The Smart PBX Manager API interface

1. API Introduction

The API (Application Processing Interface) is the interface that the PBX provides to third-party applications to operate the PBX, such as answering incoming calls, hanging up calls, etc.

1.1. Interaction protocols

The interaction protocol uses MQTT, with the PBX as the client.

1.2. Transmission content

The content of the transfer is in json format, see the API description in the documentation for details of the format.

1.3. Business signalling process

- **The overall message push process**
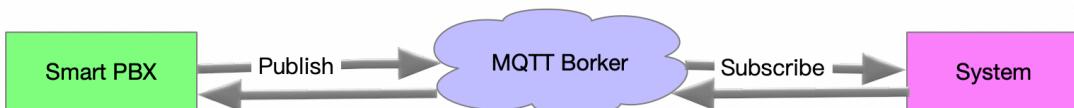
- **Command sending process**

1. System Subscribe topic device/${token}/api/v1.0/response
2. System Publish command to topic device/${token}/api/v1.0/command/${subcmd}
3. System Receive response from topic device/${token}/api/v1.0/response

- **Event acceptance process**
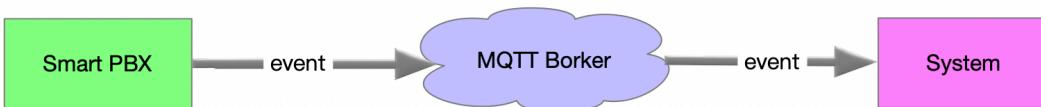
1. System Subscribe topic device/${token}/api/v1.0/event
2. System Receive event from topic device/${token}/api/v1.0/event

2. API interface

2.1. API interface Configuration

The interface to the SmartPBX API requires login to the PBX administration page for configuration.

API Manager Configure

Enable	☑
Status	Disconnected
Host	
Port	
Username	
Password	
Token	

Note: 1. Configure the Borker-related login information for MQTT. 2. The token field is a unique string associated with the Topic.

2.2. Query PBX device information

- **Topic:** device/${token}/api/v1.0/command/system
- **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	deviceInfo
request_id	No	String	The command returns as is

- **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
deviceinfo	Yes	String	
devicename	Yes	String	Equipment name
sn	Yes	String	Equipment serial number
firmwarever	Yes	String	Firmware version number
systemtime	Yes	String	System time
uptime	Yes	String	Start-up time
message	No	String	Message Status
request_id	Yes	String	Request id

- **Practical examples**

1. request

{"cmd": "deviceInfo", "request_id":" e914b5997b762aa7"}

2. Response

{"status": "Success", "deviceinfo":

    { "devicename": "SPX1006O16S",

    "sn": "XR18132110000787",

    "firmwarever": "0.0.1-beta-20220610",

    "systemtime": "Fri Jun 10 11:37:23 2022",

    "uptime": "00:22:27"},

"message": "success",

"request_id": "e914b5997b762aa7"}

2.3. Extension Information Search

- **Topic: device/${token}/api/v1.0/command/system**
- **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	extension_list
request_id	No	String	The command returns as is

- **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
extlist	Yes	Array < ExtesnionInfo>	Extension Information
request_id	Yes	String	Request id

Extensioninfo.

Name	Is it necessary	Type	Description
type	Yes	String	Extension type: 1.SIP 2.FXS
number	Yes	String	Extension Number
username	Yes	String	Extension Name

Name	Is it necessary	Type	Description
status	Yes	String	Current extension status
port	Yes	String	**When type is FXS**, FXS channel number

- **Practical examples**

1. Requests

{"cmd": "extension_list", "request_id":" e914b5997b762aa7"}

2. Response

{ "status": "Success",

"message": "success",

"extlist":[{"status": "Unavailable", "type": "SIP", "number": "8001", "username": "8001"},

{"number": "2005", "status": "Idle", "type": "FXS", "port": "5", "username":""},

{"number": "2006", "status": "Idle", "type": "FXS", "port": "6", "username":""},

{"number": "2007", "status": "Idle", "type": "FXS", "port": "7", "username":""},

{"number": "2008", "status": "Idle", "type": "FXS", "port": "8", "username":""},

{"number": "2009", "status": "Idle", "type": "FXS", "port": "9", "username":""},

{"number": "2010", "status": "Idle", "type": "FXS", "port": "10", "username":""},

{"number": "2011", "status": "Idle", "type": "FXS", "port": "11", "username":""},

{"number": "2012", "status": "Idle", "type": "FXS", "port": "12", "username":""},

{"number": "2013", "status": "Idle", "type": "FXS", "port": "13", "username":""},

{"number": "2014", "status": "Idle", "type": "FXS", "port": "14", "username":""},

{"number": "2015", "status": "Idle", "type": "FXS", "port": "15", "username":""},

{"number": "2016", "status": "Idle", "type": "FXS", "port": "16", "username":""}],

