[MS-ASCAL]: ActiveSync Calendar Class Protocol Specification

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Revision Summary			
Author	Date	Version	Comments
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1 Introduction

Mobile devices that communicate by using the ActiveSync protocol are able to exchange calendar data. The ActiveSync Calendar Class protocol specifies the ActiveSync protocol format for the interchange of calendar data.

1.1 Glossary

The following terms are defined in [MS-OXGLOS]:

> **class**
> **collection**
> **message database (MDB)**
> **Uniform Resource Identifier (URI)**
> **WAP Binary XML (WBXML)**
> **XML**

The following term is specific to this document:

XML schema: A schema that consists of components such as type definitions and element declarations. These can be used to assess the validity of well-formed element and attribute information items.

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

[MS-ASAIRS] Microsoft Corporation, "ActiveSync AirSyncBase Namespace Protocol Specification", December 2008.

[MS-ASCMD] Microsoft Corporation, "ActiveSync Command Reference Protocol Specification , December 2008.

[MS-ASDTYPE] Microsoft Corporation, "ActiveSync Data Type Protocol Specification", December 2008.

[MS-ASWBXML] Microsoft Corporation, "ActiveSync WAP Binary XML(WBXML) Protocol Specification", December 2008.

[MS-OXGLOS] Microsoft Corporation, "Exchange Server Protocols Master Glossary", June 2008.

[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.

[RFC822] Crocker, D.H., "Standard for ARPA Internet Text Messages", RFC 822, August 1982, http://www.ietf.org/rfc/rfc0822.txt.

[XML] Bray, T., et al., "Extensible Markup Language (XML) 1.0 (Fourth Edition)", http://www.w3.org/TR/REC-xml/.

[XMLNS] World Wide Web Consortium, "Namespaces in XML 1.0 (Second Edition)", August 2006, http://www.w3.org/TR/REC-xml-names/.

1.2.2   Informative References

[MS-OXOCAL] Microsoft Corporation, "Appointment and Meeting Object Protocol Specification", June 2008.

1.3   Protocol Overview

 The ActiveSync Calendar Class protocol specifies an **XML** representation of calendar data as used in various ActiveSync commands.

1.4   Relationship to Other Protocols

The ActiveSync Calendar Class protocol specifies an **XML** representation of calendar data that is used by the commands that are specified in [MS-ASCMD]. The protocol that controls the transmission of these commands between client and server is specified in [MS-ASCMD].

All data types in this document conform to the data type definitions that are specified in [MS-ASDTYPE]. Common **XML schema** elements that are used by other classes are specified in [MS-ASAIRS].

1.5   Prerequisites/Preconditions

None.

1.6   Applicability Statement

None.

1.7   Versioning and Localization

None.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

The Calendar **class** consists of a series of **XML** elements that are embedded inside a **collection** that is transmitted as specified in [MS-ASCMD]. The XML block that contains the Calendar **class** elements is transmitted in either the Request Body of a Request, or in the Response Body of a Response.

This section specifies the child elements of the **ApplicationData** element, when the parent **class** element is set to "Calendar." This section also describes concepts that are related to the Calendar class.

2.2 Message Syntax

The markup MUST be well-formed **XML**, as specified in [XML], and use the commands that are specified in [MS-ASCMD].

The XML markup that constitutes the Request Body or the Response Body is transmitted between client and server by using **WAP Binary XML (WBXML)** [MS-ASWBXML].

