[MS-SPASA]:

SharePoint Analytics Service Application Protocol

Revision Summary

Date	Revision History	Revision Class	Comments
1/20/2012	0.1	New	Released new document.
4/11/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
7/16/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
9/12/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
10/8/2012	1.0	Major	Significantly changed the technical content.
2/11/2013	1.0	None	No changes to the meaning, language, or formatting of the technical content.
7/30/2013	1.0	None	No changes to the meaning, language, or formatting of the technical content.
11/18/2013	1.0	None	No changes to the meaning, language, or formatting of the technical content.
2/10/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
4/30/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
7/31/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
10/30/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
2/26/2016	2.0	Major	Significantly changed the technical content.
7/15/2016	2.0	None	No changes to the meaning, language, or formatting of the technical content.
9/14/2016	2.0	None	No changes to the meaning, language, or formatting of the technical content.
6/20/2017	3.0	Major	Significantly changed the technical content.
9/19/2017	4.0	Major	Significantly changed the technical content.
7/24/2018	5.0	Major	Significantly changed the technical content.
10/1/2018	6.0	Major	Significantly changed the technical content.

Table of Contents

1   Introduction

A protocol client uses the SharePoint Analytics Service Application Protocol to send usage events for processing by a protocol server and to retrieve aggregated usage information from a protocol server.

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:

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).

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].

rollup: A type of calculated value that is derived from the aggregated scores of child or descendant key performance indicators (KPIs) in a scorecard.

search query: A complete set of conditions that are used to generate search results, including query text, sort order, and ranking parameters.

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.

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.

tenant: A protocol client or protocol server that accesses a partition in a shared service database.

timestamp: A condition of a digital signature that indicates whether the signature was created with a valid certificate that has expired or was created with a certificate that had expired already. If the certificate expired after the signature was created, the signature can be trusted. If it expired before the signature was created, it cannot be trusted.

Transmission Control Protocol (TCP): A protocol used with the Internet Protocol (IP) to send data in the form of message units between computers over the Internet. TCP handles keeping track of the individual units of data (called packets) that a message is divided into for efficient routing through the Internet.

Unicode: A character encoding standard developed by the Unicode Consortium that represents almost all of the written languages of the world. The **Unicode** standard [UNICODE5.0.0/2007] provides three forms (UTF-8, UTF-16, and UTF-32) and seven schemes (UTF-8, UTF-16, UTF-16 BE, UTF-16 LE, UTF-32, UTF-32 LE, and UTF-32 BE).

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.

website: (1) A group of related webpages that is hosted by a server on the World Wide Web or an intranet. Each website has its own entry points, metadata, administration settings, and workflows. Also referred to as site.

(2) 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 site.

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

[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

[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

[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/

[XMLSCHEMA1/2] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-1-20041028/

[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/

[XMLSCHEMA2/2] Biron, P., and Malhotra, A., Eds., "XML Schema Part 2: Datatypes Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/

[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/

1.2.2 Informative References

[MS-SPTWS] Microsoft Corporation, "Service Platform Topology Web Service Protocol".

1.3 Overview

This protocol enables a protocol client to send usage events to the protocol server. The protocol server performs implementation specific aggregation of those events and produces historical usage information based on those events. This protocol further enables a protocol client to retrieve the aggregated usage information from the protocol server. A typical scenario for using this protocol is a reporting application that allows the users to visualize the usage of an item during its lifetime.

1.4 Relationship to Other Protocols

This protocol uses the **SOAP** message protocol for formatting request and response messages, as described in [SOAP1.1], [SOAP1.2/1] and [SOAP1.2/2]. It transmits those messages by using **HTTP**,

as described in [RFC2616], or **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as described in [RFC2818].

The following diagram shows the underlying messaging and transport stack used by the protocol:
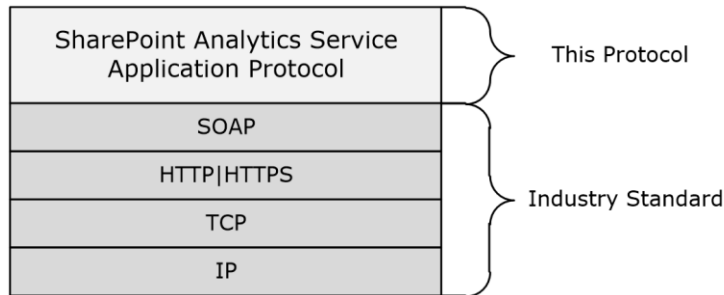
Figure 1: This protocol in relation to other protocols

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 appropriate 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 intended for use by protocol clients and protocol servers that are connected by high-bandwidth, low-latency network connections.

The methods for sending data were designed to work with batches of 100 or fewer events.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

▪ **Supported Transports:** This protocol can be implemented by using transports that support sending SOAP messages, as specified in section 2.1.

▪ **Protocol Versions:** This protocol is not versioned.

▪ **Capability Negotiation:** This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

None.

1.9   Standards Assignments

None.

2 Messages

2.1 Transport

Protocol servers MUST support **SOAP** over **HTTP**, **HTTPS**, or **TCP**.

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

Protocol messages MUST be formatted as specified in either [SOAP1.1] section 4 or [SOAP1.2/1] section 5. Protocol server faults MUST be returned by using HTTP status codes, as specified in [RFC2616] section 10, or **SOAP faults**, as specified in [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 can transmit an additional SOAP header, the ServiceContext header, as described in [MS-SPSTWS].

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 server—for example, the SOAP format over an HTTP transport.

2.2 Common Message Syntax

This section contains common structures used by this protocol. The syntax of the structures uses **XML schema**, as specified in [XMLSCHEMA1] and [XMLSCHEMA2], and WSDL, as specified in [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://www.microsoft.com/sharepoint/search/KnownTypes/2011/01	
q27	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09	
q36	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05	
ser	http://schemas.microsoft.com/2003/10/Serialization/	
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tns	http://tempuri.org/	
tns1	http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics	
tns2	http://schemas.microsoft.com/2003/10/Serialization/Arrays	
tns3	http://tempuri.org/Imports	
wsaw	http://www.w3.org/2006/05/addressing/wsdl	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]

Prefix	Namespace URI	Reference
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1/2] [XMLSCHEMA2/2]

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
AnalyticsEventTypeDefinition	The **AnalyticsEventTypeDefinition** complex type defines an analytics event.
AnalyticsItemData	The **AnalyticsItemData** complex type defines the analytics usage data associated with an item or **rollup** scope.
AnalyticsTenantSettingsData	The **AnalyticsTenantSettingsData** complex type defines the analytics configuration settings for a **tenant**.
AnalyticsUsageEvent	A usage event.
ArrayOfAnalyticsItemData	The **ArrayOfAnalyticsItemData** complex type defines a list of **AnalyticsItemData** elements.
ArrayOfAnalyticsUsageEvent	A list of usage events.
ArrayOfint	The **ArrayOfint** complex type defines an array of integers.

2.2.4.1 AnalyticsEventTypeDefinition

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

The **AnalyticsEventTypeDefinition** complex type defines an analytics event.

```
<xs:complexType name="AnalyticsEventTypeDefinition"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="AggregationType" type="tns1:EventCountType"/>
    <xs:element minOccurs="0" name="AppEventTypeId" type="ser:guid"/>
    <xs:element minOccurs="0" name="ApplicationName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
```

```
            <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Options" type="tns1:EventOptions"/>
            <xs:element minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
            <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
            <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
            <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Rollups" type="tns1:EventRollups"/>
            <xs:element minOccurs="0" name="TailTrimming" type="xs:int"/>
            <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
        </xs:sequence>
</xs:complexType>
```

AggregationType: The type of aggregation to use for this event type.

AppEventTypeId: The identifier of the application registering the event type.

ApplicationName: The name of the application registering the event type.

EventName: The human-readable name of the event type.

EventTypeId: The identifier of the event type.

Options: Additional options for this event type.

RecentPopularityTimeframe: The timeframe for recent popularity for the event type.

RecommendationWeight: The weight this event type is given when considered for calculating recommended items.

RelevanceWeight: The weight this event type is given when considered for calculating relevant items.

Rollups: The **rollup** aggregations that can be calculated for this event type.

TailTrimming: The minimum number of events required to be considered at all for aggregations.

TenantId: The identifier of the **tenant** associated with this event type.

2.2.4.2 AnalyticsItemData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

The **AnalyticsItemData** complex type defines the analytics usage data associated with an item or **rollup** scope.

```
    <xs:complexType name="AnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:sequence>
        <xs:element minOccurs="0" name="CurrentDate" type="xs:dateTime"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DailyHits" nillable="true" type="tns2:ArrayOfint"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DailyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
        <xs:element minOccurs="0" name="EventType" type="xs:int"/>
        <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="LastProcessingHits" type="xs:int"/>
        <xs:element minOccurs="0" name="LastProcessingTime" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="LastProcessingUniqueUsers" type="xs:int"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="MonthlyHits" nillable="true" type="tns2:ArrayOfint"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="MonthlyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
```

```
            <xs:element minOccurs="0" name="ScopeId" nillable="true" type="ser:guid"/>
            <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
            <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
            <xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
            <xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
        </xs:sequence>
    </xs:complexType>
```

CurrentDate: The date when the analytics usage data was retrieved.

DailyHits: The raw historical hit data by day for the item or rollup scope.

DailyUniqueUsers: The raw historical unique user data by day for the item or rollup scope.

EventType: The identifier of the event type.

ItemId: The identifier of the item.

LastProcessingHits: The hit count for the associated item in the last processing interval.

LastProcessingTime: The last time that events for the associated item were aggregated.

LastProcessingUniqueUsers: The unique user count for the associated item in the last processing interval.

MonthlyHits: The raw historical hit data by month for the item or rollup scope.

MonthlyUniqueUsers: The raw historical unique user data by month for the item or rollup scope.

ScopeId: The identifier of an application-specific rollup scope.

SiteId: The identifier of the **Web site (2)**.

TenantId: The identifier of the **tenant**.

TotalHits: The lifetime hit count.

TotalUniqueUsers: The lifetime unique user count.

2.2.4.3 AnalyticsTenantSettingsData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

The **AnalyticsTenantSettingsData** complex type defines the analytics configuration settings for a **tenant**.

```
    <xs:complexType name="AnalyticsTenantSettingsData"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:sequence>
        <xs:element minOccurs="0" name="EventFilters" nillable="true" type="xs:base64Binary"/>
        <xs:element minOccurs="0" name="EventTypeDefinitions" nillable="true"
type="xs:base64Binary"/>
        <xs:element minOccurs="0" name="LastUpdateTime" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="Options" type="q27:AnalyticsTenantSettingOptions"/>
        <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
        <xs:element minOccurs="0" name="Version" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
```

EventFilters: A serialized collection of all event filters for this tenant.

EventTypeDefinitions: A serialized collection of event type definitions for this tenant.

LastUpdateTime: A timestamp of the most recent time the configuration settings for the tenant were updated.

Options: Configuration options for the tenant. This MUST be a combination of one or more of the values defined in the **AnalyticsTenantSettingOptions** simple type, as specified in Section 2.2.5.1.

TenantId: The identifier of the tenant.

Version: The version number of the settings.

2.2.4.4 AnalyticsUsageEvent

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A usage event.

```
<xs:complexType name="AnalyticsUsageEvent" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="CustomData" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
    <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ScopeId" type="ser:guid"/>
    <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TimeStamp" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="UserId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="UserIdRaw" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Weight" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

CustomData: Reserved. MUST be NULL.

EventTypeId: The identifier of the event type of this event.

ItemId: The identifier of the item associated with this event.

ScopeId: The identifier of an application-specific **rollup** scope.

SessionId: The identifier of the user session.

SiteId: The identifier for the **Web site (2)**.

TenantId: The identifier for the **tenant**.

TimeStamp: The timestamp when the event occurred.

UserId: The identifier of the user that triggered the associated event.

UserIdRaw: The non-hashed identifier of the user that triggered the associated event.

Weight: This is reserved and SHOULD be 1, but it MAY be used to indicate the number of times this event occurred repeatedly.

2.2.4.5 ArrayOfAnalyticsItemData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

The **ArrayOfAnalyticsItemData** complex type defines a list of **AnalyticsItemData** elements.

```
<xs:complexType name="ArrayOfAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsItemData" nillable="true"
type="q1:AnalyticsItemData"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsItemData: Analytics usage data associated with an item or **rollup** scope.

