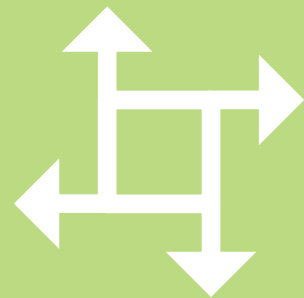


# PortaSIP



## XML / JSON API Reference

55

Maintenance  
Release



Documentation

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**PortaSIP® API Reference, May 2016**  
**Maintenance Release 55**  
**V1.55.03**

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## Preface

This document provides information for developers who want to interface their applications with PortaSIP® via XML and JSON API. The PortaBilling® XML and JSON API is described in the [PortaBilling XML / JSON API Reference](#).

### Where to get the latest version of this guide

The hard copy of this guide is updated upon major releases only, and does not always contain the latest material on enhancements that occur in-between minor releases. The online copy of this guide is always up to date, and integrates the latest changes to the product. You can access the latest copy of this guide at: [www.portaone.com/support/documentation/](http://www.portaone.com/support/documentation/).

## Conventions

This publication uses the following conventions:



**Exclamation mark** draws your attention to important actions that must be taken for proper configuration.

**NOTE:** Notes contain additional information to supplement or accentuate important points in the text.

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## What is New in Maintenance Release 55?

- The **SetMenuTransitionResponse** structure now returns the *i menu transition* property instead of the *success* property.
- The *i menu transition* property has been added to the **TransitionInfo** and **GetMenuTransitionPromptRequest** structures.

# 1. XML / JSON API Overview

## Security

Connection to the XML / JSON API interface is provided via HTTPS. Authentication is done using authentication pairs (login-password). Each request to the API should contain the **auth\_info** structure as the header attribute. Note that we strongly recommend using the *session\_id* property (which must be received during the authorization via the **LoginRequest**) in the **auth\_info** structure for all session requests. Otherwise, if you use login-password authentication pairs for every request, new sessions will be created and cause additional load to the database.

## XML API

XML (SOAP) API has its own advantages and drawbacks as compared with JSON API. Among the benefits are the following:

- There is a wide range of reusable software available to programmers to handle XML so they do not have to re-invent code.
- XML (SOAP) is more verbose compared with JSON, but because of this, the data encoding result is typically larger than the equivalent encoding in JSON API.

### Access to XML API

**Proxy (URL):** <https://media-server.yourdomain.com:8443/soap/soap.fcgi>

**SOAP URI (namespace):** <https://media-server.yourdomain.com/UM/SOAP/>



Please replace the **media-server.yourdomain.com** with the actual hostname of your PortaSIP® Media Server.

### Error Handling

SOAP faults are used to carry error information within a SOAP message. If the actual response has a SOAP fault element as the body entry, then an error has occurred. In this case, the accuracy of any other fields in the response cannot be guaranteed, and you should only use the fault sub-elements to identify the error. Currently, these sub-elements are as follows:

- **faultcode** is intended for use by the client software and provides an algorithmic mechanism for identifying a fault.
- **faultstring** provides a human-readable explanation of a fault, and is not intended for algorithmic processing.

## JSON API

As an alternative to XML API, PortaSwitch® supports JSON API, thus providing your development department with a choice of Web Application Services that can be used. Among the advantages of JSON API are the following:

- Simple data structures that can be easily read and written.
- JSON format is faster in parsing and generating data due to simple syntax, thus there is little influence on web server performance.
- Supports the same methods as those in the SOAP.
- Simplifies the creation of front-end web sites that receive and modify data with minimum impact on performance.

### Access to JSON API

All JSON requests to PortaSIP® Media Server API must be sent to the following URL: `https://<media-server.yourdomain.com>:8443/rest/<service>/<method>/`



Please replace the **media-server.yourdomain.com** with the actual hostname of your PortaSIP® Media Server.

Replace **<service>** with the API service that contains the required method (e.g. specify the **SMPreferences** service to manage voice mailbox preferences.)

Replace **<method>** with the required API method (e.g. specify **set\_folder\_preferences** method in order to change mailbox folder preferences.)

Here is an example of the URL the POST request to be sent to:

`https://demo.portaone.com:8443/rest/SMPreferences/set_folder_preferences/`

### Sending an HTTP request

For HTTP requests you must include the following parameters (in JSON format) in the POST request body:

- `auth_info` – The mandatory authentication information (see the [Security](#) section).
- `params` – A set of method parameters (in JSON format) that depend on a method structure. Note that method parameters and their structures are the same as those in the SOAP.



## Error Handling

If the server returns the ‘500 Internal Server Error’ status code in the HTTP response, then the response body contains a JSON object which includes two elements (keys) that carry error information:

- **faultcode**, that is intended for use by the client software and provides an algorithmic mechanism for identifying the fault.
- **faultstring**, that provides a human readable explanation of the fault, and is not intended for algorithmic processing.

## WSDL

Each PortaSIP® Media Server has its own set of WSDL documents available for download from the web server. Assuming the name of the PortaSIP® Media Server is media-server.yourdomain.com, these documents can be downloaded from:

- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=Session.xsd>
- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=Types.xsd>
- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=Voicemail.xsd>
- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=SMPreferences.xsd>
- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=DialDirectory.xsd>
- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=AutoAttendant.xsd>
- <https://media-server.yourdomain.com:8443/soap/wsdl.fcgi?get=Conference.xsd>

All requests to PortaSIP® Media Server API are handled via an SSL connection. By default, PortaSIP® Media Server installations contain a self-signed certificate that provides the means to encrypt data. However, since this certificate’s authenticity cannot be validated, you may experience some problems when connecting to an SSL site. In that case, it may be necessary to obtain a certificate from a genuine certificate authority. Another option is to generate your own certificate authority and have certificates deployed to all API clients. However, this goes beyond the scope of the present document.

