

[MS-OXWSGTZ]: Get Server Time Zone Web Service Protocol Specification

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft's Open Specification Promise (available here: <http://www.microsoft.com/interop/osp>) or the Community Promise (available here: <http://www.microsoft.com/interop/cp/default.mspx>). If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting iplg@microsoft.com.
- **Trademarks.** The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights.
- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

Reservation of Rights. All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

Tools. The Open Specifications do not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them. Certain Open Specifications are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

Revision Summary

| Date | Revision History | Revision Class | Comments |
|------------|------------------|----------------|---|
| 07/15/2009 | 1.0 | Major | Initial Availability. |
| 11/04/2009 | 1.1.0 | Minor | Updated the technical content. |
| 02/10/2010 | 1.1.0 | None | Version 1.1.0 release |
| 05/05/2010 | 1.1.1 | Editorial | Revised and edited the technical content. |
| 08/04/2010 | 1.2 | Minor | Clarified the meaning of the technical content. |

Contents

| | |
|--|-----------|
| 1 Introduction | 5 |
| 1.1 Glossary | 5 |
| 1.2 References | 5 |
| 1.2.1 Normative References | 5 |
| 1.2.2 Informative References | 6 |
| 1.3 Overview | 7 |
| 1.4 Relationship to Other Protocols | 7 |
| 1.5 Prerequisites/Preconditions | 8 |
| 1.6 Applicability Statement | 8 |
| 1.7 Versioning and Capability Negotiation | 8 |
| 1.8 Vendor Extensible Fields | 8 |
| 1.9 Standards Assignments | 8 |
| 2 Messages..... | 9 |
| 2.1 Transport | 9 |
| 2.2 Common Message Syntax | 9 |
| 2.2.1 Namespaces | 9 |
| 2.2.2 Simple Types | 9 |
| 2.2.3 Complex Types | 9 |
| 2.2.3.1 t:AbsoluteDateTransitionType Complex Type | 10 |
| 2.2.3.2 t:ArrayOfTimeZoneDefinitionType Complex Type | 10 |
| 2.2.3.3 t:ArrayOfTransitionsGroupsType Complex Type | 11 |
| 2.2.3.4 t:ArrayOfTransitionsType Complex Type | 11 |
| 2.2.3.5 t:NonEmptyArrayOfPeriodsType Complex Type | 12 |
| 2.2.3.6 t:NonEmptyArrayOfTimeZoneIdType Complex Type | 12 |
| 2.2.3.7 t:PeriodType Complex Type | 13 |
| 2.2.3.8 t:RecurringDateTransitionType Complex Type | 13 |
| 2.2.3.9 t:RecurringDayTransitionType Complex Type | 14 |
| 2.2.3.10 t:RecurringTimeTransitionType Complex Type | 15 |
| 2.2.3.11 t:TimeZoneContextType Complex Type | 15 |
| 2.2.3.12 t:TimeZoneDefinitionType Complex Type | 16 |
| 2.2.3.13 t:TransitionType Complex Type | 17 |
| 2.2.3.14 t:TransitionTargetType Complex Type | 17 |
| 2.2.4 Elements | 17 |
| 2.2.4.1 AbsoluteDateTransition Element | 18 |
| 2.2.4.2 RecurringDateTransition Element | 18 |
| 2.2.4.3 RecurringDayTransition Element | 18 |
| 2.2.4.4 TimeZoneContext Element | 18 |
| 2.2.4.5 Transition Element | 19 |
| 2.2.5 Attributes | 19 |
| 2.2.6 Groups | 19 |
| 2.2.7 Attribute Groups | 19 |
| 2.2.8 Messages | 19 |
| 3 Protocol Details | 20 |
| 3.1 ExchangeServicePortType Server Details | 20 |
| 3.1.1 Abstract Data Model | 20 |
| 3.1.2 Timers | 20 |
| 3.1.3 Initialization | 20 |
| 3.1.4 Message Processing Events and Sequencing Rules | 20 |

| | |
|--|-----------|
| 3.1.4.1.1 Simple Types | 21 |
| 3.1.4.1.1.1 t:TransitionTargetKindType Simple Type | 21 |
| 3.1.4.1.2 Complex Types | 21 |
| 3.1.4.1.2.1 m:GetServerTimeZonesResponseType Complex Type..... | 21 |
| 3.1.4.1.2.2 m:GetServerTimeZonesResponseType Complex Type..... | 22 |
| 3.1.4.1.2.3 m:GetServerTimeZonesType Complex Type..... | 22 |
| 3.1.4.1.3 Elements..... | 23 |
| 3.1.4.1.3.1 GetServerTimeZones Element | 23 |
| 3.1.4.1.3.2 GetServerTimeZonesResponse Element..... | 23 |
| 3.1.4.1.4 Messages | 24 |
| 3.1.4.1.4.1 tns:GetServerTimeZonesSoapIn | 24 |
| 3.1.4.1.4.2 tns:GetServerTimeZonesSoapOut | 24 |
| 3.1.5 Timer Events | 24 |
| 3.1.6 Other Local Events | 24 |
| 3.2 Client Details..... | 24 |
| 3.2.1 Abstract Data Model | 24 |
| 3.2.2 Timers | 24 |
| 3.2.3 Initialization | 24 |
| 3.2.4 Message Processing Events and Sequencing | 25 |
| 3.2.5 Timer Events | 25 |
| 3.2.6 Other Local Events | 25 |
| 4 Protocol Examples..... | 26 |
| 5 Security..... | 27 |
| 5.1 Security Considerations for Implementers..... | 27 |
| 5.2 Index of Security Parameters | 27 |
| 6 Appendix A: Full WSDL..... | 28 |
| 6.1 WSDL..... | 28 |
| 6.2 Types Schema..... | 29 |
| 6.3 Messages Schema..... | 32 |
| 7 Appendix B: Product Behavior..... | 34 |
| 8 Change Tracking..... | 35 |
| 9 Index | 37 |

1 Introduction

This document specifies the Get Server Time Zone Web Service protocol, which is responsible for returning time zone information that is used by the server. Clients use the SOAP protocol [\[SOAP1.1\]](#) to contact the get server time zone service.