The following is the **XML schema** definition for the Calendar class in ActiveSync. The following represents the full set of data that can be returned by the **Sync** command. The relationship between these elements and other ActiveSync protocol commands is specified in section 3.1.5.

```
<?xml version="1.0" ?>
<xs:schema xmlns:tns="CAL:" attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="CAL:" xmlns:xs=http://www.w3.org/2001/XMLSchema
xmlns:xs=http://www.w3.org/2001/XMLSchema xmlns:A="AirSyncBase:">
    <xs:import namespace="AirSyncBase:" />
    <xs:element name="Timezone" type="xs:timezone" />
    <xs:element name="AllDayEvent" type="xs:unsignedByte" />
    <xs:element name="Body" type="A:Body" />
    <xs:element name="NativeBodyType" type="A:NativeBodyType" />
    <xs:element name="BusyStatus" type="xs:unsignedByte" />
    <xs:element name="OrganizerName" type="xs:string" />
    <xs:element name="OrganizerEmail" type="xs:string" />
    <xs:element name="DtStamp" type="xs:dateTime" />
    <xs:element name="EndTime" type="xs:dateTime" />
    <xs:element name="Location" type="xs:string" />
    <xs:element name="Reminder" type="xs:unsignedInt" />
    <xs:element name="Sensitivity" type="xs:unsignedByte" />
    <xs:element name="Subject" type="xs:string" />
```

```
<xs:element name="StartTime" type="xs:dateTime" />
<xs:element name="UID" type="xs:string" />
<xs:element name="MeetingStatus" type="xs:unsignedByte" />
<xs:element name="Attendees">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="Attendee">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="Email" type="xs:string" />
                        <xs:element name="Name" type="xs:string" />
                        <xs:element name="AttendeeStatus" type="xs:unsignedByte" />
                        <xs:element name="AttendeeType" type="xs:unsignedByte" />
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="Categories">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="Category" type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="Recurrence">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="Type" type="xs:unsignedByte" />
            <xs:element name="Occurrences" type="xs:unsignedShort" />
            <xs:element name="Interval" type="xs:unsignedShort" />
            <xs:element name="WeekOfMonth" type="xs:unsignedByte" />
            <xs:element name="DayOfWeek" type="xs:unsignedShort" />
            <xs:element name="MonthOfYear" type="xs:unsignedByte" />
            <xs:element name="Until" type="xs:dateTime" />
            <xs:element name="DayOfMonth" type="xs:unsignedByte" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="Exceptions">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="Exception">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="Deleted" type="xs:unsignedByte" />
                        <xs:element name="ExceptionStartTime" type="xs:dateTime" />
                        <xs:element name="Subject" type="xs:string" />
                        <xs:element name="StartTime" type="xs:dateTime" />
                        <xs:element name="EndTime" type="xs:dateTime" />
                        <xs:element name="Body" type="A:Body" />
                        <xs:element name="Location" type="xs:string" />
                        <xs:element name="Categories">
                            <xs:complexType>
                                <xs:sequence>
                                    <xs:element name="Category" type="xs:string" />
                                </xs:sequence>
                            </xs:complexType>
```

```
                </xs:element>
                <xs:element name="Sensitivity" type="xs:unsignedByte" />
                <xs:element name="BusyStatus" type="xs:unsignedByte" />
                <xs:element name="AllDayEvent" type="xs:unsignedByte" />
                <xs:element name="Reminder" type="xs:unsignedInt" />
                <xs:element name="DtStamp" type="xs:dateTime" />
                <xs:element name="MeetingStatus" type="xs:unsignedByte" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

2.2.1   Namespaces

This specification defines and references various **XML** namespaces by 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.

The following table summarizes the namespaces that are defined in or used by this specification.

Prefix	Reference
CAL:	[MS-ASCAL]
A:	[MS-ASAIRS]

2.2.2   Simple Types

None.

2.2.3   Complex Types

The following table summarizes the set of common **XML schema** complex type definitions defined by this specification.

Complex Type	Description
Body	The body text of the calendar item.
Attendees	A **collection** of the calendar item's attendees.
Attendees.Attendee	An attendee who is invited to the event.
Categories	A collection of categories for this calendar item.
Recurrence	The recurrence information for the calendar item.

Exceptions	A collection of the exceptions to this calendar item's recurrence.
Exceptions.Exception	An exception to this calendar item's recurrence.
Exceptions.Exception.Categories	The categories that are assigned to the recurring item exception.
Exceptions.Exception.Body	The body text of the recurring item exception.

2.2.3.1   Body

The **Body** type is an optional **container** ([MS-ASDTYP] section 2.8) type that specifies the body text of the calendar item.

The **Body** type is specified in [MS-ASAIRS] section 2.2.3.3.

2.2.3.2   Attendees

The **Attendees** type is an optional **container** ([MS-ASDTYP] section 2.8) type that specifies the **collection** of attendees for this calendar item.

The **Attendees** type can only have the following child element:

- **Attendees.Attendee** (section 2.2.3.3): At least one instance of this type is required.

2.2.3.3   Attendees.Attendee

The **Attendees.Attendee** type is a **container** ([MS-ASDTYP] section 2.8) type that specifies an attendee who is invited to the event.

The **Attendees.Attendee** type can only have the following child elements:

- **Attendees.Attendee.Email** (section 2.2.4.16): One instance of this element is required.
- **Attendees.Attendee.Name** (section 2.2.4.17): One instance of this element is required.
- **Attendees.Attendee.AttendeeStatus** (section 2.2.4.18): This element is optional.
- **Attendees.Attendee.AttendeeType** (section 2.2.4.219): This element is optional.

2.2.3.4   Categories

The **Categories** type is an optional **container** ([MS-ASDTYPE] section 2.8) type that specifies a **collection** of categories for this calendar item.

The **Categories** type can only have the following child element:

- **Categories.Category** (section 2.2.4.20): At least one instance of this type is required.

2.2.3.5 Recurrence

The **Recurrence** type is an optional **container** ([MS-ASDTYPE] section 2.8) type that specifies the recurrence information for this calendar item.

The **Recurrence** type can only have the following child elements:

- **Recurrence.Type** (section 2.2.4.21): One instance of this element is required.
- **Recurrence.Occurrences** (section 2.2.4.22): One instance of this element is required.
- **Recurrence.Interval** (section 2.2.4.23): One instance of this element is required.
- **Recurrence.WeekOfMonth** (section 2.2.4.24): This element is optional.
- **Recurrence.DayOfWeek** (section 2.2.4.25): This element is optional.
- **Recurrence.MonthOfYear** (section 2.2.4.26): This element is optional.
