[MS-ASTASK]: ActiveSync Tasks Class Protocol Specification

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Revision Summary			
Author	Date	Version	Comments
Microsoft Corporation	December 3, 2008	1.0	Initial Release.
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1 Introduction

Mobile devices that communicate using the ActiveSync protocol need to exchange task list data. The Task Class protocol specifies the ActiveSync protocol format for the interchange of task data.

1.1 Glossary

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

class
collection
protocol
message database
server
synchronization
Uniform Resource Identifier (URI)
WAP Binary XML (WBXML)

The following terms are specific to this document:

WAP Binary XML (WBXML): A compact binary representation of XML designed to reduce the transmission size of XML documents over narrowband communication channels.

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 Types 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 (Fifth Edition)", http://www.w3.org/TR/REC-xml/.

1.2.2 Informative References

None.

1.3 Protocol Overview

The Task Class protocol specifies an XML representation of task list data as used in various ActiveSync commands.

1.4 Relationship to Other Protocols

The Task Class protocol specifies the XML representation of task list data that is used by commands specified in [MS-ASCMD].

All data types in this document conform to the data type definitions specified in [MS-ASDTYPE]. Common XML schema elements used by other classes are defined 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 Task class consists of a series of XML elements that are embedded inside of a **collection** transmitted according to the commands specified in [MS-ASCMD]. The XML block containing the **class** elements is transmitted in either the request body of a request, or in the response body of a response. The types and elements of the Task **class** are defined in the namespaces Task and AirSyncBase. All of the Task class types and elements are specified in this document; however, complex types and elements defined in the AirSyncBase namespace are specified in [MS-ASAIRS].

The parent element of the Task class elements depends upon the ActiveSync protocol command used to retrieve the class data. Commands for the Task class XML schema are specified in section 3.

2.2 Message Syntax

The markup MUST be well-formed XML, as specified in [XML].

The XML markup that constitutes the request body or the response body is transmitted between the client and the server using **WAP Binary XML (WBXML)**. For more information, see [MS-ASWBXML].

The XML schema definition for the Task Class in ActiveSync is as follows.

```
<?xml version="1.0" ?>
<xs:schema xmlns:tns="TASKS:" attributeFormDefault="unqualified"
elementFormDefault="qualified"
targetNamespace="TASKS:" xmlns:xs=http://www.w3.org/2001/XMLSchema
xmlns:A=”AirSyncBase:”>
   <xs:element name="Body" type=”A:Body” />
   <xs:element name=”Rtf” type=”xs:string” />
   <xs:element name="Subject" type="xs:string" />
   <xs:element name="Importance" type="xs:unsignedByte" />
   <xs:element name="UtcStartDate" type="xs:dateTime" />
   <xs:element name="StartDate" type="xs:dateTime" />
   <xs:element name="UtcDueDate" type="xs:dateTime" />
   <xs:element name="DueDate" type="xs:dateTime" />
   <xs:element name="Categories">
      <xs:complexType>
           <xs:sequence>
            <xs:element maxOccurs="unbounded" 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="Start" type="xs:dateTime" />
            <xs:element name="Until" type="xs:dateTime" />
            <xs:element name="Occurrences" type="xs:unsignedByte" />
            <xs:element name="Interval" type="xs:unsignedByte" />
            <xs:element name="DayOfWeek" type="xs:unsignedByte" />
            <xs:element name="DayOfMonth" type="xs:unsignedByte" />
            <xs:element name="WeekOfMonth" type="xs:unsignedByte" />
            <xs:element name="MonthOfYear" type="xs:unsignedByte" />
            <xs:element name="Regenerate" type="xs:unsignedByte" />
            <xs:element name="DeadOccur" type="xs:unsignedByte" />
         </xs:sequence>
      </xs:complexType>
   </xs:element>
   <xs:element name="Complete" type="xs:unsignedByte" />
   <xs:element name="DateCompleted" type="xs:dateTime" />
   <xs:element name="Sensitivity" type="xs:unsignedByte"  />
   <xs:element name="ReminderTime" type="xs:dateTime" />
   <xs:element name="ReminderSet" type="xs:unsignedByte" />
</xs:schema>
```

2.2.1 Complex Types

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

Complex Type	Description
Body	The text for this task.
Categories	A collection of categories to which the tasks belongs.
Recurrence	Describes when and how often this task recurs.

2.2.1.1 Body

The **Body** type is an optional container ([MS-ASDTYPE] section 2.8) type that specifies the text for this task.

For more information about the **Body** type, see [MS-ASAIRS].

2.2.1.2 Categories

The **Categories** type is an optional container ([MS-ASDTYPE] section 2.8) type that specifies a collection of categories to which this task belongs.

A command request or response has a maximum of one **Categories** type per **ApplicationData** element.

The **Categories** type has the following child element:

- **Category** (section 2.2.2.7): At least one instance of this element is required.