1.1 Glossary

The following terms are defined in [\[MS-OXGLOS\]](#):

Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Socket Layers (HTTPS)
SOAP body
SOAP fault
Web Services Description Language (WSDL)
WSDL message
XML
XML Schema

The following terms are specific to this document:

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

1.2 References

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. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MS-OXWSATT] Microsoft Corporation, "[Attachment Handling Web Service Protocol Specification](#)", July 2009.

[MS-OXWSCDATA] Microsoft Corporation, "[Common Web Service Data Types](#)", July 2009.

[MS-OXWSCONT] Microsoft Corporation, "[Contacts Web Service Protocol Specification](#)", July 2009.

[MS-OXWSMSG] Microsoft Corporation, "[E-Mail Message Types Web Service Protocol Specification](#)", July 2009.

[MS-OXWSMTGS] Microsoft Corporation, "[Calendaring Web Service Protocol Specification](#)", July 2009.

[MS-OXWSPOST] Microsoft Corporation, "[Post Items Web Service Protocol Specification](#)", July 2009.

[MS-OXWSSRCH] Microsoft Corporation, "[Mailbox Search Web Service Protocol Specification](#)", July 2009.

[MS-OXWSSYNC] Microsoft Corporation, "[Mailbox Contents Synchronization Web Service Protocol Specification](#)", July 2009.

- [MS-OXWSTASK] Microsoft Corporation, "[Tasks Web Service Protocol Specification](#)", July 2009.
- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.ietf.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.ietf.org/rfc/rfc2616.txt>
- [RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, <http://www.ietf.org/rfc/rfc2818.txt>
- [RFC3066] Alvestrand, H., "Tags for the Identification of Languages", BCP 47, RFC 3066, January 2001, <http://www.ietf.org/rfc/rfc3066.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/>
- [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., Eds., et al., "Namespaces in XML 1.0 (Third Edition)", December 2009, <http://www.w3.org/TR/REC-xml-names/>
- [XMLSCHEMA1] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>
- [XMLSCHEMA2] Biron, P., and Malhotra, A., Eds., "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-OXGLOS] Microsoft Corporation, "[Exchange Server Protocols Master Glossary](#)", April 2008.
- [MS-OXWSATT] Microsoft Corporation, "[Attachment Handling Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSCONT] Microsoft Corporation, "[Contacts Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSDLIST] Microsoft Corporation, "[Distribution List Creation and Usage Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSMSG] Microsoft Corporation, "[E-Mail Message Types Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSMTGS] Microsoft Corporation, "[Calendaring Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSPOST] Microsoft Corporation, "[Post Items Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSSRCH] Microsoft Corporation, "[Mailbox Search Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSSYNC] Microsoft Corporation, "[Mailbox Contents Synchronization Web Service Protocol Specification](#)", July 2009.
- [MS-OXWSTASK] Microsoft Corporation, "[Tasks Web Service Protocol Specification](#)", July 2009.

1.3 Overview

The Get Server Time Zone Web Service protocol provides clients with time zone information that is supported by the server. Clients request the list of time zones for which the server has definitions, then use this information when making requests to other Web service protocols, or to present time-based information to the user.

1.4 Relationship to Other Protocols

The Get Server Time Zone Web Service protocol uses SOAP over [HTTP \[RFC2616\]](#), as shown in the following figure.

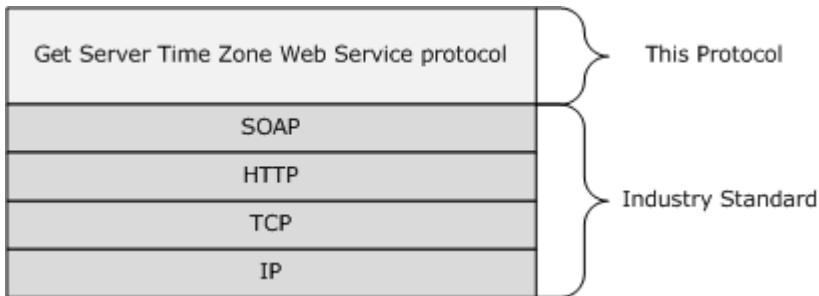


Figure 1: Get Server Time Zone Web Service protocol HTTP stack

The Get Server Time Zone Web Service protocol uses SOAP over [HTTPS \[RFC2818\]](#), as shown in the following figure.

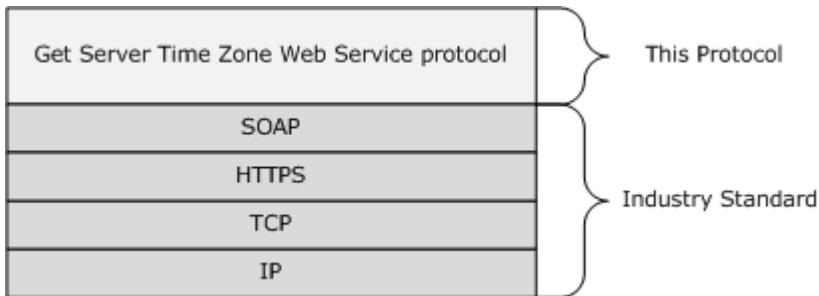


Figure 2: Get Server Time Zone Web Service protocol HTTPS stack

The time zone information that is returned by the Get Server Time Zone Web Service protocol is used when requests are made by using the following protocols:

- Attachment Handling Web Service protocol [\[MS-OXWSATT\]](#)
- Contacts Web Service protocol [\[MS-OXWSCONT\]](#)
- Distribution List Creation and Usage Web Service protocol [\[MS-OXWSDLIST\]](#)
- E-Mail Message Types Web Service protocol [\[MS-OXWSMSG\]](#)
- Calendaring Web Service protocol [\[MS-OXWSMTGS\]](#)
- Post Items Web Service protocol [\[MS-OXWSPOST\]](#)
- Mailbox Search Web Service protocol [\[MS-OXWSSRCH\]](#)

- Mailbox Contents Synchronization Web Service protocol [\[MS-OXWSSYNC\]](#)
- Tasks Web Service protocol [\[MS-OXWSTASK\]](#)

1.5 Prerequisites/Preconditions

None.