- **Recurrence.Until** (section 2.2.4.27): One instance of this element is required.
- **Recurrence.DayOfMonth** (section 2.2.4.28): This element is optional.

The following limitations apply to the **Recurrence** type:

- Multiple **Recurrence** types MUST NOT start on the same day.

- Multiple occurrences of the **Recurrence** type MUST NOT overlap. An exception that modifies the start date of an instance in the recurring series MUST occur on a date that is sometime after the end of the prior instance and before the start of the next instance in the recurring series. The same is true if the prior or next instance in the recurring series is defined as an exception by using the **Exceptions** type.

For more information about recurrence patterns, see [MS-OXOCAL] section 2.2.1.44.

2.2.3.6 Exceptions

The **Exceptions** type is an optional **container** ([MS-ASDTYP] section 2.8) type that specifies a **collection** of exceptions to the recurrence pattern of this calendar item.

The **Exceptions** type can only have the following child element:

- **Exceptions.Exception** (Section 2.2.3.7): at least one instance of this type is required.

2.2.3.7 Exceptions.Exception

The **Exceptions.Exception** type is an optional **container** ([MS-ASDTYP] section 2.8) type that specifies an exception to this calendar item's recurrence.

A command request or response MUST have a minimum of one **Exceptions.Exception** type per **Exceptions** type.

The **Exceptions.Exception** type can only have the following child elements:

- **Exceptions.Exception.Deleted** (section 2.2.4.29): This element is optional.
- **Exceptions.Exception.ExceptionStartTime** (section 2.2.4.30): One instance of this element is required.
- **Exceptions.Exception.EndTime** (section 2.2.4.31): One instance of this element is required.
- **Exceptions.Exception.Body** (section 2.2.3.9): This element is optional.
- **Exceptions.Exception.Location** (section 2.2.4.32): This element is optional.
- **Exceptions.Exception.Categories** (section 2.2.3.8): This element is optional.
- **Exceptions.Exception.Sensitivity** (section 2.2.4.34): This element is optional.
- **Exceptions.Exception.BusyStatus** (section 2.2.4.35): This element is optional.
- **Exceptions.Exception.AllDayEvent** (section 2.2.4.36): This element is optional.
- **Exceptions.Exception.Reminder** (section 2.2.4.37): This element is optional.
- **Exceptions.Exception.DtStamp** (section 2.2.4.38): One instance of this element is required.
- **Exceptions.Exception.MeetingStatus** (section 2.2.4.4029): One instance of this element is required.

2.2.3.8   Exceptions.Exception.Categories

The **Exceptions.Exception.Categories** type is an optional **container** ([MS-ASDTYP] section 2.8) type that specifies the categories for this recurrence exception.

A command request or response MUST have a maximum of one **Exceptions.Exception.Categories** type per **Exceptions.Exception** type.

The **Exceptions.Exception.Categories** type can only have the following element:

- **Categories.Category** (Section 2.2.4.20): At least one instance of this element is required.

2.2.3.9   Exceptions.Exception.Body

The **Exceptions.Exception.Body** type is an optional **container** ([MS-ASDTYP] section 2.8) type that specifies the body text of the exception item.

A command request or response MUST have a maximum of one **Exceptions.Exception.Body** type per **Exceptions.Exception** type.

The **Body** type is defined within the AirSyncBase namespace, and is further specified in [MS-ASAIRS].

2.2.4 Elements

The following table summarizes the set of common **XML schema** elements that are defined or used by this specification. XML schema elements that are specific to a particular operation are defined with the operation.

Calendar class elements MUST NOT have child elements in either the command request or response.

Element	Description
Timezone	The time zone of the calendar item.
AllDayEvent	Specifies whether this calendar item runs for the entire day.
BusyStatus	Specifies whether the recipient is busy at the specified time.
OrganizerName	The name of the calendar item's organizer.
OrganizerEmail	The e-mail address of the calendar item's organizer.
DtStamp	The time at which this calendar item was created or modified.
EndTime	The end time of the calendar item.
Location	The location of the meeting.
Reminder	The number of minutes before a calendar item's start time to display a reminder notice.
Sensitivity	The sensitivity level of the calendar item.
Subject	The subject of the calendar item.
StartTime	The start time of the calendar item.
UID	A unique, 300 digit hexadecimal ID generated by the client when the calendar item is created.
MeetingStatus	The status of the meeting.
Attendees.Attendee.Email	The e-mail address of the attendee.
Attendees.Attendee.Name	The name of the attendee.
Attendees.Attendee.AttendeeStatus	The attendee's acceptance status.

Attendees.Attendee.AttendeeType	Specifies whether the attendee is required, optional, or a resource.
Categories.Category	A category for this calendar item.
Recurrence.Type	The type of recurrence.
Recurrence.Occurrences	The number of recurrences.
Recurrence.Interval	The interval between recurrences.
Recurrence.WeekOfMonth	The week of the month for this recurrence.
Recurrence.DayOfWeek	The day of the week for this recurrence.
Recurrence.MonthOfYear	The month of the year for this recurrence.
Recurrence.Until	The end date and time of this recurrence.
Recurrence.DayOfMonth	The day of the month of this recurrence.
Exceptions.Exception.Deleted	Specifies whether this exception has been deleted.
Exceptions.Exception.ExceptionStartTime	The start time of the recurring meeting.
Exceptions.Exception.Subject	The subject of this exception.
Exceptions.Exception.StartTime	The start time of this exception.
Exceptions.Exception.EndTime	The end time of this exception.
Exceptions.Exception.Location	The location of the meeting.
Exceptions.Exception.Categories.Category	A category assigned to this exception.
Exceptions.Exception.Sensitivity	The sensitivity level of this exception.
Exceptions.Exception.BusyStatus	The busy status of the meeting organizer.
Exceptions.Exception.AllDayEvent	Specifies whether this exception is an all-day event.
Exceptions.Exception.Reminder	Specifies whether a reminder should be displayed for the exception item.
Exceptions.Exception.DtStamp	The date and time that the exception was created.
Exceptions.Exception.MeetingStatus	The status of the meeting exception.

2.2.4.1   Timezone

The **Timezone** element is an optional element that specifies the time zone of the calendar item.

The value of the **Timezone** element MUST be a **TimeZone** type, as specified in [MS-ASDTYPE].

2.2.4.2   AllDayEvent

The **AllDayEvent** element is an optional element that specifies whether the calendar item runs for the entire day.

The value of the **AllDayEvent** element MUST be one of those listed in the following table.

Value	Description
0	Is not an all day event.
1	Is an all day event.

An item marked as an all day event is understood to begin on midnight of the current day and to end on midnight of the next day.

2.2.4.3   NativeBodyType

The **NativeBodyType** element is a required element that specifies the format of this calendar item as stored on the server.

The **NativeBodyType** element is only valid in command responses.