"request_id":" e914b5997b762aa7"}

2.4. Extension parameter setting

- **Topic: device/${token}/api/v1.0/command/cfg**
- **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	extension_set
request_id	No	String	The command returns as is
extension	Yes	String	Extension Number
params	Yes	Array < Extensionparams>	

Extensionparams

Name	Is it necessary	Type	Description

Name	Is it necessary	Type	Description
logout_status	Yes	String	Extension login/logout settings
fullname	No	String	Extension name setting
permission	Yes	String	Permission settings. 0 means inside the device 1 indicates in-house 2 for local calls 3 indicates domestic long distance 4 indicates international long distance

● **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id

● **Practical examples**

1. Requests

```
{
    "cmd": "extension_set",
    "request_id": "xxxx",
    "extension": "8001",
    "params": {
        "logout_status": "0",
        "fullname": "Tom",
        "permission": "3"
    }
}
```

2. Response

```
{"message": "success", "status": "Success", "request_id": "xxxx"}
```

2.5. Extension alarm setting

- **Topic: device/${token}/api/v1.0/command/cfg**
- **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	alarm_set
request_id	No	String	The command returns as is
extension	Yes	String	Extension Number
params	Yes	Array < Alarmparams>	

Alarmparams

Name	Is it necessary	Type	Description
start	Yes	String	Start time
clock_sound	Yes	String	Alarm beep
cycle	Yes	String	Wake-up call cycle
times	Yes	String	Number of wake-up calls
days	Yes	String	Days of wake up call

- **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id

- **Practical examples**

1. Requests

```
{
    "cmd": "alarm_set",
    "request_id": "xxxx",
    "extension": "8001",
    "params": {
        "start": "16:30",
        "clock_sound": "xxxx.wav",
        "cycle": "10",
        "times": "1",
```

```
            "days": "10"
        }
}
```

2. Response

```
{"request_id": "xxxx", "status": "Failed", "message": "clock sound is not existing"}
```

2.6. Relay Information Search

- **Topic: device/${token}/api/v1.0/command/system**
- **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	trunk_list
request_id	No	String	The command returns as is

- **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
trunklist	Yes	Array < TrunkInfo>	Extension Information
request_id	Yes	String	Request id

Trunkinfo.

Name	Is it necessary	Type	Description
type	Yes	String	Extension type: 1. SIP 2. FXO
name	Yes	String	Relay Name
status	Yes	String	Current Relay Status
port	Yes	String	**When type is FXO, FXO channel number**
vbat	Yes	String	**FXO voltage value when type is FXO**

1. Requests

```
{"cmd": "trunk_list", "request_id":" e914b5997b762aa7"}
```

2. Response

```
{ "trunklist":[{"status": "Idle", "name": "SIP_kMvORe", "type": "SIP"},
            {"port": "1", "vbat":50, "status": "Idle", "name": "FXO-1", "type": "FXO"},
            {"port": "2", "vbat":1, "status": "Disconnected", "name": "FXO-2", "type": "FXO"},
```

{"port": "3", "vbat":1, "status": "Disconnected", "name": "FXO-3", "type": "FXO"},

{"port": "4", "vbat":1, "status": "Disconnected", "name": "FXO-4", "type": "FXO"}],

"request_id":" e914b5997b762aa7",

"status": "Success",

"message": "success"}

2.7. Real-time call information search

- **Topic: device/${token}/api/v1.0/command/system**
- **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	livecall
request_id	No	String	The command returns as is

- **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
livecall	Yes	Array < Livecallinfo>	Extension Information
request_id	Yes	String	Request id

Livecallinfo.

Name	Is it necessary	Type	Description
caller	Yes	String	Calling Number
source	Yes	String	Calling channel
called	Yes	String	Called Number
destination	Yes	String	Called channels
Duration	Yes	String	Duration
callid	Yes	String	Unique Identification Number
state	Yes	String	Called channel status
direction	Yes	String	Internal: indicates an internal call Outbound: indicates an outbound call
recording	Yes	String	Recording address

1. Requests

{"cmd": "livecall", "request_id":" e914b5997b762aa7"}

2. Response

{ "request_id": "e914b5997b762aa7",

"status": "Success",

"livecall":

[{"caller": "2005", "source": "FXS/5", "called": "2006", "destination": "FXS/6",

"duration": "00:00:06", "callid": "1673071399.25", "state": "Ringing",

"direction": "Internal", "recording": "no"}],

"message": "success"}

1.1. Hang-ups

1.   Topic: device/${token}/api/v1.0/command/call

2.   Request parameters

Name	Is it necessary	Type	Description
cmd	Yes	String	hangup
request_id	No	String	The command returns as is
callid	Yes	String	Unique Identification Number