2.2.4.6 ArrayOfAnalyticsUsageEvent

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A list of usage events.

```
<xs:complexType name="ArrayOfAnalyticsUsageEvent"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsUsageEvent"
nillable="true" type="q1:AnalyticsUsageEvent"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsUsageEvent: A usage event.

2.2.4.7 ArrayOfint

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

The **ArrayOfint** complex type defines an array of integers.

```
<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 integer.

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
AnalyticsTenantSettingOptions	The **AnalyticsTenantSettingOptions** simple type defines options for tenant settings.
char	The **char** simple type represents a **Unicode** character.
duration	The **duration** simple type specifies the time interval or duration of time measured as positive or negative number of days, hours, minutes, seconds and fractions of a second.

Simple type	Description
EventCountType	The **EventCountType** simple type defines the type of aggregation for an event type.
EventOptions	The **EventOptions** simple type defines additional options for an event type.
EventRollups	The **EventRollups** simple type defines the **rollup** aggregations that can be calculated.
guid	The **guid** simple type contains an identifier that is globally unique.

2.2.5.1 AnalyticsTenantSettingOptions

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

The **AnalyticsTenantSettingOptions** simple type defines options for tenant settings.

The **AnalyticsTenantSettingOptions** MUST be a combination of one or more of the values in the following table:

Value	Meaning
None	The Analytics Tenant Setting is not specified.
AnalyticsDisabled	The Analytics Tenant Setting is disabled.
DoNotHashUserName	The Analytics Tenant Setting does not hash user name.

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

2.2.5.2 char

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

The **char** simple type represents a **Unicode** character.

```
<xs:simpleType name="char" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:int"/>
</xs:simpleType>
```

2.2.5.3 duration

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

The **duration** simple type specifies the time interval or duration of time measured as positive or negative number of days, hours, minutes, seconds and fractions of a second.

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

2.2.5.4 EventCountType

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

The **EventCountType** simple type defines the type of aggregation for an event type.

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

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

Value	Meaning
Count	Aggregate by raw count.
UniqueUsers	Aggregate by the number of unique users.

2.2.5.5 EventOptions

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

The **EventOptions** simple type defines additional options for an event type.

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

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

Value	Meaning
None	No options are specified.

Value	Meaning
AllowAnonymousWrite	Allow anonymous users to generate events of this event type.

2.2.5.6 EventRollups

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

The **EventRollups** simple type defines the **rollup** aggregations that can be calculated.

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

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

Value	Meaning
SiteSubscriptionId	Site-subscription-level aggregation
SiteId	Site-level aggregation
ScopeId	Scope-level aggregation

2.2.5.7 guid

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

The **guid** simple type contains an identifier that is globally unique.

```
<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>
```

2.2.6 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.

3   Protocol Details

In the following sections, the schema definition might be less restrictive than the processing rules imposed by the protocol. The WSDL in the 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 protocol 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**, **present** and **not null**.

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 made by the higher-layer protocol or application are passed directly to the transport and the results returned by the transport are passed directly back to the higher-layer protocol or application.

Except where specified, protocol clients SHOULD interpret 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 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

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this document.

The protocol server receives usage events, which represent actions performed on the protocol client; for example, a view event on a **Web site (2)**. An event includes, among other things, an event type and an associated item.

The protocol server maintains an event store, which provides persistent storage for events received by the protocol server.

The protocol server maintains various configuration settings for each **tenant**. These settings include, among other things, a collection of definitions of event types. Some of the event types are predefined by the protocol server, such as Views; whereas other event types are registered for use by specific applications on the protocol client.

The protocol server aggregates the events in the event store and stores the results of the processing in an aggregation store. The aggregation store keeps historic aggregated count of events of each event type for each item, as well as recommendations (related items), it determines based on the usage events.

The protocol server also stores historic aggregated counts of search-related events for **search queries**, such as how many times a search query was issued.

The protocol server also aggregates usage data by combining the events for multiple items from the same **rollup** scope, for example, items from the same Web site (2). Rollup scopes can be global, tenant, site, or specified by the application logging the event.

3.1.2 Timers

None.

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
DeleteAllUsageDataForTenant	Initiates the deletion of aggregated data for a specified tenant.
DeleteCustomEventUsageDataForSite	Initiates the deletion of aggregated data for a specified **Web site (2)** for an application-specific event type.
DeleteCustomEventUsageDataForTenant	Initiates the deletion of aggregated data for a specified **tenant** for an application-specific event type.
DeleteRecommendationsDataForTenant	Initiates the deletion of aggregated recommendations for the specified tenant.
DeleteStandardEventUsageDataForSite	Initiates the deletion of aggregated data for a specified Web site (2) for a predefined event type.
DeleteStandardEventUsageDataForTenant	Initiates the deletion of aggregated data for a specified tenant for a predefined event type.
GetAnalyticsEventTypeDefinition	Retrieves the definition of an event type for the specified tenant.
GetAnalyticsEventTypeDefinitions	Retrieves a filtered set of definitions of event types for the specified tenant.
GetAnalyticsItemData	Retrieves aggregated usage data for a specified item for a specified event type.
GetAnalyticsItemsData	Retrieves aggregated usage data for multiple specified items for a specified event type.
GetAnalyticsTenantConfiguration	Retrieves the configuration settings for a specified tenant.
GetGlobalAnalyticsItemDataBatch	Retrieves aggregated usage data for multiple items for a specified event type and a specified scope that have been processed since a specified time.
GetQueryTermsForUser	Retrieves **search queries** for a specified user.
GetRawAnalyticsTenantSettingsBatch	Retrieves the configuration settings for multiple tenants.
GetRawAnayticsTenantSettings	Retrieves the configuration settings for a specified tenant.
GetRollupAnalyticsItemData	Retrieves aggregated usage data for a **rollup** scope for events of a specified event type.
GetSearchReport	Retrieves the aggregated top occurrences for the specified search event type within a scope.
GetTenantAnalyticsItemData	Retrieves aggregated usage data for a tenant for events of a

Operation	Description
	specified event type.
SendAnalyticsUsageEvents	Sends usage events to the protocol server.
SendAnalyticsUsageEventsToEventStore	Sends a list of analytics usage events into the event store.
UpsertRawAnalyticsTenantSettings	Updates the configuration settings for a specified tenant.

3.1.4.1 DeleteAllUsageDataForTenant

Initiates the deletion of aggregated data for a specified tenant.

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

```
<wsdl:operation name="DeleteAllUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns:IAnalyticsServiceApplication DeleteAllUsageDataForTenant InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTenantRespo
nse" message="tns:IAnalyticsServiceApplication DeleteAllUsageDataForTenant OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage WSDL message
and the protocol server responds with an
IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage WSDL message
as follows:

▪ The protocol server initiates the deletion of aggregated data for the specified **tenantId**. For
example, the protocol server might synchronously delete the relevant aggregated data, or it might
queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.1.1 Messages

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

Message	Description
IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage	The request WSDL message for the **DeleteAllUsageDataForTenant WSDL operation**.
IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage	The response WSDL message for the **DeleteAllUsageDataForTenant** WSDL operation.

3.1.4.1.1.1 IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTenant
```

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

3.1.4.1.1.2 IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage

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

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

3.1.4.1.2 Elements

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

Element	Description
DeleteAllUsageDataForTenant	The input data for the **DeleteAllUsageDataForTenant WSDL operation**.
DeleteAllUsageDataForTenantResponse	The result data for the **DeleteAllUsageDataForTenant** WSDL operation.

3.1.4.1.2.1 DeleteAllUsageDataForTenant

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

```
<xs:element name="DeleteAllUsageDataForTenant" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

3.1.4.1.2.2 DeleteAllUsageDataForTenantResponse

The **DeleteAllUsageDataForTenantResponse** element specifies the result data for the **DeleteAllUsageDataForTenant WSDL operation**.

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

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

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 DeleteCustomEventUsageDataForSite

Initiates the deletion of aggregated data for a specified **Web site (2)** for an application-specific event type.

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

```
<wsdl:operation name="DeleteCustomEventUsageDataForSite"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForSit
e" message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForSit
eResponse"
message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage WSDL message as follows:

- The protocol server initiates the deletion of aggregated data on the Web site (2) corresponding to the specified **tenantId** and **siteId** for the application-specific event type corresponding to the specified **appEventTypeId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.2.1 Messages

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

Message	Description
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_ InputMessage	The request WSDL message for the **DeleteCustomEventUsageData ForSite WSDL operation**.
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_ OutputMessage	The response WSDL message for the **DeleteCustomEventUsageData ForSite** WSDL operation.

3.1.4.2.1.1 IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_Inpu tMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForSite
```

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

3.1.4.2.1.2 IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_Out putMessage

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

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

3.1.4.2.2 Elements

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

Element	Description
DeleteCustomEventUsageDataForSite	The input data for the **DeleteCustomEventUsageDataForSite WSDL operation**.
DeleteCustomEventUsageDataForSiteResponse	The result data for the **DeleteCustomEventUsageDataForSite** WSDL operation.

3.1.4.2.2.1 DeleteCustomEventUsageDataForSite

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

```
<xs:element name="DeleteCustomEventUsageDataForSite"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

siteId: The identifier of the **Web site (2)**.

appEventTypeId: The identifier of the application-specific event type. The identifier MUST correspond to an application-specific event type that is registered for this tenant.

3.1.4.2.2.2   DeleteCustomEventUsageDataForSiteResponse

The **DeleteCustomEventUsageDataForSiteResponse** element specifies the result data for the **DeleteCustomEventUsageDataForSite WSDL operation**.

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

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 DeleteCustomEventUsageDataForTenant

Initiates the deletion of aggregated data for a specified **tenant** for an application-specific event type.

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

```
<wsdl:operation name="DeleteCustomEventUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForTen
ant"
message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForTen
antResponse"
message="tns:IAnalyticsServiceApplication DeleteCustomEventUsageDataForTenant OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage
WSDL message as follows:

- The protocol server initiates the deletion of aggregated data on the tenant corresponding to the specified **tenantId** for the application-specific event type corresponding to the specified **appEventTypeId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.3.1 Messages

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

Message	Description
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage	The request WSDL message for the **DeleteCustomEventUsageDataForTenant WSDL operation**.
IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage	The response WSDL message for the **DeleteCustomEventUsageDataForTenant** WSDL operation.

3.1.4.3.1.1 IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForTenant
```

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

3.1.4.3.1.2 IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage

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

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

3.1.4.3.2 Elements

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

Element	Description
DeleteCustomEventUsageDataForTenant	The input data for the **DeleteCustomEventUsageDataForTenant WSDL operation**.
DeleteCustomEventUsageDataForTenantResponse	The result data for the **DeleteCustomEventUsageDataForTenant** WSDL operation.

3.1.4.3.2.1 DeleteCustomEventUsageDataForTenant

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

```
<xs:element name="DeleteCustomEventUsageDataForTenant"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

appEventTypeId: The identifier of the application-specific event type. The identifier MUST correspond to an application-specific event type that is registered for this tenant.

3.1.4.3.2.2 DeleteCustomEventUsageDataForTenantResponse

The **DeleteCustomEventUsageDataForTenantResponse** element specifies the result data for the **DeleteCustomEventUsageDataForTenant WSDL operation**.

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

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 DeleteRecommendationsDataForTenant

Initiates the deletion of aggregated recommendations for the specified **tenant**.

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

```
<wsdl:operation name="DeleteRecommendationsDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTena
nt"
message="tns:IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTena
ntResponse"
message="tns:IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage WSDL message as follows:

▪ The protocol server initiates the deletion of aggregated recommendations for the tenant corresponding to the specified **tenantId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.4.1 Messages

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

Message	Description
IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage	The request WSDL message for the **DeleteRecommendationsDataForTenant WSDL operation**.
IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage	The response WSDL message for the **DeleteRecommendationsDataForTenant** WSDL operation.

3.1.4.4.1.1 IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTenant
```

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

3.1.4.4.1.2 IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage

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

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

3.1.4.4.2 Elements

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

Element	Description
DeleteRecommendationsDataForTenant	The input data for the **DeleteRecommendationsDataForTenant WSDL operation**.
DeleteRecommendationsDataForTenantResponse	The result data for the **DeleteRecommendationsDataForTenant** WSDL operation.

3.1.4.4.2.1 DeleteRecommendationsDataForTenant

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

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

```
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

3.1.4.4.2.2   DeleteRecommendationsDataForTenantResponse

The **DeleteRecommendationsDataForTenantResponse** element specifies the result data for the **DeleteRecommendationsDataForTenant WSDL operation**.

