

[MS-OCSMP]: Microsoft Online Conference Scheduling and Management Protocol Specification

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1 Introduction

The Microsoft Online Conference Scheduling and Management Protocol defines how a remote client communicates with the protocol server to schedule and manage online conferences.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

1.1 Glossary

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

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the technical documents, which are updated frequently. References to other documents include a publishing year when one is available.

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.

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

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

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

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

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

1.2.2 Informative References

[MS-OCAUTHWS] Microsoft Corporation, "[OC Authentication Web Service Protocol Specification](#)".

[MS-OCDISCWS] Microsoft Corporation, "[Lync Autodiscover Web Service Protocol Specification](#)".

1.3 Overview

This protocol is used to create and manage online conferences that have been scheduled on the protocol server. Communication is always initiated by the protocol client using different operations, the functionality of which is outlined as follows.

- Getting data to be used as the basis for a data-driven UI
- Scheduling, updating and cancelling online conferences
- Getting an overview of the user's existing online conferences

A typical scenario for this protocol is a web or mobile application for scheduling and managing online conferences.

1.4 Relationship to Other Protocols

Access to the Conference Scheduling and Management Web Service is discovered through the Lync Autodiscover Web Service. The discovery service protocol is described in the [\[MS-OCDISCWS\]](#) document.

Conference Scheduling and Management is accessible only to authenticated users, either directly via a client application or indirectly via a trusted server application. The authentication service protocols are described in the [\[MS-OCAUTHWS\]](#) document.

1.5 Prerequisites/Preconditions

This protocol operates against a protocol server that is configured to listen for HTTP or HTTPS requests and a protocol client that knows the Request-URI of the protocol server.

1.6 Applicability Statement

This protocol is applicable for the following scenarios:

- Creating, reading, updating, or deleting conferences on the protocol server.
- Consumption of the Conference Scheduling and Management Service.

This protocol is not applicable for the following scenarios:

- Joining or participating in an online conference
- Implementing a similar web service.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the area of supported transports. This protocol can use HTTP or HTTPS as a transport. For more information, see section [2.1](#)

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

The Conference Scheduling and Management protocol is a RESTful protocol transported using HTTP/HTTPS, as specified in [\[RFC2616\]](#). The service SHOULD be served on ports 80 and 443 respectively, but MAY be served on other ports. For specific port information please contact your service provider.

Protocol messages are text-based and MUST be UTF-8 encoded. Messages MUST NOT contain a Byte Order Mark.

2.2 Message Syntax

This section contains common definitions used by this protocol specification. The syntax of the definitions uses XML schema as defined in section [6](#)

2.2.1 Common URI Parameters

The following table summarizes the set of common URI parameters defined by this specification.

URI Parameter	Description
Conference ID	A string that uniquely identifies a specific conference entity.

2.2.2 Elements

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

Element	Description
AttendanceAnnouncementsStatus	An AttendanceAnnouncementsStatus enum value
AutomaticLeaderAssignment	An AutomaticLeaderAssignment enum value
Code	An operation dependent error code
ConferenceAccessLevel	A ConferenceAccessLevel enum value
ConferenceId	The conference's identifier
ConferenceServicesRequest	Top-level container for all entities and properties that are sent from the client application as part of a request to perform an action.
ConferenceServicesResponse	Top-level container for all entities and properties that are sent to the client application as part of a response to an action that was performed.
ConferenceUri	The conference's SIP URI
Description	Application defined long description of the conference's purpose
DialIn	An atomic grouping of PSTN dial-in properties

Element	Description
Error	A grouping of properties representing a failure in performing the requested operation
ExpiryTime	The absolute UTC date and time after which the conference is deleted
IsPhoneAccessEnabled	A Boolean value
IsReadOnly	A Boolean value
Link	A reference to an entity
LobbyBypass	A LobbyBypass enum value
Message	An operation dependent error message
Name	An application defined property name; A name for the country/region served by the related PhoneInformation
Number	A phone number
OrganizerData	An application supplied property bag of name-value pairs to be sent to the organizer upon joining the conference
OrganizerUri	The URI of the conference's organizer
Participant	A grouping of properties representing a participant in the conference
ParticipantData	An application supplied property bag of name-value pairs to be sent to each participant upon joining the conference
Participants	A collection of Participant objects
PhoneInformation	A grouping of properties representing a conference dial-in phone number and supported languages
Property	A name/value pair or name/values pair
PSTNID	A numerical ID callers should use to identify the conference
Role	A ConferencingRole enum value indicating the participant's role in the conference
ScheduledConference	A grouping of properties representing a conference's settings
SchedulingTemplate	A SchedulingTemplate enum value
Subject	The application defined short description of the conference's purpose
Uri	The URI of an invited participant
Value	An application defined property value
Values	A collection of name/value pairs
WebUrl	The web URL where users can join the conference

2.2.3 Complex Types

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

Complex Type	Description
ConferenceParticipantInformation	Represents information about a single contact invited to participate in a meeting and the maximum level at which the contact may participate in the conference
ConferenceServicesRequest	Top-level container for all properties that are sent from the client application as part of a request to perform an action.
ConferenceServicesResponse	Top-level container for all properties that are sent to the client application as part of a response from a performed action.
DialIn	A grouping of PSTN dial-in properties
DialInRegion	The dial-in country/region.
DialInRegions	A collection of DialInRegion objects.
Error	A grouping of properties describing an error in performing an operation
Languages	A collection of language names in the format "<languagecode2>-<country/regioncode2>", where <languagecode2> is a lowercase two-letter code derived from ISO 639-1 and <country/regioncode2> is an uppercase two-letter code derived from ISO 3166.
Link	A reference to an entity
Participant	A grouping of properties representing a contact invited to join the scheduled conference
Participants	Represents a collection of contacts invited to join the scheduled conference
PhoneInformation	A grouping of properties representing a conference dial-in phone number and supported languages.
Property	Represents name/value pair data
PropertyBag	A collection of name/value pairs
ScheduledConferenceEntity	A grouping of properties representing a conference's settings

2.2.3.1 ConferenceParticipantInformation

Represents information about a single contact invited to participate in a meeting and the maximum level at which the contact may participate in the conference.

Property name	Type	Description
Role	ConferencingRole	A value indicating the participant's role in the conference
Uri	String	The URI of the invited participant

2.2.3.2 ConferenceServicesRequest

Top-level container for all properties that are sent from the client application as part of a request to perform an action.

Property name	Type	Description
ScheduledConferenceSettings	ScheduledConferenceSettings	A grouping of properties representing the initial values to be applied to a newly created conference.
ScheduledConferencePatchSettings	ScheduledConferencePatchSettings	A grouping of properties representing the new values to be applied to a previously created conference.

2.2.3.3 ConferenceServicesResponse

Top-level container for all properties that are sent to the client application as part of a response from a performed action.

Property name	Type	Description
Error	Error	A grouping of properties describing the reason an operation may have failed.
ScheduledConference	ScheduledConferenceEntity	A grouping of properties representing a conference's settings
ScheduledConferenceOptions	ScheduledConferenceOptionsEntity	A grouping of properties related to scheduling a conference
ScheduledConferenceSummaries	ScheduledConferenceSummariesEntity	A collection of ScheduledConferenceSummary objects

2.2.3.4 DialIn

A grouping of PSTN dial-in properties

Property name	Type	Description
DialInRegions	DialInRegions	A collection of DialInRegion objects
ExternalDirectoryUri	String	The URI for the external phone directory
InternalDirectoryUri	String	The URI for the internal phone directory
PSTNID	String	The numerical ID callers should use to identify the conference

2.2.3.5 DialInRegion

Property name	Type	Description
PhoneInformation	PhoneInformation	A grouping of properties representing a conference dial-in phone number and supported languages.
Name	String	A name for the geographic region served by the related PhoneInformation object

2.2.3.6 DialInRegions

A collection of DialInRegion objects.

2.2.3.7 Error

A grouping of properties describing an error in performing an operation

Property name	Type	Description
Link	Collection	A collection of Link objects.
Code	String	A key that identifies the specific error
Message	string	A short, human readable description of the error

2.2.3.8 Link

A reference to an entity

Property name	Type	Description
Rel	String	A moniker that identifies how the attributed item is related to its parent container item
Href	String	A URL that is relative to the service's root URL
Token	String	A classification that is used to infer the purpose and use of the attributed item. Somewhat analogous to a type in traditional, compiled programming languages

2.2.3.9 Participant

A grouping of properties representing a contact invited to join the scheduled conference

Property name	Type	Description
Role	ConferencingRole	A ConferencingRole enum value indicating the participant's role in the conference
Uri	String	The URI of an invited participant

2.2.3.10 Participants

A collection of Participant objects.

2.2.3.11 PhoneInformation

A grouping of properties representing a conference dial-in phone number and supported languages.

Property name	Type	Description
Languages	Languages	A collection of language names in the format "<languagecode2>-<country/regioncode2>", where <languagecode2> is a lowercase two-letter code derived from ISO 639-1 and <country/regioncode2> is an uppercase two-letter code derived from ISO 3166.
Number	String	A phone number

2.2.3.12 Properties

A collection of Property objects.

2.2.3.13 Property

Represents name/value pair data

Property name	Type	Description
Name	String	An application defined unique string identifier
Value	String	An application defined value

2.2.3.14 PropertyBag

A collection of name/value pairs

Property name	Type	Description
Name	String	An application defined unique string identifier
Value	String or Properties	An application defined value or a collection of Property objects

2.2.3.15 PropertyBags

A collection of PropertyBag objects.

