[MS-ADR]:

Access Services Data Run Time Protocol

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Table of Contents

1   Introduction

The Access Services Data Run Time Protocol enables a protocol client to execute and monitor tasks on a **database application**.

Sections 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

1.1   Glossary

This document uses the following terms:

absolute URL: The full Internet address of a page or other World Wide Web resource. The absolute URL includes a protocol, such as "http," a network location, and an optional path and file name — for example, http://www.treyresearch.net/.

account: A collection of data and settings for a SharePoint Workspace or Groove identity that represents a user. This includes shared spaces, messages, and preferences that are associated with a user's identity. An account can reside on one or more devices.

alert: A message that is passed to a protocol client to notify it when specific criteria are met.

app: (1) See web application.

(2) A set of instructions that a computer uses to perform a specific task, such as word processing, accounting, or data management.

app instance: An instantiation of an **app** on a specific site.

Augmented Backus-Naur Form (ABNF): A modified version of Backus-Naur Form (BNF), commonly used by Internet specifications. ABNF notation balances compactness and simplicity with reasonable representational power. ABNF differs from standard BNF in its definitions and uses of naming rules, repetition, alternatives, order-independence, and value ranges. For more information, see [RFC5234].

authentication: The act of proving an identity to a server while providing key material that binds the identity to subsequent communications.

base64 encoding: A binary-to-text encoding scheme whereby an arbitrary sequence of bytes is converted to a sequence of printable ASCII characters, as described in [RFC4648].

caption: One or more characters that can be used as a label for display purposes or as an identifier.

collation: A set of rules that determines how data is compared, ordered, and presented.

column: See **field**.

computed field: A field that can perform data manipulation and display functions by using the contents of other fields.

control button: A button in the user interface.

credential: Previously established, **authentication** data that is used by a security principal to establish its own identity. When used in reference to the Netlogon Protocol, it is the data that is stored in the NETLOGON_CREDENTIAL structure.

culture name: A part of a language identification tagging system, as described in [RFC1766]. Culture names adhere to the format "<languagecode2>-<country/regioncode2>." If a two-letter language code is not available, a three-letter code that is derived from [ISO-639] is used.

data culture: The language that is used to specify number formatting for data.

data type: A property of a field that defines the kind of data that is stored in the field, or defines the kind of data returned by an expression when the expression is evaluated.

database application: A set of objects, including tables, queries, forms, reports, macros, and code modules, that are stored in a database structure.

domain: A set of users and computers sharing a common namespace and management infrastructure. At least one computer member of the set must act as a domain controller (DC) and host a member list that identifies all members of the domain, as well as optionally hosting the Active Directory service. The domain controller provides **authentication** of members, creating a unit of trust for its members. Each domain has an identifier that is shared among its members. For more information, see [MS-AUTHSOD] section 1.1.1.5 and [MS-ADTS].

fallback data culture: A data culture that is selected through an algorithm as a substitute for a data culture that is not installed or is otherwise unavailable.

field: A discrete unit of a record that has a name, a data type, and a value.

form: A structured document with controls and spaces that are reserved for entering and displaying information. Forms can contain special coding for actions such as submitting and querying data.

gallery: A library that is used to store a collection of site resources, such as Web Parts, list templates, and site templates.

globally unique identifier (GUID): A term used interchangeably with universally unique identifier (UUID) in Microsoft protocol technical documents (TDs). Interchanging the usage of these terms does not imply or require a specific algorithm or mechanism to generate the value. Specifically, the use of this term does not imply or require that the algorithms described in [RFC4122] or [C706] must be used for generating the **GUID**. See also universally unique identifier (UUID).

Help topic identifier: A unique identifier for an article that contains Help content.

host data language: The **data culture** of a site.

HTTP POST: An HTTP method, as described in [RFC2616].

Hypertext Markup Language (HTML): An application of the Standard Generalized Markup Language (SGML) that uses tags to mark elements in a document, as described in [HTML].

Hypertext Transfer Protocol (HTTP): An application-level protocol for distributed, collaborative, hypermedia information systems (text, graphic images, sound, video, and other multimedia files) on the World Wide Web.

Hypertext Transfer Protocol Secure (HTTPS): An extension of HTTP that securely encrypts and decrypts web page requests. In some older protocols, "Hypertext Transfer Protocol over Secure Sockets Layer" is still used (Secure Sockets Layer has been deprecated). For more information, see [SSL3] and [RFC5246].

language code identifier (LCID): A 32-bit number that identifies the user interface human language dialect or variation that is supported by an application or a client computer.

object model: A collection of object-oriented APIs that represent data structures and are designed to promote software interoperability.

owner: A security principal who has the requisite permission to manage a security group.

primary key: A field or set of fields that uniquely identifies each record in a table. A primary key cannot contain a null value.

query: A formalized instruction to a data source to either extract data or perform a specified action. A query can be in the form of a query expression, a method-based query, or a combination of the two. The data source can be in different forms, such as a relational database, XML document, or in-memory object. See also search query.

record: A group of related **fields**, which are sometimes referred to as columns, of information that are treated as a unit. Also referred to as row.

result set: A list of records that results from running a stored procedure or query, or applying a filter. The structure and content of the data in a result set varies according to the implementation.

root element: The top-level element in an XML document. It contains all other elements and is not contained by any other element, as described in [XML].

row: A collection of **columns** that contains property values that describe a single item in a set of items that match the restriction specified in a query.

Security Support Provider Interface (SSPI): A Windows-specific API implementation that provides the means for connected applications to call one of several security providers to establish authenticated connections and to exchange data securely over those connections. This is the Windows equivalent of Generic Security Services (GSS)-API, and the two families of APIs are on-the-wire compatible.

session: A representation of application data in system memory. It is used to maintain state for application data that is being manipulated or monitored on a protocol server by a user.

session identifier: A key that enables an application to make reference to a session.

site: A group of related pages and data within a SharePoint site collection. The structure and content of a site is based on a site definition. Also referred to as SharePoint site and web site.

site identifier: A GUID that is used to identify a site in a site collection.

site subscription identifier: A GUID that is used to identify a site subscription.

SOAP: A lightweight protocol for exchanging structured information in a decentralized, distributed environment. **SOAP** uses **XML** technologies to define an extensible messaging framework, which provides a message construct that can be exchanged over a variety of underlying protocols. The framework has been designed to be independent of any particular programming model and other implementation-specific semantics. SOAP 1.2 supersedes SOAP 1.1. See [SOAP1.2-1/2003].

SOAP action: The HTTP request header field used to indicate the intent of the **SOAP** request, using a **URI** value. See [SOAP1.1] section 6.1.1 for more information.

SOAP body: A container for the payload data being delivered by a SOAP message to its recipient. See [SOAP1.2-1/2007] section 5.3 for more information.

SOAP fault: A container for error and status information within a SOAP message. See [SOAP1.2-1/2007] section 5.4 for more information.

SOAP fault detail: A string containing a human-readable explanation of a **SOAP fault**, which is not intended for algorithmic processing. See [SOAP1.2-1/2007] section 5.4.5 for more information.

SOAP header: A mechanism for implementing extensions to a SOAP message in a decentralized manner without prior agreement between the communicating parties. See [SOAP1.2-1/2007] section 5.2 for more information.

SQL authentication: One of two mechanisms for validating attempts to connect to instances of SQL Server. In SQL authentication, users specify a SQL Server login name and password when they connect. The SQL Server instance ensures that the login name and password combination are valid before permitting the connection to succeed.

state changing: A type of operation that changes the state of a session.

Status-Code: A 3-digit integer result code in an HTTP response message, as described in [RFC2616].

table: A list that is defined in a workbook.

time zone: A geographical area that observes the same local time. The local time has a positive, zero, or negative offset from Coordinated Universal Time (UTC). The offset can be different during standard time and daylight saving time.

time zone bias: The positive, zero, or negative offset in minutes from Coordinated Universal Time (UTC). For example, Middle European Time (MET, GMT+01:00) has a time zone bias of "-60" because it is one hour ahead of UTC. Pacific Standard Time (PST, GMT-08:00) has a time zone bias of "+480" because it is eight hours behind UTC.

time zone daylight bias: The positive, zero, or negative offset in minutes that is added to the time zone bias during daylight saving time. For example, daylight saving time advances the clock by one hour. The time zone daylight bias is set to "-60".

time zone daylight date: The date and time when the change from standard time to daylight saving time occurs.

time zone standard bias: A positive, zero, or negative offset in minutes that is added to the time zone bias outside daylight saving time.

time zone standard date: The date and time when the change from daylight saving time to standard time occurs.

UI culture: The language that is used to display strings and graphical elements in a user interface.

Uniform Resource Identifier (URI): A string that identifies a resource. The URI is an addressing mechanism defined in Internet Engineering Task Force (IETF) Uniform Resource Identifier (URI): Generic Syntax [RFC3986].

user display name: A user profile property that contains the preferred name of a user. See also display name.

user name: A unique name that identifies a specific user account. The user name of an account is unique among the other group names and user names within its own domain or workgroup.

Web Services Description Language (WSDL): An XML format for describing network services as a set of endpoints that operate on messages that contain either document-oriented or procedure-oriented information. The operations and messages are described abstractly and are bound to a concrete network protocol and message format in order to define an endpoint. Related concrete endpoints are combined into abstract endpoints, which describe a network service. WSDL is extensible, which allows the description of endpoints and their messages regardless of the message formats or network protocols that are used.

WSDL message: An abstract, typed definition of the data that is communicated during a **WSDL operation** [WSDL]. Also, an element that describes the data being exchanged between web service providers and clients.

WSDL operation: A single action or function of a web service. The execution of a WSDL operation typically requires the exchange of messages between the service requestor and the service provider.

XML: The Extensible Markup Language, as described in [XML1.0].

XML namespace: A collection of names that is used to identify elements, types, and attributes in XML documents identified in a URI reference [RFC3986]. A combination of XML namespace and local name allows XML documents to use elements, types, and attributes that have the same names but come from different sources. For more information, see [XMLNS-2ED].

XML namespace prefix: An abbreviated form of an **XML namespace**, as described in [XML].

XML schema: A description of a type of XML document that is typically expressed in terms of constraints on the structure and content of documents of that type, in addition to the basic syntax constraints that are imposed by **XML** itself. An XML schema provides a view of a document type at a relatively high level of abstraction.

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2   References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the Errata.

1.2.1   Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information.

[MS-AADT] Microsoft Corporation, "Access Application Design Time Protocol".

[MS-ART] Microsoft Corporation, "Access Run Time Protocol".

[MS-ASDT] Microsoft Corporation, "Access Server Design Time Protocol".

[MS-AXL2] Microsoft Corporation, "Access Application Transfer Protocol Structure Version 2".

[MS-CSOMSPT] Microsoft Corporation, "SharePoint Client-Side Object Model Protocol".

[MS-DACPAC] Microsoft Corporation, "Data-Tier Application Schema File Format".

[MS-DSDIFFGRAM] Microsoft Corporation, "SharePoint Web Services: DataSet DiffGram Structure".

[MS-SPSTWS] Microsoft Corporation, "SharePoint Security Token Service Web Service Protocol".

[MSDN-TSQL-Reference-2011] Microsoft Corporation, "Transact-SQL Reference (Database Engine)", TSQL 2011, http://msdn.microsoft.com/en-us/library/bb510741(SQL.110).aspx

[RFC1766] Alvestrand, H., "Tags for the Identification of Languages", RFC 1766, March 1995, http://www.ietf.org/rfc/rfc1766.txt

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, http://www.rfc-editor.org/rfc/rfc2119.txt

[RFC2234] Crocker, D. and Overell, P., "Augmented BNF for Syntax Specifications: ABNF", RFC 2234, November 1997, http://www.ietf.org/rfc/rfc2234.txt

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, http://www.rfc-editor.org/rfc/rfc2616.txt

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.rfc-editor.org/rfc/rfc2818.txt

[RFC3339] Klyne, G. and Newman, C., "Date and Time on the Internet: Timestamps", RFC 3339, July 2002, http://www.ietf.org/rfc/rfc3339.txt

[RFC4646] Phillips, A., and Davis, M., Eds., "Tags for Identifying Languages", BCP 47, RFC 4646, September 2006, http://www.rfc-editor.org/rfc/rfc4646.txt

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", W3C Note, May 2000, http://www.w3.org/TR/2000/NOTE-SOAP-20000508/

[SOAP1.2/1] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 1: Messaging Framework", W3C Recommendation, June 2003, http://www.w3.org/TR/2003/REC-soap12-part1-20030624

[WSDL] Christensen, E., Curbera, F., Meredith, G., and Weerawarana, S., "Web Services Description Language (WSDL) 1.1", W3C Note, March 2001, http://www.w3.org/TR/2001/NOTE-wsdl-20010315

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, http://www.w3.org/TR/2009/REC-xml-names-20091208/

[XMLSCHEMA1] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/

[XML] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Fourth Edition)", W3C Recommendation 16 August 2006, edited in place 29 September 2006, http://www.w3.org/TR/2006/REC-xml-20060816/

1.2.2 Informative References

None.

1.3 Overview

This protocol is used for managing data maintained by a protocol server, which provides access to a protocol client that renders the data provided by the protocol server. The communication is always initiated by the protocol client using different operations, the functionality of which is outlined in section 1.3.2. A typical scenario for this protocol is opening a **result set** and updating data.

1.3.1 Session-based Protocol

The protocol is **session** based and uses a unique **session identifier**. This session identifier is generated when a new session is created and is used thereafter to refer to that particular session.

- Multiple sessions can exist at the same time.

- **Result sets** are not shared across sessions.

- Sessions can be created and closed independently.
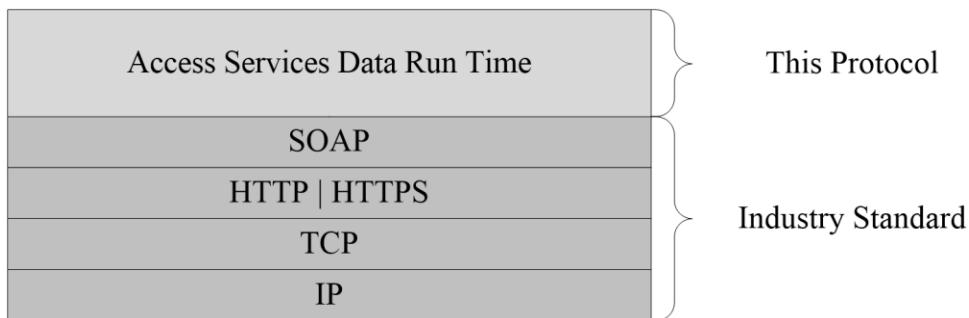
1.3.2 Protocol Operations

The protocol provides the following sets of functionality:

- Creation, modification, and deletion of objects in a **database application**.

- Querying a protocol server for information about a database application or the objects in it.

- Setting some behaviors for a database application.

- Creation of packages that describe a database application

- Creating and enabling logins on the database application, which enable connecting to the database application directly.

- Creating and managing databases that are used to store data in database applications.

- Creating, reading, updating and deleting data from the database application.

- Getting information about the protocol server.

1.4 Relationship to Other Protocols

This Protocol uses **SOAP** over **HTTP**, as described in [RFC2616], and SOAP over **HTTPS**, as described in [RFC2818], as shown in the following layering diagram:

Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a protocol server that exposes one or more endpoint **URIs** that are known by protocol clients. The endpoint URI of the protocol server and the transport that is used by the protocol server are either known by the protocol client or obtained by using the discovery mechanism that is described in [MS-SPTWS].

The protocol client obtains the requisite ApplicationClassId and ApplicationVersion values and the endpoint URI of the protocol server that provides the discovery mechanism, as described in [MS-SPTWS], by means that are independent of either protocol.

This protocol requires the protocol client to have permission to call the methods on the protocol server.

The protocol client implements the token-based security mechanisms that are required by the protocol server and related security protocols, as described in [MS-SPSTWS].

1.6   Applicability Statement

This protocol is applicable for the following scenarios:

- Creation, modification, and deletion of objects in a **database application**.

- Querying a protocol server for information about a database application or the objects in it.

- Setting some behaviors for a database application.

- Creation of packages that describe a database application

- Creating and enabling logins on the database application, which enable connecting to the database application directly.

- Creating and managing databases that are used to store data in database applications.

- Managing **sessions** between protocol client and protocol server.

- Creating, reading, updating, or deleting data on the protocol server.

- Monitoring the health of the protocol server.

1.7   Versioning and Capability Negotiation

This protocol can be implemented by using transports that support sending **Simple Object Access Protocol (SOAP)** messages, as specified in section 2.1.

1.8   Vendor-Extensible Fields

None.

1.9   Standards Assignments

None.

2 Messages

In the following sections, the schema definition might be less restrictive than the processing rules imposed by the protocol. The **WSDL** in this specification matches the **WSDL** that shipped with the product and provides a base description of the schema. The text that introduces the WSDL specifies additional restrictions that reflect actual Microsoft product behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present** but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **not null** and **present**.

2.1 Transport

Protocol servers MUST support **SOAP** over **HTTP**, as specified in [RFC2616], or SOAP over **HTTPS**, as specified in [RFC2818].

All protocol messages MUST be transported by using HTTP or HTTPS bindings at the transport level.

Protocol messages MUST be formatted as specified by either [SOAP1.1] section 4 or [SOAP1.2/1] section 5. Protocol server faults MUST be returned by using either an HTTP **Status-Code**, as specified by [RFC2616] section 10, or **SOAP faults**, as specified by either [SOAP1.1] section 4.4 or [SOAP1.2/1] section 5.4.

If the **HTTPS** transport is used, a server certificate MUST be deployed.

This protocol MAY transmit an additional **SOAP header**, the **ServiceContext** header, as specified by [MS-SPSTWS] section 2.2.4.1.

This protocol does not define any means for activating a protocol server or protocol client. The protocol server MUST be configured and begin listening in an implementation-specific way. In addition, the protocol client MUST know the format and transport that is used by the protocol server, for example, the SOAP format over the HTTP transport.

2.2 Common Message Syntax

This section contains common definitions used by this protocol. The syntax of the definitions uses an **XML schema** as defined by [XMLSCHEMA1] and [XMLSCHEMA2], and the **WSDL** as defined by [WSDL].

2.2.1 Namespaces

This specification defines and references various **XML namespaces** using the mechanisms specified in [XMLNS]. Although this specification associates a specific **XML namespace prefix** for each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and not significant for interoperability.

Prefix	Namespace URI	Reference
q1	http://schemas.microsoft.com/2003/10/Serialization/Arrays	
q2	http://microsoft.com/wsdl/types/	
ser	http://schemas.microsoft.com/2003/10/Serialization/	
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tns	http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database	
tns1	http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services	

Prefix	Namespace URI	Reference
tns2	http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/	
tns3	http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/Imports	
wsaw	http://www.w3.org/2006/05/addressing/wsdl	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

2.2.2 Messages

This specification does not define any common **WSDL message** definitions.

2.2.3 Elements

This specification does not define any common **XML schema** element definitions.

2.2.4 Complex Types

The following table summarizes the set of common **XML schema** complex type definitions defined by this specification. XML schema complex type definitions that are specific to a particular operation are described with the operation.

Complex type	Description
AccessServerMessage	The **AccessServerMessage** complex type contains information about an **alert**.
ArrayOfAnyType	Specifies a set of **anyType** elements.
ArrayOfFieldSchema	The **ArrayOfFieldSchema** complex type is a collection of **fields** of a **Source** (section 3.1.1.1).
ArrayOfInt	The **ArrayOfInt** complex type is a collection of **int** (**[XMLSCHEMA2]** section 3.3.17) values.
ArrayOfKeyValueOfstringstring	Specifies a collection of properties and their values.
ArrayOfKeyValuePair	An array of **KeyValuePair** elements.
ArrayOfParameterValue	Specifies a set of values of input parameters to pass to a **Data Macro** ([MS-AXL2] section 2.1.2.2) or **UI Macro** ([MS-AXL2] section 2.1.2.1) upon execution.
ArrayOfString	The **ArrayOfString** complex type is a collection of **string** (**[XMLSCHEMA2]** section 3.2.1) values.
ClientMessage	Specifies an error or informative message to return to the protocol server.

Complex type	Description
CommandParameter	The **CommandParameter** complex type is an input parameter used by some protocol server operations. The following applies to **CommandParameter**, unless extended or overridden by an operation specification:
CommandResult	The **CommandResult** complex type is an operation response message used by all protocol server operations. The following applies to the **CommandResult** complex type, unless extended or overridden by an operation specification:
DatabaseContext	Specifies metadata about a database.
DatabaseProviderMessage	Specifies an error condition that occurred during communication between the protocol server and a database server.
Expression	Specifies an **expression**.
FieldList	Specifies a collection of fields.
FieldSchema	The type **FieldSchema** stores all metadata information about a field of a **Source** (section 3.1.1.1).
FilterInfo	Specifies how to filter a **result set**. The **Expression** and **Text** elements are complementary ways of filtering the result set. If both **Expression** and **Text** are specified by the protocol client and are not empty, the result set MUST only contain those **rows** that meet the conditions specified by both the **Expression** and **Text** elements. If only one of the **Expression** and **Text** elements is specified and non-empty, the result set MUST be filtered to only those rows that meet the conditions specified by that element. If both the **Expression** and **Text** elements are empty or not specified, then all rows from the result set MUST be returned by the protocol server.
KeyValuePair	The **KeyValuePair** complex type is used as a container for a key and its associated value.
NetworkCredential	Specifies **credentials** for password-based **authentication** schemes.
ParameterValue	Specifies the value of a parameter to pass to a Data Macro ([MS-AXL2] section 2.1.2.2) or UI Macro ([MS-AXL2] section 2.1.2.1) upon execution.
ProvisionedDatabaseContext	Specifies information about a database after its creation.
RequestContext	Specifies information necessary for the protocol server to uniquely identify the **database application**.
SecureString	Specifies an empty element.
ServerContext	Specifies information about a server on which databases are located.
ServerHealthInformation	The **ServerHealthInformation** complex type contains information about the health of the protocol server.
ServerHealthInformation	The **ServerHealthInformation** complex type contains information about the health of the protocol server.
WorkOnBehalf	MUST NOT be used.

2.2.4.1 AccessServerMessage

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

The **AccessServerMessage** complex type contains information about an **alert**.

```
<xs:complexType name="AccessServerMessage" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Buttons" type="tns1:AccessServerMessageButtons"/>
    <xs:element minOccurs="0" name="Caption" nillable="true" type="xs:string"/>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DataDictionary" nillable="true" type="q1:ArrayOfKeyValueOfstringstring"/>
    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ErrorNumber" nillable="true" type="xs:int"/>
    <xs:element minOccurs="0" name="ExtendedDescription" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="HealthInformation" nillable="true"
type="tns1:ServerHealthInformation"/>
    <xs:element minOccurs="0" name="HelpDisplayText" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="HelpTopicId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Id" type="tns1:AccessServerMessageId"/>
    <xs:element minOccurs="0" name="MessageType" type="tns1:AccessServerMessageType"/>
    <xs:element minOccurs="0" name="RequestCorrelationId" type="ser:guid"/>
    <xs:element minOccurs="0" name="Severity" type="tns1:AccessServerMessageSeverity"/>
    <xs:element minOccurs="0" name="Timestamp" type="xs:dateTime"/>
  </xs:sequence>
</xs:complexType>
```

Buttons: An **AccessServerMessageButtons** (section 2.2.5.1) that specifies the **control buttons** of the alert. MUST be present.

Caption: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **caption** of the alert. MUST be present.

DataDictionary: An **ArrayOfKeyValueOfstringstring** (section 2.2.4.17) that specifies additional properties of the alert.

Description: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the description of the alert. MUST be present. MUST NOT be empty.

ErrorNumber: MUST NOT be used.

ExtendedDescription: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the extended description of the alert. MUST NOT be used.

HealthInformation: A **ServerHealthInformation** (section 2.2.4.6) that specifies the health information of the protocol server. MUST be present.

HelpDisplayText: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies a description of the help topic. MUST be present.

HelpTopicId: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **Help topic identifier**.

Id: An **AccessServerMessageId** (section 2.2.5.2) that specifies the identifier of the alert. MUST be present.

MessageType: An **AccessServerMessageType** (section 2.2.5.4) that specifies the type of the alert. MUST be present.

RequestCorrelationId: A **guid** (section 2.2.5.8) that specifies the unique identifier of the request message to the protocol server that triggered the alert.

Severity: An **AccessServerMessageSeverity** (section 2.2.5.3) that specifies the severity of the alert. MUST be present.

Timestamp: A **dateTime** ([XMLSCHEMA2] section 3.2.7) that specifies the date and time at which the alert occurred.

2.2.4.2 ArrayOfKeyValuePair

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

An array of **KeyValuePair** elements.

```
<xs:complexType name="ArrayOfKeyValuePair" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValuePair"
type="tns2:KeyValuePair"/>
  </xs:sequence>
</xs:complexType>
```

KeyValuePair: A **KeyValuePair** (section 2.2.4.5) that specifies a key and its associated value. Each **KeyValuePair** in the **ArrayOfKeyValuePair** element MUST have a unique value in its **Key** element.

2.2.4.3 CommandParameter

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **CommandParameter** complex type is an input parameter used by some protocol server operations.

The following applies to **CommandParameter**, unless extended or overridden by an operation specification:

```
<xs:complexType name="CommandParameter" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="WorkbookId" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="StateId" type="xs:int"/>
    <xs:element minOccurs="0" maxOccurs="1" name="WorkOnBehalfRequest"
type="tns2:WorkOnBehalf"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ProtocolClientId" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="UserFriendlyDisplayName" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Zone" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AppPrincipalIdentifier" type="xs:string"/>
    <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="RequestSiteId" type="q2:guid"/>
    <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="CorrelationId" type="q2:guid"/>
    <xs:element minOccurs="0" maxOccurs="1" name="RequestId" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="CompleteResponseTimeout" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

WorkbookId: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **session identifier** that is returned in the **sessionId** of the **OpenSessionResponse** element (section 3.1.4.11.2.2).

▪ If present, it MUST NOT be empty, and it MUST be as specified in section 3.1.1.2.

For all operations other than **OpenSession** (section 3.1.4.11), this element MUST be present and MUST have a value that was obtained from a previous call to an **OpenSession** operation.

StateId: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies a unique identifier for the state of a **session**. The value MUST be -1.

WorkOnBehalfRequest: MUST NOT be present.

ProtocolClientId: The protocol server SHOULD ignore this element and set it to empty.

UserFriendlyDisplayName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **user display name**. This element MUST be present.

Zone: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the network zone from which the request originated. This element MUST be present.

AppPrincipalIdentifier: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies a security context for the **database application**. This element MUST be present.

RequestSiteId: A **guid** (section 2.2.5.8) that specifies the **site identifier**. This element MUST be present.

CorrelationId: A **guid** (section 2.2.5.8) that uniquely identifies the request message that is sent as input to a protocol operation. This element MUST be present.

RequestId: MUST NOT be present.

CompleteResponseTimeout: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the amount of time, in milliseconds, to wait when executing the operation before departing from it. The value MUST be zero, which means that no amount of wait time has been specified.

2.2.4.4 CommandResult

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **CommandResult** complex type is an operation response message used by all protocol server operations.

The following applies to the **CommandResult** complex type, unless extended or overridden by an operation specification:

```
<xs:complexType name="CommandResult" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="TransientEditSessionToken"
type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="StateId" type="xs:int"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SpreadsheetData" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="HealthInformation"
type="tns2:ServerHealthInformation"/>
    <xs:element minOccurs="1" maxOccurs="1" name="EditSessionIsDirty" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="EditSessionHasMultipleCollaborationUsers"
type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="RequestId" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

TransientEditSessionToken: MUST NOT be used.

StateId: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the unique identifier for the state of a **session**. MUST be zero (0).

SpreadsheetData: MUST NOT be used.

HealthInformation: A **ServerHealthInformation** (section 2.2.4.7) that specifies the health information of the protocol server.

EditSessionIsDirty: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the current session has any unsaved changes. MUST be "false".

EditSessionHasMultipleCollaborationUsers: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the current session has more than one user. MUST be "false".

RequestId: MUST NOT be used.

2.2.4.5 KeyValuePair

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalServic
e/

The **KeyValuePair** complex type is used as a container for a key and its associated value.

```
<xs:complexType name="KeyValuePair" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Key"/>
    <xs:element minOccurs="1" maxOccurs="1" name="Value" nillable="true"/>
  </xs:sequence>
</xs:complexType>
```

Key: Specifies a value that uniquely identifies the **KeyValuePair** within a collection. MUST be present. MUST be of type **string** ([XMLSCHEMA2] section 3.2.1) or **int** ([XMLSCHEMA2] section 3.3.17)**.**

Value: Data associated with a given **Key**, which can have any value as long as the document remains well formed, as specified in [XML] section 2. MUST be present. MUST be formatted in the **data culture** of the **session**.

2.2.4.6 ServerHealthInformation

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

The **ServerHealthInformation** complex type contains information about the health of the protocol server.

```
<xs:complexType name="ServerHealthInformation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="HealthScore" type="xs:float"/>
    <xs:element minOccurs="0" name="StateFlags" type="tns1:ServerStateFlags"/>
  </xs:sequence>
</xs:complexType>
```

HealthScore: A **float** ([XMLSCHEMA2] section 3.2.4) that gives an indication of the health of the protocol server. It is a value that specifies the server performance health ranging between 0 and 100, wherein a score of 0 specifies excellent server health and a score of 100 specifies very poor server health. MUST be present.

StateFlags: A **ServerStateFlags** (section 2.2.5.10) that specifies the state of the protocol server. MUST be present. MUST contain zero or more values from **ServerStateFlags**.

2.2.4.7 ServerHealthInformation

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **ServerHealthInformation** complex type contains information about the health of the protocol server.

```
<xs:complexType name="ServerHealthInformation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="StateFlags" type="tns2:ServerStateFlags"/>
    <xs:element minOccurs="1" maxOccurs="1" name="HealthScore" type="xs:float"/>
  </xs:sequence>
</xs:complexType>
```

StateFlags: A **ServerStateFlags** (section 2.2.5.11) that specifies the state of the protocol server. MUST be present. MUST contain zero or more values from **ServerStateFlags.**

HealthScore: A **float** ([XMLSCHEMA2] section 3.2.4) that gives an indication of the health of the protocol server. It is a value that specifies the server performance health ranging between 0 and 100, wherein a score of 0 specifies excellent server health and a score of 100 specifies very poor server health. MUST be present.

2.2.4.8 WorkOnBehalf

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

MUST NOT be used.

```
<xs:complexType name="WorkOnBehalf" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="UserName" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="UserSid" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="UserToken" type="xs:base64Binary"/>
    <xs:element minOccurs="1" maxOccurs="1" name="UserTokenTtl" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

UserName: Not used.

UserSid: Not used.

UserToken: Not used.

UserTokenTtl: Not used.

2.2.4.9 ArrayOfAnyType

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies a set of **anyType** elements.

```
<xs:complexType name="ArrayOfAnyType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="anyType" nillable="true"/>
  </xs:sequence>
</xs:complexType>
```

anyType: An element of any arbitrary object type.

2.2.4.10   FilterInfo

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies how to filter a **result set**. The **Expression** and **Text** elements are complementary ways of filtering the result set. If both **Expression** and **Text** are specified by the protocol client and are not empty, the result set MUST only contain those **rows** that meet the conditions specified by both the **Expression** and **Text** elements. If only one of the **Expression** and **Text** elements is specified and non-empty, the result set MUST be filtered to only those rows that meet the conditions specified by that element. If both the **Expression** and **Text** elements are empty or not specified, then all rows from the result set MUST be returned by the protocol server.

```
<xs:complexType name="FilterInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Expression" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Text" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Fields" type="tns2:FieldList"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Culture" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Expression: A **CT_Expression** ([MS-AXL2] section 2.2.3.1) that specifies conditions requested to be satisfied for every row of the result set.

Text: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies zero or more search terms requested to be present in every row of the result set in any of the **fields** specified by the **Fields** element. This element is further specified as follows:

▪ Multiple search terms MUST be separated by one or more space characters.

▪ Search terms that contain a space character MUST be enclosed in double-quotes.

▪ Search terms that are immediately preceded with the name of a field specified by the **Fields** element followed by a colon (':') character (with no intervening space characters) are requested to be present in that specific field in every row of the result set. Fields specified as such that contain spaces MUST be surrounded by double-quotes.

If this element is specified and non-empty, the **Fields** and **Culture** elements MUST be specified and non-empty.

Fields: A **FieldList** (section 2.2.4.12) that specifies which fields in the result set are used when filtering using the **Text** element.

Culture: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **culture name** of the **collation** used to interpret any numbers, dates, or times specified in the **Text** element. MUST be formatted as specified by [RFC4646].

2.2.4.11 DatabaseContext

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies metadata about a database.

```
<xs:complexType name="DatabaseContext" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Server" type="tns2:ServerContext"/>
    <xs:element minOccurs="0" maxOccurs="1" name="DatabaseName" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="PackageSource" type="tns2:PackageSource"/>
    <xs:element minOccurs="0" maxOccurs="1" name="PackageType" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Collation" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="InstallationLocaleId" type="xs:int"/>
    <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="SiteId" type="q2:guid"/>
    <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="SiteSubscriptionId" type="q2:guid"/>
    <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="AppInstanceId" type="q2:guid"/>
    <xs:element minOccurs="0" maxOccurs="1" name="TimeZone" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="DatabaseSize" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Server: A **ServerContext** (section 2.2.4.16) that specifies information about the server on which the database is located. MUST be present.

DatabaseName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the database. MUST be present.

PackageSource: A **PackageSource** (section 2.2.5.9) that specifies where the package containing the database originated.

PackageType: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the type of package containing the database. MUST be present.

Collation: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **collation** of the database.

InstallationLocaleId: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the **language code identifier (LCID)** of the language to be used while creating the full-text index on the **database application** if the protocol server supports full-text indexes.

SiteId: A **guid** (section 2.2.5.8) that specifies a **site identifier**.

SiteSubscriptionId: A **guid** (section 2.2.5.8) that specifies a **site subscription identifier**.

AppInstanceId: A **guid** (section 2.2.5.8) that specifies an identifier for an **app instance**.

TimeZone: A **string** ([XMLSCHEMA2] section 3.2.1) time zone identifier that specifies the time zone information of the database application.

DatabaseSize: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the maximum size of the database application.

2.2.4.12 FieldList

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies a collection of **fields**.

```
<xs:complexType name="FieldList" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Field" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Field: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of a field.

2.2.4.13 NetworkCredential

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies **credentials** for password-based **authentication** schemes.

```
<xs:complexType name="NetworkCredential" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="UserName" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Password" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SecurePassword" type="tns2:SecureString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Domain" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

UserName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **user name** associated with the credentials. MUST be present.

Password: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the password for the user name associated with the credentials. MUST be present.

SecurePassword: A **SecureString** (section 2.2.4.15) that specifies an empty element. MUST be present.

Domain: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **domain** or computer name that verifies the credentials. MUST be present.

2.2.4.14 ProvisionedDatabaseContext

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies information about a database after its creation.

```
<xs:complexType name="ProvisionedDatabaseContext"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="DatabaseContext"
type="tns2:DatabaseContext"/>
```

```
    <xs:element minOccurs="0" maxOccurs="1" name="DboCredential"
type="tns2:NetworkCredential"/>
    <xs:element minOccurs="0" maxOccurs="1" name="LoginCredential"
type="tns2:NetworkCredential"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AccessAccount" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Password" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="LoginPassword" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

DatabaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database. MUST be present.

DboCredential: A **NetworkCredential** (section 2.2.4.13) that specifies the **credentials** necessary to access the **owner account** on the database.

LoginCredential: A **NetworkCredential** (section 2.2.4.13) that specifies the credentials necessary to access the customized account on the database.

AccessAccount: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **user name** under which the process hosting the protocol server is being run. MUST be present.

Password: A **string** ([XMLSCHEMA2] section 3.2.1) that overrides the password of the user name specified by **DboCredential**.

LoginPassword: A **string** ([XMLSCHEMA2] section 3.2.1) that overrides the password of the user name specified by **LoginCredential**.

2.2.4.15   SecureString

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies an empty element.

```
<xs:complexType name="SecureString" xmlns:xs="http://www.w3.org/2001/XMLSchema"/>
```

2.2.4.16   ServerContext

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies information about a server on which databases are located.

```
<xs:complexType name="ServerContext" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="ServerReferenceId" type="q2:guid"/>
    <xs:element minOccurs="0" maxOccurs="1" name="MasterCredential"
type="tns2:NetworkCredential"/>
  </xs:sequence>
</xs:complexType>
```

ServerReferenceId: A **guid** (section 2.2.5.8) that specifies a value that is used as a handle to this particular database server.

MasterCredential: A **NetworkCredential** (section 2.2.4.13) that specifies **credentials** to be used when executing commands on this particular database server.

2.2.4.17   ArrayOfKeyValueOfstringstring

Namespace: http://schemas.microsoft.com/2003/10/Serialization/Arrays

Specifies a collection of properties and their values.

```
<xs:complexType name="ArrayOfKeyValueOfstringstring"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValueOfstringstring">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Key" nillable="true" type="xs:string"/>
          <xs:element name="Value" nillable="true" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

KeyValueOfstringstring: A **string** ([XMLSCHEMA2] section 3.2.1) based name/value property pair.

KeyValueOfstringstring.Key: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of a property.

KeyValueOfstringstring.Value: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the value of the property specified by **KeyValueOfstringstring.Key**.

2.2.4.18   DatabaseProviderMessage

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

Specifies an error condition that occurred during communication between the protocol server and a database server.

```
<xs:complexType name="DatabaseProviderMessage" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database"
minOccurs="0" name="Error" type="tns:DatabaseProviderError"/>
    <xs:element minOccurs="0" name="Message" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="OriginalStackTrace" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Error: A **DatabaseProviderError** (section 2.2.5.7) that specifies the type of error that occurred.

Message: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies information about the error that occurred.

OriginalStackTrace: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies where the error was encountered in the protocol server's source code. The protocol client SHOULD add this information to a log file, but otherwise does not use it.

2.2.4.19 ArrayOfFieldSchema

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **ArrayOfFieldSchema** complex type is a collection of **fields** of a **Source** (section 3.1.1.1).

```
<xs:complexType name="ArrayOfFieldSchema" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="FieldSchema" nillable="true"
type="tns2:FieldSchema"/>
  </xs:sequence>
</xs:complexType>
```

FieldSchema: A **FieldSchema** (section 2.2.4.25) that specifies metadata information about a **field (3)** of a **Source** (section 3.1.1.1). At least one **FieldSchema** MUST be present.

2.2.4.20 ArrayOfInt

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **ArrayOfInt** complex type is a collection of **int** (**[XMLSCHEMA2]** section 3.3.17) values.

```
<xs:complexType name="ArrayOfInt" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

int: An **int** (**[XMLSCHEMA2]** section 3.3.17) that specifies an integer.

2.2.4.21 ArrayOfParameterValue

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies a set of values of input parameters to pass to a **Data Macro** ([MS-AXL2] section 2.1.2.2) or **UI Macro** ([MS-AXL2] section 2.1.2.1) upon execution.

```
<xs:complexType name="ArrayOfParameterValue" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ParameterValue" nillable="true"
type="tns2:ParameterValue"/>
  </xs:sequence>
</xs:complexType>
```

ParameterValue: A **ParameterValue** (section 2.2.4.26) that specifies the value for a parameter to a **Data Macro** or a **UI Macro**.

2.2.4.22 ArrayOfString

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **ArrayOfString** complex type is a collection of **string** (**[XMLSCHEMA2]** section 3.2.1) values.

```
<xs:complexType name="ArrayOfString" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

string: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies a string value.

2.2.4.23 ClientMessage

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies an error or informative message to return to the protocol server.

```
<xs:complexType name="ClientMessage" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="MessageID" type="tns2:ClientMessageID"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Context" type="tns2:ArrayOfAnyType"/>
  </xs:sequence>
</xs:complexType>
```

MessageID: A **ClientMessageID** (section 2.2.5.6) that specifies an identifier that the protocol server assumes is associated with a string.

Context: An **ArrayOfAnyType** (section 2.2.4.9) that specifies context information about the message. If the string assumed to be associated with the **MessageID** contains numbered placeholders, that is, a number surrounded by {} characters, the protocol server MUST include a contextual string for each different placeholder, such that the first **anyType** subelement corresponds to the placeholder "{0}", the second **anyType** subelement corresponds to the placeholder "{1}", and so on. The protocol server assumes that the protocol client replaces each placeholder with a string that represents the value of the corresponding **anyType** subelement.

2.2.4.24 Expression

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies an **expression**.

```
<xs:complexType name="Expression" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="ExpressionScript" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ReferencesFunction" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Properties" type="tns2:ArrayOfAnyType"/>
    <xs:element minOccurs="1" maxOccurs="1" name="ServerExpression" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="OriginalExpression" type="xs:string"/>
```

```
        </xs:sequence>
    </xs:complexType>
```

ExpressionScript: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **JSON** representation of an **expression**. MUST be specified. The value MUST conform to the following **ABNF** grammar (**[RFC5234]**):

ExpressionScript =
"Access.AccessApplication.GenerateAxlFromJson({{'Type':'FunctionCall','Value':'" function-name
"','Arguments':[" argument-list "]})"
argument-list = argument / (argument "," argument-list)
argument = "{{'Type':'" argument-name "','Value':'" argument-value "'}}"

function-name specifies the name of a function. MUST be a valid value for the **Name** attribute of **CT_FunctionCall**, as specified by [MS-AXL2] section 2.2.3.46.

argument-name specifies the name of an argument to the function. MUST be a valid value for the **Name** attribute specified by [MS-AXL2] section 2.2.5.2.

argument-value specifies the value of an argument.

ReferencesFunction: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the name of a function. MUST match **function-name** in **ExpressionScript**.

Properties: An **ArrayOfAnyType** (section 2.2.4.9). MUST be ignored.

ServerExpression: A **boolean** (**[XMLSCHEMA2]** section 3.2.2) that specifies whether the **expression** is to be evaluated by the protocol server.

OriginalExpression: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **expression** exactly as the user entered it. MUST be omitted if the **expression** did not originate from user input.

2.2.4.25   FieldSchema

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The type **FieldSchema** stores all metadata information about a **field** of a **Source** (section 3.1.1.1).

```
<xs:complexType name="FieldSchema" xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="ColumnName" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DataType" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DefaultValue" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="IsKey" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="Required" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="ReadOnly" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="MaxLength" type="xs:int"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DefaultExpression" type="tns2:Expression"/>
        <xs:element minOccurs="0" maxOccurs="1" name="ValidationScript" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="ValidationMessage"
type="tns2:ClientMessage"/>
        <xs:element minOccurs="1" maxOccurs="1" name="KeyIndex" type="xs:int"/>
        <xs:element minOccurs="0" maxOccurs="1" name="SourceObject" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DependentFields" type="tns2:ArrayOfInt"/>
        <xs:element minOccurs="1" maxOccurs="1" name="AllowMultipleValues" type="xs:boolean"/>
        <xs:element minOccurs="0" maxOccurs="1" name="FormatString" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="CurrencySymbol" type="xs:string"/>
```

```
        <xs:element minOccurs="1" maxOccurs="1" name="DecimalPlaces" type="xs:int"/>
        <xs:element minOccurs="0" maxOccurs="1" name="TextType" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="IsTableQueryLookup" type="xs:boolean"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupSource" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupBoundField" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupDisplayField" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupSortType" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupValueList" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DataSource" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
```

ColumnName: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the name of the **field (3)**. MUST be present.

DataType: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **data type** of the **field (3)**. MUST be present. MUST be one of the following values.

- "Bit" ([MSDN-TSQL-Reference-2011])

- "Decimal" ([MSDN-TSQL-Reference-2011])

- "Float" ([MSDN-TSQL-Reference-2011])

- "Int" ([MSDN-TSQL-Reference-2011])

- "NVarChar" ([MSDN-TSQL-Reference-2011])

- "VarBinary" ([MSDN-TSQL-Reference-2011])

- "Variant" ([MSDN-TSQL-Reference-2011])

- "DateTime2" ([MSDN-TSQL-Reference-2011])

DefaultValue: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the default value of the **field (3)**. The value MUST be in the same data type as specified by **DataType**. MUST be present.

IsKey: A **boolean** (**[XMLSCHEMA2]** section 3.2.2) that specifies whether the **field (3)** is a **primary key**.

Required: A **boolean** (**[XMLSCHEMA2]** section 3.2.2) that specifies whether the **field (3)** is required to have data. A value of "false" specifies that the **field (3)** can contain NULL values.

ReadOnly: A **boolean** (**[XMLSCHEMA2]** section 3.2.2) that specifies whether the data in the **field (3)** is read-only. A value of "true" specifies that the data cannot be changed.

MaxLength: An **int** (**[XMLSCHEMA2]** section 3.3.17) that specifies the maximum size of the **field (3)**. If **DataType** is "NVarChar", the size is in characters, otherwise the size is in bytes. A value of -1 specifies that the **field (3)** does not have a maximum length.

DefaultExpression: An **Expression** (section 2.2.4.24) that specifies the default value of the field. MUST be empty.

ValidationScript: MUST NOT be used.

ValidationMessage: A **ClientMessage** (section 2.2.4.23) that specifies an error or informative message returned by the protocol server. MUST be present.

KeyIndex: An **int** (**[XMLSCHEMA2]** section 3.3.17) that specifies the index of the **primary key field (3)**. MUST be -1.

SourceObject: MUST NOT be used.

DependentFields: An **ArrayOfInt** (section 2.2.4.20) that specifies the indices of all **fields (3)** that are dependent on this **field (3)**. MUST be present.

AllowMultipleValues: MUST NOT be used.

FormatString: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the format string of the **field (3)**. MUST be present. MUST be one of the following values:

▪ "General Number" ([MS-AXL2] section 2.2.4.13)

▪ "Currency" ([MS-AXL2] section 2.2.4.13)

▪ "Fixed" ([MS-AXL2] section 2.2.4.13)

▪ "Standard" ([MS-AXL2] section 2.2.4.13)

▪ "Percent" ([MS-AXL2] section 2.2.4.13)

▪ "General Date" ([MS-AXL2] section 2.2.4.13)

▪ "Long Date" ([MS-AXL2] section 2.2.4.13)

▪ "Short Date" ([MS-AXL2] section 2.2.4.13)

▪ "Long Time" ([MS-AXL2] section 2.2.4.13)

▪ "Short Date" ([MS-AXL2] section 2.2.4.13)

CurrencySymbol: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the currency symbol of the **field (3)**. MUST be present.

DecimalPlaces: An **int** (**[XMLSCHEMA2]** section 3.3.17) that specifies the number of decimal places of the **field (3)**. MUST NOT be used.

TextType: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the text type of the **field (3)**. MUST NOT be present if **DataType** is not "NVarchar"; otherwise, MUST be one of the following values:

▪ "SingleLine" ([MS-AXL2] section 2.2.4.8)

▪ "MultiLine" ([MS-AXL2] section 2.2.4.8)

▪ "HyperLink"([MS-AXL2] section 2.2.4.8)

IsTableQueryLookup: A **boolean** (**[XMLSCHEMA2]** section 3.2.2) that specifies whether this **field (3)** is a **lookup field**.

LookupSource: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **ReferencedTable** ([MS-AXL2] section 2.2.2.16) of this **field (3)**. MUST be used only if this **field (3)** is a **lookup field**.

LookupBoundField: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **BoundColumn** ([MS-AXL2] section 2.2.2.5) of this **field (3)**. MUST be used only if this **field (3)** is a **lookup field**.

LookupDisplayField: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **DisplayColumn** ([MS-AXL2] section 2.2.2.10) of this **field (3)**. MUST be used only if this **field (3)** is a **lookup field**.

LookupSortType: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the sort order of **LookupDisplayField**. MUST be used only if this **field (3)** is a **lookup field**. MUST be either "ascending" or "descending".

LookupValueList: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies a list of values that this **field (3)** can have. The values are separated by a comma in this string. MUST be used only if this **field (3)** is a **lookup field**. MUST be used only if **LookupSource** is empty or not present.

DataSource: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the name of the **Source** (section 3.1.1.1) the **field (3)** belongs to when this **FieldSchema** element appears inside of a **RelatedFieldInfos** element of a **Recordset** (section 3.1.4.45.3.1).

2.2.4.26   ParameterValue

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalServic e/

Specifies the value of a parameter to pass to a Data Macro ([MS-AXL2] section 2.1.2.2) or UI Macro ([MS-AXL2] section 2.1.2.1) upon execution.

```
<xs:complexType name="ParameterValue" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Name" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Value"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsDate" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
```

Name: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the name of a parameter to a Data Macro or UI Macro being executed. MUST be present.

Value: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the value of a parameter to a Data Macro or UI Macro being executed. MUST be present.

IsDate: A **boolean** (**[XMLSCHEMA2]** section 3.2.2) that specifies whether the value specified by **Value** represents a date. If true, the value specified by **Value** must be in a format specified by **[ISO-8601]**.

2.2.4.27   RequestContext

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalServic e/

Specifies information necessary for the protocol server to uniquely identify the **database application**.

```
<xs:complexType name="RequestContext" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Url" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Url: A **string** (**[XMLSCHEMA2]** section 3.2.1) that specifies the **fully qualified URL** to the **database application**. MUST be present.

2.2.5 Simple Types

The following table summarizes the set of common **XML schema** simple type definitions defined by this specification. XML schema simple type definitions that are specific to a particular operation are described with the operation.

Simple type	Description
AccessServerMessageButtons	**AccessServerMessageButtons** specifies the **control buttons** associated with an **alert** that the protocol server returns to the protocol client.
AccessServerMessageId	The **AccessServerMessageId** type is an enumeration of alerts returned from the protocol server.
AccessServerMessageSeverity	**AccessServerMessageSeverity** specifies the severity of the alert that the protocol server returns to the protocol client.
AccessServerMessageType	**AccessServerMessageType** specifies the type of alert that the protocol server returns to the protocol client.
CacheCommands	The **CacheCommands** simple type is a list of enumeration values specifying operations to perform on the **result set**. If multiple values are specified, all of the specified operations MUST be performed, except for combinations prohibited by the table following the schema.
ClientMessageID	The **ClientMessageID** simple type is a list of enumeration values specifying a message identifier.
DatabaseProviderError	Specifies the type of error condition that occurred during communication between the protocol server and a database server.
PackageSource	Specifies where a database package originated.
ServerStateFlags	**ServerStateFlags** specifies the state of the protocol server.
ServerStateFlags	**ServerStateFlags** specifies the state of the protocol server.

2.2.5.1 AccessServerMessageButtons

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

AccessServerMessageButtons specifies the **control buttons** associated with an **alert** that the protocol server returns to the protocol client.

```
<xs:simpleType name="AccessServerMessageButtons" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="None"/>
        <xs:enumeration value="OK"/>
        <xs:enumeration value="Cancel"/>
        <xs:enumeration value="Yes"/>
        <xs:enumeration value="No"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
```

The following table specifies the allowable values for the **AccessServerMessageButtons** simple type.

Value	Meaning
None	MUST NOT be used.
OK	An OK control button.

Value	Meaning
Cancel	MUST NOT be used.
Yes	MUST NOT be used.
No	MUST NOT be used.

2.2.5.2 AccessServerMessageId

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

The **AccessServerMessageId** type is an enumeration of **alerts** returned from the protocol server.