The **NativeBodyType** element is part of the AirSyncBase namespace, and is further specified in [MS-ASAIRS].

2.2.4.4   BusyStatus

The **BusyStatus** element is an optional element that specifies whether the recipient is busy at the time of the meeting.

The value of the **BusyStatus** element MUST be one of those listed in the following table.

Value	Description
0	Free
1	Tentative
2	Busy
3	Out of Office

2.2.4.5   OrganizerName

The **OrganizerName** element is an optional element that specifies the name of the meeting organizer.

2.2.4.6 OrganizerEmail

The **OrganizerEmail** element is an optional element that specifies the e-mail address of the meeting organizer.

The value of the **OrganizerEmail** element MUST be a valid e-mail address format, as specified in [MS-ADTYPE].

2.2.4.7 DtStamp

The **DtStamp** element is an optional element that specifies the date and time that this calendar item was created.

The value of the **DtStamp** element MUST be a valid **DateTime** type, as specified in [MS-ADTYPE].

2.2.4.8 EndTime

The **EndTime** element is a required element that specifies the end time of this calendar item. The **EndTime** element MUST be present in the response even if the value of the **AllDayEvent** element is 1.

The value of the **EndTime** element MUST be a valid date/time, as specified in [MS-ADTYPE].

2.2.4.9 Location

The **Location** element is an optional element that specifies the location of the meeting or event.

2.2.4.10 Reminder

The **Reminder** element is an optional element that specifies the number of minutes before a calendar item's start time to display a reminder notice.

Clients SHOULD respect the value of **Reminder** by producing some form of alert or notification at the specified time.

2.2.4.11 Sensitivity

The **Sensitivity** element is an optional child element that specifies the sensitivity level of the calendar item.

The value of the **Sensitivity** element MUST be one of those listed in the following table.

Value	Description
0	Normal
1	Personal

| 2 | Private |
| 3 | Confidential |

2.2.4.12 Subject

The **Subject** element is a required element that specifies the subject of the calendar item.

2.2.4.13 StartTime

The **StartTime** element is an optional element that specifies the start time of the calendar item.

The value of the **StartTime** element MUST be a **DateTime** type, as specified in [MS-ASDTYPE].

2.2.4.14 UID

The **UID** element is an optional element that specifies a random 300-digit hexadecimal ID generated by the client when the calendar item is created.

2.2.4.15 MeetingStatus

The **MeetingStatus** element is an optional element that specifies the status of the meeting.

The value of the **MeetingStatus** element MUST be one of those listed in the following table.

Value	Description
0	Is not a meeting.
1	Is a meeting.
3	Meeting received.
5	Meeting is canceled.
7	Meeting is canceled and received.

2.2.4.16 Attendees.Attendee.Email

The **Attendees.Attendee.Email** element is a required child element of the **Attendees.Attendee** type that specifies the e-mail address of an attendee.

A command request or response MUST have a minimum of one **Attendees.Attendee.Email** element per **Attendees.Attendee** type.

A command request or response MUST have a maximum of one **Attendees.Attendee.Email** element per **Attendees.Attendee** type.

The value of the **Attendees.Attendee.Email** element MUST be a valid e-mail address format, as specified in [MS-ASDTYPE].

2.2.4.17 Attendees.Attendee.Name

The **Attendees.Attendee.Name** element is a required child element of the **Attendees.Attendee** type that specifies the name of an attendee.

A command request or response MUST have a minimum of one **Attendees.Attendee.Name** element per **Attendees.Attendee** type.

A command request or response MUST have a maximum of one **Attendees.Attendee.Name** element per **Attendees.Attendee** type.

2.2.4.18 Attendees.Attendee.AttendeeStatus

The **Attendees.Attendee.AttendeeStatus** element is an optional child element of the **Attendees.Attendee** type that specifies the attendee's acceptance status.

The **Attendees.Attendee.AttendeeStatus** element is only valid in command responses.

A command response MUST have a maximum of one **Attendees.Attendee.AttendeeStatus** element per **Attendees.Attendee** type.

The value of the **Attendees.Attendee.AttendeeStatus** element MUST be one of those listed in the following table.

Value	Description
0	Response unknown
2	Tentative
3	Accept
4	Decline
5	Not responded

2.2.4.19 Attendees.Attendee.AttendeeType

The **Attendees.Attendee.AttendeeType** element is an optional child element of the **Attendees.Attendee** type that specifies whether this attendee is required, optional, or a resource.

The **Attendees.Attendee.AttendeeType** element is only valid in command responses.

A command response MUST have a maximum of one **Attendees.Attendee.AttendeeType** element per **Attendees.Attendee** type.

The value of the **Attendees.Attendee.AttendeeType** element MUST be one of those specified in the following table.

Value	Description
1	Required
2	Optional
3	Resource

2.2.4.20 Categories.Category

The **Categories.Category** element is an optional element of the **Categories** type that specifies a category for this calendar item.

A command request MUST NOT contain more than 300 **Categories.Category** elements per **Categories** type.

A command response SHOULD NOT contain more than 300 **Categories.Category** elements per **Categories** type.

2.2.4.21 Recurrence.Type

The **Recurrence.Type** element is a required child element of the **Recurrence** type that specifies the type of the recurrence.

A command request or response MUST have a minimum of one **Recurrence.Type** element per **Recurrence** element.

A command request or response MUST have a maximum of one **Recurrence.Type** element per **Recurrence** element.

The value of the **Recurrence.Type** element MUST be one of those listed in the following table.

Value	Description
0	Recurs daily.
1	Recurs weekly.
2	Recurs monthly.
3	Recurs monthly on the nth day.
5	Recurs yearly.
6	Recurs yearly on the nth day.

2.2.4.22 Recurrence.Occurrences

The **Recurrence.Occurrences** element is an optional child element of the **Recurrence** type that specifies the number of occurrences before the series ends.

A command request or response MUST have a maximum of one **Recurrence.Occurrences** element per **Recurrence** element.

If a value is specified for the **Recurrence.Occurrences** element, the **Recurrence container** ([MS-ASDTYP] section 2.8) type MUST not contain the **Recurrence.Until** element.

2.2.4.23 Recurrence.Interval

The **Recurrence.Interval** element is a required child element of the **Recurrence** type that specifies the interval between recurrences.

A command request or response MUST have a minimum of one **Recurrence.Interval** element per **Recurrence** element.

A command request or response MUST have a maximum of one **Recurrence.Interval** element per **Recurrence** element.

The value of the **Recurrence.Interval** element MUST be an integer. The allowable range of values MUST conform to one of those listed in the following table, based on the value of the **Type** element.

Value of Type Element	Maximum Allowed Value
0 (Daily)	999
1 (Weekly)	99
2 (Monthly)	99
3 (Monthly)	99
5 (Yearly)	1
6 (Yearly)	1