2.2.3.16 ScheduledConferenceEntity

A grouping of properties representing a conference's settings

Property name	Type	Description
Link	Link	A reference to an entity

Property name	Type	Description
AttendanceAnnouncementsStatus	AttendanceAnnouncementsStatus	An AttendanceAnnouncementsStatus enum value
AutomaticLeaderAssignment	AutomaticLeaderAssignment	An AutomaticLeaderAssignment enum value
ConferenceAccessLevel	ConferenceAccessLevel	A ConferenceAccessLevel enum value
ConferenceId	String	The conference's identifier
ConferenceUri	String	The conference's SIP URI
Description	String	The application defined long description of the conference's purpose
DialIn	DialIn	A grouping of PSTN dial-in properties
ExpiryTime	DateTime	The absolute UTC date and time after which the conference is deleted
IsActive	Boolean	A Boolean value indicating whether the conference is currently active
IsReadOnly	Boolean	A Boolean value indicating whether the conference's properties can be modified
LobbyBypass	LobbyBypass	A LobbyBypass enum value indicating the type of user that can bypass the lobby
OrganizerData	AbstractProperties	An application supplied property bag of name-value pairs to be sent to the organizer upon joining the conference
OrganizerUri	String	The URI of the conference's organizer
ParticipantData	AbstractProperties	An application supplied property bag of name-value pairs to be sent to each participant upon joining the conference
Participants	Participants	A collection of Participant objects
SchedulingTemplate	SchedulingTemplate	A SchedulingTemplate enum value that was used when scheduling the conference
Subject	String	The application defined short description of the conference's purpose

Property name	Type	Description
WebUrl	String	The web URL where users can join the conference

2.2.4 Simple Types

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

Simple Type	Description
AttendanceAnnouncementsStatus	An enumeration that represents how dial-in attendees to the conference will be announced to other attendees of the conference
AutomaticLeaderAssignment	An enumeration representing the policy that determines which participants are automatically promoted to leaders in the conference
ConferenceAccessLevel	An enumeration representing the policy that determines whether certain types of contacts are allowed to participate in the scheduled conference
ConferencingRole	An enumeration representing the role the contact will play in the scheduled conference
LobbyBypass	An enumeration representing the policy that determines whether certain types of contacts will automatically bypass the conference lobby
SchedulingTemplate	An enumeration representing the type of the conference

2.2.4.1 AttendanceAnnouncementsStatus

The following table summarizes the values of the AttendanceAnnouncementsStatus enumeration.

Value	Description
Unsupported	The conference does not support modifying attendance announcements.
Disabled	Attendance announcements are disabled.
Enabled	Attendance announcements are enabled.

2.2.4.2 AutomaticLeaderAssignment

The following table summarizes the values of the AutomaticLeaderAssignment enumeration.

Value	Description
Disabled	No one is automatically promoted to leader. Pre-invited leaders will still join the conference as leaders.
SameEnterprise	Everyone from the same company is automatically promoted to leader.
Everyone	Everyone is automatically promoted to leader on joining the conference.

2.2.4.3 ConferenceAccessLevel

The following table summarizes the values of the ConferenceAccessLevel enumeration.

Value	Description
SameEnterprise	Only the participants from the same company are admitted into the conference. Any other participant is placed in the conference lobby.
None	Not initialized.
Locked	Only the organizer is admitted into the conference. Any other participant is placed in the conference lobby.
Invited	Only invited participants from the same company are admitted into the conference. Any other participant is placed in the conference lobby.
Everyone	Everyone is admitted into the conference.

2.2.4.4 ConferencingRole

The following table summarizes the values of the ConferencingRole enumeration.

Value	Description
None	No or uninitialized role.
Attendee	Role as attendee.
Leader	Role as leader.

2.2.4.5 LobbyBypass

The following table summarizes the values of the LobbyBypass enumeration.

Value	Description
Disabled	Lobby bypass is disabled for all participants.
EnabledForGatewayParticipants	Lobby bypass is enabled for participants joining from a voice gateway.

2.2.4.6 SchedulingTemplate

The following table summarizes the values of the SchedulingTemplate enumeration.

Value	Description
OrganizerSupplied	The conference was scheduled based on an organizer supplied template.
AdministratorSupplied	The conference was scheduled based on an administrator supplied template.

2.2.5 Attributes

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

Attribute	Description
rel	A moniker that identifies how the attributed item is related to its parent container item
href	A URL that is relative to the service's root URL
token	A classification that is used to infer the purpose and use of the attributed item. Somewhat analogous to a type in traditional, compiled programming languages

2.2.6 Common Data Structures

For a list of common data structures defined by this specification see section [2.2.3](#).

3 Protocol Details

3.1 Server Role

The basic unit for operations in the Conference Scheduling and Management protocol is an Entity. Applications will be able to discover available Entities as well as the Properties and Capabilities of an Entity thus allowing applications to create a UI that is dynamically adjustable. An Entity's Capability is performed via an Operation. The current thought is that most Operations in UCWA could be executed either synchronously or asynchronously at the applications choice. Every Entity will be scoped within a Namespace. All of UCWA will be accessible via the HTTP protocol.

3.1.1 Protocol Conventions and Behaviors

The Conference Scheduling and Management protocol uses HTTP as its underlying transport and leverages existing HTTP conventions and idioms to their fullest advantage.

3.1.1.1 Optional Properties in a Request

Some UCWA operations may have a combination of required and optional properties in the request data. If a property is optional that property can be completely omitted from the submitted request. In the case of creating a new object for each missing optional property UCWA will substitute the default value for the omitted property. In the case of updating an object for each missing optional property UCWA will not update the value of any omitted property.

3.1.1.2 Name-Value Pair Property Bags

Some of the operations allow the application to store arbitrary data for later retrieval in a Name-Value Pair property bag. Though there is nothing to prevent the application for storing data in a flat manner it is recommended that each app use a nested property bag for storing its own data. Using a nested property bag provides a namespace-like benefit. It avoids potential conflicts with other applications that may store a property with the same name as one of your properties. It also makes it easier for YourApplication to read the complete set of properties added by MyApplication.

3.1.1.3 Updating Collection Properties

When updating a collection property UCWA will makes no attempt to resolve deltas between the previous values in a collection vs. the new values passed in the update request. This means UCWA by itself will not be able to distinguish between an update operation where the members in the request's collection property should be appended to the object's current collection members and an update operation where the members in the request's collection property should be should be removed from the object's current collection members. The application will be responsible for processing collection deltas on its own and submitting to UCWA the entirety of the updated collection.

3.1.1.4 Operation Return Values

The result (success or failure) of a Web API operation will be available in the HTTP response's response code and response text. The operation's output properties will be serialized in the HTTP response's body.

3.1.1.5 Errors and Exceptions

If a method call should fail for any reason error information that does not fit in the response code and/or response text may be serialized in the HTTP response's body

3.1.2 Abstract Data Model

None.

3.1.3 Timers

None.

3.1.4 Initialization

None.

3.1.5 Higher-Layer Triggered Events

None.

3.1.6 Message Processing Events and Sequencing Rules

Resource	Description
scheduled/conference	The resource with which an existing conference is updated or deleted
scheduled/conferences	The resource with which a new conference is scheduled
scheduled/summary	The resource containing a summary of important properties of a conference.
scheduled/summaries	The resource with which the collection of summary information for all previously schedule conferences is retrieved.
scheduled/schedulingoptions	The resource with which queries are performed to retrieve the user-specific information on allowed values and default values for every required property when scheduling a new conference or updating an existing conference.

3.1.6.1 scheduled/conference

The following operations are allowed to be performed on this resource.

Operation	Description
DELETE	Delete (cancel) a previously schedule conference
PATCH	Update a previously scheduled conference with new settings

3.1.6.1.1 Delete a Conference

Token	Media types	HTTP method
scheduled/conference	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1	DELETE

3.1.6.1.1.1 Request Body

Request Header	Usage	Value
None.		

3.1.6.1.1.2 Response Body

Response Header	Usage	Value
None.		

The response to this operation can result in the following status codes.

Status code	Description
204	Request was successful, but no data is sent back
410	The requested resource is no longer available at the server and no forwarding address is known

None.

3.1.6.1.1.3 Processing Details

None

3.1.6.1.2 Update a Conference

Token	Media types	HTTP method
scheduled/conference	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1	PATCH

3.1.6.1.2.1 Request Body

Request Header	Usage	Values
Accept	Response content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1
Content-type	Request content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The request body will consist of a `ConferenceServicesRequest` (section [2.2.3.2](#)) object containing a `ScheduledConferencePatchSettings` object.

3.1.6.1.2.1.1 ScheduledConferencePatchSettings

The following table summarizes the structure of the ScheduledConferencePatchSettings complex type.

Property name	Type	Description
AttendanceAnnouncementsStatus	AttendanceAnnouncementsStatus	An AttendanceAnnouncementsStatus enum value
AutomaticLeaderAssignment	AutomaticLeaderAssignment	An AutomaticLeaderAssignment enum value
ConferenceAccessLevel	ConferenceAccessLevel	A ConferenceAccessLevel enum value
Description	String	Application defined long description of the conference's purpose
ExpiryTime	DateTime	The absolute UTC date and time after which the conference is deleted
IsPhoneAccessEnabled	Boolean	A Boolean value
LobbyBypass	LobbyBypass	A LobbyBypass enum value
OrganizerDataAdded	PropertyBag	A PropertyBag of application defined name/value pairs to be added to the conference's existing OrganizerData property
OrganizerDataUpdated	PropertyBag	A PropertyBag of application defined name/value pairs to be updated in the conference's existing OrganizerData property
OrganizerDataRemoved	PropertyBag	A PropertyBag of application defined name/value pairs to be removed from the conference's existing OrganizerData property
ParticipantDataAdded	PropertyBag	A PropertyBag of application defined name/value pairs to be added to the conference's existing ParticipantData property
ParticipantDataUpdated	PropertyBag	A PropertyBag of application defined name/value pairs to be updated in the conference's existing ParticipantData property
ParticipantDataRemoved	PropertyBag	A PropertyBag of application defined name/value pairs to be removed from the conference's existing ParticipantData property
ParticipantsAdded	Participants	A collection of Participant objects to be added to the conference's

Property name	Type	Description
		existing Participants property
ParticipantsUpdated	Participants	A collection of Participant objects to be updated in the conference's existing Participants property
ParticipantsRemoved	Participants	A collection of Participant objects to be removed from the conference's existing Participants property
Subject	String	The application defined short description of the conference's purpose

3.1.6.1.2.2 Response Body

Response Header	Usage	Values
Content-type	Content-type and protocol version	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The response to this operation can result in the following status codes.