```xml
<xs:simpleType name="AccessServerMessageId" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Blank"/>
    <xs:enumeration value="InternalError"/>
    <xs:enumeration value="ManagementUIInternalError"/>
    <xs:enumeration value="InvalidValueForField"/>
    <xs:enumeration value="GetRecordsPermissionsFailure"/>
    <xs:enumeration value="WriteRecordsPermissionsFailure"/>
    <xs:enumeration value="NotMemberOfRole"/>
    <xs:enumeration value="ServerReadOnly"/>
    <xs:enumeration value="MaxSessionsPerUserExceeded"/>
    <xs:enumeration value="RetryError"/>
    <xs:enumeration value="MaxRequestDurationExceeded"/>
    <xs:enumeration value="ProductExpired"/>
    <xs:enumeration value="NewWorkbookSessionTimeout"/>
    <xs:enumeration value="DataException_CacheOperationInvalid"/>
    <xs:enumeration value="DataException_InvalidPageNumber"/>
    <xs:enumeration value="DataException_ConflictsEncounteredWhileUpdatingData"/>
    <xs:enumeration value="DataException_DeleteConflict"/>
    <xs:enumeration value="DataException_QueryParametersNotSupplied"/>
    <xs:enumeration value="DataException_GenericError"/>
    <xs:enumeration value="DataException_CacheFailureAfterSuccessfulCommit"/>
    <xs:enumeration value="ExternalData_InvalidSource"/>
    <xs:enumeration value="ExternalData_InvalidSite"/>
    <xs:enumeration value="ExternalData_ComponentMissing"/>
    <xs:enumeration value="ExternalData_SourceAccessDenied"/>
    <xs:enumeration value="ExternalData_TooMuchData"/>
    <xs:enumeration value="ExternalData_TooManyWildcards"/>
    <xs:enumeration value="ExternalData_ParametersNotSupported"/>
    <xs:enumeration value="ExternalData_IncompatableCulture"/>
    <xs:enumeration value="ExternalData_RefreshDataSource"/>
    <xs:enumeration value="ExternalData_LoadUserProfileDisabled"/>
    <xs:enumeration value="DataConnectivity_FunctionalityDisabled"/>
    <xs:enumeration value="InvalidArgument"/>
    <xs:enumeration value="NullArgument"/>
    <xs:enumeration value="WebService_ObjectNotFound"/>
    <xs:enumeration value="WebService_InvalidId"/>
    <xs:enumeration value="WebService_ObjectSaveConflict"/>
    <xs:enumeration value="WebService_ObjectModifiedExternally"/>
    <xs:enumeration value="WebService_DeleteApplicationWithSubwebs"/>
    <xs:enumeration value="WebService_SiteDoesNotExist"/>
    <xs:enumeration value="WebService_InvalidApplicationEndPoint"/>
    <xs:enumeration value="WebService_GetServerInformation_SiteDoesNotExist"/>
    <xs:enumeration value="WebService_CreateApplication_SiteDoesNotExist"/>
    <xs:enumeration value="WebService_UnsupportedCulture"/>
    <xs:enumeration value="WebService_MustBeAuthorToDesign"/>
    <xs:enumeration value="WebService_ConflictingOperationInProgress"/>
    <xs:enumeration value="ObjectAlreadyExists"/>
    <xs:enumeration value="AccessServicesDisabled"/>
    <xs:enumeration value="TableException_CsdlDefinitionNotSupported"/>
```

```
<xs:enumeration value="TableException_DuplicateColumnName"/>
<xs:enumeration value="TableException_InvalidColumn"/>
<xs:enumeration value="TableException_InvalidFieldInExpression"/>
<xs:enumeration value="TableException_InvalidObjectInExpression"/>
<xs:enumeration value="TableException_InvalidComputedColumnExpression"/>
<xs:enumeration value="TableException_InvalidComputedColumnType"/>
<xs:enumeration value="TableException_InvalidRequiredImageColumn"/>
<xs:enumeration value="TableException_InvalidCheckConstraintExpression"/>
<xs:enumeration value="TableException_TooManyIndexes"/>
<xs:enumeration value="QueryException_AmbiguousSourceNamesProvided"/>
<xs:enumeration value="QueryException_InvalidSourceNamesProvided"/>
<xs:enumeration value="QueryException_AmbiguousAliasProvided"/>
<xs:enumeration value="QueryException_InvalidObjectName"/>
<xs:enumeration value="QueryException_AmbiguousJoins"/>
<xs:enumeration value="QueryException_GenericAXLValidation"/>
<xs:enumeration value="QueryException_OutputNotInGroupsOrPartOfAggregate"/>
<xs:enumeration value="QueryException_ParameterTypeMismatch"/>
<xs:enumeration value="QueryException_OrderNotInOutputs"/>
<xs:enumeration value="OrderingException_InvalidSpecification"/>
<xs:enumeration value="OrderingException_InvalidColumnName"/>
<xs:enumeration value="MacroCompilationException_InvalidAxl"/>
<xs:enumeration value="MacroCompilationException_InvalidAction"/>
<xs:enumeration value="MacroCompilationException_InvalidEventName"/>
<xs:enumeration value="MacroCompilationException_RequiredArgumentMissing"/>
<xs:enumeration value="MacroCompilationException_ArgumentValueNotSpecified"/>
<xs:enumeration value="MacroCompilationException_InvalidActionArgument"/>
<xs:enumeration value="MacroCompilationException_MissingDataMacroParameter"/>
<xs:enumeration value="MacroCompilationException_InvalidParameter"/>
<xs:enumeration value="MacroCompilationException_InvalidQueryParameter"/>
<xs:enumeration value="MacroCompilationException_MacroCallStackDepthExceeded"/>
<xs:enumeration value="MacroCompilationException_VariableNameCollision"/>
<xs:enumeration value="MacroCompilationException_EmptyConditionalBlock"/>
<xs:enumeration value="MacroCompilationException_EmptyLookupRecordBlock"/>
<xs:enumeration value="MacroCompilationException_UpdateOnDeletedRecord"/>
<xs:enumeration value="MacroCompilationException_UpdateRecordInNDM"/>
<xs:enumeration value="MacroCompilationException_UpdateOnReadonlyQuery"/>
<xs:enumeration value="MacroCompilationException_UpdateOnReadonlyField"/>
<xs:enumeration value="MacroCompilationException_InvalidAlias"/>
<xs:enumeration value="MacroCompilationException_InvalidIdentifier"/>
<xs:enumeration value="MacroCompilationException_InvalidVariableName"/>
<xs:enumeration value="UnsupportedDatabaseCollation"/>
<xs:enumeration value="NoDatabaseServersAvailableForCreate"/>
<xs:enumeration value="NoSQLAuthDatabaseServersAvailableForCreate"/>
<xs:enumeration value="ExpressionBooleanBitMismatch"/>
<xs:enumeration value="NoApplicationDatabaseInformation"/>
<xs:enumeration value="DatabaseServerLoginFailed"/>
<xs:enumeration value="SettingValidationFailed"/>
<xs:enumeration value="SettingApplicationNameNotFound"/>
<xs:enumeration value="SettingApplicationIdNotFound"/>
<xs:enumeration value="SettingApplicationProxyNameNotFound"/>
<xs:enumeration value="ProvisioningGenericFailure"/>
<xs:enumeration value="ProvisioningApplicationAlreadyExists"/>
<xs:enumeration value="ProvisioningException_InstallationTimeout"/>
<xs:enumeration value="ProvisioningSecureStoreIsRequiredAndMissing"/>
<xs:enumeration value="ProvisioningAccessServicesNotSupportedBySite"/>
<xs:enumeration value="FormException_GenericAXLValidation"/>
<xs:enumeration value="UnrecognizedVersion"/>
<xs:enumeration value="UpgradeFailed"/>
<xs:enumeration value="AnotherUpgradeInProgress"/>
<xs:enumeration value="ServerNotCompatibleWithClient"/>
<xs:enumeration value="AppNotCompatibleWithClient"/>
<xs:enumeration value="AppNotCompatibleWithServer"/>
<xs:enumeration value="TemplateNotCompatible"/>
<xs:enumeration value="TemplateSizeExceeded"/>
<xs:enumeration value="TemplateImageSizeExceeded"/>
<xs:enumeration value="TemplateImageTypeUnsupported"/>
<xs:enumeration value="TemplateFailedToExtractApp"/>
<xs:enumeration value="TemplateUnsupportedOrDependencies"/>
<xs:enumeration value="ValidateApplicationException_InvalidUserObjectDefinition"/>
```

```
<xs:enumeration value="ValidateApplicationException_InvalidEventDatamacroDefinition"/>
<xs:enumeration value="AccessSqlException_GenericError"/>
<xs:enumeration value="AccessSqlException_CalculationCannotbeStored"/>
<xs:enumeration value="AccessSqlException_ObjectNotFound"/>
<xs:enumeration value="AccessSqlException_PermissionDenied"/>
<xs:enumeration value="AccessSqlException_DuplicateConstraintValue"/>
<xs:enumeration value="AccessSqlException_NoQueryParameters"/>
<xs:enumeration value="AccessSqlException_FieldNoValue"/>
<xs:enumeration value="AccessSqlException_FieldNoValueDesignTime"/>
<xs:enumeration value="AccessSqlException_InvalidFieldName"/>
<xs:enumeration value="AccessSqlException_InvalidObjectName"/>
<xs:enumeration value="AccessSqlException_ObjectAlreadyExists"/>
<xs:enumeration value="AccessSqlException_MissingExpressionInAggregateFunction"/>
<xs:enumeration value="AccessSqlException_DataTypeConversionMismatch"/>
<xs:enumeration value="AccessSqlException_InvalidLengthParameter"/>
<xs:enumeration value="AccessSqlException_IncompatibleTypeChange_TableSave"/>
<xs:enumeration value="AccessSqlException_IncompatibleDataChange_TableSave"/>
<xs:enumeration value="AccessSqlException_ErrorMessage"/>
<xs:enumeration value="AccessSqlException_SqlConnectionTimeout"/>
<xs:enumeration value="AccessSqlException_SqlConnectionTimeoutDuringInsert"/>
<xs:enumeration value="AccessSqlException_SqlError102"/>
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<xs:enumeration value="AccessSqlException_SqlError547_CheckConstraint_Design_Column"/>
<xs:enumeration value="AccessSqlException_SqlError547_ForeignKey_RuntimeInsertUpdate"/>
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            <xs:enumeration value="AccessSqlException_SqlError8134"/>
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            <xs:enumeration value="AccessSqlException SqlError9810"/>
            <xs:enumeration value="AccessSqlException_SqlError17142"/>
            <xs:enumeration value="AccessSqlException_SqlError40544"/>
            <xs:enumeration value="AccessSqlException_SqlError40682"/>
            <xs:enumeration value="AccessSqlException_CustomError50001"/>
            <xs:enumeration value="AccessSqlException_CustomError50003"/>
            <xs:enumeration value="AccessSqlException CustomError50005"/>
            <xs:enumeration value="OpenDependentObjects"/>
            <xs:enumeration value="OpenDependentObjectsForUpdate"/>
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   </xs:simpleType>
```

The following table specifies the allowable values for the **AccessServerMessageId** simple type.

Value	Meaning
Blank	MUST NOT be used.
InternalError	An internal error has occurred on the protocol server.
ManagementUIInternalError	MUST NOT be used.
InvalidValueForField	MUST NOT be used.
GetRecordsPermissionsFailure	The user does not have permissions to view the requested **record**.
WriteRecordsPermissionsFailure	The user does not have permissions to create or edit the requested record.
NotMemberOfRole	The user credentials failed to be authenticated by the protocol server.
ServerReadOnly	The **database application** is read-only.
MaxSessionsPerUserExceeded	The protocol operation cannot be finished because the protocol client has exceeded the maximum number of **sessions** allowed on the protocol server.
RetryError	The protocol server is unable to process the request.
MaxRequestDurationExceeded	The request exceeded the amount of time allowed. It has been canceled.
ProductExpired	The trial period for the protocol has expired.
NewWorkbookSessionTimeout	The session has timed out.
DataException_CacheOperationInvalid	MUST NOT be used.
DataException_InvalidPageNumber	MUST NOT be used.

Value	Meaning
DataException_ConflictsEncounteredWhileUpdatingData	MUST NOT be used.
DataException_DeleteConflict	MUST NOT be used.
DataException_QueryParametersNotSupplied	The parameters required in the **Source** (section 3.1.1.1) are not supplied as input elements to the operation.
DataException_GenericError	An internal error occurred on the server and data changes could not be saved.
DataException_CacheFailureAfterSuccessfulCommit	Data changes were saved, but an internal error occurred on the server after that.
ExternalData_InvalidSource	The protocol server cannot find the **Linked Table** ([MS-AXL2] section 2.1.1.6) to which the protocol client is trying to connect.
ExternalData_InvalidSite	The protocol server cannot connect to the site specified by the protocol client.
ExternalData_ComponentMissing	The protocol server cannot connect to the **Linked Table** ([MS-AXL2] section 2.1.1.6) because a required component is not installed on the protocol server.
ExternalData_SourceAccessDenied	The protocol server cannot connect to the **Linked Table** ([MS-AXL2] section 2.1.1.6) because access was denied.
ExternalData_TooMuchData	The protocol server cannot complete the protocol operation because the query retrieved in too many results.
ExternalData_TooManyWildcards	The protocol server cannot complete the protocol operation because the query contained too many wildcard characters.
ExternalData_ParametersNotSupported	The protocol server cannot complete the protocol operation because the query contained unsupported parameters.
ExternalData_IncompatableCulture	The protocol server cannot connect to a **Linked Table** ([MS-AXL2] section 2.1.1.6) because it uses a different **data culture** than the database application.
ExternalData_RefreshDataSource	The protocol server cannot complete the protocol operation because the definition of the **Linked Table** ([MS-AXL2] section 2.1.1.6) has been updated externally.
ExternalData_LoadUserProfileDisabled	The protocol server is not configured correctly.
DataConnectivity_FunctionalityDisabled	MUST NOT be used.
InvalidArgument	An invalid argument was passed as an input element to the protocol operation.
NullArgument	MUST NOT be used.
WebService_ObjectNotFound	The protocol server cannot find the object requested.

Value	Meaning
WebService_InvalidId	An invalid argument was passed as input to the protocol server.
WebService_ObjectSaveConflict	The protocol server cannot save the object because someone else has made changes to it using this protocol message.
WebService_ObjectModifiedExternally	The protocol server cannot save the object because someone else has made changes to it using an external tool without using this protocol message.
WebService_DeleteApplicationWithSubwebs	The protocol server cannot delete an application that has sub **sites**.
WebService_SiteDoesNotExist	The site identified by the **URI** in the request message from the protocol client does not exist.
WebService_InvalidApplicationEndPoint	The site identified by the URI in the request message from the protocol client is not a valid location for an application.
WebService_GetServerInformation_SiteDoesNotExist	The URI for the site specified by the protocol client in the **GetServerInformation** ([MS-ASDT] section 3.1.4.2) request message is invalid.
WebService_CreateApplication_SiteDoesNotExist	The protocol server cannot create a new database application at the site identified by the URI in the request message.
WebService_UnsupportedCulture	The requested language is not supported by the protocol server.
WebService_MustBeAuthorToDesign	MUST NOT be used.
WebService_ConflictingOperationInProgress	The request failed because the protocol server is currently saving the changes from another operation in the same application.
ObjectAlreadyExists	The user operation to add/modify an object results in the violation of a primary key constraint on the protocol server.
AccessServicesDisabled	The feature used by the operation is disabled on the protocol server.
TableException_CsdlDefinitionNotSupported	An internal error occurred on the protocol server while saving a **table** ([MS-AXL2] section 2.1.1).
TableException_DuplicateColumnName	Duplicate **field** names provided while creating a **table** ([MS-AXL2] section 2.1.1).
TableException_InvalidColumn	Invalid field provided while creating a **table** ([MS-AXL2] section 2.1.1).
TableException_InvalidFieldInExpression	Invalid field was referenced in an **expression** ([MS-AXL2] section 2.2.1.10) while creating a **table** ([MS-AXL2] section 2.1.1).
TableException_InvalidObjectInExpression	Invalid object was referenced in an **expression** ([MS-AXL2] section 2.2.1.10) while creating a **table** ([MS-AXL2] section 2.1.1).
TableException_InvalidComputedColumnExpression	The **expression** ([MS-AXL2] section 2.2.1.10)in a

Value	Meaning
	computed **column** is not valid.
TableException_InvalidComputedColumnType	The evaluated type of a computed column is not valid.
TableException_InvalidRequiredImageColumn	An Image type column with "Required" property is not valid.
TableException_InvalidCheckConstraintExpression	One or more fields referenced in an **expression** ([MS-AXL2] section 2.2.1.10) could not be found.
TableException_TooManyIndexes	
QueryException_AmbiguousSourceNamesProvided	Duplicate **Source** (section 3.1.1.1) names provided while creating a **Named Query** (section 3.1.1.1).
QueryException_InvalidSourceNamesProvided	Invalid **Source** (section 3.1.1.1) names provided while creating a **Named Query** (section 3.1.1.1).
QueryException_AmbiguousAliasProvided	Duplicate field names provided while creating a **Named Query** (section 3.1.1.1).
QueryException_InvalidObjectName	MUST NOT be used.
QueryException_AmbiguousJoins	**Named Query** (section 3.1.1.1) cannot be saved because the protocol server cannot determine which **CT_Join** ([MS-AXL2] section 2.2.3.10) is to be performed first.
QueryException_GenericAXLValidation	**Named Query** (section 3.1.1.1) cannot be saved because it failed validation.
QueryException_OutputNotInGroupsOrPartOfAggregate	**Named Query** (section 3.1.1.1) cannot be saved because one of the fields is not part of an aggregate function.
QueryException_ParameterTypeMismatch	**Named Query** (section 3.1.1.1) cannot be saved because one of the **CT_Parameters** ([MS-AXL2] section 2.2.3.12) has an invalid data type.
QueryException_OrderNotInOutputs	**Named Query** (section 3.1.1.1) cannot be saved because one of the fields referenced in **CT_Order** ([MS-AXL2] section 2.2.3.2) or **CT_OrderExpression** ([MS-AXL2] section 2.2.3.71) is not in **CT_Results** ([MS-AXL2] section 2.2.3.9)
OrderingException_InvalidSpecification	Invalid **sortExpression** is supplied as an input element in **OpenResultSet** (section 3.1.4.10.2.1)
OrderingException_InvalidColumnName	MUST NOT be used.
MacroCompilationException_InvalidAxl	The Data Macro ([MS-AXL2] section 2.1.2.2) or UI Macro ([MS-AXL2] section 2.1.2.1) compilation failed because of invalid AXL ([MS-AXL2]).
MacroCompilationException_InvalidAction	The action specified is invalid.
MacroCompilationException_InvalidEventName	The event attribute is invalid.
MacroCompilationException_RequiredArgumentMissing	A required argument is not present for a Macro action.

Value	Meaning
MacroCompilationException_ArgumentValueNotSpecified	A value is not specified for a given argument.
MacroCompilationException_InvalidActionArgument	The value of a given argument is not valid.
MacroCompilationException_MissingDataMacroParameter	The protocol server could not execute the Macro because either an input or an output parameter was not supplied.
MacroCompilationException_InvalidParameter	The name of an input parameter is not valid.
MacroCompilationException_InvalidQueryParameter	The protocol server could not save the Macro because the parameters supplied do not match with the **Named Query** (section 3.1.1.1) definition.
MacroCompilationException_MacroCallStackDepthExceeded	The number of nesting macros exceeds the limit.
MacroCompilationException_VariableNameCollision	A local variable or return variable is using the same name as a previously defined variable or parameter.
MacroCompilationException_EmptyConditionalBlock	A conditional block does not contain any actionable statements. Here a conditional block means an **If** block, **Else** block, or **ElseIf** block.
MacroCompilationException_EmptyLookupRecordBlock	A **LookupRecord** ([MS-AXL2] section 2.2.3.24) block does not contain any actionable statements.
MacroCompilationException_UpdateOnDeletedRecord	An **EditRecord** ([MS-AXL2] section 2.2.3.28) or **DeleteRecord** ([MS-AXL2] section 2.2.5.1.4) is operating against a record that no longer exists.
MacroCompilationException_UpdateRecordInNDM	An action **EditRecord** ([MS-AXL2] section 2.2.3.28) is used at the root level of a **Named Data Macro** as specified by [MS-AXL2] section 2.1.2.2.
MacroCompilationException_UpdateOnReadonlyQuery	The protocol server could not save the Macro because the protocol server could not determine a primary key to use in a Query.
MacroCompilationException_UpdateOnReadonlyField	The protocol server could not save the Macro because a field being edited is read-only.
MacroCompilationException_InvalidAlias	The alias specified is not valid.
MacroCompilationException_InvalidIdentifier	The identifier specified is not valid.
MacroCompilationException_InvalidVariableName	A local variable or return variable name uses an invalid prefix or violates the naming rules.
UnsupportedDatabaseCollation	The database application collation is not supported.
NoDatabaseServersAvailableForCreate	No database servers are available for create.
NoSQLAuthDatabaseServersAvailableForCreate	No database servers where **SqlAuthenticationMode** (section 3.1.4.35.4.1) value is "SqlServerAuth" are available for create.
ExpressionBooleanBitMismatch	MUST NOT be used.
NoApplicationDatabaseInformation	MUST NOT be used.

Value	Meaning
DatabaseServerLoginFailed	The protocol server was unable to log in to the database server.
SettingValidationFailed	MUST NOT be used.
SettingApplicationNameNotFound	MUST NOT be used.
SettingApplicationIdNotFound	MUST NOT be used.
SettingApplicationProxyNameNotFound	MUST NOT be used.
ProvisioningGenericFailure	MUST NOT be used.
ProvisioningApplicationAlreadyExists	The protocol server cannot save the database application because another database application with the same name already exists.
ProvisioningException_InstallationTimeout	The protocol server timed out while waiting for the database application creation to finish.
ProvisioningSecureStoreIsRequiredAndMissing	MUST NOT be used.
ProvisioningAccessServicesNotSupportedBySite	The protocol server could not create the database application because a template it needs is not available.
FormException_GenericAXLValidation	Form object([MS-AXL2] section 2.2.1.12)definition is invalid.
UnrecognizedVersion	The protocol server does not recognize the version of the application the protocol client is trying to open.
UpgradeFailed	The protocol server failed to upgrade the application to the latest version.
AnotherUpgradeInProgress	MUST NOT be used.
ServerNotCompatibleWithClient	The protocol server is not compatible with the version of the protocol client.
AppNotCompatibleWithClient	The database application is not compatible with the version of the protocol client.
AppNotCompatibleWithServer	The database application to which the protocol client is trying to connect is not compatible with the version of the protocol server.
TemplateNotCompatible	MUST NOT be used.
TemplateSizeExceeded	MUST NOT be used.
TemplateImageSizeExceeded	MUST NOT be used.
TemplateImageTypeUnsupported	MUST NOT be used.
TemplateFailedToExtractApp	The protocol server failed to create the package.
TemplateUnsupportedOrDependencies	The protocol server failed to create a package because it has unsupported objects or some objects are missing dependencies.
ValidateApplicationException_InvalidUserObjectDefinition	The database application contains one or more

Value	Meaning
	objects with an invalid definition.
ValidateApplicationException_InvalidEventDatamacroDefinition	The database application contains one or more Macros with an invalid definition.
AccessSqlException_GenericError	The protocol server encountered an error.
AccessSqlException_CalculationCannotbeStored	A calculation on the protocol server resulted in a value that cannot be stored because of an overflow error or an out-of-range value when converting from one data type to another.
AccessSqlException_ObjectNotFound	The protocol server cannot find the object.
AccessSqlException_PermissionDenied	The protocol client does not have sufficient permissions on the site (2) to create or install an **app (1)**.
AccessSqlException_DuplicateConstraintValue	The changes requested by the protocol client on the **table** ([MS-AXL2] section 2.1.1) were not successful because they would create duplicate values in the **index** ([MS-AXL2] section 2.1.1.3), **primary key**, or other constraints.
AccessSqlException_NoQueryParameters	Parameters were not supplied for a **query** ([MS-AXL2] section 1.3.4).
AccessSqlException_FieldNoValue	A field is empty but is expecting a value.
AccessSqlException_FieldNoValueDesignTime	Existing data violates the new setting for a field. Values MUST be filled in for all records in the field (3) before it can be made to accept only non-null values.
AccessSqlException_InvalidFieldName	Invalid field name.
AccessSqlException_InvalidObjectName	Invalid object name.
AccessSqlException_ObjectAlreadyExists	There is already an object with the same name in the database application.
AccessSqlException_MissingExpressionInAggregateFunction	The **query** ([MS-AXL2] section 1.3.4) that the protocol client is trying to run does not include an **expression** ([MS-AXL2] section 2.2.1.10) as part of an aggregate function ([MS-AXL2] section 2.1.3.1).
AccessSqlException_DataTypeConversionMismatch	The protocol server can throw one of three **AccessServerMessageIDs** (**AccessSqlException_DataTypeConversionMismatch**, **AccessSqlException_SqlError8114** as specified by section 2.2.5.2, or **AccessSqlException_SqlError245** as specified by section 2.2.5.2) when it fails to convert data from the current data type to the required data type. Which error will be thrown is implementation-specific.
AccessSqlException_InvalidLengthParameter	The protocol server cannot store the result of a function because the value of the function's length parameter isn't valid.
AccessSqlException_IncompatibleTypeChange_TableSave	The protocol server cannot convert the type of an

Value	Meaning
	existing column to the specified type.
AccessSqlException_IncompatibleDataChange_TableSave	The protocol server cannot convert the data in an existing column to the specified type.
AccessSqlException_ErrorMessage	The client operation resulted in the violation of a custom validation rule specified by the user and a custom user-specified message is associated with the validation rule failure.
AccessSqlException_SqlConnectionTimeout	The protocol server timed out while communicating with the database application.
AccessSqlException_SqlConnectionTimeoutDuringInsert	The protocol server timed out while communicating with the database application during an insert operation.
AccessSqlException_SqlError102	The protocol server cannot evaluate an **expression** ([MS-AXL2] section 2.2.1.10) because of a syntax error.
AccessSqlException_SqlError107	A prefix does not match with the name of a **table** ([MS-AXL2] section 2.1.1) or an **alias** used in the **query** ([MS-AXL2] section 1.3.4).
AccessSqlException_SqlError128	Field names are not permitted in this context.
AccessSqlException_SqlError130	The protocol server cannot perform an aggregate function on an **expression** ([MS-AXL2] section 2.2.1.10) that contains an aggregate ([MS-AXL2] section 2.1.3.1) or a **sub-query** ([MS-AXL2] section 2.2.1.1).
AccessSqlException_SqlError192	The scale MUST be less than or equal to the precision.
AccessSqlException_SqlError201	An expected parameter was not supplied.
AccessSqlException_SqlError206	The protocol server cannot evaluate an **expression** ([MS-AXL2] section 2.2.1.10) because the operand data types aren't compatible with each other with respect to the operator in the expression.
AccessSqlException_SqlError209	Ambiguous field name encountered.
AccessSqlException_SqlError214	Type conversion error in a parameter.
AccessSqlException_SqlError217	The **data macro** ([MS-AXL2] section 2.1.2.2) was stopped because an endless loop was detected.
AccessSqlException_SqlError229	The protocol client does not have sufficient permissions to perform the action on an object in the database application. This error occurs if the user attempts an action, such as executing a stored procedure, or reading or modifying a table, for which the user does not have the appropriate privileges.
AccessSqlException_SqlError241	One or more strings could not be converted to the Date/Time data type.
AccessSqlException_SqlError245	The protocol server can throw one of three

Value	Meaning
	AccessServerMessageIDs (**AccessSqlException_DataTypeConversionMismatch** as specified by section 2.2.5.2, **AccessSqlException_SqlError8114** as specified by section 2.2.5.2, or **AccessSqlException_SqlError245**) when it fails to convert data from the current data type to the required data type. Which error will be thrown is implementation-specific.
AccessSqlException_SqlError256	The protocol server cannot use the specified data with the function because the data type is not Text ([MS-AXL2] section 2.2.4.6) or Yes/No ([MS-AXL2] section 2.2.4.6).
AccessSqlException_SqlError257	The protocol server can throw either **AccessSqlException_SqlError257** or **AccessSqlException_SqlError260** as specified by section 2.2.5.2 when it cannot implicitly convert the data from the current data type to the required data type as part of the operation. Which error will be thrown is implementation-specific.
AccessSqlException_SqlError260	The protocol server can throw either **AccessSqlException_SqlError257** as specified by section 2.2.5.2 or **AccessSqlException_SqlError260** when it cannot implicitly convert the data from the current data type to the required data type as part of the operation. Which error will be thrown is implementation-specific.
AccessSqlException_SqlError271	The protocol server cannot update a field because it is read-only.
AccessSqlException_SqlError289	A function cannot create a value of type **Date**, **Time**, or **DateWithTime** because some of the arguments have invalid values. **Date** is the SQL date type, **Time** is the SQL time type and **DateWithTime** is the SQL datetime2 type.
AccessSqlException_SqlError402	The protocol server cannot evaluate an **expression** ([MS-AXL2] section 2.2.1.10) because the operand data types are not compatible with the operator in the expression.
AccessSqlException_SqlError403	The protocol server cannot evaluate an **expression** ([MS-AXL2] section 2.2.1.10) because it contains an operator that does not work with the supplied data type.
AccessSqlException_SqlError421	Invalid data type for field in a DISTINCT **query** ([MS-AXL2] section 1.3.4).
AccessSqlException_SqlError535	The difference between two date values is too large to be stored.
AccessSqlException_SqlError542	A date calculation has resulted in a year value greater than 9999, which is too large to store.
AccessSqlException_SqlError547_CheckConstraint_Runtime	One or more values are prohibited by a **check constraint** ([MS-AXL2] section 2.1.1.1).

Value	Meaning
AccessSqlException_SqlError547_CheckConstraint_Design_Table	Existing data violates a new record **check constraint** ([MS-AXL2] section 2.1.1.1).
AccessSqlException_SqlError547_CheckConstraint_Design_Column	Existing data violates a new **check constraint** ([MS-AXL2] section 2.1.1.1) for a field.
AccessSqlException_SqlError547_ForeignKey_RuntimeInsertUpdate	You cannot add or change a record because a related record is required in a **table** ([MS-AXL2] section 2.1.1).
AccessSqlException_SqlError547_ForeignKey_RuntimeDelete	A record cannot be deleted or changed because a **table** ([MS-AXL2] section 2.1.1) contains related records.
AccessSqlException_SqlError547_ForeignKey_Design	Existing data in a **table** ([MS-AXL2] section 2.1.1) violates referential integrity rules.
AccessSqlException_SqlError1004	A prefix is invalid because there is no **table** ([MS-AXL2] section 2.1.1) name or alias specified in the **query** ([MS-AXL2] section 1.3.4).
AccessSqlException_SqlError1715	The protocol server cannot create a relationship with cascade update or delete on a calculated field.
AccessSqlException_SqlError1759	**Computed fields** cannot reference other computed fields in the **expression** ([MS-AXL2] section 2.2.1.10) property.
AccessSqlException_SqlError1765	Cascade updates are not supported for relationships on computed fields.
AccessSqlException_SqlError1778	Relationship MUST be between fields of the same data type, and MUST include the same number of fields in each **table** ([MS-AXL2] section 2.1.1).
AccessSqlException_SqlError1785	Cannot create cascading relationship on a **table** ([MS-AXL2] section 2.1.1) as it will cause a circular cascade relationship.
AccessSqlException_SqlError1919	A field in a **table** ([MS-AXL2] section 2.1.1) cannot be used in an **index** ([MS-AXL2] section 2.1.1.3).
AccessSqlException_SqlError2364	The protocol server cannot automatically convert values from the current data type to the required data type in a criteria expression.
AccessSqlException_SqlError2365	The protocol server cannot convert a value from the current data type to the required data type in a criteria expression.
AccessSqlException_SqlError2812	The protocol server cannot find a **data macro** ([MS-AXL2] section 2.1.2.2).
AccessSqlException_SqlError3250	The value of a parameter is outside of the range the protocol server expects.
AccessSqlException_SqlError3623	The protocol server cannot evaluate an expression because of a floating point error or an expression argument value that is not valid.
AccessSqlException_SqlError3726	The protocol server cannot delete an object because it is included in a relationship.

Value	Meaning
AccessSqlException_SqlError3906	The protocol server is currently read-only and some operations are not allowed.
AccessSqlException_SqlError4121	The protocol server cannot find the specified column (1) or expression, or the specified name is ambiguous.
AccessSqlException_SqlError4145	The protocol server is expecting a Boolean condition.
AccessSqlException_SqlError4405	Update or delete for a **query** ([MS-AXL2] section 1.3.4) failed because the change would affect more than one base **table** ([MS-AXL2] section 2.1.1).
AccessSqlException_SqlError4506	An output alias is used more than once.
AccessSqlException_SqlError4511	Cannot create a **query** ([MS-AXL2] section 1.3.4) because no alias was specified for a field.
AccessSqlException_SqlError4901	The protocol server cannot add the field because the table contains data and the field (3) is required but does not have a default value.
AccessSqlException_SqlError4922	The protocol server cannot save the changes because one or more objects reference the field.
AccessSqlException_SqlError4924	A field does not exist in a **table** ([MS-AXL2] section 2.1.1).
AccessSqlException_SqlError5074	The protocol server cannot save the changes because the object being updated is dependent on another object.
AccessSqlException_SqlError7704	The protocol server cannot use the specified value because its data type is not valid for the operation.
AccessSqlException_SqlError8114	The protocol server can throw one of three **AccessServerMessageIDs** (**AccessSqlException_DataTypeConversionMismatch** as specified by section 2.2.5.2, **AccessSqlException_SqlError8114**, or **AccessSqlException_SqlError245** as specified by section 2.2.5.2) when it fails to convert data from the current data type to the required data type. Which error will be thrown is implementation-specific.
AccessSqlException_SqlError8115	While converting a value from one data type to another, the protocol server produced a value that cannot be stored.
AccessSqlException_SqlError8116	One of the arguments to a function has an incorrect data type.
AccessSqlException_SqlError8117	The protocol server cannot evaluate an **expression** ([MS-AXL2] section 2.2.1.10) because a value's data type is not compatible with its operator.
AccessSqlException_SqlError8134	Division by zero.
AccessSqlException_SqlError8152	String or binary data which would be truncated.

Value	Meaning
AccessSqlException_SqlError9810	The protocol server cannot use a date part function. A date part function returns an integer that represents the specified date part of the specified date, such as the year, month, or day of the specified date.
AccessSqlException_SqlError17142	The database service is unavailable.
AccessSqlException_SqlError40544	The database application has reached its maximum size limit.
AccessSqlException_SqlError40682	The database application is read-only.
AccessSqlException_CustomError50001	Circular reference resulted in an error.
AccessSqlException_CustomError50003	A specified data source does not exist.
AccessSqlException_CustomError50005	The protocol server cannot delete the object because it was modified by another user.
OpenDependentObjects	Some dependent objects opened in the protocol client and cannot be updated on the protocol server.
OpenDependentObjectsForUpdate	Some dependent objects opened in the protocol client and cannot be updated on the protocol server.

2.2.5.3 AccessServerMessageSeverity

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

AccessServerMessageSeverity specifies the severity of the **alert** that the protocol server returns to the protocol client.

```
<xs:simpleType name="AccessServerMessageSeverity"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Error"/>
    <xs:enumeration value="Warning"/>
    <xs:enumeration value="Information"/>
    <xs:enumeration value="Progress"/>
    <xs:enumeration value="GettingStarted"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **AccessServerMessageSeverity** simple type.

Value	Meaning
Error	The alert indicates that an error occurred.
Warning	MUST NOT be used.
Information	The alert indicates that information is being sent from the server.

Value	Meaning
Progress	MUST NOT be used.
GettingStarted	MUST NOT be used.

2.2.5.4 AccessServerMessageType

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

AccessServerMessageType specifies the type of **alert** that the protocol server returns to the protocol client.

```
<xs:simpleType name="AccessServerMessageType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Alert"/>
    <xs:enumeration value="Status"/>
    <xs:enumeration value="Confirmation"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **AccessServerMessageType** simple type.

Value	Meaning
Alert	The server message is an alert message.
Status	The server message is a status message.
Confirmation	MUST NOT be used.

2.2.5.5 CacheCommands

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **CacheCommands** simple type is a list of enumeration values specifying operations to perform on the **result set**. If multiple values are specified, all of the specified operations MUST be performed, except for combinations prohibited by the table following the schema.

```
<xs:simpleType name="CacheCommands" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="RefreshData"/>
        <xs:enumeration value="ApplyFilter"/>
        <xs:enumeration value="ClearFilter"/>
        <xs:enumeration value="ApplySort"/>
        <xs:enumeration value="RetrieveImage"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
```

The following table specifies the allowable values for the **CacheCommands** simple type.

Value	Meaning
RefreshData	Refreshes the row specified by the **startRowIndex** element (section 3.1.4.4.2.1) from **Source** (section 3.1.1.1) which was previously supplied as an input element to the **GetObjectSchema** operation (section 3.1.4.7) that created the **result set**.
ApplyFilter	Filters the **result set** as specified in the **filter** element (section 3.1.4.4.2.1). The **ApplyFilter** value MUST NOT be present if **ClearFilter** is present.
ClearFilter	Removes any filtering applied to the **result set**. The **ClearFilter** value MUST NOT be present if **ApplyFilter** is present.
ApplySort	Sorts the result set as specified by the **sortExpression** element (section 3.1.4.4.2.1).
RetrieveImage	Returns the row specified by the **startRowIndex** element (section 3.1.4.4.2.1) from the **result set**. The row MUST have only the **fields (3)** from the **result set** that contains image data.

2.2.5.6 ClientMessageID

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **ClientMessageID** simple type is a list of enumeration values specifying a message identifier.

For each identifier except **None**, the protocol server assumes that the protocol client associates a string with each message identifier that is similar to the corresponding entry in the table following the schema.<1>

```
<xs:simpleType name="ClientMessageID" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None"/>
    <xs:enumeration value="PassthroughMessage"/>
    <xs:enumeration value="WebServiceUnavailableMessage"/>
    <xs:enumeration value="WebServiceCanceledMessage"/>
    <xs:enumeration value="DataMacroStopWaiting"/>
    <xs:enumeration value="GenericError"/>
    <xs:enumeration value="NotifyRecordUpdated"/>
    <xs:enumeration value="NotifyRecordsDeleted"/>
    <xs:enumeration value="NotifyCannotDelete"/>
    <xs:enumeration value="NotifyCannotSave"/>
    <xs:enumeration value="NotifyCannotSaveDescription"/>
    <xs:enumeration value="SubFormNestingLimitExceededError"/>
    <xs:enumeration value="DivisionByZero"/>
    <xs:enumeration value="TypeMismatch"/>
    <xs:enumeration value="NoCurrentRecord"/>
    <xs:enumeration value="RecordNotUpdatable"/>
    <xs:enumeration value="WhereConditionTooLong"/>
    <xs:enumeration value="InvalidArgument"/>
    <xs:enumeration value="InvalidContainerControlName"/>
    <xs:enumeration value="ActionArgumentNotFound"/>
    <xs:enumeration value="FormCannotClose"/>
    <xs:enumeration value="AttachmentMustSave"/>
    <xs:enumeration value="InvalidExpression"/>
    <xs:enumeration value="AttachmentUploadSucceed"/>
    <xs:enumeration value="AttachmentDeleted"/>
    <xs:enumeration value="FormOrReportNotBound"/>

    <xs:enumeration value="InvalidPropertyOrMethod"/>
    <xs:enumeration value="InvalidUrl"/>
```

```
        <xs:enumeration value="UserInterfaceMacroLoadFailure"/>
        <xs:enumeration value="CannotFindMacroObject"/>
        <xs:enumeration value="CannotGoToSpecifiedRecord"/>
        <xs:enumeration value="InvalidConditionExpression"/>
        <xs:enumeration value="CannotGoToSubformOrTabpage"/>
        <xs:enumeration value="InvalidControl"/>
        <xs:enumeration value="CannotFocusOnControl"/>
        <xs:enumeration value="InvalidControlValue"/>
        <xs:enumeration value="NoControlName"/>
        <xs:enumeration value="CannotFindErrorHandlingMacro"/>
        <xs:enumeration value="InvalidSetPropertyControl"/>
        <xs:enumeration value="LocalVarNameNotSpecified"/>
        <xs:enumeration value="LocalVarExpressionNotSpecified"/>
        <xs:enumeration value="LocalVariableNameInvalid"/>
        <xs:enumeration value="TempVarNameNotSpecified"/>
        <xs:enumeration value="TempVariableNameInvalid"/>
        <xs:enumeration value="CommandNotAvailable"/>
        <xs:enumeration value="ExpressionErrorCannotSet"/>
        <xs:enumeration value="TooManyRunMacros"/>
        <xs:enumeration value="InvalidBrowseToPathArgument"/>
        <xs:enumeration value="InvalidObjectReference"/>
        <xs:enumeration value="FormNotFoundRep"/>
        <xs:enumeration value="ControlDoesNotSupportRequery"/>
        <xs:enumeration value="ReadOnlyNote"/>
        <xs:enumeration value="TooMuchParameterData"/>
        <xs:enumeration value="OperationNotSupportedOnSubReports"/>
        <xs:enumeration value="InvalidPropertyValue"/>
        <xs:enumeration value="AutocompleteWaitingForValidationMessage"/>
        <xs:enumeration value="AutocompleteInvalidDataMessage"/>
        <xs:enumeration value="TooManyTermsInFilter"/>
        <xs:enumeration value="InvalidValueForFieldMessage"/>
        <xs:enumeration value="InvalidValueForControlMessage"/>
        <xs:enumeration value="ImageUploadFailureNotificationMessage"/>
        <xs:enumeration value="NoResultsFromFilter"/>
        <xs:enumeration value="ErrorRetrievingDataForComboBoxMessage"/>
        <xs:enumeration value="ExpressionImplicitConversionInvalid"/>
        <xs:enumeration value="InvalidSetPropertyInViewMode"/>
        <xs:enumeration value="ErrorRetrievingDataForAutoSum"/>
        <xs:enumeration value="ExpressionImplicitConversionFailed"/>
        <xs:enumeration value="ExpressionArithmeticBadDataType"/>
        <xs:enumeration value="ExpressionOverflow"/>
        <xs:enumeration value="ExpressionDivisionByZero"/>
        <xs:enumeration value="ExpressionSqrtNegativeArgument"/>
        <xs:enumeration value="ExpressionLeftRightNegativeArgument"/>
        <xs:enumeration value="ExpressionSubstringNullFirstArgument"/>
        <xs:enumeration value="ExpressionSubstringInvalidThirdArgument"/>
        <xs:enumeration value="ExpressionDatePartUsedOnTime"/>
        <xs:enumeration value="ExpressionTimePartUsedOnDate"/>
        <xs:enumeration value="ExpressionIIfNullFirstArgument"/>
        <xs:enumeration value="InvalidControlReferenceError"/>
        <xs:enumeration value="RequiredFieldIsEmpty"/>
        <xs:enumeration value="InvalidDateValue"/>
        <xs:enumeration value="InvalidNumberValue"/>
        <xs:enumeration value="InvalidSetPropertyValue"/>
        <xs:enumeration value="ValueExceedsMaximumLength"/>
        <xs:enumeration value="InvalidChangeViewTable"/>
        <xs:enumeration value="MaxNumberOfPopupsReached"/>
        <xs:enumeration value="NoServerReferenceFoundInWhereConditionError"/>
        <xs:enumeration value="ExpressionIllegalDateTime"/>
        <xs:enumeration value="LoadingMessage"/>
        <xs:enumeration value="ExpressionCircularReference"/>
        <xs:enumeration value="NoBoundValueForDisplayText"/>
        <xs:enumeration value="InvalidControlsAreNotUpdatable"/>
        <xs:enumeration value="UserLogonNameDeprecated"/>
    </xs:restriction>
  </xs:simpleType>
```

The following table specifies the allowable values for the **ClientMessageID** simple type.

Value	Meaning
None	No message.
PassthroughMessage	"{0}"
WebServiceUnavailableMessage	"This service is not currently available."
WebServiceCanceledMessage	"The operation was canceled."
DataMacroStopWaiting	"The operation will continue to run in the background."
GenericError	"An error occurred."
NotifyRecordUpdated	"Changes saved."
NotifyRecordsDeleted	"Item(s) deleted."
NotifyCannotDelete	"Rows cannot be deleted while other changes are still processing."
NotifyCannotSave	"Record not saved."
NotifyCannotSaveDescription	"Hang on, we can't save until you fix the problems below."
SubFormNestingLimitExceededError	"Parts of this form cannot be displayed because the form uses more than seven levels of nested subforms."
DivisionByZero	"Division by zero."
TypeMismatch	"Type mismatch."
NoCurrentRecord	"No current record."
RecordNotUpdatable	"Record cannot be updated."
WhereConditionTooLong	"This form could not be loaded. The OpenForm macro action failed because the Where Condition argument was too long."
InvalidArgument	"Invalid argument '{0}'."
InvalidContainerControlName	"The '{0}' action requires a valid control name that corresponds to a subform or subreport."
ActionArgumentNotFound	"The action or method requires an argument: {0}"
FormCannotClose	"You can't save this record at this time."
AttachmentMustSave	"You must save this record before adding any attachments."
InvalidExpression	"Invalid expression."
AttachmentUploadSucceed	"The file has been successfully uploaded."
AttachmentDeleted	"File deleted."
FormOrReportNotBound	"The action or method is not valid because the form or report is not bound to a table or query."
InvalidPropertyOrMethod	"Sorry, you found a glitch."
InvalidUrl	"The webpage cannot be displayed. The hyperlink may be

Value	Meaning
	invalid."
UserInterfaceMacroLoadFailure	"The macro '{0}' is not available."
CannotFindMacroObject	"Cannot find the object '{0}'."
CannotGoToSpecifiedRecord	"You cannot go to the specified record. You may be on the last record."
InvalidConditionExpression	"Invalid condition expression."
CannotGoToSubformOrTabpage	"The GoToControl macro action cannot be used to go to a subform control or tab page in Web forms."
InvalidControl	"There is no field named '{0}' in the current record."
CannotFocusOnControl	"Can't move the focus to the control '{0}'."
InvalidControlValue	"The value you entered isn't valid for this field."
NoControlName	"The action or method requires a Control Name argument."
CannotFindErrorHandlingMacro	"Can't find the macro '{0}' in the macro group '{1}'."
InvalidSetPropertyControl	"The control name '{0}' is misspelled or refers to a control that doesn't exist."
LocalVarNameNotSpecified	"You must specify a name for the local variable."
LocalVarExpressionNotSpecified	"You must specify a value for the local variable."
LocalVariableNameInvalid	"Local variable names must be less than or equal to 64 characters in length, may not start with an equal sign or a space, and may not contain any of the following characters: CR, LF or TAB: .![]/\:*?"<>|#{}%~&."
TempVarNameNotSpecified	"You must specify a name for the temporary variable."
TempVariableNameInvalid	"The name of this TempVar is too long. TempVar names must be less than 256 characters."
CommandNotAvailable	"The command or action isn't currently available: {0}."
ExpressionErrorCannotSet	"You can't assign a value to this object."
TooManyRunMacros	"Macros can only be called 19 times. Your macro contains one or more RunMacro actions that calls a macro more than 19 times. Use an If block to stop the macro after it has been run 19 times."
InvalidBrowseToPathArgument	"The BrowseTo macro action contains an invalid Path argument. The Path argument must be of the form: MainForm1.Subform1 > Form1.Subform1."
InvalidObjectReference	"The object doesn't contain the object '{0}'."
FormNotFoundRep	"The report name '{0}' you entered in either the property sheet or macro is misspelled or refers to a report that doesn't exist."
ControlDoesNotSupportRequery	"The Requery action can't be used on the control '{0}'."
ReadOnlyNote	"This field cannot be edited because the underlying field '{0}'

Value	Meaning
	is read-only."
TooMuchParameterData	"You have exceeded the amount of parameter data that can be passed to the report."
OperationNotSupportedOnSubReports	"The '{0}' action failed because the referenced control contains a report object. {0} on subform controls can only be used when they contain form objects."
InvalidPropertyValue	"'{0}' is an invalid value for property {1}. The valid values for this property are: {2}."
AutocompleteWaitingForValidationMessage	"Validating Data..."
AutocompleteInvalidDataMessage	"Invalid Data"
TooManyTermsInFilter	"Your search is too complex. The results may show more data than you intended."
InvalidValueForFieldMessage	"The value that you entered is not valid for the {0} field."
InvalidValueForControlMessage	"The value that you entered is not valid for the {0} control."
ImageUploadFailureNotificationMessage	"Record saved, but image failed to upload: {0}"
NoResultsFromFilter	"No matches found."
ErrorRetrievingDataForComboBoxMessage	"Failure retrieving option data for ComboBox/Autocomplete."
ExpressionImplicitConversionInvalid	"An expression contains an implicit conversion from one data type to another, but that conversion is invalid."
InvalidSetPropertyInViewMode	"Enter edit mode before modifying any data (that is, controls bound to data)."
ErrorRetrievingDataForAutoSum	"Failure retrieving data for calculation"
ExpressionImplicitConversionFailed	"The expression contains a valid implicit conversion from one data type to another, but the value cannot be converted."
ExpressionArithmeticBadDataType	"The expression is using an arithmetic operator with an invalid data type for the operator."
ExpressionOverflow	"The expression resulted in an overflow because the value is too large for the resulting data type."
ExpressionDivisionByZero	"The expression resulted in a division by zero."
ExpressionSqrtNegativeArgument	"The SQRT() function (Square Root) cannot be used with a negative argument."
ExpressionLeftRightNegativeArgument	"The LEFT() and RIGHT() functions cannot be used with a negative argument."
ExpressionSubstringNullFirstArgument	"The SUBSTRING() function cannot use a NULL value as its first argument."
ExpressionSubstringInvalidThirdArgument	"The SUBSTRING() function cannot use a negative value as its third argument."
ExpressionDatePartUsedOnTime	"A date part such as DAY or MONTH cannot be used on a non-date value (such as a TIME value)."

Value	Meaning
ExpressionTimePartUsedOnDate	"A date part such as HOUR or MINUTE cannot be used on a non-time value (such as a DATE value)."
ExpressionIIfNullFirstArgument	"The function IIF() cannot use a NULL value as its first argument."
InvalidControlReferenceError	"Error: Invalid control reference."
RequiredFieldIsEmpty	"You must enter a value into this field."
InvalidDateValue	"You may only enter dates or times into this field."
InvalidNumberValue	"You may only enter numbers into this field."
InvalidSetPropertyValue	"Sorry, we weren't able to complete the macro action due to an unusable value."
ValueExceedsMaximumLength	"You can't enter more than {0} letters or numbers into this field."
InvalidChangeViewTable	"Sorry, we couldn't find table '{0}' to complete this Change View action. Please double check the table name and try again."
MaxNumberOfPopupsReached	"Sorry, the maximum number of popups has been reached."
NoServerReferenceFoundInWhereConditionError	"Where clauses must contain at least one field reference that includes the table name. For example, "Contacts.Email". You may have specified the field name without a table name, which will resolve to the field's current value."
ExpressionIllegalDateTime	"The calculated value is illegal due to a daylight saving time shift on this date."
LoadingMessage	"Loading..."
ExpressionCircularReference	"There is a circular reference between the controls on this view. If you are the app developer, please remove the circular reference -- whether it's a control that refers to itself or two controls that refer to each other."
NoBoundValueForDisplayText	"Please retry finding the value."
InvalidControlsAreNotUpdatable	"It looks like there is a problem with your app. It's likely that there's a required field on this view that's been hidden or disabled. To fix this, try enabling or unhiding the controls on this view."
UserLogonNameDeprecated	"The UserLoginName function has been deprecated. Please use the UserEmailAddress or UserDisplayName functions instead."

2.2.5.7 DatabaseProviderError

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database

Specifies the type of error condition that occurred during communication between the protocol server and a database server.

```
<xs:simpleType name="DatabaseProviderError" xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

```
    <xs:restriction base="xs:string">
      <xs:enumeration value="UndefinedError"/>
      <xs:enumeration value="ServiceContextError"/>
      <xs:enumeration value="InvalidArgument"/>
      <xs:enumeration value="NotSupported"/>
    </xs:restriction>
  </xs:simpleType>
```

The following table specifies the allowable values for the **DatabaseProviderError** simple type.

Value	Meaning
UndefinedError	Specifies an error that does not fall into any category specified by the other **DatabaseProviderError** values.
ServiceContextError	Specifies that context information about the service is missing.
InvalidArgument	Specifies that an invalid value for an argument was given.
NotSupported	Specifies that the requested operation is not supported by the database server.

2.2.5.8 guid

Namespace: http://microsoft.com/wsdl/types/

The **guid** type specifies a **GUID** value.

```
<xs:simpleType name="guid" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"/>
  </xs:restriction>
</xs:simpleType>
```

Namespace: http://schemas.microsoft.com/2003/10/Serialization/

The **guid** type specifies a GUID value.

```
<xs:simpleType name="guid" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
<xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}"/>
  </xs:restriction>
</xs:simpleType>
```

2.2.5.9 PackageSource

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies where a database package originated.

```
<xs:simpleType name="PackageSource" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="InvalidSource"/>
    <xs:enumeration value="Marketplace"/>
```

```
            <xs:enumeration value="CorporateCatalog"/>
            <xs:enumeration value="DeveloperSite"/>
            <xs:enumeration value="ObjectModel"/>
            <xs:enumeration value="RemoteObjectModel"/>
        </xs:restriction>
    </xs:simpleType>
```

The following table specifies the allowable values for the **PackageSource** simple type.

Value	Meaning
InvalidSource	Specifies an internal error. SHOULD NOT be used.
Marketplace	Specifies that the package came from the SharePoint Marketplace.
CorporateCatalog	Specifies that the package came from the corporate **gallery**.
DeveloperSite	Specifies that the package came from the Developer Site. A Developer Site is one type of SharePoint template, intended as a site for developers to build, test and publish **apps (2)**.
ObjectModel	Specifies that the package was loaded via the **object model**.
RemoteObjectModel	Specifies that the package was uploaded via the client-side object model ([MS-CSOMSPT]).

2.2.5.10   ServerStateFlags

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services

ServerStateFlags specifies the state of the protocol server.

```
    <xs:simpleType name="ServerStateFlags" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:list>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="None"/>
            <xs:enumeration value="Probation"/>
            <xs:enumeration value="ShuttingDown"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:list>
    </xs:simpleType>
```

The following table specifies the allowable values for the **ServerStateFlags** simple type.

Value	Meaning
None	MUST NOT be used.
Probation	MUST NOT be used.
ShuttingDown	The protocol server is shutting down.

2.2.5.11   ServerStateFlags

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

ServerStateFlags specifies the state of the protocol server.

```
<xs:simpleType name="ServerStateFlags" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="ShuttingDown"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
```

The following table specifies the allowable values for the **ServerStateFlags** simple type.

Value	Meaning
ShuttingDown	The protocol server is shutting down.

2.2.6   Attributes

This specification does not define any common **XML schema** attribute definitions.

2.2.7   Groups

This specification does not define any common **XML schema** group definitions.

2.2.8   Attribute Groups

This specification does not define any common **XML schema** attribute group definitions.

2.2.9   Faults

In the event of an application error, the protocol server MUST return either a **SOAP fault** ([SOAP1.2/1] section 5.4), or a **ServiceError** ([MS-AADT] section 2.2.4.13) as a response to the operation.

For SOAP faults:

- The protocol client MUST ignore all elements of the SOAP fault except the **Detail** element ([SOAP1.2/1] section 5.4.5).

- The SOAP fault **Detail** element ([SOAP1.2/1] section 5.4.5) MUST contain the protocol server alert specified by section 2.2.4.1.