2.2.4.24 Recurrence.WeekOfMonth

The **Recurrence.WeekOfMonth** element is an optional child element of the **Recurrence** type that specifies the week of the month for the recurrence.

A command request or response MUST have a minimum of one **Recurrence.WeekOfMonth** element per **Recurrence** element if the value of the **Recurrence.Interval** element is either 3 or 6.

A command request or response MUST have a maximum of one **Recurrence.WeekOfMonth** element per **Recurrence** element.

The value of the **Recurrence.WeekOfMonth** element MUST be between 1 and 5. The value of 5 always designates the last week of the month.

2.2.4.25 Recurrence.DayOfWeek

The **Recurrence.DayOfWeek** element is an optional child element of the **Recurrence** type that specifies the day of the week for the recurrence.

A command request or response MUST have a minimum of one **Recurrence.DayOfWeek** element per **Recurrence** element if the value of the **Recurrence.Interval** element is 1.

A command request or response MUST have a maximum of one **Recurrence.DayOfWeek** element per **Recurrence** element.

The value of the **Recurrence.DayOfWeek** element MUST be either one of the values, or the sum of more than one of the values (in which case this task recurs on more than one day) listed in the following table.

Value	Description
1	Sunday
2	Monday
4	Tuesday
8	Wednesday
16	Thursday
32	Friday
64	Saturday

2.2.4.26 Recurrence.MonthOfYear

The **Recurrence.MonthofYear** element is an optional child element of the **Recurrence** type that specifies the month of the year for the recurrence.

A command request or response MUST have a minimum of one **Recurrence.MonthOfYear** element per **Recurrence** element if the value of the **Recurrence.Interval** element is either 5 or 6.

A command request or response MUST have a maximum of one **Recurrence.MonthOfYear** element per **Recurrence** element.

The value of the **Recurrence.MonthOfYear** element MUST be between 1 and 12.

2.2.4.27 Recurrence.Until

The **Recurrence.Until** element is an optional child element of the **Recurrence** type that specifies the end time of a series of recurrence items.

A command request or response MUST have a maximum of one **Recurrence.Until** element per **Recurrence** element.

If a value is specified for the **Recurrence.Until** element, the **Recurrence container** ([MS-ASDTYP] section 2.8) type MUST NOT contain the **Recurrence.Occurences** element.

The value of the **Recurrence.Until** element MUST be a **DateTime** type, as specified in [MS-ASDTYPE].

2.2.4.28 Recurrence.DayOfMonth

The **Recurrence.DayOfMonth** element is an optional child element of the **Recurrence** type that specifies the day of the month for the recurrence.

A command request or response MUST have a minimum of one **Recurrence.DayOfMonth** element per **Recurrence** element if the value of the **Recurrence.Interval** element is either 2 or 5.

A command request or response MUST have a maximum of one **Recurrence.DayOfMonth** element per **Recurrence** element.

The value of the **Recurrence.DayOfMonth** element MUST be between 1 and 31. The value MUST be constrained by the value of **Recurrence.MonthOfYear**. A request or response can use the special value 127 to specify the last day of the month, regardless of the value of **Recurrence.MonthOfYear**.

2.2.4.29 Exceptions.Exception.Deleted

The **Exceptions.Exception.Deleted** element is an optional child element of the **Exceptions.Exception** element that specifies whether this exception to the calendar item has been deleted.

A command request or response MUST have a maximum of one **Exceptions.Exception.Deleted** element per **Exceptions.Exception** element.

The value of the **Exceptions.Exception.Deleted** element MUST be one of the following:

Value	Description
0	Has not been deleted.
1	Has been deleted.

2.2.4.30 Exceptions.Exception.ExceptionStartTime

The **Exceptions.Exception.ExceptionStartTime** element is a required child element of the **Exceptions.Exception** type that specifies the start time of the original recurring meeting.

A command request or response MUST have a maximum of one **Exceptions.Exception.ExceptionStartTime** element per **Exceptions.Exception** element.

The value of the **Exceptions.Exception.ExceptionStartTime** element MUST be a DateTime type as specified in [MS-ASDTYP].

2.2.4.31 Exceptions.Exception.EndTime

The **Exceptions.Exception. EndTime** element is an optional child element of the **Exceptions.Exception** type that specifies the end time of the exception.

A command request or response MUST have a maximum of one **Exceptions.Exception.EndTime** element per **Exceptions.Exception** element.

The value of the **Exceptions.Exception.EndTime** element MUST be a DateTime type as specified in [MS-ASDTYP].

2.2.4.32 Exceptions.Exception.Location

The **Exceptions.Exception.Location** element is an optional child element of the **Exceptions.Exception** type that specifies the location of the exception.

A command request or response MUST have a maximum of one **Exceptions.Exception.Location** element per **Exceptions.Exception** element.

2.2.4.33 Exceptions.Exception.Categories.Category

The **Exceptions.Exception.Categories.Category** element is a required child element of the **Exceptions.Exception.Categories** type that specifies a category to which the exception is assigned.

A command request or response MUST have a minimum of one **Exceptions.Exception.Categories.Category** element per **Exceptions.Exception.Categories** type.

A command request MUST NOT contain more than 300 **Categories.Exception.Category** elements per **Categories** type.

A command response SHOULD NOT contain more than 300 **Categories.Exception.Category** elements per **Categories** type.

2.2.4.34 Exceptions.Exception.Sensitivity

The **Exceptions.Exception.Sensitivity** element is an optional child element of the **Exceptions.Exception** type that specifies the sensitivity level of this exception.

A command request or response MUST have a maximum of one **Exceptions.Exception.Sensitivity** element per **Exceptions.Exception** type.

For a list of allowed values for the **Exceptions.Exception.Sensitivity** element, see the **Sensitivity** element (Section 2.2.4.14).

2.2.4.35 Exceptions.Exception.BusyStatus

The **Exceptions.Exception.BusyStatus** element is an optional child element of the **Exceptions.Exception** type that specifies the busy status of the current user.

A command request or response MUST have a maximum of one **Exceptions.Exception.BusyStatus** element per **Exceptions.Exception** element.

For a list of valid values of the **Exceptions.Exception.BusyStatus** element, see **BusyStatus** (Section 2.2.4.4).

2.2.4.36 Exceptions.Exception.AllDayEvent

The **Exceptions.Exception.AllDayEvent** element is an optional child element of the **Exceptions.Exception** type that specifies whether the calendar item runs for the entire day.

A command request or response MUST have a maximum of one **Exceptions.Exception.AllDayEvent** element per **Exceptions.Exception** element.

For a list of valid values for the **Exceptions.Exception.AllDayEvent** element, see section 2.2.4.2.

2.2.4.37 Exceptions.Exception.Reminder

The **Exceptions.Exception.Reminder** element is an optional child element of the **Exceptions.Exception** type that specifies the number of minutes before a calendar item's start time to display a reminder notice.