Status code	Description
200	The specified conference was successfully updated
400	The request is malformed or contains invalid values
404	The specified conference could not be found
405	The request's method is not allowed for this resource
406	The server does not have the ability to format the response according to the media type(s) specified in the request's Accept header

The response body will consist of a ConferenceServicesResponse (section [2.2.3.3](#)) containing either a ScheduledConferenceEntity (section [2.2.3.16](#)) object or an Error (section [2.2.3.7](#)) object.

3.1.6.1.2.3 Processing Details

None.

3.1.6.2 scheduled/summaries

Operation	Description
GET	Get the collection of summary information for all previously scheduled owned by the current user.

3.1.6.2.1 Get Conference Summaries

Token	Media types	HTTP method
scheduled/summaries	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1	GET

3.1.6.2.1.1 Request Body

Request Header	Usage	Values
Accept	Response content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

3.1.6.2.1.2 Response Body

Response Header	Usage	Values
Content-type	Content-type and protocol version	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The response to this operation can result in the following status codes.

Status code	Description
200	The summaries for all conferences were successfully retrieved
405	The request's method is not allowed for this resource
406	The server does not have the ability to format the response according to the media type(s) specified in the request's Accept header

The response body will consist of a `ConferenceServicesResponse` (section [2.2.3.3](#)) containing either a `ScheduledConferenceSummaries` object or an `Error` (section [2.2.3.7](#)) object.

3.1.6.2.1.2.1 ScheduledConferenceSummaries

A collection of `ScheduledConferenceSummaryEntity` objects.

3.1.6.2.1.2.2 ScheduledConferenceSummaryEntity

The following table summarizes the structure of the `ScheduledConferenceSummaryEntity` complex type.

Property name	Type	Description
Link	Link	A reference to the related <code>ScheduledConference</code> entity

Property name	Type	Description
Subject	String	The application defined short description of the conference's purpose
IsReadOnly	Boolean	A Boolean value indicating whether the conference's properties can be modified

3.1.6.2.1.3 Processing Details

None.

3.1.6.3 scheduled/conferences

3.1.6.3.1 Get a Conference

3.1.6.3.1.1 Request Body

Request Header	Usage	Values
Accept	Response content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

None.

3.1.6.3.1.2 Response Body

Response Header	Usage	Values
Content-type	Content-type and protocol version	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The response to this operation can result in the following status codes.

Status code	Description
200	The specified conference was successfully updated
404	The specified conference could not be found
405	The request's method is not allowed for this resource
406	The server does not have the ability to format the response according to the media type(s) specified in the request's Accept header

The response body will consist of a ConferenceServicesResponse (section [2.2.3.3](#)) containing either a ScheduledConferenceEntity (section [2.2.3.16](#)) object or an Error (section [2.2.3.7](#)) object.

3.1.6.3.1.3 Processing Details

None.

3.1.6.3.2 Create a Conference

3.1.6.3.2.1 Request Body

Request Header	Usage	Values
Accept	Response content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1
Content-type	Request content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The request body will consist of a `ConferenceServicesRequest` (section [2.2.3.2](#)) object containing a `ScheduledConferenceSettings` object.

3.1.6.3.2.1.1 ScheduledConferenceSettings

The following table summarizes the structure of the `ScheduledConferenceSettings` complex type.

Property name	Type	Description
AttendanceAnnouncementsStatus	AttendanceAnnouncementsStatus	An AttendanceAnnouncementsStatus enum value
AutomaticLeaderAssignment	AutomaticLeaderAssignment	An AutomaticLeaderAssignment enum value
ConferenceAccessLevel	ConferenceAccessLevel	A ConferenceAccessLevel enum value
Description	String	Application defined long description of the conference's purpose
ExpiryTime	DateTime	The absolute UTC date and time after which the conference is deleted
IsPhoneAccessEnabled	Boolean	A Boolean value
LobbyBypass	LobbyBypass	A LobbyBypass enum value
OrganizerData	PropertyBag	An application supplied property bag of name-value pairs to be sent to the organizer upon joining the conference
ParticipantData	PropertyBag	An application supplied property bag of name-value pairs to be sent to each participant upon joining the conference
Participants	Collection	A collection of Participant objects
SchedulingTemplate	SchedulingTemplate	A SchedulingTemplate enum

Property name	Type	Description
		value
Subject	String	The application defined short description of the conference's purpose

3.1.6.3.2.2 Response Body

Response Header	Usage	Values
Content-type	Content-type and protocol version	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The response to this operation can result in the following status codes.

Status code	Description
201	The conference was successfully created
400	The request is malformed or contains invalid values
405	The request's method is not allowed for this resource
406	The server does not have the ability to format the response according to the media type(s) specified in the request's Accept header

The response body will consist of a `ConferenceServicesResponse` (section [2.2.3.3](#)) containing either a `ScheduledConferenceEntity` (section [2.2.3.16](#)) object or an `Error` (section [2.2.3.7](#)) object.

3.1.6.3.2.3 Processing Details

None.

3.1.6.4 scheduled/schedulingoptions

The `scheduled/schedulingoptions` resource exposes to the user discovery of available conference features, allowed property values and recommended default property values for those settings. The values retrieved from this resource are specific to the user accessing this resource. The values retrieved should not be cached for later use by the current user or any other user.

This resource enables two key scenarios in a client application:

1. The client application can use the data retrieved from this resource to render a data driven UI to the end user.
2. The retrieved data can be used to perform local validation of the data in a request to the `scheduled/conference` or `scheduled/conferences` resources without incurring the cost of an additional round-trip over the wire to the Conference Scheduling and Management service for remote validation of the request.

Operation	Description
GET	Retrieves the user-specific information on available conference features, allowed property values and recommended default property values for every required property when scheduling a new conference or updating an existing conference.

3.1.6.4.1 Get Scheduling Options

Token	Media types	HTTP method
scheduled/schedulingoptions	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1	GET

3.1.6.4.1.1 Request Body

Request Header	Usage	Values
Accept	Response content-type and protocol version negotiation	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

None.

3.1.6.4.1.2 Response Body

Response Header	Usage	Values
Content-type	Content-type and protocol version	application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1 application/vnd.microsoft.com.ucwa.conferenceservices+json;v=1

The response to this operation can result in the following status codes.

Status code	Description
200	The user's scheduling options were successfully retrieved
404	The specified conference could not be found
405	The request's method is not allowed for this resource
406	The server does not have the ability to format the response according to the media type(s) specified in the request's Accept header

The response body will consist of a `ConferenceServicesResponse` (section [2.2.3.3](#)) containing either a `ScheduledConferenceOptionsEntity` object or an `Error` (section [2.2.3.7](#)) object.

3.1.6.4.1.2.1 ScheduledConferenceOptionsEntity

The following table summarizes the structure of the `ScheduledConferenceSettings` complex type.

Property name	Type	Description
AvailableValues	AvailableValues	A grouping of properties each containing a collection of valid values for the corresponding property in a ScheduledConferenceSettings entity
DefaultValues	DefaultValues	A grouping of properties each containing a single value from the set of available values for the corresponding property in the AvailableValues grouping.
SupportedFeatures	SupportedFeatures	A grouping of properties each indicating whether the user is allowed to schedule a conference with the corresponding feature

3.1.6.4.1.2.2 AvailableValues

The following table summarizes the structure of the ScheduledConferenceSettings complex type.

Property name	Type	Description
AttendanceAnnouncementsStatuses	Collection	A collection of valid AttendanceAnnouncementStatus enum values
AutomaticLeaderAssignments	Collection	A collection of valid AutomaticLeaderAssignment enum values
ConferenceAccessLevels	Collection	A collection of valid ConferenceAccessLevel enum values
DialIn		An atomic grouping of valid PSTN dial-in values
LobbyBypassSettings	Collection	A collection of valid LobbyBypass enum values
SchedulingTemplates	Collection	A collection of valid SchedulingTemplate enum values

3.1.6.4.1.2.3 DefaultValues

The following table summarizes the structure of the ScheduledConferenceSettings complex type.

Property name	Type	Description
AttendanceAnnouncementsStatus	AttendanceAnnouncementsStatus	The recommended default value for the AttendanceAnnouncementsStatus property in a ScheduledConferenceSettings entity
AutomaticLeaderAssignment	AutomaticLeaderAssignment	The recommended default value for the AutomaticLeaderAssignment property in a ScheduledConferenceSettings entity
ConferenceAccessLevel	ConferenceAccessLevel	The recommended default value for the ConferenceAccessLevel property in a

Property name	Type	Description
		ScheduledConferenceSettings entity
DialIn	DialIn	An atomic grouping of recommended default values for the DialIn property
InvitationFooterText	String	The text that should be displayed in the footer of a customized conference invitations
InvitationHelpUrl	String	The URL where the recipient of the conference invitation can go for help joining the conference
InvitationLegalUrl	String	The URL where the recipient of the conference invitation can find legal information and disclaimers
InvitationLogoUrl	String	The URL for the image that should be displayed in customized conference invitations
SchedulingTemplate	SchedulingTemplate	The recommended default value for the SchedulingTemplate property in a ScheduledConferenceSettings entity

3.1.6.4.1.2.4 SupportedFeatures

The following table summarizes the structure of the ScheduledConferenceSettings complex type.