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

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 DeleteStandardEventUsageDataForSite

Initiates the deletion of aggregated data for a specified **Web site (2)** for a predefined event type.

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

```
<wsdl:operation name="DeleteStandardEventUsageDataForSite"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForS
ite"
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForS
iteResponse"
```

```
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    </wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage WSDL message as follows:

- The protocol server initiates the deletion of aggregated data for the Web site (2) corresponding to the specified **tenantId** and **siteId** for the predefined event type corresponding to the specified **eventType**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.5.1 Messages

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

Message	Description
IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage	The request WSDL message for the **DeleteStandardEventUsageDataForSite WSDL operation**.
IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage	The response WSDL message for the **DeleteStandardEventUsageDataForSite** WSDL operation.

3.1.4.5.1.1 IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForSite
```

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

3.1.4.5.1.2 IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage

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

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

3.1.4.5.2 Elements

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

Element	Description
DeleteStandardEventUsageDataForSite	The input data for the **DeleteStandardEventUsageDataForSite WSDL operation**.
DeleteStandardEventUsageDataForSiteResponse	The result data for the **DeleteStandardEventUsageDataForSite** WSDL operation.

3.1.4.5.2.1 DeleteStandardEventUsageDataForSite

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

```
<xs:element name="DeleteStandardEventUsageDataForSite"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

siteId: The identifier of the **Web site (2)**.

eventType: The identifier of the event type. The identifier MUST correspond to a predefined event type.

3.1.4.5.2.2 DeleteStandardEventUsageDataForSiteResponse

The **DeleteStandardEventUsageDataForSiteResponse** element specifies the result data for the **DeleteStandardEventUsageDataForSite WSDL operation**.

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

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 DeleteStandardEventUsageDataForTenant

Initiates the deletion of aggregated data for a specified **tenant** for a predefined event type.

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

```
<wsdl:operation name="DeleteStandardEventUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForT
enant"
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForT
enantResponse"
message="tns:IAnalyticsServiceApplication DeleteStandardEventUsageDataForTenant OutputMessage
" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage WSDL message**, and the protocol server responds with an **IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage** WSDL message as follows:

▪ The protocol server initiates the deletion of aggregated data for the tenant corresponding to the specified **tenantId** for the predefined event type corresponding to the specified **eventType**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.6.1 Messages

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

Message	Description
IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage	The request WSDL message for the **DeleteStandardEventUsageDataForTenant WSDL operation**.
IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage	The response WSDL message for the **DeleteStandardEventUsageDataForTenant** WSDL operation.

3.1.4.6.1.1 IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_ InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForTenant
```

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

3.1.4.6.1.2 IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_ OutputMessage

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

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

3.1.4.6.2 Elements

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

Element	Description
DeleteStandardEventUsageDataForTenant	The input data for the **DeleteStandardEventUsageDataForTenant WSDL operation**.
DeleteStandardEventUsageDataForTenantResponse	The result data for the **DeleteStandardEventUsageDataForTenant** WSDL operation.

3.1.4.6.2.1 DeleteStandardEventUsageDataForTenant

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

```
<xs:element name="DeleteStandardEventUsageDataForTenant"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

eventType: The identifier of the event type. The identifier MUST correspond to a predefined event type.

3.1.4.6.2.2   DeleteStandardEventUsageDataForTenantResponse

The **DeleteStandardEventUsageDataForTenantResponse** element specifies the result data for the **DeleteStandardEventUsageDataForTenant WSDL operation**.

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

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 GetAnalyticsEventTypeDefinition

Retrieves the definition of an event type for the specified **tenant**.

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

```
<wsdl:operation name="GetAnalyticsEventTypeDefinition"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitionR
esponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage WSDL message as follows:

- If the **eventType** corresponds to a predefined event type, the protocol server returns the definition of that event type.

- If the **eventType** corresponds to an application-specific event type that is registered for the tenant, the protocol server returns the definition of that event type.

- Otherwise, the protocol server returns a SOAP exception.

3.1.4.7.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_Input Message	The request WSDL message for the **GetAnalyticsEventTypeDefinition WSDL operation**.
IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_Output Message	The response WSDL message for the **GetAnalyticsEventTypeDefinition** WSDL operation.

3.1.4.7.1.1 IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinition
```

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

3.1.4.7.1.2 IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage

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

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

3.1.4.7.2 Elements

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

Element	Description
GetAnalyticsEventTypeDefinition	The input data for the **GetAnalyticsEventTypeDefinition WSDL operation**.
GetAnalyticsEventTypeDefinitionResponse	The result data for the **GetAnalyticsEventTypeDefinition** WSDL operation.

3.1.4.7.2.1   GetAnalyticsEventTypeDefinition

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

```
<xs:element name="GetAnalyticsEventTypeDefinition"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

eventType: The identifier of the event type.

3.1.4.7.2.2   GetAnalyticsEventTypeDefinitionResponse

The **GetAnalyticsEventTypeDefinitionResponse** element specifies the result data for the
GetAnalyticsEventTypeDefinition WSDL operation.

```
<xs:element name="GetAnalyticsEventTypeDefinitionResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionResult" nillable="true"
type="q1:AnalyticsEventTypeDefinition"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsEventTypeDefinitionResult: The definition of the event type.

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 GetAnalyticsEventTypeDefinitions

Retrieves a filtered set of definitions of event types for the specified **tenant**.

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

```
<wsdl:operation name="GetAnalyticsEventTypeDefinitions"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
" message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
Response"
message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage WSDL message**, and the protocol server responds with an **._OutputMessage** WSDL message as follows:

- If the **filter** includes predefined event types, the protocol server returns the definitions of the predefined event type.

- If the **filter** includes application-specific event types, the protocol server returns the definition of any application-specific event types that are registered for the tenant.

- If the **filter** includes additional predefined event types, the protocol server returns the definition the additional predefined event types.

3.1.4.8.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage	The request WSDL message for the **GetAnalyticsEventTypeDefinitions WSDL operation**.
IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage	The response WSDL message for the **GetAnalyticsEventTypeDefinitions** WSDL operation.

3.1.4.8.1.1 IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
```

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

3.1.4.8.1.2 IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_Output Message

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

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

3.1.4.8.2 Elements

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

Element	Description
GetAnalyticsEventTypeDefinitions	The input data for the **GetAnalyticsEventTypeDefinitions WSDL operation**.
GetAnalyticsEventTypeDefinitionsResponse	The result data for the **GetAnalyticsEventTypeDefinitions** WSDL operation.

3.1.4.8.2.1 GetAnalyticsEventTypeDefinitions

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

```
<xs:element name="GetAnalyticsEventTypeDefinitions"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:q36="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q36:AnalyticsEventTypes"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

filter: The filter of which definitions of event types to retrieve.

3.1.4.8.2.2 GetAnalyticsEventTypeDefinitionsResponse

The **GetAnalyticsEventTypeDefinitionsResponse** element specifies the result data for the **GetAnalyticsEventTypeDefinitions WSDL operation**.

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

```
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionsResult" nillable="true"
type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
      </xs:sequence>
    </xs:complexType>
</xs:element>
```

GetAnalyticsEventTypeDefinitionsResult: A list of definitions of event types.

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
ArrayOfAnalyticsEventTypeDefinition	A list of type AnalyticsEventTypeDefinition.

3.1.4.8.3.1   ArrayOfAnalyticsEventTypeDefinition

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A list of definitions of event types.

```
<xs:complexType name="ArrayOfAnalyticsEventTypeDefinition"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsEventTypeDefinition"
nillable="true" type="q1:AnalyticsEventTypeDefinition"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsEventTypeDefinition: The definition of an event type.

3.1.4.8.4 Simple Types

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

Simple type	Description
AnalyticsEventTypes	A filter used for retrieving event types.

3.1.4.8.4.1   AnalyticsEventTypes

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05

A filter used for retrieving analytics event types.

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

```
            <xs:enumeration value="None"/>
            <xs:enumeration value="Standard"/>
            <xs:enumeration value="Custom"/>
            <xs:enumeration value="Internal"/>
            <xs:enumeration value="All"/>
            <xs:enumeration value="AllIncludingInternal"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:list>
    </xs:simpleType>
```

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

Value	Meaning
None	No event types
Standard	Predefined event types
Custom	Application-specific event types
Internal	Additional predefined event types, generally event types that are not commonly shown to end users.
All	All event types that are commonly shown to end users, including predefined and application-specific event types.
AllIncludingInternal	All event types

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 GetAnalyticsItemData

Retrieves aggregated usage data for a specified item for a specified event type.

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

```
<wsdl:operation name="GetAnalyticsItemData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemData"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemDataResponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage** request message and the protocol server responds with an **IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage** response message as follows:

▪ The protocol server returns aggregated usage data for the item if it has data for the specified **eventType**.

▪ Otherwise, the protocol server returns NULL.

3.1.4.9.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage	The request WSDL message for the **GetAnalyticsItemData WSDL operation**.
IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage	The response WSDL message for the **GetAnalyticsItemData** WSDL operation.

3.1.4.9.1.1   IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemData
```

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

3.1.4.9.1.2   IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage

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

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

3.1.4.9.2 Elements

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

Element	Description
GetAnalyticsItemData	The input data for the **GetAnalyticsItemData WSDL operation**.
GetAnalyticsItemDataResponse	The result data for the **GetAnalyticsItemData** WSDL operation.

3.1.4.9.2.1   GetAnalyticsItemData

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

```
<xs:element name="GetAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element minOccurs="0" name="itemId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the **tenant**.

siteId: The identifier of the **Web site (2)**.

itemId: The identifier of the item.

3.1.4.9.2.2   GetAnalyticsItemDataResponse

The **GetAnalyticsItemDataResponse** element specifies the result data for the **GetAnalyticsItemData WSDL operation**.

```
<xs:element name="GetAnalyticsItemDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemDataResult" nillable="true" type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsItemDataResult: The aggregated usage data for the item.

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 GetAnalyticsItemsData

Retrieves aggregated usage data for multiple specified items for a specified event type.

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

```
<wsdl:operation name="GetAnalyticsItemsData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemsData"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns:IAnalyticsServiceApplication GetAnalyticsItemsData OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage WSDL message, and the
protocol server responds with an
IAnalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage WSDL message as
follows:

- The protocol server returns aggregated usage data for each item corresponding to one of the
  specified **itemIds** for which it has data for the specified **eventType**.

3.1.4.10.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage	The request WSDL message for the **GetAnalyticsItemsData WSDL operation**.
IAnalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage	The response WSDL message for the **GetAnalyticsItemsData** WSDL operation.

3.1.4.10.1.1 IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemsData
```

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

3.1.4.10.1.2 IAnalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage

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

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

3.1.4.10.2   Elements

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

Element	Description
GetAnalyticsItemsData	The input data for the **GetAnalyticsItemsData WSDL operation**.
GetAnalyticsItemsDataResponse	The result data for the **GetAnalyticsItemsData** WSDL operation.

3.1.4.10.2.1 GetAnalyticsItemsData

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

```
<xs:element name="GetAnalyticsItemsData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="itemIds" nillable="true" type="tns2:ArrayOfstring"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the **tenant**.

siteId: The identifier of the **Web site (2)**.

itemIds: A list of identifiers of the items whose associated analytics data is to be retrieved.

3.1.4.10.2.2 GetAnalyticsItemsDataResponse

The **GetAnalyticsItemsDataResponse** element specifies the result data for the **GetAnalyticsItemsData WSDL operation**.

```
<xs:element name="GetAnalyticsItemsDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemsDataResult" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsItemsDataResult: A list of aggregated usage data associated for the specified items.

3.1.4.10.3   Complex Types

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

Complex type	Description
ArrayOfstring	An array of strings.

3.1.4.10.3.1 ArrayOfstring

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

A list of strings.

```
<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 non-empty sequence of characters.

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   GetAnalyticsTenantConfiguration

Retrieves the configuration settings for a specified **tenant**.

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

```
<wsdl:operation name="GetAnalyticsTenantConfiguration"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns:IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsTenantConfigurationR
esponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage WSDL message as follows:

▪ The protocol server returns the configuration settings for the tenant corresponding to the specified **tenantId**.