## 2. Reference

## Notation Conventions

The following typographic conventions apply throughout this chapter:

- \* – A value can be entered for this property only when inserting new records and cannot be changed later.
- \*\* – This property is read-only, and its value cannot be changed.
- Mandatory properties (whose value must be entered during insertion, and cannot be set to an empty value later) are underlined.
- <sup>n</sup> – This property can be used with the **nil** attribute to indicate that it is blank (has no content):
  - In the *Request* message the **xsi:nil="true"** attribute can be used to clear the property (set value to NULL in the database).
  - In the *Response* message a property has the **xsi:nil="true"** attribute if it is blank (has the NULL value in the database).

## Establishing an Authenticated Session

SOAP URI: `https://media-server.yourdomain.com/UM/SOAP/Session`

### Methods

#### login

Parameters: **LoginRequest**

Return value: **LoginResponse**

Checks the validity of login and password and returns `session_id` on success. An API fault is generated on failure.

#### logout

Parameters: **LogoutRequest**

Return value: **LogoutResponse**

Terminates the session. You should call `logout()` to terminate the session properly.

## Type Reference

### LoginRequest structure

| Property | Type                 | Description  |
|----------|----------------------|--|
| login    | string, 32 char max  | Account ID specified on web interface  |
| domain   | string               | Media Server Domain corresponding to billing environment that the account belongs to |
| password | string, 16 chars max | Password specified on web interface  |

### LoginResponse structure

| Property   | Type                 | Description                |
|------------|----------------------|----------------------------|
| session_id | string, 32 chars max | ID of newly opened session |

### LogoutRequest structure

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

### LogoutResponse structure

| Property | Type | Description                                |
|----------|------|--|
| success  | int  | 1 in case of success, 0 in case of failure |

## Global Methods and Types

### Type Reference

The structure below is used to pass authentication data to the API method. There are two possible ways to authenticate an API request: create a session and pass session\_id in auth\_info, or pass all the required credentials (login/domain/password) in every API request.

### auth\_info structure

| Property | Type                 | Description                           |
|----------|----------------------|---------------------------------------|
| login    | string, 32 chars max | Account ID specified on web interface |

|                   |                      |  |
|-------------------|----------------------|--|
| domain            | string               | Media Server Domain corresponding to current billing environment |
| password          | string, 16 chars max | Password specified on web interface                              |
| or alternatively: |                      |  |
| session_id        | string, 32 chars max | The unique ID of previously opened API session                   |

## Access to Voicemail Settings

SOAP URI: <https://media-server.yourdomain.com/UM/SOAP/Voicemail>

### Methods

#### **get\_vm\_settings**

Parameters: [GetVMSettingsRequest](#)  
Return value: [GetVMSettingsResponse](#)

This method allows an API user (account) to get general voicemail settings from the PortaSIP® Media Server database.

#### **set\_vm\_settings**

Parameters: [SetVMSettingsRequest](#)  
Return value: [SetVMSettingsResponse](#)

This method allows an API user (account) to set general voicemail settings in the PortaSIP® Media Server database.

#### **get\_vm\_greeting**

Parameters: [GetVMGreetingRequest](#)  
Return value: [GetVMGreetingResponse](#)

This method allows an API user (account) to get the sound prompt for a specified greeting from the PortaSIP® Media Server database. The sound file is returned in a MIME attachment.

#### **set\_vm\_greeting**

Parameters: [SetVMGreetingRequest](#)  
Return value: [SetVMGreetingResponse](#)

This method allows an API user (account) to set the sound prompt for a specified greeting type. The sound file is sent in a MIME attachment.

## Type Reference

### GetVMSettingsRequest structure

This method doesn't have any parameters.

### GetVMSettingsResponse structure

| Property    | Type              | Description   |
|-------------|-------------------|---|
| vm_settings | <b>VMSettings</b> | Complete information about general voicemail settings |

### SetVMSettingsRequest structure

May include **any** of the following properties:

| Property    | Type              | Description   |
|-------------|-------------------|---|
| vm_settings | <b>VMSettings</b> | Complete information about general voicemail settings |

### SetVMSettingsResponse structure

| Property          | Type | Description          |
|-------------------|------|----------------------|
| vm_settings_saved | int  | 1 in case of success |

### VMSettings structure

| Property      | Type   | Description   |
|---------------|--------|---|
| password      | string | Password for accessing voicemail via IVR  |
| password_ask  | string | <ul style="list-style-type: none"><li>• yes – ask for password when accessing voicemail via IVR;</li><li>• no – don't ask for password when accessing voicemail via IVR</li></ul>   |
| prompt_levels | string | PortaSIP® Media Server offers three voice prompt settings in each supported language: <ul style="list-style-type: none"><li>• standard</li><li>• extended</li><li>• rapid</li></ul> |
| announce_dt   | string | Announce the date and time  |

|                  |                       |  |
|------------------|-----------------------|--|
|                  |                       | when each voicemail was sent.<br>Values: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>   |
| auto_play        | string                | Auto-play new voicemail(s) when a call to voicemail is established. Values: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>                                      |
| greetings        | string                | Type of greeting for users wishing to leave a voicemail. Values: <ul style="list-style-type: none"> <li>• standard</li> <li>• extended</li> <li>• personal;</li> <li>• name</li> </ul> |
| fax_file         | string                | Format for received faxes: <ul style="list-style-type: none"> <li>• multi_png</li> <li>• multi_tiff</li> <li>• pdf</li> <li>• tiff</li> </ul>  |
| ext_email        | string, max 128 chars | External email for forwarding, copying, and notifying  |
| ext_email_action | string                | Action for external email: <ul style="list-style-type: none"> <li>• none</li> <li>• forward</li> <li>• notify</li> <li>• copy</li> <li>• fwd_as_attachment</li> </ul>                  |
| ext_email_vm_fmt | string                | Voice message audio format: <ul style="list-style-type: none"> <li>• au</li> <li>• mp3 (default)</li> <li>• wav</li> </ul>   |
| enable_disa      | string (Yes/No)       | Enable DISA functionality for customer's voicemail   |
| disa_password    | string                | Password for using DISA functionality  |

