



# Grandstream Networks, Inc.

UCM6510/UCM62xx Series

**HTTPS API Guide**



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## INTRODUCTION

The UCM62xx/6510 provides a new API interface to query, edit PBX settings and implement multiple call functions on another server connected to it via API. UCM will actively send system reports and call reports to this other server. Additionally, legacy CDR API, REC API and PMS API in addition to QUEUE API are included and supported by default when enabling API.

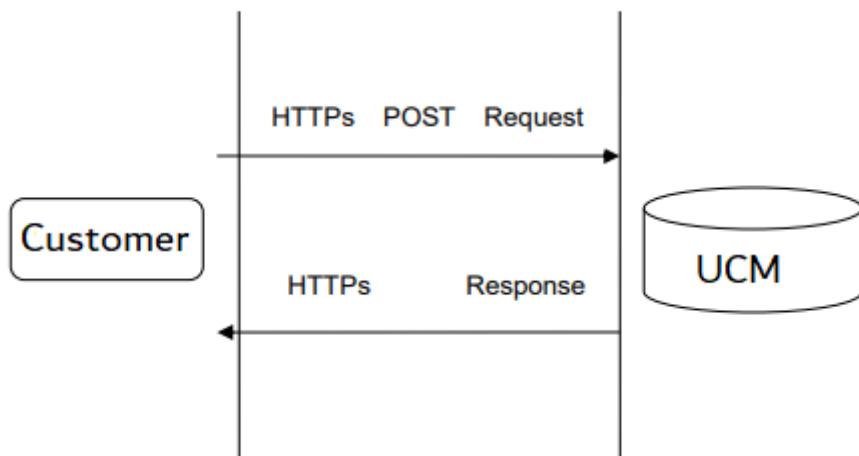


Figure 1: API Flow



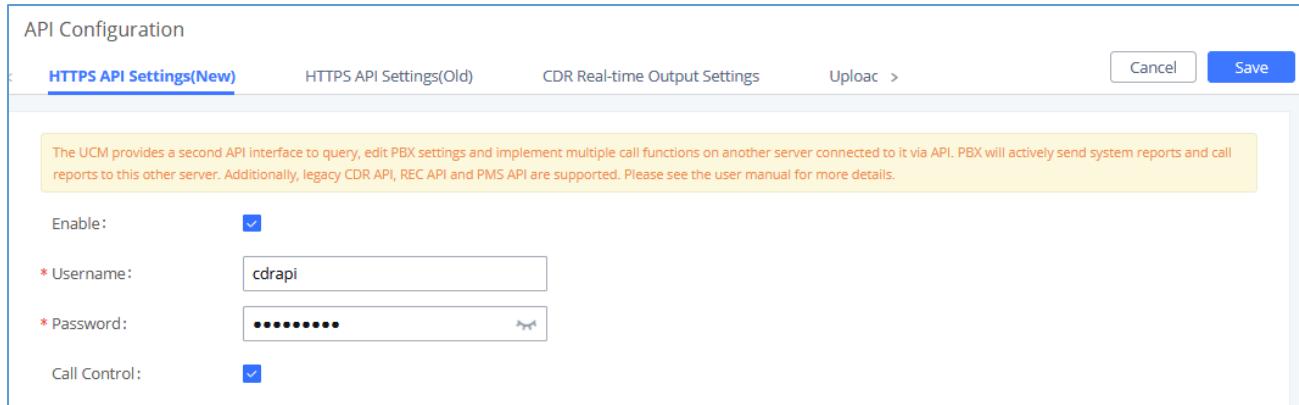
## API BASICS

To get started with UCM's API feature, users must configure the HTTPS API settings and get familiar with the feature's communication method, request structure, response messages, and event reports.

### Configuring the API

#### Enabling PBX API Interface

1. Log into the UCM web UI and navigate to **Value-Added Features** → **API Configuration** → **HTTPS API Settings (New)**.
2. Check the Enable option and configure a username and password. These credentials will be used when connecting to the API.



The UCM provides a second API interface to query, edit PBX settings and implement multiple call functions on another server connected to it via API. PBX will actively send system reports and call reports to this other server. Additionally, legacy CDR API, REC API and PMS API are supported. Please see the user manual for more details.

Enable:	<input checked="" type="checkbox"/>
* Username:	cdrapi
* Password:	*****
Call Control:	<input checked="" type="checkbox"/>

Figure 2: HTTPS API Settings

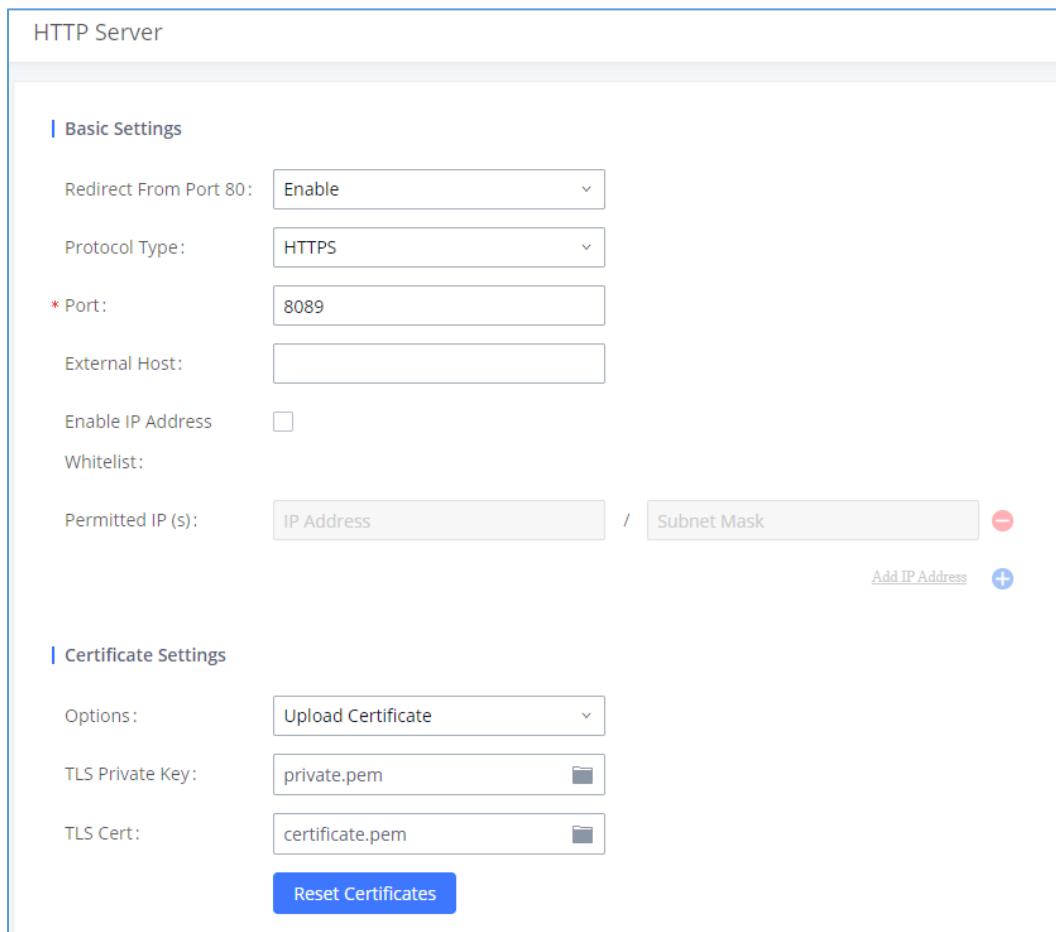
Table 1: New API Configuration Parameters

<b>Enable</b>	Enable/Disable API. The default setting is disabled.
<b>Username</b>	Configure the username for API Authentication.
<b>Password</b>	Configure the password for API Authentication.
<b>Call Control</b>	If enabled, 3 <sup>rd</sup> party applications will be able to manage inbound calls via API actions. <b>acceptCall</b> will accept incoming calls while <b>refuseCall</b> will reject them. If no actions are done within 10 seconds, calls will automatically be accepted.



## Server Configuration

The API server address is the same as the UCM's web UI address. To configure the UCM's HTTP server settings, navigate to **System Settings → HTTP Server**.



HTTP Server

**Basic Settings**

Redirect From Port 80:

Protocol Type:

\* Port:

External Host:

Enable IP Address

Whitelist:

Permitted IP (s):  /  - +

Add IP Address

**Certificate Settings**

Options:

TLS Private Key:  -

TLS Cert:  -

Reset Certificates

Figure 3: HTTP Server Settings

## Login Restrictions

When several failed login attempts have been made from a specific IP address, that IP address will be added to the UCM's blacklist and will be unable to access the UCM. To ensure this doesn't happen to trusted IP addresses, consider enabling and adding its IP address to whitelist as shown on the same page as server configuration.



## Communication

### Communication Protocol

The API uses HTTPS protocol and the same certificate used for UCM web portal. If the UCM is using HTTP, the API feature cannot be used.

### JSON data into HTTP request

Below is a JSON example of **challenge** action and how the JSON script will be encapsulated in HTTPS Post request:

```
curl -H "Content-Type: application/json; charset=UTF-8" -H "Connection: close" -X POST -d '{"request": {"action": "challenge", "user": "cdrapi", "version": "1.0"}}' -k "https://192.168.5.153:8089/api" --insecure
```

As a response to the sent request, the UCM will return a challenge string which will be used to generate the token as mentioned above and with the same structure the **login** action needs to be sent to have the cookie id as response.

### Communication Method

2 methods of communication can occur between the UCM and 3<sup>rd</sup> party applications:

- 3<sup>rd</sup> party application server sends request to UCM:
  1. 3<sup>rd</sup> party application initiates the request.
  2. 3<sup>rd</sup> party application is the client, and UCM is the server.
  3. Scenario: 3<sup>rd</sup> party application initiates calls and sends query to UCM.
- UCM initiates and sends events to 3<sup>rd</sup> party application
  1. Prerequisite: 3<sup>rd</sup> party applications need to be verified by UCM API and enable related events.
  2. 3<sup>rd</sup> party application is the server, and UCM is the client.
  3. Scenario: Extension or trunk status change, call events etc.

### Version Control

“Challenge” requests must contain the API version number. If version is not specified, requests will be parsed based on the latest version of the API, and this may result in information being processed incorrectly. Thus, it is highly recommended to include version number in the challenge request.



**Example:** If the latest API version is 1.2, and the 3rd party interface was developed using version 1.0, version 1.0 must be included when sending the challenge request.

```
{"request": {"action": "challenge", "version": "1.0", "user": "api"}}
```

## Operation Log

UCM's Operation Log feature is able to display API activity history. API actions will be labeled with "(API)" at the end of each entry. Operation Log entries can be filtered and deleted.

Operation Log				
 Delete Search Result(s)	 Delete All Logs	 Download Search Result(s)	 Download All Log	
Date	User Name	IP Address	Results	Page Operation
2019-02-25 17:03:03	cdrapi	192.168.129.16	Operation successful	Logout: logout(API)
2019-02-25 17:03:02	cdrapi	192.168.129.16	Operation successful	Extensions: updateSIPAccount(API)
2019-02-25 17:03:02	cdrapi	192.168.129.16	Operation successful	applyChanges(API)
2019-02-25 17:03:01	cdrapi	192.168.129.16	Operation successful	Login: login(API)
2019-02-25 16:43:12	cdrapi	192.168.129.16	Operation successful	Extensions: updateSIPAccount(API)
2019-02-25 16:43:12	cdrapi	192.168.129.16	Operation successful	applyChanges(API)

Figure 4: Operation Log



## API QUERIES

The new API supports the queries listed below which will accomplish certain requests and get DATA about different modules on UCM62xx/6510.

**Table 2: New API Supported Queries**

getSystemStatus	addInboundRoute	listPaginggroup
getSystemGeneralStatus	getInboundRoute	addPaginggroup
listAccount	updateInboundRoute	getPaginggroup
getSIPAccount	deleteInboundRoute	updatePaginggroup
updateSIPAccount	playPromptByOrg	deletePaginggroup
listVoIPTrunk	listBridgedChannels	MulticastPaging
addSIPTrunk	listUnBridgedChannels	MulticastPagingHangup
getSIPTrunk	Hangup	listIVR
updateSIPTrunk	Callbarge	addIVR
deleteSIPTrunk	listQueue	getIVR
listOutboundRoute	getQueue	updateIVR
addOutboundRoute	updateQueue	deleteIVR
getOutboundRoute	addQueue	cdrapi
updateOutboundRoute	deleteQueue	recapi
deleteOutboundRoute	loginLogoffQueueAgent	pmsapi
listInboundRoute	pauseUnpauseQueueAgent	queueapi
mute	Unmute	hold
unhold	dialExtension	dialOutbound
callTransfer	transferNumberInbound	transferNumberOutbound
dialIVR	dialIVROutbound	dialQueue
dialRinggroup	dialOutboundTwo	listUser
getUser	updateUser	listExtensionGroup
listPinSets	refuseCall	acceptCall
applyChanges	addAnalogTrunk	getAnalogTrunk
listAnalogTrunk	updateAnalogTrunk	deleteAnalogTrunk



addSLATrunk	updateSLATrunk	deleteDigitalTrunk
addDigitalTrunk	getDigitalTrunk	listDigitalTrunk
updateDigitalTrunk		



## ESTABLISHING CONNECTION AND USER AUTHENTICATION

To use HTTPS API users need to connect to the UCM62xx/6510's IP address with HTTPS/HTTP port which is by default **8089** then authenticate using the configured **Username** and **Password**.

### Challenge

The HTTP authentication is based on challenge/response authentication protocol. The client sends a request for a challenge.

```
{
    "request": {
        "action": "challenge",
        "user": "cdrapi",
        "version": "1.0"
    }
}

{
    "response": {
        "challenge": "0000001652831717"
    },
    "status": 0
}
```

Table 3: Challenge

Key word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>user</b>		Yes	string	API username
<b>Version</b>		No	string	API protocol version. New versions will be available for future interfaces. Different versions will be compatible with one another.  This keyword is not mandatory. By default, the latest version will be used. If the requested version cannot be matched, the latest version is used
<b>Successful response</b>				
<b>status</b>	0	Yes	int	Successful response
<b>challenge</b>	16-digit Random number	Yes	string	Random string returned by the API used to generate secret key for logging in.



#### Failed response

<b>status</b>		Yes		Please see the error code list for more details.
<b>remain_num</b>		No	int	When obtaining parameter failed, the number of remaining attempts will be returned. After exceeding the remaining number of attempts, this IP and username will be added to UCM login blacklist. On UCM web page, the banned IP can be removed.
<b>remain_time</b>		No	int	When an IP address or username has been banned, the ban period will be returned.

## Login

Upon obtaining the challenge string, the client then creates an MD5 hash consisting of the challenge and the user password. By sending a login command with the username and MD5 hash, the client will be able to log in. User information will be returned upon successful login.

```
{
  "request": {
    "action": "login",
    "token": "0faaa24433e3c7a9bcfa8000f735305d5",
    "url": "http://192.168.5.199:8070",
    "user": "cdrapi"
  }
}

{
  "response": {
    "cookie": "sid1652831717-1574421057"
  },
  "status": 0
}
```

Table 4: Login

Key word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>user</b>		Yes	string	API username
<b>token</b>		No	string	Verification code MD5(\${challenge}\${password})



<b>url</b>		No	string	The URL used by the 3rd party application to obtain API reports.  For example: <code> \${ip}:\${port}/\${path}</code> <b>Note:</b> If this parameter is not included, no API report can be sent.
<b>Successful response</b>				
<b>status</b>	0	Yes	int	Successful response
<b>Cookie</b>		Yes	string	Cookie is generated after the 3rd party application successfully connects to the UCM. Excluding challenge and login requests, other API requests need to include the cookie returned by API authentication. Cookie times out in 10 minutes.
<b>Failed response</b>				
<b>status</b>		Yes		Please see the error code list for more details.
<b>remain_num</b>		No	int	When obtaining parameter failed, the number of remaining attempts will be returned. After exceeding the remaining number of attempts, this IP and username will be added to UCM login blacklist. On UCM web page, the banned IP can be removed.
<b>remain_time</b>		No	int	When an IP address or username has been banned, the ban period will be returned.



## DATA DEFINITION

### Request Data

**Action:** Define the action needed to be executed on the UCM.

**Cookie:** Session identifier.

**Parameters:** Parameters of the defined action.

```
{  
    "request": {  
        "action": "",  
        "cookie": "",  
        "options": ""  
    }  
}
```

#This field is optional to include parameters

**Note:** Parameters will be added depending on the used action.

### Response Data

**Status:** Please refer to the return code table. [ERROR RETURN CODES]



## OPERATION METHODS

### Get System Configuration

#### getSystemStatus

The “getSystemStatus” action will return the system information.

- **Request**

```
{
  "request": {
    "action": "getSystemStatus",
    "cookie": "sid877877-1574437822"
  }
}
```

- **Response**

```
{
  "response": {
    "idle-time": "14:32:44",
    "part-number": "9660002815A",
    "serial-number": "21AWMJPH70BCA783",
    "system-time": "2019-11-22 17:50:26 UTC+02:00",
    "up-time": "07:33:15"
  },
  "status": 0
}
```

Table 5: getSystemStatus

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Successful response</b>				
<b>status</b>	0	Yes	int	Return successful, status is 0
<b>part-number</b>		No	string	Product part number
<b>up-time</b>		No	string	System uptime since bootup
<b>idle-time</b>		No	string	System idle time



<b>system-time</b>		No	string	System time
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## getSystemGeneralStatus

The “getSystemGeneralStatus” action will return the version information.

- **Request**

```
{
  "request": {
    "action": "getSystemGeneralStatus",
    "cookie": "sid877877-1574437822"
  }
}
```

- **Response**

```
{
  "response": {
    "base-version": "1.0.20.13",
    "boot-version": "1.0.20.8",
    "core-version": "1.0.20.8",
    "gswave-version": "1.0.20.13",
    "lang-version": "1.0.20.13",
    "product-model": "UCM6202 V1.5A",
    "prog-version": "1.0.20.13",
    "rcvr-version": "1.0.20.8"
  },
  "status": 0
}
```

Table 6: getSystemGeneralStatus

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>product-model</b>		no	string	Product model
<b>base-version</b>		no	string	Base version



<b>prog-version</b>		no	string	Program version
<b>boot-version</b>		no	string	Boot version
<b>core-version</b>		no	string	Core version
<b>rcvr-version</b>		no	string	Recovery version
<b>lang-version</b>		no	string	Lang version
<b>gswave-version</b>		no	string	GSwave version
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Extension

### listAccount

The “listAccount” action will return information about the extensions created on the UCM, such as the extension’s number, its name etc.

**Note:** The needed information, can be defined in the parameter “**options**”.

- **Request**

```
{
  "request": {
    "action": "listAccount",
    "cookie": "sid877877-1574437822",
    "item_num": "30",
    "options": "extension,account_type,fullname,status,addr",
    "page": "1",
    "sidx": "extension",
    "sord": "asc"
  }
}
```

- **Response**

```
{
  "response": {
    "account": [
      {
        "account_type": "SIP (WebRTC)",
        "addr": "-",
        "extension": "1000",
        "fullname": null,
        "status": "Unavailable"
      },
      {
        ...
      }
    ]
  }
}
```



```

        "account_type": "SIP (WebRTC)",
        "addr": "192.168.5.95:62144",
        "extension": "1102",
        "fullname": null,
        "status": "Idle"
    },
],
"page": 1,
"total_item": 2,
"total_page": 1
},
"status": 0
}

```

Table 7: listAccount

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Retrieves the extensions on the specified page. This page is based on the value for the <b>item_num</b> parameter. If <b>item_num</b> is unspecified, all items will be on page 1.
<b>item_num</b>		no	int	Maximum number of extensions to retrieve for the query. If unspecified, all extensions will be returned. This also indicates the number of items per page for the page parameter
<b>sord</b>	acs, desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>options</b>	extension,account_type,fullname,out_of_service,status,addr,urgemsg,newmsg,oldmsg	no	string	Specify the extension details to retrieve and display. Multiple items can be entered and must be separated by commas. If unspecified, all details will be returned.
<b>Successful response:</b>				



<b>status</b>	0	yes	int	Successful response, status is 0
<b>account</b>		yes	Json array	Account List
<b>total_item</b>		yes	int	Total number of items on the list
<b>total_page</b>		yes	int	Total pages of the list
<b>page</b>		yes	int	Page the extensions are on.
<b>extension</b>		yes	string	Extension number.
<b>account_type</b>	SIP,IAX,FXS,SIP(Web RTC)	no	string	Extension type.
<b>fullname</b>		no	string	Caller ID Name, which consists of first_name, space, and last name
<b>out_of_service</b>	Yes, no	no	string	Indicates whether the extension is out of service
<b>status</b>	Idle, InUse, Busy, Unavailable, Ringing	no	string	Just “Extension status” is fine.
<b>addr</b>		no	string	IP address and port number of registered extensions. If there are multiple devices under the same account, they will be separated by commas.
<b>urgmsg</b>		no	int	Number of urgent messages.
<b>newmsg</b>		no	int	Number of new messages.
<b>oldmsg</b>		no	int	Number of old messages.
<b>presence_status</b>	unavailable, available, away, chat, dnd, userdef	no	string	Presence status. Only SIP extensions support presence status.
<b>presence_def_script</b>				Custom presence status. If <b>presence_status</b> is userdef, this parameter's value will be used.
<b>user_name</b>		no	string	Typically the same as extension number.
<b>email_to_user</b>		no	string	Indicates whether or not to send email notifications to an extension's configured email address if the extension gets updated.



**Failed response:**

<b>status</b>	yes	int	Please see the error code list for more details.
---------------	-----	-----	--

## getSIPAccount

The “getSIPAccount” action will return information about specific extension.

- **Request**

```
{
  "request": {
    "action": "getSIPAccount",
    "cookie": "sid877877-1574437822",
    "extension": "1000"
  }
}
```

- **Response**

```
{
  "response": {
    "cti_feature_privilege": {
      "active_call": "no",
      "callbarge": "no",
      "extension_status": "no",
      "hangup": "no"
    },
    "extension": {
      "account_type": "SIP (WebRTC)",
      "alertinfo": null,
      "allow": "ulaw,alaw,gsm,g726,g722,g729,h264,ilbc",
      "authid": null,
      "auto_record": "off",
      "bypass_outrt_auth": "no",
      "call_waiting": "yes",
      "callbarging_monitor": "",
      "cc_agent_policy": "never",
      "cc_max_agents": 1,
      "cc_max_monitors": 2,
      "cc_monitor_policy": "never",
      "cidnumber": "1000",
      "custom_autoanswer": "no",
      "directmedia": "no",
      "dnd": "no",
      "dnd_timetype": 0,
      "dndwhitelist": "",
      "dtmfmode": "rfc2833",
      "emergcidnumber": null,
      "en_ringboth": "no",
      "forward": "no"
    }
  }
}
```



```
"enable_ldap":"yes",
"enable_qualify":"no",
"enable_webrtc":"yes",
"enablehotdesk":"no",
"encryption":"no",
"extension":"1000",
"external_number":null,
"fax_gateway":"no",
"faxdetect":"no",
"fullname":null,
"fwdwhitelist":null,
"hasvoicemail":"yes",
"ice_support":"yes",
"intranet_ip_filter":"no",
"limitime":null,
"local_network1":null,
"local_network10":null,
"local_network2":null,
"local_network3":null,
"local_network4":null,
"local_network5":null,
"local_network6":null,
"local_network4":null,
"local_network5":null,
"local_network6":null,
"local_network7":null,
"local_network8":null,
"local_network9":null,
"max_contacts":1,
"media_encryption":"auto_dtls",
"missed_call":"no",
"mohsuggest":"default",
"nat":"yes",
"out_of_service":"no",
"permission":"internal",
"presence_def_script":null,
"presence_status":"available",
"qualify":1000,
"qualifyfreq":60,
"ring_timeout":null,
"ringboth_timetype":0,
"sca_enable":"no",
"seamless_transfer_members":"",
"secret":"pas0",
"sendtofax":null,
"skip_auth_timetype":0,
"skip_vmssecret":"no",
"specific_ip":null,
"strategy_ipacl":0,
```



```

    "t38_udptl":"no",
    "tel_uri":"disabled",
    "use_avpf":"yes",
    "use_callee_dod_on_fm":"no",
    "use_callee_dod_on_fwd_rb":"no",
    "user_outrt_passwd":null,
    "vmsecret":"5333"
},
"sip_presence_settings":[
{
    "cfb":null,
    "cfb_destination_type":"0",
    "cfb_timetype":0,
    "cfn":null,
    "cfn_destination_type":"0",
    "cfn_timetype":0,
    "cfu":null,
    "cfu_destination_type":"0",
    "cfu_timetype":0,
    "presence_status":"available"
},
"sip_presence_settings":[
{
    "cfb":null,
    "cfb_destination_type":"0",
    "cfb_timetype":0,
    "cfn":null,
    "cfn_destination_type":"0",
    "cfn_timetype":0,
    "cfu":null,
    "cfu_destination_type":"0",
    "cfu_timetype":0,
    "presence_status":"available"
},
{
    "cfb":null,
    "cfb_destination_type":"0",
    "cfb_timetype":0,
    "cfn":null,
    "cfn_destination_type":"0",
    "cfn_timetype":0,
    "cfu":null,
    "cfu_destination_type":"0",
    "cfu_timetype":0,
    "presence_status":"away"
},
{
    "cfb":null,
    "cfb_destination_type":"0",

```



```

        "cfb_timetype":0,
        "cfn":null,
        "cfn_destination_type":"0",
        "cfn_timetype":0,
        "cfu":null,
        "cfu_destination_type":"0",
        "cfu_timetype":0,
        "presence_status":"chat"
    },
    {
        "cfb":null,
        "cfb_destination_type":"0",
        "cfb_timetype":0,
        "cfn":null,
        "cfn_destination_type":"0",
        "cfn_timetype":0,
        "cfu":null,
        "cfu_destination_type":"0",
        "cfu_timetype":0,
        "presence_status":"unavailable"
    },
    {
        "cfb":null,
        "cfb_destination_type":"0",
        "cfb_timetype":0,
        "cfn":null,
        "cfn_destination_type":"0",
        "cfn_timetype":0,
        "cfu":null,
        "cfu_destination_type":"0",
        "cfu_timetype":0,
        "presence_status":"userdef"
    }
],
"voicemail":{
    "vm_attach":null,
    "vm_reserve":null
},
},
"status":0
}

```

**Note:** If you only want to get some parameters regarding a specific extension, users can specify that parameter in the sending request.



**Table 8: getSIPAccount**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>extension</b>	Existing extension number	yes	string	Specify which extension's configuration to retrieve.
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0.
<b>extension</b>		no	Json obj	The specific configuration of the extension.
<b>account_type</b>	SIP,IAX,FXS ,SIP(WebRT C)	no	string	Extension type.
<b>fullname</b>		no	string	Caller ID Name, which consists of first_name, space, and last name.
<b>hasvoicemail</b>	yes, no	no	string	Indicates whether voicemail is enabled or disabled.
<b>cidnumber</b>		no	string	Caller ID of incoming calls.
<b>secret</b>		no	string	SIP/IAX password.
<b>vmsecret</b>		no	string	Voicemail password.
<b>skip_vmsecret</b>	Yes, no	no	string	Indicates whether an extension will need to enter a password when dialing into voicemail.
<b>ring_timeout</b>		no	int	Extensions' ring timeout. If unspecified, the system ring timeout will be used. Default is 60 seconds.
<b>auto_record</b>	all, external, internal, off	no	string	Auto-recording.  all: all incoming calls to the extension will be recorded  external: only calls to external numbers will be recorded.  internal: only calls to internal numbers will be recorded.  off: No calls will be recorded.



<b>encryption</b>	no, yes, support	no	string	SRTP encryption mode. Set whether to turn on SRTP mode to encrypt RTP streams. Support: Enable but not forced.
<b>faxdetect</b>	no, yes	no	string	Configure the mode of using fax. There are 2 available settings. The default is "no". no: Disable fax related features. yes (Fax detection): Fax signals from this user or the trunk can be detected during a call. The received fax will be sent to the email address set for the user. If the user's email address is not configured, the fax will be sent to the default email address set on the fax page.
<b>sendtofax</b>	yes, no	no	string	Indicates whether or not fax will also be sent to the extension's configured email address when receiving a fax call.
<b>strategy_ipacl</b>	0,1,2	no	int	Indicates the device's ACL policy. 0(Allow All): Any IP address can register to this extension. 1(Local Network): Only IP addresses in the configured subnets can register to this extension. Devices on the UCM's subnet is allowed by default. Up to 10 subnets can be added. 2 (Special IP address): This option seems to have been merged with 1 (Local Network) in 1.0.20.x
<b>local_network1</b>		no	string	local_network1-10 are the subnets that are allowed to register to the extension when 1 is configured as the value for <b>strategy_ipacl</b> .
<b>local_network2</b>		no	string	
<b>local_network3</b>		no	string	
<b>local_network4</b>		no	string	
<b>local_network5</b>		no	string	
<b>local_network6</b>		no	string	
<b>local_network7</b>		no	string	
<b>local_network8</b>		no	string	



<b>local_network9</b>		no	string	
<b>local_network10</b>		no	string	
<b>specific_ip</b>		no	string	When the policy is 2, that is, Special IP Address, Format is xxx.xxx.xxx.xxx or xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx.
<b>allow</b>	ulaw,alaw,gs m,g726,g72 2,g729,h264 ,ilbc,g726aal 2,adpcm,g7 23,h263,h26 3p,vp8,opus ,h265,rtx	no	string	The extension's supported codecs. Several codecs can be configured for a single extension.
<b>dnd</b>	yes, no	no	string	Indicates DND status.  If set to yes, all calls will be ignored, and the extension's call forwarding rules will not take effect
<b>dnd_timetype</b>	0,1,2,3,4,5,6 ,8	no	int	The time conditions where DND status will be enabled.  0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday
<b>permission</b>	internal, internal-local, internal-local-national,	no	string	Outbound call permissions of the extension.  internal: Internal internal-local: Local internal-local-national: Nationwide internal-local-national-international: International



	internal- local- national- international			
<b>nat</b>	yes, no	no	string	Indicates whether the extension is behind a NAT. If the UCM is using a public IP address to communicate with devices behind NAT, one-way audio issues may occur if this option is not enabled, NAT is not configured properly, or if SIP/RTP ports are not supported by the firewall.
<b>bypass_outrt_au</b> <b>th</b>	no, yes, bytime	no	string	Indicates whether the extension can skip password authentication when dialing out of a trunk  yes: Users will not need to enter a password when dialing out of a trunk.  bytime: Users will not need to enter a password when dialing out of a trunk only during the specified time condition.
<b>skip_auth_time</b> <b>type</b>	0,1,2,3,4,5,6 ,8	no	int	Time condition where the extension will be able to dial out of a trunk without needing to enter a password.  0: All Time  1: Office Time  2: Out of Office Time  3: Holiday  4: Out of Holiday  5: Out of office time or holiday  6: Specific time  8: Office time and out of holiday
<b>t38_udptl</b>	yes, no	no	string	Indicates whether T.38 support is toggled on or off
<b>directmedia</b>	yes, no	no	string	Indicates whether direct media is enabled or not.  No: The PBX will route RTP media streams from SIP endpoints through itself.