When returning a SOAP fault ([SOAP1.2/1] section 5.4) or a **ServiceError** ([MS-AADT] section 2.2.4.13) as a response, the protocol server MUST return a **fault identifier** (section 2.2.5.2) in the response either as the **Value** element ([SOAP1.2/1] section 5.4.1.3) inside a **Subcode** element ([SOAP1.2/1] section 5.4.1.2) of the SOAP fault ([SOAP1.2/1] section 5.4), or as the **Code** attribute in a **ServiceError** ([MS-AADT] section 2.2.4.13).

The different **fault identifiers** (section 2.2.5.2) returned by the protocol server are grouped as Common Fault Identifiers, Runtime Fault Identifiers, Sql Fault Identifiers and Design Time Fault Identifiers. These fault identifiers along with information about the corresponding error encountered by the protocol server are listed in the following sub-sections.

2.2.9.1 Common Fault Identifiers

The following is the list of common fault identifiers, as specified by section 2.2.5.2.

- WriteRecordsPermissionsFailure

- GetRecordsPermissionsFailure

- InternalError

- NotMemberOfRole

- MaxSessionsPerUserExceeded

- RetryError

- MaxRequestDurationExceeded

- ProductExpired

- NewWorkbookSessionTimeout

- ExternalData_TooMuchData

2.2.9.2 Runtime Fault Identifiers

The following is the list of runtime fault identifiers, as specified by section 2.2.5.2.

- DataException_QueryParametersNotSupplied

- ExternalData_InvalidSource

- DataException_GenericError

- DataException_CacheFailureAfterSuccessfulCommit

- ExternalData_ComponentMissing

- ExternalData_TooManyWildcards

- ExternalData_ParametersNotSupported

- GetRecordsPermissionsFailure

- WriteRecordsPermissionsFailure

2.2.9.3 Sql Fault Identifiers

The following is the list of Sql fault identifiers, as specified by section 2.2.5.2.

- AccessSqlException_GenericError

- AccessSqlException_CalculationCannotbeStored

- AccessSqlException_ObjectNotFound

- AccessSqlException_PermissionDenied

- AccessSqlException_DuplicateConstraintValue

- AccessSqlException_NoQueryParameters

- AccessSqlException_FieldNoValue

- AccessSqlException_FieldNoValueDesignTime

- AccessSqlException_InvalidFieldName

- AccessSqlException_InvalidObjectName

- AccessSqlException_ObjectAlreadyExists

- AccessSqlException_MissingExpressionInAggregateFunction

- AccessSqlException_DataTypeConversionMismatch

- AccessSqlException_InvalidLengthParameter

- AccessSqlException_IncompatibleTypeChange_TableSave

- AccessSqlException_IncompatibleDataChange_TableSave

- AccessSqlException_ErrorMessage

- AccessSqlException_SqlConnectionTimeout

- AccessSqlException_SqlError102

- AccessSqlException_SqlError107

- AccessSqlException_SqlError128

- AccessSqlException_SqlError130

- AccessSqlException_SqlError192

- AccessSqlException_SqlError201

- AccessSqlException_SqlError206

- AccessSqlException_SqlError209

- AccessSqlException_SqlError214

- AccessSqlException_SqlError217

- AccessSqlException_SqlError229

- AccessSqlException_SqlError241

- AccessSqlException_SqlError245

- AccessSqlException_SqlError256

- AccessSqlException_SqlError257

- AccessSqlException_SqlError260

- AccessSqlException_SqlError271

- AccessSqlException_SqlError289

- AccessSqlException_SqlError402

- AccessSqlException_SqlError403

- AccessSqlException_SqlError421

- AccessSqlException_SqlError535

- AccessSqlException_SqlError542

- AccessSqlException_SqlError547_CheckConstraint_Runtime

- AccessSqlException_SqlError547_CheckConstraint_Design_Table

- AccessSqlException_SqlError547_CheckConstraint_Design_Column

- AccessSqlException_SqlError547_ForeignKey_RuntimeInsertUpdate

- AccessSqlException_SqlError547_ForeignKey_RuntimeDelete

- AccessSqlException_SqlError547_ForeignKey_Design

- AccessSqlException_SqlError1004

- AccessSqlException_SqlError1715

- AccessSqlException_SqlError1759

- AccessSqlException_SqlError1765

- AccessSqlException_SqlError1778

- AccessSqlException_SqlError1785

- AccessSqlException_SqlError1919

- AccessSqlException_SqlError2364

- AccessSqlException_SqlError2365

- AccessSqlException_SqlError2812

- AccessSqlException_SqlError3250

- AccessSqlException_SqlError3623

- AccessSqlException_SqlError3726

- AccessSqlException_SqlError3906

- TableException_InvalidFieldInExpression

- AccessSqlException_SqlError4121

- AccessSqlException_SqlError4145

- AccessSqlException_SqlError4405

- AccessSqlException_SqlError4506

- AccessSqlException_SqlError4511

- AccessSqlException_SqlError4901

- AccessSqlException_SqlError4922

- AccessSqlException_SqlError4924

- AccessSqlException_SqlError5074

- AccessSqlException_SqlError7704

- AccessSqlException_SqlError8114

- AccessSqlException_SqlError8115

- AccessSqlException_SqlError8116

- AccessSqlException_SqlError8117

- AccessSqlException_SqlError8134

- AccessSqlException_SqlError8152

- AccessSqlException_SqlError9810

- AccessSqlException_SqlError17142

- AccessSqlException_SqlError40682

- AccessSqlException_CustomError50001

- AccessSqlException_CustomError50003

- AccessSqlException_CustomError50005

2.2.9.4 Design Time Fault Identifiers

The following is the list of Design time fault identifiers, as specified by section 2.2.5.2.

- AccessServicesDisabled

- AppNotCompatibleWithClient

- AppNotCompatibleWithServer

- ExternalData_SourceAccessDenied

- ExternalData_InvalidSite

- ExternalData_InvalidSource

- FormException_GenericAXLValidation

- InvalidArgument

- MacroCompilationException_ArgumentValueNotSpecified

- MacroCompilationException_EmptyConditionalBlock

- MacroCompilationException_EmptyLookupRecordBlock

- MacroCompilationException_InvalidAction

- MacroCompilationException_InvalidActionArgument

- MacroCompilationException_MissingDataMacroParameter

- MacroCompilationException_InvalidAlias

- MacroCompilationException_InvalidAxl

- MacroCompilationException_InvalidEventName

- MacroCompilationException_InvalidIdentifier

- MacroCompilationException_InvalidParameter

- MacroCompilationException_InvalidQueryParameter

- MacroCompilationException_InvalidVariableName

- MacroCompilationException_MacroCallStackDepthExceeded

- MacroCompilationException_RequiredArgumentMissing

- MacroCompilationException_UpdateOnDeletedRecord

- MacroCompilationException_UpdateRecordInNDM

- MacroCompilationException_UpdateOnReadonlyQuery

- MacroCompilationException_UpdateOnReadonlyField

- MacroCompilationException_VariableNameCollision

- NoDatabaseServersAvailableForCreate

- NoSQLAuthDatabaseServersAvailableForCreate

- NotMemberOfRole

- ObjectAlreadyExists

- ProvisioningAccessServicesNotSupportedBySite

- ProvisioningApplicationAlreadyExists

- ProvisioningException_InstallationTimeout

- QueryException_AmbiguousAliasProvided

- QueryException_AmbiguousJoins

- QueryException_AmbiguousSourceNamesProvided

- QueryException_GenericAXLValidation

- QueryException_InvalidObjectName

- QueryException_InvalidSourceNamesProvided

- QueryException_OrderNotInOutputs

- QueryException_OutputNotInGroupsOrPartOfAggregate

- QueryException_ParameterTypeMismatch

- ServerNotCompatibleWithClient

- ServerReadOnly

- TableException_CsdlDefinitionNotSupported

- TableException_DuplicateColumnName

- TableException_InvalidColumn

- TableException_InvalidObjectInExpression

- TableException_InvalidComputedColumnExpression

- TableException_InvalidComputedColumnType

- TableException_InvalidRequiredImageColumn

- TableException_InvalidCheckConstraintExpression

- UnrecognizedVersion

- UnsupportedDatabaseCollation

- WebService_CreateApplication_SiteDoesNotExist

- WebService_DeleteApplicationWithSubwebs

- WebService_GetServerInformation_SiteDoesNotExist

- WebService_InvalidApplicationEndPoint

- WebService_InvalidId

- WebService_ObjectModifiedExternally

- WebService_ObjectNotFound

- WebService_ObjectSaveConflict

- WebService_SetApplicationProperties_SetThemePermissionsFailure

- WebService_SiteDoesNotExist

- WebService_UnsupportedCulture

- WebService_ConflictingOperationInProgress

- TemplateNotCompatible

- TemplateSizeExceeded

- TemplateImageSizeExceeded

- TemplateImageTypeUnsupported

- TemplateFailedToExtractApp

- TemplateUnsupportedOrDependencies

- ValidateApplicationException_InvalidUserObjectDefinition

- ValidateApplicationException_InvalidEventDatamacroDefinition

- GetRecordsPermissionsFailure

- WriteRecordsPermissionsFailure

- OpenDependentObjects

- OpenDependentObjectsForUpdate

3   Protocol Details

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The **WSDL** in this specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL might specify differences that reflect actual Microsoft product behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present** but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **not null**, and **present**.

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls that are made by the higher-layer protocol or application are passed directly to the transport, and the results that are returned by the transport are passed directly to the higher-layer protocol or application.

Except where specified, protocol clients SHOULD interpret **Hypertext Transfer Protocol (HTTP)** status codes that are returned by the protocol server as specified in [RFC2616], section 10.

This protocol allows protocol servers to notify protocol clients of application-level faults by using **SOAP faults**. Except where otherwise specified, these SOAP faults are not significant for interoperability and protocol clients can interpret them in an implementation-specific manner.

This protocol allows protocol servers to perform implementation-specific authorization checks and to notify protocol clients of authorization faults by using either HTTP status codes or SOAP faults, as specified previously in this section.

3.1   Server Details

3.1.1   Abstract Data Model

3.1.1.1   Common Terms

The following terms are common amongst all protocol operations.

Session: An entity that gives context to operations working against application data. A **session** is associated with one or more **result sets**, which can be modified by **state changing** operations.

Request: An entity that represents a running request on the protocol server.

Named Query: An entity stored in the **database application** representing a **CT_Query** element, as specified in [MS-AXL2] section 2.2.3.18. The **Name** attribute of the element MUST be specified.

Source: A **table** or a **Named Query** in the database application. One or more **Sources** MUST be referenced in a **CT_Query** element.

Updatable Source: The **Source** in a database application against which insert, update, and delete data operations are applied.

- If a **Source** is a table, it is an **Updatable Source**.

- For a **Named Query** based on a single **Source**, that query is updatable, as long as the **Source** is updatable, and the query includes the **primary key** of the **Source**.

- For queries with more than one **Source** to be updatable, the **Sources** in the query MUST be connected by joins. Each join is specified by a **CT_Join** element, as specified in [MS-AXL2] section 2.2.3.10. For the join, call the **Source** specified in the **Left** attribute S_L, the **Source** specified in the **Right** attribute S_R, the property specified in the **LeftProperty** attribute P_L, the property specified in the **RightProperty** attribute P_R, and the join type specified in the **Type** attribute T. For the query to be updatable, a property MUST be part of exactly one **CT_Join** element.

If a graph is defined by considering each **Source** as a node, and each **CT_Join** as an edge between its **Sources** S_L and S_R, then the graph:

- MUST be fully connected.

- MUST be acyclic.

- MUST NOT have more than one edge between two given nodes.

    For each **CT_Join**, S_L is updatable in relation to S_R if all of the following conditions hold:

    - T is "Inner" or "Left Outer."

    - P_R is a primary key field.

    - P_L is not a primary key field.

    S_R is updatable in relation to S_L if all of the following conditions hold:

    - T is "Inner" or "Right Outer."

    - P_L is a primary key field.

    - P_R is not a primary key field.

    Otherwise, S_R is not updatable in relation to S_L and S_L is not updatable in relation to S_R.

    The query is updatable, if there exists a **Source** that is updatable in relation to all of the **Sources** that it is connected to in the graph for the query. Because the graph is fully connected and acyclic, there is exactly one of these **Sources**. Only the **fields** from this **Source** are updatable.

Result Set: A set of rows that results from running a query specified by a **Source**. Rows SHOULD satisfy the **filter** and **restriction** criteria which are input elements in **OpenResultSet** (section 3.1.4.10.2.1), and SHOULD be sorted according to the **sortExpression** which is an input element in **OpenResultSet** (section 3.1.4.10.2.1).

A protocol client requests a subset of the rows in a result set by specifying a starting index and a maximum row count to return. The row indices are consecutive integer values starting at zero and ending at one less than the total number of rows, or maximum row count, whichever is smaller

3.1.1.2 SessionIdentifier

A **string** ([XMLSCHEMA2] section 3.2.1) that uniquely identifies a **session** on the protocol server and also contains information about the session.

The **SessionIdentifier** MUST have the following layout:

(Numeric values in parts 1, 3, 5, 6, 8, 10, 12, and 14 MUST follow the **int** ([XMLSCHEMA2] section 3.3.17) type representation)

Part 1: MUST be the value "1", followed by a period (".").

Part 2: MUST be "V".

Part 3: The number of characters in part 4, followed by a period (".").

Part 4: A unique **string** ([XMLSCHEMA2] section 3.2.1). MUST be greater than or equal to 20 and less than or equal to 32647 characters long.

Part 5: The sum of the number of characters in parts 6-11, followed by a period (".").

Part 6: The number of characters in part 7, followed by a period (".").

Part 7: The **UI culture** of the session. A language tag, as specified in [RFC1766] Section 2.

Part 8: The number of characters in part 9, followed by a period (".").

Part 9: The **data culture** of the session. A language tag, as specified in [RFC1766] Section 2.

Part 10: The number of characters in part 11, followed by a period (".").

Part 11: The **time zone** of the session, as specified in **CultureCommandParameter** complex type (section 3.1.4.11.3.1).

Part 12: The number of characters in part 13, followed by a period (".").

Part 13: MUST be equal to the value of **RequestSiteId** passed in *parameter*, in the **OpenSession** operation (section 3.1.4.11.2.1).

Part 14: MUST be the value "1", followed by a period (".").

Part 15: MUST be "U".

3.1.2 Timers

The **Session Timeout** timer measures the time remaining before a **session** times out.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

The following table summarizes the list of operations as defined by this specification.

Operation	Description
AddFirewallRule	This operation adds a **FirewallRule** ([MS-AADT] section 2.2.4.7) to the database application.
CheckCopyStatus	This operation retrieves the status of a **CopyDatabase** operation (section 3.1.4.32).
CloseSession	The **CloseSession** operation closes a **session** on the protocol server.
CopyDatabase	This operation instructs the protocol server to begin copying a database.
CreateAccessObject	This operation triggers the creation of an object in a **database application**.
CreateApplication	This operation creates a new database application under the current **site**.
CreatePackage	This operation triggers creation of a package that represents a database application, including its objects and data. The package can be retrieved by using the **GetPackage** operation (section 3.1.4.36).
DatabaseExists	This operation is used to determine whether or not a database exists on the protocol server.
DeleteAccessObject	This operation triggers deletion of an object in a database application.
DeleteData	This operation deletes a record from a **table** in the database application

Operation	Description
	and also deletes the corresponding row from the **result set**.
DeleteFirewallRules	This operation deletes the **FirewallRules** ([MS-AADT] section 2.2.4.7) from the database application. These **FirewallRules** MUST be previously added by the **AddFirewallRule** operation (section 3.1.4.13).
ExecuteDacIncrementalUpgrade	Instructs the protocol server to update the contents of a database.
FixupRow	This operation returns the results of performing a hypothetical update on the result set.
GetAccessObject	This operation triggers retrieval of the requested object from a database application.
GetApplicationInformation	This operation retrieves information about a database application from the protocol server.
GetAutoSumValues	This operation retrieves the result of applying aggregate functions specified by **autoSumFunctions** (section 3.1.4.42.2.1) on **fields** specified by **autoSumFields** (section 3.1.4.42.2.1). The fields MUST belong to the **Source** (section 3.1.1) specified by **source** input element (section 3.1.4.42.2.1).
GetAvailableServer	This operation returns an available database server on which new databases can be created using a given mode of **authentication** with a given package source.
GetData	This operation performs sort, filter, and synchronization operations on rows in the result set, and returns a subset of those rows.
GetDataConnectivity	This operation retrieves information about a login in the database application, which is used to connect to the database application directly.
GetDataConnectivityStatus	This operation retrieves status information about logins in the database application, which are used to connect to the database application directly.
GetDistinctValues	This operation returns a single column from a result set with duplicate values removed.
GetFirewallRules	This operation retrieves all the **FirewallRules** ([MS-AADT] section 2.2.4.7) present in the database application.
GetFormDefinitionAndRecordSet	This operation retrieves the form definition ([MS-AXL2] section 2.2.1.12) of a **form** and then opens a result set for the **RecordSource** specified in the form definition ([MS-AXL2] section 2.2.3.81) and returns a **RecordSet** (section 3.1.4.45.3.1) that contains the subset of rows from the result set.
GetHealthScore	This operation returns information about the health of the protocol server.
GetLinkedTableInformation	This operation retrieves information from the protocol server about a table in a database application.
GetObjectSchema	This operation retrieves metadata information of a **Source** (section 3.1.1.1) in a database application, and returns the information to a protocol client.
GetPackage	This operation retrieves a package that represents a database application, including its objects and data.
GetSearchData	This operation retrieves **records** from **Source** (section 3.1.1.1), specified by **source** (section 3.1.4.43.2.1), which is an input element to the protocol operation.

Operation	Description
GetServerName	Retrieves the name of a database server associated with a given handle.
GetUIMacroJavascript	Retrieves the definition for a **UI macro** ([MS-AXL2] section 1.3.2).
ImportData	This operation triggers importing data into a table in a database application.
InsertData	This operation inserts one or more records into a table in the database application and also inserts the corresponding rows into the result set.
KeepAlive	This operation extends the time a session has remaining before it times out.
OpenResultSet	This operation opens a result set for the given **Source** (section 3.1.1.1) and returns a subset of rows from the result set.
OpenSession	This operation creates a new session.
ProvisionDatabase	Instructs the protocol server to create a new database.
RefreshLinkedTableInformation	This operation refreshes an existing **linked table** ([MS-AXL2] section 2.1.1.6) in a database application on the protocol server. The protocol server uses the **ID** attribute in the **RefreshLinkedTableInformationParameters** (([MS-AADT] section 3.1.4.16.3.1) element to identify the **linked table** ([MS-AXL2] section 2.1.1.6) in the database application, updates its definition from the source of the **linked table** ([MS-AXL2] section 2.1.1.6), and returns the updated definition to the protocol client.
RenameAccessObject	This operation changes the name of an object in a database application.
RenameDatabase	Changes the name of a database.
RunDataMacro	Instructs the protocol server to execute a **Data Macro** ([MS-AXL2] section 2.1.2.2).
SetDataConnectivityStatus	This operation enables or disables a login in the database application, which is used to connect to the database application directly.
SetDataMacroTracing	This operation sets the data macro tracing option in a database application.
SetEnableDisableDatabase	Instructs the protocol server to toggle a database between the enabled and disabled states.
SetReadWrite	Instructs the protocol server to toggle a database between read-only and read-write states.
UnprovisionDatabase	Instructs the protocol server to delete a database.
UpdateAccessObject	This operation updates an object in a database application.
UpdateData	This operation updates a record in an **Updatable Source** (section 3.1.1.1) in the database application and also updates the row in the result set.
UpdateDatabaseConfiguration	Updates the maximum size of the database application.

3.1.4.1 CloseSession

The **CloseSession** operation closes a **session** on the protocol server.

The following is the **WSDL** port type specification of the **CloseSession WSDL operation**.

```
<wsdl:operation name="CloseSession" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CloseSession"
message="tns2:IAccessServiceSoap CloseSession InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CloseSessionResponse"
message="tns2:IAccessServiceSoap_CloseSession_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CloseSessionAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CloseSession_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_CloseSession_InputMessage** (section 3.1.4.1.1.1) request message and the protocol server responds with an **IAccessServiceSoap_CloseSession_OutputMessage** (section 3.1.4.1.1.2) response message as follows:

- The protocol server closes the session specified in the **WorkbookId** element in the **parameter** element in the **CloseSession** element (section 3.1.4.1.2.1) and returns back the **CloseSessionResponse** element (section 3.1.4.1.2.2).

- In the event of an application error on the protocol server during this operation, a SOAP fault is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** (section 2.2.4.1) MUST be one of the values specified in section 2.2.9.1.

3.1.4.1.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_CloseSession_InputMessage	The request WSDL message for the **CloseSession WSDL operation**.
IAccessServiceSoap_CloseSession_OutputMessage	The response WSDL message for the **CloseSession** WSDL operation.

3.1.4.1.1.1   IAccessServiceSoap_CloseSession_InputMessage

The request **WSDL message** for the **CloseSession WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/CloseSession
```

The **SOAP body** contains the **CloseSession** element.

3.1.4.1.1.2 IAccessServiceSoap_CloseSession_OutputMessage

The response **WSDL message** for the **CloseSession WSDL operation**.

The **SOAP body** contains the **CloseSessionResponse** element.

3.1.4.1.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
CloseSession	The input data for the **CloseSession WSDL operation**.
CloseSessionResponse	The result data for the **CloseSession** WSDL operation.

3.1.4.1.2.1 CloseSession

The **CloseSession** element specifies the input data for the **CloseSession WSDL operation**.

```
<xs:element name="CloseSession" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.1.2.2 CloseSessionResponse

The **CloseSessionResponse** element specifies the result data for the **CloseSession WSDL operation**.

```
<xs:element name="CloseSessionResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="CloseSessionResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

CloseSessionResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

3.1.4.1.3 Complex Types

None.

3.1.4.1.4 Simple Types

None.

3.1.4.1.5 Attributes

None.

3.1.4.1.6 Groups

None.

3.1.4.1.7 Attribute Groups

None.

3.1.4.2 DeleteData

This operation deletes a record from a **table** in the **database application** and also deletes the corresponding row from the **result set**.

The following is the **WSDL** port type specification of the **DeleteData WSDL operation**.

```
<wsdl:operation name="DeleteData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteData"
message="tns2:IAccessServiceSoap_DeleteData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteDataResponse"
message="tns2:IAccessServiceSoap_DeleteData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_DeleteData_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_DeleteData_InputMessage** (section 3.1.4.2.1.1) request message and the protocol server responds with an **IAccessServiceSoap_DeleteData_OutputMessage** (section 3.1.4.2.1.2) response message as follows:

▪ The protocol server deletes from the **Updatable Source** (section 3.1.1.1) the **record** that has a primary key equal to the **Key** element of the first **KeyValuePair** in the **keys** element in the **DeleteData** element (section 3.1.4.2.2.1).

▪ If the record is successfully deleted, then the protocol server also deletes from the result set the **row** with a **primary key** equal to primary key of the deleted record.

▪ In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** (section 2.2.4.1) MUST be one of the values specified in either section 2.2.9.1, section 2.2.9.2 or section 2.2.9.3.

3.1.4.2.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_DeleteData_InputMessage	The request WSDL message for the **DeleteData WSDL operation**.
IAccessServiceSoap_DeleteData_OutputMessage	The response WSDL message for the **DeleteData** WSDL operation.

3.1.4.2.1.1   IAccessServiceSoap_DeleteData_InputMessage

The request **WSDL message** for the **DeleteData WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/DeleteData
```

The **SOAP body** contains the **DeleteData** element.

3.1.4.2.1.2   IAccessServiceSoap_DeleteData_OutputMessage

The response **WSDL message** for the **DeleteData WSDL operation**.

The **SOAP body** contains the **DeleteDataResponse** element.

3.1.4.2.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
DeleteData	The input data for the **DeleteData WSDL operation**.
DeleteDataResponse	The result data for the **DeleteData** WSDL operation.

3.1.4.2.2.1   DeleteData

The **DeleteData** element specifies the input data for the **DeleteData WSDL operation**.

```
<xs:element name="DeleteData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="keys" type="tns2:ArrayOfKeyValuePair"/>
      <xs:element minOccurs="0" maxOccurs="1" name="oldValues"
type="tns2:ArrayOfKeyValuePair"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
```

```
      </xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

keys: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the **record** to delete.

- MUST be present and MUST contain exactly one **KeyValuePair** (section 2.2.4.5).

- The **Key** element of the **KeyValuePair** MUST be of type **xs:int** and MUST be a **primary key** for a record in the **table**.

- The **Value** element of the **KeyValuePair** MUST be ignored.

oldValues: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the **fields** and their original values in the record identified by **keys** element. MUST be present and MUST contain at least one **KeyValuePair** (section 2.2.4.5). SHOULD be ignored by the protocol server.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.2.2.2   DeleteDataResponse

The **DeleteDataResponse** element specifies the result data for the **DeleteData WSDL operation**.

```
<xs:element name="DeleteDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="DeleteDataResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="1" maxOccurs="1" name="recordsDeleted" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DeleteDataResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

recordsDeleted: MUST be 1.

3.1.4.2.3 Complex Types

None.

3.1.4.2.4 Simple Types

None.

3.1.4.2.5 Attributes

None.

3.1.4.2.6 Groups

None.

3.1.4.2.7 Attribute Groups

None.

3.1.4.3 FixupRow

This operation returns the results of performing a hypothetical update on the result set.

The following is the **WSDL** port type specification of the **FixupRow WSDL operation**.

```
<wsdl:operation name="FixupRow" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/FixupRow"
message="tns2:IAccessServiceSoap FixupRow InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/FixupRowResponse"
message="tns2:IAccessServiceSoap_FixupRow_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/FixupRowAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_FixupRow_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_FixupRow_InputMessage** (section 3.1.4.3.1.1) request message and the protocol server responds with an **IAccessServiceSoap_FixupRow_OutputMessage** (section 3.1.4.3.1.2) response message as follows:

- The protocol server retrieves a copy of a row from the **database application** using the **Updatable Source** (section 3.1.1.1)**,** which was previously supplied as the **source** input element to **GetObjectSchema** Operation (section 3.1.4.7.2.1) and the given **key**, and updates the columns specified in **values** in the copy. Neither the database application nor the **result set** are modified. If the update succeeds, the protocol server returns the updated values of all columns in the row.

- In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** MUST be one of the common fault identifiers specified in section 2.2.9.1 or one of the Sql fault identifiers specified in section 2.2.9.3.

3.1.4.3.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_FixupRow_InputMessage	The request WSDL message for the **FixupRow WSDL operation**.
IAccessServiceSoap_FixupRow_OutputMessage	The response WSDL message for the **FixupRow** WSDL operation.

3.1.4.3.1.1 IAccessServiceSoap_FixupRow_InputMessage

The request **WSDL message** for the **FixupRow WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/FixupRow
```

The **SOAP body** contains the **FixupRow** element.

3.1.4.3.1.2 IAccessServiceSoap_FixupRow_OutputMessage

The response **WSDL message** for the **FixupRow WSDL operation**.

The **SOAP body** contains the **FixupRowResponse** element.

3.1.4.3.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
FixupRow	The input data for the **FixupRow WSDL operation**.
FixupRowResponse	The result data for the **FixupRow** WSDL operation.

3.1.4.3.2.1 FixupRow

The **FixupRow** element specifies the input data for the **FixupRow WSDL operation**.

```
<xs:element name="FixupRow" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="keys" type="tns2:ArrayOfKeyValuePair"/>
      <xs:element minOccurs="0" maxOccurs="1" name="values" type="tns2:ArrayOfKeyValuePair"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

keys: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the row to operate on. MUST be present. MUST contain exactly one **KeyValuePair** (section 2.2.4.5). The **Key** element of the **KeyValuePair** MUST contain a **primary key** value for a row in the result set.

values: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the **fields** and their new values which are to be used for the hypothetical update of the **record** identified by **keys** element. Each **Key** element specifies the name of a column in the result set, and the corresponding **Value** element contains the data for that column in the row.

- MUST be present.

- MUST contain at least one **KeyValuePair** (section 2.2.4.5).

- For each **KeyValuePair**:

  - The **Key** element MUST be equal to the name of a column in the result set.

  - The **Value** element MUST be the correct **data type** for the column in the result set.

  - The **Value** element MUST either be empty and with the **nil** ([XMLSCHEMA2] section 2.6.2) attribute set to "true" or have the **type** ([XMLSCHEMA2] section 2.6.1) attribute set to one of the following:

    - **boolean** ([XMLSCHEMA2] section 3.2.2)

    - **datetime** ([XMLSCHEMA2] section 3.2.7)

    - **string** ([XMLSCHEMA2] section 3.2.1)

    - **int** ([XMLSCHEMA2] section 3.3.17)

    - **decimal** ([XMLSCHEMA2] section 3.2.3)

    - **double** ([XMLSCHEMA2] section 3.2.5)

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.3.2.2   FixupRowResponse

The **FixupRowResponse** element specifies the result data for the **FixupRow WSDL operation**.

```
<xs:element name="FixupRowResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="FixupRowResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="totalRowCount" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

FixupRowResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

tableXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies **XML** containing the content of the returned row, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2).

totalRowCount: MUST be "1".

3.1.4.3.3 Complex Types

None.

3.1.4.3.4 Simple Types

None.

3.1.4.3.5 Attributes

None.

3.1.4.3.6 Groups

None.

3.1.4.3.7 Attribute Groups

None.

3.1.4.4 GetData

This operation performs sort, filter, and synchronization operations on rows in the **result set**, and returns a subset of those rows.

The following is the **WSDL** port type specification of the **GetData WSDL operation**.

```
<wsdl:operation name="GetData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetData"
message="tns2:IAccessServiceSoap_GetData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataResponse"
message="tns2:IAccessServiceSoap_GetData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetData_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetData_InputMessage** (section 3.1.4.4.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetData_OutputMessage** (section 3.1.4.4.1.2) response message as follows:

- The protocol server first executes any actions specified by the **cacheCommands** input element (section 3.1.4.4.2.1), and refreshes the result set according to the **cacheCommands** values specified in section 2.2.5.5. Next, the protocol server returns a subset of the rows in the result set, as specified by the **startRowIndex** and **maximumRows** input elements (section 3.1.4.4.2.1).

- The subset of rows returned is specified by **startRowIndex** and **maximumRows** as follows:

  - **maximumRows** MUST be greater than zero . If it is less than or equal to zero, a **SOAP fault** is returned, as specified in section 2.2.9.

- If the **RetrieveImage** value is specified for **cacheCommands**, then the protocol server returns a single row specified by the **startRowIndex** from the result set. The row MUST have only **fields** from the result set that contain image data.

- If the **maximumRows** element is greater than zero and **startRowIndex** + **maximumRows** exceeds the number of rows in the result set, the protocol server returns all rows in the result set with indices greater than or equal to **startRowIndex**.

- Otherwise, the protocol server returns all rows in the result set with indices starting at **startRowIndex** and ending at **startRowIndex** + **maximumRows** -1.

- In the event of an application error on the protocol server during this operation, a SOAP fault is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** (section 2.2.4.1) MUST be one of the values specified in section 2.2.9.1, or section 2.2.9.3, or one of the values from the following table.

Identifier	Description
OrderingException_InvalidSpecification	See section 2.2.5.2.
OrderingException_InvalidColumnName	See section 2.2.5.2.

3.1.4.4.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetData_InputMessage	The request WSDL message for the **GetData WSDL operation**.
IAccessServiceSoap_GetData_OutputMessage	The response WSDL message for the **GetData** WSDL operation.

3.1.4.4.1.1   IAccessServiceSoap_GetData_InputMessage

The request **WSDL message** for the **GetData WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetData
```

The **SOAP body** contains the **GetData** element.

3.1.4.4.1.2   IAccessServiceSoap_GetData_OutputMessage

The response **WSDL message** for the **GetData WSDL operation**.

The **SOAP body** contains the **GetDataResponse** element.

3.1.4.4.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetData	The input data for the **GetData WSDL operation**.
GetDataResponse	The result data for the **GetData** WSDL operation.

3.1.4.4.2.1   GetData

The **GetData** element specifies the input data for the **GetData WSDL operation**.

```
<xs:element name="GetData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="startRowIndex" type="xs:int"/>
      <xs:element minOccurs="1" maxOccurs="1" name="rowKey" type="xs:int"/>
      <xs:element minOccurs="1" maxOccurs="1" name="maximumRows" type="xs:int"/>
      <xs:element minOccurs="1" maxOccurs="1" name="cacheCommands"
type="tns2:CacheCommands"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sortExpression" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="filter" type="tns2:FilterInfo"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified by section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

startRowIndex: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the index of the first row to return from the result set.

▪ MUST be nonnegative.

▪ MUST be less than the total number of rows in the result set.

rowKey: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the value of the primary key of a **record** from the result set. The protocol server uses this value to identify the record from the result set, which needs to be refreshed.

▪ If **cacheCommands** contains **RefreshData**, MUST NOT be less than zero.

maximumRows: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the maximum number of rows to return.

▪ MUST be greater than zero.

▪ If **cacheCommands** contains **RetrieveImage**, MUST be "1".

▪ If **cacheCommands** contains **RefreshData**, MUST be "1".

cacheCommands: A **CacheCommands** (section 2.2.5.5) that specifies a list of actions to perform on the result set. If both **ApplyFilter** and **ClearFilter** are specified, the protocol server MUST return a **SOAP fault**, as specified by section 3.1.4.4.

sortExpression: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the sort order to apply to the result set. If **cacheCommands** contains **ApplySort**:

- MUST be present.

- MUST contain a **CT_AdHocOrdering**, as specified by [MS-AXL2] section 2.2.3.5.

The protocol server MUST ignore this element if **cacheCommands** does not contain **ApplySort**.

filter: A **FilterInfo** (section 2.2.4.10) that specifies the filter criteria to apply to the result set. The protocol server MUST ignore this element if **cacheCommands** does not contain **ApplyFilter**.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. MUST be present. SHOULD be ignored by the protocol server.

3.1.4.4.2.2   GetDataResponse

The **GetDataResponse** element specifies the result data for the **GetData WSDL operation**.

```
<xs:element name="GetDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetDataResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="aggregateValues"
type="tns2:ArrayOfAnyType"/>
      <xs:element minOccurs="1" maxOccurs="1" name="totalRowCount" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetDataResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

tableXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies **XML** containing the content of the returned rows, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2).

aggregateValues: MUST NOT be used.

totalRowCount: A **int** ([XMLSCHEMA2] section 3.3.17) that specifies the number of rows in the **Source** (section 3.1.1.1)**,** which was previously supplied as an input element to **GetObjectSchema** operation (section 3.1.4.7.2.1).

3.1.4.4.3 Complex Types

None.

3.1.4.4.4 Simple Types

None.

3.1.4.4.5 Attributes

None.

3.1.4.4.6 Groups

None.

3.1.4.4.7 Attribute Groups

None.

3.1.4.5 GetDistinctValues

This operation returns a single column from a **result set** with duplicate values removed.

The following is the **WSDL** port type specification of the **GetDistinctValues WSDL operation**.

```
<wsdl:operation name="GetDistinctValues" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDistinctValues"
message="tns2:IAccessServiceSoap_GetDistinctValues_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDistinctValuesResponse"
message="tns2:IAccessServiceSoap_GetDistinctValues_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDistinctValuesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetDistinctValues_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetDistinctValues_InputMessage** (section 3.1.4.5.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetDistinctValues_OutputMessage** (section 3.1.4.5.1.2) response message as follows:

▪ The protocol server returns a table consisting of a single column. Each row of the table contains a distinct value from the column specified by **columnName** in the result set specified by **source** in the **GetDistinctValues** element (section 3.1.4.5.2.1).

In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** MUST be one of the values specified in section 2.2.9.1 or section 2.2.9.3.

3.1.4.5.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetDistinctValues_InputMessage	The request WSDL message for the **GetDistinctValues WSDL operation**.
IAccessServiceSoap_GetDistinctValues_OutputMessage	The response WSDL message for the **GetDistinctValues** WSDL operation.

3.1.4.5.1.1   IAccessServiceSoap_GetDistinctValues_InputMessage

The request **WSDL message** for the **GetDistinctValues WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetDistinctValues
```

The **SOAP body** contains the **GetDistinctValues** element.

3.1.4.5.1.2   IAccessServiceSoap_GetDistinctValues_OutputMessage

The response **WSDL message** for the **GetDistinctValues WSDL operation**.

The **SOAP body** contains the **GetDistinctValuesResponse** element.

3.1.4.5.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetDistinctValues	The input data for the **GetDistinctValues WSDL operation**.
GetDistinctValuesResponse	The result data for the **GetDistinctValues** WSDL operation.

3.1.4.5.2.1   GetDistinctValues

The **GetDistinctValues** element specifies the input data for the **GetDistinctValues WSDL operation**.

```
<xs:element name="GetDistinctValues" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="columnName" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="maximumRows" type="xs:int"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

columnName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the column to return values from. MUST be present. MUST be the name of a column in the result set identified by **moniker**.

maximumRows: A **int** ([XMLSCHEMA2] section 3.3.17) that specifies the maximum number of values to return. Zero means that there is no limit on the number of values to return. MUST NOT be less than zero.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.5.2.2   GetDistinctValuesResponse

The **GetDistinctValuesResponse** element specifies the result data for the **GetDistinctValues WSDL operation**.

```
<xs:element name="GetDistinctValuesResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetDistinctValuesResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetDistinctValuesResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

tableXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **XML** containing the content of the returned rows, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2).

3.1.4.5.3 Complex Types

None.

3.1.4.5.4 Simple Types

None.

3.1.4.5.5 Attributes

None.

3.1.4.5.6 Groups

None.

3.1.4.5.7 Attribute Groups

None.

3.1.4.6 GetHealthScore

This operation returns information about the health of the protocol server.

The following is the **WSDL** port type specification of the **GetHealthScore WSDL operation**.

```
<wsdl:operation name="GetHealthScore" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetHealthScore"
```

```
message="tns2:IAccessServiceSoap_GetHealthScore_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetHealthScoreResponse"
message="tns2:IAccessServiceSoap_GetHealthScore_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetHealthScoreAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetHealthScore_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetHealthScore_InputMessage** (section 3.1.4.6.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetHealthScore_OutputMessage** (section 3.1.4.6.1.2) response message as follows:

▪ In the event of an application error on the protocol server during this operation, the protocol server MUST return a **SOAP fault** response. The **SOAP fault detail** MUST contain an **AccessServerMessage**, as specified by section 2.2.4.1, whose **Id** element MUST be Internal Error (section 2.2.5.2).

▪ Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_GetHealthScore_OutputMessage** response message that contains information about the health of the protocol server.

3.1.4.6.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetHealthScore_InputMessage	The request WSDL message for the **GetHealthScore WSDL operation**.
IAccessServiceSoap_GetHealthScore_OutputMessage	The response WSDL message for the **GetHealthScore** WSDL operation.

3.1.4.6.1.1   IAccessServiceSoap_GetHealthScore_InputMessage

The request **WSDL message** for the **GetHealthScore WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetHealthScore
```

The **SOAP body** contains the **GetHealthScore** element.

3.1.4.6.1.2   IAccessServiceSoap_GetHealthScore_OutputMessage

The response **WSDL message** for the **GetHealthScore WSDL operation**.

The **SOAP body** contains the **GetHealthScoreResponse** element.

3.1.4.6.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetHealthScore	The input data for the **GetHealthScore WSDL operation**.
GetHealthScoreResponse	The result data for the **GetHealthScore** WSDL operation.

3.1.4.6.2.1 GetHealthScore

The **GetHealthScore** element specifies the input data for the **GetHealthScore WSDL operation**.

```
<xs:element name="GetHealthScore" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType/>
</xs:element>
```

3.1.4.6.2.2 GetHealthScoreResponse

The **GetHealthScoreResponse** element specifies the result data for the **GetHealthScore WSDL operation**.

```
<xs:element name="GetHealthScoreResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetHealthScoreResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetHealthScoreResult: A **CommandResult**, as specified by section 2.2.4.4. MUST be present. The **HealthInformation** element of the **CommandResult** MUST be present.

3.1.4.6.3 Complex Types

None.

3.1.4.6.4 Simple Types

None.

3.1.4.6.5 Attributes

None.

3.1.4.6.6 Groups

None.

3.1.4.6.7 Attribute Groups

None.

3.1.4.7 GetObjectSchema

This operation retrieves metadata information of a **Source** (section 3.1.1.1) in a **database application**, and returns the information to a protocol client.

The following is the **WSDL** port type specification of the **GetObjectSchema WSDL operation**.

```
<wsdl:operation name="GetObjectSchema" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetObjectSchema"
message="tns2:IAccessServiceSoap_GetObjectSchema_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetObjectSchemaResponse"
message="tns2:IAccessServiceSoap_GetObjectSchema_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetObjectSchemaAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetObjectSchema_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetObjectSchema_InputMessage** (section 3.1.4.7.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetObjectSchema_OutputMessage** (section 3.1.4.7.1.2) response message as follows:

- The protocol server retrieves information about all **fields** of the **Source** in the database application. The information is returned in **FieldSchema** elements, as specified by section 2.2.4.25.

- This operation will create a new result set for a session (2), which was created during the operation **OpenSession** (section 3.1.4.11).

- In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** MUST be one of the values specified in section 2.2.9.1, or section 2.2.9.3.

3.1.4.7.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetObjectSchema_InputMessage	The request WSDL message for the **GetObjectSchema WSDL operation**.
IAccessServiceSoap_GetObjectSchema_OutputMessage	The response WSDL message for the **GetObjectSchema** WSDL operation.

3.1.4.7.1.1   IAccessServiceSoap_GetObjectSchema_InputMessage

The request **WSDL message** for the **GetObjectSchema WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetObjectSchema
```

The **SOAP body** contains the **GetObjectSchema** element.

3.1.4.7.1.2   IAccessServiceSoap_GetObjectSchema_OutputMessage

The response **WSDL message** for the **GetObjectSchema WSDL operation**.

The **SOAP body** contains the **GetObjectSchemaResponse** element.

3.1.4.7.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetObjectSchema	The input data for the **GetObjectSchema WSDL operation**.
GetObjectSchemaResponse	The result data for the **GetObjectSchema** WSDL operation.

3.1.4.7.2.1   GetObjectSchema

The **GetObjectSchema** element specifies the input data for the **GetObjectSchema WSDL operation**.

```
<xs:element name="GetObjectSchema" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="requestContext"
type="tns2:RequestContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified by section 2.2.4.3. The **parameter** element MUST be present.

requestContext: A **RequestContext** (section 2.2.4.27) that specifies information necessary for the protocol server to uniquely identify the **database application**. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **Source** (section 3.1.1.1) for which metadata is to be retrieved. The **Source** element MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.7.2.2 GetObjectSchemaResponse

The **GetObjectSchemaResponse** element specifies the result data for the **GetObjectSchema WSDL operation**.

```
<xs:element name="GetObjectSchemaResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetObjectSchemaResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="fieldSchemas"
type="tns2:ArrayOfFieldSchema"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetObjectSchemaResult: A **CommandResult**, as specified by section 2.2.4.4. MUST be present.

fieldSchemas: An **ArrayOfFieldSchema** (section 2.2.4.19) that specifies the metadata information about **fields** of the **source** input element (section 3.1.4.7.2.1). MUST be present.

3.1.4.7.3 Complex Types

None.

3.1.4.7.4 Simple Types

None.

3.1.4.7.5 Attributes

None.

3.1.4.7.6 Groups

None.

3.1.4.7.7 Attribute Groups

None.

3.1.4.8 InsertData

This operation inserts one or more **records** into a table in the **database application** and also inserts the corresponding rows into the **result set**.

The following is the **WSDL** port type specification of the **InsertData WSDL operation**.

```
<wsdl:operation name="InsertData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/InsertData"
message="tns2:IAccessServiceSoap_InsertData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/InsertDataResponse"
message="tns2:IAccessServiceSoap_InsertData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/InsertDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_InsertData_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    </wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_InsertData_InputMessage** (section 3.1.4.8.1.1) request message and the protocol server responds with an **IAccessServiceSoap_InsertData_OutputMessage** (section 3.1.4.8.1.2) response message as follows:

▪ The protocol server adds one or more new records into the **Updatable Source** of the database application (section 3.1.1) with the **fields** of the records filled in as specified by the **values** element in the **InsertData** element (section 3.1.4.8.2.1).

▪ If the records were successfully inserted, the protocol server retrieves the inserted records from the database application and adds corresponding rows to the result set where the **primary key** of each row is equal to the primary key of that record, and with its columns filled in as specified by the corresponding columns of the retrieved record. The protocol server then returns the newly added rows to the protocol client.

In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified by section 2.2.9. The **Id** element of the **AccessServerMessage** MUST be one of the values specified by section 2.2.9.1, one of the values specified by section 2.2.9.3, or one of the values specified in the following table.

Identifier	Description
WriteRecordsPermissionsFailure	See section 2.2.5.2.

3.1.4.8.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_InsertData_InputMessage	The request WSDL message for the **InsertData WSDL operation**.
IAccessServiceSoap_InsertData_OutputMessage	The response WSDL message for the **InsertData** WSDL operation.

3.1.4.8.1.1   IAccessServiceSoap_InsertData_InputMessage

The request **WSDL message** for the **InsertData WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/InsertData
```

The **SOAP body** contains the **InsertData** element.

3.1.4.8.1.2   IAccessServiceSoap_InsertData_OutputMessage

The response **WSDL message** for the **InsertData WSDL operation**.

The **SOAP body** contains the **InsertDataResponse** element.

3.1.4.8.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
InsertData	The input data for the **InsertData WSDL operation**.
InsertDataResponse	The result data for the **InsertData** WSDL operation.

3.1.4.8.2.1   InsertData

The **InsertData** element specifies the input data for the **InsertData WSDL operation**.

```
<xs:element name="InsertData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="values"
type="tns2:ArrayOfArrayOfKeyValuePair"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

values: An **ArrayOfArrayOfKeyValuePair** (section 3.1.4.8.3.1) that specifies which **records** need to be inserted into the **database application**. Each **ArrayOfKeyValuePair** (section 2.2.4.2) element of the **ArrayOfArrayOfKeyValuePair** specifies the **fields** and their new values which are to be inserted in a new record. Each **Key** element specifies the name of a column in the result set, and the corresponding **Value** element contains the data for that column in the new row.

▪   MUST be present.

▪   MUST contain at least one **KeyValuePair** (section 2.2.4.5).

▪   For each **KeyValuePair**:

   ▪   The **Key** element MUST be equal to the name of a column in the result set.

   ▪   The **Value** element MUST be the correct **data type** for the column in the result set.

- The **Value** element MUST either be empty and with the **nil** ([XMLSCHEMA2] section 2.6.2) attribute set to "true" or have the **type** ([XMLSCHEMA2] section 2.6.1) attribute set to one of the following:

    - **boolean** ([XMLSCHEMA2] section 3.2.2)

    - **datetime** ([XMLSCHEMA2] section 3.2.7)

    - **string** ([XMLSCHEMA2] section 3.2.1)

    - **int** ([XMLSCHEMA2] section 3.3.17)

    - **decimal** ([XMLSCHEMA2] section 3.2.3)

    - **double** ([XMLSCHEMA2] section 3.2.5)

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. MUST be present. SHOULD be ignored by the protocol server.

3.1.4.8.2.2   InsertDataResponse

The **InsertDataResponse** element specifies the result data for the **InsertData WSDL operation**.

```
<xs:element name="InsertDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="InsertDataResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="insertedRowsXml" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

InsertDataResult: A **CommandResult,** as specified by section 2.2.4.4. MUST be present.

insertedRowsXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **XML** containing the content of the returned rows, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2).

3.1.4.8.3 Complex Types

The following table summarizes the **XML schema** complex type definitions that are specific to this operation.

Complex type	Description
ArrayOfArrayOfKeyValuePair	An array of **ArrayOfKeyValuePair** (section 2.2.4.2) elements.

3.1.4.8.3.1   ArrayOfArrayOfKeyValuePair

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

An array of **ArrayOfKeyValuePair** (section 2.2.4.2) elements.

```
<xs:complexType name="ArrayOfArrayOfKeyValuePair"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfKeyValuePair"
nillable="true" type="tns2:ArrayOfKeyValuePair"/>
  </xs:sequence>
</xs:complexType>
```

ArrayOfKeyValuePair: An **ArrayOfKeyValuePair**, as specified in section 2.2.4.2.

3.1.4.8.4 Simple Types

None.

3.1.4.8.5 Attributes

None.

3.1.4.8.6 Groups

None.

3.1.4.8.7 Attribute Groups

None.

3.1.4.9 KeepAlive

This operation extends the time a **session** has remaining before it times out.

The following is the **WSDL** port type specification of the **KeepAlive WSDL operation**.

```
<wsdl:operation name="KeepAlive" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/KeepAlive"
message="tns2:IAccessServiceSoap_KeepAlive_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/KeepAliveResponse"
message="tns2:IAccessServiceSoap_KeepAlive_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/KeepAliveAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_KeepAlive_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_KeepAlive_InputMessage** (section 3.1.4.9.1.1) request message and the protocol server responds with an **IAccessServiceSoap_KeepAlive_OutputMessage** (section 3.1.4.9.1.2) response message as follows:

▪ The protocol server resets the **Session Timeout** timer (section 3.1.2) for the session specified in the **WorkbookId** element in the **parameter** element in the **KeepAlive** element (section 3.1.4.9.2.1).

- In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** (section 2.2.4.1) MUST be one of the values specified in section 2.2.9.1.

3.1.4.9.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_KeepAlive_InputMessage	The request WSDL message for the **KeepAlive WSDL operation**.
IAccessServiceSoap_KeepAlive_OutputMessage	The response WSDL message for the **KeepAlive** WSDL operation.

3.1.4.9.1.1   IAccessServiceSoap_KeepAlive_InputMessage

The request **WSDL message** for the **KeepAlive WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/KeepAlive
```

The **SOAP body** contains the **KeepAlive** element.

3.1.4.9.1.2   IAccessServiceSoap_KeepAlive_OutputMessage

The response **WSDL message** for the **KeepAlive WSDL operation**.

The **SOAP body** contains the **KeepAliveResponse** element.

3.1.4.9.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
KeepAlive	The input data for the **KeepAlive WSDL operation**.
KeepAliveResponse	The result data for the **KeepAlive** WSDL operation.

3.1.4.9.2.1   KeepAlive

The **KeepAlive** element specifies the input data for the **KeepAlive WSDL operation**.

```
<xs:element name="KeepAlive" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
```

```
         <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
   </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.9.2.2   KeepAliveResponse

The **KeepAliveResponse** element specifies the result data for the **KeepAlive WSDL operation**.

```
<xs:element name="KeepAliveResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="KeepAliveResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

KeepAliveResult: A **CommandResult**, as specified by section 2.2.4.4. MUST be present.

3.1.4.9.3 Complex Types

None.

3.1.4.9.4 Simple Types

None.

3.1.4.9.5 Attributes

None.

3.1.4.9.6 Groups

None.

3.1.4.9.7 Attribute Groups

None.

3.1.4.10   OpenResultSet

This operation opens a **result set** for the given **Source** (section 3.1.1.1) and returns a subset of rows from the result set.

The following is the **WSDL** port type specification of the **OpenResultSet WSDL operation**.

```
<wsdl:operation name="OpenResultSet" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenResultSet"
```

```
message="tns2:IAccessServiceSoap_OpenResultSet_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenResultSetResponse"
message="tns2:IAccessServiceSoap_OpenResultSet_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenResultSetAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_OpenResultSet_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_OpenResultSet_InputMessage** (section 3.1.4.10.1.1) request message and the protocol server responds with an **IAccessServiceSoap_OpenResultSet_OutputMessage** (section 3.1.4.10.1.2) response message as follows:

- The protocol server retrieves data from the given **Source** of the **database application**, which was previously supplied as an input element to the **GetObjectSchema** (section 3.1.4.7.2.1) operation. Only the **fields** that are specified by **fields** input element in section 3.1.4.10.2.1 are retrieved. The data is filtered according to the **filter** and **restriction** input elements (section 3.1.4.10.2.1). The protocol server also sorts the data according to expressions defined by the **sortExpression** input element (section 3.1.4.10.2.1).

- The protocol server stores the data in a result set identified by the **source** input element (section 3.1.4.10.2.1) within the **session** identified by the **WorkbookId** element of the **parameter** input element (section 3.1.4.10.2.1) in the request message.

- The protocol server returns a subset of rows specified by **startRowIndex** and **maximumRows** input elements (section 3.1.4.10.2.1) as follows:

  - **maximumRows** MUST be greater than zero ("0"). If it is less than or equal to zero, a **SOAP fault** is returned, as specified in section 2.2.9.

  - If the **maximumRows** element is greater than zero and if the sum of **startRowIndex** and **maximumRows** exceeds the number of rows in the result set, the protocol server returns all rows in the result set with indices greater than or equal to **startRowIndex**.

  - Otherwise, the protocol server returns all rows in the result set with indices starting at **startRowIndex** and ending at the sum of **startRowIndex** and **maximumRows** minus 1.

- The protocol server calculates the total number of rows in **Source** that satisfy the **filter** and **restriction** conditions, and returns this row count as the **totalRowCount** output element (section 3.1.4.10.2.2).

- If the **retrieveExactRowCount** input element (section 3.1.4.10.2.1) is "true", the protocol server returns the exact number of total row count and if the **retrieveExactRowCount** input element is "false", the protocol server returns an approximate number of total row count in the **totalRowCount** output element.