### GetVMGreetingRequest structure

| Property      | Type   | Description  |
|---------------|--------|--|
| greeting_type | string | Values: <ul style="list-style-type: none"> <li>• standard</li> <li>• extended</li> <li>• personal</li> </ul> |

|  |  |  |
|--|--|--|
|  |  | <ul style="list-style-type: none"><li>• name</li></ul> |
|--|--|--|

### GetVMGreetingResponse structure

| Property | Type   | Description   |
|----------|--------|---|
| filename | string | Filename of greeting attached to SOAP response in a MIME attachment |

### SetVMGreetingRequest structure

| Property             | Type                          | Description  |
|----------------------|-------------------------------|--|
| <u>greeting_info</u> | <b>GreetingInfo</b> structure | Complete information about general greeting's settings |

### GreetingInfo structure

| Property             | Type   | Description  |
|----------------------|--------|--|
| <u>greeting_type</u> | string | Values: <ul style="list-style-type: none"><li>• extended</li><li>• personal</li><li>• name</li></ul> |
| <u>filename</u>      | string | Filename of greeting attached to SOAP request in a MIME attachment                                   |

### SetVMGreetingResponse structure

| Property | Type | Description          |
|----------|------|----------------------|
| success  | int  | 1 in case of success |

## Access to Folder Preferences and MailBox and Message Display Options

SOAP URI: <https://media-server.yourdomain.com/UM/SOAP/SMPreferences>

### Methods

#### get\_folder\_preferences

Parameters: **GetFolderPreferencesRequest**

Return value: **GetFolderPreferencesResponse**

This method allows an API user (account) to get the preferences of his mailbox.



### set\_folder\_preferences

Parameters: **SetFolderPreferencesRequest**

Return value: **SetFolderPreferencesResponse**

This method allows an API user (account) to set the preferences of his mailbox.

### get\_display\_preferences

Parameters: **GetDisplayPreferencesRequest**

Return value: **GetDisplayPreferencesResponse**

This method allows an API user (account) to get the display preferences of his mailbox and messages.

### set\_display\_preferences

Parameters: **SetDisplayPreferencesRequest**

Return value: **SetDisplayPreferencesResponse**

This method allows an API user (account) to set the display preferences of his mailbox and messages.

### GetFolderPreferencesResponse structure

| Property            | Type                               | Description  |
|---------------------|------------------------------------|--|
| <u>folder_prefs</u> | <b>FolderPreferences</b> structure | Complete information about the folder preferences; for more information, see below |

### FolderPreferences structure

| Property      | Type   | Description  |
|---------------|--------|--|
| trash_folder  | string | An IMAP folder where messages are moved on deletion. The messages are deleted completely if this field is set to “none”                                      |
| draft_folder  | string | An IMAP folder where the user can save a message in progress as a draft. The messages aren’t saved if this field is set to “none”                            |
| unseen_type   | int    | The Unread Message Notification Type: <ul style="list-style-type: none"><li>• 1 – Only Unseen</li><li>• 2 – Unseen and Total</li></ul>                       |
| unseen_notify | int    | Enable Unread Message Notification: <ul style="list-style-type: none"><li>• 1 – No Notification</li><li>• 2 – Only INBOX</li><li>• 3 – All Folders</li></ul> |

|                   |        |   |
|-------------------|--------|---|
| sent_folder       | string | An IMAP folder messages are copied to after they are sent. The messages aren't copied if this field is set to "none"  |
| unseen_cumulative | int    | Enable the Cumulative Unread Message Notification. This controls the behavior of the message counter displayed next to each folder in the folder list. When enabled, if the folder contains sub-folders and is collapsed, then the message count includes all messages within all the sub-folders of that folder. |
| search_memory     | int    | Memory Search options. If the user searches the mailbox, the search can be saved for quick access later on. This option defines how many mailbox searches will be saved.<br><br>Allowed Values: 0 (disabled), 1, 2, 3, 4, 5, 6, 7, 8, 9   |

**SetFolderPreferencesRequest structure**

| Property            | Type                               | Description  |
|---------------------|------------------------------------|--|
| <u>folder_prefs</u> | <b>FolderPreferences</b> structure | Complete information about the folder preferences; for more information, see below |

**SetFolderPreferencesResponse structure**

| Property       | Type | Description          |
|----------------|------|----------------------|
| <u>success</u> | int  | 1 in case of success |

**GetDisplayPreferencesRequest structure****GetDisplayPreferencesResponse structure**

| Property             | Type                                | Description   |
|----------------------|-------------------------------------|---|
| <u>display_prefs</u> | <b>DisplayPreferences</b> structure | Complete information about the display preferences; for more information, see below |

**DisplayPreferences structure**

| Property        | Type | Description   |
|-----------------|------|---|
| wrap_at         | int  | Defines how many characters to allow before wrapping text |
| truncate_sender | int  | Specifies the length of the From / To fields (0 for full) |