				Yes: The PBX will attempt to redirect RTP media streams so that they are only between caller and callee. Note: It is not always possible for the UCM to negotiate endpoint-to endpoint media routing.
<b>dtmfmode</b>	rfc4733, info, inband, auto	no	string	Indicates the DTMF signaling sent from the extension  Info: Signaling is transmitted through SIP messages.  Inband: Signaling is transmitted in audio streams. Requires PCMU and PCMA codec support.  RFC4733: Signaling is transmitted as audio but is encoded separately from the audio stream.  Auto: Selects the signaling to use based on negotiation.  Signaling is preferred in the following priority: RFC4733, Inband, Info
<b>enable_qualify</b>	yes, no	no	string	Indicates whether or not keep-alive is enabled for this extension.  Yes: The PBX periodically sends SIP OPTION messages to the extension endpoint to monitor and maintain UCM's connection to the endpoint.
<b>qualifyfreq</b>		no	int	Keep-alive Frequency.  Indicates how often keep-alive messages are sent to this extension's endpoints.
<b>authid</b>		no	string	Authentication ID.  This is the SIP service subscriber's ID used for authentication. If not configured, the Extension Number will be used for authentication.
<b>tel_uri</b>	disabled, user_phone, enabled	no	string	TEL URI.  Enabled: TEL URI and Remove OBP from Route cannot be enabled at the same time. "Tel:" will be used instead of "SIP:" in the SIP request.  User_Phone: If the phone has an assigned PSTN telephone number, this field should be set. A "User=Phone" parameter will then be attached to the Request-Line and "TO" header in the SIP



				request to indicate the E.164 number.
<b>enablehotdesk</b>	no, yes	no	string	Indicates whether or not hotdesking is enabled for this extension.  yes: SIP Password will accept only alphanumeric characters; Extension will be used for AuthID.
<b>user_outrt_pas swd</b>		no	string	Dial Trunk Password  Password that must be entered by the extension to dial out.
<b>out_of_service</b>	yes, no	no	string	Indicates whether the "Disable this Extension" option is toggled on or off for this extension.  yes: The extension is disabled.  no: The extension is enabled.
<b>mohsuggest</b>	default, ringbackton e_default, .....	no	string	Music on Hold.  Indicates the Music on Hold playlist to use when putting parties on hold.
<b>en_ringboth</b>	no, yes	no	string	Ring Simultaneously: Indicates whether the "Ring Simultaneously" option is toggled on or off for this extension  If enabled, both this extension and the configured external number will be rung at the same time. If the calling the external number requires the use of a register trunk, the register trunk's number will be displayed to the caller. Failover trunks cannot be used for Ring Simultaneously calls.
<b>external_number</b>		no	string	The external number configured for Ring Simultaneously. Hyphens (-) are ignored
<b>use_callee_dod_on_fwd_rb</b>	no, yes	no	string	Indicates whether or not the callee's DOD number will be used as CID for forwarded calls or Ring Simultaneously calls
<b>use_callee_dod_on_fm</b>	no, yes	no	string	Use Callee DOD for Follow Me  Indicates whether or not to the callee's DOD number will be used as CID for Follow Me calls.



<b>ringboth_timetype</b>	0,1,2,3,4,5,6 , 8	no	int	Time Condition for Ring Simultaneously  The time conditions when Ring Simultaneously will be used  0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday
<b>enable_ldap</b>	yes, no	no	string	Enable LDAP  Indicates whether or not this extension can be added to LDAP phonebooks.
<b>max_contacts</b>		no	int	Concurrent Registrations  The maximum allowed number of endpoints that can register to this extension. Supported values: 1-10
<b>custom_autoanswer</b>	no, yes	no	string	Custom Call-info for Auto Answer  Indicates whether or not the extension supports auto-answer when denoted in Call-info and Alert-info headers.
<b>sca_enable</b>	no, yes	no	string	Enable SCA  Indicates whether or not SCA is enabled for the extension
<b>call_waiting</b>	yes, no	no	string	Call Waiting  Indicates whether or not calls can be made to the extension while it is already in a call. If disabled, CC service and Call Forward Busy will not work.
<b>emergcidnumber</b>		no	string	Emergency Calls CID  CallerID number that will be used when calling out and receiving direct callbacks.
<b>enable_webrtc</b>	yes, no	no	string	Enable WebRTC Support  Indicates whether or not this extension supports WebRTC registration and calling.



<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore-dr1, Bellcore-dr2, Bellcore-dr3, Bellcore-dr4, Bellcore-dr5, custom			Alert-info  Indicates the alert-info header that will be used in the extension's INVITE requests to specify a ring tone to be used by the UAS.
<b>limitime</b>		no	int	Maximum Call Duration  Indicates the maximum duration of this extension's calls. The default value 0 means no limit.
<b>dndwhitelist</b>		no	string	DND whitelist  Displays the numbers that can call this extension even if it has DND enabled. Multiple numbers are separated by commas.
<b>fwdwhitelist</b>		no	string	Forward Whitelist  Displays the numbers that will ignore this extension's call forwarding rules when calling in. Multiple numbers are separated by commas
<b>callbarging_monitor</b>		no	string	Allow call-baring  Displays the extensions that are able to barge in and monitor this extensions' calls via feature code.
<b>seamless_transfer_members</b>		no	string	Allowed to seamless transfer  Displays the extensions that can seamless transfer to this extension.
<b>sip_presence_settings</b>			Json array	The specific configuration content of the online status of the SIP extension. The specific content needs to specify which state the presence_status is.  "sip_presence_settings": [ {



				<pre>"presence_status": "available", "cfb":"6000" , "cfn": null, "cfu": null, "cfb_timetype": 1, "cfn_timetype": 0, "cfu_timetype": 0, "cfb_destination_type": "0", "cfn_destination_type": "0", "cfu_destination_type": "0" }, { "presence_status": "unavailable", "cfb": null, "cfn": "12345", "cfu": null, "cfb_timetype": 0, "cfn_timetype": 2, "cfu_timetype": 0, "cfb_destination_type": "0", "cfn_destination_type": "0", "cfu_destination_type": "0" } ] When available, cfb to extension 6000; When unavailable, cfn to custom extension 12345.</pre>
<b>presence_status</b>	available, away, chat, dnd, userdef, unavailable	no	string	presence status  Presence status of this extension. Default is Available.
<b>cfb</b>		no	string	Call Forward Busy (CFB) destination.  Callers will be redirected to this number if the extension is busy.
<b>cfn</b>		no	string	Call Forward No Answer (CFNA) Destination  Callers will be redirected to this number if calls to



				<p>the extension are not answered before ring timeout.</p> <p>Note: If unspecified, this feature is disabled.</p>
<b>cfu</b>		no	string	<p>Call Forward Unconditional (CFU) destination.</p> <p>Callers will always be redirected to this number.</p>
<b>cfb_timetype</b>	0,1,2,3,4,5,6 ,8	no	string	<p>Call forward busy based on this time condition.</p> <p>CFB will be active only during the selected time condition.</p> <p>0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday</p>
<b>cfn_timetype</b>	0,1,2,3,4,5,6 ,8	no	string	<p>Call forward no answer based on this time condition. CFNA will be active only during the selected time condition.</p> <p>0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday</p>
<b>cfu_timetype</b>	0,1,2,3,4,5,6 ,8	no	string	<p>Call forward unconditional based on this time condition. CFU will be active only during the selected time condition.</p> <p>0: All Time 1: Office Time 2: Out of Office Time 3: Holiday</p>



				4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday
<b>cfb_destination_type</b>	0,1,2,3,4,5,6 ,8			Extension type of the CFB destination. If unspecified, CFB will be disabled. 0: None 1: Extension 2: Custom Number 3: Voicemail 4: Ring Group 5: Queues 6: Voicemail Group
<b>cfn_destination_type</b>	0,1,2,3,4,5,6 ,8			Extension type of the CFNA destination. If unspecified, CFNA will be disabled. 0: None 1: Extension 2: Custom Number 3: Voicemail 4: Ring Group 5: Queues 6: Voicemail Group
<b>cfu_destination_type</b>	0,1,2,3,4,5,6 ,8			Extension type of the CFU destination. If unspecified, CFU will be disabled 0: None 1: Extension 2: Custom Number 3: Voicemail 4: Ring Group 5: Queues 6: Voicemail Group
<b>voicemail</b>		no	Json obj	Specific Configuration of voicemail. <pre>"voicemail": {     "vm_attach": null,     "vm_reserve": null }</pre>



<b>vm_attach</b>	NULL, yes, no	no	string	Send voicemail to email NULL: "Default". Global voicemail settings in the Voicemail page will be used
<b>vm_reserve</b>	NULL, yes, no	no	string	Keep Voicemail after Emailing Only applicable when either condition is fulfilled: 1. Edit Extension→Send Voicemail to Email is enabled. 2. Voicemail→Voicemail Email Settings→Send Voicemail to Email is enabled and Edit Extension→Send Voicemail to Email is set to "Default". Global voicemail settings in the Voicemail page will be used. "Default". Global voicemail settings in the Voicemail page will be used.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## updateSIPAccount

This action will allow users to update an existing SIP account.

- **Request**

```
{
  "request": {
    "action": "updateSIPAccount",
    "cookie": "sid71933887-1574671289",
    "extension": "1000",
    "permission": "internal"
  }
}
```

- **Response**

```
{
  "response": {
    "extension": {
      "alertinfo": null,
      "extension": "1000"
    }
  },
  "status": 0
}
```



**Note:** Editing presence configuration requires sending the entire json list of sip\_presence\_settings. Make sure to specify the presence status when updating presence settings.

Table 9: updateSIPAccount

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>extension</b>	Required. 2-18 digits	yes	string	Specifies the extension to configure.
<b>hasvoicemail</b>	Yes, no	no	string	Whether to enable voicemail
<b>cidnumber</b>	2-32 digit	no	string	Caller ID number
<b>secret</b>	Required.  4-32 alphanumeric characters or special characters  ~!@#\$%^*,	no	string	SIP/IAX password
<b>vmsecret</b>	4-32 digits	no	string	Voicemail password
<b>skip_vmsecret</b>	Yes, no	no	string	Skip Voicemail Password Verification  yes: When user dials My Voicemail, the password verification IVR is skipped
<b>ring_timeout</b>	Value between 3 and 600. Can be set to "null". When set to null, global settings will be used.	no	int	Ring Timeout  when set to NULL, the system default ring timeout is used.
<b>auto_record</b>	all, external,	no	string	Auto record  All Calls: All incoming calls to this extension will



	internal, off			be recorded.  OFF: This extension's calls will not be recorded. external: All external calls of the extension will be recorded. internal: All internal calls of the extension will be recorded.
<b>encryption</b>	no, yes, support	no	string	SRTP encryption mode  Enable/disable SRTP for RTP stream encryption. support: Enabled but not forced
<b>faxdetect</b>	no, yes	no	string	Configure the mode of using fax. There are 2 available settings. The default is "no".  no: Disable fax related features.  yes (Fax detection): Fax signals from this user or the trunk can be detected during a call. The received fax will be sent to the email address set for the user. If the user's email address is not configured, the fax will be sent to the default email address set on the fax page.
<b>sendtofax</b>	yes, no	no	string	Send fax to the email address.  yes: The received fax will be sent to the email address set for the user. If the user's email address is not configured, the fax will be sent to the default email address set on the fax page.
<b>strategy_ipacl</b>	0,1,2	no	int	IP access strategy.  0(Allow All): Any IP address can register to this extension.  1(Local Network): IP addresses in local network segments can register to this extension. By default it is the current IP segment of the device and can be set to register 10 other subnet devices.  2 (Special IP address): Only allow one special IP address to register; special IP is disabled for WebRTC users.



<b>local_network1</b>	IP address Format: xxx.xxx.xxx .0 or /16	no	string	Local subnet. When the policy is 1, that is, the local subnet, you can set up to 10 local subnets.
<b>local_network2</b>		no	string	
<b>local_network3</b>		no	string	
<b>local_network4</b>		no	string	
<b>local_network5</b>		no	string	
<b>local_network6</b>		no	string	
<b>local_network7</b>		no	string	
<b>local_network8</b>		no	string	
<b>local_network9</b>		no	string	
<b>local_network10</b>		no	string	
<b>specific_ip</b>	IP address	no	string	When the policy is 2, that is, Special IP Address, Format is xxx.xxx.xxx.xxx or xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx.
<b>allow</b>	At least one of the following must be selected: ulaw, alaw, gsm, g726, g722, g729, h264, ilbc, g726aal2, adpcm, g723, h263, h263p, vp8, opus, h265, rtx	no	string	Supported codec. Multiple can be set.
<b>dnd</b>	yes, no	no	string	Do Not Disturb. yes: All calls will be ignored, and the call forward unconditional/ no answer/ busy of the extension



				will not take effect.
<b>dnd_timetype</b>	0,1,2,3,4,5, 6,8	no	int	<p>Do not disturb time condition. DND will take effect only when this condition is satisfied.</p> <p>0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday</p>
<b>permission</b>	internal, internal-local, internal-local-national, internal-local-national-internation al	no	string	<p>Select outbound permission.</p> <p>internal: internal internal-local: local internal-local-national: nationwide internal-local-national-international: international</p>
<b>nat</b>	yes, no	no	string	NAT is used when UCM uses public IP and communicates with devices hidden behind a NAT network, such as a broadband router. You may encounter one-way audio problem. This type of problem is often associated with NAT configuration or SIP and RTP ports supported by the firewall.
<b>bypass_outrt_au</b> <b>th</b>	no, yes, bytime	no	string	<p>Skip trunk authentication.</p> <p>yes: When dialing an external line, the user does not need to enter a password; bytime: dial an external line in the set time condition, the user does not need to enter a password.</p>



<b>skip_auth_time_type</b>	0,1,2,3,4,5,6,8	no	int	time condition for Skip the trunk authentication: skipping the trunk authentication can only take effect after this condition is satisfied.  0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday
<b>t38_udptl</b>	yes, no	no	string	Whether to support T.38 UDPTL.
<b>directmedia</b>	yes, no	no	string	Whether to enable direct media.  No: the PBX will route the media streams from SIP endpoints through itself.  Yes: the PBX will attempt to redirect the RTP media streams to bypass the PBX and to go directly between caller and callee. Note: It is not always possible for the PBX to negotiate endpoint-to-endpoint media routing.
<b>dtmfmode</b>	rfc2833, info, inband, auto	no	string	Default mode of sending DTMF signal.  The DTMF signal is carried by the info method of SIP signaling. Inband: Requires 64kbit codec PCMU and PCMA.  Auto: Adaptive preference is for RFC2833, followed by inband.
<b>enable_qualify</b>	yes, no	no	string	Enable keeping-alive.  Yes: The PBX periodically sends SIP OPTION signaling to detect if the host is online.
<b>qualifyfreq</b>	Required. Set a value between 1	no	int	Keep-alive Frequency.  When the host is on, set the interval of sending keep-alive messages measured in seconds.



	and 3600.			
<b>authid</b>	Up to 32 characters excluding space., ;?:\ "(<>@,\V[] ={}.	no	string	<p>Authentication ID.</p> <p>This is the SIP service subscriber's ID used for authentication. If not configured, the Extension Number will be used for authentication.</p>
<b>tel_uri</b>	disabled, user_phone, enabled	no	string	<p>TEL URI.</p> <p>Enabled: TEL URI and Remove OBP from Route cannot be enabled at the same time. "Tel:" will be used instead of "SIP:" in the SIP request.</p> <p>User_Phone: If the phone has an assigned PSTN telephone number, this field should be set. A "User=Phone" parameter will then be attached to the Request-Line and "TO" header in the SIP request to indicate the E.164 number.</p>
<b>enablehotdesk</b>	no, yes	no	string	<p>Support Hot-desking Mode</p> <p>yes: SIP Password will accept only alphanumeric characters; Extension will be used for AuthID.</p>
<b>user_outtr_pas swd</b>	4-10 digits	no	string	<p>Dial Trunk Password</p> <p>Configure personal password when making outbound calls.</p>
<b>out_of_service</b>	yes, no	no	string	<p>Whether to disable this extension</p> <p>yes: disable</p> <p>no: enable</p>
<b>mohsuggest</b>	Required: default, ringbackton e_default, MoH playlist name, etc	no	string	<p>Music on Hold.</p> <p>Specify which Music on Hold class to suggest to the bridged channel when putting them on hold.</p>
<b>en_ringboth</b>	no, yes	no	string	<p>Ring Simultaneously</p> <p>If you want the extension and external number to</p>



				ring simultaneously, check this box. If you use register trunk for outbound calls, the caller will display the registered number. The outbound call will use only the main trunk. The failover trunk will not be used.
<b>external_number</b>	Up to 32 alphanumeric characters and special characters +-*#	no	string	Set the external number for Ring Simultaneously. "-" is the connection character and will be ignored.
<b>use_callee_dod_on_fwd_rb</b>	no, yes	no	string	yes: Use the callee's DOD number as callerID on Outgoing Forwarding or Ring Simultaneously calls.
<b>use_callee_dod_on_fm</b>	no, yes	no	string	Use Callee DOD for Follow Me Use the callee DOD number as CID if configured Follow Me numbers are external numbers.
<b>ringboth_timestype</b>	0,1,2,3,4,5,6,8	no	int	Time Condition for Ring Simultaneously 0: All Time 1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday
<b>enable_ldap</b>	yes, no	no	string	Enable LDAP yes: If enabled, the extension will be added to LDAP Phonebook PBX lists.
<b>max_contacts</b>	Value between 1 and 10	no	int	Concurrent Registrations The maximum endpoints which can be registered to this extension. Value: 1-10.
<b>custom_autoanswer</b>	no, yes	no	string	Custom Call-info for Auto Answer yes: If checked, the invite message sent to the



				extension will contain a Call-info header to indicate auto answer.
<b>sca_enable</b>	no, yes	no	string	Enable SCA.
<b>call_waiting</b>	yes, no	no	string	Call waiting yes: Allows calls to the extension even when it is already in a call. This only works if the caller is directly dialing the extension. If disabled, the CC service and busy in-call forward will not work.
<b>emergcidnumber</b>	2-32 alphanumeric characters	no	string	Emergency Calls CID CallerID number that will be used when calling out and receiving direct callbacks.
<b>enable_webrtc</b>	yes, no	no	string	Enable WebRTC Support Enable registration and call from WebRTC.
<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore-dr1, Bellcore-dr2, Bellcore-dr3, Bellcore-dr4, Bellcore-dr5, custom			Alert-info When present in an INVITE request, the Alert-info header field specifies an alternative ring tone to the UAS.
<b>limitime</b>	Value between 0 and 86400	no	int	Maximum Call Duration The maximum call duration (in seconds). The default value 0 means no limit.
<b>dndwhitelist</b>		no	string	DND whitelist Multiple numbers are supported and separated by commas.



<b>fwdwhitelist</b>		no	string	Forward Whitelist  Set extension numbers, multiple can be separated by commas. Calls from users in the forward whitelist will not be forwarded.
<b>callbarging_monitor</b>		no	string	Set up Allow call-barging list. Members of the list can spy on this extension via feature codes. Multiple extensions can be set, separated by commas.
<b>seamless_transfer_members</b>		no	string	Set up Allow to seamless transfer list. Members of the list can seamless transfer via feature code. Multiple extensions can be set, separated by commas.
<b>sip_presence_settings</b>			Json array	<p>The specific configuration content of the online status of the SIP extension. The specific content needs to specify which state the presence_status is.</p> <pre>"sip_presence_settings": [ {     "presence_status": "available",     "cfb": "6000",     "cfn": null,     "cfu": null,     "cfb_timetype": 1,     "cfn_timetype": 0,     "cfu_timetype": 0,     "cfb_destination_type": "0",     "cfn_destination_type": "0",     "cfu_destination_type": "0" }, {     "presence_status": "unavailable",     "cfb": null,     "cfn": "12345",     "cfu": null,     "cfb_timetype": 0,     "cfn_timetype": 2,     "cfu_timetype": 0,     "cfb_destination_type": "0",     "cfn_destination_type": "0",     "cfu_destination_type": "0" }]</pre>



				<pre>"cfn_destination_type": "0", "cfu_destination_type": "0" }]</pre> <p>When available, cfb to extension 6000; When unavailable, cfn to custom extension 12345.</p>
<b>presence_status</b>	available, away, chat, dnd, userdef, unavailable	no	string	<p>presence status</p> <p>Set the presence status of this extension. Default is Available. To set the transfer destination, configure call transfer.</p>
<b>cfb</b>		no	string	<p>Configure the target number to be forwarded to for Call Forward Busy(CFB).</p> <p>Incoming calls during busy time will be forwarded to the entered extension.</p> <p>Corresponds to the extension number under the cfb_destination_type type.</p>
<b>cfn</b>		no	string	<p>Configure the target number to be forwarded to for Call Forward No Answer(CFN).</p> <p>Incoming calls that are not answered after ring timeout will be forwarded to the entered extension.</p> <p>Note: If not specified, this feature is disabled.</p> <p>Corresponds to the extension number under the cfn_destination_type type.</p>
<b>cfu</b>		no	string	<p>Configure the target number to be forwarded to for Call Forward Unconditional(CFU). All incoming calls will be forwarded to the entered extension unconditionally. Corresponds to the extension number under the cfu_destination_type type.</p>
<b>cfb_timetype</b>	0,1,2,3,4,5, 6,8	no	string	<p>Call forward busy based on this time condition.</p> <p>CFB can take effect only after this condition is satisfied.</p> <p>0: All Time</p>



				1: Office Time 2: Out of Office Time 3: Holiday 4: Out of Holiday 5: Out of office time or holiday 6: Specific time 8: Office time and out of holiday
<b>cfn_timetype</b>	0,1,2,3,4,5, 6,8	no	string	<p>Call forward no answer based on this time condition. CFN can take effect only after this condition is satisfied.</p> <p>0: All Time          1: Office Time          2: Out of Office Time          3: Holiday          4: Out of Holiday          5: Out of office time or holiday          6: Specific time          8: Office time and out of holiday</p>
<b>cfu_timetype</b>	0,1,2,3,4,5, 6,8	no	string	<p>Call forward unconditional based on this time condition. CFU can take effect only after this condition is satisfied.</p> <p>0: All Time          1: Office Time          2: Out of Office Time          3: Holiday          4: Out of Holiday          5: Out of office time or holiday          6: Specific time          8: Office time and out of holiday</p>
<b>cfb_destination_type</b>	0,1,2,3,4,5, 6			<p>Type of CFB. Note: If not specified, this feature is disabled.</p> <p>0: None          1: Extension</p>



				2: Custom Number 3: Voicemail 4: Ring Group 5: Queues 6: Voicemail Group
<b>cfn_destination_type</b>	0,1,2,3,4,5, 6			Type of CFN. Note: If not specified, this feature is disabled. 0: None 1: Extension 2: Custom Number 3: Voicemail 4: Ring Group 5: Queues 6: Voicemail Group
<b>cfu_destination_type</b>	0,1,2,3,4,5, 6			Type of CFU. Note: If not specified, this feature is disabled. 0: None 1: Extension 2: Custom Number 3: Voicemail 4: Ring Group 5: Queues 6: Voicemail Group
<b>vm_attach</b>	yes, no If set to NULL, global setting will be used.	no	string	Send voicemail to email NULL: the global setting will be used.
<b>vm_reserve</b>	Yes, no, NULL If set to NULL, global setting will be used	no	string	Keep Voicemail after Emailing Only applies if extension-level is enabled or global Send Voicemail to Email is enabled and extension-level is default. NULL: the global setting will be used.



<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

**Note:** Editing presence configuration requires sending the entire json list of sip\_presence\_settings. Make sure to specify the presence status when updating presence settings.

## Trunk

### listVoIPTrunk

The “listVoIPTrunk” action will allow users to get information about the existing SIP trunk, such as the trunk’s name, its IP address etc.

**Note:** The needed information, can be defined in the parameter “**options**”. Otherwise all the information will be returned.

- **Request**

```
{
  "request": {
    "action": "listVoIPTrunk",
    "cookie": "sid719338887-1574671289",
    "options": "trunk_index,trunk_name,trunk_type"
  }
}
```

- **Response**

```
{
  "response": {
    "page": 1,
    "total_item": 3,
    "total_page": 1,
    "voip_trunk": [
      {
        "trunk_index": 2,
        "trunk_name": "test",
        "trunk_type": "peer"
      },
      {
        "trunk_index": 3,
        "trunk_name": "test2",
        "trunk_type": "peer"
      },
      {
        "trunk_index": 4,
        "trunk_name": "test12",
        "trunk_type": "peer"
      }
    ]
  }
}
```



```

        "status":0
    }
}
```

Table 10: listVoIPTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Page</b>		no	int	Get extension list by page number.
<b>item_num</b>		no	int	Number of trunks to return for the request. If unspecified, all trunks will be returned.
<b>Sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>Sidx</b>		no	string	Sort by trunk index. This is based on trunk creation date.
<b>options</b>	trunk_index,trunk_name,host,trunk_type,username,technology,ldap_sync_enable,trunks.out_of_service	no	string	Specify the information to return. Multiple options can be selected and must be separated by commas. If unspecified, all the listed information will be returned.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>voip_trunk</b>		yes	Json array	VOIP trunk list
<b>total_item</b>		yes	int	Total number of items that were returned.
<b>total_page</b>		yes	int	Total number of pages in the list.
<b>page</b>		yes	int	What page is on.
<b>trunk_index</b>		no	string	Trunk ID
<b>trunk_name</b>		no	string	Trunk name



<b>Host</b>		no	string	Host
<b>trunk_type</b>	peer, register	no	string	Trunk type Peer trunk and register trunk
<b>username</b>		no	string	Username of register trunk. NULL for peer trunk.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## addSIPTrunk

The “addSIPTrunk” action will allow users to create SIP trunks.