- In the event of an application error on the protocol server during this operation, a SOAP fault is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** (section 2.2.4.1) MUST be one of the values specified in section 2.2.9.1, one of the values specified in section 2.2.9.2, one of the values specified in section 2.2.9.3, or one of the values in the following table.

Identifier	Description
GetRecordsPermissionsFailure	See section 2.2.5.2.

Identifier	Description
OrderingException_InvalidSpecification	See section 2.2.5.2.
OrderingException_InvalidColumnName	See section 2.2.5.2.

3.1.4.10.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_OpenResultSet_InputMessage	The request WSDL message for the **OpenResultSet WSDL operation**.
IAccessServiceSoap_OpenResultSet_OutputMessage	The response WSDL message for the **OpenResultSet** WSDL operation.

3.1.4.10.1.1 IAccessServiceSoap_OpenResultSet_InputMessage

The request **WSDL message** for the **OpenResultSet WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/OpenResultSet
```

The **SOAP body** contains the **OpenResultSet** element.

3.1.4.10.1.2 IAccessServiceSoap_OpenResultSet_OutputMessage

The response **WSDL message** for the **OpenResultSet WSDL operation**.

The **SOAP body** contains the **OpenResultSetResponse** element.

3.1.4.10.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
OpenResultSet	The input data for the **OpenResultSet WSDL operation**.
OpenResultSetResponse	The result data for the **OpenResultSet** WSDL operation.

3.1.4.10.2.1 OpenResultSet

The **OpenResultSet** element specifies the input data for the **OpenResultSet WSDL operation**.

```
<xs:element name="OpenResultSet" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="fields" type="tns2:FieldList"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="restriction" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="queryParameters"
type="tns2:ArrayOfKeyValuePair"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sortExpression" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="filter" type="tns2:FilterInfo"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="startRowIndex" type="xs:int"/>
      <xs:element minOccurs="1" maxOccurs="1" name="maximumRows" type="xs:int"/>
      <xs:element minOccurs="1" maxOccurs="1" name="autoResync" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="retrieveExactRowCount"
type="xs:boolean"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified by section 2.2.4.3. MUST be present.

fields: A **FieldList** (section 2.2.4.12) that specifies the **fields** of the **Source** (section 3.1.1.1), which was previously supplied as an input element to the **GetObjectSchema** operation (section 3.1.4.7.2.1), for which data is to be retrieved.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

restriction: A **string** representing a **CT_Expression** ([MS-AXL2] section 2.2.3.1) that specifies a restriction expression to be applied to the **result set**. Only rows in the **Source** that return "true" for this restriction expression are included in the result set.

queryParameters: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the set of values for each **CT_Parameter** ([MS-AXL2] section 2.2.3.12) required in the **Source.** One value MUST be present for every **CT_Parameter** defined in the **Source**.

- The **Key** element of each of the **KeyValuePairs** (section 2.2.4.5) in **queryParameters** matches the **Name** element of the **CT_Parameter**.

- The **Value** element of each of the **KeyValuePairs** specifies the value of the **Expression** element of the **CT_ParameterValue** ([MS-AXL2] section 2.2.3.16) in the correct data type.

sortExpression: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the sort order to apply when the protocol server retrieves data from the **database application**. If present and not empty, MUST contain an **Ordering** element, as specified by [MS-AXL2] section 2.2.1.2.

filter: A **FilterInfo** (section 2.2.4.10) that specifies how the result set is to be filtered.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a result set. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

startRowIndex: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the index of the first row to return from the result set.

- MUST be nonnegative.

- MUST be zero to specify the first row.

▪ MUST be less than the number of rows in the result set.

maximumRows: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the maximum number of rows to return. MUST be non-negative.

autoResync: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the protocol server will sync any row after it is inserted or updated.

retrieveExactRowCount: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the protocol server will return the exact row count in the **totalRowCount** element of **OpenResultSetResponse** (section 3.1.4.10.2.2).

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.10.2.2 OpenResultSetResponse

The **OpenResultSetResponse** element specifies the result data for the **OpenResultSet WSDL operation**.

```
<xs:element name="OpenResultSetResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="OpenResultSetResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="totalRowCount" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

OpenResultSetResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

tableXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies **XML** containing the returned rows.

▪ MUST be present.

▪ MUST be a **DiffGram**, as specified by [MS-DSDIFFGRAM].

▪ The **root element** MUST be named "DataTable".

Each child of the "DocumentElement" child of the "Diffgram" child of the "DataTable" element MUST be named "Data".

totalRowCount: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the total number of rows in the **Source** (section 3.1.1.1), which was previously supplied as an input element in the **GetObjectSchema** operation (section 3.1.4.7.2.1).

3.1.4.10.3   Complex Types

None.

3.1.4.10.4   Simple Types

None.

3.1.4.10.5   Attributes

None.

3.1.4.10.6   Groups

None.

3.1.4.10.7   Attribute Groups

None.

3.1.4.11   OpenSession

This operation creates a new **session**.

The following is the **WSDL** port type specification of the **OpenSession WSDL operation**.

```
<wsdl:operation name="OpenSession" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenSession"
message="tns2:IAccessServiceSoap_OpenSession_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenSessionResponse"
message="tns2:IAccessServiceSoap_OpenSession_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenSessionAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_OpenSession_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_OpenSession_InputMessage** (section 3.1.4.11.1.1) request message and the protocol server responds with an **IAccessServiceSoap_OpenSession_OutputMessage** (section 3.1.4.11.1.2) response message as follows:

- If the operation succeeds, the protocol server MUST return the **SessionIdentifier** (section 3.1.1.2) for the newly created session in the response message to be used in any future operations against the newly created session. This **SessionIdentifier** MUST be returned in the **sessionId** element of the **OpenSessionResponse** element (section 3.1.4.11.2.2).

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

3.1.4.11.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_OpenSession_InputMessage	The request WSDL message for the **OpenSession WSDL operation**.
IAccessServiceSoap_OpenSession_OutputMessage	The response WSDL message for the **OpenSession** WSDL operation.

3.1.4.11.1.1 IAccessServiceSoap_OpenSession_InputMessage

The request **WSDL message** for the **OpenSession WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/OpenSession
```

The **SOAP body** contains the **OpenSession** element.

3.1.4.11.1.2 IAccessServiceSoap_OpenSession_OutputMessage

The response **WSDL message** for the **OpenSession WSDL operation**.

The **SOAP body** contains the **OpenSessionResponse** element.

3.1.4.11.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
OpenSession	The input data for the **OpenSession WSDL operation**.
OpenSessionResponse	The result data for the **OpenSession** WSDL operation.

3.1.4.11.2.1 OpenSession

The **OpenSession** element specifies the input data for the **OpenSession WSDL operation**.

```
<xs:element name="OpenSession" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="cultureParameter"
type="tns2:CultureCommandParameter"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified by section 2.2.4.3. MUST be present.

cultureParameter: A **CultureCommandParameter** (section 3.1.4.11.3.1) that specifies **UI culture**, **data culture**, and **host data language** related information of the newly created **session**. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.11.2.2 OpenSessionResponse

The **OpenSessionResponse** element specifies the result data for the **OpenSession WSDL operation**.

```
<xs:element name="OpenSessionResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="OpenSessionResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sessionId" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

OpenSessionResult: A **CommandResult**, as specified by section 2.2.4.4. MUST be present.

sessionId: A **SessionIdentifier** (section 3.1.1.2) that specifies the **session identifier** of the newly created **session**. MUST be present.

3.1.4.11.3   Complex Types

The following table summarizes the **XML schema** complex type definitions that are specific to this operation.

Complex type	Description
CultureCommandParameter	See section 3.1.4.11.3.1.

3.1.4.11.3.1 CultureCommandParameter

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

The **CultureCommandParameter** complex type is used to specify **UI culture**, **data culture**, and **host data language** related information when creating a new **session**.

```
<xs:complexType name="CultureCommandParameter" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="UICultureName" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="DataCultureName" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SharePointDataCultureName"
type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="TimeZoneSerialization" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

UICultureName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies a language tag, as specified in [RFC1766], section 2, that specifies the UI culture. The **UICultureName** element:

- MUST be present.

- MUST NOT be empty.

- MUST NOT be longer than 32,768 characters.

▪ If the language represented by **UICultureName** is not supported on the protocol server, the protocol server SHOULD fall back to some other supported language which is implementation-specific.

DataCultureName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies a language tag, as specified in [RFC1766], section 2, that specifies the data culture. The **DataCultureName** element:

▪ MUST be present.

▪ MUST NOT be empty.

▪ MUST NOT be longer than 32,768 characters.

The protocol server uses **SharePointDataCultureName** as a **fallback data culture** if **DataCultureName** is not supported.

SharePointDataCultureName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies a language tag, as specified in [RFC1766], section 2, that specifies the host data language. The **SharePointDataCultureName** element:

▪ MUST be present.

▪ MUST NOT be longer than 32,768 characters.

TimeZoneSerialization: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the time zone of the session. The **TimeZoneSerialization** element:

▪ MUST be present.

▪ MUST be exactly 73 characters long.

▪ MUST have the following layout, which is specified using **Augmented Backus-Naur Form (ABNF)**, as specified in [RFC2234]:

TimeZone	=	Bias "#" StandardDate "#" StandardBias "#" DaylightDate "#" DaylightBias
Bias	=	"+"\"-" 4DIGIT
StandardDate	=	Date %d84 Time
StandardBias	=	"+"\"-" 4DIGIT
DaylightDate	=	Date %d84 Time
DaylightBias	=	"+"\"-" 4DIGIT
Date	=	Year "-" Month "-" DayOfWeek "-" Day
Time	=	Hour ":" Minute ":" Second ":" Millisecond
Year	=	4DIGIT
Month	=	2DIGIT ; 01-12
DayOfWeek	=	2DIGIT ; 00-06 (Sunday-Saturday)
Day	=	2DIGIT ; 01-31
Hour	=	2DIGIT ; 00-23

TimeZone	=	Bias "#" StandardDate "#" StandardBias "#" DaylightDate "#" DaylightBias
Minute	=	2DIGIT ; 00-59
Second	=	2DIGIT ; 00-59
Millisecond	=	4DIGIT

The following restrictions MUST apply to the **TimeZoneSerialization** element:

- **Bias** MUST be the **time zone bias**.

- **StandardDate** MUST be the **time zone standard date**.

- **StandardBias** MUST be the **time zone standard bias**.

- **DaylightDate** MUST be the **time zone daylight date**.

- **DaylightBias** MUST be the **time zone daylight bias**.

- **Month** MUST be date-month, as specified in [RFC3339].

- **Day** MUST be date-mday, as specified in [RFC3339].

- **Hour** MUST be time-hour, as specified in [RFC3339].

- **Minute** MUST time-minute, as specified in [RFC3339].

- **Second** MUST be time-second, as specified in [RFC3339].

DayOfWeek MUST have one of the values in the following table.

Value	Meaning
00	Sunday
01	Monday
02	Tuesday
03	Wednesday
04	Thursday
05	Friday
06	Saturday

3.1.4.11.4   Simple Types

None.

3.1.4.11.5   Attributes

None.

3.1.4.11.6   Groups

None.

3.1.4.11.7   Attribute Groups

None.

3.1.4.12   UpdateData

This operation updates a **record** in an **Updatable Source** (section 3.1.1.1) in the **database application** and also updates the row in the **result set**.

The following is the **WSDL** port type specification of the **UpdateData WSDL operation**.

```
<wsdl:operation name="UpdateData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateData"
message="tns2:IAccessServiceSoap_UpdateData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDataResponse"
message="tns2:IAccessServiceSoap_UpdateData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_UpdateData_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_UpdateData_InputMessage** (section 3.1.4.12.1.1) request message and the protocol server responds with an **IAccessServiceSoap_UpdateData_OutputMessage** (section 3.1.4.12.1.2) response message as follows:

- The protocol server attempts to update the record in the **Updatable Source**, as specified in section 3.1.1.1, which has a **primary key** equal to the **Key** element of the first **KeyValuePair** (section 2.2.4.5) of the **keys** input element (section 3.1.4.12.2.1).

- If the columns in the result set specified by the **Key** elements of the **KeyValuePair** elements of the **oldValues** element (section 3.1.4.12.2.1) contain data different from what is specified by the respective **Value** elements of the **KeyValuePair** elements of the **oldValues**, a **SOAP fault** MUST be returned.

- If the record was successfully updated, the protocol server retrieves the updated record from the database application and updates the row in result set with a primary key equal to the primary key of the updated record with its columns filled in as specified by the corresponding columns of the retrieved record. The protocol server then returns the updated row to the protocol client.

In the event of an application error on the protocol server during this operation, a SOAP fault is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** (section 2.2.4.1) MUST be one of the values specified in section 2.2.9.1, or one of the values specified in section 2.2.9.2, or one of the values specified in section 2.2.9.3, or one of the values specified in the following table.

Identifier	Description
WriteRecordsPermissionsFailure	See section 2.2.5.2.
DataException_ConflictsEncounteredWhileUpdatingData	See section 2.2.5.2.
DataException_DeleteConflict	See section 2.2.5.2.

3.1.4.12.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_UpdateData_InputMessage	The request WSDL message for the **UpdateData WSDL operation**.
IAccessServiceSoap_UpdateData_OutputMessage	The response WSDL message for the **UpdateData** WSDL operation.

3.1.4.12.1.1 IAccessServiceSoap_UpdateData_InputMessage

The request **WSDL message** for the **UpdateData WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/UpdateData
```

The **SOAP body** contains the **UpdateData** element.

3.1.4.12.1.2 IAccessServiceSoap_UpdateData_OutputMessage

The response **WSDL message** for the **UpdateData WSDL operation**.

The **SOAP body** contains the **UpdateDataResponse** element.

3.1.4.12.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
UpdateData	The input data for the **UpdateData WSDL operation**.
UpdateDataResponse	The result data for the **UpdateData** WSDL operation.

3.1.4.12.2.1 UpdateData

The **UpdateData** element specifies the input data for the **UpdateData WSDL operation**.

```
<xs:element name="UpdateData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="keys" type="tns2:ArrayOfKeyValuePair"/>
      <xs:element minOccurs="0" maxOccurs="1" name="values" type="tns2:ArrayOfKeyValuePair"/>
      <xs:element minOccurs="0" maxOccurs="1" name="oldValues"
type="tns2:ArrayOfKeyValuePair"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

keys: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the row to update.

▪ MUST be present, and MUST contain exactly one **KeyValuePair**.

The **Key** element of the **KeyValuePair** MUST contain a **primary key** value for a row in the result set.

values: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the **fields** and their new values which are to be inserted in the **record** identified by **keys** element. Each **Key** element specifies the name of a column in the result set, and the corresponding **Value** element contains the data for that column in the row.

▪ MUST be present.

▪ MUST contain at least one **KeyValuePair** (section 2.2.4.5).

▪ For each **KeyValuePair:**

  ▪ The **Value** element MUST be the correct **data type** for the column in the result set.

  ▪ The **Value** element MUST either be empty and with the **nil** ([XMLSCHEMA2] section 2.6.2) attribute set to "true" or have the **type** ([XMLSCHEMA2] section 2.6.1) attribute set to one of the following:

    ▪ **boolean** ([XMLSCHEMA2] section 3.2.2)

    ▪ **datetime** ([XMLSCHEMA2] section 3.2.7)

    ▪ **string** ([XMLSCHEMA2] section 3.2.1)

    ▪ **int** ([XMLSCHEMA2] section 3.3.17)

    ▪ **decimal** ([XMLSCHEMA2] section 3.2.3)

    ▪ **double** ([XMLSCHEMA2] section 3.2.5)

oldValues: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the fields and their original values in the record identified by **keys** element. Each **Key** element specifies the name of a column in the result set, and the corresponding **Value** element contains the value of the column in the row prior to the update operation.

- MUST be present.

- MUST contain at least one **KeyValuePair** (section 2.2.4.5).

- For each **KeyValuePair:**

    - The **Value** element MUST be the correct data type for the column in the result set.

    - The **Value** element MUST either be empty and with the **nil** ([XMLSCHEMA2] section 2.6.2) attribute set to "true" or have the **type** ([XMLSCHEMA2] section 2.6.1) attribute set to one of the following:

        - **boolean** ([XMLSCHEMA2] section 3.2.2)

        - **datetime** ([XMLSCHEMA2] section 3.2.7)

        - **string** ([XMLSCHEMA2] section 3.2.1)

        - **int** ([XMLSCHEMA2] section 3.3.17)

        - **decimal** ([XMLSCHEMA2] section 3.2.3)

        - **double** ([XMLSCHEMA2] section 3.2.5)

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.12.2.2 UpdateDataResponse

The **UpdateDataResponse** element specifies the result data for the **UpdateData WSDL operation**.

```
<xs:element name="UpdateDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="UpdateDataResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="updatedTableXml" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UpdateDataResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

updatedTableXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **XML** containing the content of the returned row, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2).

3.1.4.12.3   Complex Types

None.

3.1.4.12.4   Simple Types

None.

3.1.4.12.5   Attributes

None.

3.1.4.12.6   Groups

None.

3.1.4.12.7 Attribute Groups

None.

3.1.4.13 AddFirewallRule

This operation adds a **FirewallRule** ([MS-AADT] section 2.2.4.7) to the database application.

The following is the **WSDL** port type specification of the **AddFirewallRule WSDL operation**.

```
<wsdl:operation name="AddFirewallRule" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/AddFirewallRule"
message="tns2:IAccessServiceSoap AddFirewallRule InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/AddFirewallRuleResponse"
message="tns2:IAccessServiceSoap AddFirewallRule OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/AddFirewallRuleAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap AddFirewallRule AccessServerMessageFault FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_AddFirewallRule_InputMessage** (section 3.1.4.13.1.1) request message and the protocol server responds with an **IAccessServiceSoap_AddFirewallRule_OutputMessage** (section 3.1.4.13.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_AddFirewallRule_OutputMessage** response message that contains information about the **FirewallRule** ([MS-AADT] section 2.2.4.7) which was added to the **database application**.

3.1.4.13.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_AddFirewallRule_InputMessage	The request WSDL message for the **AddFirewallRule WSDL operation**.
IAccessServiceSoap_AddFirewallRule_OutputMessage	The response WSDL message for the **AddFirewallRule** WSDL operation.

3.1.4.13.1.1 IAccessServiceSoap_AddFirewallRule_InputMessage

The request **WSDL message** for the **AddFirewallRule WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/AddFirewallRule
```

The **SOAP body** contains the **AddFirewallRule** element.

3.1.4.13.1.2 IAccessServiceSoap_AddFirewallRule_OutputMessage

The response **WSDL message** for the **AddFirewallRule WSDL operation**.

The **SOAP body** contains the **AddFirewallRuleResponse** element.

3.1.4.13.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
AddFirewallRule	The input data for the **AddFirewallRule WSDL operation**.
AddFirewallRuleResponse	The result data for the **AddFirewallRule** WSDL operation.

3.1.4.13.2.1 AddFirewallRule

The **AddFirewallRule** element specifies the input data for the **AddFirewallRule WSDL operation**.

```
<xs:element name="AddFirewallRule" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:AddFirewallRuleParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: An **AddFirewallRuleParameters** ([MS-AADT] section 3.1.4.10.3.1) that specifies the IP range for which **FirewallRules** ([MS-AADT] section 2.2.4.7) are to be created in the **database application**. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.13.2.2 AddFirewallRuleResponse

The **AddFirewallRuleResponse** element specifies the result data for the **AddFirewallRule WSDL operation**.

```
<xs:element name="AddFirewallRuleResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="AddFirewallRuleResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:AddFirewallRuleResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

AddFirewallRuleResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: An **AddFirewallRuleResult** ([MS-AADT] section 3.1.4.10.3.2) that specifies the **FirewallRule** ([MS-AADT] section 2.2.4.7) name if adding **FirewallRule** in **database application** was successful. MUST be present.

3.1.4.13.3   Complex Types

None.

3.1.4.13.4   Simple Types

None.

3.1.4.13.5   Attributes

None.

3.1.4.13.6   Groups

None.

3.1.4.13.7   Attribute Groups

None.

3.1.4.14   CreateAccessObject

This operation triggers the creation of an object in a **database application**.

The following is the **WSDL** port type specification of the **CreateAccessObject WSDL operation**.

```
<wsdl:operation name="CreateAccessObject" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateAccessObject"
message="tns2:IAccessServiceSoap_CreateAccessObject_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateAccessObjectResponse"
message="tns2:IAccessServiceSoap_CreateAccessObject_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CreateAccessObject_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    </wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_CreateAccessObject_InputMessage** (section 3.1.4.14.1.1) request message and the protocol server responds with an **IAccessServiceSoap_CreateAccessObject_OutputMessage** (section 3.1.4.14.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_CreateAccessObject_OutputMessage** response message that contains information about the newly created object, as specified by **CreateResult** ([MS-AADT] section 3.1.4.1.3.2).

3.1.4.14.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_CreateAccessObject_InputMessage	The request WSDL message for the **CreateAccessObject WSDL operation**.
IAccessServiceSoap_CreateAccessObject_OutputMessage	The response WSDL message for the **CreateAccessObject** WSDL operation.

3.1.4.14.1.1 IAccessServiceSoap_CreateAccessObject_InputMessage

The request **WSDL message** for the **CreateAccessObject WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/CreateAccessObject
```

The **SOAP body** contains the **CreateAccessObject** element.

3.1.4.14.1.2 IAccessServiceSoap_CreateAccessObject_OutputMessage

The response **WSDL message** for the **CreateAccessObject WSDL operation**.

The **SOAP body** contains the **CreateAccessObjectResponse** element.

3.1.4.14.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
CreateAccessObject	The input data for the **CreateAccessObject WSDL operation**.
CreateAccessObjectResponse	The result data for the **CreateAccessObject** WSDL operation.

3.1.4.14.2.1 CreateAccessObject

The **CreateAccessObject** element specifies the input data for the **CreateAccessObject WSDL operation**.

```
<xs:element name="CreateAccessObject" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:CreateParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **CreateParameters** ([MS-AADT] section 3.1.4.1.3.1) that specifies the information that the protocol server needs to create an object. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation.

3.1.4.14.2.2 CreateAccessObjectResponse

The **CreateAccessObjectResponse** element specifies the result data for the **CreateAccessObject WSDL operation**.

```
<xs:element name="CreateAccessObjectResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="CreateAccessObjectResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:CreateResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

CreateAccessObjectResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **CreateResult** element ([MS-AADT] section 3.1.4.1.3.2) that specifies information about a newly created object for the protocol client to use.

3.1.4.14.3   Complex Types

None.

3.1.4.14.4   Simple Types

None.

3.1.4.14.5   Attributes

None.

3.1.4.14.6   Groups

None.

3.1.4.14.7   Attribute Groups

None.

3.1.4.15   CreateApplication

This operation creates a new **database application** under the current **site**.

The following is the **WSDL** port type specification of the **CreateApplication WSDL operation**.

```
<wsdl:operation name="CreateApplication" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateApplication"
message="tns2:IAccessServiceSoap_CreateApplication_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateApplicationResponse"
message="tns2:IAccessServiceSoap_CreateApplication_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateApplicationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CreateApplication_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The client sends an **IAccessServiceSoap_CreateApplication_InputMessage** (section
3.1.4.15.1.1) request message and the server responds with an
IAccessServiceSoap_CreateApplication_OutputMessage (section 3.1.4.15.1.2) response
message upon successful completion of creating the database application. The protocol server MUST
respond with a **SOAP fault** as specified by section 2.2.9 if an error occurs on the protocol server
during this operation.

3.1.4.15.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this
operation.

Message	Description
IAccessServiceSoap_CreateApplication_InputMessage	The request WSDL message for the **CreateApplication WSDL operation**.

Message	Description
IAccessServiceSoap_CreateApplication_OutputMessage	The response WSDL message for the **CreateApplication** WSDL operation.

3.1.4.15.1.1 IAccessServiceSoap_CreateApplication_InputMessage

The request **WSDL message** for the **CreateApplication WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/CreateApplication
```

The **SOAP body** contains the **CreateApplication** element.

3.1.4.15.1.2 IAccessServiceSoap_CreateApplication_OutputMessage

The response **WSDL message** for the **CreateApplication WSDL operation**.

The **SOAP body** contains the **CreateApplicationResponse** element.

3.1.4.15.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
CreateApplication	The input data for the **CreateApplication WSDL operation**.
CreateApplicationResponse	The result data for the **CreateApplication** WSDL operation.

3.1.4.15.2.1 CreateApplication

The **CreateApplication** element specifies the input data for the **CreateApplication WSDL operation**.

```
<xs:element name="CreateApplication" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:CreateApplicationParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      <xs:element minOccurs="1" maxOccurs="1" name="waitForAppCreation" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **CreateApplicationParameters** element ([MS-ASDT] section 3.1.4.1.3.1) that specifies the information that the protocol server needs to create a new **database application**. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

waitForAppCreation: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the protocol server MUST wait until the database application creation completes before returning a response.

3.1.4.15.2.2 CreateApplicationResponse

The **CreateApplicationResponse** element specifies the result data for the **CreateApplication WSDL operation**.

```
<xs:element name="CreateApplicationResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="CreateApplicationResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:CreateAppResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

CreateApplicationResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **CreateAppResult** element ([MS-ASDT] section 3.1.4.1.3.3) that specifies information about a newly created **database application** for the protocol client to use.

3.1.4.15.3   Complex Types

None.

3.1.4.15.4   Simple Types

None.

3.1.4.15.5   Attributes

None.

3.1.4.15.6   Groups

None.

3.1.4.15.7   Attribute Groups

None.

3.1.4.16   CreatePackage

This operation triggers creation of a package that represents a **database application**, including its objects and data. The package can be retrieved by using the **GetPackage** operation (section 3.1.4.36).

The following is the **WSDL** port type specification of the **CreatePackage WSDL operation**.

```
<wsdl:operation name="CreatePackage" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreatePackage"
message="tns2:IAccessServiceSoap_CreatePackage_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreatePackageResponse"
message="tns2:IAccessServiceSoap_CreatePackage_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreatePackageAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CreatePackage_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_CreatePackage_InputMessage** (section 3.1.4.16.1.1) request message and the protocol server responds with a **IAccessServiceSoap_CreatePackage_OutputMessage** (section 3.1.4.16.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_CreatePackage_OutputMessage** response message that contains an identifier that can be used to retrieve the package.

3.1.4.16.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_CreatePackage_InputMessage	The request WSDL message for the **CreatePackage WSDL operation**.
IAccessServiceSoap_CreatePackage_OutputMessage	The response WSDL message for the **CreatePackage** WSDL operation.

3.1.4.16.1.1 IAccessServiceSoap_CreatePackage_InputMessage

The request **WSDL message** for the **CreatePackage WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/CreatePackage
```

The **SOAP body** contains the **CreatePackage** element.

3.1.4.16.1.2 IAccessServiceSoap_CreatePackage_OutputMessage

The response **WSDL message** for the **CreatePackage WSDL operation**.

The **SOAP body** contains the **CreatePackageResponse** element.

3.1.4.16.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
CreatePackage	The input data for the **CreatePackage WSDL operation**.
CreatePackageResponse	The result data for the **CreatePackage** WSDL operation.

3.1.4.16.2.1 CreatePackage

The **CreatePackage** element specifies the input data for the **CreatePackage WSDL operation**.

```
<xs:element name="CreatePackage" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:CreatePackageParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **CreatePackageParameters** element ([MS-AADT] section 3.1.4.2.3.1) that specifies the information the protocol server needs to create a package. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.16.2.2 CreatePackageResponse

The **CreatePackageResponse** element specifies the result data for the **CreatePackage WSDL operation**.

```
<xs:element name="CreatePackageResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="CreatePackageResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:CreatePackageResult"/>
    </xs:sequence>
```

```
    </xs:complexType>
  </xs:element>
```

CreatePackageResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **CreatePackageResult** element ([MS-AADT] section 3.1.4.2.3.2) that contains an identifier of a package.

3.1.4.16.3   Complex Types

None.

3.1.4.16.4   Simple Types

None.

3.1.4.16.5   Attributes

None.

3.1.4.16.6   Groups

None.

3.1.4.16.7   Attribute Groups

None.

3.1.4.17   DeleteAccessObject

This operation triggers deletion of an object in a **database application**.

The following is the **WSDL** port type specification of the **DeleteAccessObject WSDL operation**.

```
<wsdl:operation name="DeleteAccessObject" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteAccessObject"
message="tns2:IAccessServiceSoap DeleteAccessObject InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteAccessObjectResponse"
message="tns2:IAccessServiceSoap DeleteAccessObject OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap DeleteAccessObject AccessServerMessageFault FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_DeleteAccessObject_InputMessage** (section 3.1.4.17.1.1) request message and the protocol server responds with an **IAccessServiceSoap_DeleteAccessObject_OutputMessage** (section 3.1.4.17.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_DeleteAccessObject_OutputMessage** response message that contains information about the deleted object.

3.1.4.17.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_DeleteAccessObject_InputMessage	The request WSDL message for the **DeleteAccessObject WSDL operation**.
IAccessServiceSoap_DeleteAccessObject_OutputMessage	The response WSDL message for the **DeleteAccessObject** WSDL operation.

3.1.4.17.1.1 IAccessServiceSoap_DeleteAccessObject_InputMessage

The request **WSDL message** for the **DeleteAccessObject WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/DeleteAccessObject
```

The **SOAP body** contains the **DeleteAccessObject** element.

3.1.4.17.1.2 IAccessServiceSoap_DeleteAccessObject_OutputMessage

The response **WSDL message** for the **DeleteAccessObject WSDL operation**.

The **SOAP body** contains the **DeleteAccessObjectResponse** element.

3.1.4.17.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
DeleteAccessObject	The input data for the **DeleteAccessObject WSDL operation**.
DeleteAccessObjectResponse	The result data for the **DeleteAccessObject** WSDL operation.

3.1.4.17.2.1 DeleteAccessObject

The **DeleteAccessObject** element specifies the input data for the **DeleteAccessObject WSDL operation**.

```
<xs:element name="DeleteAccessObject" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:DeleteParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **DeleteParameters** element ([MS-AADT] section 3.1.4.9.3.1) that specifies the object to delete. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.17.2.2 DeleteAccessObjectResponse

The **DeleteAccessObjectResponse** element specifies the result data for the **DeleteAccessObject WSDL operation**.

```
<xs:element name="DeleteAccessObjectResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="DeleteAccessObjectResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:DeleteResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DeleteAccessObjectResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **DeleteResult** element ([MS-AADT] section 3.1.4.9.3.2) that specifies the result of the delete operation.

3.1.4.17.3   Complex Types

None.

3.1.4.17.4   Simple Types

None.

3.1.4.17.5   Attributes

None.

3.1.4.17.6   Groups

None.

3.1.4.17.7 Attribute Groups

None.

3.1.4.18 DeleteFirewallRules

This operation deletes the **FirewallRules** ([MS-AADT] section 2.2.4.7) from the database application. These **FirewallRules** MUST be previously added by the **AddFirewallRule** operation (section 3.1.4.13).

The following is the **WSDL** port type specification of the **DeleteFirewallRules WSDL operation**.

```
<wsdl:operation name="DeleteFirewallRules" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteFirewallRules"
message="tns2:IAccessServiceSoap_DeleteFirewallRules_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteFirewallRulesResponse"
message="tns2:IAccessServiceSoap_DeleteFirewallRules_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteFirewallRulesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_DeleteFirewallRules_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_DeleteFirewallRules_InputMessage** (section 3.1.4.18.1.1) request message and the protocol server responds with an **IAccessServiceSoap_DeleteFirewallRules_OutputMessage** (section 3.1.4.18.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_DeleteFirewallRules_OutputMessage** response message.

3.1.4.18.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_DeleteFirewallRules_InputMessage	The request WSDL message for the **DeleteFirewallRules WSDL operation**.
IAccessServiceSoap_DeleteFirewallRules_OutputMessage	The response WSDL message for the **DeleteFirewallRules** WSDL operation.

3.1.4.18.1.1 IAccessServiceSoap_DeleteFirewallRules_InputMessage

The request **WSDL message** for the **DeleteFirewallRules WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/DeleteFirewallRules
```

The **SOAP body** contains the **DeleteFirewallRules** element.

3.1.4.18.1.2 IAccessServiceSoap_DeleteFirewallRules_OutputMessage

The response **WSDL message** for the **DeleteFirewallRules WSDL operation**.

The **SOAP body** contains the **DeleteFirewallRulesResponse** element.

3.1.4.18.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
DeleteFirewallRules	The input data for the **DeleteFirewallRules WSDL operation**.
DeleteFirewallRulesResponse	The result data for the **DeleteFirewallRules** WSDL operation.

3.1.4.18.2.1 DeleteFirewallRules

The **DeleteFirewallRules** element specifies the input data for the **DeleteFirewallRules WSDL operation**.

```
<xs:element name="DeleteFirewallRules" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:DeleteFirewallRulesParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **DeleteFirewallRulesParameters** ([MS-AADT] section 3.1.4.11.3.1) that specifies which **FirewallRules** ([MS-AADT] section 2.2.4.7) in the **database application** are to be deleted. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.18.2.2 DeleteFirewallRulesResponse

The **DeleteFirewallRulesResponse** element specifies the result data for the **DeleteFirewallRules WSDL operation**.

```
<xs:element name="DeleteFirewallRulesResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="DeleteFirewallRulesResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:DeleteFirewallRulesResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DeleteFirewallRulesResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **DeleteFirewallRulesResult** ([MS-AADT] section 3.1.4.11.3.3) that specifies if deletion of **FirewallRules** ([MS-AADT] section 2.2.4.7) in the **database application** was successful. MUST be present.

3.1.4.18.3   Complex Types

None.

3.1.4.18.4   Simple Types

None.

3.1.4.18.5   Attributes

None.

3.1.4.18.6   Groups

None.

3.1.4.18.7   Attribute Groups

None.

3.1.4.19   GetAccessObject

This operation triggers retrieval of the requested object from a **database application**.

The following is the **WSDL** port type specification of the **GetAccessObject WSDL operation**.

```
<wsdl:operation name="GetAccessObject" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAccessObject"
message="tns2:IAccessServiceSoap_GetAccessObject_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAccessObjectResponse"
message="tns2:IAccessServiceSoap_GetAccessObject_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetAccessObject_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   </wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetAccessObject_InputMessage** (section 3.1.4.19.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetAccessObject_OutputMessage** (section 3.1.4.19.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_GetAccessObject_OutputMessage** response message that contains information about the requested object.

3.1.4.19.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetAccessObject_InputMessage	The request WSDL message for the **GetAccessObject WSDL operation**.
IAccessServiceSoap_GetAccessObject_OutputMessage	The response WSDL message for the **GetAccessObject** WSDL operation.

3.1.4.19.1.1 IAccessServiceSoap_GetAccessObject_InputMessage

The request **WSDL message** for the **GetAccessObject WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetAccessObject
```

The **SOAP body** contains the **GetAccessObject** element.

3.1.4.19.1.2 IAccessServiceSoap_GetAccessObject_OutputMessage

The response **WSDL message** for the **GetAccessObject WSDL operation**.

The **SOAP body** contains the **GetAccessObjectResponse** element.

3.1.4.19.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetAccessObject	The input data for the **GetAccessObject WSDL operation**.
GetAccessObjectResponse	The result data for the **GetAccessObject** WSDL operation.

3.1.4.19.2.1 GetAccessObject

The **GetAccessObject** element specifies the input data for the **GetAccessObject WSDL operation**.

```
<xs:element name="GetAccessObject" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters" type="tns2:GetParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **GetParameters** element ([MS-AADT] section 3.1.4.3.3.1) that specifies the information that the protocol server needs to retrieve an object. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.19.2.2 GetAccessObjectResponse

The **GetAccessObjectResponse** element specifies the result data for the **GetAccessObject WSDL operation**.

```
<xs:element name="GetAccessObjectResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetAccessObjectResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:GetResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAccessObjectResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetResult** element ([MS-AADT] section 3.1.4.3.3.2) that specifies information about the requested object for the protocol client to use.

3.1.4.19.3   Complex Types

None.

3.1.4.19.4 Simple Types

None.

3.1.4.19.5 Attributes

None.

3.1.4.19.6 Groups

None.

3.1.4.19.7 Attribute Groups

None.

3.1.4.20 GetApplicationInformation

This operation retrieves information about a **database application** from the protocol server.

The following is the **WSDL** port type specification of the **GetApplicationInformation WSDL operation**.

```
<wsdl:operation name="GetApplicationInformation"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetApplicationInformation"
message="tns2:IAccessServiceSoap GetApplicationInformation InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetApplicationInformationResponse"
message="tns2:IAccessServiceSoap_GetApplicationInformation_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetApplicationInformationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetApplicationInformation_AccessServerMessageFault_FaultMess
age" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAccessServiceSoap_GetApplicationInformation_InputMessage**
(section 3.1.4.20.1.1) request message and the protocol server responds with a
IAccessServiceSoap_GetApplicationInformation_OutputMessage (section 3.1.4.20.1.2)
response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond
  with a **SOAP fault**, as specified by section 2.2.9.
- Otherwise, the protocol server MUST respond with a
  IAccessServiceSoap_GetApplicationInformation_OutputMessage response message that
  contains information about the requested database application.

3.1.4.20.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this
operation.

Message	Description
IAccessServiceSoap_GetApplicationInformation_InputMessage	The request WSDL message for the **GetApplicationInformation WSDL operation**.
IAccessServiceSoap_GetApplicationInformation_OutputMessage	The response WSDL message for the **GetApplicationInformation** WSDL operation.

3.1.4.20.1.1 IAccessServiceSoap_GetApplicationInformation_InputMessage

The request **WSDL message** for the **GetApplicationInformation WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetApplicationInformation
```

The **SOAP body** contains the **GetApplicationInformation** element.

3.1.4.20.1.2 IAccessServiceSoap_GetApplicationInformation_OutputMessage

The response **WSDL message** for the **GetApplicationInformation WSDL operation**.

The **SOAP body** contains the **GetApplicationInformationResponse** element.

3.1.4.20.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetApplicationInformation	The input data for the **GetApplicationInformation WSDL operation**.
GetApplicationInformationResponse	The result data for the **GetApplicationInformation** WSDL operation.

3.1.4.20.2.1 GetApplicationInformation

The **GetApplicationInformation** element specifies the input data for the **GetApplicationInformation WSDL operation**.

```
<xs:element name="GetApplicationInformation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetApplicationInformationParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
```

```
    </xs:complexType>
  </xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **GetApplicationInformationParameters** element ([MS-AADT] section 3.1.4.4.3.1) that specifies the information that the protocol server needs to identify and retrieve a **database application**. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.20.2.2 GetApplicationInformationResponse

The **GetApplicationInformationResponse** element specifies the result data for the **GetApplicationInformation WSDL operation**.

```
<xs:element name="GetApplicationInformationResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetApplicationInformationResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:GetAppInfoResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetApplicationInformationResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetAppInfoResult** element ([MS-AADT] section 3.1.4.4.3.2) that specifies information about the requested **database application**.

3.1.4.20.3   Complex Types

None.

3.1.4.20.4   Simple Types

None.

3.1.4.20.5   Attributes

None.

3.1.4.20.6   Groups

None.

3.1.4.20.7   Attribute Groups

None.

3.1.4.21 GetDataConnectivity

This operation retrieves information about a login in the **database application**, which is used to connect to the database application directly.

The following is the **WSDL** port type specification of the **GetDataConnectivity WSDL operation**.

```
<wsdl:operation name="GetDataConnectivity" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivity"
message="tns2:IAccessServiceSoap_GetDataConnectivity_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityResponse"
message="tns2:IAccessServiceSoap_GetDataConnectivity_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetDataConnectivity_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetDataConnectivity_InputMessage** (section 3.1.4.21.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetDataConnectivity_OutputMessage** (section 3.1.4.21.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_GetDataConnectivity_OutputMessage** response message that contains information about the requested login in the database application.

3.1.4.21.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetDataConnectivity_InputMessage	The request WSDL message for the **GetDataConnectivity WSDL operation**.
IAccessServiceSoap_GetDataConnectivity_OutputMessage	The response WSDL message for the **GetDataConnectivity** WSDL operation.

3.1.4.21.1.1 IAccessServiceSoap_GetDataConnectivity_InputMessage

The request **WSDL message** for the **GetDataConnectivity WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetDataConnectivity
```

The **SOAP body** contains the **GetDataConnectivity** element.

3.1.4.21.1.2 IAccessServiceSoap_GetDataConnectivity_OutputMessage

The response **WSDL message** for the **GetDataConnectivity WSDL operation**.

The **SOAP body** contains the **GetDataConnectivityResponse** element.

3.1.4.21.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetDataConnectivity	The input data for the **GetDataConnectivity WSDL operation**.
GetDataConnectivityResponse	The result data for the **GetDataConnectivity** WSDL operation.

3.1.4.21.2.1 GetDataConnectivity

The **GetDataConnectivity** element specifies the input data for the **GetDataConnectivity WSDL operation**.

```
<xs:element name="GetDataConnectivity" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetDataConnectivityParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **GetDataConnectivityParameters** ([MS-AADT] section 3.1.4.12.3.1) that specifies permission level for a login in the **database application**, whose information is requested from the protocol server.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.21.2.2 GetDataConnectivityResponse

The **GetDataConnectivityResponse** element specifies the result data for the **GetDataConnectivity WSDL operation**.

```
<xs:element name="GetDataConnectivityResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetDataConnectivityResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetDataConnectivityResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetDataConnectivityResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetDataConnectivityResult** ([MS-AADT] section 3.1.4.12.3.2) that specifies information about the login in the **database application** with the requested permission level. Information such as login name and password are returned.

3.1.4.21.3   Complex Types

None.

3.1.4.21.4   Simple Types

None.

3.1.4.21.5   Attributes

None.

3.1.4.21.6   Groups

None.

3.1.4.21.7   Attribute Groups

None.

3.1.4.22   GetDataConnectivityStatus

This operation retrieves status information about logins in the **database application**, which are used to connect to the database application directly.

The following is the **WSDL** port type specification of the **GetDataConnectivityStatus WSDL operation**.

```
<wsdl:operation name="GetDataConnectivityStatus"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityStatus"
message="tns2:IAccessServiceSoap_GetDataConnectivityStatus_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityStatusResponse"
message="tns2:IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
    <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityStatusAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetDataConnectivityStatus_AccessServerMessageFault_FaultMess
age" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    </wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetDataConnectivityStatus_InputMessage** (section 3.1.4.22.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage** (section 3.1.4.22.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

▪ Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage** response message that contains status information about logins in the database application.

3.1.4.22.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetDataConnectivityStatus_InputMessage	The request WSDL message for the **GetDataConnectivityStatus WSDL operation**.
IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage	The response WSDL message for the **GetDataConnectivityStatus** WSDL operation.

3.1.4.22.1.1 IAccessServiceSoap_GetDataConnectivityStatus_InputMessage

The request **WSDL message** for the **GetDataConnectivityStatus WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetDataConnectivityStatus
```

The **SOAP body** contains the **GetDataConnectivityStatus** element.

3.1.4.22.1.2 IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage

The response **WSDL message** for the **GetDataConnectivityStatus WSDL operation**.

The **SOAP body** contains the **GetDataConnectivityStatusResponse** element.

3.1.4.22.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetDataConnectivityStatus	The input data for the **GetDataConnectivityStatus WSDL operation**.
GetDataConnectivityStatusResponse	The result data for the **GetDataConnectivityStatus** WSDL operation.

3.1.4.22.2.1 GetDataConnectivityStatus

The **GetDataConnectivityStatus** element specifies the input data for the **GetDataConnectivityStatus WSDL operation**.

```
<xs:element name="GetDataConnectivityStatus" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetDataConnectivityStatusParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **GetDataConnectivityStatusParameters** ([MS-AADT] section 3.1.4.13.3.1) that specifies input data for the **GetDataConnectivityStatus** protocol operation ([MS-AADT] section 3.1.4.13). MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.22.2.2 GetDataConnectivityStatusResponse

The **GetDataConnectivityStatusResponse** element specifies the result data for the **GetDataConnectivityStatus WSDL operation**.

```
<xs:element name="GetDataConnectivityStatusResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetDataConnectivityStatusResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetDataConnectivityStatusResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetDataConnectivityStatusResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetDataConnectivityStatusResult** ([MS-AADT] section 3.1.4.13.3.2) that specifies information about all the logins in **database application**, and whether they are enabled or disabled. MUST be present.

3.1.4.22.3   Complex Types

None.

3.1.4.22.4   Simple Types

None.

3.1.4.22.5   Attributes

None.

3.1.4.22.6   Groups

None.

3.1.4.22.7   Attribute Groups

None.

3.1.4.23   GetFirewallRules

This operation retrieves all the **FirewallRules** ([MS-AADT] section 2.2.4.7) present in the **database application**.

The following is the **WSDL** port type specification of the **GetFirewallRules WSDL operation**.

```
<wsdl:operation name="GetFirewallRules" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFirewallRules"
message="tns2:IAccessServiceSoap_GetFirewallRules_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFirewallRulesResponse"
message="tns2:IAccessServiceSoap GetFirewallRules OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFirewallRulesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap GetFirewallRules AccessServerMessageFault FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetFirewallRules_InputMessage** (section 3.1.4.23.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetFirewallRules_OutputMessage** (section 3.1.4.23.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_GetFirewallRules_OutputMessage** response message that contains

information about all of the **FirewallRules** ([MS-AADT] section 2.2.4.7) that are present in the database application.

3.1.4.23.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetFirewallRules_InputMessage	The request WSDL message for the **GetFirewallRules WSDL operation**.
IAccessServiceSoap_GetFirewallRules_OutputMessage	The response WSDL message for the **GetFirewallRules** WSDL operation.

3.1.4.23.1.1 IAccessServiceSoap_GetFirewallRules_InputMessage

The request **WSDL message** for the **GetFirewallRules WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetFirewallRules
```

The **SOAP body** contains the **GetFirewallRules** element.

3.1.4.23.1.2 IAccessServiceSoap_GetFirewallRules_OutputMessage

The response **WSDL message** for the **GetFirewallRules WSDL operation**.

The **SOAP body** contains the **GetFirewallRulesResponse** element.

3.1.4.23.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetFirewallRules	The input data for the **GetFirewallRules WSDL operation**.
GetFirewallRulesResponse	The result data for the **GetFirewallRules** WSDL operation.

3.1.4.23.2.1 GetFirewallRules

The **GetFirewallRules** element specifies the input data for the **GetFirewallRules WSDL operation**.

```
<xs:element name="GetFirewallRules" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
```

```
              <xs:element minOccurs="0" maxOccurs="1" name="parameters"
   type="tns2:GetFirewallRulesParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
   name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
   </xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **GetFirewallRulesParameters** ([MS-AADT] section 3.1.4.14.3.1) that specifies input data for the **GetFirewallRules** protocol operation ([MS-AADT] section 3.1.4.14).

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.23.2.2 GetFirewallRulesResponse

The **GetFirewallRulesResponse** element specifies the result data for the **GetFirewallRules WSDL operation**.

```
   <xs:element name="GetFirewallRulesResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
     <xs:complexType>
       <xs:sequence>
         <xs:element minOccurs="0" maxOccurs="1" name="GetFirewallRulesResult"
   type="tns2:CommandResult"/>
         <xs:element minOccurs="0" maxOccurs="1" name="result"
   type="tns2:GetFirewallRulesResult"/>
       </xs:sequence>
     </xs:complexType>
   </xs:element>
```

GetFirewallRulesResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetFirewallRulesResult** ([MS-AADT] section 3.1.4.14.3.2) that specifies the information about all the **FirewallRules** ([MS-AADT] section 2.2.4.7) present in the **database application**. MUST be present.

3.1.4.23.3   Complex Types

None.

3.1.4.23.4   Simple Types

None.

3.1.4.23.5   Attributes

None.

3.1.4.23.6   Groups

None.

3.1.4.23.7   Attribute Groups

None.

3.1.4.24   GetLinkedTableInformation

This operation retrieves information from the protocol server about a table in a **database application**.

The following is the **WSDL** port type specification of the **GetLinkedTableInformation WSDL operation**.

```
<wsdl:operation name="GetLinkedTableInformation"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetLinkedTableInformation"
message="tns2:IAccessServiceSoap_GetLinkedTableInformation_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetLinkedTableInformationResponse"
message="tns2:IAccessServiceSoap_GetLinkedTableInformation_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetLinkedTableInformationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetLinkedTableInformation_AccessServerMessageFault_FaultMess
age" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetLinkedTableInformation_InputMessage** (section 3.1.4.24.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetLinkedTableInformation_OutputMessage** (section 3.1.4.24.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.
- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_GetLinkedTableInformation_OutputMessage** response message that contains information about the requested table.

The protocol client MUST have successfully finished an authentication handshake process for the protocol server to process the request from the protocol client. Otherwise, the request **IAccessServiceSoap_GetLinkedTableInformation_InputMessage** (section 3.1.4.24.1.1) message from the client triggers the authentication handshake process, which works as follows:

1. If the protocol client has not successfully finished an authentication handshake process yet for the table object specified in the message, the protocol server returns a HTTP response with status code 403 and an authentication URL in the value for X-AuthorizeUrl in the response header.

2. The protocol client will then have to first send a HTTP request to the URL specified in the X-AuthorizeUrl and authenticate itself using its credentials. This process authenticates the protocol client for accessing the data source of the linked table.

3. Upon successful authentication of the protocol client credentials, the protocol server's response will prompt for a confirmation from the protocol client on whether the protocol client intends to access the specified data source on the protocol server. The protocol client MUST confirm that it intends to access the data source.

4. An action from the protocol client to allow access to the data source will trigger an **HTTP POST** message with the value *ctl00$PlaceHolderMain$BtnAllow* for the *__EVENTTARGET* property to the

protocol server and the protocol server will return a HTTP response with status code 302 and the value *access:AuthRequestComplete*, without any errors in the response header. This indicates a successful handshake process completion between the protocol client and the protocol server.

On the other hand, an action from the protocol client to deny access to the data source will send a HTTP POST message with the value *ctl00$PlaceHolderMain$BtnDeny* for the *__EVENTTARGET* property server and the protocol server will return a HTTP response with status code 302 and the value access:AuthRequestComplete with *error=Access Denied* in the response header. This indicates that the protocol client and the protocol server did not successfully complete the authentication handshake process.

3.1.4.24.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetLinkedTableInformation_InputMessage	The request WSDL message for the **GetLinkedTableInformation WSDL operation**.
IAccessServiceSoap_GetLinkedTableInformation_OutputMessage	The response WSDL message for the **GetLinkedTableInformation** WSDL operation.

3.1.4.24.1.1 IAccessServiceSoap_GetLinkedTableInformation_InputMessage

The request **WSDL message** for the **GetLinkedTableInformation WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetLinkedTableInformation
```

The **SOAP body** contains the **GetLinkedTableInformation** element.

3.1.4.24.1.2 IAccessServiceSoap_GetLinkedTableInformation_OutputMessage

The response **WSDL message** for the **GetLinkedTableInformation WSDL operation**.

The **SOAP body** contains the **GetLinkedTableInformationResponse** element.

3.1.4.24.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetLinkedTableInformation	The input data for the **GetLinkedTableInformation WSDL operation**.
GetLinkedTableInformationResponse	The result data for the **GetLinkedTableInformation** WSDL operation.

3.1.4.24.2.1 GetLinkedTableInformation

The **GetLinkedTableInformation** element specifies the input data for the **GetLinkedTableInformation** **WSDL operation**.

```
<xs:element name="GetLinkedTableInformation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetLinkedTableInformationParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **GetLinkedTableInformationParameters** ([MS-AADT] section 3.1.4.5.3.1) element that specifies the table about which to retrieve information. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.24.2.2 GetLinkedTableInformationResponse

The **GetLinkedTableInformationResponse** element specifies the result data for the **GetLinkedTableInformation** **WSDL operation**.

```
<xs:element name="GetLinkedTableInformationResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetLinkedTableInformationResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetLinkedTableInformationResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetLinkedTableInformationResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetLinkedTableInformationResult** ([MS-AADT] section 3.1.4.5.3.2) element that specifies information about the requested table.

3.1.4.24.3   Complex Types

None.

3.1.4.24.4   Simple Types

None.

3.1.4.24.5   Attributes

None.

3.1.4.24.6   Groups

None.

3.1.4.24.7   Attribute Groups

None.

3.1.4.25   ImportData

This operation triggers importing data into a table in a **database application**.

The following is the **WSDL** port type specification of the **ImportData WSDL operation**.

```
<wsdl:operation name="ImportData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ImportData"
message="tns2:IAccessServiceSoap_ImportData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ImportDataResponse"
message="tns2:IAccessServiceSoap_ImportData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ImportDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap ImportData AccessServerMessageFault FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_ImportData_InputMessage** (section 3.1.4.25.1.1) request message and the protocol server responds with an **IAccessServiceSoap_ImportData_OutputMessage** (section 3.1.4.25.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_ImportData_OutputMessage** response message that contains the number of rows inserted into the specified table.

3.1.4.25.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_ImportData_InputMessage	The request WSDL message for the **ImportData WSDL**

Message	Description
	operation.
IAccessServiceSoap_ImportData_OutputMessage	The response WSDL message for the **ImportData** WSDL operation.

3.1.4.25.1.1 IAccessServiceSoap_ImportData_InputMessage

The request **WSDL message** for the **ImportData WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/ImportData
```

The **SOAP body** contains the **ImportData** element.

3.1.4.25.1.2 IAccessServiceSoap_ImportData_OutputMessage

The response **WSDL message** for the **ImportData WSDL operation**.

The **SOAP body** contains the **ImportDataResponse** element.