1.6 Applicability Statement

This protocol is applicable to client applications that create, update, or manage items in the server data store that include time or date information.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses SOAP 1.1, as specified in section [2.1](#).
- **Protocol Versions:** This protocol specifies only one **WSDL port type** version.
- **Security and Authentication Methods:** This protocol relies on the Web server that is hosting it to perform authentication.
- **Localization:** This protocol includes text strings in various messages. Localization considerations for such strings are specified in section [3.1.4](#).
- **Capability Negotiation:** None.

1.8 Vendor Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

The SOAP version supported is SOAP 1.1. For details, see [\[SOAP1.1\]](#).

2.2 Common Message Syntax

This section contains common definitions that are used by this protocol. The syntax of the definitions uses **XML schema**, as defined in [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#), and **Web Services Description Language (WSDL)**, as defined 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 |
|-----------------|---|------------------------------|
| soap | http://schemas.xmlsoap.org/wsdl/soap/ | [SOAP1.1] |
| tns | http://schemas.microsoft.com/exchange/services/2006/messages | |
| s | http://www.w3.org/2001/XMLSchema | [XMLSCHEMA1] |
| targetNamespace | http://schemas.microsoft.com/exchange/services/2006/messages | |
| wsdl | http://schemas.xmlsoap.org/wsdl/ | [WSDL] |
| t | http://schemas.microsoft.com/exchange/services/2006/types | |

2.2.2 Simple Types

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

2.2.3 Complex Types

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

| Complex Type | Description |
|--|--|
| t:AbsoluteDateTransitionType | Specifies a time zone transition that occurs on a specific date and at a specific time. |
| t:ArrayOfTransitionsGroupsType | Specifies an array of transition groups. |
| t:ArrayOfTransitionsType | Specifies an array of time zone transitions. |
| t:NonEmptyArrayOfPeriodsType | Specifies an array of t:PeriodType complex types that has at least one member. |

| Complex Type | Description |
|---|---|
| t:PeriodType | Specifies the name and offset of a specific time zone. |
| t:RecurringDateTransitionType | Specifies a time zone transition that occurs on a specified day of the year. |
| t:RecurringDayTransitionType | Specifies a time zone transition that occurs on the same weekday each year. |
| t:RecurringTimeTransitionType | Specifies the base class for recurring time zone transitions. |
| t:TimeZoneContextType | Specifies a time zone definition and enables the SOAP protocol attributes to be associated with the definition. |
| t:TimeZoneDefinitionType | Specifies the time periods and transitions that describe a time zone. |
| t:TransitionType | Specifies the base type for all time zone transition complex types. |
| t:TransitionTargetType | Specifies a time zone transition target type. |

2.2.3.1 t:AbsoluteDateTransitionType Complex Type

The [AbsoluteDateTransitionType](#) complex type specifies a time zone transition that occurs on a specific date and at a specific time.

```
<xs:complexType name="AbsoluteDateTransitionType">
  <xs:complexContent>
    <xs:restriction
      base="t:TransitionType"
    >
      <xs:sequence>
        <xs:element name="DateTime"
          type="xs:dateTime"
        />
      </xs:sequence>
    </xs:restriction>
  </xs:complexContent>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|----------|-------------|---|
| DateTime | xs:dateTime | Specifies the date and time at which the time zone transition occurs. |

2.2.3.2 t:ArrayOfTimeZoneDefinitionType Complex Type

The [ArrayOfTimeZoneDefinitionType](#) complex type specifies zero or more [TimeZoneDefinitionType](#) complex type (section [2.2.3.12](#)) instances.

```
<xs:complexType name="ArrayOfTimeZoneDefinitionType">
  <xs:sequence
    maxOccurs="unbounded"
    minOccurs="0"
  >
```

```

>
<xs:element name="TimeZoneDefinition"
    type="t:TimeZoneDefinitionType"
/>
</xs:sequence>
</xs:complexType>

```

Child Elements

| Element | Type | Description |
|--------------------|--|--|
| TimeZoneDefinition | t:TimeZoneDefinitionType | Specifies the definition of a time zone. |

2.2.3.3 t:ArrayOfTransitionsGroupsType Complex Type

The [ArrayOfTransitionsGroupsType](#) complex type specifies an array of transition groups.

```

<xs:complexType name="ArrayOfTransitionsGroupsType">
<xs:sequence>
<xs:element name="TransitionsGroup"
    type="t:ArrayOfTransitionsType"
    maxOccurs="unbounded"
/>
</xs:sequence>
</xs:complexType>

```

Child Elements

| Element | Type | Description |
|------------------|--|--|
| TransitionsGroup | t:ArrayOfTransitionsType | Specifies one or more arrays of transitions. |

2.2.3.4 t:ArrayOfTransitionsType Complex Type

The [ArrayOfTransitionsType](#) complex type specifies an array of time zone transitions.

```

<xs:complexType name="ArrayOfTransitionsType">
<xs:sequence>
<xs:element
    maxOccurs="unbounded"
    ref="t:Transition"
/>
</xs:sequence>
<xs:attribute name="Id"
    type="xs:string"
/>
</xs:complexType>

```

Child Elements

| Element | Type | Description |
|---------------------|---------------------|--|
| t:Transition | t:Transition | Specifies a descendent of the t:Transition element (section 2.2.4.5) that describes the time zone transition. |
| Name | Type | Description |
| Id | xs:string | Specifies a unique identifier for the time zone transition. |

Attributes

| Name | Type | Description |
|------|-----------|---|
| Id | xs:string | Specifies a unique identifier for the time zone transition. |

2.2.3.5 t:NonEmptyArrayOfPeriodsType Complex Type

The [NonEmptyArrayOfPeriodsType](#) complex type specifies an array of [t:PeriodType](#) complex types (section [2.2.3.7](#)) that has at least one member.