Property name	Type	Description
AttendanceAnnouncementsStatus	Boolean	A flag indicating whether the Attendance Announcements feature is supported and configurable by the user.
DialIn	Boolean	A flag indicating whether the PSTN dial-in feature is supported and configurable by the user.
ExternalUserRecording	Boolean	A flag indicating whether external users are allowed to record the conference
InternalUserRecording	Boolean	A flag indicating whether internal users are allowed to record the conference

3.1.6.4.1.3 Processing Details

None.

3.1.7 Timer Events

None.

3.1.8 Other Local Events

None.

Preliminary

4 Protocol Examples

4.1 Scheduling a Conference

The following example illustrates the exchange of messages required for a client to retrieve the available and recommended default user-specific values required in order to successfully schedule a new conference.

4.1.1 Getting the Scheduling Options

HTTP Request

```
GET https://pool0.vdomain.com/ucwa/scheduled/schedulingoptions HTTP/1.1
X-MS-WebTicket: cwt=AAEBHAEFAAAAAAFFQAAACZfw6hMpZ-
w7RAMgf8EAACBEPDttJWHCThQn950JLXgmL2CAN9PgyDLq590MCQc4kjBjvgM_PnqrO59o7jJnz0xnC479nEt4YYIndzg
jCCJzgg
Accept: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Host: pool0.vdomain.com
```

HTTP Response

```
HTTP/1.1 200 OK
Cache-Control: no-cache
Content-Length: 2089
Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml; v=1
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-MS-Server-Fqdn: SERVER.vdomain.com
X-Powered-By: ASP.NET
Date: Thu, 15 Dec 2011 01:10:47 GMT

<?xml version="1.0" encoding="utf-8"?>
<ConferenceServicesResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConferenceOptions>
    <AvailableValues>
      <AttendanceAnnouncementsStatuses>
        <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
        <AttendanceAnnouncementsStatus>Enabled</AttendanceAnnouncementsStatus>
      </AttendanceAnnouncementsStatuses>
      <AutomaticLeaderAssignments>
        <AutomaticLeaderAssignment>Disabled</AutomaticLeaderAssignment>
        <AutomaticLeaderAssignment>Everyone</AutomaticLeaderAssignment>
        <AutomaticLeaderAssignment>SameEnterprise</AutomaticLeaderAssignment>
      </AutomaticLeaderAssignments>
      <ConferenceAccessLevels>
        <ConferenceAccessLevel>Invited</ConferenceAccessLevel>
        <ConferenceAccessLevel>SameEnterprise</ConferenceAccessLevel>
        <ConferenceAccessLevel>Everyone</ConferenceAccessLevel>
        <ConferenceAccessLevel>Locked</ConferenceAccessLevel>
      </ConferenceAccessLevels>
      <DialIn>
        <DialInRegions />
        <ExternalDirectoryUri />
        <InternalDirectoryUri />
      </DialIn>
    </AvailableValues>
  </ScheduledConferenceOptions>
</ConferenceServicesResponse>
```

```

    <LobbyBypassSettings>
      <LobbyBypass>Disabled</LobbyBypass>
      <LobbyBypass>EnabledForGatewayParticipants</LobbyBypass>
    </LobbyBypassSettings>
  </SchedulingTemplates>
  <SchedulingTemplate>AdministratorSupplied</SchedulingTemplate>
  <SchedulingTemplate>OrganizerSupplied</SchedulingTemplate>
</SchedulingTemplates>
</AvailableValues>
<DefaultValues>
  <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
  <AutomaticLeaderAssignment>SameEnterprise</AutomaticLeaderAssignment>
  <ConferenceAccessLevel>Everyone</ConferenceAccessLevel>
  <DialIn>
    <DialInRegions />
    <ExternalDirectoryUri />
    <InternalDirectoryUri />
  </DialIn>
  <InvitationFooterText />
  <InvitationHelpUrl />
  <InvitationLegalUrl />
  <InvitationLogoUrl />
  <SchedulingTemplate>AdministratorSupplied</SchedulingTemplate>
</DefaultValues>
<SupportedFeatures>
  <AttendanceAnnouncementsStatus>true</AttendanceAnnouncementsStatus>
  <DialIn>true</DialIn>
  <ExternalUserRecording>>false</ExternalUserRecording>
  <InternalUserRecording>>false</InternalUserRecording>
</SupportedFeatures>
</ScheduledConferenceOptions>
</ConferenceServicesResponse>

```

4.1.2 Scheduling the Conference

HTTP Request

```

POST https://pool0.vdomain.com/ucwa/scheduled/conferences HTTP/1.1
X-MS-WebTicket: cwt=AAEBHAEFAAAAAAFFQAAACZfw6hMpZ-
w7RAMgf8EAACBEPDttJWHCThQn950JLXgmL2CAn9PgyCNS71zK5avg7qXEOzi3GwU7o081058Hiwrs-
zGRoU3BoYIGpnXkSCJzgg
Accept: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Host: pool0.vdomain.com
Content-Length: 1842
Expect: 100-continue

```

```

<ConferenceServicesRequest xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConferenceSettings>
    <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
    <AutomaticLeaderAssignment>Everyone</AutomaticLeaderAssignment>
    <ConferenceAccessLevel>Everyone</ConferenceAccessLevel>
    <Description>Capabilities-based conference for BVT</Description>
    <ExpiryTime>2011-12-17T17:10:48.5520049-08:00</ExpiryTime>
    <IsPhoneAccessEnabled>true</IsPhoneAccessEnabled>
    <LobbyBypass>Disabled</LobbyBypass>
  </ScheduledConferenceSettings>
</ConferenceServicesRequest>

```



```

<OrganizerData>
  <Property>
    <Name>presentation.conferencing.contoso.com</Name>
    <Values>
      <Property>
        <Name>UploadFile1</Name>
        <Value>http://sharepoint/meeting/1/Presentation1.pptx</Value>
      </Property>
      <Property>
        <Name>UploadFile2</Name>
        <Value>http://sharepoint/meeting/1/Presentation2.pptx</Value>
      </Property>
      <Property>
        <Name>SlideTimers</Name>
        <Value>Enabled</Value>
      </Property>
    </Values>
  </Property>
  <Property>
    <Name>securedaccess.fabrikam.com</Name>
    <Values>
      <Property>
        <Name>OrganizerPropertyName1</Name>
        <Value>OrganizerPropertyValue1</Value>
      </Property>
      <Property>
        <Name>OrganizerPropertyName2</Name>
        <Value>OrganizerPropertyValue2</Value>
      </Property>
    </Values>
  </Property>
</OrganizerData>
<ParticipantData>
  <Property>
    <Name>attendee.conferencing.contoso.com</Name>
    <Values>
      <Property>
        <Name>Archiving</Name>
        <Value>Disabled</Value>
      </Property>
    </Values>
  </Property>
  <Property>
    <Name>securedaccess.fabrikam.com</Name>
    <Values>
      <Property>
        <Name>ParticipantPropertyName1</Name>
        <Value>ParticipantPropertyValue1</Value>
      </Property>
      <Property>
        <Name>ParticipantPropertyName2</Name>
        <Value>ParticipantPropertyValue2</Value>
      </Property>
    </Values>
  </Property>
</ParticipantData>
<SchedulingTemplate>OrganizerSupplied</SchedulingTemplate>
<Subject>Dynamic conference scheduling values</Subject>
</ScheduledConferenceSettings>

```

```
</ConferenceServicesRequest>
```

HTTP Response

```
HTTP/1.1 200 OK
Cache-Control: no-cache
Content-Length: 2211
Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml; v=1
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-MS-Server-Fqdn: SERVER.vdomain.com
X-Powered-By: ASP.NET
Date: Thu, 15 Dec 2011 01:10:50 GMT

<?xml version="1.0" encoding="utf-8"?>
<ConferenceServicesResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConference>
    <Link rel="self" href="/scheduled/conferences('2JLKWC7S')" token="scheduled/conference"
    />
    <ConferenceAccessLevel>Everyone</ConferenceAccessLevel>
    <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
    <AutomaticLeaderAssignment>Everyone</AutomaticLeaderAssignment>
    <ConferenceId>2JLKWC7S</ConferenceId>
  </ScheduledConference>
  <ConferenceUri>sip:UcwaUser1@vdomain.com;gruu;opaque=app:conf:focus:id:2JLKWC7S</ConferenceUri>
  <Description>Capabilities-based conference for BVT</Description>
  <ExpiryTime>2011-12-18T01:10:48Z</ExpiryTime>
  <IsActive>false</IsActive>
  <IsReadOnly>false</IsReadOnly>
  <LobbyBypass>Disabled</LobbyBypass>
  <OrganizerData>
    <Property>
      <Name>presentation.conferencing.contoso.com</Name>
      <Values>
        <Property>
          <Name>UploadFile1</Name>
          <Value>http://sharepoint/meeting/1/Presentation1.pptx</Value>
        </Property>
        <Property>
          <Name>UploadFile2</Name>
          <Value>http://sharepoint/meeting/1/Presentation2.pptx</Value>
        </Property>
        <Property>
          <Name>SlideTimers</Name>
          <Value>Enabled</Value>
        </Property>
      </Values>
    </Property>
    <Property>
      <Name>securedaccess.fabrikam.com</Name>
      <Values>
        <Property>
          <Name>OrganizerPropertyName1</Name>
          <Value>OrganizerPropertyValue1</Value>
        </Property>
      </Values>
    </Property>
  </OrganizerData>