A command request or response MUST have a maximum of one **Reminder** element per **Exceptions.Exception** element.

2.2.4.38 Exceptions.Exception.DtStamp

The **Exceptions.Exception.DtStamp** element is an optional element that specifies the date and time that this exception was created.

A command request or response MUST have a minimum of one
Exceptions.Exception.DtStamp element per **Exceptions.Exception** element.

A command request or response MUST have a maximum of one
Exceptions.Exception.DtStamp element per **Exceptions.Exception** element.

The value of the **Exceptions.Exception.DtStamp** element MUST be a valid **DateTime** type, as specified in [MS-ASDTYPE].

2.2.4.39 Exceptions.Exception.MeetingStatus

The **Exceptions.Exception.MeetingStatus** element is a required element child element of the **Exceptions.Exception** type that specifies the status of this exception.

For a list of valid values for the **Exceptions.Exception.MeetingStatus** element, see section 2.2.4.15.

2.2.5 Attributes

None.

2.2.6 Groups

None.

2.2.7 Attribute Groups

None.

2.2.8 Commands

Commands that send and receive Calendar class data are specified in section 3.1.5.

3 Protocol Details

3.1 Client and 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 Calendar class is a structured **XML** text block that adheres to the **XML schema** definition specified in section 2.1. It is included by the server as part of a full XML response to the client commands specified in section 3.1.4.

The server can return zero or more Calendar class blocks in its response, depending on how many task items match the criteria specified by the client command request.

The server MUST return a Calendar class XML block for every task that matches the criteria specified by the client command request.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Higher-Layer Triggered Events

The Calendar class is used when a client does the following:

- Synchronizes its calendar data with a server.

- Searches a server for a calendar item.

- Requests details for one or more specific calendar items.

3.1.5 Message Processing Events and Sequencing Rules

The following section specifies how various elements of the Calendar class are used in the context of specific ActiveSync commands. Command details are specified in [MS-ASCMD].

3.1.5.1 ItemOperations

A client uses the **ItemOperations** command to retrieve specific calendar items from the server by using the **Fetch** element. An **ItemOperations** request can contain multiple **Fetch** elements.

The **ItemOperations** command is specified in [MS-ASCMD] section 2.2.2.10.

3.1.5.1.1 Complex Types

3.1.5.1.1.1 Command Request

Any of the complex types for the Calendar class CAN be included in an **ItemOperations** command request.

Calendar **class** complex types MUST be transmitted as children of the **Schema** type ([MS-ASCMD] Section 2.2.2.10.3.12).

3.1.5.1.1.2 Command Response

Any of the complex types for the Calendar **class** CAN be included in an **ItemOperations** command response. If a **Schema** element was included in the command request, then the complex types returned MUST be restricted to the complex types included in the command request's **Schema** element.

Calendar **class** complex types MUST be returned as children of the **Properties** type ([MS-ASCMD] Section 2.2.2.10.4.8).

3.1.5.1.2 Elements

3.1.5.1.2.1   Command Request
Any of the Calendar class elements can be included in an **ItemOperations** command request.

Calendar class elements MUST be transmitted as children of the **Schema** type ([MS-ASCMD] section 2.2.2.10.3.12).

3.1.5.1.2.2   Command Response
Any of the elements for the Calendar class can be included in an **ItemOperations** command response. If a **Schema** element was included in the command request, the elements returned MUST be restricted to the elements included in the command request's **Schema** element.

Calendar class elements MUST be returned as children of the **Properties** type ([MS-ASCMD] section 2.2.2.10.4.8).

3.1.5.2   Search
A client uses the **Search** command to retrieve Calendar class items that match the criteria specified by the client.

Search is specified in [MS-ASCMD] Section 2.2.2.17.

3.1.5.2.1 Complex Types

3.1.5.2.1.1   Command Request
The complex types for the Calendar class MUST NOT be included in a **Search** command request.

3.1.5.2.1.2   Command Response
Any of the complex types for the Calendar class can be included in a **Search** command response.

Calendar class complex types MUST be returned as children of the **Properties** type ([MS-ASCMD] section 2.2.2.17.2.2).

3.1.5.2.2 Elements

3.1.5.2.2.1 Command Request

The Calendar class elements MUST NOT be included in a **Search** command request.

3.1.5.2.2.2 Command Response

Any of the elements for the Calendar class can be included in a **Search** command response.

Calendar class elements MUST be returned as children of the **Properties** type ([MS-ASCMD] section 2.2.2.17.2.2).

3.1.5.3 Sync

A client uses the **Sync** command to synchronize its Calendar class items for a specified user with the calendars that are currently stored by the server.

The **Sync** command is specified in [MS-ASCMD] section 2.2.2.22.

3.1.5.3.1 Complex Types

3.1.5.3.1.1 Command Request

Any of the complex types for the Calendar class can be included in a **Sync** command request.

Calendar class complex types MUST be transmitted as children of the **Supported** type ([MS-ASCMD] section 2.2.2.22.1.13).

3.1.5.3.1.2 Command Response

Any of the complex types for the Calendar class can be included in a **Sync** command response. If a **Supported** element was included in the command request, the complex types that are returned MUST be restricted to the complex types that are included in the command request's **Supported** element.

Calendar class complex types MUST be returned as children of the **ApplicationData** type ([MS-ASCMD] section 2.2.2.22.2.2).

3.1.5.3.2 Elements

3.1.5.3.2.1 Command Request

Any of the Calendar class elements can be included in a **Sync** command request.

Calendar class elements MUST be transmitted as children of the **Supported** type ([MS-ASCMD] section 2.2.2.22.1.13).

3.1.5.3.2.2 Command Response

Any of the elements for the Calendar class can be included in a **Sync** command response. If a **Supported** element was included in the command request, the elements returned MUST be restricted to the elements included in the command request's **Supported** element.

Calendar class elements MUST be returned as children of the **ApplicationData** type ([MS-ASCMD] section 2.2.2.22.2.2).

3.1.6   Timer Events
None.

3.1.7   Other Local Events
None.

4   Protocol Examples

4.1   Synchronizing Calendar Data

The following example shows a client requesting calendar data synchronization with a server, and the server's response. The types and elements of the Calendar class are included in the server response as children of the **ApplicationData** type, which is itself a child of either the **Add** or **Change** type.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync:">
  <Collections>
    <Collection>
      <SyncKey>850479756</SyncKey>
      <CollectionId>1</CollectionId>
      <DeletesAsMoves/>
      <GetChanges/>
    </Collection>
  </Collections>
</Sync>
```