- **Request**

```
{
  "request": {
    "action": "addSIPTrunk",
    "cookie": "sid719338887-1574671289",
    "host": "192.168.5.222",
    "trunk_name": "GSTest",
    "trunk_type": "peer"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 11: addSIPTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>trunk_name</b>		yes	string	Trunk name
<b>Host</b>		yes	string	Host
<b>trunk_type</b>	Peer, register	yes	string	Trunk type



<b>Username</b>	Up to 64 characters	yes	string	Configure the username to authenticate with the VoIP provider.
<b>Secret</b>				Configure the password to authenticate with the VoIP provider. Required for register trunks.
<b>The rest options are Same as updateSIPTrunk</b>				
<b>Successful response</b>				
<b>Status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		yes	int	Please see the error code list for more details.

## getSIPTrunk

The “getSIPTrunk” will allow users to get information about a specific trunk.

- **Request**

```
{
  "request": {
    "action": "getSIPTrunk",
    "cookie": "sid23597213-1574672527",
    "trunk": "3"
  }
}
```

- **Response**

```
{
  "response": {
    "trunk": {
      "allow": "ulaw,alaw,gsm,g726,g729,ilbc",
      "allow_outgoing_calls_if_reg_failed": "yes",
      "auth_trunk": "no",
      "authid": null,
      "auto_recording": "no",
      "cc_agent_policy": "never",
      "cc_max_agents": 5,
      "cc_max_monitors": 5,
      "cc_monitor_policy": "never",
      "cidname": null,
      "cidnumber": null,
      "dialin_direct": "no",
      "did_mode": "request-line",
      "dtmfmode": null,
      "enable_qualify": "no",
      "encryption": "no",
      "fromdomain": null,
      "fromuser": null,
      "label": "Trunk 3"
    }
  }
}
```



```

    "host":"1.2.55.4",
    "keepcid":"no",
    "keeporgcid":"no",
    "ldap_custom_prefix":null,
    "ldap_default_outrt":null,
    "ldap_default_outrt_prefix":null,
    "ldap_sync_enable":"no",
    "ldap_sync_passwd":null,
    "ldap_sync_port":null,
    "nat":"no",
    "need_register":"no",
    "out_maxchans":0,
    "out_of_service":"no",
    "outboundproxy":null,
    "pai_number":null,
    "passthrough_pai":"yes",
    "qualifyfreq":60,
    "rmv_obp_from_route":"no",
    "secret":null,
    "send_ppi":"no",
    "status":"Unmonitored",
    "tel_uri":"disabled",
    "transport":"udp",
    "trunk_index":3,
    "trunk_name":"test2",
    "trunk_type":"peer",
    "uri_sip_or_sips":0,
    "use_dod_as_from_name":"no",
    "use_dod_in_ppi":"no",
    "use_for_sfu_conf":"no",
    "use_origcid_in_ppi":"no",
    "username":null
}
},
"status":0
}

```

Table 12: getSIPTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>trunk</b>		yes	string	Retrieves the configuration of the specified trunk. Please enter the trunk ID.
<b>Response successfully</b>				
<b>status</b>	0	yes	int	Successful response, the status is 0.
<b>trunk</b>		yes	Json, obj	Specific Trunk configuration.



<b>trunk_index</b>		yes	string	Trunk id.
<b>allow</b>	ulaw,alaw,gsm ,g726,g729,ilb c,g722,g726a al2,adpcm,g72 3,h263,h263p, h264,h265,vp 8,opus,rtx.	no	string	The trunk's supported codecs
<b>allow_outgoing_calls_if_reg_failed</b>	yes, no	no	string	Whether outgoing calls are allowed the trunk is unable to register successfully.
<b>auth_trunk</b>	yes, no	no	string	Authenticate trunk.  If enabled, UCM will respond to incoming calls with 401 message to authenticate the trunk.
<b>authid</b>		no	string	Authenticate ID  This is the SIP service subscriber's ID used for authentication. If not configured, the Extension Number will be used for authentication.
<b>auto_recording</b>	no, yes	no	string	Auto record.
<b>cc_agent_policy</b>	native, never	no	string	To enable CC service  Control together with cc_monitor_policy.  CC service is enabled if both cc_agent_policy and cc_monitor_policy are native. It is disabled if both are set to never.
<b>cc_max_agents</b>		no	int	The maximum number of CCSS agents that may be allocated to this channel. In other words, this number is the maximum number of CC requests this channel is allowed to make.
<b>cc_max_monitors</b>		no	int	The maximum number of monitor structures which may be created for this device. In other words, this number tells how many callers may request CC services for a specific device at one time.
<b>cc_monitor_policy</b>	native, never	no	string	To enable CC service  Control together with cc_agent_policy.



				CC service is enabled if both cc_agent_policy and cc_monitory_policy are native. It is disabled if both are set to never.
<b>cidname</b>		no	string	Caller ID Name  CID name for this trunk that will be used if the caller does not have CID name configured.
<b>cidnumber</b>		no	string	Caller ID  Number that the trunk will try to use when making outbound calls.  CID priority from highest to lowest is as follows: From User (register trunk only) > Inbound Call CID (enable using remote CID) > Trunk CID/register trunk username (Keep Trunk CID enabled) > DOD CID(with correspond DOD configuration) > Extension CID > Register Trunk Username (for register trunk only, Keep Trunk CID disabled) > Global Outbound CID.  Note: Certain providers may ignore this CID.
<b>dialin_direct</b>	no, yes	no	string	Direct callback  Allows external numbers the option to get directed to the extension that last called them.
<b>did_mode</b>	request-line, to-header	no	string	DID Mode  Configure to obtain the destination ID of an incoming SIP call from SIP Request-line or To header.
<b>dtmfmode</b>	null, rfc2833, info, inband, auto	no	string	Configures the mode for sending DTMF.  Null: Use global setting.  RFC4733 (default): DTMF is transmitted as audio in the RTP stream but is encoded separately from the audio stream. Backward-compatible with RFC2833. Info: DTMF is transmitted through SIP signaling using info method.  Inband: DTMF is transmitted as audio and is included in the audio stream.  Auto: self-adjust
<b>enable_qua</b>	yes, no	no	string	Enable Heartbeat Detection



<b>lify</b>				yes: the PBX will regularly send SIP OPTIONS to check if the device is online.
<b>encryption</b>	no, yes, support	no	string	SRTP encryption mode Toggles support for RTP stream encryption.
<b>fax_intelligent_route</b>		no	string	Enable fax intelligent routing. Set the destination to which the fax will be forwarded when a fax is detected. The following options are available: <ul style="list-style-type: none"><li>• Extension: Sends a fax to the specified extension when a fax is detected. If FXS extension is selected here, the fax will be sent to the FXS extension;</li><li>• Fax to E-mail: When the fax is detected, the fax will be sent as an attachment to the specified e-mail address. The e-mail address can be the extension's mailbox or self-identification. Define a mailbox. Note: If you need to send a fax to your mailbox, make sure that the Mailbox in System is set up correctly.</li></ul>
<b>fax_intelligent_route_destination</b>		no	string	Fax destination. The destination of fax intelligent routing can only be a fax extension or an fxs extension with a fax device.
<b>faxdetect</b>	yes, no	no	string	
<b>Fromdomain</b>		no	string	From domain  Configure the actual domain where the extension comes from. Can override From field. For example,"trunk.UCM6510.provider.com "is the domain name of the following From header field. sip:1234567@trunk.UCM6510.provider.com
<b>fromuser</b>		no	string	Configure the actual user  Can override From header field. A single ID could register multiple DID. For example "1234567" is the username of the following From header field: sip:1234567@trunk.UCM6510.provider.com
<b>host</b>		no	string	Enter the IP address or hostname of the VoIP provider's server.
<b>keepcid</b>	no, yes	no	string	Keep Trunk CID  yes: Trunk CID will not be overwritten by host CID.



				When set to yes, cidnumber is mandatory.
<b>keeporgcid</b>	no, yes	no	string	Keep Original CID  Keep CID from the inbound call when dialing out even if option "Keep Trunk CID" is enabled. Please make sure the peer PBX at the other end supports matching user entry using the "username" field from the authentication line.
<b>ldap_custom_prefix</b>		no	string	LDAP Dialed Prefix  System will automatically modify the remote contacts by adding this prefix. When ldap_default_outrt is set to self-defined, use this prefix.
<b>ldap_default_outrt</b>		no	int	LDAP Outbound Rule  Specify an outbound rule. The PBX system will automatically modify the remote contacts by adding prefix parsed from this rule.  If null and ldap_default_outrt_prefix is configured, use custom outbound prefix. If null, no outbound prefix is added by default.
<b>ldap_sync_enable</b>	no, yes	no	string	Sync LDAP Enable  Provide and update the local LDAP contact to a remote peer automatically (SIP peer trunk only). To ensure successful synchronization, the remote peer needs to enable this service and set the same password as the local UCM.
<b>ldap_sync_passwd</b>		no	string	Sync LDAP Password  This is the password used for LDAP contact file encryption and decryption. The password must be the same for both peers to ensure successful synchronization.
<b>ldap_sync_port</b>		no	int	Sync LDAP Port  The TCP port used by this service.
<b>nat</b>	no, yes	no	string	Enable this setting if the UCM is using public IP and communicating with devices behind NAT.  Note 1: This setting will overwrite the Contact header of received messages, which may affect the



				ability to establish calls when behind NAT. Consider changing settings in PBX Settings->SIP Settings->NAT instead.  If one is experiencing one-way audio issues, please check the NAT configuration and SIP/RTP ports in the firewall.
<b>need_register</b>	no, yes	no	string	Whether to register on the external server.
<b>out_maxchans</b>		no	int	The number of current outgoing calls over the trunk at the same time. The default value 0 means no limit.
<b>out_of_service</b>	no, yes	no	string	Whether to disable the trunk.
<b>outboundproxy</b>		no	string	Outbound proxy  When configured, the outbound signal will be sent to the proxy instead of the devices directly. The outbound proxy can be domain name or IP address.
<b>pai_number</b>		no	string	PAI Header  PAI header for the trunk formatted as "name<number>", "<number>", or "number". If not configured, CID will be used instead.
<b>passthrough_pai</b>	yes, no	no	string	Passthrough PAI Header  If enabled and "Send PAI Header" is disabled, PAI headers will be preserved as calls pass through the UCM.
<b>qualifyfreq</b>		no	int	Configure the frequency (in seconds) to send SIP OPTIONS messages to check the status of the device. Default is 60.
<b>rmv_obp_from_route</b>	no, yes	no	string	Remove OBP from Route  If enabled, the outbound proxy URI in the Route header will be removed from SIP requests. Default setting is "No".
<b>secret</b>		no	string	Password of register trunk
<b>send_ppi</b>	no, yes	no	string	Send PPI Header  Yes: the invite message sent to trunks will contain PPI (P-Preferred-Identity) Header.
<b>status</b>	Unknown,	no	string	



	Unmonitored, Reachable, Unreachable, Registered, Unregistered, Lagged, Failed, Request Sent, Rejected, Timeout, No Authentication			
<b>tel_uri</b>	disabled, user_phone, enabled	no	string	<p>TEL URI Enabled: TEL URI and Remove OBP from Route cannot be enabled at the same time. If set to "Enable", "Tel:" will be used instead of "SIP:" in the SIP request.</p> <p>User_phone: If the phone has an assigned PSTN telephone number, this field should be set. A "User=Phone" parameter will then be attached to the Request-Line and "TO" header in the SIP request to indicate the E.164 number.</p>
<b>transport</b>	udp, tcp, tls	no	string	Configure the SIP Transport method. Using TCP requires local TCP support; using TLS requires local TLS support.
<b>trunk_index</b>		no	string	Trunk ID
<b>trunk_name</b>		no	string	<p>Provider name Configure a unique label to identify the trunk when listed in outbound rules and incoming rules.</p>
<b>trunk_type</b>	peer, register	no	string	<p>Trunk type Peer trunk or register trunk</p>
<b>use_dod_in_ppi</b>	no, yes	no	string	<p>Displays whether or not the DOD is being used for the PPI header. If both use_dod_in_pi and use_origcid_in_ppi are set to "no", CID will be used for the PPI header.</p>
<b>use_origcid_in_ppi</b>	no, yes	no	string	Displays whether or not the original CID is used for the PPI header.



				If both use_dod_in_pi and use_origcid_in_ppi are set to "no", CID will be used for the PPI header.
<b>username</b>		no	string	Configure the username to authenticate with the VoIP provider.
<b>use_for_sfu_conf</b>	yes, no	no	string	IPVT Mode Enabling this will allow UCM to establish communication with IPVT.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## updateSIPTrunk

The “updateSIPTrunk” action will allow users to update existing SIP trunk while specifying the trunk’s number.

- Request

```
{
  "request": {
    "action": "updateSIPTrunk",
    "cookie": "sid23597213-1574672527",
    "trunk": "5",
    "trunk_name": "GS1"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 13: updateSIPTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Cookie: Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>trunk</b>		yes	string	Trunk id, specify which trunk to edit.
<b>allow</b>	ulaw, alaw, gsm, g726,	no	string	Supported codec, multiple can be set.



	g729, ilbc, g722, g726aal2, adpcm, g723, h263, h263p, h264, h265, vp8, opus, rtx, mandatory			
<b>allow_outgoing_calls_if_registration_failed</b>	yes, no	no	string	Whether outgoing calls are allowed when registration failed  no: Calls are not allowed when the registration fails. If no outgoing registration is set, this configuration item can be ignored.
<b>auth_trunk</b>	yes, no	no	string	Authenticate trunk  yes: the UCM will send a 401 response to the incoming call to authenticate the trunk.
<b>authid</b>	Up to 64 characters	no	string	Authenticate ID  This is the SIP service subscriber's ID used for authentication. If not configured, the Extension Number will be used for authentication.
<b>auto_recording</b>	no, yes	no	string	Auto record.
<b>cc_agent_policy</b>	native, never	no	string	To enable CC service  Control together with cc_monitor_policy.  When cc_agent_policy and cc_monitor_policy are native at the same time, service is enabled. When both are never, service is disabled.



<b>cc_max_agents</b>	1-999	no	int	The maximum number of CCSS agents that may be allocated to this channel. In other words, this number is the maximum number of CC requests this channel is allowed to make..
<b>cc_max_monitors</b>	1-999	no	int	The maximum number of monitor structures which may be created for this device. In other words, this number tells how many callers may request CC services for a specific device at one time.
<b>cc_monitor_policy</b>	native, never	no	string	To enable CC service Control together with cc_agent_policy. When cc_agent_policy and cc_monitor_policy are native at the same time, service is enables. When both are never, service is disabled.
<b>cidname</b>	2-64 characters	no	string	Caller ID Name Configure the new name of the caller when the extension has no CallerID Name configured.
<b>cidnumber</b>	2-64 characters	no	string	Caller ID Number that the trunk will try to use when making outbound calls. CID priority from highest to lowest is as follows: From User (register trunk only) > Inbound Call CID (enable using remote CID) > Trunk CID/register trunk username (Keep Trunk CID enabled) > DOD CID (with correspond DOD configuration) > Extension CID > Register Trunk Username (for register trunk only, Keep Trunk CID disabled) > Global Outbound CID. Note: Certain providers may ignore this CID.
<b>dialin_direct</b>	no, yes	no	string	Direct callback Allows external numbers the option to get directed to the extension that last called them..
<b>did_mode</b>	request-line, to-header	no	string	DID Mode Configure to obtain the destination ID of an incoming SIP call from SIP Request-line or To header.



<b>dtmfmode</b>	Null, rfc4733, info, inband, auto	no	string	Configures the mode for sending DTMF.  Null: Use global setting.  RFC4733 (default): DTMF is transmitted as audio in the RTP stream but is encoded separately from the audio stream. Backward-compatible with RFC2833. Info: DTMF is transmitted through SIP signaling using info method. Inband: DTMF is transmitted as audio and is included in the audio stream. Auto: self-adjust
<b>enable_qualify</b>	yes, no	no	string	Enable Heartbeat Detection  yes: the PBX will regularly send SIP OPTIONS to check if the device is online.
<b>encryption</b>	no, yes, support	no	string	SRTP encryption mode  Set whether to turn on SRTP mode to encrypt RTP streams.
<b>fax_intelligent_route</b>		no	string	Enable fax intelligent routing. Set the destination to which the fax will be forwarded when a fax is detected. The following options are available:  • Extension: Sends a fax to the specified extension when a fax is detected. If FXS extension is selected here, the fax will be sent to the FXS extension;  • Fax to E-mail: When the fax is detected, the fax will be sent as an attachment to the specified e-mail address. The e-mail address can be the extension's mailbox or self-identification. Define a mailbox. Note: If you need to send a fax to your mailbox, make sure that the Mailbox in System is set up correctly.
<b>fax_intelligent_route_destination</b>		no	string	Fax destination. The destination of fax intelligent routing can only be a fax extension or an fxs extension with a fax device.
<b>fromdomain</b>	Up to 60 characters	no	string	From domain



				Configure the actual domain where the extension comes from. Can override From field. For example, "trunk.UCM6510.provider.com" is the domain name of the following From header field. sip:1234567@trunk.UCM6510.provider.com
<b>fromuser</b>	Up to 64 characters	no	string	Configure the actual user, Can override From header field. A single ID could register multiple DID. For example "1234567" is the username of the following From header field: sip:1234567@trunk.UCM6510.provider.com
<b>host</b>	Required. Up to 60 characters.	no	string	Enter the IP address or hostname of the VoIP provider's server.
<b>keepcid</b>	no, yes	no	string	Keep Trunk CID  yes: Trunk CID will not be overwritten by host CID. When set to yes, cidnumber is mandatory.
<b>keeporgcid</b>	no, yes	no	string	Keep Original CID  Keep CID from the inbound call when dialing out even if option "Keep Trunk CID" is enabled. Please make sure the peer PBX at the other end supports matching user entry using the "username" field from the authentication line.
<b>ldap_custom_prefix</b>	1-14 characters	no	string	LDAP Dialed Prefix  System will automatically modify the remote contacts by adding this prefix. When ldap_default_outrt is set to self-defined, use this prefix.
<b>ldap_default_outrt</b>	The existing outgoing route id	no	int	LDAP Outbound Rule  Specify an outbound rule. The PBX system will automatically modify the remote contacts by adding prefix parsed from this rule.



				If null and <code>ldap_default_outtrt_prefix</code> is configured, use custom outbound prefix. If null, no outbound prefix is added by default.
<code>ldap_sync_enable</code>	no, yes	no	string	<p>Sync LDAP Enable</p> <p>Provide and update the local LDAP contact to a remote peer automatically (SIP peer trunk only). To ensure successful synchronization, the remote peer needs to enable this service and set the same password as the local UCM.</p>
<code>ldap_sync_p asswd</code>	4-64 alphanumeric characters and underscore (_) only.	no	string	<p>Sync LDAP Password</p> <p>This is the password used for LDAP contact file encryption and decryption. The password must be the same for both peers to ensure successful synchronization.</p>
<code>ldap_sync_p ort</code>	Value between 1- 65534	no	int	<p>Sync LDAP Port</p> <p>The TCP port used by this service.</p>
<code>nat</code>	no, yes	no	string	<p>Enable this setting if the UCM is using public IP and communicating with devices behind NAT.</p> <p>Note 1: This setting will overwrite the Contact header of received messages, which may affect the ability to establish calls when behind NAT. Consider changing settings in PBX Settings-&gt;SIP Settings-&gt;NAT instead.</p> <p>If one is experiencing one-way audio issues, please check the NAT configuration and SIP/RTP ports in the firewall.</p> <p>This configuration needs to be confirmed under real situation because it will change the Contact header field of incoming message in tun affects the</p>



				establishing of calls. Under NAT environment, it requires configuring on NAT interface of SIP settings.
<b>need_register</b>	no, yes	no	string	Whether to register on the external server.
<b>out_maxchans</b>	Value between 0-999	no	int	The number of current outgoing calls over the trunk at the same time. The default value 0 means no limit.
<b>out_of_service</b>	no, yes	no	string	Whether to disable the trunk.
<b>outboundproxy</b>	Domain name or IP address	no	string	Outbound proxy  When configured, the outbound signal will be sent to the proxy instead of the devices directly. The outbound proxy can be domain name or IP address.
<b>pai_number</b>	Up to 60 characters	no	string	PAI Header  The user and name of the PAI header, it is formatted as "name<number>" or "<number>" or "number". If null, use the CID according to the priority.
<b>passthrough_pai</b>	yes, no	no	string	Passthrough PAI Header  If enabled and "Send PAI Header" is disabled, PAI headers will be preserved as calls pass through the UCM.
<b>qualifyfreq</b>	Value between 1-3600	no	int	Configure the frequency (in seconds) to send SIP OPTIONS messages to check the status of the device. Default is 60.
<b>rmv_obp_from_route</b>	no, yes	no	string	Remove OBP from Route  It is used for removing the URI of outbound proxy from Route header field of phone system. If enabled, Route header will be removed from SIP requests. The default setting is "No".



<b>secret</b>	Up to 64 characters	no	string	Password of register trunk
<b>send_ppi</b>	no, yes	no	string	Send PPI Header  Yes: the invite message sent to trunks will contain PPI (P-Preferred-Identity) Header.
<b>tel_uri</b>	disabled, user_phone, enabled	no	string	TEL URI  Enabled: TEL URI and Remove OBP from Route cannot be enabled at the same time. If set to "Enable", "Tel:" will be used instead of "SIP:" in the SIP request.  User_phone: If the phone has an assigned PSTN telephone number, this field should be set. A "User=Phone" parameter will then be attached to the Request-Line and "TO" header in the SIP request to indicate the E.164 number.
<b>transport</b>	udp, tcp, tls	no	string	Configure the SIP Transport method. Using TCP requires local TCP support; using TLS requires local TLS support.
<b>trunk_name</b>	2-64 characters	no	string	Trunk id
<b>use_dod_in_ppi</b>	no, yes	no	string	Configure how to set the PPI number.  When use_dod_in_ppi and use_origcid_in_ppi are both no, set the ppi number by CID option priority.  When use_origcid_in_ppi is yes, use the original CID in the PPI header, if no original CID, use the default number. When use_dod_in_ppi is yes, use the DOD number in the PPI header, if no DOD number, use the default number.
<b>use_origcid_in_ppi</b>	no, yes	no	string	Configure how to set the PPI number.



				When use_dod_in_ppi and use_origcid_in_ppi are both no, set the ppi number by CID option priority.  When use_origcid_in_ppi is yes, use the original CID in the PPI header, if no original CID, use the default number. When use_dod_in_ppi is yes, use the DOD number in the PPI header, if no DOD number, use the default number.
<b>username</b>	Up to 64 characters	no	string	Configure the username to authenticate with the VoIP provider.
<b>use_for_sfu_conf</b>	yes, no	no	string	IPVT Mode Configures the UCM to be used exclusively for IPVT. Warning: This will lock out certain UCM features.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, the status is 0.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## deleteSIPTrunk

The “deleteSIPTrunk” action, allows users to delete an existing trunk.

- Request

```
{
  "request": {
    "action": "deleteSIPTrunk",
    "cookie": "sid23597213-1574672527",
    "trunk": "5"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```



**Table 14: deleteSIPTrunk**

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Trunk</b>		yes	string	Enter the trunk ID to specify the trunk to delete.
<b>Successful response</b>				
<b>Status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		yes	Int	Please see the error code list for more details.

## listAnalogTrunk

The “listAnalogTrunk” action will allow users to get information about the existing analog trunks, such as the trunk’s name, trunk index etc.

**Note:** The needed information, can be defined in the parameter “**options**”. Otherwise all the information will be returned.

- **Request**

```
{
  "request": {
    "action": "listAnalogTrunk",
    "cookie": "sid1838731674-1582859646",
    "options": "trunk_name,trunk_index,chans,out_of_service,trunkmode"
  }
}
```

- **Response**

```
{
  "response": {
    "analogtrunk": [
      {
        "chans": "1",
        "out_of_service": "no",
        "trunk_index": 7,
        "trunk_name": "123",
        "trunkmode": "normal"
      }
    ],
    "page": 1,
    "total_item": 1,
    "total_page": 1
  },
  "status": 0
}
```



**Table 15: listAnalogTrunk**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>Cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Page</b>		no	int	Get extension list by page number.
<b>item_num</b>		no	int	Number of trunks to return for the request. If unspecified, all trunks will be returned.
<b>Sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>Sidx</b>		no	string	Sort by trunk index. This is based on trunk creation date.
<b>options</b>	trunk_name,trunk_index,chan ,out_of_service,trunk mode	no	string	Specify the information to return. Multiple options can be selected and must be separated by commas. If unspecified, all the listed information will be returned.
<b>Successful response</b>				
<b>Status</b>	0	yes	int	Successful response, status is 0
<b>analogtrunk</b>		yes	Json array	Analog trunk list
<b>total_item</b>		yes	int	Total number of items that were returned.
<b>total_page</b>		yes	int	Total number of pages in the list.
<b>Page</b>		yes	int	What page is on.
<b>trunk_index</b>		no	string	Trunk ID
<b>trunk_name</b>		no	string	Trunk name
<b>out_of_service</b>		no	string	Either the trunk is disabled or not
<b>Chans</b>		no	string	Used ports
<b>trunkmode</b>		no	string	Trunk mode
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.



## addAnalogTrunk

The “addAnalogTrunk” action will allow users to create Analog trunks.

- **Request**

```
{
    "request": {
        "chans": 2,
        "trunkgroup": "",
        "action": "addAnalogTrunk",
        "cookie": "sid65643067-1582875896"
        "trunk_name": "1232",
        "trunkmode": "normal",
        "polarityswitch": "no",
        "enablecurrentdisconnectthreshold": "yes",
        "currentdisconnectthreshold": 200,
        "ringtimeout": 8000,
        "rxgain": 0,
        "txgain": 0,
        "usecallerid": "yes",
        "cidmode": 0,
        "fxooutbandcalldialdelay": 0,
        "auto_record": "no",
        "out_of_service": "no",
        "dahdilineselectmode": "ascend",
        "lectype": 0,
        "busydetect": "yes",
        "busycount": 2,
        "congestiondetect": "yes",
        "congestioncount": 2,
        "countrytone": "us",
        "busy": "f1=480@-50,f2=620@-50,c=500/500",
        "congestion": "f1=480@-50,f2=620@-50,c=250/250",
        "dialin_direct": "no",
        "cidstart": "ring",
        "cidsignalling": "bell",
        "faxdetect": "incoming",
        "fax_gateway": "no"
    }
}
```

- **Response**

```
{
    "response": {
        "need_apply": "yes"
    },
    "status": 0
}
```



**Table 16: addAnalogTrunk**

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>trunk_name</b>		yes	string	Trunk name
<b>Auto_record</b>	Yes, no	no	string	Whether to enable automatic recording
<b>Busy</b>		no	string	Busy tone settings
<b>Busydetect</b>	Yes, no	no	string	Whether to enable busy tone detection
<b>busycount</b>		no	int	The number of busy tones the user will hear before hanging up the call when Busy Detection is enabled.
<b>Chans</b>		yes	int	Used ports
<b>Congestion</b>		no	string	Congestion tone settings
<b>Congestioncount</b>		no	int	The number of congestion tones to wait for when Congestion Detection is enabled.
<b>Congestiondetect</b>	Yes, no	no	string	Congestion Detection is used for detecting far end congestion signal.
<b>Countrytone</b>		no	string	Country for tone settings. You can also select Custom and set the values manually.
<b>Currentdisconnec tthreshold</b>	50-3000	no	int	Current hang-up threshold (ms)
<b>Dahdilineselectmo de</b>		no	string	Outgoing line selection
<b>dalin_direct</b>	Yes, no	no	string	Direct callback
<b>Enablecurrentdisc onnectthreshold</b>		no	string	Whether to enable the current hang-up threshold
<b>Fxooutbandcalldia ldelay</b>	0-3000	no	int	FXO dial delay
<b>Fax_gateway</b>	Yes, no	no	string	Either the FXO mode is set to fax gateway or not
<b>Lectype</b>		no	int	Echo cancellation mode
<b>out_maxchans</b>		no	int	Maximum number of calls
<b>out_of_service</b>	Yes, no	no	string	Either the trunk is disabled or not
<b>Polarityonanswer</b>	100 –	no	int	Polarity reversal response delay



<b>delay</b>	2000			
<b>Polarityswitch</b>	Yes, no	no	string	Detect polarity reversal
<b>ringtimeout</b>	4000 – 20000	no	int	ringtimeout
<b>Rxgain</b>	-13 – 12	no	real	RX gain
<b>trunkmode</b>	Normal, SLA	no	string	Trunk mode
<b>Txgain</b>	-13 – 12	no	real	TX gain
<b>Usecallerid</b>	Yes, no	no	string	Whether to enable use callerID option or not
<b>Trunkgroup</b>		yes	string	The default is 0 when adding. The value is the same as trunk index
<b>Cidsignaling</b>		no	string	CallerID scheme
<b>Cidmode</b>		no	int	Caller number combination
<b>Successful response</b>				
<b>Status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		yes	int	Please see the error code list for more details.

## getAnalogTrunk

The “getAnalogTrunk” will allow users to get information about a specific trunk.

- **Request**

```
{
  "request": {
    "action": "getAnalogTrunk",
    "cookie": "sid23597213-1574672527",
    "analogtrunk": "3"
  }
}
```

- **Response**

```
{
  "response": {
    "analogtrunk": {
      "auto_record": "no",
      "busy": "f1=480@-50,f2=620@-50,c=500/500",
      "busycount": 2,
      "busydetect": "yes",
      "callerid": "asreceived",
      "chans": "1",
      "cidmode": 0,
      "cidsignalling": "bell",
      "label": "Analog Trunk 3"
    }
  }
}
```



```

    "cidstart":"ring",
    "congestion":"f1=480@-50,f2=620@-50,c=250/250",
    "congestioncount":2,
    "congestiondetect":"yes",
    "countrytone":"us",
    "currentdisconnectthreshold":200,
    "dahdilineselectmode":"ascend",
    "dialin_direct":"no",
    "echocancel":128,
    "enablecurrentdisconnectthreshold":"yes",
    "fax_gateway":"no",
    "fax_intelligent_route":"no",
    "fax_intelligent_route_destination":null,
    "faxdetect":"incoming",
    "fxooutbandcalldialdelay":0,
    "lectype":0,
    "out_maxchans":0,
    "out_of_service":"no",
    "polarityonanswerdelay":600,
    "polarityswitch":"no",
    "ringtimeout":8000,
    "rxgain":0.0,
    "tmp":7,
    "trunk_index":7,
    "trunk_name":"123",
    "trunkgroup":7,
    "trunkmode":"normal",
    "txgain":0.0,
    "usecallerid":"yes"
}
},
"status":0
}

```

Table 17: getAnalogTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>analogtrunk</b>		yes	int	Trunk id
<b>Successful response</b>				
<b>trunk_name</b>		Yes	string	Trunk name
<b>Auto_record</b>	Yes, no	No	string	Whether to enable automatic recording
<b>Busy</b>		No	string	Busy tone settings
<b>Busydetect</b>	Yes, no	No	string	Whether to enable busy tone detection



<b>busycount</b>		No	int	The number of busy tones the user will hear before hanging up the call when Busy Detection is enabled.
<b>Chans</b>		yes	int	Used ports
<b>Congestion</b>		No	string	Congestion tone settings
<b>Congestioncount</b>		No	int	The number of congestion tones to wait for when Congestion Detection is enabled.
<b>Congestiondetect</b>	Yes, no	No	string	Congestion Detection is used for detecting far end congestion signal.
<b>Countrytone</b>		No	string	Country for tone settings. You can also select Custom and set the values manually.
<b>Currentdisconnec tthreshold</b>	50-3000	No	int	Current hang-up threshold (ms)
<b>Dahdilineselectmo de</b>		No	string	Outgoing line selection
<b>dialin_direct</b>	Yes, no	No	string	Direct callback
<b>Enablecurrentdisc onnectthreshold</b>		No	string	Whether to enable the current hang-up threshold
<b>Fxooutbandcalldia ldelay</b>	0-3000	No	int	FXO dial delay
<b>Fax_gateway</b>	Yes, no	No	string	Either the FXO mode is set to fax gateway or not
<b>Lectype</b>		No	int	Echo cancellation mode
<b>out_maxchans</b>		No	int	Maximum number of calls
<b>out_of_service</b>	Yes, no	No	string	Either the trunk is disabled or not
<b>Polarityonanswer delay</b>	100 – 2000	No	int	Polarity reversal response delay
<b>Polaritieswitch</b>	Yes, no	No	string	Detect polarity reversal
<b>ringtimeout</b>	4000 – 20000	No	int	Ringtimeout
<b>Rxgain</b>	-13 - 12	No	real	RX gain
<b>Trunkmode</b>	Normal, SLA	No	string	Trunk mode
<b>Txgain</b>	-13 – 12	No	real	TX gain
<b>Usecallerid</b>	Yes, no	No	string	Whether to enable use callerID option or not
<b>Trunkgroup</b>		yes	string	The default is 0 when adding. The value is the same as trunk index



<b>Cidsignaling</b>		No	string	CallerID scheme
<b>Cidmode</b>		No	int	Caller number combination
<b>Status</b>	0	Yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		Yes	int	Please see the error code list for more details.

## updateAnalogTrunk

The “updateAnalogTrunk” action will allow users to update existing Analog trunk while specifying the trunk group.

- **Request**

```
{
  "request": {
    "trunkmode": "normal",
    "polarityswitch": "no",
    "enablecurrentdisconnectthreshold": "yes",
    "currentdisconnectthreshold": 200,
    "ringtimeout": 8000,
    "rxgain": 0,
    "txgain": 0,
    "usecallerid": "yes",
    "cidmode": 0,
    "fxooutbandcalldialdelay": 0,
    "auto_record": "no",
    "out_of_service": "no",
    "dahdilineselectmode": "ascend",
    "lectype": 0,
    "busydetect": "yes",
    "busycount": 2,
    "congestiondetect": "yes",
    "congestioncount": 2,
    "countrytone": "us",
    "busy": "f1=480@-50,f2=620@-50,c=500/500",
    "congestion": "f1=480@-50,f2=620@-50,c=250/250",
    "dalin_direct": "no",
    "cidstart": "ring",
    "cidsignalling": "bell",
    "faxdetect": "incoming",
    "fax_gateway": "no",
    "chans": 2,
    "trunkgroup": 7,
    "action": "updateAnalogTrunk",
    "cookie": "sid65643067-1582875896"
  }
}
```

- **Response**

```
{
  "response": {

```



```

        "need_apply":"yes"
    },
    "status":0
}

```

Table 18: updateAnalogTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Trunk_index</b>		Yes	string	Trunk index
<b>Other parameters are the same as addAnalogTrunk action</b>				
<b>Successful response</b>				
<b>Status</b>	0	Yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		Yes	int	Please see the error code list for more details.

## deleteAnalogTrunk

The “deleteAnalogTrunk” action, allows users to delete an existing trunk.

- **Request**

```
{
  "request": {
    "action": "deleteAnalogTrunk",
    "analogtrunk": 7,
    "cookie": "sid1449753552-1582877632"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```



Table 19: deleteAnalogTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>analogtrunk</b>		Yes	int	Enter the trunk ID to specify the trunk to delete.
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		yes	int	Please see the error code list for more details.