3.1.4.25.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
ImportData	The input data for the **ImportData WSDL operation**.
ImportDataResponse	The result data for the **ImportData** WSDL operation.

3.1.4.25.2.1 ImportData

The **ImportData** element specifies the input data for the **ImportData WSDL operation**.

```
<xs:element name="ImportData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:ImportDataParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: An **ImportDataParameters** element ([MS-AADT] section 3.1.4.15.3.1) that specifies the information that the protocol server needs to import data.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.25.2.2 ImportDataResponse

The **ImportDataResponse** element specifies the result data for the **ImportData WSDL operation**.

```
<xs:element name="ImportDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="ImportDataResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:ImportDataResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ImportDataResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: An **ImportDataResult** element ([MS-AADT] section 3.1.4.15.3.2) that specifies the result of the import data operation.

3.1.4.25.3   Complex Types

None.

3.1.4.25.4   Simple Types

None.

3.1.4.25.5   Attributes

None.

3.1.4.25.6   Groups

None.

3.1.4.25.7   Attribute Groups

None.

3.1.4.26   RefreshLinkedTableInformation

This operation refreshes an existing **linked table** ([MS-AXL2] section 2.1.1.6) in a **database application** on the protocol server. The protocol server uses the **ID** attribute in the **RefreshLinkedTableInformationParameters** (([MS-AADT] section 3.1.4.16.3.1) element to identify the **linked table** ([MS-AXL2] section 2.1.1.6) in the database application, updates its definition from the source of the **linked table** ([MS-AXL2] section 2.1.1.6), and returns the updated definition to the protocol client.

The following is the **WSDL** port type specification of the **RefreshLinkedTableInformation WSDL operation**.

```
<wsdl:operation name="RefreshLinkedTableInformation"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RefreshLinkedTableInformation"
message="tns2:IAccessServiceSoap_RefreshLinkedTableInformation_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RefreshLinkedTableInformationResponse"
message="tns2:IAccessServiceSoap RefreshLinkedTableInformation OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RefreshLinkedTableInformationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap RefreshLinkedTableInformation AccessServerMessageFault Fault
Message" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAccessServiceSoap_RefreshLinkedTableInformation_InputMessage (section 3.1.4.26.1.1)
request message and the protocol server responds with an
IAccessServiceSoap_RefreshLinkedTableInformation_OutputMessage (section 3.1.4.26.1.2)
response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with an
  IAccessServiceSoap_RefreshLinkedTableInformation_OutputMessage response message
  that contains information about the requested table.

3.1.4.26.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_RefreshLinkedTableInformation_InputMessage	The request WSDL message for the **RefreshLinkedTableInformatio n WSDL operation**.
IAccessServiceSoap_RefreshLinkedTableInformation_OutputMessag e	The response WSDL message for the **RefreshLinkedTableInformatio n** WSDL operation.

3.1.4.26.1.1 IAccessServiceSoap_RefreshLinkedTableInformation_InputMessage

The request **WSDL message** for the **RefreshLinkedTableInformation WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/RefreshLinkedTableInformation
```

The **SOAP body** contains the **RefreshLinkedTableInformation** element.

3.1.4.26.1.2 IAccessServiceSoap_RefreshLinkedTableInformation_OutputMessage

The response **WSDL message** for the **RefreshLinkedTableInformation WSDL operation**.

The **SOAP body** contains the **RefreshLinkedTableInformationResponse** element.

3.1.4.26.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
RefreshLinkedTableInformation	The input data for the **RefreshLinkedTableInformation WSDL operation**.
RefreshLinkedTableInformationResponse	The result data for the **RefreshLinkedTableInformation** WSDL operation.

3.1.4.26.2.1 RefreshLinkedTableInformation

The **RefreshLinkedTableInformation** element specifies the input data for the **RefreshLinkedTableInformation WSDL operation**.

```
<xs:element name="RefreshLinkedTableInformation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:RefreshLinkedTableInformationParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter,** as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **RefreshLinkedTableInformationParameters** ([MS-AADT] section 3.1.4.16.3.1) element that specifies the table for which to retrieve information. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.26.2.2 RefreshLinkedTableInformationResponse

The **RefreshLinkedTableInformationResponse** element specifies the result data for the **RefreshLinkedTableInformation WSDL operation**.

```
<xs:element name="RefreshLinkedTableInformationResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="RefreshLinkedTableInformationResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:RefreshLinkedTableInformationResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RefreshLinkedTableInformationResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **RefreshLinkedTableInformationResult** ([MS-AADT] section 3.1.4.16.3.2) element that specifies information about the requested table. MUST be present.

3.1.4.26.3   Complex Types

None.

3.1.4.26.4   Simple Types

None.

3.1.4.26.5   Attributes

None.

3.1.4.26.6   Groups

None.

3.1.4.26.7   Attribute Groups

None.

3.1.4.27   RenameAccessObject

This operation changes the name of an object in a **database application**.

The following is the **WSDL** port type specification of the **RenameAccessObject WSDL operation**.

```
<wsdl:operation name="RenameAccessObject" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameAccessObject"
message="tns2:IAccessServiceSoap_RenameAccessObject_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameAccessObjectResponse"
message="tns2:IAccessServiceSoap RenameAccessObject OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
```

```
erInternalService/IAccessServiceSoap/RenameAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap RenameAccessObject AccessServerMessageFault FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_RenameAccessObject_InputMessage** (section 3.1.4.27.1.1) request message and the protocol server responds with an **IAccessServiceSoap_RenameAccessObject_OutputMessage** (section 3.1.4.27.1.2) response message as follows:

- If the **ObjectVersion** attribute specified in the **parameters** element in the **RenameAccessObject** element (section 3.1.4.27.2.1) does not match the version token on the protocol server for the object being renamed, the protocol server MUST respond with a **IAccessServiceSoap_RenameAccessObject_OutputMessage** response message that contains the current definition of the indicated object and a **ServiceError** element as specified by [MS-AADT] section 2.2.4.13, and MUST NOT rename the object.
- If an error occurs on the protocol server during this operation, the protocol server MUST send a **SOAP fault**, as specified by section 2.2.9.
- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_RenameAccessObject_OutputMessage** response message that contains the specified information about the renamed object.

3.1.4.27.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_RenameAccessObject_InputMessage	The request WSDL message for the **RenameAccessObject WSDL operation**.
IAccessServiceSoap_RenameAccessObject_OutputMessage	The response WSDL message for the **RenameAccessObject** WSDL operation.

3.1.4.27.1.1 IAccessServiceSoap_RenameAccessObject_InputMessage

The request **WSDL message** for the **RenameAccessObject WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/RenameAccessObject
```

The **SOAP body** contains the **RenameAccessObject** element.

3.1.4.27.1.2 IAccessServiceSoap_RenameAccessObject_OutputMessage

The response **WSDL message** for the **RenameAccessObject WSDL operation**.

The **SOAP body** contains the **RenameAccessObjectResponse** element.

3.1.4.27.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
RenameAccessObject	The input data for the **RenameAccessObject WSDL operation**.
RenameAccessObjectResponse	The result data for the **RenameAccessObject** WSDL operation.

3.1.4.27.2.1 RenameAccessObject

The **RenameAccessObject** element specifies the input data for the **RenameAccessObject WSDL operation**.

```
<xs:element name="RenameAccessObject" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:RenameParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **RenameParameters** element ([MS-AADT] section 3.1.4.6.3.1) that specifies the information that the protocol server needs to rename an object. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.27.2.2 RenameAccessObjectResponse

The **RenameAccessObjectResponse** element specifies the result data for the **RenameAccessObject WSDL operation**.

```
<xs:element name="RenameAccessObjectResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="RenameAccessObjectResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:RenameResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RenameAccessObjectResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **RenameResult** element ([MS-AADT] section 3.1.4.6.3.2) that specifies information about a renamed object for the protocol client to use.

3.1.4.27.3 Complex Types

None.

3.1.4.27.4 Simple Types

None.

3.1.4.27.5 Attributes

None.

3.1.4.27.6 Groups

None.

3.1.4.27.7 Attribute Groups

None.

3.1.4.28 SetDataConnectivityStatus

This operation enables or disables a login in the **database application**, which is used to connect to the database application directly.

The following is the **WSDL** port type specification of the **SetDataConnectivityStatus WSDL operation**.

```
<wsdl:operation name="SetDataConnectivityStatus"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataConnectivityStatus"
message="tns2:IAccessServiceSoap_SetDataConnectivityStatus_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataConnectivityStatusResponse"
message="tns2:IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataConnectivityStatusAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_SetDataConnectivityStatus_AccessServerMessageFault_FaultMess
age" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_SetDataConnectivityStatus_InputMessage** (section 3.1.4.28.1.1) request message and the protocol server responds with an **IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage** (section 3.1.4.28.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

▪ Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage** response message that contains information about the login which was enabled or disabled by the protocol operation.

3.1.4.28.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_SetDataConnectivityStatus_InputMessage	The request WSDL message for the **SetDataConnectivityStatus WSDL operation**.
IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage	The response WSDL message for the **SetDataConnectivityStatus** WSDL operation.

3.1.4.28.1.1 IAccessServiceSoap_SetDataConnectivityStatus_InputMessage

The request **WSDL message** for the **SetDataConnectivityStatus WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/SetDataConnectivityStatus
```

The **SOAP body** contains the **SetDataConnectivityStatus** element.

3.1.4.28.1.2 IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage

The response **WSDL message** for the **SetDataConnectivityStatus WSDL operation**.

The **SOAP body** contains the **SetDataConnectivityStatusResponse** element.

3.1.4.28.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
SetDataConnectivityStatus	The input data for the **SetDataConnectivityStatus WSDL operation**.
SetDataConnectivityStatusResponse	The result data for the **SetDataConnectivityStatus** WSDL operation.

3.1.4.28.2.1 SetDataConnectivityStatus

The **SetDataConnectivityStatus** element specifies the input data for the **SetDataConnectivityStatus WSDL operation**.

```
<xs:element name="SetDataConnectivityStatus" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
```

```
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameters"
    type="tns2:SetDataConnectivityStatusParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
    name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **SetDataConnectivityStatusParameter** ([MS-AADT] section 3.1.4.17.3.1) that specifies the permission level of a login and whether it is to be enabled or disabled. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.28.2.2 SetDataConnectivityStatusResponse

The **SetDataConnectivityStatusResponse** element specifies the result data for the **SetDataConnectivityStatus WSDL operation**.

```
    <xs:element name="SetDataConnectivityStatusResponse"
    xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="SetDataConnectivityStatusResult"
    type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result"
    type="tns2:SetDataConnectivityStatusResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

SetDataConnectivityStatusResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **SetDataConnectivityStatusResult** ([MS-AADT] section 3.1.4.17.3.2) that specifies whether enabling or disabling of the login with requested permission level was successful. MUST be present.

3.1.4.28.3   Complex Types

None.

3.1.4.28.4   Simple Types

None.

3.1.4.28.5   Attributes

None.

3.1.4.28.6   Groups

None.

3.1.4.28.7   Attribute Groups

None.

3.1.4.29   SetDataMacroTracing

This operation sets the data macro tracing option in a **database application**.

The following is the **WSDL** port type specification of the **SetDataMacroTracing WSDL operation**.

```
<wsdl:operation name="SetDataMacroTracing" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataMacroTracing"
message="tns2:IAccessServiceSoap SetDataMacroTracing InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataMacroTracingResponse"
message="tns2:IAccessServiceSoap_SetDataMacroTracing_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataMacroTracingAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_SetDataMacroTracing_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_SetDataMacroTracing_InputMessage** (section 3.1.4.29.1.1) request message and the protocol server responds with an **IAccessServiceSoap_SetDataMacroTracing_OutputMessage** (section 3.1.4.29.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified in section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_SetDataMacroTracing_OutputMessage** response message that contains the information about the data macro tracing option.

3.1.4.29.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_SetDataMacroTracing_InputMessage	The request WSDL message for the **SetDataMacroTracing WSDL operation**.
IAccessServiceSoap_SetDataMacroTracing_OutputMessage	The response WSDL message for the **SetDataMacroTracing** WSDL operation.

3.1.4.29.1.1 IAccessServiceSoap_SetDataMacroTracing_InputMessage

The request **WSDL message** for the **SetDataMacroTracing WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/SetDataMacroTracing
```

The **SOAP body** contains the **SetDataMacroTracing** element.

3.1.4.29.1.2 IAccessServiceSoap_SetDataMacroTracing_OutputMessage

The response **WSDL message** for the **SetDataMacroTracing WSDL operation**.

The **SOAP body** contains the **SetDataMacroTracingResponse** element.

3.1.4.29.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
SetDataMacroTracing	The input data for the **SetDataMacroTracing WSDL operation**.
SetDataMacroTracingResponse	The result data for the **SetDataMacroTracing** WSDL operation.

3.1.4.29.2.1 SetDataMacroTracing

The **SetDataMacroTracing** element specifies the input data for the **SetDataMacroTracing WSDL operation**.

```
<xs:element name="SetDataMacroTracing" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:SetDataMacroTracingParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter,** as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: A **SetDataMacroTracingParameters** element ([MS-AADT] section 3.1.4.7.3.1) that specifies the information that the protocol server needs to set the data macro tracing option.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.29.2.2 SetDataMacroTracingResponse

The **SetDataMacroTracingResponse** element specifies the result data for the **SetDataMacroTracing** **WSDL operation**.

```
<xs:element name="SetDataMacroTracingResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="SetDataMacroTracingResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:SetDataMacroTracingResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SetDataMacroTracingResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **SetDataMacroTracingResult** element ([MS-AADT] section 3.1.4.7.3.2) that specifies information about the data macro tracing option for the protocol client to use.

3.1.4.29.3   Complex Types

None.

3.1.4.29.4   Simple Types

None.

3.1.4.29.5   Attributes

None.

3.1.4.29.6   Groups

None.

3.1.4.29.7   Attribute Groups

None.

3.1.4.30   UpdateAccessObject

This operation updates an object in a **database application**.

The following is the **WSDL** port type specification of the **UpdateAccessObject WSDL operation**.

```
<wsdl:operation name="UpdateAccessObject" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateAccessObject"
message="tns2:IAccessServiceSoap_UpdateAccessObject_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateAccessObjectResponse"
message="tns2:IAccessServiceSoap_UpdateAccessObject_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
```

```
message="tns2:IAccessServiceSoap_UpdateAccessObject_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_UpdateAccessObject_InputMessage** (section 3.1.4.30.1.1) request message and the protocol server responds with an **IAccessServiceSoap_UpdateAccessObject_OutputMessage** (section 3.1.4.30.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with either a **SOAP fault**, as specified by section 2.2.9, or a **ServiceError**, as specified by [MS-AADT] section 2.2.4.13.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_UpdateAccessObject_OutputMessage** response message that contains information about the updated object.

3.1.4.30.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_UpdateAccessObject_InputMessage	The request WSDL message for the **UpdateAccessObject WSDL operation**.
IAccessServiceSoap_UpdateAccessObject_OutputMessage	The response WSDL message for the **UpdateAccessObject** WSDL operation.

3.1.4.30.1.1 IAccessServiceSoap_UpdateAccessObject_InputMessage

The request **WSDL message** for the **UpdateAccessObject WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/UpdateAccessObject
```

The **SOAP body** contains the **UpdateAccessObject** element.

3.1.4.30.1.2 IAccessServiceSoap_UpdateAccessObject_OutputMessage

The response **WSDL message** for the **UpdateAccessObject WSDL operation**.

The **SOAP body** contains the **UpdateAccessObjectResponse** element.

3.1.4.30.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
UpdateAccessObject	The input data for the **UpdateAccessObject WSDL operation**.

Element	Description
UpdateAccessObjectResponse	The result data for the **UpdateAccessObject** WSDL operation.

3.1.4.30.2.1 UpdateAccessObject

The **UpdateAccessObject** element specifies the input data for the **UpdateAccessObject WSDL operation**.

```
<xs:element name="UpdateAccessObject" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:UpdateParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

parameters: An **UpdateParameters** ([MS-AADT] section 3.1.4.8.3.1) element that specifies information needed by the protocol server to update an object.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.30.2.2 UpdateAccessObjectResponse

The **UpdateAccessObjectResponse** element specifies the result data for the **UpdateAccessObject WSDL operation**.

```
<xs:element name="UpdateAccessObjectResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="UpdateAccessObjectResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:UpdateResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UpdateAccessObjectResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: An **UpdateResult** ([MS-AADT] section 3.1.4.8.3.2) element that specifies information about the updated object.

3.1.4.30.3   Complex Types

None.

3.1.4.30.4   Simple Types

None.

3.1.4.30.5   Attributes

None.

3.1.4.30.6   Groups

None.

3.1.4.30.7   Attribute Groups

None.

3.1.4.31   CheckCopyStatus

This operation retrieves the status of a **CopyDatabase** operation (section 3.1.4.32).

The following is the **WSDL** port type specification of the **CheckCopyStatus WSDL operation**.

```
<wsdl:operation name="CheckCopyStatus" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CheckCopyStatus"
message="tns2:IAccessServiceSoap_CheckCopyStatus_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CheckCopyStatusResponse"
message="tns2:IAccessServiceSoap_CheckCopyStatus_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CheckCopyStatusDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_CheckCopyStatus_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_CheckCopyStatus_InputMessage** (section 3.1.4.31.1.1) request message and the protocol server responds with an **IAccessServiceSoap_CheckCopyStatus_OutputMessage** (section 3.1.4.31.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_CheckCopyStatus_OutputMessage** response message that contains the status of the copy operation.

3.1.4.31.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_CheckCopyStatus_InputMessage	The request WSDL message for the **CheckCopyStatus WSDL operation**.
IAccessServiceSoap_CheckCopyStatus_OutputMessage	The response WSDL message for the **CheckCopyStatus** WSDL operation.

3.1.4.31.1.1 IAccessServiceSoap_CheckCopyStatus_InputMessage

The request **WSDL message** for the **CheckCopyStatus WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/CheckCopyStatus
```

The **SOAP body** contains the **CheckCopyStatus** element.

3.1.4.31.1.2 IAccessServiceSoap_CheckCopyStatus_OutputMessage

The response **WSDL message** for the **CheckCopyStatus WSDL operation**.

The **SOAP body** contains the **CheckCopyStatusResponse** element.

3.1.4.31.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
CheckCopyStatus	The input data for the **CheckCopyStatus WSDL operation**.
CheckCopyStatusResponse	The result data for the **CheckCopyStatus** WSDL operation.

3.1.4.31.2.1 CheckCopyStatus

The **CheckCopyStatus** element specifies the input data for the **CheckCopyStatus WSDL operation**.

```
<xs:element name="CheckCopyStatus" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sourceDatabase"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="destinationDatabase"
type="tns2:DatabaseContext"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

sourceDatabase: A **DatabaseContext** (section 2.2.4.11) that specifies information about the source database being copied. MUST match the **originalDatabaseContext** element of the **CopyDatabase** (section 3.1.4.32.2.1) element supplied to an earlier **CopyDatabase** (section 3.1.4.32) operation. MUST be present.

destinationDatabase: A **DatabaseContext** (section 2.2.4.11) that specifies information about the copy of the database being created. MUST match the **DatabaseContext** element of the **provisionedDatabaseContext** element of the **CopyDatabaseResponse** (section 3.1.4.32.2.2) element returned by an earlier **CopyDatabase** (section 3.1.4.32) operation called with the **originalDatabaseContext** of the **CopyDatabase** (section 3.1.4.32.2.1) element matching the **sourceDatabase** element. MUST be present.

3.1.4.31.2.2 CheckCopyStatusResponse

The **CheckCopyStatusResponse** element specifies the result data for the **CheckCopyStatus WSDL operation**.

```
<xs:element name="CheckCopyStatusResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="CheckCopyStatusResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="1" maxOccurs="1" name="copyStatus" type="xs:unsignedByte"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

CheckCopyStatusResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

copyStatus: An **unsignedByte** ([XMLSCHEMA2] section 3.3.24) that specifies the completion percentage of the copy operation. MUST have a value between 0 and 100, inclusive.

3.1.4.31.3   Complex Types

None.

3.1.4.31.4   Simple Types

None.

3.1.4.31.5   Attributes

None.

3.1.4.31.6   Groups

None.

3.1.4.31.7   Attribute Groups

None.

3.1.4.32   CopyDatabase

This operation instructs the protocol server to begin copying a database.

The following is the **WSDL** port type specification of the **CopyDatabase WSDL operation**.

```
<wsdl:operation name="CopyDatabase" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CopyDatabase"
message="tns2:IAccessServiceSoap_CopyDatabase_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CopyDatabaseResponse"
message="tns2:IAccessServiceSoap_CopyDatabase_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CopyDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_CopyDatabase_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_CopyDatabase_InputMessage** (section 3.1.4.32.1.1) request message and the protocol server responds with an **IAccessServiceSoap_CopyDatabase_OutputMessage** (section 3.1.4.32.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_CopyDatabase_OutputMessage** response message that contains information about the copied database.

3.1.4.32.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_CopyDatabase_InputMessage	The request WSDL message for the **CopyDatabase WSDL operation**.
IAccessServiceSoap_CopyDatabase_OutputMessage	The response WSDL message for the **CopyDatabase** WSDL operation.

3.1.4.32.1.1 IAccessServiceSoap_CopyDatabase_InputMessage

The request **WSDL message** for the **CopyDatabase WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/CopyDatabase
```

The **SOAP body** contains the **CopyDatabase** element.

3.1.4.32.1.2 IAccessServiceSoap_CopyDatabase_OutputMessage

The response **WSDL message** for the **CopyDatabase WSDL operation**.

The **SOAP body** contains the **CopyDatabaseResponse** element.

3.1.4.32.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
CopyDatabase	The input data for the **CopyDatabase WSDL operation**.
CopyDatabaseResponse	The result data for the **CopyDatabase** WSDL operation.

3.1.4.32.2.1 CopyDatabase

The **CopyDatabase** element specifies the input data for the **CopyDatabase WSDL operation**.

```
<xs:element name="CopyDatabase" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="originalDatabaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="copyDatabaseName" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

originalDatabaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies the database to copy. MUST be present.

copyDatabaseName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the copy of the database. MUST be present.

3.1.4.32.2.2 CopyDatabaseResponse

The **CopyDatabaseResponse** element specifies the result data for the **CopyDatabase WSDL operation**.

```
<xs:element name="CopyDatabaseResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="CopyDatabaseResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="provisionedDatabaseContext"
type="tns2:ProvisionedDatabaseContext"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

CopyDatabaseResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

provisionedDatabaseContext: A **ProvisionedDatabaseContext** (section 2.2.4.14) that specifies information about the copy of the database being created. MUST be present.

3.1.4.32.3   Complex Types

None.

3.1.4.32.4   Simple Types

None.

3.1.4.32.5   Attributes

None.

3.1.4.32.6   Groups

None.

3.1.4.32.7   Attribute Groups

None.

3.1.4.33   DatabaseExists

This operation is used to determine whether or not a database exists on the protocol server.

The following is the **WSDL** port type specification of the **DatabaseExists WSDL operation**.

```
<wsdl:operation name="DatabaseExists" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DatabaseExists"
message="tns2:IAccessServiceSoap_DatabaseExists_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DatabaseExistsResponse"
message="tns2:IAccessServiceSoap_DatabaseExists_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DatabaseExistsDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_DatabaseExists_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_DatabaseExists_InputMessage** (section 3.1.4.33.1.1) request message and the protocol server responds with an **IAccessServiceSoap_DatabaseExists_OutputMessage** (section 3.1.4.33.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_DatabaseExists_OutputMessage** response message that contains information regarding the existence of the database.

3.1.4.33.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_DatabaseExists_InputMessage	The request WSDL message for the **DatabaseExists WSDL operation**.
IAccessServiceSoap_DatabaseExists_OutputMessage	The response WSDL message for the **DatabaseExists** WSDL operation.

3.1.4.33.1.1 IAccessServiceSoap_DatabaseExists_InputMessage

The request **WSDL message** for the **DatabaseExists WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/DatabaseExists
```

The **SOAP body** contains the **DatabaseExists** element.

3.1.4.33.1.2 IAccessServiceSoap_DatabaseExists_OutputMessage

The response **WSDL message** for the **DatabaseExists WSDL operation**.

The **SOAP body** contains the **DatabaseExistsResponse** element.

3.1.4.33.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
DatabaseExists	The input data for the **DatabaseExists WSDL operation**.
DatabaseExistsResponse	The result data for the **DatabaseExists** WSDL operation.

3.1.4.33.2.1 DatabaseExists

The **DatabaseExists** element specifies the input data for the **DatabaseExists WSDL operation**.

```
<xs:element name="DatabaseExists" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
    </xs:sequence>
  </xs:complexType>
```

```
      </xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database whose existence is to be checked. MUST be present.

3.1.4.33.2.2 DatabaseExistsResponse

The **DatabaseExistsResponse** element specifies the result data for the **DatabaseExists WSDL operation**.

```
<xs:element name="DatabaseExistsResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="DatabaseExistsResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="1" maxOccurs="1" name="exists" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DatabaseExistsResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

exists: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the database that is specified by the **databaseContext** element of the **DatabaseExists** element (section 3.1.4.33.2.1) in the request exists.

3.1.4.33.3   Complex Types

None.

3.1.4.33.4   Simple Types

None.

3.1.4.33.5   Attributes

None.

3.1.4.33.6   Groups

None.

3.1.4.33.7   Attribute Groups

None.

3.1.4.34   ExecuteDacIncrementalUpgrade

Instructs the protocol server to update the contents of a database.

The following is the **WSDL** port type specification of the **ExecuteDacIncrementalUpgrade WSDL operation**.

```
<wsdl:operation name="ExecuteDacIncrementalUpgrade"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
```

```
   <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgrade"
message="tns2:IAccessServiceSoap_ExecuteDacIncrementalUpgrade_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgradeResponse"
message="tns2:IAccessServiceSoap_ExecuteDacIncrementalUpgrade_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgradeDatabaseProviderMessageFault
" name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_ExecuteDacIncrementalUpgrade_DatabaseProviderMessageFault_Fa
ultMessage" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
 </wsdl:operation>
```

The protocol client sends an
IAccessServiceSoap_ExecuteDacIncrementalUpgrade_InputMessage (section 3.1.4.34.1.1)
request message and the protocol server responds with an
IAccessServiceSoap_ExecuteDacIncrementalUpgrade_OutputMessage (section 3.1.4.34.1.2)
response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond
   with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a
   IAccessServiceSoap_ExecuteDacIncrementalUpgrade_OutputMessage response message.

3.1.4.34.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this
operation.

Message	Description
IAccessServiceSoap_ExecuteDacIncrementalUpgrade_InputMessage	The request WSDL message for the **ExecuteDacIncrementalUpgrade WSDL operation**.
IAccessServiceSoap_ExecuteDacIncrementalUpgrade_OutputMessage	The response WSDL message for the **ExecuteDacIncrementalUpgrade** WSDL operation.

3.1.4.34.1.1 IAccessServiceSoap_ExecuteDacIncrementalUpgrade_InputMessage

The request **WSDL message** for the **ExecuteDacIncrementalUpgrade WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/ExecuteDacIncrementalUpgrade
```

The **SOAP body** contains the **ExecuteDacIncrementalUpgrade** element.

3.1.4.34.1.2 IAccessServiceSoap_ExecuteDacIncrementalUpgrade_OutputMessage

The response **WSDL message** for the **ExecuteDacIncrementalUpgrade WSDL operation**.

The **SOAP body** contains the **ExecuteDacIncrementalUpgradeResponse** element.

3.1.4.34.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
ExecuteDacIncrementalUpgrade	The input data for the **ExecuteDacIncrementalUpgrade WSDL operation**.
ExecuteDacIncrementalUpgradeResponse	The result data for the **ExecuteDacIncrementalUpgrade** WSDL operation.

3.1.4.34.2.1 ExecuteDacIncrementalUpgrade

The **ExecuteDacIncrementalUpgrade** element specifies the input data for the **ExecuteDacIncrementalUpgrade WSDL operation**.

```
<xs:element name="ExecuteDacIncrementalUpgrade" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="loginName" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="encodedDac" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database to update. MUST be present.

loginName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies a database login to grant access to the updated database. If not specified, the protocol server will not grant any additional access to the updated database.

encodedDac: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies updated contents for the database specified by the **databaseContext** element. The format of this **string** is a **base64 encoding** of a data-tier application schema and data file, as specified by [MS-DACPAC]. MUST be present.

3.1.4.34.2.2 ExecuteDacIncrementalUpgradeResponse

The **ExecuteDacIncrementalUpgradeResponse** element specifies the result data for the **ExecuteDacIncrementalUpgrade WSDL operation**.

```
<xs:element name="ExecuteDacIncrementalUpgradeResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="ExecuteDacIncrementalUpgradeResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ExecuteDacIncrementalUpgradeResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

3.1.4.34.3   Complex Types

None.

3.1.4.34.4   Simple Types

None.

3.1.4.34.5   Attributes

None.

3.1.4.34.6   Groups

None.

3.1.4.34.7   Attribute Groups

None.

3.1.4.35   GetAvailableServer

This operation returns an available database server on which new databases can be created using a given mode of **authentication** with a given package source.

The following is the **WSDL** port type specification of the **GetAvailableServer WSDL operation**.

```
<wsdl:operation name="GetAvailableServer" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAvailableServer"
message="tns2:IAccessServiceSoap_GetAvailableServer_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAvailableServerResponse"
message="tns2:IAccessServiceSoap_GetAvailableServer_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAvailableServerDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_GetAvailableServer_DatabaseProviderMessageFault_FaultMessage
" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetAvailableServer_InputMessage** (section 3.1.4.35.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetAvailableServer_OutputMessage** (section 3.1.4.35.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_GetAvailableServer_OutputMessage** response message that contains information about an available server.

3.1.4.35.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetAvailableServer_InputMessage	The request WSDL message for the **GetAvailableServer WSDL operation**.
IAccessServiceSoap_GetAvailableServer_OutputMessage	The response WSDL message for the **GetAvailableServer** WSDL operation.

3.1.4.35.1.1 IAccessServiceSoap_GetAvailableServer_InputMessage

The request **WSDL message** for the **GetAvailableServer WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetAvailableServer
```

The **SOAP body** contains the **GetAvailableServer** element.

3.1.4.35.1.2 IAccessServiceSoap_GetAvailableServer_OutputMessage

The response **WSDL message** for the **GetAvailableServer WSDL operation**.

The **SOAP body** contains the **GetAvailableServerResponse** element.

3.1.4.35.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetAvailableServer	The input data for the **GetAvailableServer WSDL operation**.
GetAvailableServerResponse	The result data for the **GetAvailableServer** WSDL operation.

3.1.4.35.2.1 GetAvailableServer

The **GetAvailableServer** element specifies the input data for the **GetAvailableServer WSDL operation**.

```
<xs:element name="GetAvailableServer" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="1" maxOccurs="1" name="authMode"
type="tns2:SqlAuthenticationMode"/>
      <xs:element minOccurs="1" maxOccurs="1" name="packageSource"
type="tns2:PackageSource"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

authMode: A **SqlAuthenticationMode** (section 3.1.4.35.4.1) that specifies a requirement that the database server specified in the response to the **GetAvailableServer** operation MUST support that particular mode of **authentication**.

packageSource: A **PackageSource** (section 2.2.5.9) that specifies a requirement that the database server specified in the response to the **GetAvailableServer** operation MUST support packages from that origin.

3.1.4.35.2.2 GetAvailableServerResponse

The **GetAvailableServerResponse** element specifies the result data for the **GetAvailableServer WSDL operation**.

```
<xs:element name="GetAvailableServerResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetAvailableServerResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="serverContext"
type="tns2:ServerContext"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAvailableServerResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

serverContext: A **ServerContext** (section 2.2.4.16) that specifies a server that can be used successfully in the **Server** element of the **databaseContext** element of the **ProvisionDatabase** element (section 3.1.4.38.2.1) in a future call to **ProvisionDatabase** (section 3.1.4.38). MUST be present.

3.1.4.35.3   Complex Types

None.

3.1.4.35.4   Simple Types

The following table summarizes the **XML schema** simple type definitions that are specific to this operation.

Simple type	Description
SqlAuthenticationMode	Specifies a desired mode of **authentication** to the database server.

3.1.4.35.4.1 SqlAuthenticationMode

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies a desired mode of **authentication** to the database server.

```
<xs:simpleType name="SqlAuthenticationMode" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="SqlServerAuth"/>
    <xs:enumeration value="SqlServerAuthOrWindowsAuth"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **SqlAuthenticationMode** simple type.

Value	Meaning
SqlServerAuth	Specifies that authentication to the database server will be done using **SQL authentication**.
SqlServerAuthOrWindowsAuth	Specifies that authentication to the database server will be done either with SQL authentication or with the **Security Support Provider Interface (SSPI)**.

3.1.4.35.5 Attributes

None.

3.1.4.35.6 Groups

None.

3.1.4.35.7 Attribute Groups

None.

3.1.4.36 GetPackage

This operation retrieves a package that represents a **database application**, including its objects and data.

The following is the **WSDL** port type specification of the **GetPackage WSDL operation**.

```
<wsdl:operation name="GetPackage" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/IAccessServiceSoap/GetPackage"
message="tns2:IAccessServiceSoap_GetPackage_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetPackageResponse"
message="tns2:IAccessServiceSoap_GetPackage_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetPackageAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetPackage_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAccessServiceSoap_GetPackage_InputMessage** (section 3.1.4.36.1.1) request message and the protocol server responds with a **IAccessServiceSoap_GetPackage_OutputMessage** (section 3.1.4.36.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_GetPackage_OutputMessage** response message that contains the package.

3.1.4.36.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetPackage_InputMessage	The request WSDL message for the **GetPackage WSDL operation**.
IAccessServiceSoap_GetPackage_OutputMessage	The response WSDL message for the **GetPackage** WSDL operation.

3.1.4.36.1.1 IAccessServiceSoap_GetPackage_InputMessage

The request **WSDL message** for the **GetPackage WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetPackage
```

The **SOAP body** contains the **GetPackage** element.

3.1.4.36.1.2 IAccessServiceSoap_GetPackage_OutputMessage

The response **WSDL message** for the **GetPackage WSDL operation**.

The **SOAP body** contains the **GetPackageResponse** element.

3.1.4.36.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetPackage	The input data for the **GetPackage WSDL operation**.
GetPackageResponse	The result data for the **GetPackage** WSDL operation.

3.1.4.36.2.1 GetPackage

The **GetPackage** element specifies the input data for the **GetPackage WSDL operation**.

```
<xs:element name="GetPackage" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="packageParams"
type="tns2:GetPackageParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

packageParams: A **GetPackageParameters** ([MS-AADT] section 3.1.4.18.3.1) that specifies the identifier of the package to retrieve. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.36.2.2 GetPackageResponse

The **GetPackageResponse** element specifies the result data for the **GetPackage WSDL operation**.

```
<xs:element name="GetPackageResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetPackageResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:GetPackageResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetPackageResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

result: A **GetPackageResult** element ([MS-AADT] section 3.1.4.18.3.2) that contains the package. MUST be present.

3.1.4.36.3 Complex Types

None.

3.1.4.36.4 Simple Types

None.

3.1.4.36.5 Attributes

None.

3.1.4.36.6 Groups

None.

3.1.4.36.7 Attribute Groups

None.

3.1.4.37 GetServerName

Retrieves the name of a database server associated with a given handle.

The following is the **WSDL** port type specification of the **GetServerName WSDL operation**.

```
<wsdl:operation name="GetServerName" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetServerName"
message="tns2:IAccessServiceSoap_GetServerName_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetServerNameResponse"
message="tns2:IAccessServiceSoap_GetServerName_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetServerNameDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_GetServerName_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetServerName_InputMessage** (section 3.1.4.37.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetServerName_OutputMessage** (section 3.1.4.37.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_GetServerName_OutputMessage** response message that contains the name of the server requested.

3.1.4.37.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetServerName_InputMessage	The request WSDL message for the **GetServerName WSDL operation**.
IAccessServiceSoap_GetServerName_OutputMessage	The response WSDL message for the **GetServerName** WSDL operation.

3.1.4.37.1.1 IAccessServiceSoap_GetServerName_InputMessage

The request **WSDL message** for the **GetServerName WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetServerName
```

The **SOAP body** contains the **GetServerName** element.

3.1.4.37.1.2 IAccessServiceSoap_GetServerName_OutputMessage

The response **WSDL message** for the **GetServerName WSDL operation**.

The **SOAP body** contains the **GetServerNameResponse** element.

3.1.4.37.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetServerName	The input data for the **GetServerName WSDL operation**.
GetServerNameResponse	The result data for the **GetServerName** WSDL operation.

3.1.4.37.2.1 GetServerName

The **GetServerName** element specifies the input data for the **GetServerName WSDL operation**.

```
<xs:element name="GetServerName" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="serverReferenceId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

serverReferenceId: A **guid** (section 2.2.5.8) that specifies a value that is used as a handle to a database server, as appears in the **ServerReferenceId** element of a **ServerContext** element (section 2.2.4.16).

3.1.4.37.2.2 GetServerNameResponse

The **GetServerNameResponse** element specifies the result data for the **GetServerName WSDL operation**.

```
<xs:element name="GetServerNameResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetServerNameResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="serverName" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetServerNameResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

serverName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the database server corresponding to the **serverReferenceId** of the **GetServerName** element (section 3.1.4.37.2.1) in the request to this operation. MUST be present.

3.1.4.37.3 Complex Types

None.

3.1.4.37.4 Simple Types

None.

3.1.4.37.5 Attributes

None.

3.1.4.37.6 Groups

None.

3.1.4.37.7 Attribute Groups

None.

3.1.4.38 ProvisionDatabase

Instructs the protocol server to create a new database.

The following is the **WSDL** port type specification of the **ProvisionDatabase WSDL operation**.

```
<wsdl:operation name="ProvisionDatabase" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ProvisionDatabase"
message="tns2:IAccessServiceSoap_ProvisionDatabase_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ProvisionDatabaseResponse"
message="tns2:IAccessServiceSoap_ProvisionDatabase_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ProvisionDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_ProvisionDatabase_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_ProvisionDatabase_InputMessage** (section 3.1.4.38.1.1) request message and the protocol server responds with an **IAccessServiceSoap_ProvisionDatabase_OutputMessage** (section 3.1.4.38.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_ProvisionDatabase_OutputMessage** response message that contains information about the newly created database.

3.1.4.38.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_ProvisionDatabase_InputMessage	The request WSDL message for the **ProvisionDatabase WSDL operation**.
IAccessServiceSoap_ProvisionDatabase_OutputMessage	The response WSDL message for the **ProvisionDatabase** WSDL operation.

3.1.4.38.1.1   IAccessServiceSoap_ProvisionDatabase_InputMessage

The request **WSDL message** for the **ProvisionDatabase WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/ProvisionDatabase
```

The **SOAP body** contains the **ProvisionDatabase** element.

3.1.4.38.1.2   IAccessServiceSoap_ProvisionDatabase_OutputMessage

The response **WSDL message** for the **ProvisionDatabase WSDL operation**.

The **SOAP body** contains the **ProvisionDatabaseResponse** element.

3.1.4.38.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
ProvisionDatabase	The input data for the **ProvisionDatabase WSDL operation**.
ProvisionDatabaseResponse	The result data for the **ProvisionDatabase** WSDL operation.

3.1.4.38.2.1 ProvisionDatabase

The **ProvisionDatabase** element specifies the input data for the **ProvisionDatabase WSDL operation**.

```
<xs:element name="ProvisionDatabase" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="encodedDac" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database to create. The **ServerContext** (section 2.2.4.16) specified by the **Server** element of **databaseContext** MUST be a value returned by a call to **GetAvailableServer** (section 3.1.4.35). MUST be present.

encodedDac: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the contents of the database to create. The format of this **string** is a **base64 encoding** of a data-tier application schema and data file as specified by [MS-DACPAC]. MUST be present.

3.1.4.38.2.2 ProvisionDatabaseResponse

The **ProvisionDatabaseResponse** element specifies the result data for the **ProvisionDatabase WSDL operation**.

```
<xs:element name="ProvisionDatabaseResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="ProvisionDatabaseResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="provisionedDatabaseContext"
type="tns2:ProvisionedDatabaseContext"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ProvisionDatabaseResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

provisionedDatabaseContext: A **ProvisionedDatabaseContext** (section 2.2.4.14) that specifies information about the database created. MUST be present. If the **PackageType** element of the

DatabaseContext element of **ProvisionedDatabaseContext** is "Access", then no permissions are associated with the **DboCredential** element of the **ProvisionedDatabaseContext**.

3.1.4.38.3   Complex Types

None.

3.1.4.38.4   Simple Types

None.

3.1.4.38.5   Attributes

None.

3.1.4.38.6   Groups

None.

3.1.4.38.7   Attribute Groups

None.

3.1.4.39   RenameDatabase

Changes the name of a database.

The following is the **WSDL** port type specification of the **RenameDatabase WSDL operation**.

```
<wsdl:operation name="RenameDatabase" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameDatabase"
message="tns2:IAccessServiceSoap_RenameDatabase_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameDatabaseResponse"
message="tns2:IAccessServiceSoap_RenameDatabase_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_RenameDatabase_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_RenameDatabase_InputMessage** (section 3.1.4.39.1.1) request message and the protocol server responds with an **IAccessServiceSoap_RenameDatabase_OutputMessage** (section 3.1.4.39.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_RenameDatabase_OutputMessage** response message.

3.1.4.39.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_RenameDatabase_InputMessage	The request WSDL message for the **RenameDatabase WSDL operation**.
IAccessServiceSoap_RenameDatabase_OutputMessage	The response WSDL message for the **RenameDatabase** WSDL operation.

3.1.4.39.1.1   IAccessServiceSoap_RenameDatabase_InputMessage

The request **WSDL message** for the **RenameDatabase WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/RenameDatabase
```

The **SOAP body** contains the **RenameDatabase** element.

3.1.4.39.1.2   IAccessServiceSoap_RenameDatabase_OutputMessage

The response **WSDL message** for the **RenameDatabase WSDL operation**.

The **SOAP body** contains the **RenameDatabaseResponse** element.

3.1.4.39.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
RenameDatabase	The input data for the **RenameDatabase WSDL operation**.
RenameDatabaseResponse	The result data for the **RenameDatabase** WSDL operation.

3.1.4.39.2.1   RenameDatabase

The **RenameDatabase** element specifies the input data for the **RenameDatabase WSDL operation**.

```
<xs:element name="RenameDatabase" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="newDatabaseName" type="xs:string"/>
    </xs:sequence>
```

```
      </xs:complexType>
    </xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database to rename. MUST be present.

newDatabaseName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the new name to give the database specified by the **databaseContext** element. MUST be present.

3.1.4.39.2.2 RenameDatabaseResponse

The **RenameDatabaseResponse** element specifies the result data for the **RenameDatabase WSDL operation**.

```
    <xs:element name="RenameDatabaseResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="RenameDatabaseResult"
    type="tns2:CommandResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

RenameDatabaseResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

3.1.4.39.3   Complex Types

None.

3.1.4.39.4   Simple Types

None.

3.1.4.39.5   Attributes

None.

3.1.4.39.6   Groups

None.

3.1.4.39.7   Attribute Groups

None.

3.1.4.40   SetReadWrite

Instructs the protocol server to toggle a database between read-only and read-write states.

The following is the **WSDL** port type specification of the **SetReadWrite WSDL operation**.

```
    <wsdl:operation name="SetReadWrite" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
      <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
    erInternalService/IAccessServiceSoap/SetReadWrite"
```

```
message="tns2:IAccessServiceSoap_SetReadWrite_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetReadWriteResponse"
message="tns2:IAccessServiceSoap_SetReadWrite_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetReadWriteDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_SetReadWrite_DatabaseProviderMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_SetReadWrite_InputMessage** (section 3.1.4.40.1.1) request message and the protocol server responds with an **IAccessServiceSoap_SetReadWrite_OutputMessage** (section 3.1.4.40.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_SetReadWrite_OutputMessage** response message.

3.1.4.40.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_SetReadWrite_InputMessage	The request WSDL message for the **SetReadWrite WSDL operation**.
IAccessServiceSoap_SetReadWrite_OutputMessage	The response WSDL message for the **SetReadWrite** WSDL operation.

3.1.4.40.1.1   IAccessServiceSoap_SetReadWrite_InputMessage

The request **WSDL message** for the **SetReadWrite WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/SetReadWrite
```

The **SOAP body** contains the **SetReadWrite** element.

3.1.4.40.1.2   IAccessServiceSoap_SetReadWrite_OutputMessage

The response **WSDL message** for the **SetReadWrite WSDL operation**.

The **SOAP body** contains the **SetReadWriteResponse** element.

3.1.4.40.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
SetReadWrite	The input data for the **SetReadWrite WSDL operation**.
SetReadWriteResponse	The result data for the **SetReadWrite** WSDL operation.

3.1.4.40.2.1 SetReadWrite

The **SetReadWrite** element specifies the input data for the **SetReadWrite WSDL operation**.

```
<xs:element name="SetReadWrite" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="1" maxOccurs="1" name="readWrite"
type="tns2:DatabaseReadWriteState"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database for which to toggle the read-only/read-write state. MUST be present.

readWrite: A **DatabaseReadWriteState** (section 3.1.4.40.4.1) that specifies whether to set the database specified by the **databaseContext** element to read-only or read-write state.

3.1.4.40.2.2 SetReadWriteResponse

The **SetReadWriteResponse** element specifies the result data for the **SetReadWrite WSDL operation**.

```
<xs:element name="SetReadWriteResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="SetReadWriteResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SetReadWriteResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

3.1.4.40.3   Complex Types

None.

3.1.4.40.4   Simple Types

The following table summarizes the **XML schema** simple type definitions that are specific to this operation.

Simple type	Description
DatabaseReadWriteState	Specifies whether a database is to be set to read-only or read-write state.

3.1.4.40.4.1 DatabaseReadWriteState

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies whether a database is to be set in read-only or read-write mode.

```
<xs:simpleType name="DatabaseReadWriteState" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Read"/>
    <xs:enumeration value="ReadWrite"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **DatabaseReadWriteState** simple type.

Value	Meaning
Read	Specifies that the database is to be set to read-only state.
ReadWrite	Specifies that the database is to be set to read-write state.

3.1.4.40.5   Attributes

None.

3.1.4.40.6   Groups

None.

3.1.4.40.7   Attribute Groups

None.

3.1.4.41   UnprovisionDatabase

Instructs the protocol server to delete a database.

The following is the **WSDL** port type specification of the **UnprovisionDatabase WSDL operation**.

```
<wsdl:operation name="UnprovisionDatabase" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/IAccessServiceSoap/UnprovisionDatabase"
message="tns2:IAccessServiceSoap_UnprovisionDatabase_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
   <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UnprovisionDatabaseResponse"
message="tns2:IAccessServiceSoap_UnprovisionDatabase_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UnprovisionDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_UnprovisionDatabase_DatabaseProviderMessageFault_FaultMessag
e" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
   </wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_UnprovisionDatabase_InputMessage** (section 3.1.4.41.1.1) request message and the protocol server responds with an **IAccessServiceSoap_UnprovisionDatabase_OutputMessage** (section 3.1.4.41.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with a **IAccessServiceSoap_UnprovisionDatabase_OutputMessage** response message.

3.1.4.41.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_UnprovisionDatabase_InputMessage	The request WSDL message for the **UnprovisionDatabase WSDL operation**.
IAccessServiceSoap_UnprovisionDatabase_OutputMessage	The response WSDL message for the **UnprovisionDatabase** WSDL operation.

3.1.4.41.1.1 IAccessServiceSoap_UnprovisionDatabase_InputMessage

The request **WSDL message** for the **UnprovisionDatabase WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/UnprovisionDatabase
```

The **SOAP body** contains the **UnprovisionDatabase** element.

3.1.4.41.1.2 IAccessServiceSoap_UnprovisionDatabase_OutputMessage

The response **WSDL message** for the **UnprovisionDatabase WSDL operation**.

The **SOAP body** contains the **UnprovisionDatabaseResponse** element.

3.1.4.41.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
UnprovisionDatabase	The input data for the **UnprovisionDatabase WSDL operation**.
UnprovisionDatabaseResponse	The result data for the **UnprovisionDatabase** WSDL operation.

3.1.4.41.2.1 UnprovisionDatabase

The **UnprovisionDatabase** element specifies the input data for the **UnprovisionDatabase WSDL operation**.

```
<xs:element name="UnprovisionDatabase" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="1" maxOccurs="1" name="dropLogin" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database to delete. MUST be present.

dropLogin: A **boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the protocol client is requesting the protocol server to also delete the account used for accessing the database specified by **databaseContext**.

3.1.4.41.2.2 UnprovisionDatabaseResponse

The **UnprovisionDatabaseResponse** element specifies the result data for the **UnprovisionDatabase WSDL operation**.

```
<xs:element name="UnprovisionDatabaseResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="UnprovisionDatabaseResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UnprovisionDatabaseResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

3.1.4.41.3   Complex Types

None.

3.1.4.41.4   Simple Types

None.

3.1.4.41.5 Attributes

None.

3.1.4.41.6 Groups

None.

3.1.4.41.7 Attribute Groups

None.

3.1.4.42 GetAutoSumValues

This operation retrieves the result of applying aggregate functions specified by **autoSumFunctions** (section 3.1.4.42.2.1) on **fields** specified by **autoSumFields** (section 3.1.4.42.2.1). The fields MUST belong to the **Source** (section 3.1.1) specified by **source** input element (section 3.1.4.42.2.1).

The following is the **WSDL** port type specification of the **GetAutoSumValues WSDL operation**.

```
<wsdl:operation name="GetAutoSumValues" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAutoSumValues"
message="tns2:IAccessServiceSoap_GetAutoSumValues_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAutoSumValuesResponse"
message="tns2:IAccessServiceSoap_GetAutoSumValues_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAutoSumValuesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetAutoSumValues_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetAutoSumValues_InputMessage** (section 3.1.4.42.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetAutoSumValues_OutputMessage** (section 3.1.4.42.1.2) response message as follows:

- The protocol server retrieves the result of aggregate functions specified by **autoSumFunctions** (section 3.1.4.42.2.1) when applied to the fields specified by the **autoSumFields** (section 3.1.4.42.2.1).

- Exactly one row is returned to the protocol client.

- The number of values in the row MUST be equal to the number of **autoSumFunctions** (section 3.1.4.42.2.1).

In the event of an application error on the protocol server during this operation, a SOAP fault is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** MUST be one of the values specified in section 2.2.9.1, section 2.2.9.2 or section 2.2.9.3.

3.1.4.42.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetAutoSumValues_InputMessage	The request WSDL message for the **GetAutoSumValues WSDL operation**.
IAccessServiceSoap_GetAutoSumValues_OutputMessage	The response WSDL message for the **GetAutoSumValues** WSDL operation.

3.1.4.42.1.1 IAccessServiceSoap_GetAutoSumValues_InputMessage

The request **WSDL message** for the **GetAutoSumValues WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetAutoSumValues
```

The **SOAP body** contains the **GetAutoSumValues** element.

3.1.4.42.1.2 IAccessServiceSoap_GetAutoSumValues_OutputMessage

The response **WSDL message** for the **GetAutoSumValues WSDL operation**.

The **SOAP body** contains the **GetAutoSumValuesResponse** element.

3.1.4.42.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetAutoSumValues	The input data for the **GetAutoSumValues WSDL operation**.
GetAutoSumValuesResponse	The result data for the **GetAutoSumValues** WSDL operation.

3.1.4.42.2.1 GetAutoSumValues

The **GetAutoSumValues** element specifies the input data for the **GetAutoSumValues WSDL operation**.

```
<xs:element name="GetAutoSumValues" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="autoSumFields"
type="tns2:ArrayOfString"/>
      <xs:element minOccurs="0" maxOccurs="1" name="autoSumFunctions"
type="tns2:ArrayOfString"/>
      <xs:element minOccurs="0" maxOccurs="1" name="restriction" type="xs:string"/>
```

```
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

autoSumFields: An **ArrayOfString** (section 2.2.4.22) that specifies the names of **fields** for which the protocol server applies the **autoSumFunctions.** MUST be present. MUST contain at least one element.

autoSumFunctions: An **ArrayOfString** (section 2.2.4.22) that specifies the aggregate functions to be applied to the **autoSumFields**. MUST be present. The number of elements in **autoSumFunctions** MUST be exactly equal to the number of elements in the **autoSumFields**.

restriction: A **CT_Expression** ([MS-AXL2] section 2.2.3.1) that specifies a restriction expression to be applied while calculating the aggregate results. Only rows in the **Source** that return "true" for this restriction expression are included while calculating the aggregate result.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. MUST be present. SHOULD be ignored by the protocol server.

3.1.4.42.2.2 GetAutoSumValuesResponse

The **GetAutoSumValuesResponse** element specifies the result data for the **GetAutoSumValues WSDL operation**.

```
<xs:element name="GetAutoSumValuesResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetAutoSumValuesResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="values" type="tns2:ArrayOfAnyType"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAutoSumValuesResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

values: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the XML containing the content of the returned rows, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2).

3.1.4.42.3   Complex Types

None.

3.1.4.42.4   Simple Types

None.

3.1.4.42.5   Attributes

None.

3.1.4.42.6 Groups

None.

3.1.4.42.7 Attribute Groups

None.

3.1.4.43 GetSearchData

This operation retrieves **records** from **Source** (section 3.1.1.1), specified by **source** (section 3.1.4.43.2.1), which is an input element to the protocol operation.

The following is the **WSDL** port type specification of the **GetSearchData WSDL operation**.