|                        |        |  |
|------------------------|--------|--|
| show_xmailer_default   | int    | When viewing a message, this displays which email service or client the sender used  |
| editor_height          | int    | Specifies the height of the Editor Window  |
| mdn_user_support       | int    | Specifies whether to enable the Mail Delivery Notification   |
| truncate_subject       | int    | Specifies the length of the Subject Field (0 for full)   |
| body_quote             | string | Prefix each line of the original message with this symbol when replying or forwarding an email message   |
| include_self_reply_all | int    | Specifies whether to include user's address in CC when he chooses Reply All  |
| sig_first              | int    | Specifies whether to prepend signature before Reply/Forward text   |
| pf_cleandisplay        | int    | Specifies whether to display the View Printable Version link in a message  |
| editor_size            | int    | Specifies the width of the Editor Window.  |
| show_html_default      | int    | Specifies what version to show by default if a received message is sent in both text and HTML formats:<br>0 – Text version<br>1 – HTML version   |
| page_selector_max      | int    | Specifies the maximum number of pages that will be shown at one time   |
| internal_date_sort     | int    | Specifies whether to sort messages by Received Date  |
| page_selector          | int    | Specifies whether to show Page Selector. When enabled, message pages will be shown above and below the list of messages, allowing the user to quickly jump to a specific message page  |
| addrsrch_fullname      | string | Specifies the format of addresses added from the address book: <ul style="list-style-type: none"> <li>• “Noprefix” – No prefix, address only</li> <li>• “Nickname” – Nickname and address</li> <li>• “Fullname” – Full name and address</li> </ul> |
| show_num               | int    | Specifies the number of messages that will be shown on one page  |
| show_images            | int    | Specifies whether to display attached  |

|  |  |                         |
|--|--|-------------------------|
|  |  | images with the message |
|--|--|-------------------------|

### SetDisplayPreferencesRequest structure

| Property             | Type                                | Description   |
|----------------------|-------------------------------------|---|
| <u>display_prefs</u> | <b>DisplayPreferences</b> structure | Complete information about the display preferences; for more information, see below |

### SetDisplayPreferencesResponse structure

| Property       | Type | Description          |
|----------------|------|----------------------|
| <u>success</u> | int  | 1 in case of success |

## Auto Attendant Configuration

SOAP URI: <https://media-server.yourdomain.com/UM/SOAP/AutoAttendant>

### Methods

#### get\_menu\_list

Parameters: **GetMenuListRequest**

Return value: **GetMenuListResponse**

This method allows an API user (account) to get a list of all configured auto attendant menus.

#### update\_menu

Parameters: **UpdateMenuRequest**

Return value: **UpdateMenuResponse**

This method allows an API user (account) to update the settings of a separate auto attendant menu.

#### create\_menu

Parameters: **CreateMenuRequest**

Return value: **CreateMenuResponse**

This method allows an API user (account) to create an auto attendant menu.

#### del\_menu

Parameters: **DelMenuRequest**

Return value: **DelMenuResponse**

This method allows an API user (account) to delete an auto attendant menu.

### **set\_menu\_prompt**

Parameters: **SetMenuPromptRequest**

Return value: **SetMenuPromptResponse**

This method allows an API user (account) to set (record) separate prompt for selected auto attendant menu. The sound file is sent in a MIME attachment to the API request.

### **get\_menu\_prompt**

Parameters: **GetMenuPromptRequest**

Return value: **GetMenuPromptResponse**

This method allows an API user (account) to get a separate prompt from the selected auto attendant menu. The sound file is sent in a MIME attachment to the API request.

### **get\_menu\_transition\_list**

Parameters: **GetMenuTransitionListRequest**

Return value: **GetMenuTransitionListResponse**

This method allows an API user (account) to get a list of auto attendant menu transitions.

### **set\_menu\_transition**

Parameters: **SetMenuTransitionRequest**

Return value: **SetMenuTransitionResponse**

This method allows an API user (account) to set auto attendant menu transitions. The transition prompt should be sent in a MIME attachment.

### **get\_menu\_transition\_prompt**

Parameters: **GetMenuTransitionPromptRequest**

Return value: **GetMenuTransitionPromptResponse**

This method allows an API user (account) to get an auto attendant menu transition prompt. The prompt is sent in a MIME attachment.

## Type Reference

### GetMenuListRequest structure

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

### GetMenuListResponse structure

| Property  | Type                                | Description                      |
|-----------|-------------------------------------|----------------------------------|
| menu_list | array of <b>MenuInfo</b> structures | The list of auto attendant menus |

### UpdateMenuRequest structure

| Property  | Type            | Description              |
|-----------|-----------------|--------------------------|
| menu_info | <b>MenuInfo</b> | Auto attendant menu data |

### UpdateMenuResponse structure

| Property | Type | Description                          |
|----------|------|--------------------------------------|
| i_menu   | int  | The unique ID of updated menu record |

### CreateMenuRequest structure

| Property  | Type            | Description              |
|-----------|-----------------|--------------------------|
| menu_info | <b>MenuInfo</b> | Auto attendant menu data |

### CreateMenuResponse structure

| Property | Type | Description                          |
|----------|------|--------------------------------------|
| i_menu   | int  | The unique ID of created menu record |

### DelMenuRequest structure

| Property | Type | Description                          |
|----------|------|--------------------------------------|
| i_menu   | int  | The unique ID of deleted menu record |

### DelMenuResponse structure

| Property | Type | Description                                   |
|----------|------|---|
| i_menu   | int  | The unique ID of deleted menu database record |

### MenuInfo structure

| Property | Type | Description |
|----------|------|-------------|
|----------|------|-------------|

|                   |                       |   |
|-------------------|-----------------------|---|
| i_menu*           | int                   | The unique ID of menu record (required for the update_menu and del_menu methods)  |
| name              | string, max 64 chars  | <b>The unique</b> within one account menu name; 'ROOT' name is reserved for the root menu, which always exists                                      |
| period            | string, max 255 chars | Period in special format (see appendix)   |
| period_desc       | string, max 255 chars | Description of period in a form understandable by end-users   |
| msg_disabled_type | string                | 'Unavailable' prompt type – standard or recorded by user.<br>Values: <ul style="list-style-type: none"> <li>• standard</li> <li>• custom</li> </ul> |
| msg_timeout_type  | string                | 'Timeout' prompt type – standard or recorded by user.<br>Values: <ul style="list-style-type: none"> <li>• standard</li> <li>• custom</li> </ul>     |
| msg_intro_set     | int                   | 1 if 'Intro' prompt recorded; otherwise 0   |
| msg_menu_set      | int                   | 1 if 'Menu' prompt recorded; otherwise 0  |
| msg_disabled_set  | int                   | 1 if 'Unavailable' prompt recorded; otherwise 0   |
| msg_timeout_set   | int                   | 1 if 'Timeout' prompt recorded; otherwise 0   |
| msg_intro_type    | string                | 'Intro' prompt type – standard or recorded by user.<br>Values: <ul style="list-style-type: none"> <li>• standard</li> <li>• custom</li> </ul>       |
| msg_menu_type     | string                | 'Menu' prompt type – standard or recorded by user.<br>Values: <ul style="list-style-type: none"> <li>• standard</li> <li>• custom</li> </ul>        |