Response:

```
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync:" xmlns:A="POOMCAL:" xmlns:B="AirSyncBase:">
  <Collections>
    <Collection>
      <SyncKey>664578668</SyncKey>
      <CollectionId>1</CollectionId>
      <Status>1</Status>
      <Commands>
        <Change>
          <ServerId>1:12</ServerId>
```

```
                   <ApplicationData>

<A:Timezone>4AEAAFAAYQBjAGkAZgBpAGMAIABTAHQAYQBuAGQAYQByAGQAIABUAGkAbQBlAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAsAAAABAAIAAAAAAAAAAAAAAFAAYQBjAGkAZgBpAGMAIA
BEAGEAeQBsAGkAZwBoAHQAIABUAGkAbQBlAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMAAAACA
AIAAAAAAAAAxP///w==</A:Timezone>
                   <A:DtStamp>20081002T231357Z</A:DtStamp>
                   <A:StartTime>20081010T190000Z</A:StartTime>
                   <A:Subject>Lunch meeting</A:Subject>

<A:UID>040000008200E00074C5B7101A82E008000000001027EAEDA124C901000000000000
000010000000C58EA426C0CFF24AB3125200707153B1</A:UID>
                   <A:OrganizerName>Rajesh M. Patel</A:OrganizerName>
                   <A:OrganizerEmail>rajeshpatel@contoso.com</A:OrganizerEmail>
                   <A:Location>Cafeteria A</A:Location>
                   <A:EndTime>20081010T203000Z</A:EndTime>
                   <B:Body>
                     <B:Type>3</B:Type>
                     <B:EstimatedDataSize>5669</B:EstimatedDataSize>
                     <B:Truncated>1</B:Truncated>
                   </B:Body>
                   <A:Sensitivity>0</A:Sensitivity>
                   <A:BusyStatus>3</A:BusyStatus>
                   <A:AllDayEvent>0</A:AllDayEvent>
                   <A:Reminder>15</A:Reminder>
                   <A:MeetingStatus>0</A:MeetingStatus>
                   <B:NativeBodyType>3</B:NativeBodyType>
                 </ApplicationData>
              </Change>
              <Add>
                 <ServerId>1:13</ServerId>
                 <ApplicationData>

<A:Timezone>4AEAAFAAYQBjAGkAZgBpAGMAIABTAHQAYQBuAGQAYQByAGQAIABUAGkAbQBlAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAsAAAABAAIAAAAAAAAAAAAAAFAAYQBjAGkAZgBpAGMAIA
BEAGEAeQBsAGkAZwBoAHQAIABUAGkAbQBlAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMAAAACA
AIAAAAAAAAAxP///w==</A:Timezone>
                   <A:DtStamp>20081002T231335Z</A:DtStamp>
                   <A:StartTime>20081013T170000Z</A:StartTime>
                   <A:Subject>Dry Run of TechEd Presentation</A:Subject>

<A:UID>040000008200E00074C5B7101A82E008000000009003C9E1A924C901000000000000
000010000000B3635D1E1A2FF54FA575AB96797F532F</A:UID>
                   <A:OrganizerName>Rajesh M. Patel</A:OrganizerName>
                   <A:OrganizerEmail>rajeshpatel@contoso.com</A:OrganizerEmail>
                   <A:Location>Conf Room 33-A/1298</A:Location>
                   <A:EndTime>20081013T180000Z</A:EndTime>
                   <B:Body>
                     <B:Type>3</B:Type>
                     <B:EstimatedDataSize>5669</B:EstimatedDataSize>
                     <B:Truncated>1</B:Truncated>
                   </B:Body>
                   <A:Sensitivity>0</A:Sensitivity>
                   <A:BusyStatus>2</A:BusyStatus>
```

```
                    <A:AllDayEvent>0</A:AllDayEvent>
                    <A:Reminder>15</A:Reminder>
                    <A:MeetingStatus>0</A:MeetingStatus>
                    <B:NativeBodyType>3</B:NativeBodyType>
                </ApplicationData>
            </Add>
            <Add>
                <ServerId>1:14</ServerId>
                <ApplicationData>

<A:Timezone>4AEAAFAAYQBjAGkAZgBpAGMAIABTAHQAYQBuAGQAYQByAGQAIABUAGkAbQBlAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAsAAAABAAIAAAAAAAAAAAAAAAFAAYBjAGkAZgBpAGMAIA
BEAGEAeQBsAGkAZwBoAHQAIABUAGkAbQBlAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMAAAACA
AIAAAAAAAAxP///w==</A:Timezone>
                    <A:DtStamp>20081002T231639Z</A:DtStamp>
                    <A:StartTime>20081013T190000Z</A:StartTime>
                    <A:Subject>Team Meeting</A:Subject>

<A:UID>040000008200E00074C5B7101A82E0080000000060043DFCA924C901000000000000
00001000000097F14EF755AC454BA30EFA7B1B315E43</A:UID>
                    <A:OrganizerName>Rajesh M. Patel</A:OrganizerName>
                    <A:OrganizerEmail>rajeshpatel@contoso.com</A:OrganizerEmail>
                    <A:Location>My office</A:Location>
                    <A:EndTime>20081013T193000Z</A:EndTime>
                    <A:Recurrence>
                      <A:Type>3</A:Type>
                      <A:Interval>1</A:Interval>
                      <A:Until>20090713T190000Z</A:Until>
                      <A:WeekOfMonth>2</A:WeekOfMonth>
                      <A:DayOfWeek>2</A:DayOfWeek>
                    </A:Recurrence>
                    <B:Body>
                      <B:Type>3</B:Type>
                      <B:EstimatedDataSize>5769</B:EstimatedDataSize>
                      <B:Truncated>1</B:Truncated>
                    </B:Body>
                    <A:Sensitivity>0</A:Sensitivity>
                    <A:BusyStatus>2</A:BusyStatus>
                    <A:AllDayEvent>0</A:AllDayEvent>
                    <A:Reminder>15</A:Reminder>
                    <A:MeetingStatus>0</A:MeetingStatus>
                    <B:NativeBodyType>3</B:NativeBodyType>
                </ApplicationData>
            </Add>
        </Commands>
      </Collection>
    </Collections>
</Sync>
```