```
<wsdl:operation name="GetSearchData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetSearchData"
message="tns2:IAccessServiceSoap_GetSearchData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetSearchDataResponse"
message="tns2:IAccessServiceSoap_GetSearchData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetSearchDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetSearchData_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetSearchData_InputMessage** (section 3.1.4.43.2.1) request message and the protocol server responds with an **IAccessServiceSoap_GetSearchData_OutputMessage** (section 3.1.4.43.2.2) response message as follows:

- A maximum of **maxResults** (section 3.1.4.43.2.1) records are retrieved.

- In each record, the combination of values of **fields** specified by **primaryDisplayField** (section 3.1.4.43.2.1) and **SecondaryDisplayField** (section 3.1.4.43.2.1) MUST be distinct.

- Only records where the value of the field, specified by **primaryDisplayField**, contains the **userInput** element (section 3.1.4.43.2.1) are retrieved.

In the event of an application error on the protocol server during this operation, a **SOAP fault** is returned, as specified in section 2.2.9. The **Id** element of the **AccessServerMessage** MUST be one of the values specified in section 2.2.9.1 or section 2.2.9.2.

3.1.4.43.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetSearchData_InputMessage	The request WSDL message for the **GetSearchData WSDL operation**.
IAccessServiceSoap_GetSearchData_OutputMessage	The response WSDL message for the **GetSearchData** WSDL operation.

3.1.4.43.1.1 IAccessServiceSoap_GetSearchData_InputMessage

The request **WSDL message** for the **GetSearchData WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetSearchData
```

The **SOAP body** contains the **GetSearchData** element.

3.1.4.43.1.2 IAccessServiceSoap_GetSearchData_OutputMessage

The response **WSDL message** for the **GetSearchData WSDL operation**.

The **SOAP body** contains the **GetSearchDataResponse** element.

3.1.4.43.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetSearchData	The input data for the **GetSearchData WSDL operation**.
GetSearchDataResponse	The result data for the **GetSearchData** WSDL operation.

3.1.4.43.2.1 GetSearchData

The **GetSearchData** element specifies the input data for the **GetSearchData WSDL operation**.

```
<xs:element name="GetSearchData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sourceName" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="boundField" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="primaryDisplayField" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="secondaryDisplayField" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="maxResults" type="xs:int"/>
      <xs:element minOccurs="0" maxOccurs="1" name="userInput" type="xs:string"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
```

```
      </xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

source: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

sourceName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **Source** (section 3.1.1.1) from which **records** are retrieved.

boundField: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the **primary key field** in **Source**.

primaryDisplayField: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of a primary field in **Source**. The values of **primaryDisplayField** in the response MUST contain the **userInput**.

secondaryDisplayField: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of a secondary field in **Source**. The combination of values of **primaryDisplayField** and **secondaryDisplayField** in the response MUST be distinct.

maxResults: An **int** ([XMLSCHEMA2] section 3.3.17) that specifies the maximum number of records to be retrieved from the **database application**.

userInput: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the text, which is used for searching records.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. MUST be present. SHOULD be ignored by the protocol server.

3.1.4.43.2.2 GetSearchDataResponse

The **GetSearchDataResponse** element specifies the result data for the **GetSearchData WSDL operation**.

```
<xs:element name="GetSearchDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetSearchDataResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetSearchDataResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

tableXml: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **XML** containing the content of the returned rows, as specified for the **tableXml** element of the **OpenResultSetResponse** element (section 3.1.4.10.2.2)..

3.1.4.43.3   Complex Types

None.

3.1.4.43.4   Simple Types

None.

3.1.4.43.5 Attributes

None.

3.1.4.43.6 Groups

None.

3.1.4.43.7 Attribute Groups

None.

3.1.4.44 RunDataMacro

Instructs the protocol server to execute a **Data Macro** ([MS-AXL2] section 2.1.2.2).

The following is the **WSDL** port type specification of the **RunDataMacro WSDL operation**.

```
<wsdl:operation name="RunDataMacro" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RunDataMacro"
message="tns2:IAccessServiceSoap_RunDataMacro_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RunDataMacroResponse"
message="tns2:IAccessServiceSoap_RunDataMacro_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RunDataMacroAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_RunDataMacro_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_RunDataMacro_InputMessage** (section 3.1.4.44.1.1) request message and the protocol server responds with an **IAccessServiceSoap_RunDataMacro_OutputMessage** (section 3.1.4.44.1.2) response message as follows:

- If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

- Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_RunDataMacro_OutputMessage** response message.

3.1.4.44.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_RunDataMacro_InputMessage	The request WSDL message for the **RunDataMacro WSDL operation**.
IAccessServiceSoap_RunDataMacro_OutputMessage	The response WSDL message for the **RunDataMacro** WSDL operation.

3.1.4.44.1.1 IAccessServiceSoap_RunDataMacro_InputMessage

The request **WSDL message** for the **RunDataMacro WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/RunDataMacro
```

The **SOAP body** contains the **RunDataMacro** element.

3.1.4.44.1.2 IAccessServiceSoap_RunDataMacro_OutputMessage

The response **WSDL message** for the **RunDataMacro WSDL operation**.

The **SOAP body** contains the **RunDataMacroResponse** element.

3.1.4.44.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
RunDataMacro	The input data for the **RunDataMacro WSDL operation**.
RunDataMacroResponse	The result data for the **RunDataMacro** WSDL operation.

3.1.4.44.2.1 RunDataMacro

The **RunDataMacro** element specifies the input data for the **RunDataMacro WSDL operation**.

```
<xs:element name="RunDataMacro" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="moniker" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="macroName" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameterValues"
type="tns2:ArrayOfParameterValue"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

moniker: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies an identifier for a **result set**. MUST be present. MUST contain an identifier that was previously supplied during the **session** as the **source** element for the input to the **GetObjectSchema** operation (section 3.1.4.7.2.1).

macroName: A **string** ([XMLSCHEMA2] section 3.2.1) that that specifies the name of a **Data Macro** ([MS-AXL2] section 2.1.2.2) to execute. MUST be present.

parameterValues: An **ArrayOfParameterValue** (section 2.2.4.21) that specifies input values of parameters to pass to a Data Macro. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.44.2.2 RunDataMacroResponse

The **RunDataMacroResponse** element specifies the result data for the **RunDataMacro WSDL operation**.

```
<xs:element name="RunDataMacroResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="RunDataMacroResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="dataMacroInstance"
type="tns2:DataMacroInstance"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RunDataMacroResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

dataMacroInstance: A **DataMacroInstance** (section 3.1.4.44.3.1) that specifies results from executing a Data Macro. MUST be present.

3.1.4.44.3   Complex Types

The following table summarizes the **XML schema** complex type definitions that are specific to this operation.

Complex type	Description
DataMacroInstance	Specifies results from executing a Data Macro.

3.1.4.44.3.1 DataMacroInstance

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies results from executing a Data Macro.

```
<xs:complexType name="DataMacroInstance" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="ReturnVars"
type="tns2:ArrayOfKeyValuePair"/>
  </xs:sequence>
</xs:complexType>
```

ReturnVars: An **ArrayOfKeyValuePair** (section 2.2.4.2) that specifies the values of output parameters after executing a Data Macro. MUST be present.

3.1.4.44.4   Simple Types

None.

3.1.4.44.5   Attributes

None.

3.1.4.44.6   Groups

None.

3.1.4.44.7   Attribute Groups

None.

3.1.4.45   GetFormDefinitionAndRecordSet

This operation retrieves the form definition ([MS-AXL2] section 2.2.1.12) of a **form** and then opens a **result set** for the **RecordSource** specified in the form definition ([MS-AXL2] section 2.2.3.81) and returns a **RecordSet** (section 3.1.4.45.3.1) that contains the subset of rows from the result set.

The following is the **WSDL** port type specification of the **GetFormDefinitionAndRecordSet WSDL operation**.

```
<wsdl:operation name="GetFormDefinitionAndRecordSet"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSet"
message="tns2:IAccessServiceSoap_GetFormDefinitionAndRecordSet_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSetResponse"
message="tns2:IAccessServiceSoap_GetFormDefinitionAndRecordSet_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSetAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetFormDefinitionAndRecordSet_AccessServerMessageFault_Fault
Message" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAccessServiceSoap_GetFormDefinitionAndRecordSet_InputMessage (section 3.1.4.45.1.1)
request message and the protocol server responds with an
IAccessServiceSoap_GetFormDefinitionAndRecordSet_OutputMessage (section 3.1.4.45.1.2)
response message as follows:

- The protocol server retrieves data from the **table** or **query** in the **database application**,
  specified by the **RecordSource** element of the Form Definition. The data is filtered according to
  the **restriction** input element (section 3.1.4.45.2.1). The protocol server also sorts the data
  according to expressions defined by the **sortExpression** input element section 3.1.4.45.2.1.

- The protocol server stores the data in a result set identified by the **RecordSource** within the
  session identified by the **WorkbookId** element of the **parameter** input element (section
  3.1.4.45.1.1) in the request message.

▪ The protocol server returns a **Recordset** (section 3.1.4.45.3.1) that contains a subset of rows from the result set as follows:

  ▪ A maximum of 50 rows are returned in the **Recordset**.

    ▪ The **FieldSchema** (section 2.2.4.25) of all the **fields** of the **Source** are returned in the **Fields** element of the **Recordset**.

▪ The protocol server calculates the total number of rows in **Source** and returns this row count as the **TotalRows** element of the **PagingInfo** (section 3.1.4.45.3.6), which is an element that is returned as part of the **Recordset**.

3.1.4.45.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetFormDefinitionAndRecordSet_InputMessage	The request WSDL message for the **GetFormDefinitionAndRecordSet WSDL operation**.
IAccessServiceSoap_GetFormDefinitionAndRecordSet_OutputMessage	The response WSDL message for the **GetFormDefinitionAndRecordSet** WSDL operation.

3.1.4.45.1.1 IAccessServiceSoap_GetFormDefinitionAndRecordSet_InputMessage

The request **WSDL message** for the **GetFormDefinitionAndRecordSet WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetFormDefinitionAndRecordSet
```

The **SOAP body** contains the **GetFormDefinitionAndRecordSet** element.

3.1.4.45.1.2 IAccessServiceSoap_GetFormDefinitionAndRecordSet_OutputMessage

The response **WSDL message** for the **GetFormDefinitionAndRecordSet WSDL operation**.

The **SOAP body** contains the **GetFormDefinitionAndRecordSetResponse** element.

3.1.4.45.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetFormDefinitionAndRecordSet	The input data for the **GetFormDefinitionAndRecordSet WSDL operation**.

Element	Description
GetFormDefinitionAndRecordSetResponse	The result data for the **GetFormDefinitionAndRecordSet** WSDL operation.

3.1.4.45.2.1 GetFormDefinitionAndRecordSet

The **GetFormDefinitionAndRecordSet** element specifies the input data for the **GetFormDefinitionAndRecordSet WSDL operation**.

```
<xs:element name="GetFormDefinitionAndRecordSet" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="requestContext"
type="tns2:RequestContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="formName" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="restriction" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sortExpression" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameterValues"
type="tns2:ArrayOfParameterValue"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

parameter: A **CommandParameter**, as specified by section 2.2.4.3. MUST be present.

requestContext: A **RequestContext** (section 2.2.4.27) that specifies information necessary for the protocol server to uniquely identify the **database application**. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

formName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the form for which **FormDef** ([MS-AXL2] section 2.2.1.12) is requested.

restriction: A **string** ([XMLSCHEMA2] section 3.2.1) that is same as the **restriction** input element to the **OpenResultSet** operation (section 3.1.4.10.2.1).

sortExpression: A **string** ([XMLSCHEMA2] section 3.2.1) that is same as the **sortExpression** input element to the **OpenResultSet** operation (section 3.1.4.10.2.1).

parameterValues: An **ArrayOfParameterValue** (section 2.2.4.21) that specifies the set of values for each **CT_Parameter** ([MS-AXL2] section 2.2.3.12) required in the **Source.** One value MUST be present for every **CT_Parameter** defined in the **Source**.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.45.2.2 GetFormDefinitionAndRecordSetResponse

The **GetFormDefinitionAndRecordSetResponse** element specifies the result data for the **GetFormDefinitionAndRecordSet WSDL operation**.

```
<xs:element name="GetFormDefinitionAndRecordSetResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetFormDefinitionAndRecordSetResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="recordset" type="tns2:Recordset"/>
      <xs:element minOccurs="0" maxOccurs="1" name="formDefinition" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="sharedDatabaseInfo"
type="tns2:SharedDataBaseInfo"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetFormDefinitionAndRecordSetResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

recordset: A **Recordset** as specified in section 3.1.4.45.3.1. MUST be present.

formDefinition: A **FormDef** ([MS-AXL2] section 2.2.1.12) that specifies the **Hypertext Markup Language (HTML)** definition of the form specified by the input element **formName** (section 3.1.4.45.2.1). MUST be present.

sharedDatabaseInfo: A **SharedDatabaseInfo** as specified in section 3.1.4.45.3.10. MUST be present.

3.1.4.45.3   Complex Types

The following table summarizes the **XML schema** complex type definitions that are specific to this operation.

Complex type	Description
ArrayOfArrayOfAnyType	A collection of **ArrayOfAnyType** (section 2.2.4.9) elements. See section 3.1.4.45.3.2 for more details.
ArrayOfArrayOfArrayOfString	A collection of **ArrayOfArrayOfString** (section 3.1.4.45.3.5) elements. See section 3.1.4.45.3.4 for more details.
ArrayOfArrayOfFormatInfo	A collection of **ArrayOfFormatInfo** (section 3.1.4.45.3.8) elements. See section 3.1.4.45.3.7 for more details.
ArrayOfArrayOfString	A collection of **ArrayOfString** (section 2.2.4.22) elements. See section 3.1.4.45.3.5 for more details.
ArrayOfFormatInfo	A collection of **FormatInfo** (section 3.1.4.45.3.9) elements. See section 3.1.4.45.3.8 for more details.
ArrayOfRecordStatus	A collection of **RecordStatus** (section 3.1.4.45.4.1) elements. See section 3.1.4.45.3.3 for more details.
CurrentUserPermissions	A complex type that specifies the user permissions for the database application. See for more details.
FormatInfo	A complex type that specifies the format of a **field** in a **Source** (section 3.1.1.1). See section 3.1.4.45.3.9 for more details.
PagingInfo	A complex type that contains information about the **Page** ([MS-ART] section 3.1.1) which is a subset of rows from **result set** that are returned in the **RecordSet.** See section 3.1.4.45.3.1 for more details.
Recordset	A complex type that is returned as output of this protocol operation. It

Complex type	Description
	contains rows from the result set, **FieldSchema** (section 2.2.4.25) information for all fields and **PagingInfo** (section 3.1.4.45.3.6), **FormatInfo** (section 3.1.4.45.3.9) types. See section 3.1.4.45.3.1 for more details.
SharedDataBaseInfo	A complex type that specifies the **Source** (section 3.1.1.1), the **FieldSchema** of all fields from the **Source**, the sort order and the restriction conditions of the rows in the result set. See section 3.1.4.45.3.10 for more details.

3.1.4.45.3.1 Recordset

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A complex type as specified by [MS-ART] section 2.2.1.9. **Recordset** is output by the **GetFormDefinitionAndRecordset** protocol operation (section 3.1.4.45) and it is used to send the rows of data from a given **Source** (section 3.1.1), **FieldSchema** (section 2.2.4.25) information of all **fields** in the **Source**, **PagingInfo** (section 3.1.4.45.3.6) of the rows in the **result set** and **FormatInfo** (section 3.1.4.45.3.9) of the fields in the **Source**.

```
<xs:complexType name="Recordset" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Values" type="tns2:ArrayOfArrayOfAnyType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="RecordStatuses"
type="tns2:ArrayOfRecordStatus"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AggregateValues"
type="tns2:ArrayOfAnyType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Localized"
type="tns2:ArrayOfArrayOfArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AggregateLocalized"
type="tns2:ArrayOfArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Paging" type="tns2:PagingInfo"/>
    <xs:element minOccurs="0" maxOccurs="1" name="DataMacroInstanceIds"
type="tns2:ArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Fields" type="tns2:ArrayOfFieldSchema"/>
    <xs:element minOccurs="0" maxOccurs="1" name="FormatInfos"
type="tns2:ArrayOfArrayOfFormatInfo"/>
    <xs:element minOccurs="0" maxOccurs="1" name="RelatedFieldInfos"
type="tns2:ArrayOfFieldSchema"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsAnonymous" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AnonymousCanRead" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AnonymousCanInsert" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AutoSumValues" type="tns2:ArrayOfAnyType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="CurrentUserPermissions"
type="tns2:CurrentUserPermissions"/>
  </xs:sequence>
</xs:complexType>
```

Values: An **ArrayOfArrayOfAnyType** (section 3.1.4.45.3.2) as specified by [MS-ART] section 2.2.1.9.

RecordStatuses: MUST NOT be used.

AggregateValues: MUST NOT be used.

Localized: An **ArrayOfArrayOfArrayOfString** (section 3.1.4.45.3.4) as specified by [MS-ART] section 2.2.1.9.

AggregateLocalized: MUST NOT be used.

Paging: A **PagingInfo** (section 3.1.4.45.3.6) that specifies information about the subset of rows in a result set.

DataMacroInstanceIds: MUST NOT be used.

Fields: An **ArrayOfFieldSchema** (section 2.2.4.19) that specifies schema information for each field in the **Source.**

FormatInfos: An **ArrayOfArrayOfFormatInfos** (section 3.1.4.45.3.7) that specifies the format information of each field in the **Source**.

RelatedFieldInfos: An **ArrayOfFieldSchema** (section 2.2.4.19) that specifies schema information for each field in the source **Source**.

IsAnonymous: MUST NOT be used.

AnonymousCanRead: MUST NOT be used.

AnonymousCanInsert: MUST NOT be used.

AutoSumValues: MUST NOT be used.

CurrentUserPermissions: A **CurrentUserPermissions** (section 3.1.4.45.3.11) that specifies the permissions the user owns for the **database application**.

3.1.4.45.3.2 ArrayOfArrayOfAnyType

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A collection of **ArrayOfAnyType** (section 2.2.4.9) elements.

```
<xs:complexType name="ArrayOfArrayOfAnyType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfAnyType" nillable="true"
type="tns2:ArrayOfAnyType"/>
  </xs:sequence>
</xs:complexType>
```

ArrayOfAnyType: An **ArrayOfAnyType** complex type, as specified by section 2.2.4.9.

3.1.4.45.3.3 ArrayOfRecordStatus

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A collection of **RecordStatus** (section 3.1.4.45.4.1).

```
<xs:complexType name="ArrayOfRecordStatus" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="RecordStatus"
type="tns2:RecordStatus"/>
  </xs:sequence>
</xs:complexType>
```

RecordStatus: A **RecordStatus** as specified by section 3.1.4.45.4.1.

3.1.4.45.3.4 ArrayOfArrayOfArrayOfString

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalServic
e/

A collection of **ArrayOfArrayOfString** (section 3.1.4.45.3.5) elements.

```
<xs:complexType name="ArrayOfArrayOfArrayOfString"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfArrayOfString"
nillable="true" type="tns2:ArrayOfArrayOfString"/>
  </xs:sequence>
</xs:complexType>
```

ArrayOfArrayOfString: An **ArrayOfArrayOfString** as specified by section 3.1.4.45.3.5.

3.1.4.45.3.5 ArrayOfArrayOfString

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalServic
e/

A collection of **ArrayOfString** (section 2.2.4.22) elements.

```
<xs:complexType name="ArrayOfArrayOfString" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfString" nillable="true"
type="tns2:ArrayOfString"/>
  </xs:sequence>
</xs:complexType>
```

ArrayOfString: An **ArrayOfString** as specified by section 2.2.4.22.

3.1.4.45.3.6 PagingInfo

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalServic
e/

A **PagingInfo** ([MS-ART] section 2.2.1.7) that specifies the information about a subset of rows from
the **result set**.

```
<xs:complexType name="PagingInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="FirstRow" type="xs:int"/>
    <xs:element minOccurs="1" maxOccurs="1" name="RowKey" type="xs:int"/>
    <xs:element minOccurs="1" maxOccurs="1" name="PageSize" type="xs:int"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Moniker" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="UseCache" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="CacheCommands" type="tns2:CacheCommands"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SortExpression" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Filter" type="tns2:FilterInfo"/>
    <xs:element minOccurs="1" maxOccurs="1" name="TotalRows" type="xs:int"/>
    <xs:element minOccurs="1" maxOccurs="1" name="RetrieveExactRowCount" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SessionId" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

FirstRow: An **int** ([XMLSCHEMA2] section 3.3.17) as specified by [MS-ART] section 2.2.1.7.

RowKey: An **int** ([XMLSCHEMA2] section 3.3.17) as specified by [MS-ART] section 2.2.1.7.

PageSize: An **int** ([XMLSCHEMA2] section 3.3.17) as specified by [MS-ART] section 2.2.1.7.

Moniker: A **string** ([XMLSCHEMA2] section 3.2.1) as specified by [MS-ART] section 2.2.1.7.

UseCache: MUST NOT be used.

CacheCommands: A **CacheCommands** (section 2.2.5.5) that specifies the operations to be performed on the result set.

SortExpression: A **string** ([XMLSCHEMA2] section 3.2.1) as specified by [MS-ART] section 2.2.1.7.

Filter: A **FilterInfo** (section 2.2.4.10) as specified by [MS-ART] section 2.2.1.7.

TotalRows: An **int** ([XMLSCHEMA2] section 3.3.17) as specified by [MS-ART] section 2.2.1.7.

RetrieveExactRowCount: An **int** ([XMLSCHEMA2] section 3.3.17) as specified by [MS-ART] section 2.2.1.7.

SessionId: A **SessionId** (section 3.1.1.2) that specifies a unique identifier for the current **session**.

3.1.4.45.3.7 ArrayOfArrayOfFormatInfo

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A collection of **ArrayOfFormatInfo** (section 3.1.4.45.3.8) elements.

```
<xs:complexType name="ArrayOfArrayOfFormatInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfFormatInfo" nillable="true"
type="tns2:ArrayOfFormatInfo"/>
  </xs:sequence>
</xs:complexType>
```

ArrayOfFormatInfo: An **ArrayOfFormatInfo** as specified by section 3.1.4.45.3.8.

3.1.4.45.3.8 ArrayOfFormatInfo

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A collection of **FormatInfo** (section 3.1.4.45.3.9) elements.

```
<xs:complexType name="ArrayOfFormatInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="FormatInfo" nillable="true"
type="tns2:FormatInfo"/>
  </xs:sequence>
</xs:complexType>
```

FormatInfo: A **FormatInfo** as specified by section 3.1.4.45.3.9.

3.1.4.45.3.9 FormatInfo

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A **FormatInfo** ([MS-ART] section 2.2.1.6) that specifies the format for a **field** of a **Source** (section 3.1.1).

```
<xs:complexType name="FormatInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Format" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Currency" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="Precision" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

Format: A **string** ([XMLSCHEMA2] section 3.2.1) as specified by [MS-ART] section 2.2.1.6.

Currency: A **string** ([XMLSCHEMA2] section 3.2.1) as specified by [MS-ART] section 2.2.1.6.

Precision: An **int** ([XMLSCHEMA2] section 3.3.17) as specified by [MS-ART] section 2.2.1.6.

3.1.4.45.3.10 SharedDataBaseInfo

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A **SharedDataBaseInfo** ([MS-ART] section 2.2.1.12) that specifies the **Source** (section 3.1.1.1), the **FieldSchema** of all **fields** from the **Source**, the sort order, and the restriction conditions of the rows in the **result set**

```
<xs:complexType name="SharedDataBaseInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="SessionId" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SelectCommand" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ParameterValues"
type="tns2:ArrayOfParameterValue"/>
    <xs:element minOccurs="0" maxOccurs="1" name="OriginalCommand" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AggregateExpressions"
type="tns2:ArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AggregateFormatInfos"
type="tns2:ArrayOfArrayOfFormatInfo"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Restriction" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Ordering" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AllowEdits" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AllowAdditions" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AllowDeletions" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="DataEntry" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="FieldNames" type="tns2:ArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="FormatInfos"
type="tns2:ArrayOfArrayOfFormatInfo"/>
    <xs:element minOccurs="1" maxOccurs="1" name="DataLevelFormat" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="ShowHeaders" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="InitialPage" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="FetchSchema" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="FetchKeyFields" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="FetchDisplayFields" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="DoNotPrefetchImages" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AutoSumFields" type="tns2:ArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AutoSumFunctions"
type="tns2:ArrayOfString"/>

  </xs:sequence>
```

```
        </xs:complexType>
```

SessionId: A **SessionId** (section 3.1.1.2) that specifies a unique identifier for the current **session**.

SelectCommand: A **string** ([XMLSCHEMA2] section 3.2.1) as specified by [MS-ART] section 2.2.1.12.

ParameterValues: An **ArrayOfParameterValue** (section 2.2.4.21) as specified by [MS-ART] section 2.2.1.12.

OriginalCommand: MUST NOT be used.

AggregateExpressions: MUST NOT be used.

AggregateFormatInfos: MUST NOT be used.

Restriction: A **CT_Expression** ([MS-AXL2] section 2.2.3.1) as specified by [MS-ART] section 2.2.1.12.

Ordering: A **string** ([XMLSCHEMA2] section 3.2.1) as specified by [MS-ART] section 2.2.1.12.

AllowEdits: MUST NOT be used.

AllowAdditions: MUST NOT be used.

AllowDeletions: MUST NOT be used.

DataEntry: MUST NOT be used.

FieldNames: An **ArrayOfString** (section 2.2.4.22) as specified by [MS-ART] section 2.2.1.12.

FormatInfos: An **ArrayOfArrayOfFormatInfos** (section 3.1.4.45.3.7) as specified by [MS-ART] section 2.2.1.12.

DataLevelFormat: MUST NOT be used.

ShowHeaders: MUST NOT be used.

InitialPage: MUST NOT be used.

FetchSchema: A **boolean** ([XMLSCHEMA2] section 3.2.2) as specified by [MS-ART] section 2.2.1.12.

FetchKeyFields: A **boolean** ([XMLSCHEMA2] section 3.2.2) as specified by [MS-ART] section 2.2.1.12.

FetchDisplayFields: A **boolean** ([XMLSCHEMA2] section 3.2.2) as specified by [MS-ART] section 2.2.1.12.

DoNotPrefetchImages: A **boolean** ([XMLSCHEMA2] section 3.2.2) as specified by [MS-ART] section 2.2.1.12.

AutoSumFields: An **ArrayOfString** (section 2.2.4.22) as specified by [MS-ART] section 2.2.1.12.

AutoSumFunctions: AutoSumFields: An **ArrayOfString** (section 2.2.4.22) as specified by [MS-ART] section 2.2.1.12.

3.1.4.45.3.11 CurrentUserPermissions

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

A complex type that specifies the user permissions for the **database application**.

```
<xs:complexType name="CurrentUserPermissions" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Read" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="Write" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="Author" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsAuthenticated" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
```

Read: A **boolean** ([XMLSCHEMA2] section 3.2.2) that indicates if the user has read permissions to the database application.

Write: A **boolean** ([XMLSCHEMA2] section 3.2.2) that indicates if the user has write permissions to the database application.

Author: A **boolean** ([XMLSCHEMA2] section 3.2.2) that indicates if the user has author level permissions to the database application.

IsAuthenticated: A **boolean** ([XMLSCHEMA2] section 3.2.2) that indicates if the user is authenticated while running the protocol operation.

3.1.4.45.4   Simple Types

The following table summarizes the **XML schema** simple type definitions that are specific to this operation.

Simple type	Description
RecordStatus	MUST NOT be used.

3.1.4.45.4.1 RecordStatus

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

MUST NOT be used.

```
<xs:simpleType name="RecordStatus" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Normal"/>
    <xs:enumeration value="Deleted"/>
    <xs:enumeration value="Error"/>
    <xs:enumeration value="Fixup"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **RecordStatus** simple type.

Value	Meaning
Normal	MUST NOT be used.
Deleted	MUST NOT be used.
Error	MUST NOT be used.
Fixup	MUST NOT be used.

3.1.4.45.5   Attributes

None.

3.1.4.45.6   Groups

None.

3.1.4.45.7   Attribute Groups

None.

3.1.4.46   GetUIMacroJavascript

Retrieves the definition for a **UI macro** ([MS-AXL2] section 1.3.2).

The following is the **WSDL** port type specification of the **GetUIMacroJavascript WSDL operation**.

```
<wsdl:operation name="GetUIMacroJavascript" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetUIMacroJavascript"
message="tns2:IAccessServiceSoap_GetUIMacroJavascript_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetUIMacroJavascriptResponse"
message="tns2:IAccessServiceSoap_GetUIMacroJavascript_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetUIMacroJavascriptAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetUIMacroJavascript_AccessServerMessageFault_FaultMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_GetUIMacroJavascript_InputMessage** (section 3.1.4.46.1.1) request message and the protocol server responds with an **IAccessServiceSoap_GetUIMacroJavascript_OutputMessage** (section 3.1.4.46.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

▪ Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_GetUIMacroJavascript_OutputMessage** response message.

3.1.4.46.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_GetUIMacroJavascript_InputMessage	The request WSDL message for the **GetUIMacroJavascript WSDL operation**.
IAccessServiceSoap_GetUIMacroJavascript_OutputMessage	The response WSDL message for the **GetUIMacroJavascript** WSDL operation.

3.1.4.46.1.1 IAccessServiceSoap_GetUIMacroJavascript_InputMessage

The request **WSDL message** for the **GetUIMacroJavascript WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/GetUIMacroJavascript
```

The **SOAP body** contains the **GetUIMacroJavascript** element.

3.1.4.46.1.2 IAccessServiceSoap_GetUIMacroJavascript_OutputMessage

The response **WSDL message** for the **GetUIMacroJavascript WSDL operation**.

The **SOAP body** contains the **GetUIMacroJavascriptResponse** element.

3.1.4.46.2 Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
GetUIMacroJavascript	The input data for the **GetUIMacroJavascript WSDL operation**.
GetUIMacroJavascriptResponse	The result data for the **GetUIMacroJavascript** WSDL operation.

3.1.4.46.2.1 GetUIMacroJavascript

The **GetUIMacroJavascript** element specifies the input data for the **GetUIMacroJavascript WSDL operation**.

```
<xs:element name="GetUIMacroJavascript" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="parameter" type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="macroName" type="xs:string"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
```

```
    </xs:complexType>
  </xs:element>
```

parameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

container: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the **absolute URL** to the current **site** on which the operation is to be performed. MUST be present.

macroName: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the name of the UI macro for which to retrieve the definition. MUST be present.

userCookieId: A **guid** (section 2.2.5.8) that specifies an identifier for the operation. SHOULD be ignored by the protocol server.

3.1.4.46.2.2 GetUIMacroJavascriptResponse

The **GetUIMacroJavascriptResponse** element specifies the result data for the **GetUIMacroJavascript WSDL operation**.

```
<xs:element name="GetUIMacroJavascriptResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetUIMacroJavascriptResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="javascript" type="xs:base64Binary"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetUIMacroJavascriptResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

javascript: A **base64Binary** ([XMLSCHEMA2] section 3.2.16) that specifies the definition for the UI macro.

3.1.4.46.3   Complex Types

None.

3.1.4.46.4   Simple Types

None.

3.1.4.46.5   Attributes

None.

3.1.4.46.6   Groups

None.

3.1.4.46.7   Attribute Groups

None.

3.1.4.47 SetEnableDisableDatabase

Instructs the protocol server to toggle a database between the enabled and disabled states.

The following is the **WSDL** port type specification of the **SetEnableDisableDatabase WSDL operation**.

```
<wsdl:operation name="SetEnableDisableDatabase"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetEnableDisableDatabase"
message="tns2:IAccessServiceSoap_SetEnableDisableDatabase_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetEnableDisableDatabaseResponse"
message="tns2:IAccessServiceSoap_SetEnableDisableDatabase_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetEnableDisableDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_SetEnableDisableDatabase_DatabaseProviderMessageFault_FaultM
essage" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_SetEnableDisableDatabase_InputMessage** (section 3.1.4.47.1.1) request message and the protocol server responds with an **IAccessServiceSoap_SetEnableDisableDatabase_OutputMessage** (section 3.1.4.47.1.2) response message as follows:
• If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.
• Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_SetEnableDisableDatabase_OutputMessage** response message.

3.1.4.47.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_SetEnableDisableDatabase_InputMessage	The request WSDL message for the **SetEnableDisableDatabase WSDL operation**.
IAccessServiceSoap_SetEnableDisableDatabase_OutputMessage	The response WSDL message for the **SetEnableDisableDatabase** WSDL operation.

3.1.4.47.1.1 IAccessServiceSoap_SetEnableDisableDatabase_InputMessage

The request **WSDL message** for the **SetEnableDisableDatabase WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/SetEnableDisableDatabase
```

The **SOAP body** contains the **SetEnableDisableDatabase** element.

3.1.4.47.1.2 IAccessServiceSoap_SetEnableDisableDatabase_OutputMessage

The response **WSDL message** for the **SetEnableDisableDatabase WSDL operation**.

The **SOAP body** contains the **SetEnableDisableDatabaseResponse** element.

3.1.4.47.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
SetEnableDisableDatabase	The input data for the **SetEnableDisableDatabase WSDL operation**.
SetEnableDisableDatabaseResponse	The result data for the **SetEnableDisableDatabase** WSDL operation.

3.1.4.47.2.1 SetEnableDisableDatabase

The **SetEnableDisableDatabase** element specifies the input data for the **SetEnableDisableDatabase WSDL operation**.

```
<xs:element name="SetEnableDisableDatabase" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="1" maxOccurs="1" name="enableDisable"
type="tns2:DatabaseEnableDisableState"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database for which to toggle the enabled/disabled state. MUST be present.

enableDisable: A **DatabaseEnableDisableState** (section 3.1.4.47.4.1) that specifies whether to set the database specified by the **databaseContext** element to the enabled or disabled state.

3.1.4.47.2.2 SetEnableDisableDatabaseResponse

The **SetEnableDisableDatabaseResponse** element specifies the result data for the **SetEnableDisableDatabase WSDL operation**.

```
<xs:element name="SetEnableDisableDatabaseResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

```
   <xs:complexType>
     <xs:sequence>
       <xs:element minOccurs="0" maxOccurs="1" name="SetEnableDisableDatabaseResult"
type="tns2:CommandResult"/>
     </xs:sequence>
   </xs:complexType>
</xs:element>
```

SetEnableDisableDatabaseResult: A **CommandResult**, as specified in section 2.2.4.4. MUST be present.

3.1.4.47.3   Complex Types

None.

3.1.4.47.4   Simple Types

The following table summarizes the **XML schema** simple type definitions that are specific to this operation.

Simple type	Description
DatabaseEnableDisableState	Specifies whether a database is to be set to the enabled or disabled state.

3.1.4.47.4.1   DatabaseEnableDisableState

Namespace:
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/

Specifies whether a database is to be set to the enabled or disabled state.

```
<xs:simpleType name="DatabaseEnableDisableState" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Enable"/>
    <xs:enumeration value="Disable"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **DatabaseEnableDisableState** simple type.

Value	Meaning
Enable	Specifies that the database is to be set to the enabled state.
Disable	Specifies that the database is to be set to the disabled state.

3.1.4.47.5   Attributes

None.

3.1.4.47.6   Groups

None.

3.1.4.47.7   Attribute Groups

None.

3.1.4.48   UpdateDatabaseConfiguration

Updates the maximum size of the **database application**.

The following is the **WSDL** port type specification of the **UpdateDatabaseConfiguration WSDL operation**.

```
<wsdl:operation name="UpdateDatabaseConfiguration"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDatabaseConfiguration"
message="tns2:IAccessServiceSoap_UpdateDatabaseConfiguration_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDatabaseConfigurationResponse"
message="tns2:IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDatabaseConfigurationDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_UpdateDatabaseConfiguration_DatabaseProviderMessageFault_Fau
ltMessage" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAccessServiceSoap_UpdateDatabaseConfiguration_InputMessage** (section 3.1.4.48.1.1) request message and the protocol server responds with an **IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage** (section 3.1.4.48.1.2) response message as follows:

▪ If an error occurs on the protocol server during this operation, the protocol server MUST respond with a **SOAP fault**, as specified by section 2.2.9.

Otherwise, the protocol server MUST respond with an **IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage** (section 3.1.4.48.1.2) response message.

3.1.4.48.1   Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IAccessServiceSoap_UpdateDatabaseConfiguration_InputMessage	The request WSDL message for the **UpdateDatabaseConfiguration WSDL operation**.
IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage	The response WSDL message for the **UpdateDatabaseConfiguration** WSDL operation.

3.1.4.48.1.1 IAccessServiceSoap_UpdateDatabaseConfiguration_InputMessage

The request **WSDL message** for the **UpdateDatabaseConfiguration WSDL operation**.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalSer
vice/IAccessServiceSoap/UpdateDatabaseConfiguration
```

The **SOAP body** contains the **UpdateDatabaseConfiguration** element.

3.1.4.48.1.2 IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage

The response **WSDL message** for the **UpdateDatabaseConfiguration WSDL operation**.

The **SOAP body** contains the **UpdateDatabaseConfigurationResponse** element.

3.1.4.48.2   Elements

The following table summarizes the **XML schema** element definitions that are specific to this operation.

Element	Description
UpdateDatabaseConfiguration	The input data for the **UpdateDatabaseConfiguration WSDL operation**.
UpdateDatabaseConfigurationResponse	The result data for the **UpdateDatabaseConfiguration** WSDL operation.

3.1.4.48.2.1 UpdateDatabaseConfiguration

The **UpdateDatabaseConfiguration** element specifies the input data for the **UpdateDatabaseConfiguration WSDL operation**.

```
<xs:element name="UpdateDatabaseConfiguration" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
      <xs:element minOccurs="0" maxOccurs="1" name="databaseSize" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

commandParameter: A **CommandParameter**, as specified in section 2.2.4.3. MUST be present.

databaseContext: A **DatabaseContext** (section 2.2.4.11) that specifies information about the database to delete. MUST be present.

databaseSize: A **string** ([XMLSCHEMA2] section 3.2.1) that specifies the new maximum size of the **database application**.

3.1.4.48.2.2 UpdateDatabaseConfigurationResponse

The **UpdateDatabaseConfigurationResponse** element specifies the result data for the **UpdateDatabaseConfiguration WSDL operation**.

```
<xs:element name="UpdateDatabaseConfigurationResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="UpdateDatabaseConfigurationResult"
type="tns2:CommandResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UpdateDatabaseConfigurationResult: A **CommandResult,** as specified in section 2.2.4.4. MUST be present.

3.1.4.48.3   Complex Types

None.

3.1.4.48.4   Simple Types

None.

3.1.4.48.5   Attributes

None.

3.1.4.48.6   Groups

None.

3.1.4.48.7   Attribute Groups

None.

3.1.5   Timer Events

3.1.5.1 Session Timeout

The **Session Timeout** event completes a request for a timed out **session** with a **SOAP fault**, as specified in section 2.2.9, with the value of the **Id** element of the **AccessServerMessage** (section 2.2.4.1) set to **NewWorkbookSessionTimeout** as specified by section 2.2.5.2.

3.1.6   Other Local Events

None.

3.2   Client Details

For any of the **Runtime protocol operations** (section 3.1.1), the client side of this protocol needs to call the **OpenSession** operation (section 3.1.4.11) and **GetObjectSchema** operation (section 3.1.4.7) before calling any other runtime protocol operation. The **OpenSession** operation creates a new **session** on the protocol server and assigns a **sessionId** (section 3.1.4.11.2.2) to the newly

created session. The **GetObjectSchema** operation creates a new **result set** on the current session and assigns a unique **moniker** (section 3.1.4.7.2.1) for the result set. The protocol client can then call any other runtime operation using the **moniker** and the **sessionId** elements to ensure that actions are performed on the same result set. If the protocol client wants to query data from any other **Source** (section 3.1.1.1) in the **database application**, it does not need to call **OpenSession** operation again. However, it MUST call **GetObjectSchema** operation with the object name passed in the **source** input element. This operation will create another result set in the same session and assign a new **moniker** to it.

4 Protocol Examples

4.1 CreateAccessObject

In this scenario, the protocol client calls the CreateAccessObject method on a protocol server named "server.example.com". This example creates a table object.

```xml
<CreateAccessObject
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServer
InternalService/">

     <commandParameter>
        <WorkbookId>1.V22.72Qgf8kLDWFQtfgr3MdByr90.5.en-US5.en-US73.+0480#0000-11-00-
01T02:00:00:0000#+0000#0000-03-00-02T02:00:00:0000#-006036.00000000-0000-0000-0000-
0000000000001.U</WorkbookId>
        <StateId>-1</StateId>
        <ProtocolClientId>
        </ProtocolClientId>
        <UserFriendlyDisplayName>DOMAIN\username</UserFriendlyDisplayName>
        <Zone>Default</Zone>
        <RequestSiteId>8b777e1b-3d99-43fb-9813-392ab88b4206</RequestSiteId>
        <CorrelationId>00000000-0000-0000-0000-000000000000</CorrelationId>
        <CompleteResponseTimeout>0</CompleteResponseTimeout>
     </commandParameter>
     <container>http://server.example.com</container>
     <parameters ProtocolVersion="15.0.24.0" Name="Client" Description=""
ObjectType="Table">
     <Body>
       <Schema Namespace="Access.Store"
xmlns="http://schemas.microsoft.com/ado/2008/09/edm"
xmlns:axl="http://schemas.microsoft.com/office/accessservices/2010/12/application">
          <EntityContainer Name="AccessStoreContainer">
            <EntitySet Name="Client" EntityType="Access.Store.Client">
            </EntitySet>
          </EntityContainer>
          <EntityType Name="Client">
            <Key>
              <PropertyRef Name="ID">
              </PropertyRef>
            </Key>
            <Property Name="ID" Type="Int32" axl:StoreGeneratedPattern="Identity"
Nullable="false">
            </Property>
            <Property Name="Client Name" Type="String" Unicode="true"
axl:TextType="SingleLine" MaxLength="220">
            </Property>
            <axl:EventDataMacro>
              <axl:DataMacro Event="AfterInsert">
              </axl:DataMacro>
            </axl:EventDataMacro>
            <axl:EventDataMacro>
              <axl:DataMacro Event="AfterUpdate">
              </axl:DataMacro>
            </axl:EventDataMacro>
            <axl:EventDataMacro>
              <axl:DataMacro Event="AfterDelete">
              </axl:DataMacro>
            </axl:EventDataMacro>
          </EntityType>
        </Schema>
      </Body>
    </parameters>
    <userCookieId>00000002-bd62-1a4f-f9dd-84489ab2aa55</userCookieId>
```

```
      </CreateAccessObject>
```

The protocol server responds with the following message:

```
<CreateAccessObjectResponse
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/ApplicationDesig
nService">
  <CreateAccessObjectResult>
    <StateId
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</StateId>
    <HealthInformation
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">
      <StateFlags>
      </StateFlags>
      <HealthScore>0</HealthScore>
    </HealthInformation>
    <SecondsBeforeNextPoll
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</SecondsBeforeNextPoll>
    <EditSessionIsDirty
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionIsDirty>
    <EditSessionHasMultipleCollaborationUsers
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionHasMultipleCollaborationUsers>
  </CreateAccessObjectResult>
  <result>
    <Warning xsi:nil="true" />
    <Objects>
      <AccessObject xsi:type="Table" ID="2" Name="Client" ObjectType="Table" Description=""
Version="2011-11-17T02:18:56.4500000">
        <ParentId xsi:nil="true" />
        <Definition>
          <Schema Namespace="Access.Store"
xmlns="http://schemas.microsoft.com/ado/2008/09/edm"
xmlns:axl="http://schemas.microsoft.com/office/accessservices/2010/12/application">
            <EntityContainer Name="AccessStoreContainer">
              <EntitySet Name="Client" EntityType="Access.Store.Client"/>
            </EntityContainer>
            <EntityType Name="Client">
              <Key>
                <PropertyRef Name="ID"/>
              </Key>
              <Property Name="ID" Type="Int32" axl:ObjectId="ID" Nullable="false"
axl:StoreGeneratedPattern="Identity"/>
              <Property Name="Client Name" Type="String" axl:ObjectId="First Name"
Unicode="true" axl:TextType="SingleLine" MaxLength="220"/>
              <axl:EventDataMacro>
                <axl:DataMacro Event="AfterInsert"/>
              </axl:EventDataMacro>
              <axl:EventDataMacro>
                <axl:DataMacro Event="AfterUpdate"/>
              </axl:EventDataMacro>
              <axl:EventDataMacro>
                <axl:DataMacro Event="AfterDelete"/>
              </axl:EventDataMacro>
            </EntityType>
          </Schema>
        </Definition>
      </AccessObject>
    </Objects>
    <RefreshRequired>false</RefreshRequired>
  </result>
</CreateAccessObjectResponse>
```

4.2 CreateApplication

In this scenario, the protocol client calls the CreateApplication method on a protocol server named "server.example.com". This example creates an application.

```
    <CreateApplication
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInte
rnalService/">
      <commandParameter>
        <WorkbookId>1.V22.733tjjt6yJkqysQEa3ecIj90.5.en-US5.en-US73.+0480#0000-11-00-
01T02:00:00:0000#+0000#0000-03-00-02T02:00:00:0000#-006036.00000000-0000-0000-0000-
0000000000001.U</WorkbookId>
        <StateId>-1</StateId>
        <ProtocolClientId>
        </ProtocolClientId>
        <UserFriendlyDisplayName>DOMAIN\username</UserFriendlyDisplayName>
        <Zone>Default</Zone>
        <RequestSiteId>8b777e1b-3d99-43fb-9813-392ab88b4206</RequestSiteId>
        <CorrelationId>00000000-0000-0000-0000-000000000000</CorrelationId>
        <CompleteResponseTimeout>0</CompleteResponseTimeout>
      </commandParameter>
      <container>http://server.example.com</container>
      <parameters Name="231">
        <Collation Culture="en-US" CaseSensitive="false" AccentSensitive="true"
KanaSensitive="false" WidthSensitive="false" UseSupplementaryCharacters="false">
        </Collation>
        <ProtocolVersionOptions>
          <ProtocolVersion>15.0.24.0</ProtocolVersion>
        </ProtocolVersionOptions>
      </parameters>
      <userCookieId>00000000-0000-0000-0000-000000000000</userCookieId>
    </CreateApplication>
```

The protocol server responds with the following message:

```
<CreateApplicationResponse
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/ServerDesignServ
ice">
  <CreateApplicationResult>
    <StateId
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</StateId>
    <HealthInformation
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">
      <StateFlags>
      </StateFlags>
      <HealthScore>0</HealthScore>
    </HealthInformation>
    <EditSessionIsDirty
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionIsDirty>
    <EditSessionHasMultipleCollaborationUsers
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionHasMultipleCollaborationUsers>
  </CreateApplicationResult>
  <result ProtocolVersion="15.0.24.0">
    <ApplicationUrl>http://www.example.com/exampleapplication</ApplicationUrl>
  </result>
</CreateApplicationResponse>
```

4.3 DeleteData

In this scenario, the protocol client calls the DeleteData method on a protocol server. This example deletes a record from a table.

```
<DeleteData
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInte
rnalService/">
      <parameter>
        <WorkbookId>1.V22.70H0556qa6XWR/hYIBvZ3T90.5.en-US5.en-US73.+0480#0000-11-00-
01T02:00:00:0000#+0000#0000-03-00-02T02:00:00:0000#-006036.00000000-0000-0000-0000-
0000000000001.U</WorkbookId>
        <StateId>-1</StateId>
        <ProtocolClientId>
        </ProtocolClientId>
        <UserFriendlyDisplayName>DOMAIN\username</UserFriendlyDisplayName>
        <Zone>Default</Zone>
        <RequestSiteId>8b777e1b-3d99-43fb-9813-392ab88b4206</RequestSiteId>
        <CorrelationId>00000000-0000-0000-0000-000000000000</CorrelationId>
        <CompleteResponseTimeout>0</CompleteResponseTimeout>
      </parameter>
      <moniker>Default</moniker>
      <keys>
        <KeyValuePair>
          <Key xsi:type="xsd:int">1</Key>
          <Value>
          </Value>
        </KeyValuePair>
      </keys>
      <oldValues>
        <KeyValuePair>
          <Key xsi:type="xsd:string">Task Title</Key>
          <Value xsi:type="xsd:string">Title3</Value>
        </KeyValuePair>
        <KeyValuePair>
          <Key xsi:type="xsd:string">Employee</Key>
          <Value xsi:nil="true">
          </Value>
        </KeyValuePair>
      </oldValues>
      <userCookieId>00000003-b006-31b4-f9dd-84489ab2aa55</userCookieId>
    </DeleteData>
```

The protocol server responds with the following message:

```
<DeleteDataResponse
xmlns="http://schemas.microsoft.com/office/Access/Server/WebServices/AccessServerInternalServ
ice/">
  <DeleteDataResult>
    <StateId
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</StateId>
    <HealthInformation
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">
      <StateFlags>
      </StateFlags>
      <HealthScore>0</HealthScore>
    </HealthInformation>
    <SecondsBeforeNextPoll
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</SecondsBeforeNextPoll>
    <EditSessionIsDirty
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionIsDirty>
```

```
      <EditSessionHasMultipleCollaborationUsers
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionHasMultipleCollaborationUsers>
  </DeleteDataResult>
  <recordsDeleted>1</recordsDeleted>
</DeleteDataResponse>
```

4.4 UpdateData

In this scenario, the protocol client calls the UpdateData method on a protocol server to update a record in a table:

```
<UpdateData
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServer
InternalService/">

      <parameter>
        <WorkbookId>1.V22.70H0556qa6XWR/hYIBvZ3T90.5.en-US5.en-US73.+0480#0000-11-00-
01T02:00:00:0000#+0000#0000-03-00-02T02:00:00:0000#-006036.00000000-0000-0000-0000-
0000000000001.U</WorkbookId>
        <StateId>-1</StateId>
        <ProtocolClientId>
        </ProtocolClientId>
        <UserFriendlyDisplayName>DOMAIN\username</UserFriendlyDisplayName>
        <Zone>Default</Zone>
        <RequestSiteId>8b777e1b-3d99-43fb-9813-392ab88b4206</RequestSiteId>
        <CorrelationId>00000000-0000-0000-0000-000000000000</CorrelationId>
        <CompleteResponseTimeout>0</CompleteResponseTimeout>
      </parameter>
      <moniker>Default</moniker>
      <keys>
        <KeyValuePair>
          <Key xsi:type="xsd:int">1</Key>
          <Value>
          </Value>
        </KeyValuePair>
      </keys>
      <values>
        <KeyValuePair>
          <Key xsi:type="xsd:string">Task Title</Key>
          <Value xsi:type="xsd:string">Title3</Value>
        </KeyValuePair>
      </values>
      <oldValues>
        <KeyValuePair>
          <Key xsi:type="xsd:string">Task Title</Key>
          <Value xsi:type="xsd:string">Title2</Value>
        </KeyValuePair>
      </oldValues>
      <userCookieId>00000003-b006-31b4-f9dd-84489ab2aa55</userCookieId>
    </UpdateData>
```

The protocol server responds with the following message:

```
<UpdateDataResponse
xmlns="http://schemas.microsoft.com/office/Access/Server/WebServices/AccessServerInternalServ
ice/">
  <UpdateDataResult>
    <StateId
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</StateId>
```

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```
      <HealthInformation
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">
        <StateFlags>
        </StateFlags>
        <HealthScore>0</HealthScore>
      </HealthInformation>
      <SecondsBeforeNextPoll
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</SecondsBeforeNextPoll>
      <EditSessionIsDirty
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionIsDirty>
      <EditSessionHasMultipleCollaborationUsers
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionHasMultipleCollaborationUsers>
    </UpdateDataResult>
    <updatedTableXml>
      <DataTable>
        <xs:schema id="Tasks" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns=""
xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">
          <xs:element name="Tasks" msdata:IsDataSet="true" msdata:MainDataTable="Data"
msdata:UseCurrentLocale="true">
            <xs:complexType>
              <xs:choice minOccurs="0" maxOccurs="unbounded">
                <xs:element name="Data">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="ID" type="xs:int"></xs:element>
                      <xs:element name="Task Title" type="xs:string"
minOccurs="0"></xs:element>
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:choice>
            </xs:complexType>
            <xs:unique name="Constraint1" msdata:PrimaryKey="true">
              <xs:selector xpath=".//Data"></xs:selector>
              <xs:field xpath="ID"></xs:field>
            </xs:unique>
          </xs:element>
        </xs:schema>
        <diffgr:diffgram xmlns:diffgr="urn:schemas-microsoft-com:xml-diffgram-v1"
xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">
          <DocumentElement xmlns="">
            <Data diffgr:id="Data1" msdata:rowOrder="0" diffgr:hasChanges="updated">
            <ID>1</ID>
            <Task Title>Title3</TaskTitle>
            </Data>
          </DocumentElement>
        </diffgr:diffgram>
      </DataTable>
    </updatedTableXml>
</UpdateDataResponse>
```

4.5 OpenResultSet

In this scenario, the protocol client calls the OpenResultSet method on a protocol server with the
following message to open a set of data from a table:

```
<OpenResultSet
xmlns="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInte
rnalService/">
      <parameter>
```