```
<xs:complexType name="NonEmptyArrayOfPeriodsType">
  <xs:sequence>
    <xs:element name="Period"
      type="t:PeriodType"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|---------|---------------------|---|
| Period | t:PeriodType | Specifies one or more t:PeriodType complex types (section 2.2.3.7). At least one t:PeriodType complex type MUST be included. |

2.2.3.6 t:NonEmptyArrayOfTimeZoneIdType Complex Type

The [NonEmptyArrayOfTimeZoneIdType](#) complex type specifies one or more time zone identifiers.

```
<xs:complexType name="NonEmptyArrayOfTimeZoneIdType">
  <xs:sequence>
    <xs:element name="Id"
      type="xs:string"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|---------|-----------|-----------------------------------|
| Id | xs:string | Specifies a time zone identifier. |

2.2.3.7 t:PeriodType Complex Type

The [PeriodType](#) complex type specifies the name and offset of a specific time zone.

```
<xs:complexType name="PeriodType">
  <xs:attribute name="Bias"
    type="xs:duration"
  />
  <xs:attribute name="Name"
    type="xs:string"
  />
  <xs:attribute name="Id"
    type="xs:string"
  />
</xs:complexType>
```

Attributes

| Name | Type | Description |
|------|--------------------|---|
| Bias | xs:duration | Specifies the hourly offset from Coordinated Universal Time (UTC) for the time zone. |
| Name | xs:string | Specifies the descriptive name of the time zone. |
| Id | xs:string | Specifies a unique identifier for the time zone period. |

2.2.3.8 t:RecurringDateTransitionType Complex Type

The [RecurringDateTransitionType](#) complex type specifies a time zone transition that occurs on a specified day of the year.

```
<xs:complexType name="RecurringDateTransitionType">
  <xs:complexContent>
    <xs:extension
      base="t:RecurringTimeTransitionType"
    >
      <xs:sequence>
        <xs:element name="Day"
          type="xs:int"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|---------|--------|---|
| Day | xs:int | Specifies the day of the year on which the time zone transition occurs. |

2.2.3.9 t:RecurringDayTransitionType Complex Type

The [RecurringDayTransitionType](#) complex type specifies a time zone transition that occurs on the same weekday each year.

```
<xs:complexType name="RecurringDayTransitionType">
  <xs:complexContent>
    <xs:extension
      base="t:RecurringTimeTransitionType"
    >
      <xs:sequence>
        <xs:element name="DayOfWeek"
          type="t:DayOfWeekType"
        />
        <xs:element name="Occurrence"
          type="xs:int"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|------------|---------------------------------|---|
| DayOfWeek | t:DayOfWeekType | Specifies the day of the week on which the time zone transition occurs. |
| Occurrence | xs:int | Specifies the occurrence of the day of the week in the month that the transition occurs on. |

The value of the **Occurrence** element is interpreted as shown in the following table.

| Occurrence | Meaning |
|------------|---|
| 1 | The first occurrence of the specified day of the week from the beginning of the month. |
| 2 | The second occurrence of the specified day of the week from the beginning of the month. |
| 3 | The third occurrence of the specified day of the week from the beginning of the month. |
| 4 | The fourth occurrence of the specified day of the week from the beginning of the month. |
| -1 | The first occurrence of the specified day of the week from the end of the month. |
| -2 | The second occurrence of the specified day of the week from the end of the month. |
| -3 | The third occurrence of the specified day of the week from the end of the month. |
| -4 | The fourth occurrence of the specified day of the week from the end of the month. |

2.2.3.10 t:RecurringTimeTransitionType Complex Type

The [RecurringTimeTransitionType](#) complex type specifies the base class for recurring time zone transitions.

```
<xs:complexType name="RecurringTimeTransitionType"
    abstract="true"
>
<xs:complexContent>
    <xs:extension
        base="t:TransitionType"
    >
        <xs:sequence>
            <xs:element name="TimeOffset"
                type="xs:duration"
            />
            <xs:element name="Month"
                type="xs:int"
            />
        </xs:sequence>
    </xs:extension>
</xs:complexContent>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|------------|-------------|---|
| TimeOffset | xs:duration | Specifies the hourly offset from Coordinated Universal Time (UTC) for the time zone transition. |
| Month | xs:int | Specifies the month in which the time zone transition occurs. |

2.2.3.11 t:TimeZoneContextType Complex Type

The [TimeZoneContextType](#) complex type specifies a time zone definition and enables SOAP protocol attributes to be associated with the definition.

```
<xs:complexType name="TimeZoneContextType">
    <xs:sequence>
        <xs:element name="TimeZoneDefinition"
            type="t:TimeZoneDefinitionType"
        />
    </xs:sequence>
    <xs:anyAttribute
        namespace="http://schemas.xmlsoap.org/soap/envelope"
    />
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|--------------------|--|--|
| TimeZoneDefinition | t:TimeZoneDefinitionType | Specifies the definition of a time zone. |

2.2.3.12 t:TimeZoneDefinitionType Complex Type

The [TimeZoneDefinitionType](#) specifies the time periods and transitions that describe a time zone.