If a **Categories** type contains no **Category** elements in a request or response, then the categories for the specified task have all been removed.

2.2.1.3 Recurrence

The **Recurrence** type is an optional container ([MS-ASDTYPE] section 2.8) type that specifies when and how often this task recurs.

A command request or response has a maximum of one **Recurrence** type per **ApplicationData** element.

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

- **Type** (section 2.2.2.8): This element is required.
- **Start** (section 2.2.2.9): This element is required.
- **Until** (section 2.2.2.10): This element is required.
- **Occurrences** (section 2.2.2.11): This element is optional.
- **Interval** (section 2.2.2.12): Tthis element is required.
- **DayOfWeek** (section 2.2.2.13): This element is optional.
- **DayOfMonth** (section 2.2.2.14): This element is optional.
- **WeekOfMonth** (section 2.2.2.15): This element is optional.
- **MonthOfYear** (section 2.2.2.16): This element is optional.
- **Regenerate** (section 2.2.2.17) : This element is optional.
- **DeadOccur** (section 2.2.2.18): This element is optional.
- **CalendarType** (section 2.2.2.19): This element is required in monthly and yearly occurrences.
- **IsLeapMonth** (section 2.2.2.20): This element is optional.

2.2.2 Elements

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

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

Element	Description
Subject	The subject of the task item.

Importance	The importance or priority of the task item.
UtcStartDate	The Coordinated Universal Time (UTC) start date of the task item.
StartDate	The local start date of the task item.
UtcDueDate	The UTC due date of the task item.
DueDate	The local due date of the task item.
Category	The category of the calendar item, such as Business, Holiday, Personal, or Waiting.
Recurrence.Type	The recurrence type.
Recurrence.Start	The start time of a series of recurrence items.
Recurrence.Until	The end time of a series of recurrence items.
Recurrence.Occurrences	The number of occurrences before the series ends.
Recurrence.Interval	The interval between recurrences.
Recurrence.DayOfWeek	The day of the week for the recurrence.
Recurrence.DayOfMonth	The day of the month for the recurrence.
Recurrence.WeekOfMonth	The week of the month for the recurrence.
Recurrence.MonthOfYear	The month of the year for the recurrence.
Recurrence.Regenerate	Whether the task item regenerates after each task instance is complete.
Recurrence.DeadOccur	Whether the task is a recurring instance.
Complete	Whether the task has been completed.
DateCompleted	The date on which the item was completed.
Sensitivity	The sensitivity of the task item.
ReminderTime	The time and date at which the reminder for the task item will appear.
ReminderSet	Whether a reminder for the task item has been set to appear.

2.2.2.1 Subject

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

2.2.2.2 Importance

The **Importance** element is an optional element that specifies the importance or priority of the task item.

The value of the **Importance** element MUST be one of the following:

Value	Description
0	Low
1	Normal (Default)
2	High

2.2.2.3 UtcStartDate

The **UtcStartDate** element is an optional element that specifies the UTC start date of the task item.

The value of this element is a **DateTime** value, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.4 StartDate

The **StartDate** element is an optional element that specifies the local start date of the task item.

The value of this element is a **DateTime** value, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.5 UtcDueDate

The **UtcDueDate** element is an optional element that specifies the UTC due date of the task item.

The value of this element is a **DateTime** value, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.6 DueDate

The DueDate element is an optional element that specifies the local due date of the task item.

The value of this element is a **DateTime** value, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.7 Categories.Category

The **Categories.Category** element is a required child element of the **Categories** type that specifies the category of the calendar item, such as Business, Holiday, Personal, or Waiting.

A command request or response has a minimum of one **Categories.Category** element per **Categories** type. There SHOULD be no more than 300 **Categories.Category** child elements in a **Categories** type.

2.2.2.8 Recurrence.Type

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

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

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

The value of the **Recurrence.Type** element MUST be one of the following.

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

2.2.2.9 Recurrence.Start

The **Recurrence.Start** element is a required child element of the **Recurrence** type that specifies the local start date for the recurrence.

A command request or response has a minimum of one **Recurrence.Start** element per **Recurrence** element.

A command request or response has a maximum of one **Recurrence.Start** element per **Recurrence** element.

The value of this element is a **DateTime** type, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.10 Recurrence.Until

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

A command request or response has a minimum of one **Recurrence.Until** element per **Recurrence** element.

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

The value of this element is a **DateTime** type, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.11 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 has a maximum of one **Recurrence.Occurrences** element per **Recurrence** element.

2.2.2.12 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 has a minimum of one **Recurrence.Interval** element per **Recurrence** element.

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

The value of the **Recurrence.Interval** element is an integer. The allowable range of values MUST conform to one of the following, based on the value of the **Type** element.