```

```

        <Name>OrganizerPropertyName2</Name>
        <Value>OrganizerPropertyValue2</Value>
    </Property>
</Values>
</Property>
</OrganizerData>
<OrganizerUri>sip:UcwaUser1@vdomain.com</OrganizerUri>
<ParticipantData>
    <Property>
        <Name>attendee.conferencing.contoso.com</Name>
        <Values>
            <Property>
                <Name>Archiving</Name>
                <Value>Disabled</Value>
            </Property>
        </Values>
    </Property>
    <Property>
        <Name>securedaccess.fabrikam.com</Name>
        <Values>
            <Property>
                <Name>ParticipantPropertyName1</Name>
                <Value>ParticipantPropertyValue1</Value>
            </Property>
            <Property>
                <Name>ParticipantPropertyName2</Name>
                <Value>ParticipantPropertyValue2</Value>
            </Property>
        </Values>
    </Property>
</ParticipantData>
<Participants />
<DialIn>
    <DialInRegions />
    <ExternalDirectoryUri />
    <InternalDirectoryUri />
    <PSTNID>52677</PSTNID>
</DialIn>
<Subject>Dynamic conference scheduling values</Subject>
<WebUrl />
</ScheduledConference>
</ConferenceServicesResponse>

```

4.2 Getting an Existing Conference

4.2.1 Getting the Conference Summaries

HTTP Request

```

GET https://pool0.vdomain.com/ucwa/scheduled/summaries HTTP/1.1
X-MS-WebTicket: cwt=AAEBHAEFAAAAAAFFQAAACZfw6hMpZ-
w7RAMgf8EAACBEPDttJWHCThQn950JLXgmL2CAn9PgyDdxadX-
iU75f9Ux3E4GTDUG1iBEih8bj3NZwNWTJr1coYIN8h6kyCJzgg
Accept: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Host: pool0.vdomain.com

```

HTTP Response

```
HTTP/1.1 200 OK
Cache-Control: no-cache
Content-Length: 36300
Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml; v=1
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-MS-Server-Fqdn: SERVER.vdomain.com
X-Powered-By: ASP.NET
Date: Thu, 15 Dec 2011 01:10:50 GMT

<?xml version="1.0" encoding="utf-8"?>
<ConferenceServicesResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConferenceSummaries>
    <ScheduledConferenceSummary>
      <Link rel="self" href="/scheduled/summaries('A7LW9YC8')" token="scheduled/summary" />
      <Link rel="related" href="/scheduled/conferences('A7LW9YC8')"
token="scheduled/conference" />
      <Subject>Dynamic conference scheduling values</Subject>
      <IsReadOnly>>false</IsReadOnly>
    </ScheduledConferenceSummary>
    <ScheduledConferenceSummary>
      <Link rel="self" href="/scheduled/summaries('L73A1STS')" token="scheduled/summary" />
      <Link rel="related" href="/scheduled/conferences('L73A1STS')"
token="scheduled/conference" />
      <Subject>Dynamic conference patching values</Subject>
      <IsReadOnly>>false</IsReadOnly>
    </ScheduledConferenceSummary>
    <ScheduledConferenceSummary>
      <Link rel="self" href="/scheduled/summaries('J3EBY8UK')" token="scheduled/summary" />
      <Link rel="related" href="/scheduled/conferences('J3EBY8UK')"
token="scheduled/conference" />
      <Subject>Dynamic conference patching values</Subject>
      <IsReadOnly>>false</IsReadOnly>
    </ScheduledConferenceSummary>
  </ScheduledConferenceSummaries>
</ConferenceServicesResponse>
```

4.2.2 Getting the Conference

HTTP Request

```
GET https://pool0.vdomain.com/ucwa/scheduled/conferences('A7LW9YC8') HTTP/1.1
X-MS-WebTicket: cwt=AAEBHAEFAAAAAAFAFFQAAACZfw6hMpZ-
w7RAMgf8EAACBEPDttJWHCThQn950JLXgmL2CAn9PgyCKk3wMkHCQBA9PHq6Y9-
bJd3e018SzEGbvdNDmIhfyrYIICZmliCJzgg
Accept: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Host: pool0.vdomain.com
```

HTTP Response

```
HTTP/1.1 200 OK
Cache-Control: no-cache
Content-Length: 2211
```

Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml; v=1
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-MS-Server-Fqdn: SERVER.vdomain.com
X-Powered-By: ASP.NET
Date: Thu, 15 Dec 2011 01:10:55 GMT

```
<?xml version="1.0" encoding="utf-8"?>
<ConferenceServicesResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConference>
    <Link rel="self" href="/scheduled/conferences('A7LW9YC8')" token="scheduled/conference"
    />
    <ConferenceAccessLevel>Everyone</ConferenceAccessLevel>
    <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
    <AutomaticLeaderAssignment>Everyone</AutomaticLeaderAssignment>
    <ConferenceId>A7LW9YC8</ConferenceId>

<ConferenceUri>sip:UcwaUser1@vdomain.com;gruu;opaque=app:conf:focus:id:A7LW9YC8</ConferenceUri>
  <Description>Capabilities-based conference for BVT</Description>
  <ExpiryTime>2011-12-17T06:54:29Z</ExpiryTime>
  <IsActive>>false</IsActive>
  <IsReadOnly>>false</IsReadOnly>
  <LobbyBypass>Disabled</LobbyBypass>
  <OrganizerData>
    <Property>
      <Name>presentation.conferencing.contoso.com</Name>
      <Values>
        <Property>
          <Name>UploadFile1</Name>
          <Value>http://sharepoint/meeting/1/Presentation1.pptx</Value>
        </Property>
        <Property>
          <Name>UploadFile2</Name>
          <Value>http://sharepoint/meeting/1/Presentation2.pptx</Value>
        </Property>
        <Property>
          <Name>SlideTimers</Name>
          <Value>Enabled</Value>
        </Property>
      </Values>
    </Property>
    <Property>
      <Name>securedaccess.fabrikam.com</Name>
      <Values>
        <Property>
          <Name>OrganizerPropertyName1</Name>
          <Value>OrganizerPropertyValue1</Value>
        </Property>
        <Property>
          <Name>OrganizerPropertyName2</Name>
          <Value>OrganizerPropertyValue2</Value>
        </Property>
      </Values>
    </Property>
  </OrganizerData>
  <OrganizerUri>sip:UcwaUser1@vdomain.com</OrganizerUri>
  <ParticipantData>
```

```

<Property>
  <Name>attendee.conferencing.contoso.com</Name>
  <Values>
    <Property>
      <Name>Archiving</Name>
      <Value>Disabled</Value>
    </Property>
  </Values>
</Property>
<Property>
  <Name>securedaccess.fabrikam.com</Name>
  <Values>
    <Property>
      <Name>ParticipantPropertyName1</Name>
      <Value>ParticipantPropertyValue1</Value>
    </Property>
    <Property>
      <Name>ParticipantPropertyName2</Name>
      <Value>ParticipantPropertyValue2</Value>
    </Property>
  </Values>
</Property>
</ParticipantData>
<Participants />
<DialIn>
  <DialInRegions />
  <ExternalDirectoryUri />
  <InternalDirectoryUri />
  <PSTNID>10450</PSTNID>
</DialIn>
<Subject>Dynamic conference scheduling values</Subject>
<WebUrl />
</ScheduledConference>
</ConferenceServicesResponse>

```

4.3 Updating an Existing Conference

4.3.1 Getting the Conference Summaries

See the example in section [4.2.1](#)

4.3.2 Getting the Scheduling Options

See the example in section [4.1.1](#)

4.3.3 Getting the Conference

See the example in section [4.2.2](#)

4.3.4 Updating the Conference

HTTP Request

```
PATCH https://pool0.vdomain.com/ucwa/scheduled/conferences('HDJ2PRO6') HTTP/1.1
```

X-MS-WebTicket: cwt=AAEBHAEFAAAAAAFFFQAAACZfw6hMpZ-
w7RAMgf8EAACBEPDttJWHCThQn950JLXgmL2CAn9PgyBOPlopP1ZdF-
5EyHd2r8v1SaT0sDtqzo9fj63baGrp0IYI8OUqlSCJzgg
Accept: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml;v=1
Host: pool0.vdomain.com
Content-Length: 2680
Expect: 100-continue

```
<ConferenceServicesRequest xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConferencePatchSettings>
    <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
    <AutomaticLeaderAssignment>Disabled</AutomaticLeaderAssignment>
    <ConferenceAccessLevel>Locked</ConferenceAccessLevel>
    <Description>Capabilities-based patched conference for BVT</Description>
    <ExpiryTime>2011-12-19T17:10:54.4484623-08:00</ExpiryTime>
    <IsPhoneAccessEnabled>>false</IsPhoneAccessEnabled>
    <LobbyBypass>EnabledForGatewayParticipants</LobbyBypass>
    <OrganizerDataAdded>
      <Property>
        <Name>presentation.conferencing.contoso.com</Name>
        <Values>
          <Property>
            <Name>Placeholder1</Name>
            <Value>Placeholder2</Value>
          </Property>
        </Values>
      </Property>
      <Property>
        <Name>securedaccess.fabrikam.com</Name>
        <Values>
          <Property>
            <Name>OrganizerPropertyName3</Name>
            <Value>OrganizerPropertyValue3</Value>
          </Property>
        </Values>
      </Property>
    </OrganizerDataAdded>
    <OrganizerDataUpdated>
      <Property>
        <Name>presentation.conferencing.contoso.com</Name>
        <Values>
          <Property>
            <Name>UploadFile1</Name>
            <Value>http://sharepoint/meeting/1/PatchedPresentation1.pptx</Value>
          </Property>
        </Values>
      </Property>
    </OrganizerDataUpdated>
    <OrganizerDataRemoved>
      <Property>
        <Name>securedaccess.fabrikam.com</Name>
        <Values>
          <Property>
            <Name>OrganizerPropertyName1</Name>
            <Value>OrganizerPropertyValue1</Value>
          </Property>
        </Values>
      </Property>
    </OrganizerDataRemoved>
  </ScheduledConferencePatchSettings>
</ConferenceServicesRequest>
```

```

    </Property>
</OrganizerDataRemoved>
<ParticipantDataAdded>
  <Property>
    <Name>attendee.conferencing.contoso.com</Name>
    <Values>
      <Property>
        <Name>Archiving</Name>
        <Value>Disabled</Value>
      </Property>
    </Values>
  </Property>
  <Property>
    <Name>securedaccess.fabrikam.com</Name>
    <Values>
      <Property>
        <Name>ParticipantPropertyName1</Name>
        <Value>ParticipantPropertyValue1</Value>
      </Property>
      <Property>
        <Name>ParticipantPropertyName2</Name>
        <Value>ParticipantPropertyValue2</Value>
      </Property>
    </Values>
  </Property>
</ParticipantDataAdded>
<ParticipantDataUpdated>
  <Property>
    <Name>attendee.conferencing.contoso.com</Name>
    <Values>
      <Property>
        <Name>Archiving</Name>
        <Value>Disabled</Value>
      </Property>
    </Values>
  </Property>
  <Property>
    <Name>securedaccess.fabrikam.com</Name>
    <Values>
      <Property>
        <Name>ParticipantPropertyName1</Name>
        <Value>ParticipantPropertyValue1</Value>
      </Property>
      <Property>
        <Name>ParticipantPropertyName2</Name>
        <Value>ParticipantPropertyValue2</Value>
      </Property>
    </Values>
  </Property>
</ParticipantDataUpdated>
<ParticipantDataRemoved>
  <Property>
    <Name>securedaccess.fabrikam.com</Name>
    <Values>
      <Property>
        <Name>ParticipantPropertyName2</Name>
        <Value>ParticipantPropertyValue2</Value>
      </Property>
    </Values>
  </Property>
</ParticipantDataRemoved>