3.1.4.11.1   Messages

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

Message	Description
IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_Input Message	The request WSDL message for the **GetAnalyticsTenantConfiguration WSDL operation**.
IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_Outpu tMessage	The response WSDL message for the **GetAnalyticsTenantConfiguration** WSDL operation.

3.1.4.11.1.1 IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsTenantConfiguration
```

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

3.1.4.11.1.2 IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage

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

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

3.1.4.11.2   Elements

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

Element	Description
GetAnalyticsTenantConfiguration	The input data for the **GetAnalyticsTenantConfiguration**

Element	Description
	WSDL operation.
GetAnalyticsTenantConfigurationResponse	The result data for the **GetAnalyticsTenantConfiguration** WSDL operation.

3.1.4.11.2.1 GetAnalyticsTenantConfiguration

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

```
<xs:element name="GetAnalyticsTenantConfiguration"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

3.1.4.11.2.2 GetAnalyticsTenantConfigurationResponse

The **GetAnalyticsTenantConfigurationResponse** element specifies the result data for the **GetAnalyticsTenantConfiguration WSDL operation**.

```
<xs:element name="GetAnalyticsTenantConfigurationResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q27:AnalyticsTenantConfig"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsTenantConfigurationResult: The configuration settings for the specified **tenant**.

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
AnalyticsTenantConfig	The analytics configuration for a **tenant**.

3.1.4.11.3.1 AnalyticsTenantConfig

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

The analytics settings for a **tenant**.

```
<xs:complexType name="AnalyticsTenantConfig" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q27:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
```

Settings: The analytics settings for a tenant.

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   GetGlobalAnalyticsItemDataBatch

Retrieves aggregated usage data for multiple items for a specified event type and a specified scope that have been processed since a specified time.

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

```
<wsdl:operation name="GetGlobalAnalyticsItemDataBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns:IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchR
esponse"
message="tns:IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage WSDL message as follows:

- The protocol server examines the **token.ScopeType**. If this value is

  - **Global**: The protocol server returns the next batch of items that have been modified after the time specified in the **since** parameter.

- **Tenant**: The protocol server returns the next batch of items for the **tenant** corresponding to the specified **token.TenantId** after the time specified in the **since** parameter.

  - **Site**: The protocol server returns the next batch of items for the **Web site (2)** corresponding to the specified **token.TenantId** and **token.SiteId** after the time specified in the **since** parameter.

- If the number of items remaining to return is larger than **batchSize**, only the next **batchSize** number of items are returned.

- The protocol server sets the **Token** with the values corresponding to the last item returned in the batch of **Items**.

  - This method is a batch method, that is, the protocol server returns a **Token** that represents state that allows the protocol server to resume a subsequent batch of items to return if the current batch is constrained by the **batchSize**. The protocol server expects the protocol client to provide a default initial **token** for a first batch and to provide the state it returns from a previous call for subsequent calls.

3.1.4.12.1   Messages

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

Message	Description
IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage	The request WSDL message for the **GetGlobalAnalyticsItemDataBatch WSDL operation**.
IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage	The response WSDL message for the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

3.1.4.12.1.1 IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch
```

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

3.1.4.12.1.2 IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage

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

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

3.1.4.12.2   Elements

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

Element	Description
GetGlobalAnalyticsItemDataBatch	The input data for the **GetGlobalAnalyticsItemDataBatch WSDL operation**.
GetGlobalAnalyticsItemDataBatchResponse	The result data for the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

3.1.4.12.2.1 GetGlobalAnalyticsItemDataBatch

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

```
<xs:element name="GetGlobalAnalyticsItemDataBatch"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element minOccurs="0" name="since" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="token" nillable="true" type="q1:ContinuationTokenItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

since: A **timestamp**.

batchSize: The maximum number of rows to be retrieved. MUST be less than 1000.

token: A token that represents the end of the previous batch.

3.1.4.12.2.2 GetGlobalAnalyticsItemDataBatchResponse

The **GetGlobalAnalyticsItemDataBatchResponse** element specifies the result data for the **GetGlobalAnalyticsItemDataBatch WSDL operation**.

```
<xs:element name="GetGlobalAnalyticsItemDataBatchResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetGlobalAnalyticsItemDataBatchResult" nillable="true"
type="q1:AnalyticsItemDataBatch"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetGlobalAnalyticsItemDataBatchResult: A batch of aggregated usage data processed since the given time, plus a token that represents the end of the current batch.

3.1.4.12.3   Complex Types

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

Complex type	Description
AnalyticsItemDataBatch	A batch of aggregated usage data, plus a token that represents the end of the batch.
ContinuationTokenItemData	A token that represents the end of a batch of data.

3.1.4.12.3.1 ContinuationTokenItemData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A token that represents the end of a batch of data.

```
<xs:complexType name="ContinuationTokenItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="EndPartitionId" nillable="true" type="xs:base64Binary"/>
    <xs:element minOccurs="0" name="ItemHash" type="xs:int"/>
    <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="ScopeType" type="tns1:ContinuationTokenItemData.Scope"/>
    <xs:element minOccurs="0" name="StartPartitionId" nillable="true"
type="xs:base64Binary"/>
  </xs:sequence>
</xs:complexType>
```

EndPartitionId: Together with **StartPartitionId** defines the partition range for which the token is valid.

ItemHash: If this is not the first batch to be retrieved, this is an implementation-specific hash code of the identifier of the last item from the previous batch. Otherwise, this MUST be 0.

ScopeType: The scope of the batch.

StartPartitionId: Together with **EndPartitionId** defines the partition range for which the token is valid.

3.1.4.12.3.2 AnalyticsItemDataBatch

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A batch of aggregated usage data, plus a token that represents the end of the batch.

```
<xs:complexType name="AnalyticsItemDataBatch" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Items" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
    <xs:element minOccurs="0" name="Token" nillable="true"
type="q1:ContinuationTokenItemData"/>
  </xs:sequence>
</xs:complexType>
```

Items: The collection of analytics item data for each of the items in the batch.

Token: The continuation token, provided so that the subsequent batch can be retrieved, if there is one.

3.1.4.12.4 Simple Types

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

Simple type	Description
ContinuationTokenItemData.Scope	The scope for the batch associated with that continuation token.

3.1.4.12.4.1 ContinuationTokenItemData.Scope

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

This value determines the scope of a batch.

```
<xs:simpleType name="ContinuationTokenItemData.Scope"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Global"/>
    <xs:enumeration value="Tenant"/>
    <xs:enumeration value="Site"/>
  </xs:restriction>
</xs:simpleType>
```

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

Value	Meaning
Global	The batch will contain all items.
Tenant	The batch will contain items from a specific **tenant**.
Site	The batch will contain items from a specific **site**.

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 GetRawAnayticsTenantSettings

Retrieves the configuration settings for a specified **tenant**.

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

```
<wsdl:operation name="GetRawAnayticsTenantSettings"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnayticsTenantSettings"
message="tns:IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnayticsTenantSettingsResp
onse" message="tns:IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage WSDL message,
and the protocol server responds with an
IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage WSDL
message as follows:

▪ The protocol server returns the configuration settings for the tenant corresponding to the specified
   tenantId.

3.1.4.13.1   Messages

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

Message	Description
IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage	The request WSDL message for the **GetRawAnayticsTenantSettings WSDL operation**.
IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage	The response WSDL message for the **GetRawAnayticsTenantSettings** WSDL operation.

3.1.4.13.1.1 IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetRawAnayticsTenantSettings
```

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

3.1.4.13.1.2 IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage

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

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

3.1.4.13.2 Elements

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

Element	Description
GetRawAnayticsTenantSettings	The input data for the **GetRawAnayticsTenantSettings WSDL operation**.
GetRawAnayticsTenantSettingsResponse	The result data for the **GetRawAnayticsTenantSettings** WSDL operation.

3.1.4.13.2.1 GetRawAnayticsTenantSettings

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

```
<xs:element name="GetRawAnayticsTenantSettings" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the **tenant**.

3.1.4.13.2.2 GetRawAnayticsTenantSettingsResponse

The **GetRawAnayticsTenantSettingsResponse** element specifies the result data for the **GetRawAnayticsTenantSettings WSDL operation**.

```
<xs:element name="GetRawAnayticsTenantSettingsResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnayticsTenantSettingsResult" nillable="true"
type="q27:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetRawAnayticsTenantSettingsResult: The configuration settings for the tenant.

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 GetRawAnalyticsTenantSettingsBatch

Retrieves the configuration settings for multiple **tenants**.

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

```
<wsdl:operation name="GetRawAnalyticsTenantSettingsBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBat
ch"
message="tns:IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBat
chResponse"
message="tns:IAnalyticsServiceApplication GetRawAnalyticsTenantSettingsBatch OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage WSDL message**, and the protocol server responds with an **IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage** WSDL message as follows:

▪ The protocol server returns the next batch of configuration settings for tenants that have identifiers greater than the **lastTenantId**.

▪ If the number of configuration settings remaining to return is larger than **batchSize**, only the next **batchSize** number of configuration settings are returned.

3.1.4.14.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_ InputMessage	The request WSDL message for the **GetRawAnalyticsTenantSettingsBatch WSDL operation**.
IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_ OutputMessage	The response WSDL message for the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

3.1.4.14.1.1 IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch
```

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

3.1.4.14.1.2 IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage

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

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

3.1.4.14.2   Elements

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

Element	Description
GetRawAnalyticsTenantSettingsBatch	The input data for the **GetRawAnalyticsTenantSettingsBatch WSDL operation**.
GetRawAnalyticsTenantSettingsBatchResponse	The result data for the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

3.1.4.14.2.1 GetRawAnalyticsTenantSettingsBatch

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

```
<xs:element name="GetRawAnalyticsTenantSettingsBatch"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

batchSize: The maximum number of rows to be retrieved. MUST be less than 1000.

lastTenantId: If this is not the first batch to be retrieved, this is the identifier of the **tenant** containing the last item from the previous batch. Otherwise, this MUST be the empty **GUID**.

3.1.4.14.2.2 GetRawAnalyticsTenantSettingsBatchResponse

The **GetRawAnalyticsTenantSettingsBatchResponse** element specifies the result data for the **GetRawAnalyticsTenantSettingsBatch WSDL operation**.

```
<xs:element name="GetRawAnalyticsTenantSettingsBatchResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q27:AnalyticsTenantSettingsDataBatch"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetRawAnalyticsTenantSettingsBatchResult: A batch of configuration settings, plus the identifier of the **tenant** for the last configuration setting from the previous batch.

3.1.4.14.3   Complex Types

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

Complex type	Description
AnalyticsTenantSettingsDataBatch	A batch of configuration settings, plus the identifier of the **tenant** for the last configuration setting from the previous batch.
ArrayOfAnalyticsTenantSettingsData	A list of configuration settings.

3.1.4.14.3.1 AnalyticsTenantSettingsDataBatch

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

A batch of configuration settings, plus the identifier of the **tenant** for the last configuration setting from the previous batch.

```
<xs:complexType name="AnalyticsTenantSettingsDataBatch"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="LastTenantId" type="ser:guid"/>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q27:ArrayOfAnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
```

LastTenantId: The identifier of the tenant for the last configuration setting from the previous batch.

Settings: A list of configuration settings.

3.1.4.14.3.2 ArrayOfAnalyticsTenantSettingsData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

A list of configuration settings.

```
<xs:complexType name="ArrayOfAnalyticsTenantSettingsData"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsTenantSettingsData"
nillable="true" type="q27:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsTenantSettingsData: The configuration settings for a **tenant**.

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   GetRollupAnalyticsItemData

Retrieves aggregated usage data for a **rollup** scope for events of a specified event type.

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

```
<wsdl:operation name="GetRollupAnalyticsItemData"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns:IAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRollupAnalyticsItemDataRespon
se" message="tns:IAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage WSDL message,
and the protocol server responds with an
IAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage WSDL message as
follows:

▪ The protocol server determines the appropriate rollup scope as follows:

  ▪ **Tenant**: the **siteId** and **scopeId** are all equal to the **tenantId**.

  ▪ **Web site**: the **siteId** is the identifier of the Web site (2) and **scopeId** MUST be the empty
    GUID.

▪ Application-specific rollup scope: the **siteId** is the identifier of the Web site (2) and **scopeId** is the application-specific rollup scope.

▪ The protocol server returns the aggregated usage data corresponding to that rollup scope.

3.1.4.15.1   Messages

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

Message	Description
IAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage	The request WSDL message for the **GetRollupAnalyticsItemData WSDL operation**.
IAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage	The response WSDL message for the **GetRollupAnalyticsItemData** WSDL operation.

3.1.4.15.1.1 IAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetRollupAnalyticsItemData
```

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

3.1.4.15.1.2 IAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage

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

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

3.1.4.15.2   Elements

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

Element	Description
GetRollupAnalyticsItemData	The input data for the **GetRollupAnalyticsItemData WSDL operation**.
GetRollupAnalyticsItemDataResponse	The result data for the **GetRollupAnalyticsItemData** WSDL operation.