```

<xs:complexType name="TimeZoneDefinitionType">
  <xs:sequence
    minOccurs="0"
  >
    <xs:element name="Periods"
      type="t:NonEmptyArrayOfPeriodsType"
    />
    <xs:element name="TransitionsGroups"
      type="t:ArrayOfTransistionsGroupsType"
      minOccurs="0"
    />
    <xs:element name="Transitions"
      type="t:ArrayOfTransistionsType"
    />
  </xs:sequence>
  <xs:attribute name="Id"
    type="xs:string"
  />
  <xs:attribute name="Name"
    type="xs:string"
  />
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|-------------------|---|---|
| Periods | t:NonEmptyArrayOfPeriodsType | Specifies the time periods when a time zone is in force. |
| TransitionsGroups | t:ArrayOfTransistionsGroupsType | Specifies a set of transition groups from one time zone specification to another. |
| Transitions | t:ArrayOfTransistionsType | Specifies a set of transitions from one time zone specification to another. |

Attributes

| Name | Type | Description |
|------|-----------|--|
| Id | xs:string | The unique identifier of the time zone definition. |
| Name | xs:string | The descriptive name of the time zone definition. |

2.2.3.13 t:TransitionType Complex Type

The [TransitionType](#) complex type is the base type for all time zone transition complex types.

```
<xs:complexType name="TransitionType"
    abstract="false"
>
<xs:sequence>
    <xs:element name="To"
        type="t:TransitionTargetType"
    />
</xs:sequence>
</xs:complexType>
```

Child Elements

| Element | Type | Description |
|---------|--|--|
| To | t:TransitionTargetType | One of the t:TransitionTargetType enumeration values (section 2.2.3.14) that specify whether the time zone transition is a single period or a group of time zone transitions. |

2.2.3.14 t:TransitionTargetType Complex Type

The [TransitionTargetType](#) complex type specifies a time zone transition target type.

```
<xs:complexType>
    <xs:simpleContent>
        <xs:extension
            base="xs:string"
        >
            <xs:attribute name="Name"
                type="t:TransitionTargetKindType"
                use="required"
            />
        </xs:extension>
    </xs:simpleContent>
</xs:complexType>
```

Attributes

| Name | Type | Description |
|------|--|---|
| Name | t:TransitionTargetKindType | Specifies the target type (period or group of periods) of the transition. |

2.2.4 Elements

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

| Element | Description |
|---|--|
| t:AbsoluteDateTransition | Specifies a time zone transition that occurs on a specified date and at a specified time. |
| t:RecurringDateTransition | Specifies a time zone transition that occurs on a specific recurring date. |
| t:RecurringDayTransition | Specifies a time zone transition that occurs on the same day each year. |
| t:TimeZoneContext | Specifies a time zone definition and enables the association of SOAP attributes with the definition. |
| t:Transition | Specifies the base element for all time zone transition elements. |

2.2.4.1 AbsoluteDateTransition Element

The [AbsoluteDateTransition](#) element specifies a time zone transition that occurs on a specified date and at a specified time.

```
<xs:element name="AbsoluteDateTransition"
    type="t:AbsoluteDateTransitionType"
/>
```

2.2.4.2 RecurringDateTransition Element

The [RecurringDateTransition](#) element specifies a time zone transition that occurs on a specific recurring date.

```
<xs:element name="RecurringDateTransition"
    type="t:RecurringDateTransitionType"
/>
```

2.2.4.3 RecurringDayTransition Element

The [RecurringDayTransition](#) element specifies a time zone transition that occurs on the same day each year.

```
<xs:element name="RecurringDayTransition"
    type="t:RecurringDayTransitionType"
/>
```

2.2.4.4 TimeZoneContext Element

The [TimeZoneContext](#) element specifies a time zone definition and enables the association of SOAP attributes with the definition.

```
<xs:element name="TimeZoneContext"
    type="t:TimeZoneContextType"
/>
```

2.2.4.5 Transition Element

The [Transition](#) element specifies the base element for all time zone transition elements.

```
<xs:element name="Transition"
    type="t:TransitionType"
/>
```

2.2.5 Attributes

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

2.2.6 Groups

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

2.2.7 Attribute Groups

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

2.2.8 Messages

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

3 Protocol Details

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

3.1 ExchangeServicePortType Server Details

The Get Server Time Zone Web Service protocol defines a single port type.

| Operation | Description |
|------------------------------------|---|
| GetServerTimeZones | Gets the time zones that are supported by the server. |

3.1.1 Abstract Data Model

The Get Server Time Zone Web Service protocol is a stateless protocol.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

This protocol includes the operation that is listed in the following table.

| Operation | Description |
|------------------------------------|--|
| GetServerTimeZones | Gets the time zones that are supported by the server. This operation is defined in section 3.1.4.1 . |

3.1.4.1 GetServerTimeZones

The [GetServerTimeZones](#) operation gets time zone definitions from the server.

```
<wsdl:operation name="GetServerTimeZones">
    <wsdl:input message="tns:GetServerTimeZonesSoapIn" />
    <wsdl:output message="tns:GetServerTimeZonesSoapOut" />
</wsdl:operation>
```

Request

| Message Format | Description |
|--|---|
| tns:GetServerTimeZonesSoapIn | Specifies the SOAP message that requests the server time zone. |

Response

| Message Format | Description |
|---|--|
| tns:GetServerTimeZonesSoapOut | Specifies the SOAP message that is returned by the server in response. |

3.1.4.1.1 Simple Types

The following **XML schema** simple type definitions are specific to this operation.

3.1.4.1.1.1 t:TransitionTargetKindType Simple Type

The [TransitionTargetKindType](#) simple type specifies whether a time zone transition is a single period or a group of time zone periods.

```
<xs:simpleType name="TransitionTargetKindType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="Period"
    />
    <xs:enumeration
      value="Group"
    />
  </xs:restriction>
</xs:simpleType>
```

Enumeration

The following values are defined by the **TransitionTargetKindType** simple type:

| Value | Description |
|--------|---|
| Period | Specifies that the time zone transition target is a single period. |
| Group | Specifies that the time zone transition target is a group of time zone periods. |

3.1.4.1.2 Complex Types

The following **XML schema** complex type definitions are specific to this operation.