```



```
    </Property>
  </ParticipantDataRemoved>
  <Subject>Dynamic conference patching values</Subject>
</ScheduledConferencePatchSettings>
</ConferenceServicesRequest>
```

HTTP Response

```
HTTP/1.1 200 OK
Cache-Control: no-cache
Content-Length: 1423
Content-Type: application/vnd.microsoft.com.ucwa.conferenceservices+xml; v=1
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-MS-Server-Fqdn: SERVER.vdomain.com
X-Powered-By: ASP.NET
Date: Thu, 15 Dec 2011 01:10:54 GMT

<?xml version="1.0" encoding="utf-8"?>
<ConferenceServicesResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ScheduledConference>
    <Link rel="self" href="/scheduled/conferences('HDJ2PRO6')" token="scheduled/conference"
/>
    <ConferenceAccessLevel>Locked</ConferenceAccessLevel>
    <AttendanceAnnouncementsStatus>Disabled</AttendanceAnnouncementsStatus>
    <AutomaticLeaderAssignment>Disabled</AutomaticLeaderAssignment>
    <ConferenceId>HDJ2PRO6</ConferenceId>

<ConferenceUri>sip:UcwaUser1@vdomain.com;gruu;opaque=app:conf:focus:id:HDJ2PRO6</ConferenceUri>
  <Description>Capabilities-based patched conference for BVT</Description>
  <ExpiryTime>2011-12-20T01:10:54Z</ExpiryTime>
  <IsActive>>false</IsActive>
  <IsReadOnly>>false</IsReadOnly>
  <LobbyBypass>EnabledForGatewayParticipants</LobbyBypass>
  <OrganizerData>
    <Property>
      <Name>securedaccess.fabrikam.com</Name>
      <Values>
        <Property>
          <Name>OrganizerPropertyName1</Name>
          <Value>OrganizerPropertyValue1</Value>
        </Property>
      </Values>
    </Property>
  </OrganizerData>
  <OrganizerUri>sip:UcwaUser1@vdomain.com</OrganizerUri>
  <ParticipantData>
    <Property>
      <Name>securedaccess.fabrikam.com</Name>
      <Values>
        <Property>
          <Name>ParticipantPropertyName2</Name>
          <Value>ParticipantPropertyValue2</Value>
        </Property>
      </Values>
    </Property>
  </ParticipantData>
```

```
</ParticipantData>
<Participants />
<Subject>Dynamic conference patching values</Subject>
<WebUrl />
</ScheduledConference>
</ConferenceServicesResponse>
```

4.4 Deleting an Existing Conference

4.4.1 Getting the Conference Summaries

See the example in section [4.2.1](#)

4.4.2 Deleting the Conference

HTTP Request

```
DELETE https://pool0.vdomain.com/ucwa/scheduled/conferences('V2AP9FIK') HTTP/1.1
X-MS-WebTicket: cwt=AAEBHAEFAAAAAAFAFFQAAACZfw6hMpZ-
w7RAMgf8EAACBEPDttJWHCThQn95OJLXgmL2CAn9PgyD-
pmhbxZPtjOzlxiolee2A9KlIPjjVwxYoy9G0xdvh9IYI5t9o1CCJzgg
Host: pool0.vdomain.com
Content-Length: 0
```

HTTP Response

```
HTTP/1.1 204 No Content
Cache-Control: no-cache
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-MS-Server-Fqdn: SERVER.vdomain.com
X-Powered-By: ASP.NET
Date: Thu, 15 Dec 2011 01:10:52 GMT
```

5 Security

5.1 Security Considerations for Implementers

None

5.2 Index of Security Parameters

None

Preliminary

6 Appendix A: Full XML Schema

6.1 ConferenceServicesRequest

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ConferenceServicesRequest" nillable="true"
type="ConferenceServicesRequest" />
  <xs:complexType name="ConferenceServicesRequest">
    <xs:complexContent mixed="false">
      <xs:extension base="RequestContainer">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="ScheduledConferenceSettings"
type="ScheduledConferenceSettings" />
          <xs:element minOccurs="0" maxOccurs="1" name="ScheduledConferencePatchSettings"
type="ScheduledConferencePatchSettings" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="RequestContainer" abstract="true" />
  <xs:complexType name="ScheduledConferenceSettings">
    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="AttendanceAnnouncementsStatus"
nillable="true" type="AttendanceAnnouncementsStatus" />
      <xs:element minOccurs="1" maxOccurs="1" name="AutomaticLeaderAssignment"
nillable="true" type="AutomaticLeaderAssignment" />
      <xs:element minOccurs="1" maxOccurs="1" name="ConferenceAccessLevel" nillable="true"
type="ConferenceAccessLevel" />
      <xs:element minOccurs="0" maxOccurs="1" name="Description" type="xs:string" />
      <xs:element minOccurs="1" maxOccurs="1" name="ExpiryTime" nillable="true"
type="xs:dateTime" />
      <xs:element minOccurs="1" maxOccurs="1" name="IsPhoneAccessEnabled" nillable="true"
type="xs:boolean" />
      <xs:element minOccurs="1" maxOccurs="1" name="LobbyBypass" nillable="true"
type="LobbyBypass" />
      <xs:element minOccurs="0" maxOccurs="1" name="OrganizerData" type="PropertyBag" />
      <xs:element minOccurs="0" maxOccurs="1" name="ParticipantData" type="PropertyBag" />
      <xs:element minOccurs="0" maxOccurs="1" name="Participants" type="Participants" />
      <xs:element minOccurs="1" maxOccurs="1" name="SchedulingTemplate"
type="SchedulingTemplate" />
      <xs:element minOccurs="0" maxOccurs="1" name="Subject" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="AttendanceAnnouncementsStatus">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Unsupported" />
      <xs:enumeration value="Disabled" />
      <xs:enumeration value="Enabled" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="AutomaticLeaderAssignment">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Disabled" />
      <xs:enumeration value="SameEnterprise" />
      <xs:enumeration value="Everyone" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="ConferenceAccessLevel">
```

```

    <xs:restriction base="xs:string">
      <xs:enumeration value="SameEnterprise" />
      <xs:enumeration value="None" />
      <xs:enumeration value="Locked" />
      <xs:enumeration value="Invited" />
      <xs:enumeration value="Everyone" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="LobbyBypass">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Disabled" />
      <xs:enumeration value="EnabledForGatewayParticipants" />
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="PropertyBag">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="Property" nillable="true"
type="Property" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="Property">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="Name" type="xs:string" />
      <xs:element minOccurs="0" maxOccurs="1" name="Value" type="xs:string" />
      <xs:element minOccurs="0" maxOccurs="1" name="Values" type="PropertyBag" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="Participants">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="Participant" nillable="true"
type="ConferenceParticipantInformation" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ConferenceParticipantInformation">
    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="Role" type="ConferencingRole" />
      <xs:element minOccurs="0" maxOccurs="1" name="Uri" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="ConferencingRole">
    <xs:restriction base="xs:string">
      <xs:enumeration value="None" />
      <xs:enumeration value="Attendee" />
      <xs:enumeration value="Leader" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="SchedulingTemplate">
    <xs:restriction base="xs:string">
      <xs:enumeration value="OrganizerSupplied" />
      <xs:enumeration value="AdministratorSupplied" />
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="ScheduledConferencePatchSettings">
    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="AttendanceAnnouncementsStatus"
nillable="true" type="AttendanceAnnouncementsStatus" />
      <xs:element minOccurs="1" maxOccurs="1" name="AutomaticLeaderAssignment"
nillable="true" type="AutomaticLeaderAssignment" />
    </xs:sequence>
  </xs:complexType>

```