### SetMenuPromptRequest structure

| Property    | Type   | Description                          |
|-------------|--------|--------------------------------------|
| i_menu      | int    | The unique ID of updated menu record |
| prompt_type | string | Prompt type:                         |

|        |        |  |
|--------|--------|--|
|        |        | <ul style="list-style-type: none"> <li>• intro</li> <li>• menu</li> <li>• disabled</li> <li>• timeout</li> </ul> |
| prompt | string | Filename of a prompt that is being sent in a MIME attachment to the API request                                  |

**SetMenuPromptResponse structure**

| Property | Type | Description                          |
|----------|------|--------------------------------------|
| i_menu   | int  | The unique ID of updated menu record |

**GetMenuPromptRequest structure**

| Property    | Type   | Description   |
|-------------|--------|---|
| i_menu      | int    | The unique ID of menu record  |
| prompt_type | string | Prompt type: <ul style="list-style-type: none"> <li>• intro</li> <li>• menu</li> <li>• disabled</li> <li>• timeout</li> </ul> |

**GetMenuPromptResponse structure**

| Property | Type   | Description  |
|----------|--------|--|
| prompt   | string | Filename of a prompt that is being sent in a MIME attachment to the API response |

**GetMenuTransitionListRequest structure**

| Property      | Type | Description                  |
|---------------|------|------------------------------|
| <u>i_menu</u> | int  | The unique ID of menu record |

**GetMenuTransitionListResponse structure**

| Property               | Type                                      | Description  |
|------------------------|---|--|
| <u>transition_list</u> | array of <b>TransitionInfo</b> structures | Set of transitions for specified auto attendant menu |

**SetMenuTransitionRequest structure**

| Property      | Type | Description                      |
|---------------|------|----------------------------------|
| <u>i_menu</u> | int  | The unique ID of the menu record |



|                        |                       |                                   |
|------------------------|-----------------------|-----------------------------------|
| <u>transition_info</u> | <b>TransitionInfo</b> | Properties of the menu transition |
|------------------------|-----------------------|-----------------------------------|

### SetMenuTransitionResponse structure

| Property                 | Type | Description                                 |
|--------------------------|------|---|
| <u>i_menu_transition</u> | int  | The unique ID of the menu transition record |

### GetMenuTransitionPromptRequest structure

| Property                 | Type   | Description   |
|--------------------------|--------|---|
| <u>event</u>             | string | Transition event; see allowed values in <b>TransitionInfo</b> structure |
| <u>i_menu</u>            | int    | The unique ID of menu record  |
| <u>i_menu_transition</u> | int    | The unique ID of the menu transition record                             |

### GetMenuTransitionPromptResponse structure

| Property      | Type   | Description   |
|---------------|--------|---|
| <u>prompt</u> | string | Filename of a prompt that is being sent in a MIME attachment to the API request |

### TransitionInfo structure

| Property      | Type   | Description   |
|---------------|--------|---|
| <u>action</u> | string | Performed action.<br><br>Possible values: <ul style="list-style-type: none"><li>• Disabled – No action.</li><li>• Directory – Launch the ‘Dial Directory’ IVR.</li><li>• Queue – Transfer to the call queue specified in the <i>target_i_menu</i> property.</li><li>• Transfer – Transfer to the preconfigured number specified in the <i>destination</i> property.</li><li>• TransferE164 – Transfer to the E164 number specified in</li></ul> |

|                             |                       |  |
|-----------------------------|-----------------------|--|
|                             |                       | <p>the <i>destination</i> property.</p> <ul style="list-style-type: none"> <li>• Voicemail – Launch voicemail recording.</li> <li>• Menu – Go to the auto attendant menu specified in <i>target_i_menu</i> property.</li> <li>• Extension – Transfer to the extension dialed by a user.</li> <li>• DISA – Make a call.</li> <li>• DirectDial.</li> </ul> |
| <u>announce_ext_numbers</u> | string                | <p>Specifies whether to announce the external number.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• Y – Announce the external number.</li> <li>• N – Don not announce the external number.</li> </ul>   |
| destination                 | string, max. 32 chars | Destination for 'Transfer,' 'TransferE164' action  |
| <u>event</u>                | string                | <p>Transition event.</p> <p>Possible values:<br/>'0', '1', '2', '3', '4', '5', '6', '7', '8', '9', '*', '#', 'Timeout', 'Not Active', 'F'.</p>   |
| i_menu_transition           | int                   | The unique ID of the menu transition record  |
| max_size                    | int                   | The maximum allowed number of digits that a user can input as an extension (applicable only for the Extension <i>action</i> )  |
| play_prompt                 | string                | <p>Play or do not play user-recorded prompt before action.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• Y</li> <li>• N</li> </ul>  |

|                |        |  |
|----------------|--------|--|
| prompt         | string | Filename of a user-recorded prompt that is being sent in a MIME attachment (only for the set_menu_transition method) |
| prompt_set     | int    | 1 if user-recorded prompt set  |
| target_i_menu  | int    | The unique ID of the auto attendant menu record  |
| target_i_queue | int    | The unique ID of the call queue to which the call must be transferred.   |

# Dial Directory Configuration

SOAP URI: `https://media-server.yourdomain.com/UM/SOAP/DialDirectory`

## Methods

### **get\_dir\_info**

Parameters: **GetDirInfoRequest**

Return value: **GetDirInfoResponse**

This method allows an API user (account) to get a list of dial directory entries and general dial directory settings.