```
        <WorkbookId>1.V22.70H0556qa6XWR/hYIBvZ3T90.5.en-US5.en-US73.+0480#0000-11-00-
01T02:00:00:0000#+0000#0000-03-00-02T02:00:00:0000#-006036.00000000-0000-0000-0000-
0000000000001.U</WorkbookId>
        <StateId>-1</StateId>
        <ProtocolClientId>
        </ProtocolClientId>
        <UserFriendlyDisplayName>DOMAIN\username</UserFriendlyDisplayName>
        <Zone>Default</Zone>
        <RequestSiteId>8b777e1b-3d99-43fb-9813-392ab88b4206</RequestSiteId>
        <CorrelationId>00000000-0000-0000-0000-000000000000</CorrelationId>
        <CompleteResponseTimeout>0</CompleteResponseTimeout>
      </parameter>
      <queryParameters>
      </queryParameters>
      <sortExpression>&lt;Ordering
xmlns="http://schemas.microsoft.com/office/accessservices/2010/12/application" &gt;&lt;Order
Name="Task Title" Direction="Ascending" /&gt;&lt;/Ordering&gt;</sortExpression>
      <moniker>Default</moniker>
      <startRowIndex>0</startRowIndex>
      <maximumRows>200</maximumRows>
      <autoResync>true</autoResync>
      <userCookieId>00000003-b006-31b4-f9dd-84489ab2aa55</userCookieId>
    </OpenResultSet>
```

The protocol server responds with the following message:

```
<OpenResultSetResponse
xmlns="http://schemas.microsoft.com/office/Access/Server/WebServices/AccessServerInternalServ
ice/">
  <OpenResultSetResult>
    <StateId
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</StateId>
    <HealthInformation
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">
      <StateFlags></StateFlags>
      <HealthScore>0</HealthScore>
    </HealthInformation>
    <SecondsBeforeNextPoll
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">0</SecondsBeforeNextPoll>
    <EditSessionIsDirty
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionIsDirty>
    <EditSessionHasMultipleUsers
xmlns="http://schemas.microsoft.com/office/Excel/Server/WebServices/ExcelServerInternalServic
e/">false</EditSessionHasMultipleUsers>
  </OpenResultSetResult>
  <tableXml>
  <DataTable>
    <xs:schema id="Tasks" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns=""
xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">
      <xs:element name="Tasks" msdata:IsDataSet="true" msdata:MainDataTable="Data"
msdata:UseCurrentLocale="true">
        <xs:complexType>
          <xs:choice minOccurs="0" maxOccurs="unbounded">
            <xs:element name="Data">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="ID" type="xs:int"></xs:element>
                  <xs:element name="Task Title" type="xs:string" minOccurs="0"></xs:element>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:choice>
        </xs:complexType>
        <xs:unique name="Constraint1" msdata:PrimaryKey="true">
```

```
                    <xs:selector xpath=".//Data"></xs:selector>
                    <xs:field xpath="ID"></xs:field>
                </xs:unique>
            </xs:element>
        </xs:schema>
        <diffgr:diffgram xmlns:diffgr="urn:schemas-microsoft-com:xml-diffgram-v1"
    xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">
            <DocumentElement xmlns="">
                <Data diffgr:id="Data1" msdata:rowOrder="0" diffgr:hasChanges="inserted">
                <ID>1</ID>
                <Task Title>First Task</TaskTitle>
                </Data>
            </DocumentElement>
        </diffgr:diffgram>
    </DataTable>
  </tableXml>
  <totalRowCount>1</totalRowCount>
</OpenResultSetResponse>
```

5 Security

5.1 Security Considerations for Implementers

In addition to the security considerations applicable to the underlying protocols, there are security risks associated with exposing **session identifiers**. If the session identifier is exposed, it is possible for an attacker to read information from, or modify data in, a **session** on the protocol server. An implementer of this protocol needs to consider keeping session identifiers protected. There could be some cases where it is desirable to expose the session identifier, however, an implementer is to use caution in how they expose session identifiers and consider the security risks.

5.2 Index of Security Parameters

None.

6   Appendix A: Full WSDL

For ease of implementation, the full WSDL is provided in this appendix.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tns2="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/" xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
targetNamespace="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/Access
ServerInternalService/" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema
xmlns:tns3="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/Imports"
targetNamespace="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/Access
ServerInternalService/Imports">
      <xs:import namespace="http://microsoft.com/wsdl/types/"/>
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"/>
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database"
/>
      <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/"/>
      <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
      <xs:import
namespace="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServer
InternalService/"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:portType name="IAccessServiceSoap">
    <wsdl:operation name="GetHealthScore">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetHealthScore"
message="tns2:IAccessServiceSoap_GetHealthScore_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetHealthScoreResponse"
message="tns2:IAccessServiceSoap_GetHealthScore_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetHealthScoreAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetHealthScore_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="OpenSession">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenSession"
message="tns2:IAccessServiceSoap_OpenSession_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenSessionResponse"
message="tns2:IAccessServiceSoap_OpenSession_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenSessionAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_OpenSession_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="CloseSession">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CloseSession"
message="tns2:IAccessServiceSoap_CloseSession_InputMessage"/>
```

```
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CloseSessionResponse"
message="tns2:IAccessServiceSoap_CloseSession_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CloseSessionAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CloseSession_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="KeepAlive">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/KeepAlive"
message="tns2:IAccessServiceSoap_KeepAlive_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/KeepAliveResponse"
message="tns2:IAccessServiceSoap_KeepAlive_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/KeepAliveAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_KeepAlive_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetObjectSchema">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetObjectSchema"
message="tns2:IAccessServiceSoap_GetObjectSchema_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetObjectSchemaResponse"
message="tns2:IAccessServiceSoap_GetObjectSchema_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetObjectSchemaAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetObjectSchema_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetFormDefinitionAndRecordSet">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSet"
message="tns2:IAccessServiceSoap_GetFormDefinitionAndRecordSet_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSetResponse"
message="tns2:IAccessServiceSoap_GetFormDefinitionAndRecordSet_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSetAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetFormDefinitionAndRecordSet_AccessServerMessageFault_Fault
Message"/>
    </wsdl:operation>
    <wsdl:operation name="OpenResultSet">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenResultSet"
message="tns2:IAccessServiceSoap_OpenResultSet_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenResultSetResponse"
message="tns2:IAccessServiceSoap_OpenResultSet_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/OpenResultSetAccessServerMessageFault"
```

```
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap OpenResultSet AccessServerMessageFault FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="GetData">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetData"
message="tns2:IAccessServiceSoap GetData InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataResponse"
message="tns2:IAccessServiceSoap_GetData_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetData_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="InsertData">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/InsertData"
message="tns2:IAccessServiceSoap_InsertData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/InsertDataResponse"
message="tns2:IAccessServiceSoap InsertData OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/InsertDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_InsertData_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="UpdateData">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateData"
message="tns2:IAccessServiceSoap_UpdateData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDataResponse"
message="tns2:IAccessServiceSoap_UpdateData_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_UpdateData_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="FixupRow">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/FixupRow"
message="tns2:IAccessServiceSoap_FixupRow_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/FixupRowResponse"
message="tns2:IAccessServiceSoap_FixupRow_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/FixupRowAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap FixupRow AccessServerMessageFault FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteData">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteData"
message="tns2:IAccessServiceSoap_DeleteData_InputMessage"/>
```

```
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteDataResponse"
message="tns2:IAccessServiceSoap_DeleteData_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_DeleteData_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetDistinctValues">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDistinctValues"
message="tns2:IAccessServiceSoap_GetDistinctValues_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDistinctValuesResponse"
message="tns2:IAccessServiceSoap GetDistinctValues OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDistinctValuesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetDistinctValues_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAutoSumValues">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAutoSumValues"
message="tns2:IAccessServiceSoap_GetAutoSumValues_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAutoSumValuesResponse"
message="tns2:IAccessServiceSoap GetAutoSumValues OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAutoSumValuesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetAutoSumValues_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetSearchData">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetSearchData"
message="tns2:IAccessServiceSoap_GetSearchData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetSearchDataResponse"
message="tns2:IAccessServiceSoap_GetSearchData_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetSearchDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap GetSearchData AccessServerMessageFault FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="RunDataMacro">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RunDataMacro"
message="tns2:IAccessServiceSoap_RunDataMacro_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RunDataMacroResponse"
message="tns2:IAccessServiceSoap_RunDataMacro_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RunDataMacroAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_RunDataMacro_AccessServerMessageFault_FaultMessage"/>
```

```
      </wsdl:operation>
      <wsdl:operation name="GetUIMacroJavascript">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetUIMacroJavascript"
message="tns2:IAccessServiceSoap_GetUIMacroJavascript_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetUIMacroJavascriptResponse"
message="tns2:IAccessServiceSoap_GetUIMacroJavascript_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetUIMacroJavascriptAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetUIMacroJavascript_AccessServerMessageFault_FaultMessage"/
>
      </wsdl:operation>
      <wsdl:operation name="CreateApplication">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateApplication"
message="tns2:IAccessServiceSoap_CreateApplication_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateApplicationResponse"
message="tns2:IAccessServiceSoap_CreateApplication_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateApplicationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CreateApplication_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="GetApplicationInformation">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetApplicationInformation"
message="tns2:IAccessServiceSoap_GetApplicationInformation_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetApplicationInformationResponse"
message="tns2:IAccessServiceSoap_GetApplicationInformation_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetApplicationInformationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetApplicationInformation_AccessServerMessageFault_FaultMess
age"/>
      </wsdl:operation>
      <wsdl:operation name="GetAccessObject">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAccessObject"
message="tns2:IAccessServiceSoap_GetAccessObject_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAccessObjectResponse"
message="tns2:IAccessServiceSoap_GetAccessObject_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetAccessObject_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="CreateAccessObject">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateAccessObject"
message="tns2:IAccessServiceSoap_CreateAccessObject_InputMessage"/>
```

```
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateAccessObjectResponse"
message="tns2:IAccessServiceSoap_CreateAccessObject_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreateAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CreateAccessObject_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="RenameAccessObject">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameAccessObject"
message="tns2:IAccessServiceSoap_RenameAccessObject_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameAccessObjectResponse"
message="tns2:IAccessServiceSoap_RenameAccessObject_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_RenameAccessObject_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="UpdateAccessObject">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateAccessObject"
message="tns2:IAccessServiceSoap_UpdateAccessObject_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateAccessObjectResponse"
message="tns2:IAccessServiceSoap_UpdateAccessObject_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_UpdateAccessObject_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="DeleteAccessObject">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteAccessObject"
message="tns2:IAccessServiceSoap_DeleteAccessObject_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteAccessObjectResponse"
message="tns2:IAccessServiceSoap_DeleteAccessObject_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteAccessObjectAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_DeleteAccessObject_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="SetDataMacroTracing">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataMacroTracing"
message="tns2:IAccessServiceSoap_SetDataMacroTracing_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataMacroTracingResponse"
message="tns2:IAccessServiceSoap_SetDataMacroTracing_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataMacroTracingAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_SetDataMacroTracing_AccessServerMessageFault_FaultMessage"/>
```

```
      </wsdl:operation>
      <wsdl:operation name="GetLinkedTableInformation">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetLinkedTableInformation"
message="tns2:IAccessServiceSoap_GetLinkedTableInformation_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetLinkedTableInformationResponse"
message="tns2:IAccessServiceSoap_GetLinkedTableInformation_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetLinkedTableInformationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetLinkedTableInformation_AccessServerMessageFault_FaultMess
age"/>
      </wsdl:operation>
      <wsdl:operation name="RefreshLinkedTableInformation">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RefreshLinkedTableInformation"
message="tns2:IAccessServiceSoap_RefreshLinkedTableInformation_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RefreshLinkedTableInformationResponse"
message="tns2:IAccessServiceSoap_RefreshLinkedTableInformation_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RefreshLinkedTableInformationAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_RefreshLinkedTableInformation_AccessServerMessageFault_Fault
Message"/>
      </wsdl:operation>
      <wsdl:operation name="ImportData">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ImportData"
message="tns2:IAccessServiceSoap_ImportData_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ImportDataResponse"
message="tns2:IAccessServiceSoap_ImportData_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ImportDataAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_ImportData_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="SetDataConnectivityStatus">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataConnectivityStatus"
message="tns2:IAccessServiceSoap_SetDataConnectivityStatus_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataConnectivityStatusResponse"
message="tns2:IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetDataConnectivityStatusAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_SetDataConnectivityStatus_AccessServerMessageFault_FaultMess
age"/>
      </wsdl:operation>
      <wsdl:operation name="GetDataConnectivityStatus">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityStatus"
message="tns2:IAccessServiceSoap_GetDataConnectivityStatus_InputMessage"/>
```

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      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityStatusResponse"
message="tns2:IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityStatusAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetDataConnectivityStatus_AccessServerMessageFault_FaultMess
age"/>
    </wsdl:operation>
    <wsdl:operation name="GetDataConnectivity">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivity"
message="tns2:IAccessServiceSoap_GetDataConnectivity_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityResponse"
message="tns2:IAccessServiceSoap_GetDataConnectivity_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetDataConnectivityAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetDataConnectivity_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetFirewallRules">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFirewallRules"
message="tns2:IAccessServiceSoap_GetFirewallRules_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFirewallRulesResponse"
message="tns2:IAccessServiceSoap_GetFirewallRules_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetFirewallRulesAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetFirewallRules_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="AddFirewallRule">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/AddFirewallRule"
message="tns2:IAccessServiceSoap_AddFirewallRule_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/AddFirewallRuleResponse"
message="tns2:IAccessServiceSoap_AddFirewallRule_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/AddFirewallRuleAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_AddFirewallRule_AccessServerMessageFault_FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="DeleteFirewallRules">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteFirewallRules"
message="tns2:IAccessServiceSoap_DeleteFirewallRules_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteFirewallRulesResponse"
message="tns2:IAccessServiceSoap_DeleteFirewallRules_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DeleteFirewallRulesAccessServerMessageFault"
```

```
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap DeleteFirewallRules AccessServerMessageFault FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="CreatePackage">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreatePackage"
message="tns2:IAccessServiceSoap CreatePackage InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreatePackageResponse"
message="tns2:IAccessServiceSoap_CreatePackage_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CreatePackageAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_CreatePackage_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="GetPackage">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetPackage"
message="tns2:IAccessServiceSoap_GetPackage_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetPackageResponse"
message="tns2:IAccessServiceSoap GetPackage OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetPackageAccessServerMessageFault"
name="AccessServerMessageFault"
message="tns2:IAccessServiceSoap_GetPackage_AccessServerMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="GetAvailableServer">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAvailableServer"
message="tns2:IAccessServiceSoap_GetAvailableServer_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAvailableServerResponse"
message="tns2:IAccessServiceSoap_GetAvailableServer_OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetAvailableServerDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_GetAvailableServer_DatabaseProviderMessageFault_FaultMessage
"/>
      </wsdl:operation>
      <wsdl:operation name="GetServerName">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetServerName"
message="tns2:IAccessServiceSoap_GetServerName_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetServerNameResponse"
message="tns2:IAccessServiceSoap GetServerName OutputMessage"/>
        <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/GetServerNameDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_GetServerName_DatabaseProviderMessageFault_FaultMessage"/>
      </wsdl:operation>
      <wsdl:operation name="ProvisionDatabase">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ProvisionDatabase"
message="tns2:IAccessServiceSoap_ProvisionDatabase_InputMessage"/>
```

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      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ProvisionDatabaseResponse"
message="tns2:IAccessServiceSoap_ProvisionDatabase_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ProvisionDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_ProvisionDatabase_DatabaseProviderMessageFault_FaultMessage"
/>
    </wsdl:operation>
    <wsdl:operation name="UnprovisionDatabase">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UnprovisionDatabase"
message="tns2:IAccessServiceSoap_UnprovisionDatabase_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UnprovisionDatabaseResponse"
message="tns2:IAccessServiceSoap_UnprovisionDatabase_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UnprovisionDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_UnprovisionDatabase_DatabaseProviderMessageFault_FaultMessag
e"/>
    </wsdl:operation>
    <wsdl:operation name="ExecuteDacIncrementalUpgrade">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgrade"
message="tns2:IAccessServiceSoap_ExecuteDacIncrementalUpgrade_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgradeResponse"
message="tns2:IAccessServiceSoap ExecuteDacIncrementalUpgrade OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgradeDatabaseProviderMessageFault
" name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_ExecuteDacIncrementalUpgrade_DatabaseProviderMessageFault_Fa
ultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="CopyDatabase">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CopyDatabase"
message="tns2:IAccessServiceSoap CopyDatabase InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CopyDatabaseResponse"
message="tns2:IAccessServiceSoap CopyDatabase OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CopyDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap CopyDatabase DatabaseProviderMessageFault FaultMessage"/>
    </wsdl:operation>
    <wsdl:operation name="CheckCopyStatus">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CheckCopyStatus"
message="tns2:IAccessServiceSoap CheckCopyStatus InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/CheckCopyStatusResponse"
message="tns2:IAccessServiceSoap_CheckCopyStatus_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
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erInternalService/IAccessServiceSoap/CheckCopyStatusDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap CheckCopyStatus DatabaseProviderMessageFault FaultMessage"/>
        </wsdl:operation>
        <wsdl:operation name="RenameDatabase">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameDatabase"
message="tns2:IAccessServiceSoap_RenameDatabase_InputMessage"/>
          <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameDatabaseResponse"
message="tns2:IAccessServiceSoap_RenameDatabase_OutputMessage"/>
          <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/RenameDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_RenameDatabase_DatabaseProviderMessageFault_FaultMessage"/>
        </wsdl:operation>
        <wsdl:operation name="DatabaseExists">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DatabaseExists"
message="tns2:IAccessServiceSoap_DatabaseExists_InputMessage"/>
          <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DatabaseExistsResponse"
message="tns2:IAccessServiceSoap_DatabaseExists_OutputMessage"/>
          <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/DatabaseExistsDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap DatabaseExists DatabaseProviderMessageFault FaultMessage"/>
        </wsdl:operation>
        <wsdl:operation name="SetReadWrite">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetReadWrite"
message="tns2:IAccessServiceSoap SetReadWrite InputMessage"/>
          <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetReadWriteResponse"
message="tns2:IAccessServiceSoap_SetReadWrite_OutputMessage"/>
          <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetReadWriteDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_SetReadWrite_DatabaseProviderMessageFault_FaultMessage"/>
        </wsdl:operation>
        <wsdl:operation name="SetEnableDisableDatabase">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetEnableDisableDatabase"
message="tns2:IAccessServiceSoap_SetEnableDisableDatabase_InputMessage"/>
          <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetEnableDisableDatabaseResponse"
message="tns2:IAccessServiceSoap SetEnableDisableDatabase OutputMessage"/>
          <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/SetEnableDisableDatabaseDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_SetEnableDisableDatabase_DatabaseProviderMessageFault_FaultM
essage"/>
        </wsdl:operation>
        <wsdl:operation name="UpdateDatabaseConfiguration">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDatabaseConfiguration"
message="tns2:IAccessServiceSoap_UpdateDatabaseConfiguration_InputMessage"/>
```

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      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDatabaseConfigurationResponse"
message="tns2:IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage"/>
      <wsdl:fault
wsaw:Action="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServ
erInternalService/IAccessServiceSoap/UpdateDatabaseConfigurationDatabaseProviderMessageFault"
name="DatabaseProviderMessageFault"
message="tns2:IAccessServiceSoap_UpdateDatabaseConfiguration_DatabaseProviderMessageFault_Fau
ltMessage"/>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="DefaultBinding_IAccessServiceSoap" type="tns2:IAccessServiceSoap">
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="GetHealthScore">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetHealthScore" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="OpenSession">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/OpenSession" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="CloseSession">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/CloseSession" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="KeepAlive">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/KeepAlive" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
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      </wsdl:operation>
      <wsdl:operation name="GetObjectSchema">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetObjectSchema" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetFormDefinitionAndRecordSet">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetFormDefinitionAndRecordSet" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="OpenResultSet">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/OpenResultSet" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetData">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetData" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="InsertData">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/InsertData" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
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          </wsdl:fault>
        </wsdl:operation>
      <wsdl:operation name="UpdateData">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/UpdateData" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="FixupRow">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/FixupRow" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="DeleteData">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/DeleteData" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetDistinctValues">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetDistinctValues" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetAutoSumValues">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetAutoSumValues" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
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          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetSearchData">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetSearchData" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="RunDataMacro">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/RunDataMacro" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetUIMacroJavascript">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetUIMacroJavascript" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="CreateApplication">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/CreateApplication" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetApplicationInformation">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetApplicationInformation" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
```

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        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetAccessObject">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetAccessObject" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="CreateAccessObject">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/CreateAccessObject" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="RenameAccessObject">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/RenameAccessObject" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="UpdateAccessObject">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/UpdateAccessObject" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="DeleteAccessObject">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/DeleteAccessObject" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
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      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="SetDataMacroTracing">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/SetDataMacroTracing" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="GetLinkedTableInformation">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetLinkedTableInformation" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="RefreshLinkedTableInformation">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/RefreshLinkedTableInformation" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="ImportData">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/ImportData" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="SetDataConnectivityStatus">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/SetDataConnectivityStatus" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
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          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetDataConnectivityStatus">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetDataConnectivityStatus" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetDataConnectivity">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetDataConnectivity" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="GetFirewallRules">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetFirewallRules" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="AddFirewallRule">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/AddFirewallRule" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:fault name="AccessServerMessageFault">
          <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
        </wsdl:fault>
      </wsdl:operation>
      <wsdl:operation name="DeleteFirewallRules">
        <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/DeleteFirewallRules" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
```

```
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="CreatePackage">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/CreatePackage" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="GetPackage">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetPackage" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="AccessServerMessageFault">
        <soap:fault use="literal" name="AccessServerMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="GetAvailableServer">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetAvailableServer" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DatabaseProviderMessageFault">
        <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="GetServerName">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/GetServerName" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DatabaseProviderMessageFault">
        <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="ProvisionDatabase">
      <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/ProvisionDatabase" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
```

```
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="UnprovisionDatabase">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/UnprovisionDatabase" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="ExecuteDacIncrementalUpgrade">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/ExecuteDacIncrementalUpgrade" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="CopyDatabase">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/CopyDatabase" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="CheckCopyStatus">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/CheckCopyStatus" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="RenameDatabase">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/RenameDatabase" style="document"/>
          <wsdl:input>
```

```
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="DatabaseExists">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/DatabaseExists" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="SetReadWrite">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/SetReadWrite" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="SetEnableDisableDatabase">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/SetEnableDisableDatabase" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="UpdateDatabaseConfiguration">
          <soap:operation
soapAction="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/IAccessServiceSoap/UpdateDatabaseConfiguration" style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
          <wsdl:fault name="DatabaseProviderMessageFault">
            <soap:fault use="literal" name="DatabaseProviderMessageFault" namespace=""/>
          </wsdl:fault>
        </wsdl:operation>
      </wsdl:binding>
      <wsdl:message
name="IAccessServiceSoap_AddFirewallRule_AccessServerMessageFault_FaultMessage">
```

```
        <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_AddFirewallRule_InputMessage">
      <wsdl:part name="parameters" element="tns2:AddFirewallRule"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_AddFirewallRule_OutputMessage">
      <wsdl:part name="parameters" element="tns2:AddFirewallRuleResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_CheckCopyStatus_DatabaseProviderMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CheckCopyStatus_InputMessage">
      <wsdl:part name="parameters" element="tns2:CheckCopyStatus"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CheckCopyStatus_OutputMessage">
      <wsdl:part name="parameters" element="tns2:CheckCopyStatusResponse"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CloseSession_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CloseSession_InputMessage">
      <wsdl:part name="parameters" element="tns2:CloseSession"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CloseSession_OutputMessage">
      <wsdl:part name="parameters" element="tns2:CloseSessionResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_CopyDatabase_DatabaseProviderMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CopyDatabase_InputMessage">
      <wsdl:part name="parameters" element="tns2:CopyDatabase"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CopyDatabase_OutputMessage">
      <wsdl:part name="parameters" element="tns2:CopyDatabaseResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_CreateAccessObject_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CreateAccessObject_InputMessage">
      <wsdl:part name="parameters" element="tns2:CreateAccessObject"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CreateAccessObject_OutputMessage">
      <wsdl:part name="parameters" element="tns2:CreateAccessObjectResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_CreateApplication_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CreateApplication_InputMessage">
      <wsdl:part name="parameters" element="tns2:CreateApplication"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_CreateApplication_OutputMessage">
      <wsdl:part name="parameters" element="tns2:CreateApplicationResponse"/>
    </wsdl:message>
```

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  <wsdl:message
name="IAccessServiceSoap_CreatePackage_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_CreatePackage_InputMessage">
    <wsdl:part name="parameters" element="tns2:CreatePackage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_CreatePackage_OutputMessage">
    <wsdl:part name="parameters" element="tns2:CreatePackageResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_DatabaseExists_DatabaseProviderMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DatabaseExists_InputMessage">
    <wsdl:part name="parameters" element="tns2:DatabaseExists"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DatabaseExists_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DatabaseExistsResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_DeleteAccessObject_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteAccessObject_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteAccessObject"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteAccessObject_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteAccessObjectResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteData_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteData_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteData"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteDataResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_DeleteFirewallRules_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteFirewallRules_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteFirewallRules"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_DeleteFirewallRules_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteFirewallRulesResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_ExecuteDacIncrementalUpgrade_DatabaseProviderMessageFault_FaultMessa
ge">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_ExecuteDacIncrementalUpgrade_InputMessage">
    <wsdl:part name="parameters" element="tns2:ExecuteDacIncrementalUpgrade"/>
  </wsdl:message>
```

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  <wsdl:message name="IAccessServiceSoap_ExecuteDacIncrementalUpgrade_OutputMessage">
    <wsdl:part name="parameters" element="tns2:ExecuteDacIncrementalUpgradeResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_FixupRow_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_FixupRow_InputMessage">
    <wsdl:part name="parameters" element="tns2:FixupRow"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_FixupRow_OutputMessage">
    <wsdl:part name="parameters" element="tns2:FixupRowResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_GetAccessObject_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetAccessObject_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetAccessObject"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetAccessObject_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetAccessObjectResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_GetApplicationInformation_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetApplicationInformation_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetApplicationInformation"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetApplicationInformation OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetApplicationInformationResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap GetAutoSumValues AccessServerMessageFault FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetAutoSumValues_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetAutoSumValues"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetAutoSumValues OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetAutoSumValuesResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap GetAvailableServer DatabaseProviderMessageFault FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetAvailableServer InputMessage">
    <wsdl:part name="parameters" element="tns2:GetAvailableServer"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetAvailableServer_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetAvailableServerResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetData AccessServerMessageFault FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetData_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetData"/>
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  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetDataResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap GetDataConnectivity AccessServerMessageFault FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetDataConnectivity InputMessage">
    <wsdl:part name="parameters" element="tns2:GetDataConnectivity"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetDataConnectivity_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetDataConnectivityResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_GetDataConnectivityStatus_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetDataConnectivityStatus InputMessage">
    <wsdl:part name="parameters" element="tns2:GetDataConnectivityStatus"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetDataConnectivityStatus_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetDataConnectivityStatusResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_GetDistinctValues_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetDistinctValues_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetDistinctValues"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetDistinctValues_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetDistinctValuesResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap GetFirewallRules AccessServerMessageFault FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetFirewallRules_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetFirewallRules"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetFirewallRules_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetFirewallRulesResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap GetFormDefinitionAndRecordSet AccessServerMessageFault FaultMessage"
>
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetFormDefinitionAndRecordSet_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetFormDefinitionAndRecordSet"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap GetFormDefinitionAndRecordSet OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetFormDefinitionAndRecordSetResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_GetHealthScore_AccessServerMessageFault_FaultMessage">
```

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      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetHealthScore_InputMessage">
      <wsdl:part name="parameters" element="tns2:GetHealthScore"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetHealthScore_OutputMessage">
      <wsdl:part name="parameters" element="tns2:GetHealthScoreResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_GetLinkedTableInformation_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetLinkedTableInformation_InputMessage">
      <wsdl:part name="parameters" element="tns2:GetLinkedTableInformation"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetLinkedTableInformation_OutputMessage">
      <wsdl:part name="parameters" element="tns2:GetLinkedTableInformationResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_GetObjectSchema_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetObjectSchema_InputMessage">
      <wsdl:part name="parameters" element="tns2:GetObjectSchema"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetObjectSchema_OutputMessage">
      <wsdl:part name="parameters" element="tns2:GetObjectSchemaResponse"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetPackage_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetPackage_InputMessage">
      <wsdl:part name="parameters" element="tns2:GetPackage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetPackage_OutputMessage">
      <wsdl:part name="parameters" element="tns2:GetPackageResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_GetSearchData_AccessServerMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetSearchData_InputMessage">
      <wsdl:part name="parameters" element="tns2:GetSearchData"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetSearchData_OutputMessage">
      <wsdl:part name="parameters" element="tns2:GetSearchDataResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAccessServiceSoap_GetServerName_DatabaseProviderMessageFault_FaultMessage">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetServerName_InputMessage">
      <wsdl:part name="parameters" element="tns2:GetServerName"/>
    </wsdl:message>
    <wsdl:message name="IAccessServiceSoap_GetServerName_OutputMessage">
      <wsdl:part name="parameters" element="tns2:GetServerNameResponse"/>
    </wsdl:message>
```

```
    <wsdl:message
name="IAccessServiceSoap_GetUIMacroJavascript_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetUIMacroJavascript_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetUIMacroJavascript"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_GetUIMacroJavascript_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetUIMacroJavascriptResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_ImportData_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_ImportData_InputMessage">
    <wsdl:part name="parameters" element="tns2:ImportData"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_ImportData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:ImportDataResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_InsertData_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_InsertData_InputMessage">
    <wsdl:part name="parameters" element="tns2:InsertData"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_InsertData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:InsertDataResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_KeepAlive_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_KeepAlive_InputMessage">
    <wsdl:part name="parameters" element="tns2:KeepAlive"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_KeepAlive_OutputMessage">
    <wsdl:part name="parameters" element="tns2:KeepAliveResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_OpenResultSet_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_OpenResultSet_InputMessage">
    <wsdl:part name="parameters" element="tns2:OpenResultSet"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_OpenResultSet_OutputMessage">
    <wsdl:part name="parameters" element="tns2:OpenResultSetResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_OpenSession_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_OpenSession_InputMessage">
    <wsdl:part name="parameters" element="tns2:OpenSession"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_OpenSession_OutputMessage">
    <wsdl:part name="parameters" element="tns2:OpenSessionResponse"/>
  </wsdl:message>
```

```
  <wsdl:message
name="IAccessServiceSoap_ProvisionDatabase_DatabaseProviderMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_ProvisionDatabase_InputMessage">
    <wsdl:part name="parameters" element="tns2:ProvisionDatabase"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_ProvisionDatabase_OutputMessage">
    <wsdl:part name="parameters" element="tns2:ProvisionDatabaseResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_RefreshLinkedTableInformation_AccessServerMessageFault_FaultMessage"
>
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RefreshLinkedTableInformation_InputMessage">
    <wsdl:part name="parameters" element="tns2:RefreshLinkedTableInformation"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RefreshLinkedTableInformation_OutputMessage">
    <wsdl:part name="parameters" element="tns2:RefreshLinkedTableInformationResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_RenameAccessObject_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RenameAccessObject_InputMessage">
    <wsdl:part name="parameters" element="tns2:RenameAccessObject"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RenameAccessObject_OutputMessage">
    <wsdl:part name="parameters" element="tns2:RenameAccessObjectResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_RenameDatabase_DatabaseProviderMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RenameDatabase_InputMessage">
    <wsdl:part name="parameters" element="tns2:RenameDatabase"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RenameDatabase_OutputMessage">
    <wsdl:part name="parameters" element="tns2:RenameDatabaseResponse"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RunDataMacro_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RunDataMacro_InputMessage">
    <wsdl:part name="parameters" element="tns2:RunDataMacro"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_RunDataMacro_OutputMessage">
    <wsdl:part name="parameters" element="tns2:RunDataMacroResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAccessServiceSoap_SetDataConnectivityStatus_AccessServerMessageFault_FaultMessage">
    <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
  </wsdl:message>
  <wsdl:message name="IAccessServiceSoap_SetDataConnectivityStatus_InputMessage">
    <wsdl:part name="parameters" element="tns2:SetDataConnectivityStatus"/>
  </wsdl:message>
```

```
<wsdl:message name="IAccessServiceSoap_SetDataConnectivityStatus_OutputMessage">
  <wsdl:part name="parameters" element="tns2:SetDataConnectivityStatusResponse"/>
</wsdl:message>
<wsdl:message
name="IAccessServiceSoap_SetDataMacroTracing_AccessServerMessageFault_FaultMessage">
  <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_SetDataMacroTracing_InputMessage">
  <wsdl:part name="parameters" element="tns2:SetDataMacroTracing"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_SetDataMacroTracing_OutputMessage">
  <wsdl:part name="parameters" element="tns2:SetDataMacroTracingResponse"/>
</wsdl:message>
<wsdl:message
name="IAccessServiceSoap_SetEnableDisableDatabase_DatabaseProviderMessageFault_FaultMessage">
  <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_SetEnableDisableDatabase_InputMessage">
  <wsdl:part name="parameters" element="tns2:SetEnableDisableDatabase"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_SetEnableDisableDatabase_OutputMessage">
  <wsdl:part name="parameters" element="tns2:SetEnableDisableDatabaseResponse"/>
</wsdl:message>
<wsdl:message
name="IAccessServiceSoap_SetReadWrite_DatabaseProviderMessageFault_FaultMessage">
  <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_SetReadWrite_InputMessage">
  <wsdl:part name="parameters" element="tns2:SetReadWrite"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_SetReadWrite_OutputMessage">
  <wsdl:part name="parameters" element="tns2:SetReadWriteResponse"/>
</wsdl:message>
<wsdl:message
name="IAccessServiceSoap_UnprovisionDatabase_DatabaseProviderMessageFault_FaultMessage">
  <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_UnprovisionDatabase_InputMessage">
  <wsdl:part name="parameters" element="tns2:UnprovisionDatabase"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_UnprovisionDatabase_OutputMessage">
  <wsdl:part name="parameters" element="tns2:UnprovisionDatabaseResponse"/>
</wsdl:message>
<wsdl:message
name="IAccessServiceSoap_UpdateAccessObject_AccessServerMessageFault_FaultMessage">
  <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_UpdateAccessObject_InputMessage">
  <wsdl:part name="parameters" element="tns2:UpdateAccessObject"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_UpdateAccessObject_OutputMessage">
  <wsdl:part name="parameters" element="tns2:UpdateAccessObjectResponse"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_UpdateData_AccessServerMessageFault_FaultMessage">
  <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:AccessServerMessage"/>
</wsdl:message>
<wsdl:message name="IAccessServiceSoap_UpdateData_InputMessage">
```

```
      <wsdl:part name="parameters" element="tns2:UpdateData"/>
   </wsdl:message>
   <wsdl:message name="IAccessServiceSoap_UpdateData_OutputMessage">
      <wsdl:part name="parameters" element="tns2:UpdateDataResponse"/>
   </wsdl:message>
   <wsdl:message
name="IAccessServiceSoap_UpdateDatabaseConfiguration_DatabaseProviderMessageFault_FaultMessag
e">
      <wsdl:part
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
name="detail" element="tns1:DatabaseProviderMessage"/>
   </wsdl:message>
   <wsdl:message name="IAccessServiceSoap_UpdateDatabaseConfiguration_InputMessage">
      <wsdl:part name="parameters" element="tns2:UpdateDatabaseConfiguration"/>
   </wsdl:message>
   <wsdl:message name="IAccessServiceSoap_UpdateDatabaseConfiguration_OutputMessage">
      <wsdl:part name="parameters" element="tns2:UpdateDatabaseConfigurationResponse"/>
   </wsdl:message>
</wsdl:definitions>
```

7 Appendix B: Full XML Schema

Schema name	Prefix	Section
http://microsoft.com/wsdl/types/	q2	7.1
http://schemas.datacontract.org/2004/07 /Microsoft.Office.Access.Services.Database	tns	7.4
http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services	tns1	7.2
http://schemas.microsoft.com/2003/10/Serialization/Arrays	q1	7.5
http://schemas.microsoft.com/2003/10/Serialization/	ser	7.6
http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices /AccessServerInternalService/	tns2	7.3

For ease of implementation, the following sections provide the full XML schema for this protocol.

7.1 http://microsoft.com/wsdl/types/ Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://microsoft.com/wsdl/types/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="guid">
    <xs:restriction base="xs:string">
      <xs:pattern value="[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-
fA-F]{12}"/>
    </xs:restriction>
  </xs:simpleType>
</xs:schema>
```

7.2 http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="AccessServerMessage">
    <xs:sequence>
      <xs:element minOccurs="0" name="Buttons" type="tns1:AccessServerMessageButtons"/>
      <xs:element minOccurs="0" name="Caption" nillable="true" type="xs:string"/>
      <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DataDictionary" nillable="true" type="q1:ArrayOfKeyValueOfstringstring"/>
      <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="ErrorNumber" nillable="true" type="xs:int"/>
      <xs:element minOccurs="0" name="ExtendedDescription" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="HealthInformation" nillable="true"
type="tns1:ServerHealthInformation"/>
      <xs:element minOccurs="0" name="HelpDisplayText" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="HelpTopicId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="Id" type="tns1:AccessServerMessageId"/>
      <xs:element minOccurs="0" name="MessageType" type="tns1:AccessServerMessageType"/>
      <xs:element minOccurs="0" name="RequestCorrelationId" type="ser:guid"/>
      <xs:element minOccurs="0" name="Severity" type="tns1:AccessServerMessageSeverity"/>
      <xs:element minOccurs="0" name="Timestamp" type="xs:dateTime"/>
```

```
        </xs:sequence>
      </xs:complexType>
      <xs:element name="AccessServerMessage" nillable="true" type="tns1:AccessServerMessage"/>
      <xs:simpleType name="AccessServerMessageButtons">
        <xs:list>
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:enumeration value="None"/>
              <xs:enumeration value="OK"/>
              <xs:enumeration value="Cancel"/>
              <xs:enumeration value="Yes"/>
              <xs:enumeration value="No"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:list>
      </xs:simpleType>
      <xs:element name="AccessServerMessageButtons" nillable="true"
type="tns1:AccessServerMessageButtons"/>
      <xs:complexType name="ServerHealthInformation">
        <xs:sequence>
          <xs:element minOccurs="0" name="HealthScore" type="xs:float"/>
          <xs:element minOccurs="0" name="StateFlags" type="tns1:ServerStateFlags"/>
        </xs:sequence>
      </xs:complexType>
      <xs:element name="ServerHealthInformation" nillable="true"
type="tns1:ServerHealthInformation"/>
      <xs:simpleType name="ServerStateFlags">
        <xs:list>
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:enumeration value="None"/>
              <xs:enumeration value="Probation"/>
              <xs:enumeration value="ShuttingDown"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:list>
      </xs:simpleType>
      <xs:element name="ServerStateFlags" nillable="true" type="tns1:ServerStateFlags"/>
      <xs:simpleType name="AccessServerMessageId">
        <xs:restriction base="xs:string">
          <xs:enumeration value="Blank"/>
          <xs:enumeration value="InternalError"/>
          <xs:enumeration value="ManagementUIInternalError"/>
          <xs:enumeration value="InvalidValueForField"/>
          <xs:enumeration value="GetRecordsPermissionsFailure"/>
          <xs:enumeration value="WriteRecordsPermissionsFailure"/>
          <xs:enumeration value="NotMemberOfRole"/>
          <xs:enumeration value="ServerReadOnly"/>
          <xs:enumeration value="MaxSessionsPerUserExceeded"/>
          <xs:enumeration value="RetryError"/>
          <xs:enumeration value="MaxRequestDurationExceeded"/>
          <xs:enumeration value="ProductExpired"/>
          <xs:enumeration value="NewWorkbookSessionTimeout"/>
          <xs:enumeration value="DataException_CacheOperationInvalid"/>
          <xs:enumeration value="DataException_InvalidPageNumber"/>
          <xs:enumeration value="DataException_ConflictsEncounteredWhileUpdatingData"/>
          <xs:enumeration value="DataException_DeleteConflict"/>
          <xs:enumeration value="DataException_QueryParametersNotSupplied"/>
          <xs:enumeration value="DataException_GenericError"/>
          <xs:enumeration value="DataException_CacheFailureAfterSuccessfulCommit"/>
          <xs:enumeration value="ExternalData_InvalidSource"/>
          <xs:enumeration value="ExternalData_InvalidSite"/>
          <xs:enumeration value="ExternalData_ComponentMissing"/>
          <xs:enumeration value="ExternalData_SourceAccessDenied"/>
          <xs:enumeration value="ExternalData_TooMuchData"/>
          <xs:enumeration value="ExternalData_TooManyWildcards"/>
          <xs:enumeration value="ExternalData_ParametersNotSupported"/>
          <xs:enumeration value="ExternalData_IncompatableCulture"/>
          <xs:enumeration value="ExternalData_RefreshDataSource"/>
```

```
<xs:enumeration value="ExternalData_LoadUserProfileDisabled"/>
<xs:enumeration value="DataConnectivity_FunctionalityDisabled"/>
<xs:enumeration value="InvalidArgument"/>
<xs:enumeration value="NullArgument"/>
<xs:enumeration value="WebService_ObjectNotFound"/>
<xs:enumeration value="WebService_InvalidId"/>
<xs:enumeration value="WebService_ObjectSaveConflict"/>
<xs:enumeration value="WebService_ObjectModifiedExternally"/>
<xs:enumeration value="WebService_DeleteApplicationWithSubwebs"/>
<xs:enumeration value="WebService_SiteDoesNotExist"/>
<xs:enumeration value="WebService_InvalidApplicationEndPoint"/>
<xs:enumeration value="WebService_GetServerInformation_SiteDoesNotExist"/>
<xs:enumeration value="WebService_CreateApplication_SiteDoesNotExist"/>
<xs:enumeration value="WebService_UnsupportedCulture"/>
<xs:enumeration value="WebService_MustBeAuthorToDesign"/>
<xs:enumeration value="WebService_ConflictingOperationInProgress"/>
<xs:enumeration value="ObjectAlreadyExists"/>
<xs:enumeration value="AccessServicesDisabled"/>
<xs:enumeration value="TableException_CsdlDefinitionNotSupported"/>
<xs:enumeration value="TableException_DuplicateColumnName"/>
<xs:enumeration value="TableException_InvalidColumn"/>
<xs:enumeration value="TableException_InvalidFieldInExpression"/>
<xs:enumeration value="TableException_InvalidObjectInExpression"/>
<xs:enumeration value="TableException_InvalidComputedColumnExpression"/>
<xs:enumeration value="TableException_InvalidComputedColumnType"/>
<xs:enumeration value="TableException_InvalidRequiredImageColumn"/>
<xs:enumeration value="TableException_InvalidCheckConstraintExpression"/>
<xs:enumeration value="TableException_TooManyIndexes"/>
<xs:enumeration value="QueryException_AmbiguousSourceNamesProvided"/>
<xs:enumeration value="QueryException_InvalidSourceNamesProvided"/>
<xs:enumeration value="QueryException_AmbiguousAliasProvided"/>
<xs:enumeration value="QueryException_InvalidObjectName"/>
<xs:enumeration value="QueryException_AmbiguousJoins"/>
<xs:enumeration value="QueryException_GenericAXLValidation"/>
<xs:enumeration value="QueryException_OutputNotInGroupsOrPartOfAggregate"/>
<xs:enumeration value="QueryException_ParameterTypeMismatch"/>
<xs:enumeration value="QueryException_OrderNotInOutputs"/>
<xs:enumeration value="OrderingException_InvalidSpecification"/>
<xs:enumeration value="OrderingException_InvalidColumnName"/>
<xs:enumeration value="MacroCompilationException_InvalidAxl"/>
<xs:enumeration value="MacroCompilationException_InvalidAction"/>
<xs:enumeration value="MacroCompilationException_InvalidEventName"/>
<xs:enumeration value="MacroCompilationException_RequiredArgumentMissing"/>
<xs:enumeration value="MacroCompilationException_ArgumentValueNotSpecified"/>
<xs:enumeration value="MacroCompilationException_InvalidActionArgument"/>
<xs:enumeration value="MacroCompilationException_MissingDataMacroParameter"/>
<xs:enumeration value="MacroCompilationException_InvalidParameter"/>
<xs:enumeration value="MacroCompilationException_InvalidQueryParameter"/>
<xs:enumeration value="MacroCompilationException_MacroCallStackDepthExceeded"/>
<xs:enumeration value="MacroCompilationException_VariableNameCollision"/>
<xs:enumeration value="MacroCompilationException_EmptyConditionalBlock"/>
<xs:enumeration value="MacroCompilationException_EmptyLookupRecordBlock"/>
<xs:enumeration value="MacroCompilationException_UpdateOnDeletedRecord"/>
<xs:enumeration value="MacroCompilationException_UpdateRecordInNDM"/>
<xs:enumeration value="MacroCompilationException_UpdateOnReadonlyQuery"/>
<xs:enumeration value="MacroCompilationException_UpdateOnReadonlyField"/>
<xs:enumeration value="MacroCompilationException_InvalidAlias"/>
<xs:enumeration value="MacroCompilationException_InvalidIdentifier"/>
<xs:enumeration value="MacroCompilationException_InvalidVariableName"/>
<xs:enumeration value="UnsupportedDatabaseCollation"/>
<xs:enumeration value="NoDatabaseServersAvailableForCreate"/>
<xs:enumeration value="NoSQLAuthDatabaseServersAvailableForCreate"/>
<xs:enumeration value="ExpressionBooleanBitMismatch"/>
<xs:enumeration value="NoApplicationDatabaseInformation"/>
<xs:enumeration value="DatabaseServerLoginFailed"/>
<xs:enumeration value="SettingValidationFailed"/>
<xs:enumeration value="SettingApplicationNameNotFound"/>
<xs:enumeration value="SettingApplicationIdNotFound"/>
<xs:enumeration value="SettingApplicationProxyNameNotFound"/>
```

```xml
<xs:enumeration value="ProvisioningGenericFailure"/>
<xs:enumeration value="ProvisioningApplicationAlreadyExists"/>
<xs:enumeration value="ProvisioningException_InstallationTimeout"/>
<xs:enumeration value="ProvisioningSecureStoreIsRequiredAndMissing"/>
<xs:enumeration value="ProvisioningAccessServicesNotSupportedBySite"/>
<xs:enumeration value="FormException_GenericAXLValidation"/>
<xs:enumeration value="UnrecognizedVersion"/>
<xs:enumeration value="UpgradeFailed"/>
<xs:enumeration value="AnotherUpgradeInProgress"/>
<xs:enumeration value="ServerNotCompatibleWithClient"/>
<xs:enumeration value="AppNotCompatibleWithClient"/>
<xs:enumeration value="AppNotCompatibleWithServer"/>
<xs:enumeration value="TemplateNotCompatible"/>
<xs:enumeration value="TemplateSizeExceeded"/>
<xs:enumeration value="TemplateImageSizeExceeded"/>
<xs:enumeration value="TemplateImageTypeUnsupported"/>
<xs:enumeration value="TemplateFailedToExtractApp"/>
<xs:enumeration value="TemplateUnsupportedOrDependencies"/>
<xs:enumeration value="ValidateApplicationException_InvalidUserObjectDefinition"/>
<xs:enumeration value="ValidateApplicationException_InvalidEventDatamacroDefinition"/>
<xs:enumeration value="AccessSqlException_GenericError"/>
<xs:enumeration value="AccessSqlException_CalculationCannotbeStored"/>
<xs:enumeration value="AccessSqlException_ObjectNotFound"/>
<xs:enumeration value="AccessSqlException_PermissionDenied"/>
<xs:enumeration value="AccessSqlException_DuplicateConstraintValue"/>
<xs:enumeration value="AccessSqlException_NoQueryParameters"/>
<xs:enumeration value="AccessSqlException_FieldNoValue"/>
<xs:enumeration value="AccessSqlException_FieldNoValueDesignTime"/>
<xs:enumeration value="AccessSqlException_InvalidFieldName"/>
<xs:enumeration value="AccessSqlException_InvalidObjectName"/>
<xs:enumeration value="AccessSqlException_ObjectAlreadyExists"/>
<xs:enumeration value="AccessSqlException_MissingExpressionInAggregateFunction"/>
<xs:enumeration value="AccessSqlException_DataTypeConversionMismatch"/>
<xs:enumeration value="AccessSqlException_InvalidLengthParameter"/>
<xs:enumeration value="AccessSqlException_IncompatibleTypeChange_TableSave"/>
<xs:enumeration value="AccessSqlException_IncompatibleDataChange_TableSave"/>
<xs:enumeration value="AccessSqlException_ErrorMessage"/>
<xs:enumeration value="AccessSqlException_SqlConnectionTimeout"/>
<xs:enumeration value="AccessSqlException_SqlConnectionTimeoutDuringInsert"/>
<xs:enumeration value="AccessSqlException_SqlError102"/>
<xs:enumeration value="AccessSqlException_SqlError107"/>
<xs:enumeration value="AccessSqlException_SqlError128"/>
<xs:enumeration value="AccessSqlException_SqlError130"/>
<xs:enumeration value="AccessSqlException_SqlError192"/>
<xs:enumeration value="AccessSqlException_SqlError201"/>
<xs:enumeration value="AccessSqlException_SqlError206"/>
<xs:enumeration value="AccessSqlException_SqlError209"/>
<xs:enumeration value="AccessSqlException_SqlError214"/>
<xs:enumeration value="AccessSqlException_SqlError217"/>
<xs:enumeration value="AccessSqlException_SqlError229"/>
<xs:enumeration value="AccessSqlException_SqlError241"/>
<xs:enumeration value="AccessSqlException_SqlError245"/>
<xs:enumeration value="AccessSqlException_SqlError256"/>
<xs:enumeration value="AccessSqlException_SqlError257"/>
<xs:enumeration value="AccessSqlException_SqlError260"/>
<xs:enumeration value="AccessSqlException_SqlError271"/>
<xs:enumeration value="AccessSqlException_SqlError289"/>
<xs:enumeration value="AccessSqlException_SqlError402"/>
<xs:enumeration value="AccessSqlException_SqlError403"/>
<xs:enumeration value="AccessSqlException_SqlError421"/>
<xs:enumeration value="AccessSqlException_SqlError535"/>
<xs:enumeration value="AccessSqlException_SqlError542"/>
<xs:enumeration value="AccessSqlException_SqlError547_CheckConstraint_Runtime"/>
<xs:enumeration value="AccessSqlException_SqlError547_CheckConstraint_Design_Table"/>
<xs:enumeration value="AccessSqlException_SqlError547_CheckConstraint_Design_Column"/>
<xs:enumeration value="AccessSqlException_SqlError547_ForeignKey_RuntimeInsertUpdate"/>
<xs:enumeration value="AccessSqlException_SqlError547_ForeignKey_RuntimeDelete"/>
<xs:enumeration value="AccessSqlException_SqlError547_ForeignKey_Design"/>
<xs:enumeration value="AccessSqlException_SqlError1004"/>
```

```
                <xs:enumeration value="AccessSqlException_SqlError1715"/>
                <xs:enumeration value="AccessSqlException_SqlError1759"/>
                <xs:enumeration value="AccessSqlException_SqlError1765"/>
                <xs:enumeration value="AccessSqlException_SqlError1778"/>
                <xs:enumeration value="AccessSqlException_SqlError1785"/>
                <xs:enumeration value="AccessSqlException_SqlError1919"/>
                <xs:enumeration value="AccessSqlException_SqlError2364"/>
                <xs:enumeration value="AccessSqlException_SqlError2365"/>
                <xs:enumeration value="AccessSqlException_SqlError2812"/>
                <xs:enumeration value="AccessSqlException_SqlError3250"/>
                <xs:enumeration value="AccessSqlException_SqlError3623"/>
                <xs:enumeration value="AccessSqlException_SqlError3726"/>
                <xs:enumeration value="AccessSqlException_SqlError3906"/>
                <xs:enumeration value="AccessSqlException_SqlError4121"/>
                <xs:enumeration value="AccessSqlException_SqlError4145"/>
                <xs:enumeration value="AccessSqlException_SqlError4405"/>
                <xs:enumeration value="AccessSqlException_SqlError4506"/>
                <xs:enumeration value="AccessSqlException_SqlError4511"/>
                <xs:enumeration value="AccessSqlException_SqlError4901"/>
                <xs:enumeration value="AccessSqlException_SqlError4922"/>
                <xs:enumeration value="AccessSqlException_SqlError4924"/>
                <xs:enumeration value="AccessSqlException_SqlError5074"/>
                <xs:enumeration value="AccessSqlException_SqlError7704"/>
                <xs:enumeration value="AccessSqlException_SqlError8114"/>
                <xs:enumeration value="AccessSqlException_SqlError8115"/>
                <xs:enumeration value="AccessSqlException_SqlError8116"/>
                <xs:enumeration value="AccessSqlException_SqlError8117"/>
                <xs:enumeration value="AccessSqlException_SqlError8134"/>
                <xs:enumeration value="AccessSqlException_SqlError8152"/>
                <xs:enumeration value="AccessSqlException_SqlError9810"/>
                <xs:enumeration value="AccessSqlException_SqlError17142"/>
                <xs:enumeration value="AccessSqlException_SqlError40544"/>
                <xs:enumeration value="AccessSqlException_SqlError40682"/>
                <xs:enumeration value="AccessSqlException_CustomError50001"/>
                <xs:enumeration value="AccessSqlException_CustomError50003"/>
                <xs:enumeration value="AccessSqlException_CustomError50005"/>
                <xs:enumeration value="OpenDependentObjects"/>
                <xs:enumeration value="OpenDependentObjectsForUpdate"/>
         </xs:restriction>
       </xs:simpleType>
       <xs:element name="AccessServerMessageId" nillable="true"
   type="tns1:AccessServerMessageId"/>
       <xs:simpleType name="AccessServerMessageType">
         <xs:restriction base="xs:string">
           <xs:enumeration value="Alert"/>
           <xs:enumeration value="Status"/>
           <xs:enumeration value="Confirmation"/>
         </xs:restriction>
       </xs:simpleType>
       <xs:element name="AccessServerMessageType" nillable="true"
   type="tns1:AccessServerMessageType"/>
       <xs:simpleType name="AccessServerMessageSeverity">
         <xs:restriction base="xs:string">
           <xs:enumeration value="Error"/>
           <xs:enumeration value="Warning"/>
           <xs:enumeration value="Information"/>
           <xs:enumeration value="Progress"/>
           <xs:enumeration value="GettingStarted"/>
         </xs:restriction>
       </xs:simpleType>
       <xs:element name="AccessServerMessageSeverity" nillable="true"
   type="tns1:AccessServerMessageSeverity"/>
       <xs:complexType name="DatabaseProviderMessage">
         <xs:sequence>
           <xs:element
   xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database"
   minOccurs="0" name="Error" type="tns:DatabaseProviderError"/>
             <xs:element minOccurs="0" name="Message" nillable="true" type="xs:string"/>
             <xs:element minOccurs="0" name="OriginalStackTrace" nillable="true" type="xs:string"/>
```