3.1.4.15.2.1 GetRollupAnalyticsItemData

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

```
<xs:element name="GetRollupAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the **tenant**.

siteId: This is the identifier of the tenant or **Web site (2)**.

scopeId: This is the identifier of the tenant, Web site (2), or application-specified **rollup** scope.

3.1.4.15.2.2 GetRollupAnalyticsItemDataResponse

The **GetRollupAnalyticsItemDataResponse** element specifies the result data for the
GetRollupAnalyticsItemData **WSDL operation**.

```
<xs:element name="GetRollupAnalyticsItemDataResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetRollupAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetRollupAnalyticsItemDataResult: The aggregated usage data for the **rollup** scope.

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 GetSearchReport

Retrieves the aggregated top occurrences for the specified search event type within a scope.

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

```
<wsdl:operation name="GetSearchReport" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetSearchReport"
message="tns:IAnalyticsServiceApplication_GetSearchReport_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetSearchReportResponse"
message="tns:IAnalyticsServiceApplication GetSearchReport OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAnalyticsServiceApplication_GetSearchReport_InputMessage** WSDL message, and the protocol server responds with an **IAnalyticsServiceApplication_GetSearchReport_OutputMessage** WSDL message as follows:

▪ The protocol server returns the top **maxRows search queries** that have the most occurrence of the specified **reportType** event for search queries performed within the **Web site (2)** specified by **tenantId** and **siteId** during the day or month (depending on **bDaily**) indicated by **reportDate**.

3.1.4.16.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetSearchReport_InputMessage	The request WSDL message for the **GetSearchReport WSDL operation**.
IAnalyticsServiceApplication_GetSearchReport_OutputMessage	The response WSDL message for the **GetSearchReport** WSDL operation.

3.1.4.16.1.1 IAnalyticsServiceApplication_GetSearchReport_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetSearchReport
```

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

3.1.4.16.1.2 IAnalyticsServiceApplication_GetSearchReport_OutputMessage

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

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

3.1.4.16.2   Elements

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

Element	Description
GetSearchReport	The input data for the **GetSearchReport WSDL operation**.
GetSearchReportResponse	The result data for the **GetSearchReport** WSDL operation.

3.1.4.16.2.1 GetSearchReport

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

```
<xs:element name="GetSearchReport" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="reportType" type="xs:int"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element minOccurs="0" name="reportDate" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="bDaily" type="xs:boolean"/>
      <xs:element minOccurs="0" name="maxRows" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

reportType: The identifier of the search event type.

tenantId: The identifier of the **tenant**.

siteId: The identifier of the **Web site (2)**.

reportDate: A timestamp that indicates the day (if **bDaily** is true) or month (if **bDaily** is false) to be reported on.

bDaily: Whether the aggregation is for a day or a month.

maxRows: The maximum number of queries to return.

3.1.4.16.2.2 GetSearchReportResponse

The **GetSearchReportResponse** element specifies the result data for the **GetSearchReport WSDL operation**.

```
<xs:element name="GetSearchReportResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetSearchReportResult" nillable="true" type="q1:ArrayOfQueryReportData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetSearchReportResult: A list of the queries with occurrence counts.

3.1.4.16.3   Complex Types

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

Complex type	Description
ArrayOfQueryReportData	A list of queries with an event count.
QueryReportData	A query and an event count.

3.1.4.16.3.1 ArrayOfQueryReportData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A list of queries with occurrence counts.

```
<xs:complexType name="ArrayOfQueryReportData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="QueryReportData" nillable="true"
type="q1:QueryReportData"/>
  </xs:sequence>
</xs:complexType>
```

QueryReportData: A query and an event count.

3.1.4.16.3.2 QueryReportData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

Represents a query and its event count.

```
<xs:complexType name="QueryReportData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Count" type="xs:int"/>
    <xs:element minOccurs="0" name="Query" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Scope" type="ser:guid"/>
  </xs:sequence>
</xs:complexType>
```

Count: The number of times that the specified search event occurred.

Query: The **search query**.

Scope: The scope in which the search query was executed.

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 GetTenantAnalyticsItemData

Retrieves aggregated usage data for a **tenant** for events of a specified event type.

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

```
<wsdl:operation name="GetTenantAnalyticsItemData"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetTenantAnalyticsItemData"
message="tns:IAnalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetTenantAnalyticsItemDataRespon
se" message="tns:IAnalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage WSDL message,
and the protocol server MUST respond with an
IAnalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage WSDL message,
as follows:

▪ The protocol server returns the aggregated usage data for the tenant specified by **tenantId**.

3.1.4.17.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage	The request WSDL message for the **GetTenantAnalyticsItemData WSDL operation**.
IAnalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage	The response WSDL message for the **GetTenantAnalyticsItemData** WSDL operation.

3.1.4.17.1.1 IAnalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetTenantAnalyticsItemData
```

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

3.1.4.17.1.2 IAnalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage

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

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

3.1.4.17.2 Elements

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

Element	Description
GetTenantAnalyticsItemData	The input data for the **GetTenantAnalyticsItemData WSDL operation**.
GetTenantAnalyticsItemDataResponse	The result data for the **GetTenantAnalyticsItemData** WSDL operation.

3.1.4.17.2.1 GetTenantAnalyticsItemData

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

```
<xs:element name="GetTenantAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the **tenant**.

3.1.4.17.2.2 GetTenantAnalyticsItemDataResponse

The **GetTenantAnalyticsItemDataResponse** element specifies the result data for the **GetTenantAnalyticsItemData WSDL operation**.

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

```
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetTenantAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
      </xs:sequence>
    </xs:complexType>
</xs:element>
```

GetTenantAnalyticsItemDataResult: The aggregated usage data for the **tenant**.

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   SendAnalyticsUsageEvents

Sends usage events to the protocol server.

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

```
<wsdl:operation name="SendAnalyticsUsageEvents"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEvents"
message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsResponse
" message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage request message and
the protocol server responds with an
IAnalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage response message
as follows:

▪   The protocol server persists the events in the event store.

3.1.4.18.1   Messages

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

Message	Description
IAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage	The request WSDL message for the **SendAnalyticsUsageEvents WSDL operation**.
IAnalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage	The response WSDL message for the **SendAnalyticsUsageEvents** WSDL operation.

3.1.4.18.1.1 IAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEvents
```

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

3.1.4.18.1.2 IAnalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage

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

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

3.1.4.18.2 Elements

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

Element	Description
SendAnalyticsUsageEvents	The input data for the **SendAnalyticsUsageEvents WSDL operation**.
SendAnalyticsUsageEventsResponse	The result data for the **SendAnalyticsUsageEvents** WSDL operation.

3.1.4.18.2.1 SendAnalyticsUsageEvents

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

```
<xs:element name="SendAnalyticsUsageEvents" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
```

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

entriesList: A list of usage events.

3.1.4.18.2.2 SendAnalyticsUsageEventsResponse

The **SendAnalyticsUsageEventsResponse** element specifies the result data for the
SendAnalyticsUsageEvents WSDL operation.

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

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   UpsertRawAnalyticsTenantSettings

Updates the configuration settings for a specified **tenant**.

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

```
    <wsdl:operation name="UpsertRawAnalyticsTenantSettings"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
      <wsdl:input
    wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
    " message="tns:IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
      <wsdl:output
    wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
    Response"
    message="tns:IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    </wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage WSDL message, and the protocol server responds with an
IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage WSDL
message as follows:

- If configuration settings exist for the tenant specified by **ts.TenantId**, those settings are replaced with the values provided.

- Otherwise, configuration settings are initialized with the values provided.

3.1.4.19.1   Messages

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

Message	Description
IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage	The request WSDL message for the **UpsertRawAnalyticsTenantSettings WSDL operation**.
IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage	The response WSDL message for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

3.1.4.19.1.1 IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_Input Message

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
```

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

3.1.4.19.1.2 IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_Output Message

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

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

3.1.4.19.2   Elements

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

Element	Description
UpsertRawAnalyticsTenantSettings	The input data for the **UpsertRawAnalyticsTenantSettings WSDL operation**.

Element	Description
UpsertRawAnalyticsTenantSettingsResponse	The result data for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

3.1.4.19.2.1 UpsertRawAnalyticsTenantSettings

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

```
<xs:element name="UpsertRawAnalyticsTenantSettings"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="ts" nillable="true" type="q27:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ts: The configuration settings.

3.1.4.19.2.2 UpsertRawAnalyticsTenantSettingsResponse

The **UpsertRawAnalyticsTenantSettingsResponse** element specifies the result data for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

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

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 GetQueryTermsForUser

Retrieves **search queries** for a specified user.

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

```
<wsdl:operation name="GetQueryTermsForUser" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetQueryTermsForUser"
message="tns:IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetQueryTermsForUserResponse"
message="tns:IAnalyticsServiceApplication GetQueryTermsForUser OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage WSDL message, and
the protocol server responds with an
IAnalyticsServiceApplication_GetQueryTermsForUser_OutputMessage WSDL message as
follows:

▪ The protocol server returns search queries for a user from a specified start date to current date.

3.1.4.20.1 Messages

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

Message	Description
IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage	The request WSDL message for the **GetQueryTermsForUser WSDL operation**.
IAnalyticsServiceApplication_GetQueryTermsForUser_OutputMessage	The response WSDL message for the **GetQueryTermsForUser** WSDL operation.

3.1.4.20.1.1 IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetQueryTermsForUser
```

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

3.1.4.20.1.2 IAnalyticsServiceApplication_GetQueryTermsForUser_OutputMessage

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

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

3.1.4.20.2 Elements

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

Element	Description
GetQueryTermsForUser	The input data for the **GetQueryTermsForUser WSDL operation**.
GetQueryTermsForUserResponse	The result data for the **GetQueryTermsForUser** WSDL operation.

3.1.4.20.2.1 GetQueryTermsForUser

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

```
<xs:element name="GetQueryTermsForUser" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="userName" nillable="true" type="xs:string"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element minOccurs="0" name="startTime" type="xs:dateTime"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

userName: The identifier of the user.

tenantId: The identifier for the **tenant**.

startTime: Start date of **search queries** to return.

3.1.4.20.2.2 GetQueryTermsForUserResponse

The **GetQueryTermsForUserResponse** element specifies the result data for the **GetQueryTermsForUser WSDL operation**.

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

GetQueryTermsForUserResult: Search queries for user within specified time range.

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 SendAnalyticsUsageEventsToEventStore

Sends a list of analytics usage events into the event store.

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

```
<wsdl:operation name="SendAnalyticsUsageEventsToEventStore"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsToEventS
tore"
message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsToEventS
toreResponse"
message="tns:IAnalyticsServiceApplication SendAnalyticsUsageEventsToEventStore OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an
IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_InputMessage
request message and the protocol server responds with an
IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore _OutputMessage
response message as follows:

▪ The protocol server persists the events in the event store.

3.1.4.21.1 Messages

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

Message	Description
IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventSto re_InputMessage	The request WSDL message for the **SendAnalyticsUsageEventsToEv entStore WSDL operation**.
IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventSto re_OutputMessage	The response WSDL message for the **SendAnalyticsUsageEventsToEv entStore** WSDL operation.

3.1.4.21.1.1 IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_InputMessage

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

The **SOAP action** value is:

```
http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsToEventStore
```

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

3.1.4.21.1.2 IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_OutputMessage

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

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

3.1.4.21.2 Elements

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

Element	Description
SendAnalyticsUsageEventsToEventStore	The input data for the **SendAnalyticsUsageEventsToEventStore WSDL operation**.
SendAnalyticsUsageEventsToEventStoreResponse	The result data for the **SendAnalyticsUsageEventsToEventStore** WSDL operation.