### **update\_dir\_info**

Parameters: **UpdateDirInfoRequest**

Return value: **UpdateDirInfoResponse**

This method allows an API user (account) to update general dial directory settings.

### **get\_dir\_entry**

Parameters: **GetDirEntryRequest**

Return value: **GetDirEntryResponse**

This method allows an API user (account) to get a dial directory entry with prompt data sent via a MIME attachment to the API response.

### **del\_dir\_entry**

Parameters: **DelDirEntryRequest**

Return value: **DelDirEntryResponse**

This method allows an API user (account) to delete an entry in the dial directory.

### **update\_dir\_entry**

Parameters: **UpdateDirEntryRequest**

Return value: **UpdateDirEntryResponse**

This method allows an API user (account) to update an entry in the dial directory. The entry prompt for should be sent in a MIME attachment to the API request.

## create\_dir\_entry

Parameters: **CreateDirEntryRequest**

Return value: **CreateDirEntryResponse**

This method allows an API user (account) to create a new entry in the dial directory. The entry prompt for should be sent in a MIME attachment to the API request.

## Type Reference

### DirectoryInfo structure

| Property     | Type   | Description   |
|--------------|--------|---|
| intro        | string | Which 'intro' prompt to play: PortaSIP® Media Server built-in or user-recorded? Values: <ul style="list-style-type: none"><li>• standard</li><li>• custom</li></ul> |
| intro_custom | string | Filename for user-recorded prompt sent in a MIME attachment   |
| no_abbr_num  | string | Values: <ul style="list-style-type: none"><li>• Y</li><li>• N</li></ul>   |

### DirEntryInfo structure

| Property           | Type                 | Description  |
|--------------------|----------------------|--|
| i_entry            | int                  | The unique ID of dial directory entry  |
| active             | string               | Is this dial directory entry active? Values: <ul style="list-style-type: none"><li>• Y</li><li>• N</li></ul>         |
| abbreviated_number | string, max 15 chars | Abbreviated number that can be used instead of dial directory entry matching via 'lastname'                          |
| number_to_dial     | string, max 32 chars | Number to be dialed  |
| lastname           | string, max 25 chars | Last name whose first 3 letters are used to match the dial directory entry (via standard telephone keyboard mapping) |
| description        | string, max 64 chars | Directory entry description  |

|            |        |  |
|------------|--------|--|
| prompt_set | int    | 1 if user-recorded prompt set, otherwise 0   |
| prompt     | string | Filename for user-recorded MOH sent in a MIME attachment (only for create_dir_entry, update_dir_entry methods) |

### GetDirInfoRequest structure

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

### GetDirInfoResponse structure

| Property       | Type                                    | Description                        |
|----------------|---|------------------------------------|
| directory_info | <b>DirectoryInfo</b>                    | Dial directory general settings    |
| dir_entry_list | array of <b>DirEntryInfo</b> structures | The list of dial directory entries |

### UpdateDirInfoRequest structure

| Property       | Type                 | Description                     |
|----------------|----------------------|---------------------------------|
| directory_info | <b>DirectoryInfo</b> | Dial directory general settings |

### UpdateDirInfoResponse structure

| Property | Type | Description                       |
|----------|------|-----------------------------------|
| success  | int  | 1 in case of success, 0 if failed |

### GetDirEntryRequest structure

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| i_entry  | int  | The unique ID of dial directory entry |

### GetDirEntryResponse structure

| Property       | Type                | Description                            |
|----------------|---------------------|--|
| dir_entry_info | <b>DirEntryInfo</b> | Information about dial directory entry |

### DelDirEntryRequest structure

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| i_entry  | int  | The unique ID of dial directory entry |

**DelDirEntryResponse structure**

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| i_entry  | int  | The unique ID of dial directory entry |

**UpdateDirEntryRequest structure**

| Property       | Type                | Description                            |
|----------------|---------------------|--|
| dir_entry_info | <b>DirEntryInfo</b> | Information about dial directory entry |

**UpdateDirEntryResponse structure**

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| i_entry  | int  | The unique ID of dial directory entry |

**CreateDirEntryRequest structure**

| Property       | Type                | Description                            |
|----------------|---------------------|--|
| dir_entry_info | <b>DirEntryInfo</b> | Information about dial directory entry |

**CreateDirEntryResponse structure**

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| i_entry  | int  | The unique ID of dial directory entry |

## Conference Configuration

SOAP URI: <https://media-server.yourdomain.com/UM/SOAP/Conference>

### Methods

**get\_conf\_info**

Parameters: **GetConfInfoRequest**  
Return value: **GetConfInfoResponse**  
Realm: account

This method allows an API user to obtain conference settings by i\_conf or name.

### **get\_conf\_list**

Parameters: **GetConfListRequest**  
Return value: **GetConfListResponse**  
Realm: account

This method allows an API user to obtain a list of all his conferences and their settings.

### **create\_conf**

Parameters: **CreateConfRequest**  
Return value: **CreateConfResponse**  
Realm: account

This method allows an API user to create a new conference entity.

### **update\_conf**

Parameters: **UpdateConfRequest**  
Return value: **UpdateConfResponse**  
Realm: account

This method allows an API user (account) to update a conference entity.

### **del\_conf**

Parameters: **DelConfRequest**  
Return value: **DelConfResponse**  
Realm: account

This method allows an API user to delete a certain conference.

### **set\_conf\_prompt**

Parameters: **SetConfPromptRequest**  
Return value: **SetConfPromptResponse**

This method allows an API user (account) to set (record) separate prompts for conferences. The sound file is sent in a MIME attachment to the API request.