```
    </xs:sequence>
  </xs:complexType>
  <xs:element name="DatabaseProviderMessage" nillable="true"
type="tns1:DatabaseProviderMessage"/>
  <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database"
/>
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/"/>
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
</xs:schema>
```

7.3 http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServerInternalService/ Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
xmlns:tns2="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/AccessServe
rInternalService/" elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/office/Access/2010/11/Server/WebServices/Access
ServerInternalService/" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://microsoft.com/wsdl/types/"/>
  <xs:element name="GetHealthScore">
    <xs:complexType/>
  </xs:element>
  <xs:element name="GetHealthScoreResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="GetHealthScoreResult"
type="tns2:CommandResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="CommandResult">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="TransientEditSessionToken"
type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="StateId" type="xs:int"/>
      <xs:element minOccurs="0" maxOccurs="1" name="SpreadsheetData" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="HealthInformation"
type="tns2:ServerHealthInformation"/>
      <xs:element minOccurs="1" maxOccurs="1" name="EditSessionIsDirty" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="EditSessionHasMultipleCollaborationUsers"
type="xs:boolean"/>
      <xs:element minOccurs="0" maxOccurs="1" name="RequestId" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ServerHealthInformation">
    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="StateFlags"
type="tns2:ServerStateFlags"/>
      <xs:element minOccurs="1" maxOccurs="1" name="HealthScore" type="xs:float"/>
    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="ServerStateFlags">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="ShuttingDown"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
  <xs:element name="OpenSession">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
```

```
            <xs:element minOccurs="0" maxOccurs="1" name="cultureParameter"
type="tns2:CultureCommandParameter"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="CommandParameter">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="WorkbookId" type="xs:string"/>
          <xs:element minOccurs="1" maxOccurs="1" name="StateId" type="xs:int"/>
          <xs:element minOccurs="0" maxOccurs="1" name="WorkOnBehalfRequest"
type="tns2:WorkOnBehalf"/>
          <xs:element minOccurs="0" maxOccurs="1" name="ProtocolClientId" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="UserFriendlyDisplayName"
type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="Zone" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="AppPrincipalIdentifier"
type="xs:string"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="RequestSiteId" type="q2:guid"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="CorrelationId" type="q2:guid"/>
          <xs:element minOccurs="0" maxOccurs="1" name="RequestId" type="xs:string"/>
          <xs:element minOccurs="1" maxOccurs="1" name="CompleteResponseTimeout" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
      <xs:complexType name="WorkOnBehalf">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="UserName" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="UserSid" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="UserToken" type="xs:base64Binary"/>
          <xs:element minOccurs="1" maxOccurs="1" name="UserTokenTtl" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
      <xs:complexType name="CultureCommandParameter">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="UICultureName" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="DataCultureName" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="SharePointDataCultureName"
type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="TimeZoneSerialization" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
      <xs:element name="OpenSessionResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="OpenSessionResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="sessionId" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="CloseSession">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="CloseSessionResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="CloseSessionResult"
type="tns2:CommandResult"/>
          </xs:sequence>
```

```
      </xs:complexType>
    </xs:element>
    <xs:element name="KeepAlive">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="KeepAliveResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="KeepAliveResult"
type="tns2:CommandResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetObjectSchema">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="requestContext"
type="tns2:RequestContext"/>
          <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="RequestContext">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="Url" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="GetObjectSchemaResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="GetObjectSchemaResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="fieldSchemas"
type="tns2:ArrayOfFieldSchema"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="ArrayOfFieldSchema">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="FieldSchema" nillable="true"
type="tns2:FieldSchema"/>
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="FieldSchema">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="ColumnName" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DataType" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DefaultValue" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="IsKey" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="Required" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="ReadOnly" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="MaxLength" type="xs:int"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DefaultExpression"
type="tns2:Expression"/>
        <xs:element minOccurs="0" maxOccurs="1" name="ValidationScript" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="ValidationMessage"
type="tns2:ClientMessage"/>
        <xs:element minOccurs="1" maxOccurs="1" name="KeyIndex" type="xs:int"/>
```

```xml
        <xs:element minOccurs="0" maxOccurs="1" name="SourceObject" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DependentFields" type="tns2:ArrayOfInt"/>
        <xs:element minOccurs="1" maxOccurs="1" name="AllowMultipleValues" type="xs:boolean"/>
        <xs:element minOccurs="0" maxOccurs="1" name="FormatString" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="CurrencySymbol" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="DecimalPlaces" type="xs:int"/>
        <xs:element minOccurs="0" maxOccurs="1" name="TextType" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="IsTableQueryLookup" type="xs:boolean"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupSource" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupBoundField" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupDisplayField" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupSortType" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LookupValueList" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DataSource" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="Expression">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="ExpressionScript" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="ReferencesFunction" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Properties" type="tns2:ArrayOfAnyType"/>
        <xs:element minOccurs="1" maxOccurs="1" name="ServerExpression" type="xs:boolean"/>
        <xs:element minOccurs="0" maxOccurs="1" name="OriginalExpression" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="ArrayOfAnyType">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="anyType" nillable="true"/>
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="ClientMessage">
      <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="MessageID" type="tns2:ClientMessageID"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Context" type="tns2:ArrayOfAnyType"/>
      </xs:sequence>
    </xs:complexType>
    <xs:simpleType name="ClientMessageID">
      <xs:restriction base="xs:string">
        <xs:enumeration value="None"/>
        <xs:enumeration value="PassthroughMessage"/>
        <xs:enumeration value="WebServiceUnavailableMessage"/>
        <xs:enumeration value="WebServiceCanceledMessage"/>
        <xs:enumeration value="DataMacroStopWaiting"/>
        <xs:enumeration value="GenericError"/>
        <xs:enumeration value="NotifyRecordUpdated"/>
        <xs:enumeration value="NotifyRecordsDeleted"/>
        <xs:enumeration value="NotifyCannotDelete"/>
        <xs:enumeration value="NotifyCannotSave"/>
        <xs:enumeration value="NotifyCannotSaveDescription"/>
        <xs:enumeration value="SubFormNestingLimitExceededError"/>
        <xs:enumeration value="DivisionByZero"/>
        <xs:enumeration value="TypeMismatch"/>
        <xs:enumeration value="NoCurrentRecord"/>
        <xs:enumeration value="RecordNotUpdatable"/>
        <xs:enumeration value="WhereConditionTooLong"/>
        <xs:enumeration value="InvalidArgument"/>
        <xs:enumeration value="InvalidContainerControlName"/>
        <xs:enumeration value="ActionArgumentNotFound"/>
        <xs:enumeration value="FormCannotClose"/>
        <xs:enumeration value="AttachmentMustSave"/>
        <xs:enumeration value="InvalidExpression"/>
        <xs:enumeration value="AttachmentUploadSucceed"/>
        <xs:enumeration value="AttachmentDeleted"/>
        <xs:enumeration value="FormOrReportNotBound"/>
        <xs:enumeration value="InvalidPropertyOrMethod"/>
        <xs:enumeration value="InvalidUrl"/>
        <xs:enumeration value="UserInterfaceMacroLoadFailure"/>
        <xs:enumeration value="CannotFindMacroObject"/>
        <xs:enumeration value="CannotGoToSpecifiedRecord"/>
```

```xml
            <xs:enumeration value="InvalidConditionExpression"/>
            <xs:enumeration value="CannotGoToSubformOrTabpage"/>
            <xs:enumeration value="InvalidControl"/>
            <xs:enumeration value="CannotFocusOnControl"/>
            <xs:enumeration value="InvalidControlValue"/>
            <xs:enumeration value="NoControlName"/>
            <xs:enumeration value="CannotFindErrorHandlingMacro"/>
            <xs:enumeration value="InvalidSetPropertyControl"/>
            <xs:enumeration value="LocalVarNameNotSpecified"/>
            <xs:enumeration value="LocalVarExpressionNotSpecified"/>
            <xs:enumeration value="LocalVariableNameInvalid"/>
            <xs:enumeration value="TempVarNameNotSpecified"/>
            <xs:enumeration value="TempVariableNameInvalid"/>
            <xs:enumeration value="CommandNotAvailable"/>
            <xs:enumeration value="ExpressionErrorCannotSet"/>
            <xs:enumeration value="TooManyRunMacros"/>
            <xs:enumeration value="InvalidBrowseToPathArgument"/>
            <xs:enumeration value="InvalidObjectReference"/>
            <xs:enumeration value="FormNotFoundRep"/>
            <xs:enumeration value="ControlDoesNotSupportRequery"/>
            <xs:enumeration value="ReadOnlyNote"/>
            <xs:enumeration value="TooMuchParameterData"/>
            <xs:enumeration value="OperationNotSupportedOnSubReports"/>
            <xs:enumeration value="InvalidPropertyValue"/>
            <xs:enumeration value="AutocompleteWaitingForValidationMessage"/>
            <xs:enumeration value="AutocompleteInvalidDataMessage"/>
            <xs:enumeration value="TooManyTermsInFilter"/>
            <xs:enumeration value="InvalidValueForFieldMessage"/>
            <xs:enumeration value="InvalidValueForControlMessage"/>
            <xs:enumeration value="ImageUploadFailureNotificationMessage"/>
            <xs:enumeration value="NoResultsFromFilter"/>
            <xs:enumeration value="ErrorRetrievingDataForComboBoxMessage"/>
            <xs:enumeration value="ExpressionImplicitConversionInvalid"/>
            <xs:enumeration value="InvalidSetPropertyInViewMode"/>
            <xs:enumeration value="ErrorRetrievingDataForAutoSum"/>
            <xs:enumeration value="ExpressionImplicitConversionFailed"/>
            <xs:enumeration value="ExpressionArithmeticBadDataType"/>
            <xs:enumeration value="ExpressionOverflow"/>
            <xs:enumeration value="ExpressionDivisionByZero"/>
            <xs:enumeration value="ExpressionSqrtNegativeArgument"/>
            <xs:enumeration value="ExpressionLeftRightNegativeArgument"/>
            <xs:enumeration value="ExpressionSubstringNullFirstArgument"/>
            <xs:enumeration value="ExpressionSubstringInvalidThirdArgument"/>
            <xs:enumeration value="ExpressionDatePartUsedOnTime"/>
            <xs:enumeration value="ExpressionTimePartUsedOnDate"/>
            <xs:enumeration value="ExpressionIIfNullFirstArgument"/>
            <xs:enumeration value="InvalidControlReferenceError"/>
            <xs:enumeration value="RequiredFieldIsEmpty"/>
            <xs:enumeration value="InvalidDateValue"/>
            <xs:enumeration value="InvalidNumberValue"/>
            <xs:enumeration value="InvalidSetPropertyValue"/>
            <xs:enumeration value="ValueExceedsMaximumLength"/>
            <xs:enumeration value="InvalidChangeViewTable"/>
            <xs:enumeration value="MaxNumberOfPopupsReached"/>
            <xs:enumeration value="NoServerReferenceFoundInWhereConditionError"/>
            <xs:enumeration value="ExpressionIllegalDateTime"/>
            <xs:enumeration value="LoadingMessage"/>
            <xs:enumeration value="ExpressionCircularReference"/>
            <xs:enumeration value="NoBoundValueForDisplayText"/>
            <xs:enumeration value="InvalidControlsAreNotUpdatable"/>
            <xs:enumeration value="UserLogonNameDeprecated"/>
         </xs:restriction>
      </xs:simpleType>
      <xs:complexType name="ArrayOfInt">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
      <xs:element name="GetFormDefinitionAndRecordSet">
```

```
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="requestContext"
type="tns2:RequestContext"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="formName" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="restriction" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="sortExpression" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameterValues"
type="tns2:ArrayOfParameterValue"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
  </xs:element>
  <xs:complexType name="ArrayOfParameterValue">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="ParameterValue" nillable="true"
type="tns2:ParameterValue"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ParameterValue">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="Name" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="Value"/>
      <xs:element minOccurs="1" maxOccurs="1" name="IsDate" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="SharedDataBaseInfo">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="SessionId" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="SelectCommand" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="ParameterValues"
type="tns2:ArrayOfParameterValue"/>
      <xs:element minOccurs="0" maxOccurs="1" name="OriginalCommand" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="AggregateExpressions"
type="tns2:ArrayOfString"/>
      <xs:element minOccurs="0" maxOccurs="1" name="AggregateFormatInfos"
type="tns2:ArrayOfArrayOfFormatInfo"/>
      <xs:element minOccurs="0" maxOccurs="1" name="Restriction" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="Ordering" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="AllowEdits" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="AllowAdditions" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="AllowDeletions" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="DataEntry" type="xs:boolean"/>
      <xs:element minOccurs="0" maxOccurs="1" name="FieldNames" type="tns2:ArrayOfString"/>
      <xs:element minOccurs="0" maxOccurs="1" name="FormatInfos"
type="tns2:ArrayOfArrayOfFormatInfo"/>
      <xs:element minOccurs="1" maxOccurs="1" name="DataLevelFormat" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="ShowHeaders" type="xs:boolean"/>
      <xs:element minOccurs="0" maxOccurs="1" name="InitialPage" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="FetchSchema" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="FetchKeyFields" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="FetchDisplayFields" type="xs:boolean"/>
      <xs:element minOccurs="1" maxOccurs="1" name="DoNotPrefetchImages" type="xs:boolean"/>
      <xs:element minOccurs="0" maxOccurs="1" name="AutoSumFields"
type="tns2:ArrayOfString"/>
      <xs:element minOccurs="0" maxOccurs="1" name="AutoSumFunctions"
type="tns2:ArrayOfString"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ArrayOfString">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
```

```
<xs:complexType name="ArrayOfArrayOfFormatInfo">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfFormatInfo"
nillable="true" type="tns2:ArrayOfFormatInfo"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ArrayOfFormatInfo">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="FormatInfo" nillable="true"
type="tns2:FormatInfo"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="FormatInfo">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Format" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Currency" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="Precision" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Recordset">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Values"
type="tns2:ArrayOfArrayOfAnyType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="RecordStatuses"
type="tns2:ArrayOfRecordStatus"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AggregateValues"
type="tns2:ArrayOfAnyType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Localized"
type="tns2:ArrayOfArrayOfArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AggregateLocalized"
type="tns2:ArrayOfArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Paging" type="tns2:PagingInfo"/>
    <xs:element minOccurs="0" maxOccurs="1" name="DataMacroInstanceIds"
type="tns2:ArrayOfString"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Fields" type="tns2:ArrayOfFieldSchema"/>
    <xs:element minOccurs="0" maxOccurs="1" name="FormatInfos"
type="tns2:ArrayOfArrayOfFormatInfo"/>
    <xs:element minOccurs="0" maxOccurs="1" name="RelatedFieldInfos"
type="tns2:ArrayOfFieldSchema"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsAnonymous" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AnonymousCanRead" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AnonymousCanInsert" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AutoSumValues"
type="tns2:ArrayOfAnyType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="CurrentUserPermissions"
type="tns2:CurrentUserPermissions"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ArrayOfArrayOfAnyType">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfAnyType" nillable="true"
type="tns2:ArrayOfAnyType"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ArrayOfRecordStatus">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="RecordStatus"
type="tns2:RecordStatus"/>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="RecordStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Normal"/>
    <xs:enumeration value="Deleted"/>
    <xs:enumeration value="Error"/>
    <xs:enumeration value="Fixup"/>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ArrayOfArrayOfArrayOfString">
```

```
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfArrayOfString"
nillable="true" type="tns2:ArrayOfArrayOfString"/>
      </xs:sequence>
   </xs:complexType>
   <xs:complexType name="ArrayOfArrayOfString">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfString" nillable="true"
type="tns2:ArrayOfString"/>
      </xs:sequence>
   </xs:complexType>
   <xs:complexType name="PagingInfo">
      <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="FirstRow" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="RowKey" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="PageSize" type="xs:int"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Moniker" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="UseCache" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="CacheCommands"
type="tns2:CacheCommands"/>
        <xs:element minOccurs="0" maxOccurs="1" name="SortExpression" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Filter" type="tns2:FilterInfo"/>
        <xs:element minOccurs="1" maxOccurs="1" name="TotalRows" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="RetrieveExactRowCount"
type="xs:boolean"/>
        <xs:element minOccurs="0" maxOccurs="1" name="SessionId" type="xs:string"/>
      </xs:sequence>
   </xs:complexType>
   <xs:simpleType name="CacheCommands">
      <xs:list>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="RefreshData"/>
            <xs:enumeration value="ApplyFilter"/>
            <xs:enumeration value="ClearFilter"/>
            <xs:enumeration value="ApplySort"/>
            <xs:enumeration value="RetrieveImage"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:list>
   </xs:simpleType>
   <xs:complexType name="FilterInfo">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="Expression" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Text" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Fields" type="tns2:FieldList"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Culture" type="xs:string"/>
      </xs:sequence>
   </xs:complexType>
   <xs:complexType name="FieldList">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="Field" type="xs:string"/>
      </xs:sequence>
   </xs:complexType>
   <xs:complexType name="CurrentUserPermissions">
      <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Read" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="Write" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="Author" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="IsAuthenticated" type="xs:boolean"/>
      </xs:sequence>
   </xs:complexType>
   <xs:element name="GetFormDefinitionAndRecordSetResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="GetFormDefinitionAndRecordSetResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="recordset" type="tns2:Recordset"/>
          <xs:element minOccurs="0" maxOccurs="1" name="formDefinition" type="xs:string"/>
```

```xml
            <xs:element minOccurs="0" maxOccurs="1" name="sharedDatabaseInfo"
type="tns2:SharedDataBaseInfo"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="OpenResultSet">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="fields" type="tns2:FieldList"/>
        <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="restriction" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="queryParameters"
type="tns2:ArrayOfKeyValuePair"/>
        <xs:element minOccurs="0" maxOccurs="1" name="sortExpression" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="filter" type="tns2:FilterInfo"/>
        <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="startRowIndex" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="maximumRows" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="autoResync" type="xs:boolean"/>
        <xs:element minOccurs="1" maxOccurs="1" name="retrieveExactRowCount"
type="xs:boolean"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="ArrayOfKeyValuePair">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValuePair"
type="tns2:KeyValuePair"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="KeyValuePair">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="Key"/>
      <xs:element minOccurs="1" maxOccurs="1" name="Value" nillable="true"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="OpenResultSetResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="OpenResultSetResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="totalRowCount" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="startRowIndex" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="rowKey" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="maximumRows" type="xs:int"/>
        <xs:element minOccurs="1" maxOccurs="1" name="cacheCommands"
type="tns2:CacheCommands"/>
        <xs:element minOccurs="0" maxOccurs="1" name="sortExpression" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="filter" type="tns2:FilterInfo"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetDataResponse">
```

```
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="GetDataResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="aggregateValues"
type="tns2:ArrayOfAnyType"/>
          <xs:element minOccurs="1" maxOccurs="1" name="totalRowCount" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="InsertData">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="values"
type="tns2:ArrayOfArrayOfKeyValuePair"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="ArrayOfArrayOfKeyValuePair">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="ArrayOfKeyValuePair"
nillable="true" type="tns2:ArrayOfKeyValuePair"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="InsertDataResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="InsertDataResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="insertedRowsXml" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="UpdateData">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="keys" type="tns2:ArrayOfKeyValuePair"/>
          <xs:element minOccurs="0" maxOccurs="1" name="values"
type="tns2:ArrayOfKeyValuePair"/>
          <xs:element minOccurs="0" maxOccurs="1" name="oldValues"
type="tns2:ArrayOfKeyValuePair"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="UpdateDataResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="UpdateDataResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="updatedTableXml" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="FixupRow">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
```

```
            <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="keys" type="tns2:ArrayOfKeyValuePair"/>
            <xs:element minOccurs="0" maxOccurs="1" name="values"
type="tns2:ArrayOfKeyValuePair"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="FixupRowResponse">
      <xs:complexType>
         <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="FixupRowResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
            <xs:element minOccurs="1" maxOccurs="1" name="totalRowCount" type="xs:int"/>
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="DeleteData">
      <xs:complexType>
         <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="keys" type="tns2:ArrayOfKeyValuePair"/>
            <xs:element minOccurs="0" maxOccurs="1" name="oldValues"
type="tns2:ArrayOfKeyValuePair"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="DeleteDataResponse">
      <xs:complexType>
         <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="DeleteDataResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="1" maxOccurs="1" name="recordsDeleted" type="xs:int"/>
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="GetDistinctValues">
      <xs:complexType>
         <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="columnName" type="xs:string"/>
            <xs:element minOccurs="1" maxOccurs="1" name="maximumRows" type="xs:int"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="GetDistinctValuesResponse">
      <xs:complexType>
         <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="GetDistinctValuesResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="GetAutoSumValues">
      <xs:complexType>
         <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
```

```
            <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="autoSumFields"
type="tns2:ArrayOfString"/>
            <xs:element minOccurs="0" maxOccurs="1" name="autoSumFunctions"
type="tns2:ArrayOfString"/>
            <xs:element minOccurs="0" maxOccurs="1" name="restriction" type="xs:string"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAutoSumValuesResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="GetAutoSumValuesResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="values" type="tns2:ArrayOfAnyType"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetSearchData">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="source" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="sourceName" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="boundField" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="primaryDisplayField" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="secondaryDisplayField"
type="xs:string"/>
            <xs:element minOccurs="1" maxOccurs="1" name="maxResults" type="xs:int"/>
            <xs:element minOccurs="0" maxOccurs="1" name="userInput" type="xs:string"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetSearchDataResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="GetSearchDataResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="tableXml" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="RunDataMacro">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="moniker" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="macroName" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameterValues"
type="tns2:ArrayOfParameterValue"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="DataMacroInstance">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="ReturnVars"
type="tns2:ArrayOfKeyValuePair"/>
        </xs:sequence>
      </xs:complexType>
      <xs:element name="RunDataMacroResponse">
```

```xml
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="RunDataMacroResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="dataMacroInstance"
type="tns2:DataMacroInstance"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetUIMacroJavascript">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="parameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="macroName" type="xs:string"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetUIMacroJavascriptResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="GetUIMacroJavascriptResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="javascript" type="xs:base64Binary"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="CreateApplication">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:CreateApplicationParameters"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        <xs:element minOccurs="1" maxOccurs="1" name="waitForAppCreation" type="xs:boolean"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="CreateApplicationParameters">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceParameters">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="Collation" type="tns2:Collation"/>
          <xs:element minOccurs="0" maxOccurs="1" name="ProtocolVersionOptions"
type="tns2:ProtocolVersionList"/>
        </xs:sequence>
        <xs:attribute name="Name" type="xs:string"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="ServiceParameters"/>
  <xs:complexType name="Collation">
    <xs:attribute name="Culture" type="xs:string"/>
    <xs:attribute name="CaseSensitive" type="xs:boolean"/>
    <xs:attribute name="AccentSensitive" type="xs:boolean"/>
    <xs:attribute name="KanaSensitive" type="xs:boolean"/>
    <xs:attribute name="WidthSensitive" type="xs:boolean"/>
    <xs:attribute name="UseSupplementaryCharacters" type="xs:boolean" use="required"/>
  </xs:complexType>
  <xs:complexType name="ProtocolVersionList">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="ProtocolVersion"
type="xs:string"/>
```

```xml
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="ServiceResult">
      <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Warning" nillable="true"
type="tns2:ServiceWarning"/>
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="ServiceWarning">
      <xs:attribute name="Code" type="xs:string"/>
      <xs:attribute name="Message" type="xs:string"/>
    </xs:complexType>
    <xs:complexType name="CreateAppResult">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceResult">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="ApplicationUrl" type="xs:string"/>
          </xs:sequence>
          <xs:attribute name="ProtocolVersion" type="xs:string"/>
          <xs:attribute name="AlternateUrl" type="xs:string"/>
          <xs:attribute name="ApplicationCulture" type="xs:string"/>
          <xs:attribute name="DatabaseName" type="xs:string"/>
          <xs:attribute name="DataServerName" type="xs:string"/>
          <xs:attribute name="RequestIPAddress" type="xs:string"/>
          <xs:attribute name="IsFirewallRestricted" type="xs:boolean" use="required"/>
          <xs:attribute name="IsDataConnectivitySupported" type="xs:boolean" use="required"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="CreateApplicationResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="CreateApplicationResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:CreateAppResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetApplicationInformation">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetApplicationInformationParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="GetApplicationInformationParameters">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceParameters">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="ProtocolVersionOptions"
type="tns2:ProtocolVersionList"/>
            <xs:element minOccurs="0" maxOccurs="1" name="KnownObjects"
type="tns2:ObjectIdentityList"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="ObjectIdentityList">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="ObjectIdentity"
type="tns2:AccessObjectIdentity"/>
      </xs:sequence>
    </xs:complexType>
```

```
<xs:complexType name="AccessObjectIdentity">
  <xs:attribute name="ID" type="xs:int" use="required"/>
  <xs:attribute name="Version" type="xs:string"/>
</xs:complexType>
<xs:complexType name="IDList">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ID" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AccessObjectList">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AccessObject"
type="tns2:AccessObject"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AccessObject">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="ParentId" nillable="true" type="xs:int"/>
    <xs:element minOccurs="1" maxOccurs="1" name="Definition" nillable="true">
      <xs:complexType mixed="true">
        <xs:sequence>
          <xs:any/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="ID" type="xs:int" use="required"/>
  <xs:attribute name="Name" type="xs:string"/>
  <xs:attribute name="ObjectType" type="tns2:AccessObjectType" use="required"/>
  <xs:attribute name="Description" type="xs:string"/>
  <xs:attribute name="Version" type="xs:string"/>
</xs:complexType>
<xs:simpleType name="AccessObjectType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Unknown"/>
    <xs:enumeration value="Table"/>
    <xs:enumeration value="Query"/>
    <xs:enumeration value="DataMacro"/>
    <xs:enumeration value="Form"/>
    <xs:enumeration value="UIMacro"/>
    <xs:enumeration value="Report"/>
    <xs:enumeration value="Image"/>
    <xs:enumeration value="NavigationPane"/>
    <xs:enumeration value="AccessProperties"/>
    <xs:enumeration value="ApplicationVersion"/>
    <xs:enumeration value="ApplicationLogic"/>
    <xs:enumeration value="ApplicationStyle"/>
    <xs:enumeration value="LinkedTable"/>
    <xs:enumeration value="EmbeddedExpression"/>
    <xs:enumeration value="LinkedQuery"/>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="Query">
  <xs:complexContent mixed="false">
    <xs:extension base="tns2:AccessObject"/>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="Table">
  <xs:complexContent mixed="false">
    <xs:extension base="tns2:AccessObject"/>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="DataMacro">
  <xs:complexContent mixed="false">
    <xs:extension base="tns2:AccessObject"/>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="LinkedTable">
  <xs:complexContent mixed="false">
```

```xml
        <xs:extension base="tns2:AccessObject"/>
      </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="AccessStorageObject" abstract="true">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:AccessObject"/>
      </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="EmbeddedExpression">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:AccessStorageObject"/>
      </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="UIMacro">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:AccessStorageObject"/>
      </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="Form">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:AccessStorageObject"/>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetApplicationInformationResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="GetApplicationInformationResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:GetAppInfoResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="GetAppInfoResult">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceResult">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="Collation" type="tns2:Collation"/>
            <xs:element minOccurs="0" maxOccurs="1" name="NewObjects"
type="tns2:AccessObjectList"/>
            <xs:element minOccurs="0" maxOccurs="1" name="UpdatedObjects"
type="tns2:AccessObjectList"/>
            <xs:element minOccurs="0" maxOccurs="1" name="DeletedObjects" type="tns2:IDList"/>
          </xs:sequence>
          <xs:attribute name="ProtocolVersion" type="xs:string"/>
          <xs:attribute name="Name" type="xs:string"/>
          <xs:attribute name="AlternateUrl" type="xs:string"/>
          <xs:attribute name="Title" type="xs:string"/>
          <xs:attribute name="DatabaseName" type="xs:string"/>
          <xs:attribute name="DataServerName" type="xs:string"/>
          <xs:attribute name="ApplicationCulture" type="xs:string"/>
          <xs:attribute name="RequestIPAddress" type="xs:string"/>
          <xs:attribute name="IsDataMacroTracingOn" type="xs:boolean" use="required"/>
          <xs:attribute name="IsFirewallRestricted" type="xs:boolean" use="required"/>
          <xs:attribute name="IsDataConnectivitySupported" type="xs:boolean" use="required"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetAccessObject">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameters" type="tns2:GetParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

```xml
<xs:complexType name="GetParameters">
  <xs:complexContent mixed="false">
    <xs:extension base="tns2:ServiceParameters">
      <xs:attribute name="ProtocolVersion" type="xs:string"/>
      <xs:attribute name="ID" type="xs:int" use="required"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="GetAccessObjectResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetAccessObjectResult"
type="tns2:CommandResult"/>
      <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:GetResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:complexType name="GetResult">
  <xs:complexContent mixed="false">
    <xs:extension base="tns2:ServiceResult">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="Objects"
type="tns2:AccessObjectList"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="CreateAccessObject">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
      <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
      <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:CreateParameters"/>
      <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:complexType name="CreateParameters">
  <xs:complexContent mixed="false">
    <xs:extension base="tns2:ServiceParameters">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="ParameterObjects"
type="tns2:ParameterObjectList"/>
      </xs:sequence>
      <xs:attribute name="ProtocolVersion" type="xs:string"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="ParameterObjectList">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ParameterObject"
type="tns2:ParameterObject"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParameterObject">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Body">
      <xs:complexType mixed="true">
        <xs:sequence>
          <xs:any/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="Name" type="xs:string"/>
  <xs:attribute name="Description" type="xs:string"/>
```

```
          <xs:attribute name="ObjectType" type="tns2:AccessObjectType" use="required"/>
    </xs:complexType>
    <xs:complexType name="ServiceError">
      <xs:attribute name="Code" type="xs:string"/>
      <xs:attribute name="Message" type="xs:string"/>
      <xs:attribute name="CorrelationId" type="xs:string"/>
      <xs:attribute name="Timestamp" type="xs:string"/>
    </xs:complexType>
    <xs:element name="CreateAccessObjectResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="CreateAccessObjectResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:CreateResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="CreateResult">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceResult">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="Objects"
type="tns2:AccessObjectList"/>
            <xs:element minOccurs="1" maxOccurs="1" name="RefreshRequired" type="xs:boolean"/>
            <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="RenameAccessObject">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:RenameParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="RenameParameters">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceParameters">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="KnownObjects"
type="tns2:ObjectIdentityList"/>
            <xs:element minOccurs="0" maxOccurs="1" name="OpenObjects"
type="tns2:ObjectIdentityList"/>
          </xs:sequence>
          <xs:attribute name="ProtocolVersion" type="xs:string"/>
          <xs:attribute name="ID" type="xs:int" use="required"/>
          <xs:attribute name="ObjectVersion" type="xs:string"/>
          <xs:attribute name="Name" type="xs:string"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="RenameAccessObjectResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="RenameAccessObjectResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:RenameResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="RenameResult">
```

```
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="AccessObject"
type="tns2:AccessObject"/>
              <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
              <xs:element minOccurs="1" maxOccurs="1" name="UpdatedObjects" nillable="true"
type="tns2:AccessObjectList"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="UpdateAccessObject">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:UpdateParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="UpdateParameters">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceParameters">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="Body">
                <xs:complexType mixed="true">
                  <xs:sequence>
                    <xs:any/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
              <xs:element minOccurs="0" maxOccurs="1" name="KnownObjects"
type="tns2:ObjectIdentityList"/>
              <xs:element minOccurs="0" maxOccurs="1" name="OpenObjects"
type="tns2:ObjectIdentityList"/>
            </xs:sequence>
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute name="ID" type="xs:int" use="required"/>
            <xs:attribute name="ObjectVersion" type="xs:string"/>
            <xs:attribute name="Description" type="xs:string"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="UpdateAccessObjectResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="UpdateAccessObjectResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:UpdateResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="UpdateResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="Objects"
type="tns2:AccessObjectList"/>
              <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
              <xs:element minOccurs="1" maxOccurs="1" name="RefreshRequired" type="xs:boolean"/>
            </xs:sequence>
          </xs:extension>
```

```xml
            </xs:complexContent>
          </xs:complexType>
          <xs:element name="DeleteAccessObject">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
                <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
                <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:DeleteParameters"/>
                <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:complexType name="DeleteParameters">
            <xs:complexContent mixed="false">
              <xs:extension base="tns2:ServiceParameters">
                <xs:attribute name="ProtocolVersion" type="xs:string"/>
                <xs:attribute name="ID" type="xs:int" use="required"/>
                <xs:attribute name="ObjectVersion" type="xs:string"/>
              </xs:extension>
            </xs:complexContent>
          </xs:complexType>
          <xs:element name="DeleteAccessObjectResponse">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="DeleteAccessObjectResult"
type="tns2:CommandResult"/>
                <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:DeleteResult"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:complexType name="DeleteResult">
            <xs:complexContent mixed="false">
              <xs:extension base="tns2:ServiceResult">
                <xs:sequence>
                  <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
                  <xs:element minOccurs="0" maxOccurs="1" name="AccessObject"
type="tns2:AccessObject"/>
                </xs:sequence>
                <xs:attribute name="ID" type="xs:int" use="required"/>
              </xs:extension>
            </xs:complexContent>
          </xs:complexType>
          <xs:element name="SetDataMacroTracing">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
                <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
                <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:SetDataMacroTracingParameters"/>
                <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:complexType name="SetDataMacroTracingParameters">
            <xs:complexContent mixed="false">
              <xs:extension base="tns2:ServiceParameters">
                <xs:attribute name="ProtocolVersion" type="xs:string"/>
                <xs:attribute name="TurnTracingOn" type="xs:boolean" use="required"/>
              </xs:extension>
            </xs:complexContent>
          </xs:complexType>
          <xs:element name="SetDataMacroTracingResponse">
            <xs:complexType>
```

```
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="SetDataMacroTracingResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:SetDataMacroTracingResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="SetDataMacroTracingResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:attribute name="IsTracingOn" type="xs:boolean" use="required"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="GetLinkedTableInformation">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetLinkedTableInformationParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="GetLinkedTableInformationParameters">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceParameters">
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute xmlns:q2="http://microsoft.com/wsdl/types/" name="ListID"
type="q2:guid" use="required"/>
            <xs:attribute name="SiteUrl" type="xs:string"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="GetLinkedTableInformationResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="GetLinkedTableInformationResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetLinkedTableInformationResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="GetLinkedTableInformationResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="Objects"
type="tns2:AccessObjectList"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="RefreshLinkedTableInformation">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:RefreshLinkedTableInformationParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
```

```
        </xs:complexType>
      </xs:element>
      <xs:complexType name="RefreshLinkedTableInformationParameters">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceParameters">
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute name="ID" type="xs:int" use="required"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="RefreshLinkedTableInformationResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="RefreshLinkedTableInformationResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:RefreshLinkedTableInformationResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="RefreshLinkedTableInformationResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="Objects"
type="tns2:AccessObjectList"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="ImportData">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:ImportDataParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="ImportDataParameters">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceParameters">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="Body">
                <xs:complexType mixed="true">
                  <xs:sequence>
                    <xs:any/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute name="Version" type="xs:string"/>
            <xs:attribute name="TargetObjectID" type="xs:int" use="required"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="ImportDataResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="ImportDataResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:ImportDataResult"/>
          </xs:sequence>
        </xs:complexType>
```

```
      </xs:element>
    <xs:complexType name="ImportDataResult">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceResult">
          <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
          </xs:sequence>
          <xs:attribute name="RowsProcessed" type="xs:int" use="required"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="SetDataConnectivityStatus">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:SetDataConnectivityStatusParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="SetDataConnectivityStatusParameters">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceParameters">
          <xs:attribute name="ProtocolVersion" type="xs:string"/>
          <xs:attribute name="Permission" type="tns2:ConnectivityPermissionLevel"
use="required"/>
          <xs:attribute name="IsEnabled" type="xs:boolean" use="required"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:simpleType name="ConnectivityPermissionLevel">
      <xs:restriction base="xs:string">
        <xs:enumeration value="Reader"/>
        <xs:enumeration value="Writer"/>
      </xs:restriction>
    </xs:simpleType>
    <xs:complexType name="ConnectivityStatusInformation">
      <xs:attribute name="Permission" type="tns2:ConnectivityPermissionLevel" use="required"/>
      <xs:attribute name="IsEnabled" type="xs:boolean" use="required"/>
    </xs:complexType>
    <xs:element name="SetDataConnectivityStatusResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="SetDataConnectivityStatusResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:SetDataConnectivityStatusResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="SetDataConnectivityStatusResult">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceResult">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="ConnectivityStatusInformation"
type="tns2:ConnectivityStatusInformation"/>
            <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetDataConnectivityStatus">
      <xs:complexType>
```

```
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetDataConnectivityStatusParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="GetDataConnectivityStatusParameters">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceParameters">
          <xs:attribute name="ProtocolVersion" type="xs:string"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="ArrayOfConnectivityStatusInformation">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="ConnectivityStatusInformation"
nillable="true" type="tns2:ConnectivityStatusInformation"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="GetDataConnectivityStatusResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="GetDataConnectivityStatusResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetDataConnectivityStatusResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="GetDataConnectivityStatusResult">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceResult">
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="StatusInformations"
type="tns2:ArrayOfConnectivityStatusInformation"/>
            <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetDataConnectivity">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetDataConnectivityParameters"/>
          <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="GetDataConnectivityParameters">
      <xs:complexContent mixed="false">
        <xs:extension base="tns2:ServiceParameters">
          <xs:attribute name="ProtocolVersion" type="xs:string"/>
          <xs:attribute name="Permission" type="tns2:ConnectivityPermissionLevel"
use="required"/>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetDataConnectivityResponse">
```

```xml
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="GetDataConnectivityResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetDataConnectivityResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="GetDataConnectivityResult">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceResult">
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
        </xs:sequence>
        <xs:attribute name="UserName" type="xs:string"/>
        <xs:attribute name="Password" type="xs:string"/>
        <xs:attribute name="Permission" type="tns2:ConnectivityPermissionLevel"
use="required"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetFirewallRules">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:GetFirewallRulesParameters"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="GetFirewallRulesParameters">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceParameters">
        <xs:attribute name="ProtocolVersion" type="xs:string"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="FirewallRule">
    <xs:attribute name="StartIPAddress" type="xs:string"/>
    <xs:attribute name="EndIPAddress" type="xs:string"/>
  </xs:complexType>
  <xs:complexType name="ArrayOfFirewallRule">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="FirewallRule" nillable="true"
type="tns2:FirewallRule"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="GetFirewallRulesResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="GetFirewallRulesResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:GetFirewallRulesResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="GetFirewallRulesResult">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceResult">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="FirewallRules"
type="tns2:ArrayOfFirewallRule"/>
```

```
          <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="AddFirewallRule">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:AddFirewallRuleParameters"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="AddFirewallRuleParameters">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceParameters">
        <xs:attribute name="ProtocolVersion" type="xs:string"/>
        <xs:attribute name="StartIPAddress" type="xs:string"/>
        <xs:attribute name="EndIPAddress" type="xs:string"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="AddFirewallRuleResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="AddFirewallRuleResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:AddFirewallRuleResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="AddFirewallRuleResult">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceResult">
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
        </xs:sequence>
        <xs:attribute name="RuleName" type="xs:string"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="DeleteFirewallRules">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:DeleteFirewallRulesParameters"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="DeleteFirewallRulesParameters">
    <xs:complexContent mixed="false">
      <xs:extension base="tns2:ServiceParameters">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="SpecifiedFirewallRules"
type="tns2:FirewallRulesList"/>
        </xs:sequence>
```

```xml
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute name="DeleteOption" type="tns2:DeleteFirewallRulesOption"
use="required"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:complexType name="FirewallRulesList">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="FirewallRule"
type="tns2:FirewallRule"/>
        </xs:sequence>
      </xs:complexType>
      <xs:simpleType name="DeleteFirewallRulesOption">
        <xs:restriction base="xs:string">
          <xs:enumeration value="Specified"/>
          <xs:enumeration value="All"/>
        </xs:restriction>
      </xs:simpleType>
      <xs:element name="DeleteFirewallRulesResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="DeleteFirewallRulesResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:DeleteFirewallRulesResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="DeleteFirewallRulesResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="1" maxOccurs="1" name="Error" nillable="true"
type="tns2:ServiceError"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="CreatePackage">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="parameters"
type="tns2:CreatePackageParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="CreatePackageParameters">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceParameters">
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute name="Title" type="xs:string"/>
            <xs:attribute name="Data" type="xs:boolean" use="required"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="CreatePackageResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="CreatePackageResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result"
type="tns2:CreatePackageResult"/>
          </xs:sequence>
        </xs:complexType>
```

```xml
        </xs:element>
      <xs:complexType name="CreatePackageResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="PackageId" type="xs:string"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="GetPackage">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="container" type="xs:string"/>
            <xs:element minOccurs="0" maxOccurs="1" name="packageParams"
type="tns2:GetPackageParameters"/>
            <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="userCookieId" type="q2:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="GetPackageParameters">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceParameters">
            <xs:attribute name="ProtocolVersion" type="xs:string"/>
            <xs:attribute name="PackageId" type="xs:string"/>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:element name="GetPackageResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="GetPackageResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="0" maxOccurs="1" name="result" type="tns2:GetPackageResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="GetPackageResult">
        <xs:complexContent mixed="false">
          <xs:extension base="tns2:ServiceResult">
            <xs:sequence>
              <xs:element minOccurs="1" maxOccurs="1" name="Status" type="tns2:PackageStatus"/>
              <xs:element minOccurs="0" maxOccurs="1" name="Data" type="xs:string"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
      <xs:simpleType name="PackageStatus">
        <xs:restriction base="xs:string">
          <xs:enumeration value="Creating"/>
          <xs:enumeration value="Created"/>
        </xs:restriction>
      </xs:simpleType>
      <xs:element name="GetAvailableServer">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="1" maxOccurs="1" name="authMode"
type="tns2:SqlAuthenticationMode"/>
            <xs:element minOccurs="1" maxOccurs="1" name="packageSource"
type="tns2:PackageSource"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:simpleType name="SqlAuthenticationMode">
```

```xml
            <xs:restriction base="xs:string">
              <xs:enumeration value="SqlServerAuth"/>
              <xs:enumeration value="SqlServerAuthOrWindowsAuth"/>
            </xs:restriction>
          </xs:simpleType>
          <xs:simpleType name="PackageSource">
            <xs:restriction base="xs:string">
              <xs:enumeration value="InvalidSource"/>
              <xs:enumeration value="Marketplace"/>
              <xs:enumeration value="CorporateCatalog"/>
              <xs:enumeration value="DeveloperSite"/>
              <xs:enumeration value="ObjectModel"/>
              <xs:enumeration value="RemoteObjectModel"/>
            </xs:restriction>
          </xs:simpleType>
          <xs:complexType name="ServerContext">
            <xs:sequence>
              <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="ServerReferenceId" type="q2:guid"/>
              <xs:element minOccurs="0" maxOccurs="1" name="MasterCredential"
type="tns2:NetworkCredential"/>
            </xs:sequence>
          </xs:complexType>
          <xs:complexType name="NetworkCredential">
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="UserName" type="xs:string"/>
              <xs:element minOccurs="0" maxOccurs="1" name="Password" type="xs:string"/>
              <xs:element minOccurs="0" maxOccurs="1" name="SecurePassword"
type="tns2:SecureString"/>
              <xs:element minOccurs="0" maxOccurs="1" name="Domain" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
          <xs:complexType name="SecureString"/>
          <xs:element name="GetAvailableServerResponse">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="GetAvailableServerResult"
type="tns2:CommandResult"/>
                <xs:element minOccurs="0" maxOccurs="1" name="serverContext"
type="tns2:ServerContext"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:element name="GetServerName">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
                <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="serverReferenceId" type="q2:guid"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:element name="GetServerNameResponse">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="GetServerNameResult"
type="tns2:CommandResult"/>
                <xs:element minOccurs="0" maxOccurs="1" name="serverName" type="xs:string"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:element name="ProvisionDatabase">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
                <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
```

```
          <xs:element minOccurs="0" maxOccurs="1" name="encodedDac" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:complexType name="DatabaseContext">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="Server" type="tns2:ServerContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DatabaseName" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="PackageSource"
type="tns2:PackageSource"/>
        <xs:element minOccurs="0" maxOccurs="1" name="PackageType" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Collation" type="xs:string"/>
        <xs:element minOccurs="1" maxOccurs="1" name="InstallationLocaleId" type="xs:int"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="SiteId" type="q2:guid"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="SiteSubscriptionId" type="q2:guid"/>
        <xs:element xmlns:q2="http://microsoft.com/wsdl/types/" minOccurs="1" maxOccurs="1"
name="AppInstanceId" type="q2:guid"/>
        <xs:element minOccurs="0" maxOccurs="1" name="TimeZone" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DatabaseSize" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
    <xs:complexType name="ProvisionedDatabaseContext">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="DatabaseContext"
type="tns2:DatabaseContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="DboCredential"
type="tns2:NetworkCredential"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LoginCredential"
type="tns2:NetworkCredential"/>
        <xs:element minOccurs="0" maxOccurs="1" name="AccessAccount" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="Password" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="LoginPassword" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ProvisionDatabaseResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="ProvisionDatabaseResult"
type="tns2:CommandResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="provisionedDatabaseContext"
type="tns2:ProvisionedDatabaseContext"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="UnprovisionDatabase">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
          <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
          <xs:element minOccurs="1" maxOccurs="1" name="dropLogin" type="xs:boolean"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="UnprovisionDatabaseResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="UnprovisionDatabaseResult"
type="tns2:CommandResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="ExecuteDacIncrementalUpgrade">
      <xs:complexType>
        <xs:sequence>
```

```
      <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="loginName" type="xs:string"/>
        <xs:element minOccurs="0" maxOccurs="1" name="encodedDac" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ExecuteDacIncrementalUpgradeResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="ExecuteDacIncrementalUpgradeResult"
type="tns2:CommandResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="CopyDatabase">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="originalDatabaseContext"
type="tns2:DatabaseContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="copyDatabaseName" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="CopyDatabaseResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="CopyDatabaseResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="0" maxOccurs="1" name="provisionedDatabaseContext"
type="tns2:ProvisionedDatabaseContext"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="CheckCopyStatus">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="sourceDatabase"
type="tns2:DatabaseContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="destinationDatabase"
type="tns2:DatabaseContext"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="CheckCopyStatusResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="CheckCopyStatusResult"
type="tns2:CommandResult"/>
        <xs:element minOccurs="1" maxOccurs="1" name="copyStatus" type="xs:unsignedByte"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="RenameDatabase">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="newDatabaseName" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
```

```xml
      </xs:element>
      <xs:element name="RenameDatabaseResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="RenameDatabaseResult"
type="tns2:CommandResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="DatabaseExists">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="DatabaseExistsResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="DatabaseExistsResult"
type="tns2:CommandResult"/>
            <xs:element minOccurs="1" maxOccurs="1" name="exists" type="xs:boolean"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="SetReadWrite">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
            <xs:element minOccurs="1" maxOccurs="1" name="readWrite"
type="tns2:DatabaseReadWriteState"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:simpleType name="DatabaseReadWriteState">
        <xs:restriction base="xs:string">
          <xs:enumeration value="Read"/>
          <xs:enumeration value="ReadWrite"/>
        </xs:restriction>
      </xs:simpleType>
      <xs:element name="SetReadWriteResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="SetReadWriteResult"
type="tns2:CommandResult"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="SetEnableDisableDatabase">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
            <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
            <xs:element minOccurs="1" maxOccurs="1" name="enableDisable"
type="tns2:DatabaseEnableDisableState"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:simpleType name="DatabaseEnableDisableState">
        <xs:restriction base="xs:string">
          <xs:enumeration value="Enable"/>
```

```xml
          <xs:enumeration value="Disable"/>
      </xs:restriction>
  </xs:simpleType>
  <xs:element name="SetEnableDisableDatabaseResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="SetEnableDisableDatabaseResult"
type="tns2:CommandResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="UpdateDatabaseConfiguration">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="commandParameter"
type="tns2:CommandParameter"/>
        <xs:element minOccurs="0" maxOccurs="1" name="databaseContext"
type="tns2:DatabaseContext"/>
        <xs:element minOccurs="0" maxOccurs="1" name="databaseSize" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="UpdateDatabaseConfigurationResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="UpdateDatabaseConfigurationResult"
type="tns2:CommandResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

7.4   http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database Schema

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database"
elementFormDefault="qualified"
targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Access.Services.Database" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="DatabaseProviderError">
    <xs:restriction base="xs:string">
      <xs:enumeration value="UndefinedError"/>
      <xs:enumeration value="ServiceContextError"/>
      <xs:enumeration value="InvalidArgument"/>
      <xs:enumeration value="NotSupported"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="DatabaseProviderError" nillable="true" type="tns:DatabaseProviderError"/>
</xs:schema>
```

7.5   http://schemas.microsoft.com/2003/10/Serialization/Arrays Schema

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="ArrayOfKeyValueOfstringstring">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValueOfstringstring">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Key" nillable="true" type="xs:string"/>
```

```
            <xs:element name="Value" nillable="true" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfKeyValueOfstringstring" nillable="true"
type="q1:ArrayOfKeyValueOfstringstring"/>
</xs:schema>
```

7.6 **http://schemas.microsoft.com/2003/10/Serialization/ Schema**

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
attributeFormDefault="qualified" elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="anyType" nillable="true" type="xs:anyType"/>
  <xs:element name="anyURI" nillable="true" type="xs:anyURI"/>
  <xs:element name="base64Binary" nillable="true" type="xs:base64Binary"/>
  <xs:element name="boolean" nillable="true" type="xs:boolean"/>
  <xs:element name="byte" nillable="true" type="xs:byte"/>
  <xs:element name="dateTime" nillable="true" type="xs:dateTime"/>
  <xs:element name="decimal" nillable="true" type="xs:decimal"/>
  <xs:element name="double" nillable="true" type="xs:double"/>
  <xs:element name="float" nillable="true" type="xs:float"/>
  <xs:element name="int" nillable="true" type="xs:int"/>
  <xs:element name="long" nillable="true" type="xs:long"/>
  <xs:element name="QName" nillable="true" type="xs:QName"/>
  <xs:element name="short" nillable="true" type="xs:short"/>
  <xs:element name="string" nillable="true" type="xs:string"/>
  <xs:element name="unsignedByte" nillable="true" type="xs:unsignedByte"/>
  <xs:element name="unsignedInt" nillable="true" type="xs:unsignedInt"/>
  <xs:element name="unsignedLong" nillable="true" type="xs:unsignedLong"/>
  <xs:element name="unsignedShort" nillable="true" type="xs:unsignedShort"/>
  <xs:element name="char" nillable="true" type="ser:char"/>
  <xs:simpleType name="char">
    <xs:restriction base="xs:int"/>
  </xs:simpleType>
  <xs:element name="duration" nillable="true" type="ser:duration"/>
  <xs:simpleType name="duration">
    <xs:restriction base="xs:duration">
      <xs:pattern value="\-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?"/>
      <xs:minInclusive value="-P10675199DT2H48M5.4775808S"/>
      <xs:maxInclusive value="P10675199DT2H48M5.4775807S"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="guid" nillable="true" type="ser:guid"/>
  <xs:simpleType name="guid">
    <xs:restriction base="xs:string">
      <xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-
F]{12}"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:attribute name="FactoryType" type="xs:QName"/>
  <xs:attribute name="Id" type="xs:ID"/>
  <xs:attribute name="Ref" type="xs:IDREF"/>
</xs:schema>
```

8   Appendix C: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs.

- Microsoft Access 2013

- Microsoft SharePoint Server 2013

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms "SHOULD" or "SHOULD NOT" implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term "MAY" implies that the product does not follow the prescription.

<1> Section 2.2.5.6: Microsoft Access Services assumes that a localized version of the string will be displayed to a user.

9   Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

10 Index