## addSLATrunk

The action “addSLATrunk” allows user to enable SLA on an existing analog trunk.

- Request

```
{
  "request": {
    "action": "addSLATrunk",
    "bargeallowed": "yes",
    "cookie": "sid1344581054-1582879094",
    "device": "DAHDI/1",
    "holdaccess": "open",
    "trunk_name": "1232"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 20: addSLATrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Trunk_name</b>		yes	string	Trunk name
<b>Device</b>		no	string	Device port id (DAHDI / 1)



<b>Bargeallowed</b>	Yes, no	no	string	Whether to allow barge or not.
<b>Holdaccess</b>	Open, private	no	string	
<b>Successful response</b>				
<b>Status</b>	0	Yes	Int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		Yes	int	Please see the error code list for more details.

## updateSLATrunk

The “updateSLATrunk” action allows user to update an existing SLA analog trunk.

- **Request**

```
{
  "request": {
    "action": "updateSLATrunk",
    "bargeallowed": "yes",
    "cookie": "sid1344581054-1582879094",
    "device": "DAHDI/1",
    "holdaccess": "open",
    "trunk_index": 7,
    "trunk_name": "43243"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 21: updateSLATrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Trunk_index</b>		yes	string	Trunk index
<b>Other parameters are the same as addSLATrunk</b>				



<b>action</b>				
<b>Successful response</b>				
<b>Status</b>	0	Yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		Yes	int	Please see the error code list for more details.

## listDigitalTrunk

The “listDigitalTrunk” action will allow users to get information about the existing Digital trunks, such as the trunk’s name, trunk index etc.

**Note:** The needed information, can be defined in the parameter “**options**”. Otherwise all the information will be returned.

- **Request**

```
{
  "request": {
    "action": "listDigitalTrunk",
    "options": "trunk_name,type,trunk_index,span,channel,out_of_service",
    "cookie": "sid1271797830-1582880510"
  }
}
```

- **Response**

```
{
  "response": {
    "digital_trunks": [
      {
        "channel": "1-15,17-31",
        "out_of_service": "no",
        "span": 3,
        "trunk_index": "1",
        "trunk_name": "4324",
        "type": "E1 (CPE)"
      }
    ],
    "page": 1,
    "total_item": 1,
    "total_page": 1
  },
  "status": 0
}
```



**Table 22: ListDigitalTrunk**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Page</b>		No	int	Get extension list by page number.
<b>item_num</b>		No	int	Number of trunks to return for the request. If unspecified, all trunks will be returned.
<b>sord</b>	acs,desc	No	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		No	string	Sort by trunk index. This is based on trunk creation date.
<b>options</b>	trunk_name,type,trunk_index,span,channel,out_of_service	no	string	Specify the information to return. Multiple options can be selected and must be separated by commas. If unspecified, all the listed information will be returned.
<b>Successful response</b>				
<b>status</b>	0	yes	Int	Successful response, status is 0
<b>Digital_trunk</b>		yes	Json array	Digital trunk list
<b>total_item</b>		yes	Int	Total number of items that were returned.
<b>total_page</b>		yes	Int	Total number of pages in the list.
<b>page</b>		yes	Int	What page is on.
<b>trunk_index</b>		No	string	Trunk ID
<b>trunk_name</b>		No	string	Trunk name
<b>out_of_service</b>		No	string	Either the trunk is disabled or not
<b>Span</b>		No	string	Used ports
<b>Type</b>		no	string	Pattern type
<b>Channel</b>		No	string	Signaling channel
<b>Failed response</b>				
<b>status</b>		Yes	int	Please see the error code list for more details.



## addDigitalTrunk

The “addDigitalTrunk” action will allow users to create Digital trunks.

- Request

```
{
  "request": {
    "action": "addDigitalTrunk",
    "auto_recording": "yes",
    "callerid": "543543",
    "cidname": "32432",
    "cookie": "sid2074121023-1582881736",
    "dahdilineselectmode": "poll",
    "dialin_direct": "yes",
    "group_index": 1,
    "hidecallerid": "yes",
    "keepcid": "yes",
    "technology": "PRI",
    "trunk_name": "4324"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 23: addDigitalTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>trunk_name</b>		Yes	string	Trunk name
<b>group_index</b>	Yes, no	yes	int	Channel group
<b>Hidecallerid</b>		no	string	Hide caller ID
<b>Keepcid</b>	Yes, no	no	string	
<b>Callerid</b>		no	string	Caller ID
<b>Cidname</b>		no	string	Caller ID name
<b>Auto_recording</b>	Yes, no	no	string	Either to enable auto recording or not.



<b>Dahdilineselectmode</b>	ascend, poll,des end	no	string	Outbound route selection
<b>dalin_direct</b>	Yes, no	no	string	Callback
<b>Technology</b>	PRI, SS7, MFC/R2 , EM, EM_W	no	string	Signaling protocol
<b>Successful response</b>				
<b>Status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		yes	int	Please see the error code list for more details.

## getDigitalTrunk

The “getDigitalTrunk” will allow users to get information about a specific Digital trunk.

- Request

```
{
  "request": {
    "action": "getDigitalTrunk",
    "cookie": "sid1105656270-1582883162",
    "trunk": 1
  }
}
```

- Response

```
{
  "response": {
    "trunk": {
      "auto_recording": "no",
      "callerid": null,
      "cidname": null,
      "dahdilineselectmode": "ascend",
      "dalin_direct": "no",
      "fax_intelligent_route": "no",
      "fax_intelligent_route_destination": null,
      "faxdetect": "yes",
      "group_index": 1,
      "hidecallerid": "no",
      "keepcid": "no",
      "out_of_service": "no",
      "pulsodial": "no",
      "status": "Unavailable",
      "trunk_index": 1,
      "trunk_label": "Digital Trunk 1"
    }
  }
}
```



```

        "trunk_name": "324"
    },
    "status": 0
}

```

Table 24: getDigitalTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Trunk</b>		yes	int	Trunk id
<b>Request parameter</b>				
<b>trunk_name</b>		Yes	string	Trunk name
<b>Status</b>	0	yes	int	
<b>Trunk_name</b>		yes	string	Trunk name
<b>Trunk</b>		yes	int	Trunk id
<b>group_index</b>	Yes, no	yes	int	Channel group
<b>Hidecallerid</b>		no	string	Hide caller ID
<b>Keepcid</b>	Yes, no	no	string	
<b>Callerid</b>		no	string	Caller ID
<b>Cidname</b>		no	string	Caller ID name
<b>Auto_recording</b>	Yes, no	no	string	Either to enable auto recording or not.
<b>Dahdilineselectmode</b>	ascend, poll,des end	no	string	Outbound route selection
<b>dialin_direct</b>	Yes, no	no	string	Callback
<b>Status</b>		no	string	Trunk status
<b>Out_of_service</b>		no	string	Whether the trunk is disabled or not
<b>Failed response</b>				
<b>Status</b>		yes	int	Please see the error code list for more details.



## updateDigitalTrunk

The “updateDigitalTrunk” action will allow users to update existing Analog trunk while specifying the trunk id.

- **Request**

```
{
    "request": {
        "action": "updateDigitalTrunk",
        "auto_recording": "yes",
        "callerid": "543543",
        "cidname": "32432",
        "cookie": "sid1105656270-1582883162",
        "dahdilineselectmode": "poll",
        "dialin_direct": "yes",
        "group_index": 1,
        "hidecallerid": "yes",
        "keepcid": "yes",
        "trunk": 1,
        "trunk_name": "4324"
    }
}
```

- **Response**

```
{
    "response": {
        "need_apply": "yes"
    },
    "status": 0
}
```

Table 25: UpdateDigitalTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		yes	String	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>trunk_name</b>		Yes	String	Trunk name
<b>Trunk</b>		yes	Int	Trunk id
<b>group_index</b>	Yes, no	yes	int	Channel group
<b>Hidecallerid</b>		no	string	Hide caller ID
<b>Keepcid</b>	Yes, no	no	string	
<b>Callerid</b>		no	string	Caller ID
<b>Cidname</b>		no	string	Caller ID name



<b>Auto_recording</b>	Yes, no	no	string	Either to enable auto recording or not.
<b>Dahdilineselectmo de</b>	ascend, poll,des end	no	string	Outbound route selection
<b>dalin_direct</b>	Yes, no	no	string	Callback
<b>Successful response</b>				
<b>Status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		yes	int	Please see the error code list for more details.

## deleteDigitalTrunk

The “deleteDigitalTrunk” action, allows users to delete an existing Digital trunk.

- Request

```
{
  "request": {
    "action": "deleteDigitalTrunk",
    "trunk": 7,
    "cookie": "sid1449753552-1582877632"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 26: deleteDigitalTrunk

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		Yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Trunk</b>		Yes	int	Enter the trunk ID to specify the trunk to delete.
<b>Successful response</b>				
<b>Status</b>	0	Yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>Status</b>		Yes	int	Please see the error code list for more details.



## Outbound Route

### listOutboundRoute

The “listOutboundRoute” allows users to list the existing outbound route such as the route’s name, its permission etc.

**Note:** The needed information, can be defined in the parameter “**options**”.

- Request

```
{
    "request": {
        "action": "listOutboundRoute",
        "cookie": "sid23597213-1574672527",

    "options": "outbound_rt_name,outbound_rt_index,permission,sequence,pattern,out_of_
    _service"
    }
}
```

- Response

```
{
    "response": {
        "outbound_route": [
            {
                "members": [],
                "out_of_service": "no",
                "outbound_rt_index": 2,
                "outbound_rt_name": "test123",
                "pattern": "\_1xxx",
                "permission": "none",
                "sequence": 1
            }
        ],
        "page": 1,
        "total_item": 1,
        "total_page": 1
    },
    "status": 0
}
```

Table 27: listOutboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>Cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.



<b>Page</b>		no	int	Retrieves outbound routes by the page they're on.
<b>item_num</b>		no	int	Extension number on each page, which is, the maximum items of each return. If empty, all members are returned by default.
<b>Sord</b>	acs, desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>Sidx</b>		no	string	Sort according to the index.
<b>options</b>	outbound_rt_na me, outbound_rt_in dex, permission, sequence, pattern, out_of_service	no	string	Specifies the information to retrieve. Several items can be entered and separated by commas. If unspecified, all outbound route information will be retrieved.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>outbound_route</b>		yes	Json array	Outbound route list
<b>total_item</b>		yes	int	Total number of items that were returned.
<b>total_page</b>		yes	int	Total number of pages in the list.
<b>Page</b>		yes	int	Page number that the trunks are on.
<b>outbound_rt_index</b>		no	string	ID of the outbound route. Used for updating and deleting outbound routes.
<b>outbound_rt_name</b>		no	string	Name of the outbound route.
<b>Permission</b>		no	string	Privilege Level  The required permission level to use the outbound route.
<b>sequence</b>		no	string	Trunk type  Peer trunk and register trunk
<b>pattern</b>		no	string	Outbound routing rules. Multiple patterns are separated by commas.
<b>Failed response</b>				



Status		yes	int	Please see the error code list for more details.
--------	--	-----	-----	--

## addOutboundRoute

The “addOutboundRoute” will allow users to add an outbound route for a specific trunk that needs to be defined using the “**default\_trunk\_index**”.

- **Request**

```
{
  "request": {
    "action": "addOutboundRoute",
    "cookie": "sid23597213-1574672527",
    "default_trunk_index": "3",
    "outbound_rt_name": "test123",
    "pattern": [
      {
        "match": "_1xxx"
      }
    ]
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 28: addOutboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>outbound_rt_index</b>		yes	string	The id of the outgoing route, which configuration of the outgoing route is obtained.
<b>outbound_rt_name</b>	2-24 letters/numbers/special characters_- . Mandatory.	yes	string	Outbound route name



<b>default_trunk_index</b>	mandatory	yes	string	Corresponding trunk id used by the outbound route
<b>pattern</b>	mandatory	no	Json array	<p>Available Extensions/Extension Groups after enabling filter on source caller ID.</p> <p>If is extension group, use the id of the group. Multiple should be separated by commas:6000,6001,group-1</p> <p>Outgoing prefix</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as <code>_pattern /* comment */</code>. In patterns, some characters have special meanings:</p> <ul style="list-style-type: none"> <li>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</li> <li>N ... Any digit from 2-9.</li> <li>. ... Wildcard, matching one or more characters.</li> <li>! ... Wildcard, matching zero or more characters immediately.</li> <li>X ... Any digit from 0-9.</li> <li>Z ... Any digit from 1-9.</li> <li>- ... Hyphen is to connect characters and it will be ignored.</li> <li>[] ... Contain special characters ([x], [n], [z]) represent letters x, n, z. Multiple patterns can be one member in json array, which is saved in match. For example, pattern is _1, _2: "pattern": [</li> </ul> <pre> {     "allow":null,     "match":"_1",     "outbound_rt_index":2,     "strip_prefix":null }, {     "allow":null, </pre>



				<pre>         "match":"_2",         "outbound_rt_index":2,         "strip_prefix":null       }     ]   </pre>
<b>permission</b>	none, Internal, local, national, international	no	string	outbound permission.  internal: internal  internal-local: local  internal-local-national: nationwide  internal-local-national-international: international
<b>out_of_service</b>	Yes, no	no	string	Whether to disable the outgoing route
<b>password</b>	4-10 digits. If null, no outbound password is used.	no	string	Outbound password
<b>strip</b>	[0,32]	no	int	Strip  Specify the number of digits that will be stripped from the beginning of the dialed string before the call is placed via the selected trunk. For example, the users will dial 9 as the first digit of a long distance calls. However, 9 should not be sent out via analog lines and the PSTN line. In this case, one digit should be stripped before the call is placed.
<b>prepend</b>	0 to 20 alphanumeric characters or +_*#	no	string	Prepend  Those digits will be prepended after the dialing number is stripped.
<b>enable_wlist</b>	Yes, no	no	string	Enable Filter on Source Caller ID  Set to yes to enable filter on Source Caller ID. If enabled, Caller ID must be in the selected list or match Custom Dynamic Route to make outbound calls.



### Successful response

<b>status</b>	0	yes	int	The response is successful, status is 0
---------------	---	-----	-----	---

### Failed response

<b>status</b>		yes	int	Please see the error code list for more details.
---------------	--	-----	-----	--

## getOutboundRoute

The “getOutboundRoute” allows users to get information about an existing outbound route.

- **Request**

```
{
  "request": {
    "action": "getOutboundRoute",
    "cookie": "sid932531770-1574674600",
    "custom_member": "",
    "default_trunk_index": "",
    "enable_wlist": "",
    "failover_outbound_data": "",
    "limitime": "",
    "members": "",
    "out_of_service": "",
    "outbound_route": "2",
    "outbound_rt_index": "",
    "outbound_rt_name": "",
    "password": "",
    "pattern": "",
    "permission": "",
    "pin_sets_id": "",
    "prepend": "",
    "strip": "",
    "time_mode": ""
  }
}
```

- **Response**

```
{
  "response": {
    "failover_outbound_data": [],
    "outbound_route": {
      "custom_member": null,
      "default_trunk_index": 3,
      "enable_wlist": "no",
      "limitime": null,
      "members": null,
      "out_of_service": "no",
      "outbound_rt_index": 2,
      "outbound_rt_name": "test123",
      "password": null,
      "permission": "none",
      "pin_sets_id": null,
      "prepend": null,
      "strip": 0
    }
  }
}
```



```

        "time_mode":0
    },
"pattern":[
{
    "allow":null,
    "match":"_1xxx",
    "outbound_rt_index":2,
    "strip_prefix":null
}
],
"status":0
}

```

Table 29: getOutboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned
<b>outbound_route</b>		yes	string	Outbound route id, which configuration of the outgoing route is obtained.
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>outbound_route</b>		yes	Json, obj	Configuration of the specified outbound route
<b>outbound_rt_index</b>		yes	string	ID of the outbound route.
<b>outbound_rt_name</b>		no	string	Name of the outbound route
<b>permission</b>	none, Internal, local, national, international	no	string	The required permission level to use the outbound route.  disable  internal: internal  internal-local: local  internal-local-national: national  internal-local-national-international: international
<b>default_trunk_index</b>		no	string	The ID of the trunk used for the outbound route.



<b>out_of_service</b>	Yes, no		string	Disable this Route  Displays whether or not this outbound route is disabled.
<b>password</b>			string	The password required to use the outbound route
<b>strip</b>			int	Strip  The number of digits to remove from the beginning of a dialed number before actually making the call.  Don't think the example is necessary in this case.
<b>prepend</b>			string	Prepend  The digits to add to the beginning of a dialed number before actually making the call.
<b>enable_wlist</b>	Yes, no		string	Enable Filter on Source Caller ID  If enabled, only the selected extensions/extension groups or extensions that satisfy the Custom Dynamic Route pattern can use the outbound route.
<b>members</b>			string	Available Extensions/Extension Groups.  The extensions and extension groups that can use this outbound route when Enable Filter on Source Caller ID is toggled on. Extension groups will be identified by ID.
<b>pattern</b>		no	json array	Outgoing prefix  All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:  [12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed. N ... Any digit from 2-9. . ... Wildcard, matching one or more characters. ! ... Wildcard, matching zero or more characters immediately. X ... Any digit from 0-9. Z ... Any digit from 1-9.



			<ul style="list-style-type: none"> <li>- ... Hyphen is to connect characters and it will be ignored.</li> </ul> <p>[] Contain special characters ([x], [n], [z]) represent letters x, n, z. Multiple patterns can be one member in json array, which is saved in match. For example, pattern is _1, _2: "pattern":[</p> <pre>     {         "allow":null,         "match":"_1",         "outbound_rt_index":2,         "strip_prefix":null     },     {         "allow":null,         "match":"_2",         "outbound_rt_index":2,         "strip_prefix":null     } ]</pre>
<b>failover_o utbound_d ata</b>		json array	<p>Each failover trunk is a member of json array.</p> <p>failover_prepend: failover prepend</p> <p>failover_strip: failover strip</p> <p>failover_trunk_index: failover trunk id</p> <p>failover_trunk_sequence : failover trunk sequence</p> <p>outbound_rt_index : outbound route id</p> <p>For example, the first failover trunk of outbound route 3 is Trunk 4, strip is 2, prepend is 1:</p> <pre> "failover_outbound_data":[     {         "failover_prepPEND":"1",         "failover_strip":2,         "failover_trunk_index":4,         "failover_trunk_sequence":1,         "outbound_rt_index":3     } ]</pre>



<b>Failed response</b>			
<b>status</b>	yes	int	Please see the error code list for more details.

## updateOutboundRoute

The “updateOutboundRoute” allows users to update an existing outbound route.

- **Request**

```
{
  "request": {
    "action": "updateOutboundRoute",
    "cookie": "sid932531770-1574674600",
    "outbound_route": "2",
    "outbound_rt_name": "out1",
    "permission": "internal"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 30: updateOutboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>outbound_rt_index</b>		yes	string	The id of the outgoing route, which configuration of the outgoing route is updated
<b>outbound_rt_name</b>	Required. 2-24 alphanumeric characters, hyphens	no	string	Outgoing route name



	(-), _ or underscore s (_)			
<b>permission</b>	none, Internal, local, national, international	no	string	outbound permission. internal: internal internal-local: local internal-local-national: nationwide internal-local-national-international: international
<b>default_trunk_index</b>	required	no	string	The corresponding trunk id of the outbound route
<b>pattern</b>	required	no	Json array	<p>Pattern</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <ul style="list-style-type: none"> <li>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</li> <li>N ... Any digit from 2-9.</li> <li>. ... Wildcard, matching one or more characters.</li> <li>! ... Wildcard, matching zero or more characters immediately.</li> <li>X ... Any digit from 0-9.</li> <li>Z ... Any digit from 1-9.</li> <li>- ... Hyphen is to connect characters and it will be ignored.</li> </ul> <p>[] Contain special characters ([x], [n], [z]) represent letters x, n, z. For multiple modes, see the array written in json. For example, rules for allowing 2xxx, 12xx outgoing is set as following:</p> <pre>[{"match": "_2xxx/*asadad*/"}, {"match": "_12xx"}]</pre>
<b>out_of_service</b>	Yes, no	no	string	Whether to disable the outgoing route
<b>password</b>	4-10 digits. If not configured, no password	no	string	Outbound password



	will be used for the outbound route.			
<b>strip</b>	0-32	no	int	Strip  Specify the number of digits that will be stripped from the beginning of the dialed string before the call is placed via the selected trunk. For example, the users will dial 9 as the first digit of a long distance calls. However, 9 should not be sent out via analog lines and the PSTN line. In this case, one digit should be stripped before the call is placed.
<b>prepend</b>	0-20 alphanumeric characters or special characters +_#*	no	string	Prepend  The digits that will be prepended after the dialing number is stripped.
<b>enable_wlist</b>	Yes, no	no	string	Enable Filter on Source Caller ID  Set yes to enable filter on Source Caller ID. If enabled, Caller ID must in the selected list or match Custom Dynamic Route to make outbound calls.
<b>members</b>		no	string	Available Extensions/Extension Groups after enabling filter on source caller ID.  If is extension group, use the id of the group. Multiple should be separated by commas:6000,6001,group-1
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## deleteOutboundRoute

The “deleteOutboundRoute” action allows users to delete an existing outbound route.

- **Request**

```
{
  "request": {
    "action": "deleteOutboundRoute",
    "cookie": "sid932531770-1574674600",
    "outbound_route": "2"
  }
}
```



```

    }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 31: deleteOutboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>outbound_route</b>		yes	string	The id of the outbound route, which configuration of the outbound route is obtained
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Inbound Route

### listInboundRoute

The “listInboundRoute” allows users to list the existing inbound routes such as the route’s name, its permission etc.

**Note:** The needed information, can be defined in the parameter “**options**”.

- **Request**

```
{
  "request": {
    "action": "listInboundRoute",
    "cookie": "sid932531770-1574674600",
    "trunk_index": "1"
  }
}
```



- Response

```

        "ivr":null,
        "mode":"",
        "multimedia_conference":null,
        "paginggroup":null,

        "queue":null,
        "ringgroup":null,
        "sequence":"0",
        "start_hour":"",
        "start_min":"",
        "tc":"0",
        "timetype":"0",
        "vmgroup":null,
        "voicemail":null
    }
],
"multimedia_conference":null,
"out_of_service":"no",
"paginggroup":null,
"permission":"internal-local-national-international",
"prepend_inbound_name":null,
"prepend_inbound_name_enable":null,
"prepend_trunk_name":"no",
"queue":null,
"ringgroup":null,
"set_callerid_enable":"no",
"set_callerid_name":"${CALLERID(name)}",
"set_callerid_number":"${CALLERID(num)}",
"trunk_index":1,
"vmgroup":null,
"voicemail":null
}
],
"page":1,
"total_item":1,
"total_page":1
},
"status":0
}

```

Table 32: listInboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.



<b>page</b>		no	int	Retrieves all the inbound routes on the specified page.
<b>item_num</b>		no	int	Retrieves the maximum number of inbound routes to retrieve for the query. If unspecified, all inbound routes will be returned.
<b>sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>trunk_index</b>		yes	int	The ID of the trunk of which to retrieve the inbound routes of.
<b>options</b>	inbound_rt_index, did_pattern_match ,did_pattern_allow ,out_of_service	no	string	See previous comments regarding similar parameter

#### Successful response

<b>status</b>	0	yes	int	The response is successful, status is 0
<b>inbound_route</b>		yes	Json array	List of inbound routes
<b>total_item</b>		yes	int	Total number of items that were returned.
<b>total_page</b>		yes	int	Total number of pages in the list.
<b>page</b>		yes	int	Page number that the trunks are on.
<b>inbound_rt_index</b>		yes	string	ID of the inbound route.
<b>members</b>		yes	Json array	Destination of the inbound route
<b>did_pattern_match</b>		no	string	<p>Callee id pattern match mode of the inbound route</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <ul style="list-style-type: none"> <li>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</li> <li>N ... Any digit from 2-9.</li> <li>. ... Wildcard, matching one or more characters.</li> <li>! ... Wildcard, matching zero or more characters</li> </ul>



				immediately.  X ... Any digit from 0-9.  Z ... Any digit from 1-9.  - ... Hyphen is to connect characters and it will be ignored.  [] Contain special characters ([x], [n], [z]) represent letters x, n, z.
<b>did_pattern_allow</b>		no	string	Callee pattern match
<b>out_of_service</b>	yes, no	no	string	Indicates whether the extension is out of service
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## addInboundRoute

The “addInboundRoute” action allows users to add and configure an inbound route for a specific trunk that needs to be defined using the “trunk\_index”.

- **Request**

```
{
  "request": {
    "account": "1001",
    "action": "addInboundRoute",
    "cookie": "sid1302335489-1574676590",
    "destination_type": "account",
    "dial_trunk": "no",
    "did_pattern_match": "_x.",
    "did_strip": "0",
    "en_multi_mode": "no",
    "enable_fax_detect": "no",
    "enable_inbound_muti_mode": "no",
    "ext_conference": "no",
    "ext_directory": "no",
    "ext_group": "no",
    "ext_local": "yes",
    "ext.paging": "no",
    "ext_queues": "no",
    "fax_intelligent_route": "email",
    "fax_intelligent_route_destination": "1001",
    "inbound_muti_mode": "0",
    "multi_mode": "[ ]",
    "out_of_service": "no",
  }
}
```



```

    "permission": "internal",
    "prepend_trunk_name": "no",
    "set_callerid_enable": "no",
    "set_callerid_name": "${CALLERID(name)}",
    "set_callerid_number": "${CALLERID(num)}",
    "time_condition": "[]",
    "trunk_index": "6",
    "voicemailgroups": "no",
    "voicemenus": "no"
}

```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 33: addInboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>inbound_route</b>		yes	string	Inbound route id, which inbound route to obtain configuration from.
<b>trunk_index</b>		yes	int	Trunk id of inbound route
<b>inbound_suffix</b>		no	string	Inbound Mode Suffix  Dial global inbound feature code + the inbound mode suffix(or dial inbound mode suffix) could switch the mode of the inbound route.  BLF subscription inbound mode suffix can monitor inbound multiple mode.
<b>inbound_muti_mode</b>		no	string	Inbound mode
<b>permission</b>	Internal,	no	string	Inbound permission



	local, national, international			Internal, local, national, international.
<b>enable_inbound_multi_mode</b>		no	string	<p>Inbound multiple mode</p> <p>Can be configured in the "Inbound Routes" page. If enabled, the global inbound mode will be used. Otherwise, the default mode will be used.</p>
<b>set_callerid_number</b>		no	string	<p>Configure the pattern-matching format to manipulate the numbers of incoming callers or to set a fixed callerID number for calls that go through this inbound route.</p> <p><code> \${CALLERID(num)}</code>: Default value which indicates the number of an incoming caller (CID). The CID will not be modified.</p> <p><code> \${CALLERID(num):n}</code>: Skips the first n characters of a CID number, where n is a number.</p> <p><code> \${CALLERID(num):-n}</code>: Takes the last n characters of a CID number, where n is a number.</p> <p><code> \${CALLERID(num):s:n}</code>: Takes n characters of a CID number starting from s+1, where n is a number and s is a character position (e.g. <code> \${CALLERID(num):2:7}</code> takes 7 characters after the second character of a CID number).</p> <p><code> n\${CALLERID(num)}</code>: Prepends n to a CID number, where n is a number.</p>
<b>set_callerid_name</b>			string	<p>Configure the pattern-matching format to customize the callerID name of incoming callers.</p> <p><code> \${CALLERID(name)}</code>: Default value which indicates the name of an incoming caller.</p> <p><code> A\${CALLERID(name)}B</code>: Prepends the character "A" and appends the character "B" to <code> \${CALLERID(name)}</code>.</p> <p>Using a string instead of the pattern-matching syntax</p>



				will set a fixed name to incoming callers.
<b>set_callerid_enable</b>	yes, no	no	string	Manipulate Caller ID (CID) name and/or number within the call flow.
<b>out_of_service</b>	yes, no	no	string	Whether to disable this inbound route
<b>prepend</b>		no	string	Prepend  Those digits will be prepended after the dialing number is stripped.
<b>enable_wlist</b>	yes, no	no	string	Enable Filter on Source Caller ID  Set to yes to enable filter on Source Caller ID. If enabled, Caller ID must in the selected list or match Custom Dynamic Route to make outbound calls.
<b>incoming_prep_end</b>		no	string	Prepend  Those digits will be prepended after the dialing number is stripped.
<b>alertinfo</b>		no	string	Alert info
<b>did_strip</b>		no	string	Strip  Specify the number of digits that will be stripped from the beginning of the dialed string before the call is placed via the selected trunk. For example, the users will dial 9 as the first digit of a long distance calls. However, 9 should not be sent out via analog lines and the PSTN line. In this case, one digit should be stripped before the call is placed.
<b>callback</b>		no	string	Default destination-callback
<b>external_number</b>		no	string	Default destination- external number
<b>directory</b>		no	string	Default destination-dial by name
<b>disa</b>		no	string	Default destination-DISA



<b>fax</b>		no	string	Default destination-Fax
<b>paginggroup</b>		no	string	Default destination-paging/intercom group
<b>queue</b>		no	string	Default destination-Queues
<b>ringgroup</b>		no	string	Default destination-ring group
<b>ivr</b>		no	string	Default destination-IVR
<b>vmgroup</b>		no	string	Default destination-voicemail group
<b>conference</b>		no	string	Default destination-conference rooms
<b>voicemail</b>		no	string	Default destination-voicemail
<b>account</b>		no	string	Default destination-extension
<b>prepend_trunk_name</b>	yes, no	no	string	Prepend trunk name
<b>destination_type</b>		no	string	Default destination
<b>did_pattern_allow</b>		no	string	<p>callerID pattern</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <ul style="list-style-type: none"> <li>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</li> <li>N ... Any digit from 2-9.</li> <li>. ... Wildcard, matching one or more characters.</li> <li>! ... Wildcard, matching zero or more characters immediately.</li> <li>X ... Any digit from 0-9.</li> <li>Z ... Any digit from 1-9.</li> <li>- ... Hyphen is to connect characters and it will be ignored.</li> </ul>



				[] Contain special characters ([x], [n], [z]) represent letters x, n, z.
<b>did_pattern_match</b>	yes	string	Pattern  All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:  [12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.  N ... Any digit from 2-9.  . ... Wildcard, matching one or more characters.  ! ... Wildcard, matching zero or more characters immediately.  X ... Any digit from 0-9.  Z ... Any digit from 1-9.  - ... Hyphen is to connect characters and it will be ignored.  [] Contain special characters ([x], [n], [z]) represent letters x, n, z.  Multiple patterns should be separated by commas. For example the patterns are _1xx, _2xx, the configuration should be:  "did_pattern_allow": "_1xx,_2xx"	
<b>seamless_transfer_did_whitelist</b>	no	string	Extension list allowed to seamless transfer  Allows the selected extension to use this function. If an extension is busy, and a mobile phone is bound to that extension, the mobile phone can pick up calls to that extension.	
<b>ext_directory</b>	yes, no	no	string	Dial by name, add at least one destination for the did destination



<b>ext.paging</b>	yes, no	no	string	Paging/intercom group, add at least one destination for the did destination
<b>ext.group</b>	yes, no	no	string	Ring group, add at least one destination for the did destination
<b>ext.queues</b>	yes, no	no	string	Queues, add at least one destination for the did destination
<b>ext.conference</b>	yes, no	no	string	Conference room, add at least one destination for the did destination
<b>voicemenus</b>	yes, no	no	string	IVR, add at least one destination for the did destination
<b>voicemailgroups</b>	yes, no	no	string	Voicemail groups, add at least one destination for the did destination
<b>ext.fax</b>	yes, no	no	string	Fax, add at least one destination for the did destination
<b>ext.local</b>	yes, no	yes	string	extensions, add at least one destination for the did destination
<b>dial.trunk</b>	yes, no	no	string	Dial trunk
<b>multi.mode</b>		yes	Json obj	Mode1
<b>time.condition</b>		yes	Json obj	Time condition
<b>blocking.did.collect.calls</b>	yes, no	no	string	<p>Block Collect Calls</p> <p>If enabled, collect calls will be blocked. Otherwise calls will be dealt as normal calls.</p> <p>Note: Collect calls are indicated by the header "P-Asserted-Service-Info: service-code=Backward Collect Call, P-Asserted-Service-Info: service-code=Collect Call".</p>
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect



				effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## getInboundRoute

The “getInboundRoute” action allows users to get information about a specific inbound route.

- **Request**