4.2 Setting Attendee Status from the Server

The following appointment has one attendee. Note that the organizer is not included in the attendee list. The organizer's information is specified by the **OrganizerEmail** and **OrganizerName** elements.

```xml
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync:" xmlns:calendar="POOMCAL:"
xmlns:airsyncbase="AirSyncBase:">
  <Collections>
    <Collection>
      <Class>Calendar</Class>
      <SyncKey>3</SyncKey>
      <CollectionId>1</CollectionId>
      <Status>1</Status>
      <Commands>
        <Add>
          <ServerId>1:2</ServerId>
          <ApplicationData>
            <calendar:Timezone>4AEAAFAAYQBjAGkAZgBpAGMAIAB
            TAHQAYQBuAGQAYQByAGQAIABUAGkAbQBlAAAAAAAAAAA
            AAAAAAAAAAAAAAAAAAAAoAAAAFAAIAAAAAAAAAAA
            AAAFAAYQBjAGkAZgBpAGMAIABEAGEAeQBsAGkAZwBoAHQA
            IABUAGkAbQBlAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
            QAAAABAAIAAAAAAAAAxP///w==</calendar:Timezone>
            <calendar:DtStamp>20051103T010509Z</calendar:DtStamp>
            <calendar:StartTime>20051103T230000Z</calendar:StartTime>
            <calendar:Subject>test meeting</calendar:Subject>
            <calendar:UID>040000008200E00074C5B7101A82E0080000000
            0B0FD68A212E0C5010000000000000000000100000008C46B9A4960AF
            340871367CEC57B4543</calendar:UID>
            <calendar:Attendees>
              <calendar:Attendee>
                <calendar:Email>rich@adventure-works.com
                </calendar:Email>
                <calendar:Name>Rich Haddock</calendar:Name>
                <calendar:AttendeeStatus>0</calendar:AttendeeStatus>
                <calendar:AteendeeType>1</calendar:AttendeeType>
              </calendar:Attendee>
```

```
        </calendar:Attendees>
        <calendar:OrganizerName>Administrator
        </calendar:OrganizerName>
        <calendar:OrganizerEmail>Administrator@adventure-
        works.com</calendar:OrganizerEmail>
        <calendar:Location>34/1123</calendar:Location>
        <calendar:EndTime>20051104T000000Z</calendar:EndTime>
        <airsyncbase:Body>
          <airsyncbase:Type>1</airsyncbase:Type>
          <airsyncbase:NonTruncatedSize>28
          </airsyncbase:NonTruncatedSize>
        </airsyncbase:Body>
        <calendar:Sensitivity>0</calendar:Sensitivity>
        <calendar:BusyStatus>2</calendar:BusyStatus>
        <calendar:AllDayEvent>0</calendar:AllDayEvent>
        <calendar:Reminder>15</calendar:Reminder>
        <calendar:MeetingStatus>1</calendar:MeetingStatus>
      </ApplicationData>
    </Add>
   </Commands>
  </Collection>
 </Collections>
</Sync>
```

The following server response is a change for the same calendar item after the attendee has accepted (note the status change from 0 to 3).

```
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync:" xmlns:calendar="POOMCAL:"
xmlns:airsyncbase="AirSyncBase:">
  <Collections>
    <Collection>
      <Class>Calendar</Class>
      <SyncKey>4</SyncKey>
      <CollectionId>1</CollectionId>
```

```
<Status>1</Status>
<Commands>
  <Change>
    <ServerId>1:2</ServerId>
    <ApplicationData>
      <calendar:Timezone>4AEAAFAAYQBjAGkAZgBpAGMAIABTAHQAY
      QBuAGQAYQByAGQAIABUAGkAbQBlAAAAAAAAAAAAAAAAAAAAAAAA
      AAAAAAAoAAAAFAAIAAAAAAAAAAAAFAAYQBjAGkAZgBpAGMAIA
      BEAGEAeQBsAGkAZwBoAHQAIABUAGkAbQBlAAAAAAAAAAAAAAAA
      AAAAAAAAAAAAAQAAABAAIAAAAAAAAAxP///w==
      </calendar:Timezone>
      <calendar:DtStamp>20051103T013759Z</calendar:DtStamp>
      <calendar:StartTime>20051103T230000Z</calendar:StartTime>
      <calendar:Subject>test meeting</calendar:Subject>
      <calendar:UID>040000008200E00074C5B7101A82E00800000000B
      0FD68A212E0C5010000000000000000100000008C46B9A4960AF
      340871367CEC57B4543</calendar:UID>
      <calendar:Attendees>
        <calendar:Attendee>
          <calendar:Email>rich@adventure-works.com
          </calendar:Email>
          <calendar:Name>Rich Haddock</calendar:Name>
          <calendar:Status>3</calendar:Status>
          <calendar:Type>1</calendar:Type>
        </calendar:Attendee>
      </calendar:Attendees>
      <calendar:OrganizerName>Administrator
      </calendar:OrganizerName>
      <calendar:OrganizerEmail>Administrator@adventure-
      works.com</calendar:OrganizerEmail>
      <calendar:Location>34/1123</calendar:Location>
      <calendar:EndTime>20051104T000000Z</calendar:EndTime>
      <airsyncbase:Body>
        <airsyncbase:Type>1</airsyncbase:Type>
```

```
            <airsyncbase:NonTruncatedSize>28
            </airsyncbase:NonTruncatedSize>
        </airsyncbase:Body>
        <calendar:Sensitivity>0</calendar:Sensitivity>
        <calendar:BusyStatus>2</calendar:BusyStatus>
        <calendar:AllDayEvent>0</calendar:AllDayEvent>
        <calendar:Reminder>15</calendar:Reminder>
        <calendar:MeetingStatus>1</calendar:MeetingStatus>
      </ApplicationData>
    </Change>
   </Commands>
  </Collection>
 </Collections>
</Sync>
```

5 Security

5.1 Security Considerations for Implementers
None.

5.2 Index of Security Parameters
None.

6 Appendix A: Office/Exchange Behavior

The information in this specification is applicable to the following versions of Office/Exchange:

- Office 2003 with Service Pack 3 applied
- Exchange 2003 with Service Pack 2 applied
- Office 2007 with Service Pack 1 applied
- Exchange 2007 with Service Pack 1 applied

Exceptions, if any, are noted below. Unless otherwise specified, any statement of optional behavior in this specification prescribed using the terms SHOULD or SHOULD NOT implies Office/Exchange behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies Office/Exchange does not follow the prescription.

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