3.1.4.21.2.1 SendAnalyticsUsageEventsToEventStore

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

```
<xs:element name="SendAnalyticsUsageEventsToEventStore"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

entriesList: A list of usage events.

3.1.4.21.2.2 SendAnalyticsUsageEventsToEventStoreResponse

The **SendAnalyticsUsageEventsToEventStoreResponse** element specifies the result data for the **SendAnalyticsUsageEventsToEventStore WSDL operation**.

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

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.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 Delete All Usage Data for a Tenant

In this example, the protocol client sends a request as follows to delete all usage data associated with a specified tenant:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTen
ant</a:Action>
  <a:MessageID>urn:uuid:0cc7e833-004c-4d17-98ae-23a1fee6cfa1</a:MessageID>
  <a:SequenceAcknowledgement>
   <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
  </a:SequenceAcknowledgement>
  <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
   <devdashboardIsEnabled>false</devdashboardIsEnabled>
   <language>en-US</language>
   <region>en-US</region>
   <scopeId>8864235033460737</scopeId>
   <siteSubscriptionId i:nil="true">
   </siteSubscriptionId>
   <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
  </ServiceContext>
  <a:To s:mustUnderstand="1"
u:Id=" 1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
 </s:Header>
 <s:Body>
  <DeleteAllUsageDataForTenant xmlns="http://tempuri.org/">
   <tenantId>00000000-0000-0000-0000-000000000000</tenantId>
  </DeleteAllUsageDataForTenant>
 </s:Body>
</s:Envelope>
```

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTen
antResponse</a:Action>
  <ActivityId CorrelationId="b42dec78-0431-4549-a958-69876e93b253"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">df8cd1bb-bb4d-41f8-
a75f-c99634642ff5</ActivityId>
  <a:RelatesTo>urn:uuid:0cc7e833-004c-4d17-98ae-23a1fee6cfa1</a:RelatesTo>
  <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
   <u:Created u:Id="_0">
    <u:Expires>2011-11-19T03:00:46.177Z</u:Expires>
    <u:Length>2011-11-19T03:05:46.177Z</u:Length>
   </u:Created>
  </o:Timestamp>
 </s:Header>
 <s:Body>
  <DeleteAllUsageDataForTenantResponse xmlns="http://tempuri.org/">
  </DeleteAllUsageDataForTenantResponse>
 </s:Body>
</s:Envelope>
```

4.2 Get an Analytics Event Type Definition

In the following example, the protocol client sends a request as follows to retrieve the definition of an event type for the specified tenant:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDef
inition</a:Action>
  <a:MessageID>urn:uuid:9961c974-35fb-4f90-b27d-7d1c1824e308</a:MessageID>
  <a:SequenceAcknowledgement>
   <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
  </a:SequenceAcknowledgement>
  <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
   <devdashboardIsEnabled>false</devdashboardIsEnabled>
   <language>en-US</language>
   <region>en-US</region>
   <scopeId>4270087397703681</scopeId>
   <siteSubscriptionId i:nil="true">
   </siteSubscriptionId>
   <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
  </ServiceContext>
  <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
 </s:Header>
 <s:Body>
  <GetAnalyticsEventTypeDefinition xmlns="http://tempuri.org/">
   <tenantId>00000000-0000-0000-0000-000000000000</tenantId>
   <eventType>1</eventType>
  </GetAnalyticsEventTypeDefinition>
 </s:Body>
</s:Envelope>
```

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDef
initionResponse</a:Action>
  <ActivityId CorrelationId="a79acb3e-c3eb-4ece-a523-e8f37f131efa"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">e8a98b4f-c541-4603-
895b-70a0ac42a170</ActivityId>
  <a:RelatesTo>urn:uuid:9961c974-35fb-4f90-b27d-7d1c1824e308</a:RelatesTo>
  <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
   <u:Created u:Id=" 0">
    <u:Expires>2011-11-19T03:23:29.321Z</u:Expires>
    <u:Length>2011-11-19T03:28:29.321Z</u:Length>
   </u:Created>
  </o:Timestamp>
 </s:Header>
 <s:Body>
  <GetAnalyticsEventTypeDefinitionResponse xmlns="http://tempuri.org/">
   <GetAnalyticsEventTypeDefinitionResult
xmlns:b="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <b:AggregationType>Count UniqueUsers</b:AggregationType>
    <b:AppEventTypeId>00000000-0000-0000-0000-000000000000</b:AppEventTypeId>
    <b:ApplicationName>
    </b:ApplicationName>
    <b:EventName>Views</b:EventName>
```

```
      <b:EventTypeId>1</b:EventTypeId>
      <b:RecentPopularityTimeframe>14</b:RecentPopularityTimeframe>
      <b:RecommendationWeight>1</b:RecommendationWeight>
      <b:RelevanceWeight>1</b:RelevanceWeight>
      <b:Rollups>SiteSubscriptionId SiteId ScopeId</b:Rollups>
      <b:TailTrimming>2</b:TailTrimming>
      <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
     </GetAnalyticsEventTypeDefinitionResult>
    </GetAnalyticsEventTypeDefinitionResponse>
  </s:Body>
 </s:Envelope>
```

4.3   Get Analytics Item Data

In the following example, the protocol client sends a request as follows to retrieve the aggregated data for views of the given item:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemData</a:
Action>
   <a:MessageID>urn:uuid:59957de8-e997-4a19-afde-f0183a7f3b9a</a:MessageID>
   <a:SequenceAcknowledgement>
    <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
   </a:SequenceAcknowledgement>
   <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
   <devdashboardIsEnabled>false</devdashboardIsEnabled>
   <language>en-US</language>
   <region>en-US</region>
   <scopeId>1251122339643393</scopeId>
   <siteSubscriptionId i:nil="true">
   </siteSubscriptionId>
   <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
   </ServiceContext>
   <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
 </s:Header>
 <s:Body>
  <GetAnalyticsItemData xmlns="http://tempuri.org/">
   <eventType>1</eventType>
   <tenantId>00000000-0000-0000-0000-000000000000</tenantId>
   <siteId>a97351de-40a9-4e05-b938-161ecf62e806</siteId>
   <itemId>http://contoso.com/sites/4af361d7-f60e-4aa5-a23d-488e0536eda1</itemId>
  </GetAnalyticsItemData>
 </s:Body>
</s:Envelope>
```

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemDataResp
onse</a:Action>
   <ActivityId CorrelationId="33ce4125-16d1-4fba-9a73-7f643f7533ae"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">96b81d74-09e1-4809-
a074-7d865ffb4400</ActivityId>
   <a:RelatesTo>urn:uuid:59957de8-e997-4a19-afde-f0183a7f3b9a</a:RelatesTo>
   <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
```

```
      <u:Created u:Id="_0">
       <u:Expires>2011-11-19T03:30:29.873Z</u:Expires>
       <u:Length>2011-11-19T03:35:29.873Z</u:Length>
      </u:Created>
     </o:Timestamp>
    </s:Header>
    <s:Body>
     <GetAnalyticsItemDataResponse xmlns="http://tempuri.org/">
      <GetAnalyticsItemDataResult
  xmlns:b="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
  xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
       <b:DailyHits xmlns:c="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>126</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
       </b:DailyHits>
       <b:DailyUniqueUsers xmlns:c="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>15</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
       </b:DailyUniqueUsers>
       <b:EventType>1</b:EventType>
       <b:ItemId>http://contoso.com/sites/4af361d7-f60e-4aa5-a23d-488e0536eda1</b:ItemId>
       <b:LastProcessingHits>126</b:LastProcessingHits>
       <b:LastProcessingTime>2011-11-15T00:00:00</b:LastProcessingTime>
       <b:LastProcessingUniqueUsers>15</b:LastProcessingUniqueUsers>
       <b:MonthlyHits xmlns:c="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
        <c:int>126</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
        <c:int>0</c:int>
```

```xml
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
        </b:MonthlyHits>
        <b:MonthlyUniqueUsers
  xmlns:c="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
          <c:int>15</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
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          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
          <c:int>0</c:int>
        </b:MonthlyUniqueUsers>
        <b:ScopeId>00000000-0000-0000-0000-000000000000</b:ScopeId>
        <b:SiteId>a97351de-40a9-4e05-b938-161ecf62e806</b:SiteId>
        <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
        <b:TotalHits>126</b:TotalHits>
        <b:TotalUniqueUsers>15</b:TotalUniqueUsers>
      </GetAnalyticsItemDataResult>
    </GetAnalyticsItemDataResponse>
  </s:Body>
```

```
        </s:Envelope>
```

4.4   Send Analytics Usage Events

In the following example, the protocol client sends a message as follows to add an event:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEvents
</a:Action>
  <a:MessageID>urn:uuid:c54875f6-014b-4e86-b863-8f9463e08aac</a:MessageID>
  <a:SequenceAcknowledgement>
   <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
  </a:SequenceAcknowledgement>
  <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
   <devdashboardIsEnabled>false</devdashboardIsEnabled>
   <language>en-US</language>
   <region>en-US</region>
   <scopeId>878161965350913</scopeId>
   <siteSubscriptionId i:nil="true">
   </siteSubscriptionId>
   <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
  </ServiceContext>
  <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
 </s:Header>
 <s:Body>
  <SendAnalyticsUsageEvents xmlns="http://tempuri.org/">
   <entriesList xmlns:b="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <b:AnalyticsUsageEvent>
     <b:CustomData>
     </b:CustomData>
     <b:EventTypeId>1</b:EventTypeId>
     <b:ItemId>http://testsite1/default.aspx</b:ItemId>
     <b:ScopeId>f36a1ae4-7b87-44da-bb5b-77a9212d1204</b:ScopeId>
     <b:SessionId>
     </b:SessionId>
     <b:SiteId>a97351de-40a9-4e05-b938-161ecf62e806</b:SiteId>
     <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
     <b:TimeStamp>2011-11-18T19:37:43.8500837-08:00</b:TimeStamp>
     <b:UserId>username1</b:UserId>
     <b:Weight>1</b:Weight>
    </b:AnalyticsUsageEvent>
    <b:AnalyticsUsageEvent>
     <b:CustomData>
     </b:CustomData>
     <b:EventTypeId>1</b:EventTypeId>
     <b:ItemId>http://testsite1/default.aspx</b:ItemId>
     <b:ScopeId>f36a1ae4-7b87-44da-bb5b-77a9212d1204</b:ScopeId>
     <b:SessionId>
     </b:SessionId>
     <b:SiteId>a97351de-40a9-4e05-b938-161ecf62e806</b:SiteId>
     <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
     <b:TimeStamp>2011-11-18T19:37:43.8500837-08:00</b:TimeStamp>
     <b:UserId>username1</b:UserId>
     <b:Weight>1</b:Weight>
    </b:AnalyticsUsageEvent>
   </entriesList>
  </SendAnalyticsUsageEvents>
 </s:Body>
```

```
        </s:Envelope>
```

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
 <s:Header>
  <a:Action
s:mustUnderstand="1">http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEvents
Response</a:Action>
  <ActivityId CorrelationId="a059bc44-a54a-43b6-a6da-f13cd582274f"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">f5bdd7e7-86a3-41be-
a15c-8d5eeeb9e01c</ActivityId>
  <a:RelatesTo>urn:uuid:c54875f6-014b-4e86-b863-8f9463e08aac</a:RelatesTo>
  <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
   <u:Created u:Id="_0">
    <u:Expires>2011-11-19T03:38:30.045Z</u:Expires>
    <u:Length>2011-11-19T03:43:30.045Z</u:Length>
   </u:Created>
  </o:Timestamp>
 </s:Header>
 <s:Body>
  <SendAnalyticsUsageEventsResponse xmlns="http://tempuri.org/">
  </SendAnalyticsUsageEventsResponse>
 </s:Body>
</s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

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:xs="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://tempuri.org/"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl" targetNamespace="http://tempuri.org/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema xmlns:tns3="http://tempuri.org/Imports"
targetNamespace="http://tempuri.org/Imports">
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/
>
      <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://tempuri.org/"/>
      <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"/>
      <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"/>
      <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:portType name="IAnalyticsServiceApplication">
    <wsdl:operation name="SendAnalyticsUsageEventsToEventStore">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsToEventS
tore"
message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_InputMessage"/
>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsToEventS
toreResponse"
message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_OutputMessage"
/>
    </wsdl:operation>
    <wsdl:operation name="SendAnalyticsUsageEvents">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEvents"
message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsResponse
" message="tns:IAnalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemData"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemDataResponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsItemsData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemsData"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetGlobalAnalyticsItemDataBatch">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns:IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchR
```