```
{
  "request": {
    "action": "getInboundRoute",
    "cookie": "sid1148042340-1574781519"
  }
}
```

- **Response**

```
{
  "response": {
    "inbound_did_destination": {
      "dial_trunk": "yes",
      "ext_conference": "yes",
      "ext_directory": "yes",
      "ext_fax": "yes",
      "ext_group": "yes",
      "ext_local": "yes",
      "ext_multimedia_conference": "yes",
      "ext.paging": "yes",
      "ext_queues": "yes",
      "inbound_rt_index": 1,
      "voicemailgroups": "yes",
      "voicemenus": "yes"
    },
    "inbound_routes": {
      "account": null,
      "accout_voicemail_out_of_service": "no",
      "alertinfo": null,
      "announcement": null,
      "blocking_did_collect_calls": "no",
      "callback": null,
      "conference": null,
      "destination_type": "byDID",
      "dialdirect": "no",
      "did_pattern_allow": "",
      "did_pattern_match": "_.",
      "did_strip": 0
    }
  }
}
```



```

    "directory":null,
    "disa":null,
    "en_multi_mode":"no",
    "enable_fax_detect":"no",
    "enable_inbound_muti_mode":"no",
    "external_number":null,
    "fax":null,
    "fax_intelligent_route":"email",
    "fax_intelligent_route_destination":null,
    "inbound_muti_mode":0,
    "inbound_rt_index":1,
    "inbound_suffix":null,
    "incoming_prepend":null,
    "ivr":null,
    "multimedia_conference":null,
    "out_of_service":"no",
    "paginggroup":null,
    "permission":"internal-local-national-international",
    "prepend_inbound_name":null,
    "prepend_inbound_name_enable":null,
    "prepend_trunk_name":"no",
    "queue":null,
    "ringgroup":null,
    "seamless_transfer_did_whitelist":"",
    "set_callerid_enable":"no",
    "set_callerid_name": "${CALLERID(name)}",
    "set_callerid_number": "${CALLERID(num)}",
    "trunk_index":1,
    "vmgroup":null,
    "voicemail":null
}
},
"status":0

```

Table 34: getInboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>inbound_route</b>		yes	string	The ID of the inbound route
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0



<b>inbound_routes</b>		yes	Json obj	Configuration of the specified inbound route
<b>inbound_suffix</b>		no	string	<p>Inbound Mode Suffix</p> <p>The suffix of the inbound route. Dialing the global inbound mode feature code + this suffix will toggle the route's inbound mode. BLF subscription inbound mode suffix can monitor inbound multiple mode.</p>
<b>inbound_muti_mode</b>		no	string	The current inbound mode of the inbound route.
<b>permission</b>	Internal, local, national, international	no	string	<p>Privilege Level.</p> <p>Permission level of incoming calls when they are routed to other trunks. This must be equal to or higher than the destination trunk's Privilege Level for calls to be routed successfully.</p>
<b>enable_inbound_muti_mode</b>		no	string	<p>Inbound multiple mode</p> <p>Displays whether or not this route</p>
<b>set_callerid_number</b>		no	string	<p>Configure the pattern-matching format to manipulate the numbers of incoming callers or to set a fixed CallerID number for calls that go through this inbound route.</p> <p><code> \${CALLERID(num)}</code>: Default value which indicates the number of an incoming caller (CID). The CID will not be modified.</p> <p><code> \${CALLERID(num):n}</code>: Skips the first n characters of a CID number, where n is a number.</p> <p><code> \${CALLERID(num):-n}</code>: Takes the last n characters of a CID number, where n is a number.</p> <p><code> \${CALLERID(num):s:n}</code>: Takes n characters of a CID number starting from s+1, where n is a number and s is a character position (e.g. <code> \${CALLERID(num):2:7}</code> takes 7 characters after the second character of a CID number).</p> <p><code> n\${CALLERID(num)}</code>: Prepends n to a CID number, where n is a number.</p>
<b>set_callerid_na</b>			string	Configure the pattern-matching format to customize the CallerID name of incoming



<b>me</b>				callers.  \${CALLERID(name)}: Default value which indicates the name of an incoming caller.  A\${CALLERID(name)}B: Prepends the character "A" and appends the character "B" to \${CALLERID(name)}.  Using a string instead of the pattern-matching syntax will set a fixed name to incoming callers.
<b>set_callerid_enable</b>	yes, no	no	string	Set CallerID Info  Displays whether or not the route will manipulate the CID information of incoming calls based on set_callerid_number and set_callerid_name.
<b>out_of_service</b>	yes, no	no	string	Indicates whether the extension is out of service
<b>prepend</b>		no	string	Prepend  The digits to add to the beginning of a dialed number before actually making the call.
<b>alertinfo</b>		no	string	Alert info
<b>callback</b>		no	string	The number configured for callback when selected as Default Destination.
<b>external_number</b>		no	string	The number configured for external number when selected as Default Destination.
<b>directory</b>		no	string	The number configured for dial by name when configured as Default Destination.
<b>disa</b>		no	string	Default destination-DISA
<b>fax</b>		no	string	Default destination-Fax
<b>paginggroup</b>		no	string	Default destination-paging/intercom group
<b>queue</b>		no	string	Default destination-Queues
<b>ringgroup</b>		no	string	Default destination-ring group
<b>ivr</b>		no	string	Default destination-IVR
<b>vmgroup</b>		no	string	Default destination-voicemail group
<b>conference</b>		no	string	Default destination-conference rooms
<b>voicemail</b>		no	string	Default destination-voicemail
<b>account</b>		no	string	Default destination-extension



<b>prepend_trunk_name</b>	yes, no	no	string	Prepend trunk name
<b>destination_type</b>		no	string	<p>Default Destination</p> <p>The destination that incoming calls will be routed to.</p>
<b>did_pattern_allow</b>		no	string	<p>callerID pattern</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <p>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</p> <p>N ... Any digit from 2-9.</p> <p>. ... Wildcard, matching one or more characters.</p> <p>! ... Wildcard, matching zero or more characters immediately.</p> <p>X ... Any digit from 0-9.</p> <p>Z ... Any digit from 1-9.</p> <p>- ... Hyphen is to connect characters and it will be ignored.</p> <p>[] Contain special characters ([x], [n], [z]) represent letters x, n, z.</p> <p>Multiple patterns should be separated by commas. For example the patterns are _123, _234, the configuration should be:</p> <p>"did_pattern_allow":"_123,_234"</p>
<b>did_pattern_match</b>		yes	string	<p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <p>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</p> <p>N ... Any digit from 2-9.</p> <p>. ... Wildcard, matching one or more characters.</p> <p>! ... Wildcard, matching zero or more characters immediately.</p>



				X ... Any digit from 0-9.  Z ... Any digit from 1-9.  - ... Hyphen is to connect characters and it will be ignored.  [] Contain special characters ([x], [n], [z]) represent letters x, n, z.  Multiple patterns should be separated by commas. For example the patterns are _1xx, _2xx, the configuration should be:  "did_pattern_allow": "_1xx,_2xx"
<b>trunk_index</b>		yes	string	ID of the trunk associated with the inbound route.
<b>seamless_transfer_did_whitelist</b>		no	string	List of extensions allowed to seamless transfer. Allows the selected extension to use this function. If an extension is busy, and a mobile phone is bound to that extension, the mobile phone can pick up calls to that extension.
<b>inbound_did_destination</b>		yes	Json obj	Allowed DID Destination  Extension types that incoming calls can be routed to when "By DID" is selected for Default Destination..
<b>ext_directory</b>		no	string	Dial by name
<b>ext.paging</b>		no	string	Paging/intercom group
<b>ext_group</b>		no	string	Ring group
<b>ext_queues</b>		no	string	queues
<b>ext_conference</b>		no	string	Conference room
<b>voicemenus</b>		no	string	IVR
<b>voicemailgroups</b>		no	string	Voicemail groups
<b>ext_fax</b>		no	string	Fax
<b>ext_local</b>		no	string	extensions
<b>dial_trunk</b>	yes, no	no	string	Dial trunk
<b>blocking_did_collect_calls</b>	yes, no	no	string	Block collect calls  Indicates whether or not collect calls will be blocked.  Note: Collect calls are indicated by the header "P-Asserted-Service-Info: service-



				code=Backward Collect Call, P-Asserted-Service-Info: service-code=Collect Call".
<b>Failed response</b>				

## updateInboundRoute

The “updateInboundRoute” action allows users to update an existing inbound route.

- **Request**

```
{
  "request": {
    "account": "1001",
    "action": "updateInboundRoute",
    "cookie": "sid1058050971-1574689082",
    "destination_type": "account",
    "inbound_route": "3"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 35: updateInboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>inbound_route</b>		yes	string	Inbound route id, which inbound route configuration to obtain
<b>inbound_suffix</b>		no	string	Inbound Mode Suffix  Dial global inbound feature code + the inbound mode suffix(or dial inbound mode suffix) could switch the mode of the inbound route.  BLF subscription inbound mode suffix can monitor inbound multiple mode.



<b>inbound_muti_mode</b>		no	string	Inbound mode
<b>permission</b>	Internal, local, national, international	no	string	Inbound permission  Internal, local, national, international
<b>enable_inbound_muti_mode</b>		no	string	Inbound multiple mode  Can be configured the in the "Inbound Routes" page. If enabled, the global inbound mode will be used. Otherwise, the default mode will be used.
<b>set_callerid_number</b>		no	string	Configure the pattern-matching format to manipulate the numbers of incoming callers or to set a fixed callerID number for calls that go through this inbound route.  \${CALLERID(num)}: Default value which indicates the number of an incoming caller (CID). The CID will not be modified.  \${CALLERID(num):n}: Skips the first n characters of a CID number, where n is a number.  \${CALLERID(num):-n}: Takes the last n characters of a CID number, where n is a number.  \${CALLERID(num):s:n}: Takes n characters of a CID number starting from s+1, where n is a number and s is a character position (e.g. \${CALLERID(num):2:7} takes 7 characters after the second character of a CID number).  n\${CALLERID(num)}: Prepends n to a CID number, where n is a number.
<b>set_callerid_name</b>			string	Configure the pattern-matching format to customize the callerID name of incoming callers.  \${CALLERID(name)}: Default value which indicates the name of an incoming caller.  A\${CALLERID(name)}B: Prepends the character "A" and appends the character "B" to \${CALLERID(name)}.  Using a string instead of the pattern-matching syntax will set a fixed name to incoming callers.
<b>set_callerid_enable</b>	yes, no	no	string	Set callerID info  Manipulate Caller ID (CID) name and/or number within the call.



<b>out_of_service</b>	yes, no	no	string	Whether to disable the inbound route.
<b>prepend</b>		no	string	Prepend  Those digits will be prepended after the dialing number is stripped.
<b>enable_wlist</b>	yes, no	no	string	Enable Filter on Source Caller ID  Set to yes to enable filter on Source Caller ID. If enabled, Caller ID must in the selected list or match Custom Dynamic Route to make outbound calls.
<b>incoming_prepend</b>		no	string	Prepend  Those digits will be prepended after the dialing number is stripped.
<b>alertinfo</b>		no	string	Alert info
<b>did_strip</b>		no	string	Strip  Specify the number of digits that will be stripped. For example, the users will dial 9 as the first digit of a long distance calls. However, 9 should not be sent out via analog lines and the PSTN line. In this case, one digit should be stripped before the call is placed.
<b>callback</b>		no	string	Default destination-callback
<b>external_number</b>		no	string	Default destination- external number
<b>directory</b>		no	string	Default destination-dial by name
<b>disa</b>		no	string	Default destination-DISA
<b>fax</b>		no	string	Default destination-Fax
<b>paginggroup</b>		no	string	Default destination-paging/intercom group
<b>queue</b>		no	string	Default destination-Queues
<b>ringgroup</b>		no	string	Default destination-ring group
<b>ivr</b>		no	string	Default destination-IVR
<b>vmgroup</b>		no	string	Default destination-voicemail group
<b>conference</b>		no	string	Default destination-conference rooms
<b>voicemail</b>		no	string	Default destination-voicemail
<b>account</b>		no	string	Default destination-extension



<b>prepend_trunk_name</b>	yes, no	no	string	Prepend trunk name
<b>destination_type</b>		no	string	Default destination
<b>did_pattern_allow</b>		no	string	<p>callerID pattern</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <ul style="list-style-type: none"> <li>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</li> <li>N ... Any digit from 2-9.</li> <li>. ... Wildcard, matching one or more characters.</li> <li>! ... Wildcard, matching zero or more characters immediately.</li> <li>X ... Any digit from 0-9.</li> <li>Z ... Any digit from 1-9.</li> <li>- ... Hyphen is to connect characters and it will be ignored.</li> <li>[] Contain special characters ([x], [n], [z]) represent letters x, n, z.</li> </ul>
<b>did_pattern_match</b>		yes	string	<p>Pattern</p> <p>All patterns are prefixed by "_" character, but please do not enter more than one "_" at the beginning. All patterns can add comments, such as "_pattern /* comment */". In patterns, some characters have special meanings:</p> <ul style="list-style-type: none"> <li>[12345-9] ... Any digit in the brackets. In this example, 1,2,3,4,5,6,7,8,9 are allowed.</li> <li>N ... Any digit from 2-9.</li> <li>. ... Wildcard, matching one or more characters.</li> <li>! ... Wildcard, matching zero or more characters immediately.</li> <li>X ... Any digit from 0-9.</li> <li>Z ... Any digit from 1-9.</li> <li>- ... Hyphen is to connect characters and it will be</li> </ul>



				<p>ignored.</p> <p>[] Contain special characters ([x], [n], [z]) represent letters x, n, z.</p> <p>Multiple patterns should be separated by commas. For example the patterns are _1xx, _2xx, the configuration should be:</p> <p>"did_pattern_allow":"_1xx,_2xx"</p>
<b>seamless_transfer_did_whitelist</b>		no	string	<p>Extension list allowed to seamless transfer</p> <p>Allows the selected extension to use this function. If an extension is busy, and a mobile phone is bound to that extension, the mobile phone can pick up calls to that extension.</p>
<b>ext_directory</b>		no	string	Dial by name
<b>ext.paging</b>		no	string	Paging/intercom group
<b>ext_group</b>		no	string	Ring group
<b>ext_queues</b>		no	string	queues
<b>ext_conference</b>		no	string	Conference room
<b>voicemenus</b>		no	string	IVR
<b>voicemailgroups</b>		no	string	Voicemail groups
<b>ext_fax</b>		no	string	Fax
<b>ext_local</b>		no	string	extensions
<b>dial_trunk</b>	yes, no	no	string	Dial trunk
<b>multi_mode</b>		yes	Json obj	Mode1
<b>time_condition</b>		yes	Json obj	Time condition
<b>blocking_did_collect_calls</b>	yes, no	no	string	<p>Block Collect Calls</p> <p>If enabled, collect calls will be blocked. Otherwise calls will be dealt as normal calls.</p> <p>Note: Collect calls are indicated by the header "P-Asserted-Service-Info: service-code=Backward Collect Call, P-Asserted-Service-Info: service-code=Collect Call".</p>



<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>need_apply</b>	Yes, no	yes	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## deleteInboundRoute

The “deleteInboundRoute” action allows users to delete an existing inbound route.

- **Request**

```
{
  "request": {
    "action": "deleteInboundRoute",
    "cookie": "sid1058050971-1574689082",
    "inbound_route": "3"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 36: deleteInboundRoute

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>inbound_route</b>		yes	string	The ID of the inbound route
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>need_apply</b>	Yes, no	yes	string	Whether “Apply” is required for the configuration to



				take effect.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## playPromptByOrg

The “playPromptByOrg” actions allows to play the selected prompt in the configured extension.

- **Request**

```
{
  "request": {
    "action": "playPromptByOrg",
    "channel": "1000",
    "cookie": "sid1863069817-1574933211",
    "type": "ivr"
    "variable": "prompt1"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 37: playPromptByOrg

Key Word	Value	Mandatory	Type	Note
<b>Request parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>type</b>	ivr,name_voice, moh	yes	string	Type of audio prompt to play.  ivr: Custom prompt uploaded to IVR.  name_voice: User name prompt for an extension  moh: Music on Hold file
<b>channel</b>		yes	string	Extension to send the prompt to.  Example: If set to 6000, extension 6000 will ring, and the prompt will play upon answering the call



<b>variable</b>		yes	string	File name of the audio prompt  File extension is not necessary. The audio prompt should exist under the specified type.
<b>class</b>		no	string	Music on Hold Playlist  If "moh" is selected as type, enter the MoH playlist name. If unspecified, the Default playlist will be used.
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Voice Call

### listBridgedChannels

The “listBridgedChannels” action will list the bridged channels.

- **Request**

```
{
  "request": {
    "action": "listBridgedChannels",
    "cookie": "sid95569340-1574692824"
  }
}
```

- **Response**

```
{
  "response": {
    "channel": [
      {
        "bridge_id": "7f12ed1a-f03d-4575-a4cb-f986f864c2a2",
        "bridge_time": "2019-11-25 09:43:19",
        "callerid1": "1001",
        "callerid2": "1000",
        "channel1": "PJSIP/1001-00000002",
        "channel2": "PJSIP/1000-00000003",
        "have_send": 1,
        "inbound_trunk_name": "",
        "name1": "1001",
        "name2": "",
        "outbound_trunk_name": "",
        "uniqueid1": "1574692996.4",
        "uniqueid2": "1574692996.4"
      }
    ]
  }
}
```



```

        "uniqueid2":"1574692996.5"
    }
],
"page":1,
"total_item":1,
"total_page":1
},
"status":0
}

```

Table 38: listBridgedChannels

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0.
<b>total_item</b>			int	Current number of established calls.
<b>page</b>			int	Current page is on.
<b>channel</b>			Json array	Detailed list of currently established calls.
<b>channel1</b>			string	<p>The calling channel. If the call is from an extension, the extension number will be displayed. If the call originated from an external source instead, the trunk ID will be displayed instead.</p> <p>This channel name will be used for call control commands.</p>
<b>channel2</b>			string	<p>The called channel. If the call is from an extension, the extension number will be displayed. If the call originated from an external source instead, the trunk ID will be displayed instead.</p> <p>This channel name will be used for call control commands</p>
<b>callerid1</b>			string	Calling number
<b>callerid2</b>			string	Called number
<b>uniqueid1</b>			string	Calling channel identifier
<b>uniqueid2</b>			string	Called channel identifier



<b>bridge_time</b>			string	Duration of the call starting from the time the call was answered.
<b>name1</b>			string	Caller's name
<b>name2</b>			string	Callee's name
<b>bridge_id</b>			string	Bridge ID
<b>inbound_trunk_name</b>			string	Name of the trunk used for the inbound call. If the call is outbound, this field will be empty.
<b>outbound_trunk_name</b>			string	Name of the trunk used for the outbound call. If the call is inbound, this field will be empty.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## listUnBridgedChannels

The “listUnBridgedChannels” action allows users to list the unbridged channels.

- Request

```
{
  "request": {
    "action": "listUnBridgedChannels",
    "cookie": "sid624909538-1574783406"
  }
}
```

- Response

```
{
  "response": {
    "channel": [],
    "page": 1,
    "total_item": 0,
    "total_page": 1
  },
  "status": 0
}
```

Table 39: listUnBridgedChannels

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.



<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0.
<b>total_item</b>			int	Current number of established calls.
<b>page</b>			int	Current page is on.
<b>channel</b>			Json array	Detailed list of current calls waiting to be answered.
<b>channel</b>			string	The calling channel, if carrying trunk_x as an incoming call. Call control can be performed through the channel number, such as forced release.
<b>state</b>			string	Channel status(Up, Ringing...)
<b>service</b>			string	Channel type(macro-dial, queue.....)
<b>callername</b>			string	Caller name
<b>callernum</b>			string	Caller number
<b>connectednum</b>			string	Connected number(when the channel is not bridged, display s)
<b>connectedname</b>			string	Connected name
<b>alloc_time</b>			string	Channel change time(the first one is channel establish time)
<b>inbound_trunk_name</b>			string	The name of trunk from where the unanswered incoming call originated.
<b>outbound_trunk_name</b>			string	The name of the trunk used for the unanswered outgoing call.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Hangup

The “Hangup” action allows users to end an active call.

- **Request**

```
{
  "request": {
    "action": "Hangup",
    "channel": "PJSIP/4000-00000084",
    "cookie": "sid1926227010-1576858973"
  }
}
```



- **Response**

```
{
    "response": {
        "need_apply": "yes"
    },
    "status": 0
}
```

Table 40: Hangup

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel of the call to hang up. This information can be obtained by using the <b>listBridgeChannels</b> command.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Callbarge

The “Callbarge” action allows users to barge into an ongoing call.

- **Request**

```
{
    "request": {
        "action": "callbarge",
        "barge-exten": "4002",
        "channel": "PJSIP/4003-00000087",
        "cookie": "sid1926227010-1576858973",
        "exten": "4003"
    }
}
```

- **Response**

```
{
    "response": {
        "need_apply": "yes"
    },
}
```



```

    "status":0
}

```

Table 41: Callbarge

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel to monitor
<b>exten</b>		yes	string	The extension that will monitor the call.
<b>mode</b>		yes	string	Null: Only listen in on the call. No parties will be able to hear you. W: Talk to the extension being monitored. The other party will not hear you. B: Join in on the call. Both parties will be able to hear and talk to you.
<b>barge-exten</b>		yes	string	Specify whether or not to request permission from an extension before monitoring its call.  Request permission: @1  Don't request permission: @0  Example: To request permission from extension 2002 permission to monitor its ongoing call, enter 2002@1
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Mute

Mute the extension through this interface. That is, the remote party of the extension cannot hear the extension, and the extension can hear the voice of the other party. To unmute, use the unmute interface. The extension will also be automatically unmuted after the call ends.

- **Request**

```

{
  "request": {
    "action": "mute",
    "cookie": "sid612583207-1551962142",
    "channel": "PJSIP/2000-00000013",
  }
}

```



- **Response**

```
{
    "response": {},
    "status": 0
}
```

Table 42: Mute

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel to be muted
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Unmute

Unmute muted calls through the API.

- **Request**

```
{
    "request": {
        "action": "unmute",
        "cookie": "sid612583207-1551962142",
        "channel": "PJSIP/2000-00000013",
    }
}
```

- **Response**

```
{
    "response": {},
    "status": 0
}
```



**Table 43: Unmute**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel to be unmuted.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Hold

This action allows users to hold current call of the specified extension through this interface. Use unhold action if need to resume call.

- Request

```
{
    "request": {
        "action": "hold",
        "cookie": "sid612583207-1551962142",
        "channel": "PJSIP/2000-00000013",
    }
}
```

- Response

```
{
    "response": {},
    "status": 0
}
```

**Table 44: Hold**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel to hold. Users can obtain the channel number by using the <b>listBridgeChannels</b> command.



<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## Unhold

This action allows users to Resume the held call.

- **Request**

```
{
    "request": {
        "action": "unhold",
        "cookie": "sid612583207-1551962142",
        "channel": "PJSIP/2000-00000013",
    }
}
```

- **Response**

```
{
    "response": {},
    "status": 0
}
```

Table 45: Unhold

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel to resume a held call
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## DialExtension

This action allows users to dial local extension.



- Request

```
{
  "request": {
    "action": "dialExtension",
    "callee": "1002",
    "caller": "1005",
    "cookie": "sid2035575025-1556156494"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

Table 46: DialExtension

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>caller</b>		yes	string	Caller number
<b>callee</b>		yes	string	Callee number
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>need_apply</b>	no	no	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## DialOutbound

This application allows users to dial external numbers.

- Request

```
{
  "request": {
    "action": "dialOutbound",
    "outbound": "4002",
  }
}
```



```

        "caller":"1005",
        "cookie":"sid2035575025-1556156494"
    }
}

```

- **Response**

```

{
    "response": {
        "need_apply": "no"
    },
    "status": 0
}

```

Table 47: DialOutbound

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>caller</b>		yes	string	Caller number
<b>outbound</b>		yes	string	Callee number
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>need_apply</b>	no	No	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## CallTransfer

The action allows users to transfer in-call number to another number.

- **Request**

```

{
    "request": {
        "action": "callTransfer",
        "channel": "PJSIP/1008-00000040",
        "extension": "1002",
        "cookie": "sid49474975-1556163431"
    }
}

```



- **Response**

```
{
    "response": {
        "need_apply": "no"
    },
    "status": 0
}
```

Table 48: CallTransfer

Key Word	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>channel</b>		yes	string	The channel that initiates the transfer.
<b>extension</b>		yes	string	The transfer destination.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## TransferNumberInbound

This action allows users to transfer external inbound call that is ringing or in call to other extension.

- **Request**

```
{
    "request": {
        "action": "transferNumberInbound",
        "cookie": "sid1612261872-1556164651",
        "channel": "PJSIP/trunk_4-00000044",
        "callee": "1008"
    }
}
```

- **Response**

```
{
    "response": {
        "need_apply": "no"
    },
    "status": 0
}
```



**Table 49: TransferNumberInbound**

Key Word	Value	Mandatory	Type	Notes
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
channel		yes	string	Channel of the inbound call.
callee		yes	string	The destination that the caller will be transferred to.
<b>Successful response</b>				
status	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
status		yes	int	Please see the error code list for more details.

## TransferNumberOutbound

This action allows users to transfer the caller of an unanswered or ongoing outbound call to another destination

- **Request**

```
{
  "request": {
    "action": "transferNumberOutbound",
    "cookie": "sid1612261872-1556164651",
    "channel": "PJSIP/1008-00000048",
    "outbound": "4002"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

**Table 50: TransferNumberOutbound**

Key Word	Value	Mandatory	Type	Notes
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will



				be returned.
channel		yes	string	Channel of the outbound call.
outbound		yes	string	The destination that the caller will be transferred to.
<b>Successful response</b>				
status	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
status		yes	int	Please see the error code list for more details.

## DialIVR

This action allows users to dial other extension via IVR.

- **Request**

```
{
  "request": {
    "action": "dialIVR",
    "cookie": "sid806817679-1556171969",
    "caller": "1002",
    "ivrnumber": "7000"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

Table 51: DialIVR

Key Word	Value	Mandatory	Type	Notes
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
caller		yes	string	The internal extension that will be used to dial other extensions via the IVR specified for the ivrnumber parameter.



ivrnumber		yes	string	IVR number.
<b>Successful response</b>				
status	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
status		yes	int	Please see the error code list for more details.

## DialIVROutbound

This action will allow users to dial external number via IVR.

- **Request**

```
{
  "request": {
    "action": "dialIVROutbound",
    "cookie": "sid806817679-1556171969",
    "outcaller": "4005",
    "ivrnumber": "7000"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

Table 52: DialIVROutbound

Key Word	Value	Mandatory	Type	Notes
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
outcaller		yes	string	The internal extension that will be used to dial external numbers via the IVR specified for the <b>ivrnumber</b> parameter.
ivrnumber		yes	string	IVR number.
<b>Successful response</b>				
status	0	yes	int	Successful response, status is 0



### Failed response

status		yes	int	Please see the error code list for more details.
--------	--	-----	-----	--

### DialQueue

This action allows users to dial into a queue's extension.