### **get\_conf\_prompt**

Parameters: **GetConfPromptRequest**  
Return value: **GetConfPromptResponse**

This method allows an API user (account) to get a prompt recorded for a conference. The sound file is sent in a MIME attachment to the API request.



## get\_conference\_settings

Parameters: **GetConferenceSettingsRequest**

Return value: **GetConferenceSettingsResponse**

Realm: administrator, reseller, retail customer, account

Standalone mode support: Yes

This method allows an API user (account) to get a list of conference room parameters.

## Type Reference

### ConfInfo structure

| Property          | Type   | Description  |
|-------------------|--------|--|
| i_conf            | int    | The unique ID for a conference entity  |
| name              | string | A conference name  |
| pin_host          | string | PIN for administrator to log into the conference   |
| pin_user          | string | PIN for user to join the conference  |
| max_call_duration | int    | Maximum conference duration  |
| max_session_time  | int    | Maximum session time (exclusive with start / end time)   |
| max_participants  | int    | Maximal participants   |
| wait_host         | string | Whether the administrator should log in first. Allowed values: Y, N  |
| play_announce     | string | Specifies whether announcements should be played. Allowed values: Y, N   |
| play_moh          | string | Specifies whether MOH should be played. Allowed values: Y, N   |
| start_time        | string | Specifies when the conference will start (For permanent conference use max_session_time). Note that the time is defined in UTC |
| msg_intro_set     | string | 1 if an 'Intro' prompt recorded; otherwise 0   |
| moh_set           | string | 1 if a 'MOH' prompt recorded; otherwise 0  |
| video_conf        | string | Specifies whether video conference is enabled. Allowed values: Y, N  |

**GetConfInfoRequest structure**

| Property | Type   | Description                      |
|----------|--------|----------------------------------|
| i_conf   | int    | The unique ID for the conference |
| name     | string | The conference name              |

**GetConfInfoResponse structure**

| Property  | Type                      | Description                 |
|-----------|---------------------------|-----------------------------|
| conf_info | <b>ConfInfo</b> structure | General conference settings |

**GetConfListRequest structure**

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

**GetConfListResponse structure**

| Property  | Type                                | Description                                |
|-----------|-------------------------------------|--|
| conf_list | array of <b>ConfInfo</b> structures | The list of conferences and their settings |

**CreateConfRequest structure**

| Property  | Type                      | Description                 |
|-----------|---------------------------|-----------------------------|
| conf_info | <b>ConfInfo</b> structure | General conference settings |

**CreateConfResponse structure**

| Property | Type | Description                        |
|----------|------|------------------------------------|
| i_conf   | int  | The unique ID for a new conference |

**UpdateConfRequest structure**

| Property  | Type                      | Description                 |
|-----------|---------------------------|-----------------------------|
| conf_info | <b>ConfInfo</b> structure | General conference settings |

**UpdateConfResponse structure**

| Property | Type | Description                              |
|----------|------|--|
| i_conf   | int  | The unique ID for the updated conference |

**DelConfRequest structure**

| Property      | Type | Description                                    |
|---------------|------|--|
| <u>i_conf</u> | int  | The unique ID for the conference to be deleted |

**DelConfResponse structure**

| Property      | Type | Description                          |
|---------------|------|--------------------------------------|
| <u>i_conf</u> | int  | The unique ID for deleted conference |

**SetConfPromptRequest structure**

| Property           | Type   | Description  |
|--------------------|--------|--|
| <u>i_conf</u>      | int    | The unique ID for a conference record  |
| <u>prompt_type</u> | string | Prompt type: <ul style="list-style-type: none"><li>• intro</li><li>• moh</li></ul> |
| <u>prompt</u>      | string | Filename for a prompt that is being sent in a MIME attachment to the API request   |

**SetConfPromptResponse structure**

| Property      | Type | Description                                     |
|---------------|------|---|
| <u>i_conf</u> | int  | The unique ID for the updated conference record |

**GetConfPromptRequest structure**

| Property           | Type   | Description  |
|--------------------|--------|--|
| <u>i_conf</u>      | int    | The unique ID for a conference record  |
| <u>prompt_type</u> | string | Prompt type: <ul style="list-style-type: none"><li>• intro</li><li>• moh</li></ul> |

**GetConfPromptResponse structure**

| Property      | Type   | Description  |
|---------------|--------|--|
| <u>prompt</u> | string | Filename of a prompt that is being sent in a MIME attachment to the API response |

**GetConferenceSettingsRequest structure**

This structure has no parameters

**GetConferenceSettingsResponse structure**

| Property                      | Type | Description   |
|-------------------------------|------|---|
| conf_max_allowed_session_time | int  | Shows the maximum duration of a conference                        |
| conf_max_pin_len              | int  | Shows moderator's and user's PIN number length                    |
| conf_max_participants_num     | int  | Shows the maximum number of participants allowed for a conference |