```
esponse"
message="tns:IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetQueryTermsForUser">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetQueryTermsForUser"
message="tns:IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetQueryTermsForUserResponse"
message="tns:IAnalyticsServiceApplication_GetQueryTermsForUser_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRollupAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns:IAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRollupAnalyticsItemDataRespon
se" message="tns:IAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetTenantAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetTenantAnalyticsItemData"
message="tns:IAnalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetTenantAnalyticsItemDataRespon
se" message="tns:IAnalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetSearchReport">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetSearchReport"
message="tns:IAnalyticsServiceApplication_GetSearchReport_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetSearchReportResponse"
message="tns:IAnalyticsServiceApplication_GetSearchReport_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnayticsTenantSettings">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnayticsTenantSettings"
message="tns:IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnayticsTenantSettingsResp
onse" message="tns:IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="UpsertRawAnalyticsTenantSettings">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
" message="tns:IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
Response"
message="tns:IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnalyticsTenantSettingsBatch">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBat
ch"
message="tns:IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBat
chResponse"
message="tns:IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsTenantConfiguration">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns:IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsTenantConfigurationR
esponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"/>
```

```
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsEventTypeDefinition">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitionR
esponse"
message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsEventTypeDefinitions">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
" message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
Response"
message="tns:IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteAllUsageDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns:IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTenantRespo
nse" message="tns:IAnalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteRecommendationsDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTena
nt"
message="tns:IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTena
ntResponse"
message="tns:IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteStandardEventUsageDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForT
enant"
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage"
/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForT
enantResponse"
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage
"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForTen
ant"
message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForTen
antResponse"
message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage"/
>
      </wsdl:operation>
      <wsdl:operation name="DeleteStandardEventUsageDataForSite">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForS
ite"
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForS
iteResponse"
```

```
message="tns:IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"/
>
      </wsdl:operation>
      <wsdl:operation name="DeleteCustomEventUsageDataForSite">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForSit
e"
message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForSit
eResponse"
message="tns:IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"/>
      </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="DefaultBinding_IAnalyticsServiceApplication"
type="tns:IAnalyticsServiceApplication">
      <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
      <wsdl:operation name="SendAnalyticsUsageEventsToEventStore">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEventsToEventSt
ore" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="SendAnalyticsUsageEvents">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/SendAnalyticsUsageEvents"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsItemData">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemData"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsItemsData">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsItemsData"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGlobalAnalyticsItemDataBatch">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
```

```
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetQueryTermsForUser">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetQueryTermsForUser"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetRollupAnalyticsItemData">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetRollupAnalyticsItemData"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetTenantAnalyticsItemData">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetTenantAnalyticsItemData"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetSearchReport">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetSearchReport"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetRawAnayticsTenantSettings">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnayticsTenantSettings"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="UpsertRawAnalyticsTenantSettings">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetRawAnalyticsTenantSettingsBatch">
```

```
      <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatc
h" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsTenantConfiguration">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsTenantConfiguration"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsEventTypeDefinition">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsEventTypeDefinitions">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="DeleteAllUsageDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/DeleteAllUsageDataForTenant"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="DeleteRecommendationsDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTenan
t" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="DeleteStandardEventUsageDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForTe
nant" style="document"/>
```

```
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
      <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForTena
nt" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteStandardEventUsageDataForSite">
      <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/DeleteStandardEventUsageDataForSi
te" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteCustomEventUsageDataForSite">
      <soap:operation
soapAction="http://tempuri.org/IAnalyticsServiceApplication/DeleteCustomEventUsageDataForSite
" style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
  </wsdl:binding>
  <wsdl:message name="IAnalyticsServiceApplication DeleteAllUsageDataForTenant InputMessage">
    <wsdl:part name="parameters" element="tns:DeleteAllUsageDataForTenant"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication DeleteAllUsageDataForTenant OutputMessage">
    <wsdl:part name="parameters" element="tns:DeleteAllUsageDataForTenantResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage">
    <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForSite"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication DeleteCustomEventUsageDataForSite OutputMessage">
    <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForSiteResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication DeleteCustomEventUsageDataForTenant InputMessage">
    <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForTenant"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForTenantResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns:DeleteRecommendationsDataForTenant"/>
  </wsdl:message>
```

```
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns:DeleteRecommendationsDataForTenantResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage">
    <wsdl:part name="parameters" element="tns:DeleteStandardEventUsageDataForSite"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage">
    <wsdl:part name="parameters" element="tns:DeleteStandardEventUsageDataForSiteResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns:DeleteStandardEventUsageDataForTenant"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage">
    <wsdl:part name="parameters"
element="tns:DeleteStandardEventUsageDataForTenantResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinition"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinitionResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinitions"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinitionsResponse"/>
  </wsdl:message>
  <wsdl:message name="IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsItemData"/>
  </wsdl:message>
  <wsdl:message name="IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsItemDataResponse"/>
  </wsdl:message>
  <wsdl:message name="IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsItemsData"/>
  </wsdl:message>
  <wsdl:message name="IAnalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsItemsDataResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsTenantConfiguration"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage">
    <wsdl:part name="parameters" element="tns:GetAnalyticsTenantConfigurationResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage">
    <wsdl:part name="parameters" element="tns:GetGlobalAnalyticsItemDataBatch"/>
  </wsdl:message>
  <wsdl:message
name="IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage">
    <wsdl:part name="parameters" element="tns:GetGlobalAnalyticsItemDataBatchResponse"/>
  </wsdl:message>
  <wsdl:message name="IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage">
    <wsdl:part name="parameters" element="tns:GetQueryTermsForUser"/>
  </wsdl:message>
  <wsdl:message name="IAnalyticsServiceApplication_GetQueryTermsForUser_OutputMessage">
```

```
      <wsdl:part name="parameters" element="tns:GetQueryTermsForUserResponse"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnalyticsTenantSettingsBatch"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnalyticsTenantSettingsBatchResponse"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnayticsTenantSettings"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnayticsTenantSettingsResponse"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication GetRollupAnalyticsItemData InputMessage">
      <wsdl:part name="parameters" element="tns:GetRollupAnalyticsItemData"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetRollupAnalyticsItemDataResponse"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication_GetSearchReport_InputMessage">
      <wsdl:part name="parameters" element="tns:GetSearchReport"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication_GetSearchReport_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetSearchReportResponse"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication GetTenantAnalyticsItemData InputMessage">
      <wsdl:part name="parameters" element="tns:GetTenantAnalyticsItemData"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication GetTenantAnalyticsItemData OutputMessage">
      <wsdl:part name="parameters" element="tns:GetTenantAnalyticsItemDataResponse"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage">
      <wsdl:part name="parameters" element="tns:SendAnalyticsUsageEvents"/>
   </wsdl:message>
   <wsdl:message name="IAnalyticsServiceApplication SendAnalyticsUsageEvents OutputMessage">
      <wsdl:part name="parameters" element="tns:SendAnalyticsUsageEventsResponse"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication_SendAnalyticsUsageEventsToEventStore_InputMessage">
      <wsdl:part name="parameters" element="tns:SendAnalyticsUsageEventsToEventStore"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication SendAnalyticsUsageEventsToEventStore OutputMessage">
      <wsdl:part name="parameters" element="tns:SendAnalyticsUsageEventsToEventStoreResponse"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication UpsertRawAnalyticsTenantSettings InputMessage">
      <wsdl:part name="parameters" element="tns:UpsertRawAnalyticsTenantSettings"/>
   </wsdl:message>
   <wsdl:message
name="IAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage">
      <wsdl:part name="parameters" element="tns:UpsertRawAnalyticsTenantSettingsResponse"/>
   </wsdl:message>
</wsdl:definitions>
```

7   Appendix B: Full XML Schema

Schema name	Prefix	Section
http://schemas.datacontract.org/2004/07 /Microsoft.Office.Server.Search.Analytics	tns1	7.1
http://schemas.microsoft.com/2003/10/Serialization/Arrays	tns2	7.2
http://schemas.microsoft.com/2003/10/Serialization/	ser	7.3
http://tempuri.org/	tns	7.4
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01	q1	7.5
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05	q36	7.6
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09	q27	7.7

For ease of implementation, the following sections provide the full XML schema for this protocol.

7.1   http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analy
tics" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/"/>
  <xs:complexType name="SignalStoreArguments">
    <xs:sequence>
      <xs:element minOccurs="0" name="ClientCorrelationId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="SignalStoreArguments" nillable="true" type="tns1:SignalStoreArguments"/>
  <xs:complexType name="SignalStoreResult">
    <xs:sequence/>
  </xs:complexType>
  <xs:element name="SignalStoreResult" nillable="true" type="tns1:SignalStoreResult"/>
  <xs:simpleType name="ContinuationTokenItemData.Scope">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Global"/>
      <xs:enumeration value="Tenant"/>
      <xs:enumeration value="Site"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="ContinuationTokenItemData.Scope" nillable="true"
type="tns1:ContinuationTokenItemData.Scope"/>
  <xs:simpleType name="EventCountType">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="Count"/>
          <xs:enumeration value="UniqueUsers"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:list>
```

```
    </xs:simpleType>
    <xs:element name="EventCountType" nillable="true" type="tns1:EventCountType"/>
    <xs:simpleType name="EventOptions">
      <xs:list>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="None"/>
            <xs:enumeration value="AllowAnonymousWrite"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:list>
    </xs:simpleType>
    <xs:element name="EventOptions" nillable="true" type="tns1:EventOptions"/>
    <xs:simpleType name="EventRollups">
      <xs:list>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="SiteSubscriptionId"/>
            <xs:enumeration value="SiteId"/>
            <xs:enumeration value="ScopeId"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:list>
    </xs:simpleType>
    <xs:element name="EventRollups" nillable="true" type="tns1:EventRollups"/>
</xs:schema>
```

7.2   http://schemas.microsoft.com/2003/10/Serialization/Arrays Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:tns2="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="tns2:ArrayOfKeyValueOfstringstring"/>
  <xs:complexType name="ArrayOfint">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfint" nillable="true" type="tns2:ArrayOfint"/>
  <xs:complexType name="ArrayOfstring">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfstring" nillable="true" type="tns2:ArrayOfstring"/>
</xs:schema>
```

7.3 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>
```

7.4 http://tempuri.org/ Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://tempuri.org/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/
>
  <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://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"/>
  <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"/>
  <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"/>
  <xs:element name="SendAnalyticsUsageEventsToEventStore">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
```

```
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsUsageEventsToEventStoreResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsUsageEvents">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsUsageEventsResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsSignals">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="signals" nillable="true" type="q1:ArrayOfAnalyticsSignal"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsSignalsResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsSignalsWithArguments">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="signals" nillable="true" type="q1:ArrayOfAnalyticsSignal"/>
          <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="arguments" nillable="true" type="tns1:SignalStoreArguments"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="SendAnalyticsSignalsWithArgumentsResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="SendAnalyticsSignalsWithArgumentsResult" nillable="true"
type="tns1:SignalStoreResult"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetAnalyticsItemData">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" name="eventType" type="xs:int"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
          <xs:element minOccurs="0" name="itemId" nillable="true" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetAnalyticsItemDataResponse">
      <xs:complexType>
```

```xml
          <xs:sequence>
            <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemDataResult" nillable="true" type="q1:AnalyticsItemData"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAnalyticsItemsData">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="eventType" type="xs:int"/>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
            <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="itemIds" nillable="true" type="tns2:ArrayOfstring"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAnalyticsItemsDataResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemsDataResult" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetGlobalAnalyticsItemDataBatch">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="eventType" type="xs:int"/>
            <xs:element minOccurs="0" name="since" type="xs:dateTime"/>
            <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
            <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="token" nillable="true" type="q1:ContinuationTokenItemData"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetGlobalAnalyticsItemDataBatchResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetGlobalAnalyticsItemDataBatchResult" nillable="true"
type="q1:AnalyticsItemDataBatch"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetQueryTermsForUser">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="userName" nillable="true" type="xs:string"/>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
            <xs:element minOccurs="0" name="startTime" type="xs:dateTime"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetQueryTermsForUserResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="GetQueryTermsForUserResult" nillable="true"
type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetRollupAnalyticsItemData">
        <xs:complexType>
          <xs:sequence>
```