- Request

```
{
  "request": {
    "action": "dialQueue",
    "cookie": "sid1772490686-1556173837",
    "outcaller": "4005",
    "queue": "6500"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

Table 53: DialQueue

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
outcaller		yes	string	Caller number (external extension)
queue		yes	string	Call Queue number
<b>Successful response</b>				
status	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
status		yes	int	Please see the error code list for more details.

### DialRinggroup

This action allows users to dial into a ring group's extension.



- Request

```
{
  "request": {
    "action": "dialRinggroup",
    "cookie": "sid1772490686-1556173837",
    "outcaller": "4005",
    "ringgroup": "6500"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

Table 54: DialRinggroup

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>outcaller</b>		yes	string	Caller number (external extension)
<b>ringgroup</b>		yes	string	Ring Group number
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## DialOutboundTwo

This action allows users to call between two external extensions.

- Request

```
{
  "request": {
    "action": "dialOutboundTwo",
    "cookie": "sid1772490686-1556173837",
    "outcaller": "4005",
    "outcallee": "1506"
  }
}
```



```

    }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "no"
  },
  "status": 0
}
```

Table 55: DialOutboundTwo

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>outcaller</b>		yes	string	Caller number (external extension)
<b>outcallee</b>		yes	string	Callee number(external extension)
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## refuseCall

This action allows users to reject an inbound call and this is doable if the “Call Control option” is enabled in the UCM’s API Configuration page which gives a 3rd party services 10 seconds to manage incoming calls.

- **Request**

```
{
  "request": {
    "action": "refuseCall",
    "cookie": "sid612583207-1551962142",
    "channel": "PJSIP/2000-00000013"
  }
}
```

- **Response**

```
{
  "response": {},
  "status": 0
}
```



**Table 56: refuseCall**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
channel		yes	string	The channel of the call to be rejected.
<b>Successful response</b>				
status	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
status		yes	int	Please see the error code list for more details.

## AcceptCall

This action allows users to accept inbound call, and this is doable if the “Call Control option” is enabled in the UCM’s API Configuration page which gives a 3rd party services 10 seconds to manage incoming calls.

- Request

```
{
  "request": {
    "action": "acceptCall",
    "cookie": "sid612583207-1551962142",
    "channel": "PJSIP/2000-00000013"
  }
}
```

- Response

```
{
  "response": {},
  "status": 0
}
```

**Table 57: AcceptCall**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
channel		yes	string	The channel of the call to be accepted.



### Successful response

<b>status</b>	0	yes	int	Successful response, status is 0
---------------	---	-----	-----	----------------------------------

### Failed response

<b>status</b>		yes	int	Please see the error code list for more details.
---------------	--	-----	-----	--

## Call Queue

### listQueue

The “listQueue” action will allow users to list the available call queues such as the queue’s name, the members etc.

**Note:** The needed information, can be defined in the parameter “**options**”.

- Request

```
{
  "request": {
    "action": "listQueue",
    "cookie": "sid226931826-1574694317",
    "options": "extension,queue_name,strategy,queue_chairmans,members",
    "sidx": "extension",
    "sord": "asc"
  }
}
```

- Response

```
{
  "response": {
    "page": 1,
    "queue": [
      {
        "extension": "6500",
        "members": null,
        "queue_chairmans": null,
        "queue_name": "Test",
        "strategy": "ringall"
      }
    ],
    "total_item": 1,
    "total_page": 1
  },
  "status": 0
}
```



**Table 58: listQueue**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Get queue list by page number.
<b>sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>options</b>	extension, queue_name, strategy, queue_chairmans, members	no	string	Specifies the information to retrieve for each queue. If unspecified, all information will be retrieved.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>total_item</b>		yes	int	Total number of items on the list
<b>total_page</b>		yes	int	Total pages of the list
<b>page</b>		yes	int	What page is on.
<b>extension</b>		no	string	Extension number.
<b>queue_name</b>		no	string	Queue name
<b>strategy</b>	ringall, linear, leastrecent, fewestcalls, random, memory	no	string	Strategy  Ring All: Ring all available agents simultaneously until one agent answers.  Linear: Ring agents in the specified order.  Least Recent: Ring the agent who has been called the least recently.  Fewest Calls: Ring the agent with the fewest completed calls.  Random: Ring a random agent.  Round Robin: Ring agents using round robin schedule with memory.
<b>queue_chairmans</b>		no	string	Queue chairman
<b>members</b>		no	string	Queue agents
<b>Failed response</b>				



<b>status</b>		yes	int	Please see the error code list for more details.
---------------	--	-----	-----	--

## getQueue

The “getQueue” action allows users to get information about a specific call queue.

- **Request**

```
{
  "request": {
    "action": "getQueue",
    "cookie": "sid226931826-1574694317",
    "queue": "6500"
  }
}
```

- **Response**

```
{
  "response": {
    "queue": {
      "account": null,
      "account_el": null,
      "account_t": null,
      "account_v": null,
      "alertinfo": null,
      "announce_frequency": 20,
      "announce_holdtime": "no",
      "announce_position": "no",
      "announcement": null,
      "announcement_el": null,
      "announcement_t": null,
      "announcement_v": null,
      "auto_record": "off",
      "autofill": "yes",
      "createid": "0",
      "custom_dates": null,
      "custom_months": null,
      "custom_prompt": null,
      "custom_welcome_prompt": null,
      "destination_type": "voicemail",
      "destination_type_el": "playsound",
      "destination_type_t": "hangup",
      "destination_type_v": "account",
      "destination_voice_enable": "no",
      "directory": null,
      "directory_el": null,
      "directory_t": null,
      "directory_v": null,
      "group": null,
      "group_el": null,
      "group_t": null,
      "group_v": null,
      "max_size": null,
      "max_size_el": null,
      "max_size_t": null,
      "max_size_v": null,
      "name": null,
      "name_el": null,
      "name_t": null,
      "name_v": null,
      "order": null,
      "order_el": null,
      "order_t": null,
      "order_v": null,
      "parent": null,
      "parent_el": null,
      "parent_t": null,
      "parent_v": null,
      "ring": null,
      "ring_el": null,
      "ring_t": null,
      "ring_v": null,
      "script": null,
      "script_el": null,
      "script_t": null,
      "script_v": null,
      "size": null,
      "size_el": null,
      "size_t": null,
      "size_v": null
    }
  }
}
```



```
"email":null,  
"enable_agent_login":"no",  
"enable_destination":"D",  
"enable_feature":"no",  
"enable_welcome":"no",  
"extension":"6500",  
"external_number":null,  
"external_number_el":null,  
"external_number_t":null,  
"external_number_v":null,  
"hasvoicemail":"no",  
"ivr":null,  
"ivr_el":null,  
"ivr_t":null,  
"ivr_v":null,  
"joinempty":"no",  
"leavewhenempty":"strict",  
"maxlen":0,  
"members":null,  
"musicclass":"default",  
"pagingtype":"once",  
"permission":"internal",  
"pin":null,  
"queue_chairman":null,  
"queue_chairmans":null,  
"queue_dest":null,  
"queue_dest_el":null,  
"queue_dest_t":null,  
"queue_dest_v":null,  
"queue_name":"Test",  
"queue_timeout":60,  
"queuesasvm":"no",  
"replace_caller_id":"no",  
"reportholdtime":"no",  
"retry":5,  
"ringgroup":null,  
"ringgroup_el":null,  
"ringgroup_t":null,  
"ringgroup_v":null,  
"ringtime":30,  
"schedule_clean_enable":"no",  
"starttime":null,  
"strategy":"ringall",  
"tmp":null,  
"tmp2":"6500",  
"vm_extension":null,  
"vm_extension_el":null,  
"vm_extension_t":null,  
"vm_extension_v":null,
```



```

        "vmgroup":null,
        "vmgroup_el":null,
        "vmgroup_t":null,
        "vmgroup_v":null,
        "vmsecret":null,
        "voice_prompt_time":60,
        "vq_callback_enable_timeout":"no",
        "vq_callback_timeout":60,
        "vq_mode":"periodic",
        "vq_outprefix":null,
        "vq_periodic":20,
        "vq_switch":"no",
        "waittime":null,
        "week_date":null,
        "wrapuptime":10
    }
},
"status":0
}

```

Table 59: getQueue

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>queue</b>		yes	string	Specific queue number
<b>Successful response</b>				
<b>queue_name</b>	0	yes	string	Queue name
<b>musicclass</b>		yes	string	The Music on Hold playlist used by the queue.
<b>leavewhenempty</b>		yes	string	<p>Configures whether to disconnect callers in queue based on agent status. There are three options:</p> <p>Yes: Callers will be disconnected from queue if all agents are paused or unavailable.</p> <p>No: Callers will never be disconnected from queue.</p> <p>Strict (Default): Callers will be disconnected from the queue if there are no agents or if all agents are unavailable or paused.</p>
<b>joinempty</b>		yes	string	<p>Configures whether callers can dial into a call queue with no agents. There are three options:</p> <p>Yes: Callers can always dial into a queue even if it is empty.</p>



				No (Default): Callers cannot dial into a queue if all agents are unavailable or paused.  Strict: Callers cannot dial into a queue if there are no agents or if all agents are unavailable or paused.
<b>pin</b>		no	string	PIN for dynamic agent login.  The suffix for dynamic agent login can be configured on the <b>Agent Login</b> page.
<b>ringtime</b>		yes	string	Ring time  Configure the number of seconds to ring an agent. The minimum is 5.
<b>strategy</b>	ringall, linear, leastrecent, fewestcalls, random, memory	yes	string	Strategy  Ring All: Ring all available agents simultaneously until one agent answers.  Linear: Ring agents in the specified order.  Least Recent: Ring the agent who has been called the least recently.  Fewest Calls: Ring the agent with the fewest completed calls.  Random: Ring a random agent.  Round Robin: Ring agents using round robin schedule with memory.
<b>wrapuptime</b>		yes	string	Wrap-up time  Configure the delay time (in seconds) after a completed call before a new call will ring. If set to 0, there will be no delay between call completion and a new call.
<b>maxlen</b>		yes	string	Max Queue Length  Configure the maximum number of calls to be queued at once. This number does not include calls that have been connected to agents, only calls that are still in queue. When this maximum value is exceeded, the caller will hear a busy tone and be forwarded to the configured failover destination. Default value is 0 (unlimited).
<b>reportholdtime</b>	yes, no	no	string	Report wait time  If enabled, the wait time of the caller will be shown to the agent before establishing the call.
<b>auto_record</b>	all, external, internal, off	yes	string	Auto Record  all: All incoming calls to this extension will be recorded.



				Off: This extension's calls will not be recorded.  External: All external calls of the extension will be recorded.  Internal: All internal calls of the extension will be recorded.
<b>queue_timeout</b>		yes	int	Max wait time  Amount of time to keep a caller in queue before rerouting them to the timeout destination.
<b>enable_feature</b>	yes, no	no	string	Enable Feature Codes  If enabled, call queue members can use feature codes to transfer, call park or disconnect calls.
<b>alertinfo</b>	none, ring1,ring2, ring3,ring4, ring5,ring6, ring7,ring8, ring9,ring10,Bellcore-dr1,Bellcore-dr2,Bellcore-dr3,Bellcore-dr4,Bellcore-dr5,custom	no	string	Alert-info  When the extension is callee, the Alert-info header field specifies an alternative ring tone to the callee.
<b>voice_prompt_time</b>		no	int	Destination Prompt Cycle  Configures the amount of time (in seconds) to pass before repeating the audio prompt specified in the <b>custom_promt</b> parameter below to callers. During the prompt, users can press 1 to transfer to the queue's configured Destination Prompt destination. Valid range is 20-200. Default is 20 seconds.
<b>custom_promt</b>		no	string	Custom prompt  When playing a custom prompt, press 1 to enter the failover destination or continue waiting in queue.
<b>retry</b>		no	int	Retry time  Configure the number of seconds to wait before ringing the next agent. The minimum is 1.
<b>replace_caller_id</b>	yes, no	no	string	Replace display name  If enabled, the UCM will replace the caller CID name with Call Queue name.



<b>queue_chairmans</b>		no	string	Queue chairman
<b>enable_agent_login</b>	yes, no	no	string	Enable agent login  Allows agent logins via 3rd party services.  Warning: Enabling this will log out all dynamic agents.
<b>vq_switch</b>	yes, no	no	string	Enable Virtual Queue  If enabled, virtual queue will be available for callers. Virtual queue allows callers to hang up the call while still maintaining their position in line. Callers will be called back when an agent is available to answer them.
<b>vq_mode</b>	yes, no	no	string	Virtual Queue Mode  When in DTMF mode, press 2 to trigger virtual queue. When in timeout mode, virtual queue will be triggered when the configured Virtual Queue Period has passed.
<b>vq_periodic</b>		no	int	Virtual Queue Period  When <b>vq_mode</b> is set to timeout mode and when callers have waited the configured amount time, they will automatically be entered into virtual queue.
<b>vq_outprefix</b>		no	string	Virtual Queue Outbound Prefix  System will add this prefix to dialed numbers when calling back users.
<b>announce_position</b>	yes, no	no	string	Enable Position Announcement  If enabled, the UCM will announce to callers their position in queue.
<b>announce_frequency</b>		no	int	Announcement Interval  The time interval (in seconds) in which positions and estimated wait times will be announced to callers.
<b>destination_type_t</b>	playsound, account, voicemail, queue, ringgroup, vmgroup, ivr, external_number	no	string	Timeout Destination  The destination that the call will be routed to if not answered within the configured queue wait time.
<b>vm_extension_t</b>		no	string	Timeout Destination – Voicemail  Use this as reference for the other “max wait time destination options” commands below.



<b>account_t</b>		no	string	Max wait time-Destination-extension
<b>vmgroup_t</b>		no	string	Max wait time-Destination-voicemail group
<b>ivr_t</b>		no	string	Max wait time-Destination-IVR
<b>ringgroup_t</b>		no	string	Max wait time-Destination-Ring Group
<b>queue_dest_t</b>		no	string	Max wait time-Destination-queues
<b>external_number_t</b>		no	string	Max wait time-Destination-external number
<b>destination_type_v</b>	account, voicemail, queue, ringgroup, vmgroup, ivr, external_n umber	no	string	Destination Prompt Cycle-destination  The caller will be prompted to follow steps and get redirected to the configured failover destination.
<b>vm_extension_v</b>		no	string	Destination Prompt Cycle-destination-voicemail
<b>account_v</b>		no	string	Destination Prompt Cycle-destination-extension
<b>vmgroup_v</b>		no	string	Destination Prompt Cycle-destination-voicemail group
<b>ivr_v</b>		no	string	Destination Prompt Cycle-destination-IVR
<b>ringgroup_v</b>		no	string	Destination Prompt Cycle-destination-Ring group
<b>queue_dest_v</b>		no	string	Destination Prompt Cycle-destination-queues
<b>external_number_v</b>		no	string	Destination Prompt Cycle-destination-external number
<b>destination_voice_enable</b>	yes, no	no	string	Configure whether callers will be prompted to be rerouted to the configured Destination Prompt Cycle destination.
<b>autofill</b>	yes, no	no	string	Configures the queue's call handling behavior. See the UCM user manual for more details. yes: Parallel call handling no: Serial call handling
<b>destination_type_el</b>	playsound, account,	no	string	Failover Destination  The destination that callers will be redirected to



	voicemail, queue, ringgroup, vmgroup, ivr, external_n umber			if the queue is empty or if all agents are unavailable.
<b>vm_extension_el</b>		no	string	Failover Destination-voicemail
<b>account_el</b>		no	string	Failover Destination-extension
<b>vmgroup_el</b>		no	string	Failover Destination-voicemail group
<b>ivr_el</b>		no	string	Failover Destination-IVR
<b>ringgroup_el</b>		no	string	Failover Destination-Ring group
<b>queue_dest_el</b>		no	string	Failover Destination-queues
<b>external_number _el</b>		no	string	Failover Destination-external number
<b>vq_callback_ena ble_timeout</b>	yes, no	no	string	Whether or not a timeout will be set for callers waiting in virtual queue. Upon timeout, callers will be disconnected from virtual queue.
<b>vq_callback_time out</b>		no	int	The virtual queue timeout period.
<b>announce_holdti me</b>	yes, no	no	string	Enable Wait Time Announcement  If enabled, the estimated wait time for the call to get answered will periodically be announced to the caller. Note: Wait time will not be announced if less than one minute.
<b>enable_welcome</b>	yes, no	no	string	Enable welcome prompt
<b>custom_welcome _prompt</b>		no	string	Custom welcome prompt
<b>schedule_clean_ enable</b>	yes, no	no	string	Whether or not to enable periodic agent call count clearing.
<b>extension</b>		no	string	Extension number
<b>starttime</b>		no	string	The time to reset agent call count.
<b>pagingtype</b>	once, daily, week,	no	string	How often to reset agent call count.



	month			
<b>week_date</b>	sun, mon, tue, wed, thu, fri, sat	no	string	The weekday to reset agent call count.
<b>custom_months</b>	jan, feb, mar, apr, may, jun, jul, aug, sep, oct, nov, dec	no	string	The month to reset agent call count.
<b>custom_dates</b>		no	string	The day of the month to reset agent call count.
<b>members</b>		no	string	Static agents
<b>status</b>		yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>	0	yes	int	Please see the error code list for more details.

## updateQueue

The “updateQueue” action allows users to update an existing call queue.

- Request

```
{
  "request": {
    "action": "updateQueue",
    "cookie": "sid225627296-1574851572",
    "members": "1001,1002,1003",
    "queue": "6502",
    "queue_name": "GSTest"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```



**Table 60: updateQueue**

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>queue</b>		yes	string	Queue number
<b>queue_name</b>		yes	string	Successful response, status is 0
<b>musicclass</b>		yes	string	Music on hold
<b>leavewhenempty</b>		yes	string	<p>Configures whether to disconnect callers in queue based on agent status. There are three options:</p> <p>Yes: Callers will be disconnected from queue if all agents are paused or unavailable.</p> <p>No: Callers will never be disconnected from queue.</p> <p>Strict (Default): Callers will be disconnected from the queue if there are no agents or if all agents are unavailable or paused.</p>
<b>joinempty</b>		yes	string	<p>Configures whether callers can dial into a call queue with no agents. There are three options:</p> <p>Yes: Callers can always dial into a queue even if it is empty.</p> <p>No (Default): Callers cannot dial into a queue if all agents are unavailable or paused.</p> <p>Strict: Callers cannot dial into a queue if there are no agents or if all agents are unavailable or paused.</p>
<b>pin</b>		no	string	<p>Dynamic login password</p> <p>The suffix of dynamic login number can be configured for login on [agent login config] page.</p>
<b>ringtime</b>		yes	string	<p>Ring time</p> <p>Configure the number of seconds to ring an agent. The minimum is 5.</p>
<b>strategy</b>	ringall, linear, leastrecent, fewestcalls, random memory	yes	string	<p>Strategy</p> <p>Ring All: Ring all available agents simultaneously until one agent answers.</p> <p>Linear: Ring agents in the specified order.</p> <p>Least Recent: Ring the agent who has been called the least recently.</p> <p>Fewest Calls: Ring the agent with the fewest</p>



				completed calls.  Random: Ring a random agent.  Round Robin: Ring agents using round robin schedule with memory.
<b>wrapuptime</b>		yes	string	Wrap-up time  Configure the delay time (in seconds) after a completed call before a new call will ring. If set to 0, there will be no delay between call completion and a new call.
<b>maxlen</b>		yes	string	Max Queue Length  Configure the maximum number of calls to be queued at once. This number does not include calls that have been connected to agents, only calls that are still in queue. When this maximum value is exceeded, the caller will hear a busy tone and be forwarded to the configured failover destination. Default value is 0 (unlimited).
<b>reportholdtime</b>	yes, no	no	string	Report hold time  If enabled, the hold time of the caller will be shown to the agent before establishing the call.
<b>auto_record</b>	all, external, internal, off	yes	string	Auto Record  all: All incoming calls to this extension will be recorded.  Off: This extension's calls will not be recorded.  External: All external calls of the extension will be recorded.  Internal: All internal calls of the extension will be recorded.
<b>queue_timeout</b>		yes	int	Max wait time  Amount of time to keep a caller in queue.
<b>enable_feature</b>	yes, no	no	string	Enable Feature Codes  If enabled, call queue members can use feature codes to transfer, call park or disconnect.
<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore-dr1, Bellcore-dr2, Bellcore-dr3, Bellcore-dr4, Bellcore-dr5,	no	string	When the extension is callee, the Alert-info header field specifies an alternative ring tone to the callee.



	custom			
<b>voice_prompt_time</b>		no	int	<p>Destination Prompt Cycle</p> <p>Configure the voice prompt cycle (in seconds) of this call queue. When playing the voice prompt, you can press 1 to transfer to failover destination. Default is 20. Effective value between 20 and 2000.</p>
<b>custom_prompt</b>		no	string	<p>Custom prompt</p> <p>When playing a custom prompt, press 1 to enter the failover destination or continue waiting in queue.</p>
<b>retry</b>		no	int	<p>Retry time</p> <p>Configure the number of seconds to wait before ringing the next agent. The minimum is 1.</p>
<b>replace_caller_id</b>	yes, no	no	string	<p>Replace display name</p> <p>If enabled, the UCM will replace the caller display name with Call Queue name.</p>
<b>queue_chairmans</b>		no	string	Queue chairman
<b>enable_agent_login</b>	yes, no	no	string	<p>Enable agent login</p> <p>Enabling agent login will cause the dynamic agents to be unavailable.</p>
<b>vq_switch</b>	yes, no	no	string	<p>Enable Virtual Queue</p> <p>If enabled, system will enable a virtual queue for users waiting in queue.</p>
<b>vq_mode</b>	yes, no	no	string	<p>Virtual Queue Mode</p> <p>When in DTMF mode, press 2 to trigger virtual queue. When in timeout mode, virtual queue will be triggered when enough time has passed..</p>
<b>vq_periodic</b>		no	int	<p>Virtual Queue Period</p> <p>When in timeout mode, when incoming users' waiting time has reached this period, the system would trigger virtual queue service for the user. Default value is 20. Effective value is between 5-2000.</p>
<b>vq_outprefix</b>		no	string	<p>Virtual Queue Outbound Prefix</p> <p>System will add this prefix to dialed numbers when calling back users.</p>
<b>announce_position</b>	yes, no	no	string	<p>Enable Position Announcement</p> <p>If enabled, the system will inform callers waiting in the queue of their positions in line.</p>



<b>announce_frequency</b>		no	int	Announcement Interval  The interval (seconds) at which caller positions and estimated wait times will be announced.
<b>destination_type_t</b>	playsound, account, voicemail, queue, ringgroup, vmgroup, ivr, external_number	no	string	Max wait time-destination  The call will be routed to this destination if no one in this queue answers the call.
<b>vm_extension_t</b>		no	string	Max wait time-Destination-voicemail
<b>account_t</b>		no	string	Max wait time-Destination-extension
<b>vmgroup_t</b>		no	string	Max wait time-Destination-voicemail group
<b>ivr_t</b>		no	string	Max wait time-Destination-IVR
<b>ringgroup_t</b>		no	string	Max wait time-Destination-Ring Group
<b>queue_dest_t</b>		no	string	Max wait time-Destination-queues
<b>external_number_t</b>		no	string	Max wait time-Destination-external number
<b>destination_type_v</b>	account, voicemail, queue, ringgroup, vmgroup, ivr, external_number	no	string	Destination Prompt Cycle-destination  The caller will be prompted to follow steps and get redirected to the configured failover destination.
<b>vm_extension_v</b>		no	string	Destination Prompt Cycle-destination-voicemail
<b>account_v</b>		no	string	Destination Prompt Cycle-destination-extension
<b>vmgroup_v</b>		no	string	Destination Prompt Cycle-destination-voicemail group
<b>ivr_v</b>		no	string	Destination Prompt Cycle-destination-IVR
<b>ringgroup_v</b>		no	string	Destination Prompt Cycle-destination-Ring group
<b>queue_dest_v</b>		no	string	Destination Prompt Cycle-destination-queues



<b>external_number_v</b>		no	string	Destination number Prompt Cycle-destination-external
<b>destination_voice_enable</b>	yes, no	no	string	Whether to enable destination prompt cycle
<b>autofill</b>	yes, no	no	string	autofill
<b>destination_type_el</b>	playsound, account, voicemail, queue, ringgroup, vmgroup, ivr, external_number	no	string	Failover Destination  Callers will be redirected to this destination if the queue is empty or if all agents are not logged in.
<b>vm_extension_el</b>		no	string	Failover Destination-voicemail
<b>account_el</b>		no	string	Failover Destination-extension
<b>vmgroup_el</b>		no	string	Failover Destination-voicemail group
<b>ivr_el</b>		no	string	Failover Destination-IVR
<b>ringgroup_el</b>		no	string	Failover Destination-Ring group
<b>queue_dest_el</b>		no	string	Failover Destination-queues
<b>external_number_el</b>		no	string	Failover Destination-external number
<b>vq_callback_enable_timeo ut</b>	yes, no	no	string	Enable Virtual Queue Timeout
<b>vq_callback_timeout</b>		no	int	Virtual queue Write Timeout
<b>announce_holdtime</b>	yes, no	no	string	Enable Wait Time Announcement  If enabled, the estimated wait time for the call to get answered will periodically be announced to the caller. Note: Wait time will not be announced if less than one minute.
<b>enable_welcome</b>	yes, no	no	string	Enable welcome prompt
<b>custom_welcome_prompt</b>		no	string	Custom welcome prompt



<b>schedule_clean_enable</b>	yes, no	no	string	Enable reset agent counting Enable this feature to specify the cycle of resetting agent counting.
<b>extension</b>		no	string	Extension number
<b>starttime</b>		no	string	Start time of reset agent counting
<b>pagingtype</b>	once, daily, week, month	no	string	Repeat (reset agent counting cycle type)
<b>week_date</b>	Sun ,mon, tue, wed, thu, fri, sat	no	string	Repeat (reset agent counting cycle type)-specific weekday under weekly type
<b>custom_months</b>	jan, feb, mar, apr, may, jun, jul, aug, sep, oct, nov, dec	no	string	Repeat (reset agent counting cycle type)-specific month under monthly type
<b>custom_dates</b>		no	string	Repeat (reset agent counting cycle type)-specific date under monthly type
<b>members</b>		no	string	Static agents
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## addQueue

The “addQueue” action will allow users to add a call queue.

- **Request**