Value of Type Element	Maximum Allowed Value
0 (Daily)	127
1 (Weekly)	5
2 (Monthly)	31
3 (Monthly on nth day)	127
5 (Yearly)	12
6 (Yearly on nth month)	366

2.2.2.13 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 has 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 has a maximum of one **Recurrence.DayOfWeek** element per **Recurrence** element.

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

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

2.2.2.14 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 has 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 has 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**.

2.2.2.15 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 has 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 has 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.

2.2.2.16 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 has 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 has a maximum of one **Recurrence.MonthOfYear** element per **Recurrence** element.

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

2.2.2.17 Recurrence.Regenerate

The **Recurrence.Regenerate** element is an optional child element of the **Recurrence** type that specifies whether this task item regenerates after it is completed.

A command request or response has a maximum of one **Recurrence.Regenerate** element per **Recurrence** element.

The value of the **Recurrence.Regenerate** element MUST be one of the following.

Value	Description
0	False (does not regenerate)
1	True (regenerates)

If the **Recurrence.Regenerate** element is not included in a response, then the client MUST assume that the default is 0 (False).

2.2.2.18 Recurrence.DeadOccur

The **Recurrence.DeadOccur** element is an optional child element of the **Recurrence** type that specifies whether the task is a recurring instance of a master task.

A command request or response has a maximum of one **Recurrence.DeadOccur** element per **Recurrence** element.

The value of the **Recurrence.DeadOccur** element MUST be one of the following.

Value	Description
0	False (recurring master task)
1	True (instance of a recurring master task)

Clients making command requests SHOULD set this value to 1 (True) when marking a task as complete.

2.2.2.19 Complete

The **Complete** element is a required child element that specifies whether the task has been completed.

The value of the **Complete** element MUST be one of the following.

Value	Description
0	False (not completed)
1	True (completed)

2.2.2.20 DateCompleted

The **DateCompleted** element is an optional child element that specifies the date and time at which the task was completed.

The **DateCompleted** element MUST be included in the response if the **Complete** element is set to a value of 1.

The value of this element is a **DateTime** type, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.21 Sensitivity

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

The value of the **Sensitivity** element MUST be one of the following.

Value	Description
0	Normal
1	Personal
2	Private
3	Confidential

2.2.2.22 ReminderTime

The **ReminderTime** element is an optional element that specifies the time and date at which the reminder for the task item will appear.

The value of this element is a **DateTime** value, as specified in [MS-ASDTYPE] section 2.6.

2.2.2.23 ReminderSet

The **ReminderSet** element is an optional element that specifies whether a reminder for a task item has been set to appear.

The value of the **ReminderSet** element MUST be one of the following.

Value	Description
0	False (no reminder is set) (Default)
1	True (reminder is set)

3 Protocol Details

3.1 Client 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.

Task class: a structured XML text block that adheres to the XML schema defined 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.

Command request: A WBXML formatted message that adheres to the command schemas specified in [MS-ASCMD].

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Higher-Layer Triggered Events

3.1.4.1 Synchronizing Task Data with a Server

A client initiates synchronization of Task **class** data with the server by sending a **Sync** command request.

3.1.4.2 Searching a Server for Task Data

A client searches a server for Task **class** data by sending a **Search** command request.

3.1.4.3 Requesting Details for One or More Specific Tasks

Task data for one or more individual task items is requested by the client using an **ItemOperations** command request, which is a wrapper for the **Fetch** command. An **ItemOperations** command can contain multiple **Fetch** commands.

3.1.5 Message Processing Events and Sequencing Rules

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

3.1.5.1 ItemOperations Command Request

A client uses the **ItemOperations** command to retrieve specific Task items from the server using the **Fetch** element. An **ItemOperations** request can contain multiple **Fetch** elements. Any of the complex types and elements for the Task **class** can be included in an **ItemOperations** command request.

Task **class** complex types and elements MUST be transmitted as children of the **Schema** type ([MS-ASCMD] section 2.2.1.8.2.12).

ItemOperations is specified in [MS-ASCMD] section 2.2.1.8.

3.1.5.2 Search Command Request

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

The Task **class** complex types and elements MUST NOT be included in a **Search** command request.

Search is specified in [MS-ASCMD] section 2.2.1.14.

3.1.5.3 Sync Command Request

A client uses the **Sync** command to synchronize its Task **class** items for a specified user with the tasks currently stored by the server.

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

Task **class** complex types and elements MUST be transmitted as children of the **ApplicationData** type ([MS-ASCMD] section 2.2.1.19.2.2)

Sync is specified in [MS-ASCMD] section 2.2.1.19.

3.1.6 Timer Events

None.

3.1.7 Other Local Events

None.

3.2 Server Details

3.2.1 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.

Task class: a structured XML text block that adheres to the XML schema defined 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.

Command response: A WBXML formatted message that adheres to the command schemas specified in [MS-ASCMD].