3.1.4.1.2.1 m:GetServerTimeZonesResponseType Complex Type

The [GetServerTimeZonesResponseType](#) complex type specifies the response that is returned by the [GetServerTimeZones](#) operation (section 3.1.4.1). The GetServerTimeZonesResponseType complex type extends the [ResponseMessageType](#) complex type ([\[MS-OXWSCDATA\]](#) section 2.2.3.52).

```
<xs:complexType name="GetServerTimeZoneResponseMessageType">
  <xs:complexContent>
    <xs:extension
      base="m:ResponseMessageType"
    >
```

```

<xs:sequence>
  <xs:element name="TimeZoneDefinitions"
    type="t:ArrayOfTimeZoneDefinitionType"
    minOccurs="1"
  />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

| Element | Type | Description |
|---------------------|---|--|
| TimeZoneDefinitions | t:ArrayOfTimeZoneDefinitionType | Specifies one or more time zone definitions. |

3.1.4.1.2.2 m:GetServerTimeZonesResponseType Complex Type

The [GetServerTimeZonesResponseType](#) complex type extends the [BaseResponseMessageType](#) complex type ([\[MS-OXWSCDATA\]](#) section 2.2.3.15).

```

<xs:complexType name="GetServerTimeZonesResponseType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseResponseMessageType"
    />
  </xs:complexContent>
</xs:complexType>

```

3.1.4.1.2.3 m:GetServerTimeZonesType Complex Type

The [GetServerTimeZonesType](#) complex type specifies the requested server time zones or specifies that all server time zones should be returned. It optionally specifies whether full time zone information is returned, or whether only time zone name and identifiers are returned. The GetServerTimeZonesType complex type extends the [BaseRequestType](#) complex type ([\[MS-OXWSCDATA\]](#) section 2.2.3.14).

```

<xs:complexType name="GetServerTimeZonesType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="Ids"
          type="t:NonEmptyArrayOfTimeZoneIdType"
          minOccurs="0"
        />
      </xs:sequence>
      <xs:attribute name="ReturnFullTimeZoneData"
        type="xs:boolean"
        use="optional"
      />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

</xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

| Element | Type | Description |
|---------|---|--|
| Ids | t:NonEmptyArrayOfTimeZoneIdType | Specifies a list of time zone identifiers for which the time zone definitions are returned. If an identifier is included that is not recognized by the server, the server does not return any information and does not report an error. This element is optional. If it is not specified, all time zone definitions that are available on the server are returned. |

Attributes

| Name | Type | Description |
|------------------------|------------|---|
| ReturnFullTimeZoneData | xs:boolean | Specifies whether the GetServerTimeZones operation (section 3.1.4.1) returns the complete time zone definition or if the operation returns only time zone name and identifiers. This attribute is optional. If it is not included, complete time zone information is returned. |

3.1.4.1.3 Elements

The following **XML schema** element definitions are specific to this operation.

3.1.4.1.3.1 GetServerTimeZones Element

The [GetServerTimeZones](#) element specifies the base element for a [GetServerTimeZones](#) operation (section [3.1.4.1](#)).

```

<xs:element name="GetServerTimeZones"
    type="m:GetServerTimeZonesType"
/>

```

3.1.4.1.3.2 GetServerTimeZonesResponse Element

The [GetServerTimeZonesResponse](#) element specifies the response message for a [GetServerTimeZones](#) operation (section [3.1.4.1](#)).

```

<xs:element name="GetServerTimeZonesResponse"
    type="m:GetServerTimeZonesResponseType"
/>

```

3.1.4.1.4 Messages

The following **WSDL message** definitions are specific to this operation.

3.1.4.1.4.1 tns:GetServerTimeZonesSoapIn

The **GetServerTimeZonesSoapIn** message contains three parts, as described in the following table.

| Part Name | Element/Type | Description |
|----------------|--|---|
| request | tns:GetServerTimeZones | Specifies the request. |
| MailboxCulture | t:MailboxCulture | Specifies the culture to use for accessing the server. The cultures are defined by [RFC3066] . |
| RequestVersion | t:RequestServerVersion | Specifies the schema version for the GetServerTimeZones request (section 3.1.4.1). |

3.1.4.1.4.2 tns:GetServerTimeZonesSoapOut

The **GetServerTimeZonesSoapOut** message contains two parts, as described in the following table.

| Part Name | Element/Type | Description |
|--------------------------|--|--|
| GetServerTimeZonesResult | tns:GetServerTimeZonesResponse | Specifies the response. |
| ServerVersion | t:ServerVersionInfo | Specifies the server version for the response. |

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

3.2 Client Details

None.

3.2.1 Abstract Data Model

None.

3.2.2 Timers

None.

3.2.3 Initialization

None.

3.2.4 Message Processing Events and Sequencing

None.

3.2.5 Timer Events

None.

3.2.6 Other Local Events

None.

4 Protocol Examples

None.

5 Security

5.1 Security Considerations for Implementers

The Get Server Time Zone Web Service protocol does not use additional security mechanisms.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

The following table lists the **XML** files that are required to implement the functionality that is specified in this document. The contents of each file are included in this section.

| File name | Description | Section |
|-------------------------|---|---------------------|
| MS-OXWSGTZ.wsdl | Contains the WSDL for the implementation of this protocol. | 6.1 |
| MS-OXWSGTZ-types.xsd | Contains the XML schema type definitions that are used in this protocol. | 6.2 |
| MS-OXWSGTZ-messages.xsd | Contains the XML schema message definitions that are used in this protocol. | 6.3 |

These files have to be placed in a common folder in order for the WSDL to validate and operate. Also, any schema files that are included in or imported into the MS-OXWSGTZ-types.xsd or MS-OXWSGTZ-messages.xsd schemas have to be placed in the common folder with the files.

6.1 WSDL

This section contains the contents of the MS-OXWSGTZ.wsdl file.