```
{
  "request": {
    "action": "addQueue",
    "cookie": "sid225627296-1574851572",
    "extension": "6502",
    "members": "1001,1002",
    "queue_chairmans": "1001",
    "queue_name": "test",
    "strategy": "ringall"
  }
}
```



}

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 61: addQueue

Key Word	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>extension</b>		yes	string	Queue number
<b>queue_name</b>		yes	string	Successful response, status is 0
<b>musicclass</b>		no	string	Music on hold
<b>leavewhenempty</b>		yes	string	<p>Configures whether to disconnect callers in queue based on agent status. There are three options:</p> <p>Yes: Callers will be disconnected from queue if all agents are paused or unavailable.</p> <p>No: Callers will never be disconnected from queue.</p> <p>Strict (Default): Callers will be disconnected from the queue if there are no agents or if all agents are unavailable or paused.</p>
<b>joinempty</b>		yes	string	<p>Configures whether callers can dial into a call queue with no agents. There are three options:</p> <p>Yes: Callers can always dial into a queue even if it is empty.</p> <p>No (Default): Callers cannot dial into a queue if all agents are unavailable or paused.</p> <p>Strict: Callers cannot dial into a queue if there are no agents or if all agents are unavailable or paused.</p>
<b>pin</b>		no	string	<p>Dynamic login password</p> <p>The suffix of dynamic login number can be configured for login on [agent login config]</p>



				page.
<b>ringtime</b>		yes	string	<p>Ring time</p> <p>Configure the number of seconds to ring an agent. The minimum is 5.</p>
<b>strategy</b>	ringall, linear, leastrecent, fewestcalls, random, memory	yes	string	<p>Strategy</p> <p>Ring All: Ring all available agents simultaneously until one agent answers.</p> <p>Linear: Ring agents in the specified order.</p> <p>Least Recent: Ring the agent who has been called the least recently.</p> <p>Fewest Calls: Ring the agent with the fewest completed calls.</p> <p>Random: Ring a random agent.</p> <p>Round Robin: Ring agents using round robin schedule with memory.</p>
<b>wrapuptime</b>		yes	string	<p>Wrap-up time</p> <p>Configure the delay time (in seconds) after a completed call before a new call will ring. If set to 0, there will be no delay between call completion and a new call.</p>
<b>maxlen</b>		yes	string	<p>Max Queue Length</p> <p>Configure the maximum number of calls to be queued at once. This number does not include calls that have been connected to agents, only calls that are still in queue. When this maximum value is exceeded, the caller will hear a busy tone and be forwarded to the configured failover destination. Default value is 0 (unlimited).</p>
<b>reportholdtime</b>	yes, no	no	string	<p>Report hold time</p> <p>If enabled, the hold time of the caller will be shown to the agent before establishing the call.</p>
<b>auto_record</b>	all, external, internal, off	yes	string	<p>Auto Record</p> <p>all: All incoming calls to this extension will be recorded.</p> <p>Off: This extension's calls will not be recorded.</p> <p>External: All external calls of the extension will be recorded.</p> <p>Internal: All internal calls of the extension will be recorded.</p>
<b>queue_timeout</b>		yes	int	<p>Max wait time</p> <p>Amount of time to keep a caller in queue.</p>



<b>enable_feature</b>	yes, no	no	string	Enable Feature Codes  If enabled, call queue members can use feature codes to transfer, call park or disconnect.
<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore-dr1, Bellcore-dr2, Bellcore-dr3, Bellcore-dr4, Bellcore-dr5, custom	no	string	Alert info.
<b>voice_prompt_time</b>		no	int	Destination Prompt Cycle  Configure the voice prompt cycle (in seconds) of this call queue. When playing the voice prompt, you can press 1 to transfer to failover destination. Default is 20. Effective value between 20 and 2000.
<b>custom_prompt</b>		no	string	Custom prompt  When playing a custom prompt, press 1 to enter the failover destination or continue waiting in queue.
<b>retry</b>		no	int	Retry time  Configure the number of seconds to wait before ringing the next agent. The minimum is 1.
<b>replace_caller_id</b>	yes, no	no	string	Replace display name  If enabled, the UCM will replace the caller display name with Call Queue name.
<b>queue_chairmans</b>		no	string	Queue chairman
<b>enable_agent_login</b>	yes, no	no	string	Enable agent login  Enabling agent login will cause the dynamic agents to be unavailable.
<b>vq_switch</b>	yes, no	no	string	Enable Virtual Queue  If enabled, system will enable a virtual queue for users waiting in queue.
<b>vq_mode</b>	yes, no	no	string	Virtual Queue Mode  When in DTMF mode, press 2 to trigger virtual queue. When in timeout mode, virtual queue will be triggered when enough time has



				passed..
<b>vq_periodic</b>		no	int	<p>Virtual Queue Period</p> <p>When in timeout mode, when incoming users' waiting time has reached this period, the system would trigger virtual queue service for the user. Default value is 20. Effective value is between 5-2000.</p>
<b>vq_outprefix</b>		no	string	<p>Virtual Queue Outbound Prefix</p> <p>System will add this prefix to dialed numbers when calling back users.</p>
<b>announce_position</b>	yes, no	no	string	<p>Enable Position Announcement</p> <p>If enabled, the system will inform callers waiting in the queue of their positions in line.</p>
<b>announce_frequency</b>		no	int	<p>Announcement Interval</p> <p>The interval (seconds) at which caller positions and estimated wait times will be announced.</p>
<b>destination_type_t</b>	playsound, account, voicemail, queue, ringgroup, vmgroup, ivr, external_number	no	string	<p>Max wait time-destination</p> <p>The call will be routed to this destination if no one in this queue answers the call.</p>
<b>vm_extension_t</b>		no	string	Max wait time-Destination-voicemail
<b>account_t</b>		no	string	Max wait time-Destination-extension
<b>vmgroup_t</b>		no	string	Max wait time-Destination-voicemail group
<b>ivr_t</b>		no	string	Max wait time-Destination-IVR
<b>ringgroup_t</b>		no	string	Max wait time-Destination-Ring Group
<b>queue_dest_t</b>		no	string	Max wait time-Destination-queues
<b>external_number_t</b>		no	string	Max wait time-Destination-external number
<b>destination_type_v</b>	account, voicemail, queue, ringgroup, vmgroup, ivr,	no	string	<p>Destination Prompt Cycle-destination</p> <p>The caller will be prompted to follow steps and get redirected to the configured failover destination.</p>



	external_number					
<b>vm_extension_v</b>		no	string	Destination voicemail	Prompt	Cycle-destination-
<b>account_v</b>		no	string	Destination extension	Prompt	Cycle-destination-
<b>vmgroup_v</b>		no	string	Destination voicemail group	Prompt	Cycle-destination-
<b>ivr_v</b>		no	string	Destination Prompt	Cycle-destination-IVR	
<b>ringgroup_v</b>		no	string	Destination	Prompt	Cycle-destination-Ring group
<b>queue_dest_v</b>		no	string	Destination	Prompt	Cycle-destination-queues
<b>external_number_v</b>		no	string	Destination	Prompt	Cycle-destination-external number
<b>destination_voice_enable</b>	yes, no	no	string	Whether to enable destination prompt cycle		
<b>autofill</b>	yes, no	no	string	autofill		
<b>destination_type_el</b>	account, voicemail, queue, ringgroup, vmgroup, ivr, external_number	no	string	Failover Destination Callers will be redirected to this destination if the queue is empty or if all agents are not logged in.		
<b>vm_extension_el</b>		no	string	Failover Destination-voicemail		
<b>account_el</b>		no	string	Failover Destination-extension		
<b>vmgroup_el</b>		no	string	Failover Destination-voicemail group		
<b>ivr_el</b>		no	string	Failover Destination-IVR		
<b>ringgroup_el</b>		no	string	Failover Destination-Ring group		
<b>queue_dest_el</b>		no	string	Failover Destination-queues		
<b>external_number_el</b>		no	string	Failover Destination-external number		



<b>vq_callback_enable_timeout</b>	yes, no	no	string	Enable Virtual Queue Timeout
<b>vq_callback_timeout</b>		no	int	Virtual queue Write Timeout
<b>announce_holdtime</b>	yes, no	no	string	Enable Wait Time Announcement  If enabled, the estimated wait time for the call to get answered will periodically be announced to the caller. Note: Wait time will not be announced if less than one minute.
<b>enable_welcome</b>	yes, no	no	string	Enable welcome prompt
<b>custom&gt;Welcome_prompt</b>		no	string	Custom welcome prompt
<b>schedule_clean_enable</b>	yes, no	no	string	Enable reset agent counting  Enable this feature to specify the cycle of resetting agent counting.
<b>starttime</b>		no	string	Start time of reset agent counting
<b>pagingtype</b>	once, daily, week, month	no	string	repeat (reset agent counting cycle type)
<b>week_date</b>	sun, mon, tue, wed, thu, fri, sat	no	string	Repeat (reset agent counting cycle type)-specific weekday under weekly type
<b>custom_months</b>	jan, feb, mar, apr, may, jun, jul, aug, sep, oct, nov, dec	no	string	Repeat (reset agent counting cycle type)-specific month under monthly type
<b>custom_dates</b>		no	string	Repeat (reset agent counting cycle type)-specific date under monthly type
<b>members</b>		no	string	Static agents
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.



## deleteQueue

The “deleteQueue” allows users to delete an existing queue.

- **Request**

```
{
  "request": {
    "action": "deleteQueue",
    "cookie": "sid1095249077-1574756325",
    "queue": "6502"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 62: deleteQueue

Keyword	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>queue</b>		yes	int	Queue number
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether “Apply” is required for the configuration to take effect

## loginLogoffQueueAgent

The “loginLogoffQueueAgent” action allows users to login or logoff static agents.

- **Request**

```
{
  "request": {
    "action": "loginLogoffQueueAgent",
    "cookie": "sid1632521748-1574853548",
    "extension": "6502",
    "interface": "1001",
  }
}
```



```

        "operatetype":"logoff"
    }
}

```

- **Response**

```
{
    "response":{},
    "status":0
}
```

Table 63: loginLogoffQueueAgent

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>operatetype</b>	login, logoff	yes	string	Operation type
<b>interface</b>		yes	string	Agent number
<b>extension</b>		yes	string	Queue number
<b>Successful response</b>				
<b>Status</b>	0	yes	int	Successful response, status is 0

## pauseUnpauseQueueAgent

The “pauseUnpauseQueueAgent” action allows users to pause or unpause static agents.

- **Request**

```
{
    "request":{
        "action":"pauseUnpauseQueueAgent",
        "cookie":"sid1632521748-1574853548",
        "interface":"1002",
        "operatetype":"pause"
    }
}
```

- **Response**

```
{
    "response":{
        "need_apply":"yes"
    },
}
```



```

    "status":0
}

```

Table 64: pauseUnpauseQueueAgent

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>operatetype</b>	pause, unpause	yes	string	Operation type
<b>interface</b>		yes	string	Agent number
<b>extension</b>		no	string	Queue number
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect

## Paging/Intercom

### addPaginggroup

The “addPaginggroup” will allow users to add a paging group.

- **Request**

```

{
  "request": {
    "action": "addPaginggroup",
    "cookie": "sid1095249077-1574756325",
    "extension": "8004",
    "members": "1000,1001,1002",
    "number_allowed": "1000",
    "paginggroup_name": "8004",
    "paginggroup_type": "1way"
  }
}

```

- **Response**

```

{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}

```



}

Table 65: addPaginggroup

Keyword	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>extension</b>		yes	string	extension
<b>paginggroup_name</b>		yes	string	Paging group name
<b>paginggroup_type</b>	3way, 2way, 1way, announcement	yes	string	Type:  1way: 1-way paging 2way: 2-way intercom 3way: Multicast paging announcement: announcement paging
<b>custom_prompt</b>		no	string	Custom Prompt
<b>replace_caller_id</b>	yes, no	no	string	Replace Display Name  If enabled, the UCM will replace the caller display name with Paging/Intercom name.
<b>multicast_ip</b>		no	string	Multicast IP Address  The allowed multicast IP address range is 224.0.1.0 - 238.255.255.255.
<b>multicast_port</b>		no	int	port
<b>limitime</b>		no	int	Maximum Call Duration  In seconds. Default is 0 means no limit.
<b>custom_date</b>		no	string	date
<b>time</b>		no	string	time, HH:MM
<b>enable</b>	yes, no	no	string	Enable. Whether to enable announcement paging.
<b>members</b>		no	string	Members that need paging/intercom
<b>paginggroup</b>		yes	string	Paging group number
<b>old_multicast_ip</b>		no	string	Multicast ip address set before  The allowed multicast IP address range is 224.0.1.0 - 238.255.255.255.
<b>old_multicast_port</b>		no	string	Multicast port set before



<b>number_allowed</b>		no	string	Paging/Intercom Whitelist  Only selected extensions will be able to initiate paging/intercom calls. If no extension is selected, all extensions will be able to initiate paging/intercom calls.
<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## listPaginggroup

The "listPaginggroup" allows users to list the existing paging group.

- **Request**

```
{
  "request": {
    "action": "listPaginggroup",
    "cookie": "sid1095249077-1574756325",
    "page": "1",
    "sidx": "extension",
    "sord": "asc"
  }
}
```

- **Response**

```
{
  "response": {
    "page": 1,
    "paginggroup": [
      {
        "custom_date": "2018-08-01",
        "custom_prompt": null,
        "enable": "yes",
        "extension": "8004",
        "holiday": null,
        "limitime": 0,
        "members": "1000,1001,1002",
        "multicast_ip": "null",
        "multicast_port": "null",
        "paginggroup_name": "8004",
        "paginggroup_type": "1way",
        "replace_caller_id": "no",
        "time": "00:00",
        "update_time": "2018-08-01T10:45:00"
      }
    ]
  }
}
```



```

        "tmp":"8004"
    }
],
"total_item":1,
"total_page":1
},
"status":0
}

```

Table 66: listPaginggroup

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Get extension list by page number.
<b>sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>item_num</b>		no	int	Extension number on each page, which is, the maximum items of each return. If empty, all members are returned by default.
<b>options</b>	paginggroup_name,paginggroup_type,extension,custom_prompt,replace_caller_id,multicast_ip,multicast_port,limitime,custom_date,time,enable,members	no	string	Specify obtaining options. Multiple can be set, separated by commas. If empty, all options are returned by default.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Total number of items on the list
<b>total_item</b>		yes	int	Total pages of the list
<b>total_page</b>		yes	int	What page is on.
<b>page</b>		yes	int	Extension number.
<b>extension</b>		no	string	extension
<b>paginggroup_</b>		no	string	Paging/intercom group name



name				
<b>paginggroup_type</b>	3way, 2way, 1way, announcement	no	string	Type:  1way: 1-way paging 2way: 2-way intercom 3way: Multicast paging announcement: announcement paging
<b>custom_prompt</b>		no	string	Custom Prompt
<b>replace_caller_id</b>	yes, no	no	string	Replace Display Name  If enabled, the UCM will replace the caller display name with Paging/Intercom name.
<b>multicast_ip</b>		no	string	Multicast IP Address  The allowed multicast IP address range is 224.0.1.0 - 238.255.255.255.
<b>multicast_port</b>		no	int	port
<b>limitime</b>		no	int	Maximum Call Duration  The maximum amount of time a paging call can be in seconds. Default is 0 (no limit).
<b>custom_date</b>		no	string	date
<b>time</b>		no	string	Time in HH:MM format.
<b>enable</b>	yes, no	no	string	Whether or not to enable the announcement page.
<b>members</b>		no	string	The members that will be paged.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## getPaginggroup

The “getPaginggroup” action allows users to get a specific paging group.

- Request

```
{
  "request": {
    "action": "getPaginggroup",
    "cookie": "sid1095249077-1574756325",
    "paginggroup": "8004"
  }
}
```

- Response



```
{
    "response": {
        "paginggroup": {
            "custom_date": "2018-08-01",
            "custom_prompt": null,
            "enable": "yes",
            "extension": "8004",
            "holiday": null,
            "limitime": 0,
            "members": "1000,1001,1002",
            "multicast_ip": "null",
            "multicast_port": "null",
            "number_allowed": "1000",
            "paginggroup_name": "8004",
            "paginggroup_type": "1way",
            "replace_caller_id": "no",
            "time": "00:00",
            "tmp": "8004"
        }
    },
    "status": 0
}
```

Table 67: getPaginggroup

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>paginggroup</b>		yes	string	Paging/intercom group number
<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>extension</b>		yes	string	extension
<b>paginggroup_name</b>		yes	string	Paging group name
<b>paginggroup_type</b>	3way, 2way, 1way, announcement	yes	string	Type:  1way: 1-way paging 2way: 2-way intercom 3way: Multicast paging announcement: announcement paging
<b>custom_prompt</b>		no	string	Custom Prompt



<b>replace_caller_id</b>	yes, no	no	string	Replace Display Name If enabled, the UCM will replace the caller display name with Paging/Intercom name.
<b>multicast_ip</b>		no	string	Multicast IP Address The allowed multicast IP address range is 224.0.1.0 - 238.255.255.255.
<b>multicast_port</b>		no	int	port
<b>limitime</b>		no	int	Maximum Call Duration In seconds. Default is 0 means no limit.
<b>custom_date</b>		no	string	date
<b>time</b>		no	string	time, HH:MM
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## updatePaginggroup

The “updatePaginggroup” action allows users to update an existing paging group.

- Request

```
{
  "request": {
    "action": "updatePaginggroup",
    "cookie": "sid1381890074-1574854661",
    "members": "1003",
    "paginggroup": "8005",
    "paginggroup_type": "2way"
  }
}
```

- Response

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 68: updatePaginggroup

Keyword	Value	Mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error



				code -6 will be returned.
<b>extension</b>		yes	string	extension
<b>paginggroup_name</b>		yes	string	Paging group name
<b>paginggroup_type</b>	3way, 2way, 1way, annoucement	yes	string	Type:  1way: 1-way paging 2way: 2-way intercom 3way: multicast paging annoucement: announcement paging
<b>custom_prompt</b>		no	string	Custom Prompt
<b>replace_caller_id</b>	Yes, no	no	string	Replace Display Name  If enabled, the UCM will replace the caller display name with Paging/Intercom name.
<b>multicast_ip</b>		no	string	Multicast IP Address  The allowed multicast IP address range is 224.0.1.0 - 238.255.255.255.
<b>multicast_port</b>		no	int	port
<b>limitime</b>		no	int	Maximum Call Duration  In seconds. Default is 0 means no limit.
<b>custom_date</b>		no	string	date
<b>time</b>		no	string	time, HH:MM
<b>enable</b>	yes, no	no	string	Enable. Whether to enable announcement paging.
<b>members</b>		no	string	Members that need paging/intercom
<b>paginggroup</b>		yes	string	Paging group number
<b>old_multicast_ip</b>		no	string	Multicast ip address set before  The allowed multicast IP address range is 224.0.1.0 - 238.255.255.255.
<b>old_multicast_port</b>		no	string	Multicast port set before
<b>number_allowed</b>		no	string	Paging/Intercom Whitelist  Only selected extensions will be able to initiate paging/intercom calls. If no extension is selected, all extensions will be able to initiate paging/intercom calls.

**Successful response**



<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## deletePaginggroup

The “deletePaginggroup” action allows users to delete an existing paging group.

- **Request**

```
{
  "request": {
    "action": "deletePaginggroup",
    "cookie": "sid627603306-1574758858",
    "paginggroup": "8004"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 69: deletePaginggroup

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>paginggroup</b>		yes	string	Paging/intercom group number
<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.



## MulticastPaging

The “MulticastPaging” action allows users to initiate a multicast paging call.

- **Request**

```
{
    "request": {
        "action": "MulticastPaging",
        "caller": "1004",
        "cookie": "sid1381890074-1574854661",
        "pagingnum": "8005"
    }
}
```

- **Response**

```
{
    "response": {
        "need_apply": "yes"
    },
    "status": 0
}
```

Table 70: MulticastPaging

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>pagingnum</b>		yes	string	Multicast paging number
<b>caller</b>		yes	string	The extension used to initiate the page.
<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	no	yes	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## MulticastPagingHangup

The “MulticastPagingHangup” action allows users to hangup an ongoing multicast paging call.



- Request

```
{
    "request": {
        "action": "MulticastPagingHangup",
        "cookie": "sid1381890074-1574854661",
        "pagingnum": "8005"
    }
}
```

- Response

```
{
    "response": {
        "need_apply": "yes"
    },
    "status": 0
}
```

Table 71: MulticastPagingHangup

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>pagingnum</b>		yes	string	Multicast paging number
<b>Successful response</b>				
<b>status</b>	0	yes	int	The response is successful, status is 0
<b>need_apply</b>	no	yes	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## IVR

### addIVR

The “addIVR” action allows users to add an IVR.

- Request

```
{
    "request": {
        "action": "addIVR",
        "alertinfo": "ring1",
        "cookie": "sid1682729010-1574760528",
    }
}
```



```

    "dial_conference": "no",
    "dial_directory": "no",
    "dial_extension": "no",
    "dial_fax": "no",
    "dial.paginggroup": "no",
    "dial_queue": "no",
    "dial_ringgroup": "no",
    "dial_trunk": "yes",
    "dial_vmgroup": "no",
    "digit_timeout": 3,
    "extension": "7000",
    "iloop": 3,
    "invalid_prompt": "invalid",
    "ivr_blackwhite_list": "",
    "ivr_name": "7000",
    "ivr_out_blackwhite_list": "1000",
    "language": null,
    "members": [
        {
            "keypress": "i",
            "keypress_event": "member_prompt",
            "member_prompt": "goodbye"
        },
        {
            "keypress": "t",
            "keypress_event": "member_prompt",
            "member_prompt": "goodbye"
        }
    ],
    "permission": "internal-local",
    "replace_caller_id": "yes",
    "response_timeout": 10,
    "switch": "no",
    "timeout_prompt": "ivr-create-timeout",
    "tloop": 3,
    "welcome_prompt": "welcome"
}
}

```

- **Response**

```
{
    "response": {
        "need_apply": "yes"
    },
    "status": 0
}
```



Table 72: addIVR

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>ivr_name</b>		yes	string	IVR Name
<b>extension</b>		yes	string	IVR number, the extension number of automatic voice reply.
<b>welcome_prompt</b>		yes	string	Prompt Initial tone that plays when the user enters the IVR.
<b>response_timeout</b>		yes	int	Response Timeout Timeout occurs when no DTMF entry is detected for the configured number of seconds after the IVR finishes playing the prompts.
<b>digit_timeout</b>		yes	int	Digit timeout After the user enters a digit, the user needs to enter the next digit within the timeout. If no digit is detected within the timeout, the PBX will consider the entries complete. The default timeout is 3 seconds.
<b>timeout_prompt</b>		yes	string	Response Timeout Prompt Play the selected prompt if response timeout occurs.
<b>invalid_prompt</b>		yes	string	Maximum calling period. In seconds, default is 0, which means unlimited.
<b>tloop</b>		yes	int	Response Timeout Prompt Repeats Number of times to repeat the prompt. After the final repeat, calls will be redirected to the Timeout destination (if configured) or dropped.
<b>iloop</b>		yes	int	Invalid Input Prompt Repeats Number of times to repeat the prompt. After the final repeat, calls will be redirected to the Invalid destination (if configured) or dropped.
<b>dial_extension</b>	yes, no	no	string	Dial Other Extensions-extension
<b>dial_conference</b>	yes, no	no	string	Dial Other Extensions-conference rooms
<b>dial_queue</b>	yes, no	no	string	Dial Other Extensions-queues
<b>dial_ringgroup</b>	yes, no	no	string	Dial Other Extensions-ring group
<b>dial_vmgroub</b>	yes, no	no	string	Dial Other Extensions-voicemail group
<b>dial_paginggrou</b>	yes, no	no	string	Dial Other Extensions-paging/intercom group



<b>p</b>				
<b>dial_fax</b>	yes, no	no	string	Dial Other Extensions-fax
<b>dial_trunk</b>	yes, no	no	string	Dial trunk  If enabled, users will be able to access trunks through this IVR. if using this feature, it is mandatory to configure permission.
<b>dial_directory</b>	yes, no	no	string	Dial Other Extensions-dial by name
<b>permission</b>	internal, internal-local, internal-local-national, internal-local-national-international	no	string	permission  internal-internal  internal-local-local  internal-local-national-national  internal-local-national-international-international
<b>language</b>		no	string	language
<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore -dr1, Bellcore -dr2  Bellcore -dr3, Bellcore -dr4, Bellcore -dr5, custom	no	string	Alert-info  When present in an INVITE request, the Alert-info header field specifies an alternative ring tone to the UAS.
<b>replace_caller_id</b>		no	string	Replace Display Name
<b>switch</b>	no white	no	string	IVR Black/Whitelist  Only whitelisted numbers and numbers not blacklisted can be called from the IVR.



	black			
<b>ivr_blackwhite_list</b>		no	string	Internal Black/Whitelist
<b>ivr_out_blackwhite_list</b>		no	string	External Blacklist/Whitelist Can be used only when Dial Trunk is enabled. Numbers will be added as follows: number1, number2, number3.
<b>members</b>		no	Json array	Key Pressing Events
<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## listIVR

The “listIVR” action allows users to list the available IVR.

- Request

```
{
  "request": {
    "action": "listIVR",
    "cookie": "sid1682729010-1574760528"
  }
}
```

- Response

```
{
  "response": {
    "ivr": [
      {
        "alertinfo": "ring1",
        "dial_conference": "no",
        "dial_directory": "no",
        "dial_extension": "no",
        "dial_failed_back2menu": "no",
        "dial_fax": "no",
        "dial_multimedia_conference": "no",
        "dial.paginggroup": "no",
        "dial_queue": "no",
        "dial_ringgroup": "no",
        "dial_trunk": "yes",
        "dial_vmgroupl": "no",
        ...
      }
    ]
  }
}
```



```

        "digit_timeout":3,
        "extension":"7000",
        "iloop":3,
        "invalid_prompt":"invalid",
        "ivr_id":"ivr-1",
        "ivr_name":"7000",
        "language":null,
        "permission":"internal-local",
        "replace_caller_id":"yes",
        "response_timeout":10,
        "switch":"no",
        "timeout_prompt":"ivr-create-timeout",
        "tloop":3,
        "welcome_prompt":"welcome"
    },
],
"page":1,
"total_item":1,
"total_page":1
},
"status":0

```

**Table 73: listIVR**

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Get extension list by page number.
<b>sord</b>	acs, desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>item_num</b>		no	int	Extension number on each page, which is, the maximum items of each return. If empty, all members are returned by default.
<b>options</b>	ivr_id, ivr_name, extension, response_time out, digit_timeout	no	string	Specify obtaining options. Multiple can be set, separated by commas. If empty, all options are returned by default.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0



<b>total_item</b>		yes	int	Total members of the list
<b>total_page</b>		yes	int	Total pages of the list
<b>page</b>		yes	int	What page is on.
<b>ivr_id</b>		no	string	IVR id
<b>ivr_name</b>		yes	string	IVR name
<b>extension</b>		yes	string	IVR number, the extension number of automatic voice reply.
<b>custom_prompt</b>		yes	string	Prompt  The welcome prompt that plays when a caller dials into the IVR.
<b>response_timeout</b>		yes	int	Response Timeout  The timeout that occurs when no DTMF input is detected for the configured number of seconds after an IVR prompt finishes playing.
<b>digit_timeout</b>		yes	int	Digit timeout  The amount of time to enter each subsequent key after the first key entry. If no input is detected within the timeout period, the UCM will consider the entry complete. Default is 3 seconds.
<b>timeout_prompt</b>		yes	string	Response Timeout Prompt  Play the selected prompt if response timeout occurs.
<b>invalid_prompt</b>		yes	string	Description doesn't match the parameter.  Invalid Prompt  Prompt that plays when invalid input is detected.
<b>tloop</b>		yes	int	Response Timeout Prompt Repeats  Amount of times to repeat the response timeout prompt before redirecting the call to the timeout destination (if configured) or disconnecting the call.
<b>iloop</b>		yes	int	Invalid Input Prompt Repeats  Amount of times to repeat the invalid prompt before redirecting the call to the invalid destination (if configured) or disconnecting the call.
<b>dial_extension</b>	yes, no	no	string	Whether or not the IVR can dial regular extensions.
<b>dial_conference</b>	yes, no	no	string	Use previous comment as reference for the rest of the "dial_" parameters.
<b>dial_queue</b>	yes, no	no	string	Dial Other Extensions-queues



<b>dial_ringgroup</b>	yes, no	no	string	Dial Other Extensions-ring group
<b>dial_vmgroup</b>	yes, no	no	string	Dial Other Extensions-voicemail group
<b>dial_paginggroup</b>	yes, no	no	string	Dial Other Extensions-paging/intercom group
<b>dial_fax</b>	yes, no	no	string	Dial Other Extensions-fax
<b>dial_trunk</b>	yes, no	no	string	Dial trunk  Whether or not the IVR can dial to trunks. If enabled, the IVR must have permission level configured.
<b>dial_directory</b>	yes, no	no	string	Dial Other Extensions-dial by name
<b>permission</b>	internal,  internal-local,  internal-local-national,  internal-local-national-international	no	string	permission  internal-internal  internal-local-local  internal-local-national-national  internal-local-national-international-international
<b>language</b>		no	string	language
<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore-dr1, Bellcore-dr2  Bellcore-dr3, Bellcore-dr4, Bellcore-dr5, custom	no	string	Alert-info  When present in an INVITE request, the Alert-info header field specifies an alternative ring tone to the UAS.
<b>replace_caller_id</b>		no	string	Replace Display Name
<b>switch</b>	no  white  black	no	string	IVR Black/Whitelist  white: Only numbers in the whitelist can access this IVR.  black: Numbers in the blacklist cannot access the IVR.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.



## getIVR

The “getIVR” action allows users to get information about a specific IVR.

- **Request**

```
{
    "request": {
        "action": "getIVR",
        "cookie": "sid1682729010-1574760528",
        "ivr": "ivr-1"
    }
}
```

- **Response**

```
{
    "response": {
        "ivr": {
            "alertinfo": "ring1",
            "dial_conference": "no",
            "dial_directory": "no",
            "dial_extension": "no",
            "dial_failed_back2menu": "no",
            "dial_fax": "no",
            "dial_multimedia_conference": "no",
            "dial_paginggroup": "no",
            "dial_queue": "no",
            "dial_ringgroup": "no",
            "dial_trunk": "yes",
            "dial_vmgroupt": "no",
            "digit_timeout": 3,
            "extension": "7000",
            "iloop": 3,
            "invalid_prompt": "invalid",
            "ivr_blackwhite_list": "",
            "ivr_id": "ivr-1",
            "ivr_name": "7000",
            "ivr_out_blackwhite_list": "1000",
            "language": null,
            "permission": "internal-local",
            "replace_caller_id": "yes",
            "response_timeout": 10,
            "switch": "no",
            "timeout_prompt": "ivr-create-timeout",
            "tloop": 3,
            "welcome_prompt": "welcome"
        },
        "members": [
    }
```



```

    {
        "keypress":"i",
        "keypress_event":"member_prompt",
        "member_prompt":"goodbye"
    },
{
    "keypress":"t",
    "keypress_event":"member_prompt",
    "member_prompt":"goodbye"
}
],
},
"status":0
}

```

Table 74: getIVR

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>ivr</b>		yes	string	IVR number
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>ivr_id</b>		no	string	IVR id
<b>ivr_name</b>		yes	string	IVR name
<b>extension</b>		yes	string	IVR number, the extension number of automatic voice reply.
<b>welcome_prompt</b>		yes	string	Prompt Initial tone that plays when the user enters the IVR.
<b>response_time_out</b>		yes	int	Response Timeout  Timeout occurs when no DTMF entry is detected for the configured number of seconds after the IVR finishes playing the prompts.
<b>digit_timeout</b>		yes	int	Digit timeout  After the user enters a digit, the user needs to enter the next digit within the timeout. If no digit is detected within the timeout, the PBX will consider the entries complete. The default timeout is 3 seconds.
<b>timeout_prompt</b>		yes	string	Response Timeout Prompt  Play the selected prompt if response timeout occurs.



<b>invalid_prompt</b>		yes	string	Maximum calling period. In seconds, default is 0, which means unlimited.
<b>tloop</b>		yes	int	Response Timeout Prompt Repeats Number of times to repeat the prompt. After the final repeat, calls will be redirected to the Timeout destination (if configured) or dropped.
<b>iloop</b>		yes	int	Invalid Input Prompt Repeats Number of times to repeat the prompt. After the final repeat, calls will be redirected to the Invalid destination (if configured) or dropped.
<b>dial_extension</b>	yes, no	no	string	Dial Other Extensions-extension
<b>dial_conference</b>	yes, no	no	string	Dial Other Extensions-conference rooms
<b>dial_queue</b>	yes, no	no	string	Dial Other Extensions-queues
<b>dial_ringgroup</b>	yes, no	no	string	Dial Other Extensions-ring group
<b>dial_vmgrou</b>	yes, no	no	string	Dial Other Extensions-voicemail group
<b>dial_paginggroup</b>	yes, no	no	string	Dial Other Extensions-paging/intercom group
<b>dial_fax</b>	yes, no	no	string	Dial Other Extensions-fax
<b>dial_trunk</b>	yes, no	no	string	Dial trunk  If enabled, users will be able to access trunks through this IVR. if using this feature, it is mandatory to configure permission.
<b>dial_directory</b>	yes, no	no	string	Dial Other Extensions-dial by name
<b>permission</b>	internal, internal-local, internal-local-national, internal-local-national-international	no	string	permission  internal-internal  internal-local-local  internal-local-national-national  internal-local-national-international-international
<b>language</b>		no	string	language
<b>alertinfo</b>	none, ring1, ring2, ring3,	no	string	Alert-info  When present in an INVITE request, the Alert-info header field specifies an alternative ring tone to the



	ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore -dr1, Bellcore -dr2  Bellcore -dr3, Bellcore -dr4, Bellcore -dr5, custom			UAS.
<b>replace_caller_id</b>		no	string	Replace Display Name
<b>switch</b>	no white black	no	string	IVR Black/Whitelist  Only whitelisted numbers and numbers not blacklisted can be called from the IVR.
<b>ivr_blackwhite_list</b>		no	string	Internal Black/Whitelist
<b>ivr_out_blackwhite_list</b>		no	string	External Blacklist/Whitelist  Can be used only when Dial Trunk is enabled. Numbers will be added as follows: number1, number2, number3.
<b>members</b>		no	Json array	Key Pressing Events
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## updateIVR

The “updateIVR” action allows users to update a specific IVR.

- **Request**