3.2.2 Timers

None.

3.2.3 Initialization

None.

3.2.4 Higher-Layer Triggered Events

3.2.4.1 Synchronizing Task Data with a Server

A client initiates synchronization of Task **class** data with the server by sending a **Sync** command request. The server responds with a **Sync** command response.

3.2.4.2 Searching a Server for Task Data

A client searches a server for Task **class** data by sending a **Search** command request. The server responds with a **Search** command response.

3.2.4.3 Requesting Details for One or More Specific Tasks

Task data for one or more individual task items is requested by the client using an **ItemOperations** command request, which is a wrapper for the **Fetch** command. An

ItemOperations command can contain multiple **Fetch** commands. The server responds with an **ItemOperations** command response.

3.2.5 Message Processing Events and Sequencing Rules

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

3.2.5.1 ItemOperations Command Response

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

Any of the complex types and elements for the Task **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.

Task **class** complex types and elements MUST be returned as children of the **Properties** type ([MS-ASCMD] section 2.2.1.8.3.8).

ItemOperations is specified in [MS-ASCMD] section 2.2.1.8.

3.2.5.2 Search Command Response

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

Search is specified in [MS-ASCMD] section 2.2.1.14.

3.2.5.3 Sync Command Response

A client uses the **Sync** command to synchronize its Task **class** items for a specified user with the tasks currently stored by the server.

3.2.5.3.1 Importance Element

If the **Importance** element is excluded from a **Change** command inside of a **Sync** request, the server MUST NOT delete the element from its store, but rather restore it to its default value.

3.2.5.3.2 ReminderSet Element

If the **ReminderSet** element is excluded from a **Change** command inside of a **Sync** request, the server MUST NOT delete the element from its store, but rather restore it to its default value.

3.2.6 Timer Events

None.

3.2.7 Other Local Events

None.

4 Protocol Examples

The following request/response pair shows a client requesting synchronization of its Task data with a server, and the server responding with three changes: an Add, a Change, and a Delete. The types and elements of the Task class are included as children of the **Add**, **Change**, and **Delete** XML types.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync:">
  <Collections>
    <Collection>
      <SyncKey>761975125</SyncKey>
      <CollectionId>19</CollectionId>
      <DeletesAsMoves/>
      <GetChanges/>
    </Collection>
  </Collections>
</Sync>
```

Response:

```
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync:" xmlns:A="AirSyncBase:" xmlns:B="POOMTASKS:">
  <Collections>
    <Collection>
      <SyncKey>457669362</SyncKey>
      <CollectionId>19</CollectionId>
      <Status>1</Status>
      <Commands>
        <Change>
          <ServerId>19:1</ServerId>
          <ApplicationData>
            <A:Body>
              <A:Type>3</A:Type>
              <A:EstimatedDataSize>5731</A:EstimatedDataSize>
              <A:Truncated>1</A:Truncated>
            </A:Body>
            <B:Subject>Finish Q4 sales roll-up</B:Subject>
            <B:Importance>1</B:Importance>
            <B:UtcStartDate>2008-10-02T07:00:00.000Z</B:UtcStartDate>
            <B:StartDate>2008-10-02T00:00:00.000Z</B:StartDate>
            <B:UtcDueDate>2008-10-10T07:00:00.000Z</B:UtcDueDate>
            <B:DueDate>2008-10-10T00:00:00.000Z</B:DueDate>
```

```
            <B:Complete>0</B:Complete>
            <B:Sensitivity>0</B:Sensitivity>
            <B:ReminderTime>2008-10-10T19:30:00.000Z</B:ReminderTime>
            <B:ReminderSet>1</B:ReminderSet>
          </ApplicationData>
        </Change>
        <Add>
          <ServerId>19:3</ServerId>
          <ApplicationData>
            <A:Body>
              <A:Type>1</A:Type>
              <A:EstimatedDataSize>0</A:EstimatedDataSize>
              <A:Truncated>1</A:Truncated>
            </A:Body>
            <B:Subject>Email management team about next round of
quarterlies</B:Subject>
            <B:Importance>1</B:Importance>
            <B:UtcStartDate>2008-10-02T07:00:00.000Z</B:UtcStartDate>
            <B:StartDate>2008-10-02T00:00:00.000Z</B:StartDate>
            <B:UtcDueDate>2008-10-02T07:00:00.000Z</B:UtcDueDate>
            <B:DueDate>2008-10-02T00:00:00.000Z</B:DueDate>
            <B:Complete>0</B:Complete>
            <B:Sensitivity>0</B:Sensitivity>
            <B:ReminderSet>0</B:ReminderSet>
          </ApplicationData>
        </Add>
        <Delete>
          <ServerId>19:2</ServerId>
        </Delete>
      </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:

- Microsoft Exchange Server 2007
- Microsoft Exchange Server 2010

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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