```

    <xs:element minOccurs="1" maxOccurs="1" name="ConferenceAccessLevel" nillable="true"
type="ConferenceAccessLevel" />
    <xs:element minOccurs="0" maxOccurs="1" name="Description" type="xs:string" />
    <xs:element minOccurs="1" maxOccurs="1" name="ExpiryTime" nillable="true"
type="xs:dateTime" />
    <xs:element minOccurs="1" maxOccurs="1" name="IsPhoneAccessEnabled" nillable="true"
type="xs:boolean" />
    <xs:element minOccurs="1" maxOccurs="1" name="LobbyBypass" nillable="true"
type="LobbyBypass" />
    <xs:element minOccurs="0" maxOccurs="1" name="OrganizerDataAdded" type="PropertyBag" />
    <xs:element minOccurs="0" maxOccurs="1" name="OrganizerDataUpdated" type="PropertyBag"
/>
    <xs:element minOccurs="0" maxOccurs="1" name="OrganizerDataRemoved" type="PropertyBag"
/>
    <xs:element minOccurs="0" maxOccurs="1" name="ParticipantDataAdded" type="PropertyBag"
/>
    <xs:element minOccurs="0" maxOccurs="1" name="ParticipantDataUpdated"
type="PropertyBag" />
    <xs:element minOccurs="0" maxOccurs="1" name="ParticipantDataRemoved"
type="PropertyBag" />
    <xs:element minOccurs="0" maxOccurs="1" name="ParticipantsAdded" type="Participants" />
    <xs:element minOccurs="0" maxOccurs="1" name="ParticipantsRemoved" type="Participants"
/>
    <xs:element minOccurs="0" maxOccurs="1" name="ParticipantsUpdated" type="Participants"
/>
    <xs:element minOccurs="0" maxOccurs="1" name="Subject" type="xs:string" />
  </xs:sequence>
</xs:complexType>
</xs:schema>

```

6.2 ConferenceServicesResponse

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ConferenceServicesResponse" nillable="true"
type="ConferenceServicesResponse" />
  <xs:complexType name="ConferenceServicesResponse">
    <xs:complexContent mixed="false">
      <xs:extension base="ResponseContainer">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="ScheduledConference"
type="ScheduledConferenceEntity" />
          <xs:element minOccurs="0" maxOccurs="1" name="ScheduledConferenceOptions"
type="ScheduledConferenceOptionsEntity" />
          <xs:element minOccurs="0" maxOccurs="1" name="ScheduledConferenceSummaries"
type="ScheduledConferenceSummariesEntity" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="ResponseContainer" abstract="true">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="Error" type="Error" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="Error">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="Link" type="Link" />
      <xs:element minOccurs="0" maxOccurs="1" name="Code" type="xs:string" />
    </xs:sequence>
  </xs:complexType>

```

```

        <xs:element minOccurs="0" maxOccurs="1" name="Message" type="xs:string" />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="Link">
    <xs:attribute name="rel" type="xs:string" />
    <xs:attribute name="href" type="xs:string" />
    <xs:attribute name="token" type="xs:string" />
    <xs:attribute name="cid" type="xs:string" />
</xs:complexType>
<xs:complexType name="ScheduledConferenceEntity">
    <xs:complexContent mixed="false">
        <xs:extension base="ConferenceEntityBase" />
    </xs:complexContent>
</xs:complexType>
<xs:complexType name="ConferenceEntityBase" abstract="true">
    <xs:complexContent mixed="false">
        <xs:extension base="Entity">
            <xs:sequence>
                <xs:element minOccurs="1" maxOccurs="1" name="ConferenceAccessLevel"
type="ConferenceAccessLevel" />
                <xs:element minOccurs="1" maxOccurs="1" name="AttendanceAnnouncementsStatus"
type="AttendanceAnnouncementsStatus" />
                <xs:element minOccurs="1" maxOccurs="1" name="AutomaticLeaderAssignment"
type="AutomaticLeaderAssignment" />
                <xs:element minOccurs="0" maxOccurs="1" name="ConferenceId" type="xs:string" />
                <xs:element minOccurs="0" maxOccurs="1" name="ConferenceUri" type="xs:string" />
                <xs:element minOccurs="0" maxOccurs="1" name="Description" type="xs:string" />
                <xs:element minOccurs="1" maxOccurs="1" name="ExpiryTime" nillable="true"
type="xs:dateTime" />
                <xs:element minOccurs="1" maxOccurs="1" name="IsActive" nillable="true"
type="xs:boolean" />
                <xs:element minOccurs="1" maxOccurs="1" name="IsReadOnly" type="xs:boolean" />
                <xs:element minOccurs="1" maxOccurs="1" name="LobbyBypass" type="LobbyBypass" />
                <xs:element minOccurs="0" maxOccurs="1" name="OrganizerData" type="PropertyBag" />
                <xs:element minOccurs="0" maxOccurs="1" name="OrganizerUri" type="xs:string" />
                <xs:element minOccurs="0" maxOccurs="1" name="ParticipantData" type="PropertyBag"
/>
                <xs:element minOccurs="0" maxOccurs="1" name="Participants" type="Participants" />
                <xs:element minOccurs="0" maxOccurs="1" name="DialIn" type="DialIn" />
                <xs:element minOccurs="0" maxOccurs="1" name="Subject" type="xs:string" />
                <xs:element minOccurs="0" maxOccurs="1" name="WebUrl" type="xs:string" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:complexType name="Entity" abstract="true">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="Link" type="Link" />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="ScheduledConferenceSummaryEntity">
    <xs:complexContent mixed="false">
        <xs:extension base="Entity">
            <xs:sequence>
                <xs:element minOccurs="0" maxOccurs="1" name="Subject" type="xs:string" />
                <xs:element minOccurs="1" maxOccurs="1" name="IsReadOnly" type="xs:boolean" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>

```

```

</xs:complexType>
<xs:complexType name="ScheduledConferenceOptionsEntity">
  <xs:complexContent mixed="false">
    <xs:extension base="Entity">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="AvailableValues"
type="AvailableValues" />
        <xs:element minOccurs="0" maxOccurs="1" name="DefaultValues" type="DefaultValues"
/>
        <xs:element minOccurs="0" maxOccurs="1" name="SupportedFeatures"
type="SupportedFeatures" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AvailableValues">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="AttendanceAnnouncementsStatuses"
type="AttendanceAnnouncementsStatuses" />
    <xs:element minOccurs="0" maxOccurs="1" name="AutomaticLeaderAssignments"
type="AutomaticLeaderAssignments" />
    <xs:element minOccurs="0" maxOccurs="1" name="ConferenceAccessLevels"
type="ConferenceAccessLevels" />
    <xs:element minOccurs="0" maxOccurs="1" name="DialIn" type="DialIn" />
    <xs:element minOccurs="0" maxOccurs="1" name="LobbyBypassSettings"
type="LobbyBypassSettings" />
    <xs:element minOccurs="0" maxOccurs="1" name="SchedulingTemplates"
type="SchedulingTemplates" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AttendanceAnnouncementsStatuses">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AttendanceAnnouncementsStatus"
type="AttendanceAnnouncementsStatus" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AttendanceAnnouncementsStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Unsupported" />
    <xs:enumeration value="Disabled" />
    <xs:enumeration value="Enabled" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="AutomaticLeaderAssignments">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AutomaticLeaderAssignment"
type="AutomaticLeaderAssignment" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AutomaticLeaderAssignment">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Disabled" />
    <xs:enumeration value="SameEnterprise" />
    <xs:enumeration value="Everyone" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ConferenceAccessLevels">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ConferenceAccessLevel"
type="ConferenceAccessLevel" />
  </xs:sequence>
</xs:complexType>

```



```

    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="ConferenceAccessLevel">
    <xs:restriction base="xs:string">
      <xs:enumeration value="SameEnterprise" />
      <xs:enumeration value="None" />
      <xs:enumeration value="Locked" />
      <xs:enumeration value="Invited" />
      <xs:enumeration value="Everyone" />
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="DialIn">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="DialInRegions" type="DialInRegions" />
      <xs:element minOccurs="0" maxOccurs="1" name="ExternalDirectoryUri" type="xs:string" />
      <xs:element minOccurs="0" maxOccurs="1" name="InternalDirectoryUri" type="xs:string" />
      <xs:element minOccurs="0" maxOccurs="1" name="PSTNID" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="DialInRegions">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="DialInRegion" nillable="true"
type="DialInRegion" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="DialInRegion">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="PhoneInformation" type="PhoneInformation"
/>
      <xs:element minOccurs="0" maxOccurs="1" name="Name" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="PhoneInformation">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="Languages" type="Languages" />
      <xs:element minOccurs="0" maxOccurs="1" name="Number" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="Languages">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="Language" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="LobbyBypassSettings">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="LobbyBypass" type="LobbyBypass"
/>
    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="LobbyBypass">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Disabled" />
      <xs:enumeration value="EnabledForGatewayParticipants" />
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="SchedulingTemplates">
    <xs:sequence>

```

```

    <xs:element minOccurs="0" maxOccurs="unbounded" name="SchedulingTemplate"
type="SchedulingTemplate" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="SchedulingTemplate">
  <xs:restriction base="xs:string">
    <xs:enumeration value="OrganizerSupplied" />
    <xs:enumeration value="AdministratorSupplied" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="DefaultValues">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="AttendanceAnnouncementsStatus"
type="AttendanceAnnouncementsStatus" />
    <xs:element minOccurs="1" maxOccurs="1" name="AutomaticLeaderAssignment"
type="AutomaticLeaderAssignment" />
    <xs:element minOccurs="1" maxOccurs="1" name="ConferenceAccessLevel"
type="ConferenceAccessLevel" />
    <xs:element minOccurs="0" maxOccurs="1" name="DialIn" type="DialIn" />
    <xs:element minOccurs="0" maxOccurs="1" name="InvitationFooterText" type="xs:string" />
    <xs:element minOccurs="0" maxOccurs="1" name="InvitationHelpUrl" type="xs:string" />
    <xs:element minOccurs="0" maxOccurs="1" name="InvitationLegalUrl" type="xs:string" />
    <xs:element minOccurs="0" maxOccurs="1" name="InvitationLogoUrl" type="xs:string" />
    <xs:element minOccurs="1" maxOccurs="1" name="SchedulingTemplate"
type="SchedulingTemplate" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="SupportedFeatures">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="AttendanceAnnouncementsStatus"
type="xs:boolean" />
    <xs:element minOccurs="1" maxOccurs="1" name="DialIn" type="xs:boolean" />
    <xs:element minOccurs="1" maxOccurs="1" name="ExternalUserRecording" type="xs:boolean"
/>
    <xs:element minOccurs="1" maxOccurs="1" name="InternalUserRecording" type="xs:boolean"
/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PropertyBag">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Property" nillable="true"
type="Property" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Property">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Name" type="xs:string" />
    <xs:element minOccurs="0" maxOccurs="1" name="Value" type="xs:string" />
    <xs:element minOccurs="0" maxOccurs="1" name="Values" type="PropertyBag" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Participants">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Participant" nillable="true"
type="ConferenceParticipantInformation" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ConferenceParticipantInformation">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Role" type="ConferencingRole" />