```
{
  "request": {
    "action": "updateIVR",
    "alertinfo": "ring2",
    "cookie": "sid1682729010-1574760528",
    "dial_conference": "no",
```



```

    "dial_directory": "no",
    "dial_extension": "no",
    "dial_failed_back2menu": "no",
    "dial_fax": "no",
    "dial.paginggroup": "no",
    "dial_queue": "no",
    "dial_ringgroup": "no",
    "dial_trunk": "yes",
    "dial_vmgrouP": "no",
    "digit_timeout": "3",
    "extension": "7000",
    "iloop": "3",
    "invalid_prompt": "invalid",
    "ivr": "ivr-1",
    "ivr_name": "7000",
    "ivr_out_blackwhite_list": "1009",
    "permission": "internal-local",
    "replace_caller_id": "yes",
    "response_timeout": "10",
    "switch": "no",
    "timeout_prompt": "ivr-create-timeout",
    "tloop": "3",
    "welcome_prompt": "welcome"
}
}
}

```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 75: updateIVR

Keyword	Value	mandatory	Type	Note
Request Parameter				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>ivr</b>		yes	string	IVR Number
<b>ivr_name</b>		yes	string	IVR Name
<b>extension</b>		yes	string	IVR number, the extension number of automatic voice reply.
<b>welcome_pro</b>		yes	string	Prompt



<b>mpt</b>				Initial tone that plays when the user enters the IVR.
<b>response_timeout</b>		yes	int	<p>Response Timeout</p> <p>Timeout occurs when no DTMF entry is detected for the configured number of seconds after the IVR finishes playing the prompts.</p>
<b>digit_timeout</b>		yes	int	<p>Digit timeout</p> <p>After the user enters a digit, the user needs to enter the next digit within the timeout. If no digit is detected within the timeout, the PBX will consider the entries complete. The default timeout is 3 seconds.</p>
<b>timeout_prompt</b>		yes	string	<p>Response Timeout Prompt</p> <p>Play the selected prompt if response timeout occurs.</p>
<b>invalid_prompt</b>		yes	string	<p>Maximum calling period.</p> <p>In seconds, default is 0, which means unlimited.</p>
<b>tloop</b>		yes	int	<p>Response Timeout Prompt Repeats</p> <p>Number of times to repeat the prompt.</p> <p>After the final repeat, calls will be redirected to the Timeout destination (if configured) or dropped.</p>
<b>iloop</b>		yes	int	<p>Invalid Input Prompt Repeats</p> <p>Number of times to repeat the prompt.</p> <p>After the final repeat, calls will be redirected to the Invalid destination (if configured) or dropped.</p>
<b>dial_extension</b>	yes, no	no	string	Dial Other Extensions-extension
<b>dial_conference</b>	yes, no	no	string	Dial Other Extensions-conference rooms
<b>dial_queue</b>	yes, no	no	string	Dial Other Extensions-queues
<b>dial_ringgroup</b>	yes, no	no	string	Dial Other Extensions-ring group
<b>dial_vmgroup</b>	yes, no	no	string	Dial Other Extensions-voicemail group
<b>dial_paginggroup</b>	yes, no	no	string	Dial Other Extensions-paging/intercom group
<b>dial_fax</b>	yes, no	no	string	Dial Other Extensions-fax
<b>dial_trunk</b>	yes, no	no	string	<p>Dial trunk</p> <p>If enabled, users will be able to access trunks through this IVR. If using this feature, it is mandatory to configure permission.</p>
<b>dial_directory</b>	yes, no	no	string	Dial Other Extensions-dial by name
<b>permission</b>	internal,	no	string	permission



	internal-local, internal-local-national, internal-local-national-international			internal-internal internal-local-local internal-local-national-national internal-local-national-international-international
<b>language</b>		no	string	language
<b>alertinfo</b>	none, ring1, ring2, ring3, ring4, ring5, ring6, ring7, ring8, ring9, ring10, Bellcore-dr1, Bellcore-dr2  Bellcore-dr3, Bellcore-dr4, Bellcore-dr5, custom	no	string	Alert-info  When present in an INVITE request, the Alert-info header field specifies an alternative ring tone to the UAS.
<b>replace_caller_id</b>		no	string	Replace Display Name
<b>switch</b>	no white black	no	string	IVR Black/Whitelist  Only whitelisted numbers and numbers not blacklisted can be called from the IVR.
<b>ivr_blackwhite_list</b>		no	string	Internal Black/Whitelist
<b>ivr_out_blackwhite_list</b>		no	string	External Blacklist/Whitelist  Can be used only when Dial Trunk is enabled. Numbers will be added as follows: number1, number2, number3.
<b>members</b>		no	Json array	Key Pressing Events



<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## deleteIVR

The “deleteIVR” action allows users to delete an existing IVR.

- **Request**

```
{
  "request": {
    "action": "deleteIVR",
    "cookie": "sid1682729010-1574760528",
    "ivr": "ivr-1"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 76: deleteIVR

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>ivr</b>		yes	string	Talked to development team. This is the IVR index, not extension. Will be changed to IVR extension in the future.
<b>Successful response</b>				
<b>status</b>		yes	int	The response is successful, status is 0
<b>need_apply</b>	yes, no	yes	string	Whether “Apply” is required for the configuration to take effect
<b>Failed response</b>				



<b>status</b>		yes	int	Please see the error code list for more details.
---------------	--	-----	-----	--

## User Information

### listUser

The “listUser” action allows users to get information about a user.

- **Request**

```
{
  "request": {
    "action": "listUser",
    "item_num": "10",
    "sidx": "extension",
    "sord": "asc",
    "page": "1",
    "cookie": "sid81747798-1551856142"
  }
}
```

- **Response**

```
{
  "response": [
    {
      "user_id": 0,
      "user_name": "admin",
      "privilege": 0,
      "department": null,
      "first_name": null,
      "last_name": null,
      "enable_multiple_extension": "no",
      "multiple_extension": null,
      "email": null,
      "language": null,
      "fax": null,
      "family_number": null,
      "phone_number": null,
      "cookie": "sid523099813-1555662509",
      "login_time": "2019-04-19 16:49:05",
      "email_to_user": "no",
      "ip": "192.168.129.55"
    },
    {
      "user_id": 2,
      "user_name": "1083",
      "privilege": 3,
      "department": null,
      "first_name": "aaa",
      "last_name": null
    }
  ]
}
```



```

        "last_name":"aaa",
        "enable_multiple_extension":"no",
        "multiple_extension":null,
        "email":null,
        "language":null,
        "fax":null,
        "family_number":null,
        "phone_number":null,
        "cookie":null,
        "login_time":null,
        "email_to_user":"no",
        "ip":null
    },
    {
        "user_id":3,
        "user_name":"1084",
        "privilege":3,
        "department":null,
        "first_name":null,
        "last_name":null,
        "enable_multiple_extension":"no",
        "multiple_extension":null,
        "email":null,
        "language":null,
        "fax":null,
        "family_number":null,
        "phone_number":null,
        "cookie":null,
        "login_time":null,
        "email_to_user":"no",
        "ip":null
    }
],
{
    "total_item":3,
    "total_page":1,
    "page":1
},
"status":0
}

```

Table 77: listUser

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Get extension list by page number.
<b>sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and



				desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>item_num</b>		no	int	Extension number on each page, which is, the maximum items of each return. If empty, all members are returned by default.
<b>options</b>	department, first_name, last_name, email, language, fax, family_number, phone_number, login_time, ip	no	string	Specify obtaining options. Multiple can be set, separated by commas. If empty, all options are returned by default.

#### Successful response

<b>status</b>	0	yes	int	Successful response, status is 0
<b>total_item</b>		yes	int	Total number of items on the list
<b>total_page</b>		yes	int	Total pages of the list
<b>page</b>		yes	int	What page is on.
<b>user_id</b>		no	int	User id
<b>user_name</b>		yes	string	User name
<b>privilege</b>		yes	int	The privilege level granted to the user.
<b>department</b>		yes	string	The department that the user belongs to.
<b>first_name</b>		yes	string	First name of the user
<b>last_name</b>		yes	string	Last name of the user
<b>email</b>		yes	string	Email address of the user. For example, "bobjones@bobjones.null".
<b>language</b>		yes	string	Language  The language that the user will hear voice prompts in.



				"default" uses the language of global settings.
<b>fax</b>		yes	string	Fax number of the user.
<b>family_num ber</b>		yes	string	User family number
<b>phone_num ber</b>		yes	string	User phone number
<b>login_time</b>		yes	string	Last login time
<b>ip</b>		yes	string	IP address of the user.
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## getUser

The "getUser" action allows users to obtain user's configuration.

- **Request**

```
{
    "request": {
        "action": "getUser",
        "user_name": "1083",
        "cookie": "sid81747798-1551856142"
    }
}
```

- **Response**

```
{
    "response": {
        "user_name": {
            "login_time": null,
            "cookie": null,
            "phone_number": "18373710740",
            "family_number": "8888",
            "fax": "123",
            "language": "en",
            "email": "2453034231@qq.com",
            "multiple_extension": null,
            "enable_multiple_extension": "no",
            "email_to_user": "yes",
            "last_name": "aaa",
            "first_name": "aaa",
            "middle_name": null
        }
    }
}
```



```

        "department": "二部",
        "privilege": 3,
        "user_id": 2
    }
},
"status": 0
}

```

Table 78: getUser

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>user_name</b>		yes	string	username
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>phone_number</b>		yes	string	User phone number
<b>family_number</b>		yes	string	User family phone number
<b>fax</b>		yes	string	User fax
<b>language</b>		yes	string	Language  Language of voice prompt.  “default” uses the language of global settings.
<b>email</b>		yes	string	The Email address of this user. For example, "bobjones@bobjones.null".
<b>last_name</b>		yes	string	The last Name of the user.
<b>first_name</b>		yes	string	The first Name of the user.
<b>department</b>		yes	string	The Department that the user belongs to
<b>user_id</b>		yes	int	User id
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.



## updateUser

The “updateUser” action allows users to update a user.

- **Request**

```
{
  "request": {
    "user_name": "1083",
    "department": "R&D department 2",
    "fax": "123",
    "email": "gangwang@grandstream.cn",
    "first_name": "aaa",
    "last_name": "aaa",
    "family_number": "8888",
    "phone_number": "18373710740",
    "action": "updateUser",
    "user_id": "2"
  }
}
```

- **Response**

```
{
  "response": {
    "need_apply": "yes"
  },
  "status": 0
}
```

Table 79: updateUser

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
cookie		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
user_name		yes	string	Username
department		no	string	The Department that the user belongs to.
fax		no	string	User fax
email		no	string	The Email address of this user. For example, "bobjones@bobjones.null".
first_name		no	string	The first Name of the user.



last_name		no	string	The last Name of the user.
family_number		no	string	User family phone number
phone_number		no	string	User phone number
user_id		no	int	User id
<b>Successful response</b>				
status		yes	int	The response is successful, status is 0
need_apply	yes, no	yes	string	Whether "Apply" is required for the configuration to take effect
<b>Failed response</b>				
status		yes	int	Please see the error code list for more details.

## Extension Groups

### listExtensionGroup

The "listExtensionGroup" action allows users to list extension group.

- **Request**

```
{
  "request": {
    "action": "listExtensionGroup",
    "item_num": "10",
    "sidx": "group_name",
    "sord": "asc",
    "page": "1",
    "cookie": "sid81747798-1551856142"
  }
}
```

- **Response**

```
{
  "response": {
    "extension_group": [
      {
        "group_id": "group-3",
        "group_name": "1083",
        "members": "1083",
        "tmp": "group-3"
      },
    ]
  }
}
```



```
{
    "group_id": "group-2",
    "group_name": "45",
    "members": "1083,1084",
    "tmp": "group-2"
},
{
    "group_id": "group-1",
    "group_name": "ew",
    "members": null,
    "tmp": null
},
],
    "total_item": 3,
    "total_page": 1,
    "page": 1
},
    "status": 0
}
```

Table 80: listExtensionGroup

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Get extension list by page number.
<b>sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>item_num</b>		no	int	Extension number on each page, which is, the maximum items of each return. If empty, all members are returned by default.
<b>options</b>	group_name, members, group_id	no	string	Specify obtaining options. Multiple can be set, separated by commas. If empty, all options are returned by default.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>total_item</b>		yes	int	Total number of items on the list
<b>total_page</b>		yes	int	Total pages of the list
<b>page</b>		yes	int	What page is on.
<b>group_id</b>		no	int	Group id
<b>group_name</b>		yes	string	Group name



<b>members</b>		yes	int	Extensions in the group
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## PIN Groups

### listPinSets

The “listPinSets” action allows users to list the available pin group.

- **Request**

```
{
    "request": {
        "action": "listPinSets",
        "item_num": "10",
        "sidx": "pin_sets_id",
        "sord": "asc",
        "page": "1",
        "cookie": "sid81747798-1551856142"
    }
}
```

- **Response**

```
{
    "response": [
        "pin_sets_id": [
            {
                "pin_sets_id": "1557210434090",
                "pin_sets_name": "hehe",
                "record_in_cdr": "no"
            },
            {
                "pin_sets_id": "1557210889523",
                "pin_sets_name": "kp",
                "record_in_cdr": "no"
            }
        ],
        "total_item": 2,
        "total_page": 1,
        "page": 1
    ],
    "status": 0
}
```



**Table 81: listPinSets**

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>page</b>		no	int	Get extension list by page number.
<b>sord</b>	acs,desc	no	string	Sorting method. acs stands for ascending, and desc stands for descending.
<b>sidx</b>		no	string	Sort according to the index.
<b>item_num</b>		no	int	Extension number on each page, which is, the maximum items of each return. If empty, all members are returned by default.
<b>options</b>	pin_sets_id, pin_sets_name, record_in_cdr	no	string	Specify obtaining options. Multiple can be set, separated by commas. If empty, all options are returned by default.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>total_item</b>		yes	int	Total number of items on the list
<b>total_page</b>		yes	int	Total pages of the list
<b>page</b>		yes	int	What page is on.
<b>pin_sets_id</b>		yes	int	ID of the PIN set
<b>pin_sets_name</b>		yes	string	Name of the PIN set
<b>record_in_cdr</b>	yes, no	yes	string	Whether to record in CDR
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

## cdrapi

The “cdrapi” action allows users to get the CDR database.

- Request

```
{
  "request": {
    "action": "cdrapi",
    "cookie": "sid1381890074-1574854661",
    "format": "json"
  }
}
```



- Response

```
{  
    "cdr_root": [  
        {  
            "AcctId": "1",  
            "accountcode": "",  
            "action_owner": "1004",  
            "action_type": "PAGE[8005]",  
            "amaflags": "DOCUMENTATION",  
            "answer": "2019-11-27 07:17:13",  
            "billsec": "1",  
            "caller_name": "1004",  
            "cdr": "1574857028274003-1004",  
            "chanext": "",  
            "channel": "PJSIP/1004-00000010",  
            "channel_ext": "1004",  
            "clid": "\"1004\" <1004>",  
            "dcontext": "pagegroups",  
            "disposition": "ANSWERED",  
            "dst": "8005",  
            "dst_trunk_name": "",  
            "dstanswer": "8005",  
            "dstchanext": "",  
            "dstchannel": "MulticastRTP/0x47e2650c",  
            "dstchannel_ext": "0x47e2650c",  
            "duration": "6",  
            "end": "2019-11-27 07:17:14",  
            "lastapp": "Dial",  
            "lastdata": "MulticastRTP/basic/224.0.1.2:8080,10,zA()",  
            "recordfiles": "",  
            "service": "p",  
            "session": "1574857028274003-1004",  
            "src": "1004",  
            "src_trunk_name": "",  
            "start": "2019-11-27 07:17:08",  
            "uniqueid": "1574857028.56",  
            "userfield": "Internal"  
        }  
    ]  
}
```



**Table 82: cdrapi**

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>format</b>	csv, xml, json	yes	string	Define the matching CDR output format. Default is csv.
<b>numRecords</b>	[0,1000]	no	int	Returned records amount. Default is 1000, which is also the maximum allowed.
<b>offset</b>	number	no	int	The number of records that need to be skipped, use together with numRecords.  Accept all records when multiple responses show up. Default is 0.
<b>caller</b>	Extension separated by comma, extension range, caller regular expression	no	string	The filter can find call records that match the input parameter, based on source (caller) number or destination (callee) number.  A format including wildcard ('@' or '_') will be treated as regular expression. , '-' is treated as range symbol rather than hyphen; '@' represents characters of any digit(including 0); '_' represents one character.
<b>callee</b>				Otherwise, digits including a hyphen will be recognized as an extension segment, non-numeric characters or characters including multiple hyphens will be ignored  0-0 matches all non-numeric string and null string.  For example, caller=5300,5302-5304,_4@-or-caller=5300&caller=5302-5304&caller=_4@  (matches extension 5300, 5302, 5303, 5304 and any extension of which the second digit is 4.)
<b>startTime</b>	Date and /or time, format is as follows: YYYY-MM-DDTHH:MM YYYY-MM-DDTHH:MM:SS YYYY-MM-DDTHH:MM	yes	int	Filter is based on value of starting time. It matches calls start time in this period, despite the time of answering or hangup.  If null, there is no limitation of minimum and maximum start time.  If date is null, the default date is 2000-01-01; If time is null, the default time is 0:00 UTC.  String including time could also specify a time zone, use '%2B' to replace the '+' in timezone. (See detail in <a href="http://www.w3.org/TR/NOTE-datetime">http://www.w3.org/TR/NOTE-datetime</a> )



<b>endTime</b>	:SS.SSS ('T' is the separator of the 3 formats) HH:MM HH:MM:SS HH:MM:SS. SSS			
<b>minDur</b>	Number(in seconds)	no	int	Filter is based on call duration.
<b>maxDur</b>				
<b>answeredby</b>		no	string	callee
<b>tineFilterType</b>	Start, End	no	string	
<b>callerName</b>		no	string	
<b>delete</b>		no	string	Delete CDR records
<b>Successful response</b>				
Consistent with former cdrapi interface. Return corresponding content based on format.				
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.

For more details regarding parameters to use in the request please refer to:

[http://www.grandstream.com/sites/default/files/Resources/ucm6xxx\\_cdr\\_rec\\_api\\_guide.pdf](http://www.grandstream.com/sites/default/files/Resources/ucm6xxx_cdr_rec_api_guide.pdf)

## Recapi

The “recapi” action allows users to download the wanted audio file.

- **Request**

```
{
  "request": {
    "action": "recapi",
    "cookie": "sid1381890074-1574854661",
    "filedir": "monitor",
    "filename": "auto-1574857256-1003-1004.wav"
  }
}
```



- **Response**

Once successful, it will prompt you to choose a location to save the downloaded file

**Table 83: Recapi**

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>filedir</b>	monitor, emergency meetme, queue, sca	no	string	Which type of record file to obtain. Multiple can be separated commas.  If filename and filedir are null at the same time, the supported filedir list will be returned.  If only filename is set, filedir is set to monitor as default.
<b>filename</b>		no	string	If only filedir is set, all csv files of the corresponding type will be returned. When multiple files are downloaded, they are separated by commas.
<b>Successful response</b>				
Consistent with original recapi interface. Download file.				
<b>Failed response</b>				
Consistent with original recapi interface. Error description.				

For more details regarding parameters to use in the request please refer to:

[http://www.grandstream.com/sites/default/files/Resources/ucm6xxx\\_cdr\\_rec\\_api\\_guide.pdf](http://www.grandstream.com/sites/default/files/Resources/ucm6xxx_cdr_rec_api_guide.pdf)

## Pmsapi

The “pmsapi” action allows users to configure PMS actions such as Checkin, checkout, etc.

- **Request**

```
{
  "request": {
    "action": "pmsapi",
    "cookie": "sid992645785-1575025577",
    "data": "<pms_data_request>
              <checkin>
              <address>1001</address>
              <room>1001</room>
              <account>1001</account>
              <firstname>John</firstname>
            </pms_data_request>
          "
  }
}
```



```

<lastname>Doe</lastname>
<language>EN</language>
<vipcode>2</vipcode>
<datein>2021/01/01 10:00</datein>
<dateout>2021/01/07 11:00</dateout>
<credit>9999900</credit>
<cos>3</cos>
</checkin>
</pms_data_request>",
"format":"xml",
"token":"16c4a7b1fe890f89c8908f3f522fc18f"
}
}

```

- **Response**

```
{
  "response":{},
  "status":0
}
```

Table 84: Pmsapi

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>token</b>		yes	string	String consist of PMS username and password after md5 encryption.
<b>format</b>	xml, json	no	string	Type of data string
<b>data</b>		yes		String in xml or json format: ----- xml ----- <pms_data_request> <checkin> <address>1000</address> <room>100</room> <account>123456</account> <firstname>John</firstname> <lastname>Doe</lastname> <language>EN</language> <vipcode>2</vipcode> <datein>2010/01/01 10:00</datein>



				<pre>&lt;dateout&gt;2010/01/07 11:00&lt;/dateout&gt; &lt;credit&gt;9999900&lt;/credit&gt; &lt;cos&gt;3&lt;/cos&gt; &lt;/checkin&gt; &lt;/pms_data_request&gt; ----- json ----- {"checkin": {"address": "2345", "room": "2345", "account":"2345", "datein":"20180909","dateout":"20180910","language":"en", "firstname": "grand", "lastname": "stream", "vipcode":"1234", "cos": "1", "credit": "100"}}</pre>
<b>address</b>				identifier recognized by destination
<b>room</b>				room number, source room
<b>account</b>				account number
<b>firstname</b>				firstname of guest
<b>lastname</b>				lastname of guest
<b>language</b>				language for account
<b>vipcode</b>				vipcode
<b>datein</b>				datein format YYYY/MM/DD hh:mm
<b>dateout</b>				dateout format YYYY/MM/DD hh:mm
<b>credit</b>				credit
<b>cos</b>				call permission 1 < 2 < 3 < 4
<b>d_address</b>				Mov :destination address
<b>r_room</b>				Move :destination room
<b>w_action</b>	0,1			1 = set. 0 = cancel
<b>w_mode</b>	1,2			1 = single (default). 2 = daily.
<b>w_date</b>	YYYYMM DD			wakeup date format YYYYMMDD
<b>w_time</b>	HHMM			wakeup time format HHMM
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>	0	yes	int	Status is -1
<b>error</b>		yes	string	Error description

The following actions can also be done using pmsapi action :



- **Update**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request>
                    <update>
                        <address>1000</address>
                        <room>100</room>
                        <account>123456</account>
                        <firstname>John</firstname>
                        <lastname>Doe</lastname>
                        <language>EN</language>
                        <vipcode>2</vipcode>
                        <datein>2010/01/01 10:00</datein>
                        <dateout>2010/01/07 11:00</dateout>
                        <credit>9999900</credit>
                        <cos>3</cos>
                    </update>
                </pms_data_request>"
    }
}
```

- **Mov**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request>
                    <mov>
                        <address>1000</address>
                        <room>100</room>
                        <d_address>1002</d_address>
                        <d_room>1002</d_room>
                    </mov>
                </pms_data_request>"
    }
}
```

- **Wakeup**

```
{
    "request": {
```



```

    "action": "pmsapi",
    "token": "63E780C3F321D13109C71BF81805476E",
    "format": "xml",
    "data": "<pms_data_request>
              <wakeup>
                <address>1000</address>
                <room>1000</room>
                <w_action>1</w_action>
                <w_mode>1</w_mode>
                <w_date>20140101</w_date>
                <w_time>0900</w_time>
              </wakeup>
            </pms_data_request>",
    "cookie": "sid612583207-1551962142"
  }
}

```

- **Checkout**

```

{
  "request": {
    "action": "pmsapi",
    "cookie": "sid612583207-1551962142",
    "token": "63E780C3F321D13109C71BF81805476E",
    "format": "xml",
    "data": "<pms_data_request>
              <checkout>
                <address>1000</address>
                <room>100</room>
              </checkout>
            </pms_data_request>"
  }
}

```

- **Add minibar**

```

{
  "request": {
    "action": "pmsapi",
    "cookie": "sid612583207-1551962142",
    "token": "63E780C3F321D13109C71BF81805476E",
    "format": "xml",
    "data": "<pms_data_request>
              <addminibar>
                <barcode>12450</barcode>
                <barname>winebar</barname>
                <prompt>record/sukima</prompt>
                <verifyskip></verifyskip>
                <listgoods></listgoods>
              </addminibar>
            </pms_data_request>"
  }
}

```



```

        }
    }
```

- **Delete Minibar**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request>
                    <delminibar>
                        <barcode>1324</barcode>
                    </delminibar>
                </pms_data_request>"
    }
}
```

- **Add minibar goods**

```
{
    "request": {
        "action": "pmsapi",
        "token": "63E780C3F321D13109C71BF81805476E",
        "cookie": "sid612583207-1551962142",
        "format": "xml",
        "data": "<pms_data_request><addminibargoods>
                    <goodscode>900</goodscode>
                    <goodsname>beverage</goodsname>
                </addminibargoods>
            </pms_data_request>",
    }
}
```

- **Delete minibar goods**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request><delminibargoods>
                    <goodscode>900</goodscode>
                </delminibargoods>
            </pms_data_request>"
    }
}
```

- **Add waiter**

```
{
```



```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request><addminibarwaiter>
                    <maidcode>9898</maidcode>
                    <password>1324</password>
                </addminibarwaiter>
            </pms_data_request>"
    }
}
```

- **Delete waiter**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request><delminibarwaiter>
                    <maidcode>9898</maidcode>
                </delminibarwaiter>
            </pms_data_request>"
    }
}
```

- **Callforward unconditional**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
        "format": "xml",
        "data": "<pms_data_request><cfu>
                    <address>4000</address>
                    <room>400</room>
                    <cfwt>4002</cfwt>
                </cfu>
            </pms_data_request>"
    }
}
```

- **DND**

```
{
    "request": {
        "action": "pmsapi",
        "cookie": "sid612583207-1551962142",
        "token": "63E780C3F321D13109C71BF81805476E",
```



```

        "format": "xml",
        "data": "<pms_data_request><address>4000</address>
                  <room>400</room>
                  <status>0</status>
                  </dnd>
                </pms_data_request>"}
    }
}

```

## Queueapi

The “Queueapi” action allows users to get the Queue Statistics.

- **Request**

```
{
  "request": {
    "action": "queueapi",
    "cookie": "sid1682729010-1574760528",
    "endTime": "2019-11-28",
    "startTime": "2019-11-27",
    "queue": "6500"           #If this line is not specified, results return
all available queues
  }
}
```

- **Response**

```
<?xml version="1.0"?>
<root_statistics>
<total>
  <queuechairman>admin</queuechairman>
  <total_calls>2</total_calls>
  <abandoned_rate>50.0</abandoned_rate>
  <avg_wait>2</avg_wait>
  <avg_talk>7</avg_talk>
  <vq_total_calls>0</vq_total_calls>
</total>
<queue>
  <queuechairman>admin</queuechairman>
  <queue>6500</queue>
  <total_calls>2</total_calls>
  <answered_calls>1</answered_calls>
  <answered_rate>50.0</answered_rate>
  <avg_wait>2</avg_wait>
  <avg_talk>7</avg_talk>
  <vq_total_calls>0</vq_total_calls>
</queue>
<agent>
```



```

<queuechairman>admin</queuechairman>
<agent>1004</agent>
<total_calls>2</total_calls>
<answered_calls>1</answered_calls>
<answered_rate>50.0</answered_rate>
<avg_talk>7</avg_talk>
</agent>
</root_statistics>

```

Table 85: Queueapi

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>format</b>	csv, xml, json	no	string	Define output format of matching call queue statistics. Default is xml.
<b>queuecha irman</b>	Admin, number	no	string	Queue chairman Default is admin
<b>queue</b>	Number,*	no	string	Queue number if queue number is *(default), all call queue information will be listed.
<b>agent</b>	Number,*	no	string	Agent number If agent number is *(default), all agent information will be listed.
<b>statistics Type</b>	overview, calldetail, loginhistory, pausedhistory,	no	string	overview: overview(default) calldetail: agent detail loginhistory: login record pausedhistory : pause log
<b>numRecor ds</b>	[0,1000]	no	int	Number of returned records Default is 1000, which is also the maximum allowed.
<b>offset</b>	number	no	int	The number of records that need to be skipped, use together with numRecords. Accept all records when multiple responses show up. Default is 0.
<b>startTime</b>	Date and/or time, format is YYYY-MM-DD	yes	int	Time range of call queue statistics, format is YYYY-MM-DD



### Successful response

Return content based on corresponding format.

### Failed response

<b>status</b>		yes	int	Please see the error code list for more details.
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## applyChanges

The “applyChanges” action allows users to apply the changes made.

- **Request**

```
{
  "request": {
    "action": "applyChanges",
    "cookie": "sid1965594381-1575027385"
  }
}
```

- **Response**

```
{
  "response": {
    "settings": "0"
  },
  "status": 0
}
```

Table 86: applyChanges

Keyword	Value	mandatory	Type	Note
<b>Request Parameter</b>				
<b>cookie</b>		yes	string	Returned value after login. All requests must include this value. If no cookie is included, error code -6 will be returned.
<b>Successful response</b>				
<b>status</b>	0	yes	int	Successful response, status is 0
<b>Failed response</b>				
<b>status</b>		yes	int	Please see the error code list for more details.



## ERROR RETURN CODES

Table 87: Error return codes

Code	Description
0	Success
-1	Invalid parameters
-5	Need authentication
-6	Cookie error
-7	Connection closed
-8	System timeout
-9	Abnormal system error!
-15	Invalid value
-16	No such item. Please refresh the page and try again
-19	Unsupported
-24	Failed to operate data
-25	Failed to update data
-26	Failed to get data
-37	Wrong account or password!
-43	Some data in this page has been modified or deleted. Please refresh the page and try again
-44	This item has been added
-45	Operating too frequently or other users are doing the same operation. Please retry after 15 seconds.
-46	Operating too frequently or other users are doing the same operation. Please retry after 15 seconds.
-47	No permission
-50	Command contains sensitive characters
-51	Another task is running now
-57	Operating too frequently, or other users are doing the same operation. Please retry after 60 seconds
-68	Login Restriction
-69	There is currently a conference going on. Changes cannot be applied at this time
-70	Login Forbidden



-71	The username doesn't exist
-90	The conference is busy, cannot be edited or deleted
-98	There are currently digital calls. Failed to apply configuration