```xml
          <xs:element minOccurs="0" name="eventType" type="xs:int"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
  </xs:element>
  <xs:element name="GetRollupAnalyticsItemDataResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetRollupAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetTenantAnalyticsItemData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetTenantAnalyticsItemDataResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetTenantAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetSearchReport">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="reportType" type="xs:int"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
        <xs:element minOccurs="0" name="reportDate" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="bDaily" type="xs:boolean"/>
        <xs:element minOccurs="0" name="maxRows" type="xs:unsignedInt"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetSearchReportResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetSearchReportResult" nillable="true" type="q1:ArrayOfQueryReportData"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetRawAnayticsTenantSettings">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetRawAnayticsTenantSettingsResponse">
    <xs:complexType>
```

```
          <xs:sequence>
            <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnayticsTenantSettingsResult" nillable="true"
type="q27:AnalyticsTenantSettingsData"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="UpsertRawAnalyticsTenantSettings">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="ts" nillable="true" type="q27:AnalyticsTenantSettingsData"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="UpsertRawAnalyticsTenantSettingsResponse">
        <xs:complexType>
          <xs:sequence/>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetRawAnalyticsTenantSettingsBatch">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="ser:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetRawAnalyticsTenantSettingsBatchResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q27:AnalyticsTenantSettingsDataBatch"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAnalyticsTenantConfiguration">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAnalyticsTenantConfigurationResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q27:AnalyticsTenantConfig"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAnalyticsEventTypeDefinition">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
            <xs:element minOccurs="0" name="eventType" type="xs:int"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetAnalyticsEventTypeDefinitionResponse">
        <xs:complexType>
          <xs:sequence>
```

```xml
            <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionResult" nillable="true"
type="q1:AnalyticsEventTypeDefinition"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetAnalyticsEventTypeDefinitions">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element xmlns:q36="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q36:AnalyticsEventTypes"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetAnalyticsEventTypeDefinitionsResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionsResult" nillable="true"
type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteAllUsageDataForTenant">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteAllUsageDataForTenantResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteRecommendationsDataForTenant">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteRecommendationsDataForTenantResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteStandardEventUsageDataForTenant">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteStandardEventUsageDataForTenantResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteCustomEventUsageDataForTenant">
      <xs:complexType>
        <xs:sequence>
```

```xml
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteCustomEventUsageDataForTenantResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteStandardEventUsageDataForSite">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
          <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteStandardEventUsageDataForSiteResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteCustomEventUsageDataForSite">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
          <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="DeleteCustomEventUsageDataForSiteResponse">
      <xs:complexType>
        <xs:sequence/>
      </xs:complexType>
    </xs:element>
</xs:schema>
```

7.5   http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01 Schema

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/
>
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/"/>
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
  <xs:complexType name="ArrayOfAnalyticsUsageEvent">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsUsageEvent"
nillable="true" type="q1:AnalyticsUsageEvent"/>
    </xs:sequence>
  </xs:complexType>
```

```
    <xs:element name="ArrayOfAnalyticsUsageEvent" nillable="true"
type="q1:ArrayOfAnalyticsUsageEvent"/>
    <xs:complexType name="AnalyticsUsageEvent">
      <xs:sequence>
        <xs:element minOccurs="0" name="CustomData" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
        <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="ScopeId" type="ser:guid"/>
        <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
        <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
        <xs:element minOccurs="0" name="TimeStamp" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="UserId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="UserIdRaw" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="Weight" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsUsageEvent" nillable="true" type="q1:AnalyticsUsageEvent"/>
    <xs:complexType name="ArrayOfAnalyticsSignal">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsSignal" nillable="true"
type="q1:AnalyticsSignal"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfAnalyticsSignal" nillable="true"
type="q1:ArrayOfAnalyticsSignal"/>
    <xs:complexType name="AnalyticsSignal">
      <xs:sequence>
        <xs:element minOccurs="0" name="Action" nillable="true" type="q1:AnalyticsAction"/>
        <xs:element minOccurs="0" name="Actor" nillable="true" type="q1:AnalyticsActor"/>
        <xs:element minOccurs="0" name="Item" nillable="true" type="q1:AnalyticsItem"/>
        <xs:element minOccurs="0" name="Source" nillable="true" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsSignal" nillable="true" type="q1:AnalyticsSignal"/>
    <xs:complexType name="AnalyticsAction">
      <xs:sequence>
        <xs:element minOccurs="0" name="ActionType" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="ExpireTime" type="xs:dateTime"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="Properties" nillable="true" type="tns2:ArrayOfKeyValueOfstringstring"/>
        <xs:element minOccurs="0" name="UserTime" type="xs:dateTime"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsAction" nillable="true" type="q1:AnalyticsAction"/>
    <xs:complexType name="AnalyticsActor">
      <xs:sequence>
        <xs:element minOccurs="0" name="Id" nillable="true" type="xs:string"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="Properties" nillable="true" type="tns2:ArrayOfKeyValueOfstringstring"/>
        <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsActor" nillable="true" type="q1:AnalyticsActor"/>
    <xs:complexType name="AnalyticsItem">
      <xs:sequence>
        <xs:element minOccurs="0" name="Id" nillable="true" type="xs:string"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="Properties" nillable="true" type="tns2:ArrayOfKeyValueOfstringstring"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsItem" nillable="true" type="q1:AnalyticsItem"/>
    <xs:complexType name="AnalyticsItemData">
      <xs:sequence>
        <xs:element minOccurs="0" name="CurrentDate" type="xs:dateTime"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DailyHits" nillable="true" type="tns2:ArrayOfint"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DailyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
```

```xml
        <xs:element minOccurs="0" name="EventType" type="xs:int"/>
        <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="LastProcessingHits" type="xs:int"/>
        <xs:element minOccurs="0" name="LastProcessingTime" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="LastProcessingUniqueUsers" type="xs:int"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
  minOccurs="0" name="MonthlyHits" nillable="true" type="tns2:ArrayOfint"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
  minOccurs="0" name="MonthlyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
        <xs:element minOccurs="0" name="ScopeId" nillable="true" type="ser:guid"/>
        <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
        <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
        <xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
        <xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsItemData" nillable="true" type="q1:AnalyticsItemData"/>
    <xs:complexType name="ArrayOfAnalyticsItemData">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsItemData"
  nillable="true" type="q1:AnalyticsItemData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfAnalyticsItemData" nillable="true"
  type="q1:ArrayOfAnalyticsItemData"/>
    <xs:complexType name="ContinuationTokenItemData">
      <xs:sequence>
        <xs:element minOccurs="0" name="EndPartitionId" nillable="true"
  type="xs:base64Binary"/>
        <xs:element minOccurs="0" name="ItemHash" type="xs:int"/>
        <xs:element
  xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
  minOccurs="0" name="ScopeType" type="tns1:ContinuationTokenItemData.Scope"/>
        <xs:element minOccurs="0" name="StartPartitionId" nillable="true"
  type="xs:base64Binary"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ContinuationTokenItemData" nillable="true"
  type="q1:ContinuationTokenItemData"/>
    <xs:complexType name="AnalyticsItemDataBatch">
      <xs:sequence>
        <xs:element minOccurs="0" name="Items" nillable="true"
  type="q1:ArrayOfAnalyticsItemData"/>
        <xs:element minOccurs="0" name="Token" nillable="true"
  type="q1:ContinuationTokenItemData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsItemDataBatch" nillable="true"
  type="q1:AnalyticsItemDataBatch"/>
    <xs:complexType name="ArrayOfQueryReportData">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="QueryReportData" nillable="true"
  type="q1:QueryReportData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfQueryReportData" nillable="true"
  type="q1:ArrayOfQueryReportData"/>
    <xs:complexType name="QueryReportData">
      <xs:sequence>
        <xs:element minOccurs="0" name="Count" type="xs:int"/>
        <xs:element minOccurs="0" name="Query" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="Scope" type="ser:guid"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="QueryReportData" nillable="true" type="q1:QueryReportData"/>
    <xs:complexType name="AnalyticsEventTypeDefinition">
      <xs:sequence>
```

```xml
      <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="AggregationType" type="tns1:EventCountType"/>
      <xs:element minOccurs="0" name="AppEventTypeId" type="ser:guid"/>
      <xs:element minOccurs="0" name="ApplicationName" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="EventName" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
      <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Options" type="tns1:EventOptions"/>
      <xs:element minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
      <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
      <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
      <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Rollups" type="tns1:EventRollups"/>
      <xs:element minOccurs="0" name="TailTrimming" type="xs:int"/>
      <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsEventTypeDefinition" nillable="true"
type="q1:AnalyticsEventTypeDefinition"/>
  <xs:complexType name="ArrayOfAnalyticsEventTypeDefinition">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsEventTypeDefinition"
nillable="true" type="q1:AnalyticsEventTypeDefinition"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsEventTypeDefinition" nillable="true"
type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
</xs:schema>
```

7.6 http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05 Schema

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:q36="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/"/>
  <xs:simpleType name="AnalyticsEventTypes">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="None"/>
          <xs:enumeration value="Standard"/>
          <xs:enumeration value="Custom"/>
          <xs:enumeration value="Internal"/>
          <xs:enumeration value="All"/>
          <xs:enumeration value="AllIncludingInternal"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
  <xs:element name="AnalyticsEventTypes" nillable="true" type="q36:AnalyticsEventTypes"/>
</xs:schema>
```

7.7 http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09 Schema

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:q27="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

```xml
    <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/"/>
    <xs:complexType name="AnalyticsTenantSettingsData">
      <xs:sequence>
        <xs:element minOccurs="0" name="EventFilters" nillable="true" type="xs:base64Binary"/>
        <xs:element minOccurs="0" name="EventTypeDefinitions" nillable="true"
type="xs:base64Binary"/>
        <xs:element minOccurs="0" name="LastUpdateTime" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="Options" type="q27:AnalyticsTenantSettingOptions"/>
        <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
        <xs:element minOccurs="0" name="Version" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsTenantSettingsData" nillable="true"
type="q27:AnalyticsTenantSettingsData"/>
    <xs:simpleType name="AnalyticsTenantSettingOptions">
      <xs:list>
        <xs:simpleType>
          <xs:restriction base="xs:string"/>
        </xs:simpleType>
      </xs:list>
    </xs:simpleType>
    <xs:element name="AnalyticsTenantSettingOptions" nillable="true"
type="q27:AnalyticsTenantSettingOptions"/>
    <xs:complexType name="AnalyticsTenantSettingsDataBatch">
      <xs:sequence>
        <xs:element minOccurs="0" name="LastTenantId" type="ser:guid"/>
        <xs:element minOccurs="0" name="Settings" nillable="true"
type="q27:ArrayOfAnalyticsTenantSettingsData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsTenantSettingsDataBatch" nillable="true"
type="q27:AnalyticsTenantSettingsDataBatch"/>
    <xs:complexType name="ArrayOfAnalyticsTenantSettingsData">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsTenantSettingsData"
nillable="true" type="q27:AnalyticsTenantSettingsData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfAnalyticsTenantSettingsData" nillable="true"
type="q27:ArrayOfAnalyticsTenantSettingsData"/>
    <xs:complexType name="AnalyticsTenantConfig">
      <xs:sequence>
        <xs:element minOccurs="0" name="Settings" nillable="true"
type="q27:AnalyticsTenantSettingsData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsTenantConfig" nillable="true" type="q27:AnalyticsTenantConfig"/>
</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 updates to those products.

▪   Microsoft SharePoint Server 2013

▪   Microsoft SharePoint Server 2016

▪   Microsoft SharePoint Server 2019

Exceptions, if any, are noted in this section. If an update version, service pack or Knowledge Base (KB) number appears with a product name, the behavior changed in that update. The new behavior also applies to subsequent updates 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.

9   Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as Major, Minor, or None.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements.
- A document revision that captures changes to protocol functionality.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **None** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the relevant technical content is identical to the last released version.

The changes made to this document are listed in the following table. For more information, please contact dochelp@microsoft.com.

Section	Description	Revision class
3.1.4.20 GetQueryTermsForUser	Added new section for this operation.	Major
3.1.4.20.1.1 IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage	Changed 'MAY' to 'can'.	Minor
3.1.4.20.1.1 IAnalyticsServiceApplication_GetQueryTermsForUser_InputMessage	Changed 'MAY' to 'can'.	Minor
3.1.4.21 SendAnalyticsUsageEventsToEventStore	Added new section for this operation.	Major
8 Appendix C: Product Behavior	Updated list of supported products.	Major

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