```

```
    <xs:element minOccurs="0" maxOccurs="1" name="Uri" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ConferencingRole">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None" />
    <xs:enumeration value="Attendee" />
    <xs:enumeration value="Leader" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ScheduledConferenceSummariesEntity">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ScheduledConferenceSummary"
nillable="true" type="ScheduledConferenceSummaryEntity" />
  </xs:sequence>
</xs:complexType>
</xs:schema>
```

7 Appendix B: Full JSON Schema

7.1 ConferenceServicesRequest

```
{
  "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.ConferenceServicesRequest",
  "type": "object",
  "properties": {
    "ScheduledConferenceSettings": {
      "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.ScheduledConferenceSettings",
      "required": true,
      "type": [
        "object",
        "null"
      ],
    },
    "properties": {
      "AttendanceAnnouncementsStatus": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      },
      "AutomaticLeaderAssignment": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      },
      "ConferenceAccessLevel": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      },
      "Description": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "ExpiryTime": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "IsPhoneAccessEnabled": {
        "required": true,
        "type": [
          "boolean",
          "null"
        ]
      }
    }
  ]
}
```

```

    },
    "LobbyBypass": {
      "required": true,
      "type": [
        "integer",
        "null"
      ]
    },
  },
  "OrganizerData": {
    "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.PropertyBag",
    "required": true,
    "type": [
      "array",
      "null"
    ],
    "items": {
      "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.Property",
      "type": [
        "object",
        "null"
      ],
      "properties": {
        "Name": {
          "required": true,
          "type": [
            "string",
            "null"
          ]
        },
        "Value": {
          "required": true,
          "type": [
            "string",
            "null"
          ]
        },
        "Values": {
          "$ref": "Microsoft.Rtc.Internal.Ucwa.DataContract.PropertyBag"
        }
      }
    }
  },
  "ParticipantData": {
    "$ref": "Microsoft.Rtc.Internal.Ucwa.DataContract.PropertyBag"
  },
  "Participants": {
    "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.ConferenceParticipantInfos",
    "required": true,
    "type": [
      "array",
      "null"
    ],
    "items": {
      "id":
"Microsoft.Rtc.Internal.Ucwa.DataContract.ConferenceParticipantInformation",
      "type": [
        "object",
        "null"
      ]
    }
  },

```

```

"properties": {
  "Role": {
    "required": true,
    "type": "integer",
    "enum": [
      0,
      1,
      2
    ],
    "options": [
      {
        "value": 0,
        "label": "None"
      },
      {
        "value": 1,
        "label": "Attendee"
      },
      {
        "value": 2,
        "label": "Leader"
      }
    ]
  },
  "Uri": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  }
}
},
"SchedulingTemplate": {
  "required": true,
  "type": "integer",
  "enum": [
    0,
    1
  ],
  "options": [
    {
      "value": 0,
      "label": "OrganizerSupplied"
    },
    {
      "value": 1,
      "label": "AdministratorSupplied"
    }
  ]
},
"Subject": {
  "required": true,
  "type": [
    "string",
    "null"
  ]
}
}

```

```

    },
  },
  "ScheduledConferencePatchSettings": {
    "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.ScheduledConferencePatchSettings",
    "required": true,
    "type": [
      "object",
      "null"
    ],
    "properties": {
      "AttendanceAnnouncementsStatus": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      },
      "AutomaticLeaderAssignment": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      },
      "ConferenceAccessLevel": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      },
      "Description": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "ExpiryTime": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "IsPhoneAccessEnabled": {
        "required": true,
        "type": [
          "boolean",
          "null"
        ]
      },
      "LobbyBypass": {
        "required": true,
        "type": [
          "integer",
          "null"
        ]
      }
    }
  },
}

```



```

1,
0,
2,
3,
4
],
"options": [
  {
    "value": 1,
    "label": "SameEnterprise"
  },
  {
    "value": 0,
    "label": "None"
  },
  {
    "value": 2,
    "label": "Locked"
  },
  {
    "value": 3,
    "label": "Invited"
  },
  {
    "value": 4,
    "label": "Everyone"
  }
],
},
"AttendanceAnnouncementsStatus": {
  "required": true,
  "type": "integer",
  "enum": [
    0,
    1,
    2
  ],
  "options": [
    {
      "value": 0,
      "label": "Unsupported"
    },
    {
      "value": 1,
      "label": "Disabled"
    },
    {
      "value": 2,
      "label": "Enabled"
    }
  ]
},
"AutomaticLeaderAssignment": {
  "required": true,
  "type": "integer",
  "enum": [
    0,
    32768,
    2147483648
  ]
}

```

```
    ],
    "options": [
      {
        "value": 0,
        "label": "Disabled"
      },
      {
        "value": 32768,
        "label": "SameEnterprise"
      },
      {
        "value": 2147483648,
        "label": "Everyone"
      }
    ]
  },
  "ConferenceId": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "ConferenceUri": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "Description": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "ExpiryTime": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "IsActive": {
    "required": true,
    "type": [
      "boolean",
      "null"
    ]
  },
  "IsReadOnly": {
    "required": true,
    "type": "boolean"
  },
  "LobbyBypass": {
    "required": true,
    "type": "integer",
    "enum": [
```

```

    0,
    1
  ],
  "options": [
    {
      "value": 0,
      "label": "Disabled"
    },
    {
      "value": 1,
      "label": "EnabledForGatewayParticipants"
    }
  ]
},
"OrganizerData": {
  "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.PropertyBag",
  "required": true,
  "type": [
    "array",
    "null"
  ],
  "items": {
    "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.Property",
    "type": [
      "object",
      "null"
    ],
    "properties": {
      "Name": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "Value": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "Values": {
        "$ref": "Microsoft.Rtc.Internal.Ucwa.DataContract.PropertyBag"
      }
    }
  },
  "OrganizerUri": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "ParticipantData": {
    "$ref": "Microsoft.Rtc.Internal.Ucwa.DataContract.PropertyBag"
  },
  "Participants": {

```

```

    "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.ConferenceParticipantInfos",
    "required": true,
    "type": [
      "array",
      "null"
    ],
    "items": {
      "id":
"Microsoft.Rtc.Internal.Ucwa.DataContract.ConferenceParticipantInformation",
      "type": [
        "object",
        "null"
      ],
      "properties": {
        "Role": {
          "required": true,
          "type": "integer",
          "enum": [
            0,
            1,
            2
          ],
          "options": [
            {
              "value": 0,
              "label": "None"
            },
            {
              "value": 1,
              "label": "Attendee"
            },
            {
              "value": 2,
              "label": "Leader"
            }
          ]
        },
        "Uri": {
          "required": true,
          "type": [
            "string",
            "null"
          ]
        }
      }
    },
    "DialIn": {
      "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.DialIn",
      "required": true,
      "type": [
        "object",
        "null"
      ],
      "properties": {
        "DialInRegions": {
          "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.DialInRegions",
          "required": true,
          "type": [

```

```

    "array",
    "null"
  ],
  "items": {
    "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.DialInRegion",
    "type": [
      "object",
      "null"
    ],
    "properties": {
      "PhoneInformation": {
        "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.PhoneInformation",
        "required": true,
        "type": [
          "object",
          "null"
        ],
        "properties": {
          "Languages": {
            "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.Languages",
            "required": true,
            "type": [
              "array",
              "null"
            ],
            "items": {
              "type": [
                "string",
                "null"
              ]
            }
          },
          "Number": {
            "required": true,
            "type": [
              "string",
              "null"
            ]
          }
        }
      },
      "Name": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      }
    }
  },
  "ExternalDirectoryUri": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "InternalDirectoryUri": {

```

```

        "required": true,
        "type": [
            "string",
            "null"
        ]
    },
    "PSTNID": {
        "required": true,
        "type": [
            "string",
            "null"
        ]
    }
},
"Subject": {
    "required": true,
    "type": [
        "string",
        "null"
    ]
},
"WebUrl": {
    "required": true,
    "type": [
        "string",
        "null"
    ]
},
"Links": {
    "id":
"System.Collections.ObjectModel.Collection`1[[Microsoft.Rtc.Internal.Ucwa.DataContract.Link,
Microsoft.Rtc.Internal.Ucwa.DataContract, Version=5.0.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35]]",
    "required": true,
    "type": [
        "array",
        "null"
    ],
    "items": {
        "id": "Microsoft.Rtc.Internal.Ucwa.DataContract.Link",
        "type": [
            "object",
            "null"
        ],
        "properties": {
            "rel": {
                "required": true,
                "type": [
                    "string",
                    "null"
                ]
            },
            "href": {
                "required": true,
                "type": [
                    "string",
                    "null"
                ]
            }
        }
    }
}

```


8 Appendix C: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

- Microsoft® Lync® Server 2013 Preview

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

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms SHOULD or SHOULD NOT implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that the product does not follow the prescription.

9 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

Preliminary

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