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
    xmlns:ss="http://www.w3.org/2001/XMLSchema" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
    xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
    targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages">
    <wsdl:types>
        <xs:schema id="messages" elementFormDefault="qualified" version="Exchange2010">
            xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
            xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
            xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
            xmlns:xs="http://www.w3.org/2001/XMLSchema"
            targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
            xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
                <xs:import
                    namespace="http://schemas.microsoft.com/exchange/services/2006/types"/>
                    <xs:include schemaLocation="MS-OXWSGTZ-messages.xsd" />
                    <!-- Add global elements and types from messages.xsd -->
            </xs:schema>
            <xs:schema id="types" elementFormDefault="qualified" version="Exchange2010">
                xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
                targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
                xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
                xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/types"
                xmlns:xs="http://www.w3.org/2001/XMLSchema">
                    <xs:import namespace="http://www.w3.org/XML/1998/namespace"/>
                    <!-- Add global elements and types from types.xsd -->
            </xs:schema>
        </wsdl:types>
        <wsdl:portType name="ExchangeServicePortType">
            <wsdl:operation name="GetServerTimeZones">
                <wsdl:input message="tns:GetServerTimeZonesSoapIn" />
                <wsdl:output message="tns:GetServerTimeZonesSoapOut" />
            </wsdl:operation>
```

```

</wsdl:portType>
<wsdl:binding name="ExchangeServiceBinding" type="tns:ExchangeServicePortType">
    <wsdl:documentation>
        <wsi:Claim conformsTo="http://ws-i.org/profiles/basic/1.0"
        xmlns:wsi="http://ws-i.org/schemas/conformanceClaim/" />
    </wsdl:documentation>
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="GetServerTimeZones">
        <soap:operation
            soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetServerTimeZones"
        />
        <wsdl:input>
            <soap:header message="tns:GetServerTimeZonesSoapIn" part="MailboxCulture"
            use="literal" />
            <soap:header message="tns:GetServerTimeZonesSoapIn" part="RequestVersion"
            use="literal" />
            <soap:body parts="request" use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body parts="GetServerTimeZonesResult" use="literal" />
            <soap:header message="tns:GetServerTimeZonesSoapOut" part="ServerVersion"
            use="literal" />
        </wsdl:output>
    </wsdl:operation>
</wsdl:binding>
<wsdl:message name="GetServerTimeZonesSoapIn">
    <wsdl:part name="request" element="tns:GetServerTimeZones" />
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture" />
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion" />
</wsdl:message>
<wsdl:message name="GetServerTimeZonesSoapOut">
    <wsdl:part name="GetServerTimeZonesResult" element="tns:GetServerTimeZonesResponse"
    />
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo" />
</wsdl:message>
</wsdl:definitions>

```

6.2 Types Schema

This section contains the contents of the MS-OXWSGTZ-types.xsd file and information about additional files that this schema file requires to operate correctly.

MS-OXWSGTZ-types.xsd includes the file listed in the following table. For the schema file to operate correctly, this file has to be present in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

| File name | Defining specification |
|------------------------|----------------------------|
| MS-OXWSCDATA-types.xsd | [MS-OXWSCDATA] section 6.3 |

```

<?xml version="1.0" encoding="utf-8"?>
<xss:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
    xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/types"
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
    elementFormDefault="qualified" version="Exchange2010" id="types">
    <xss:import namespace="http://www.w3.org/XML/1998/namespace"/>

```

```

<xs:include schemaLocation="MS-OXWSCDATA-types.xsd"/>
<xs:element name="AbsoluteDateTransition" type="t:AbsoluteDateTransitionType"
substitutionGroup="t:Transition"/>
<xs:complexType name="AbsoluteDateTransitionType">
<xs:complexContent>
<xs:extension base="t:TransitionType">
<xs:sequence>
<xs:element name="DateTime" type="xs:dateTime"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="ArrayOfTimeZoneDefinitionType">
<xs:sequence minOccurs="0" maxOccurs="unbounded">
<xs:element name="TimeZoneDefinition" type="t:TimeZoneDefinitionType"/>
</xs:sequence>
</xs:complexType>
<xs:complexType name="ArrayOfTransitionsGroupsType">
<xs:sequence>
<xs:element name="TransitionsGroup" type="t:ArrayOfTransitionsType" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
<xs:complexType name="ArrayOfTransitionsType">
<xs:sequence>
<xs:element ref="t:Transition" maxOccurs="unbounded"/>
</xs:sequence>
<xs:attribute name="Id" type="xs:string"/>
</xs:complexType>
<xs:complexType name="NonEmptyArrayOfPeriodsType">
<xs:sequence>
<xs:element name="Period" type="t:PeriodType" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
<xs:complexType name="NonEmptyArrayOfTimeZoneIdType">
<xs:sequence>
<xs:element name="Id" type="xs:string" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
<xs:complexType name="PeriodType">
<xs:attribute name="Bias" type="xs:duration"/>
<xs:attribute name="Name" type="xs:string"/>
<xs:attribute name="Id" type="xs:string"/>
</xs:complexType>
<xs:element name="RecurringDayTransition" type="t:RecurringDayTransitionType"
substitutionGroup="t:Transition"/>
<xs:element name="RecurringDateTransition" type="t:RecurringDateTransitionType"
substitutionGroup="t:Transition"/>
<xs:complexType name="RecurringDateTransitionType">
<xs:complexContent>
<xs:extension base="t:RecurringTimeTransitionType">
<xs:sequence>
<xs:element name="Day" type="xs:int"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="RecurringDayTransitionType">
<xs:complexContent>
<xs:extension base="t:RecurringTimeTransitionType">

```