# 3. Appendices

## Sample Script for PortaSIP® Media Server SOAP Communication

```
#!/perl -w
use strict;
# to enable client-side script debugging uncomment the line below
# and comment the one next to it
#use SOAP::Lite +trace => 'debug';

use SOAP::Lite;
use MIME::Entity;
use Data::Dumper;

# If the server certificate is not trusted (e.g. it was not issued by a
# trusted certificate authority), then ignore it.
$ENV{PERL_LWP_SSL_VERIFY_HOSTNAME}=0;

##### Preparing #####

my $soap_sess = SOAP::Lite
-> uri('https://localhost/UM/SOAP/Session')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap-
>transport->status . "/" . $res));
});

my $soap_test = SOAP::Lite
-> uri('https://localhost/UM/SOAP/Voicemail')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap-
>transport->status . "/" . $res));
});

my $soap_dial_dir = SOAP::Lite
-> uri('https://localhost/UM/SOAP/DialDirectory')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap-
>transport->status . "/" . $res));
});

my $soap_aa = SOAP::Lite
-> uri('https://localhost/UM/SOAP/AutoAttendant')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap-
>transport->status . "/" . $res));
});

my $authInfo = $soap_sess->login({
    'login' => '88881',
    'domain' => 'pum.somedomain.com',
    'password' => 'test123'})->result();
$authInfo = SOAP::Header->name( 'auth_info' => {
    'session_id' => $authInfo->{'session_id'}
});

my $authInfo_nosess = SOAP::Header->name( 'auth_info' => {
    'login' => '88881',
    'domain' => 'pum.somedomain.com',
    'password' => 'test123'
});
```

```
#####

my $res;
#example of accessing SOAP module without establishing session
$res = $soap_test->get_vm_settings($authInfo_nosess)->result();
print Dumper($res);
$res = $soap_test->set_vm_settings($authInfo,
    { 'vm_settings' =>
        {
            'password' => '777',
            'ext_email' => 'sergey.pavlov@gmail.com',
            'auto_play' => 'no',
            'announce_dt' => 'no'
        }
    })->result();
print "set_vm_settings done\n";
my $ent = MIME::Entity->build(
    'Filename' => 'wellcome.au',
    'Type' => 'audio/basic',
    'Encoding' => 'base64',
    'Path' =>
'/var/lib/psmsc/prompts/en/personal_ivr/frw_select_order.au',
);

my @parts = ($ent);
$res = $soap_test->parts([ $ent ])->set_vm_greeting($authInfo,
    { 'greeting_info' =>
        {
            'greeting_type' => 'name',
            'filename' => 'wellcome.au'
        }
    })->result();
print "set_vm_greeting done\n";

$res = $soap_test->get_vm_greeting($authInfo,
    {
        'greeting_type' => 'name',
    })->result();
print "get_vm_greeting done\n";

##### Dial Directory #####

$res = $soap_dial_dir->get_dir_info($authInfo)->result();
print "get_directory_list done\n";
print Dumper($res);

$res = $soap_dial_dir->parts(@parts)->create_dir_entry($authInfo,
    {
        'dir_entry_info' => {
            'active' => 'Y',
            'abbreviated_number' => '1787896',
            'number_to_dial' => '111111',
            'lastname' => 'LName',
            'description' => 'desc foo',
            'prompt' => 'wellcome.au'
        }
    })->result();
print "create_dir_entry done\n";
print Dumper($res);
my $i_entry = $res->{'i_entry'};
$res = $soap_dial_dir->parts(@parts)->update_dir_entry($authInfo,
    {
        'dir_entry_info' => {
            'i_entry' => $i_entry,
            'active' => 'Y',
            'abbreviated_number' => '99',
            'number_to_dial' => '565656',
            'lastname' => 'LastName',
            'description' => 'desc333',
            'prompt' => 'wellcome.au'
        }
    })->result();
```

```

print "update_dir_entry done\n";
$res = $soap_dial_dir->get_dir_entry($authInfo, {'i_entry' => $i_entry}
)->result();
print "get_dir_entry done\n";
print Dumper($res);

$res = $soap_dial_dir->del_dir_entry($authInfo,
    {'i_entry' => $res->{'dir_entry_info'}->{'i_entry'}}->result();
print "del_dir_entry done\n";
print Dumper($res);

##### Auto Attendant #####

$res = $soap_aa->get_menu_list($authInfo)->result();
if (!$res) {
    print "get_menu_list failed\n";
}
print "get_menu_list done\n";
print Dumper($res);
my $root_i_menu;
foreach my $menu (@{$res->{'menu_list'}}) {
    if ($menu->{'name'} eq 'ROOT') {
        $root_i_menu = $menu->{'i_menu'};
        last;
    }
}

$res = $soap_aa->parts(@parts)->set_menu_prompt($authInfo,
    {
        'i_menu'      => $root_i_menu,
        'prompt_type' => 'intro',
        'prompt'      => 'welcome.au'
    })->result();
print "set_menu_prompt done\n";
print Dumper($res);

$res = $soap_aa->set_menu_transition($authInfo,
    {
        'transition_info' => {
            'i_menu'      => $root_i_menu,
            'event'       => '0',
            'action'      => 'Transfer',
            'destination' => '5555',
        }
    })->result();
print "set_menu_transition done\n";
print Dumper($res);

$res = $soap_aa->get_menu_transition_list($authInfo,
    {
        'i_menu'      => $root_i_menu,
    })->result();
print "get_menu_transition_list done\n";
print Dumper($res);

$res = $soap_aa->get_menu_prompt($authInfo,
    {
        'i_menu'      => $root_i_menu,
        'prompt_type' => 'intro',
    })->result();
print "get_menu_prompt done\n";
print Dumper($res);

$res = $soap_aa->create_menu($authInfo,
    { 'menu_info' => {
        'name'          => 'AABBBCCC',
        'period'        => 'hr{0-11}',
        'period_desc'   => 'Some period',
        'msg_timeout_type' => 'standard'
    }
    })->result();
print "create_menu done\n";

```



```
print Dumper($res);
my $new_i_menu=$res->{'i_menu'};

$res = $soap_aa->update_menu($authInfo,
    { 'menu_info' => {
        'i_menu'      => $new_i_menu,
        'name'        => 'DDDEEFF',
        'period'      => 'hr{0-2}',
        'period_desc' => 'New period',
    }
})->result();
print "update_menu done\n";
print Dumper($res);

$res = $soap_aa->get_menu_list($authInfo)->result();
print "get_menu_list done\n";
print Dumper($res);

$res = $soap_aa->del_menu($authInfo,
    { 'i_menu' => $new_i_menu }->result();
print "del_menu done\n";
print Dumper($res);

$res = $soap_sess->logout($authInfo)->result();
print "logout done\n";
print Dumper($res);
```