```

<xs:sequence>
<xs:element name="DayOfWeek" type="t:DayOfWeekType"/>
<xs:element name="Occurrence" type="xs:int"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="RecurringTimeTransitionType" abstract="true">
<xs:complexContent>
<xs:extension base="t:TransitionType">
<xs:sequence>
<xs:element name="TimeOffset" type="xs:duration"/>
<xs:element name="Month" type="xs:int"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="TimeZoneContextType">
<xs:sequence>
<xs:element name="TimeZoneDefinition" type="t:TimeZoneDefinitionType"/>
</xs:sequence>
<xs:anyAttribute namespace="http://schemas.xmlsoap.org/soap/envelope/">
<xs:annotation>
<xs:documentation>Allow attributes in the soap namespace to be used here</xs:documentation>
</xs:annotation>
</xs:anyAttribute>
</xs:complexType>
<xs:element name="TimeZoneContext" type="t:TimeZoneContextType"/>
<xs:complexType name="TimeZoneDefinitionType">
<xs:sequence minOccurs="0">
<xs:element name="Periods" type="t:NonEmptyArrayOfPeriodsType"/>
<xs:element name="TransitionsGroups" type="t:ArrayOfTransitionsGroupsType" minOccurs="0"/>
<xs:element name="Transitions" type="t:ArrayOfTransitionsType" minOccurs="0"/>
</xs:sequence>
<xs:attribute name="Id" type="xs:string"/>
<xs:attribute name="Name" type="xs:string"/>
</xs:complexType>

```

```

<xs:simpleType name="TransitionTargetKindType">
<xs:restriction base="xs:string">
<xs:enumeration value="Period"/>
<xs:enumeration value="Group"/>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="TransitionTargetType">
<xs:simpleContent>
<xs:extension base="xs:string">
<xs:attribute name="Kind" type="t:TransitionTargetKindType" use="required"/>
</xs:extension>
</xs:simpleContent>

```

```

</xs:complexType>
<xs:complexType name="TransitionType" abstract="false">
<xs:sequence>
<xs:element name="To" type="t:TransitionTargetType"/>
</xs:sequence>
</xs:complexType>
<xs:element name="Transition" type="t:TransitionType"/>
</xs:schema>

```

6.3 Messages Schema

This section contains the contents of the MS-OXWSGTZ-messages.xsd file and information about additional files that this schema file requires to operate correctly.

MS-OXWSGTZ-types.xsd includes the file listed in the following table. For the schema file to operate correctly, this file MUST be in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

| File name | Defining specification |
|---------------------------|--|
| MS-OXWSCDATA-messages.xsd | [MS-OXWSCDATA] section 6.2 |

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
  xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
  xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
  elementFormDefault="qualified" version="Exchange2010" id="messages">
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
    schemaLocation="MS-OXWSGTZ-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:complexType name="GetServerTimeZonesType">
    <xs:complexContent>
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element name="Ids" type="t:NonEmptyArrayOfTimeZoneIdType"
            minOccurs="0"/>
        </xs:sequence>
        <xs:attribute name="ReturnFullTimeZoneData" type="xs:boolean"
          use="optional"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetServerTimeZones" type="m:GetServerTimeZonesType"/>
  <xs:complexType name="GetServerTimeZonesResponseMessageType">
    <xs:complexContent>
      <xs:extension base="m:ResponseMessageType">
        <xs:sequence>
          <xs:element name="TimeZoneDefinitions"
            type="t:ArrayOfTimeZoneDefinitionType"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="GetServerTimeZonesResponseType">

```

```
<xs:complexContent>
    <xs:extension base="m:BaseResponseMessageType"/>
</xs:complexContent>
</xs:complexType>
<xs:element name="GetServerTimeZonesResponse" type="m:GetServerTimeZonesResponseType"/>
</xs:schema>
```

7 Appendix B: Product Behavior

The information in this specification is applicable to the following Microsoft products:

- Microsoft® Exchange Server 2010

Exceptions, if any, are noted below. If a service pack number appears with the product version, behavior changed in that service pack. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification 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 product does not follow the prescription.

8 Change Tracking

This section identifies changes that were made to the [MS-OXWSGTZ] protocol document between the May 2010 and August 2010 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

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 or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- The removal of a document from the documentation set.
- Changes made for template compliance.

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 **Editorial** means that the language and formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- Obsolete document removed.

Editorial changes are always classified with the change type "Editorially updated."

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

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

| Section | Tracking number (if applicable) and description | Major change (Y or N) | Change type |
|--|---|--|------------------------|
| 1.2.1 Normative References | 55751 Moved [MS-OXGLOS] from Normative References section to Informative References section. | N | Content update. |
| 1.2.1 Normative References | Removed references to [MS-OXWDLIST], [MS-OXWSMSHR] and [RFC2396]. | N | Content update. |
| 6.2 Types Schema | 56689 Removed the TimeZoneType complex type from the .xsd file. | N | Content update. |

9 Index

A

[Applicability](#) 8

C

[Capability negotiation](#) 8
[Change tracking](#) 35

Client

[abstract data model](#) 24
[initialization](#) 24
[local events](#) 25
[message processing](#) 25
[overview](#) 24
[sequencing rules](#) 25
[timer events](#) 25
[timers](#) 24

F

[Full WSDL](#) 28

G

[Glossary](#) 5

I

[Introduction](#) 5

M

Messages

[overview](#) 9
[syntax](#) 9
[transport](#) 9

O

[Overview \(synopsis\)](#) 7

P

[Preconditions](#) 8
[Prerequisites](#) 8
[Product behavior](#) 34

R

References

[informative](#) 6
[normative](#) 5
[Relationship to other protocols](#) 7

S

Security

[implementer considerations](#) 27

[overview](#) 27

[parameter index](#) 27

Server

[abstract data model](#) 20
[initialization](#) 20
[local events](#) 24
[message processing](#) 20
[overview](#) 20
[sequencing rules](#) 20
[timer events](#) 24
[timers](#) 20
[Standards assignments](#) 8

T

[Tracking changes](#) 35

V

[Vendor-extensible fields](#) 8

[Versioning](#) 8