1.   Response parameters

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id

● **Practical examples**

1. Requests

{"cmd": "hangup", "request_id": "xxx", "callid": "1672030725.7987",}

2. Response

{ "request_id": "xxx", "status": "Success", "message": "Channel Hungup" }

2.8. Event acquisition

● **Topic: device/${token}/api/v1.0/event**

● **Response parameters**

Name	Is it necessary	Type	Description
event	Yes	String	extension_status
extension	Yes	String	Extension Number
status	Yes	String	Extension Status
ipaddr	No	String	SIP extension address information

- **Practical examples**

  1.{ "event": "extension_status", "extension": "2005", "status": "Idle" }

  2. { "event": "extension_status", "extension": "2005", "status": "InUse" }

  3. { "event": "extension_status", "extension": "2005", "status": "Busy" }

  4. { "event": "extension_status", "extension": "8001", "ipaddr": "sip:8001@192.168.8.171:63414", "status": "InUse" }

- **Topic: device/${token}/api/v1.0/event**
- **Response parameters**

Name	Is it necessary	Type	Description
event	Yes	String	invite (extension pop-up message)
from	Yes	String	Calling Number
to	Yes	String	Called Number
called	No	String	Unique Identification Number

- **Practical examples**

  {"event": "invite", "from": "8001", "to": "2005", "callid": "1673077852.143"}

- **Topic: device/${token}/api/v1.0/event**
- **Response parameters**

Name	Is it necessary	Type	Description
event	Yes	String	ivrdtmf
ivr	Yes	String	ivr number
caller	Yes	String	Calling Number
dtmf	Yes	String	Keystroke information
called	Yes	String	Unique Identification Number

- **Practical examples**

  {"event": "ivrdtmf", "ivr": "9000", "caller": "2005", "dtmf": "5", "callid": "1673078689.147"}

2.9. Click on outbound call

1. **Topic: device/${token}/api/v1.0/command/call**
2. **Request parameters**
3. **Description: Extension click to dial**

Name	Is it necessary	Type	Description
cmd	Yes	String	dial
request_id	No	String	The command returns as is
caller	Yes	String	Calling Number
callee	Yes	String	Called Number **Note: If the called number is an external number, you need to match the call routing rules.**
dialpermission	No	String	Set which extension number permission to use to call out to an outside number. Caution. • **When the caller is an extension, there is no need to set up dialpermission. You can call out directly using your extension privileges.** • **When the caller is not an extension number (e.g. ringing group or queue), you must set the dialpermission to be an extension number with outbound calling privileges, so that you can use the extension's privileges to call out to external numbers.**

4. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
callid	Yes	String	Unique Identification Number
request_id	Yes	String	Request id

- **Practical examples**
  ### 1. Requests
  {"cmd": "dial", "request_id": "xxx", "caller": "8001", "callee": "2005"}
  ### 2. Response
  {"message": "success", "callid": "1673080587.2118", "request_id": "xxx", "status": "Success"}

2.10. Click to call to IVR

1. **Topic: device/${token}/api/v1.0/command/call**

2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	dial
request_id	No	String	The command returns as is
caller	Yes	String	Calling Number (IVR ID)
callee	Yes	String	Called Number **Note: If the called number is an external number, you need to match the call routing rules.**
dialpermission	No	String	Set which extension number permission to use to call out to an outside number. Caution. • **When the caller is an extension, there is no need to set up dialpermission. You can call out directly using your extension privileges.** • **When the caller is not an extension number (e.g. ringing group or queue), you must set the dialpermission to be an extension number with outbound calling privileges, so that you can use the extension's privileges to call out to external numbers.**

3. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
callid	Yes	String	Unique Identification Number

Name	Is it necess ary	Type	Description
request_id	Yes	String	Request id

- **Practical examples**
  1. Requests
     {"cmd": "dial", "request_id": "xxx", "caller": "8001", "callee": "9000", "dialpermission": "8001"}
  2. Response
     {"callid": "1673081585.0187", "request_id": "xxx", "message": "success", "status": "Success"}

2.11. Click to call to queue

2. **Topic: device/${token}/api/v1.0/command/call**
3. **Request parameters**
4. **Description: Extension click to dial**

Name	Is it necessary	Type	Description
cmd	Yes	String	dial
request_id	No	String	The command returns as is
caller	Yes	String	Calling number (queue ID)
callee	Yes	String	Called Number **Note: If the called number is an external number, you need to match the call routing rules.**
dialpermission	No	String	Set which extension number permission to use to call out to an outside number. Caution. - **When the caller is an extension, there is no need to set up dialpermission. You can call out directly using your extension privileges.** - **When the caller is not an extension number (e.g. ringing group or queue), you must set the dialpermission to be an extension number with outbound calling privileges, so that you can use the extension's privileges to call out to external numbers.**

5. Response parameters

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
callid	Yes	String	Unique Identification Number
request_id	Yes	String	Request id

● **Practical examples**

1. Requests

{"cmd": "dial", "request_id": "xxx", "caller": "6666",
"callee": "+861235432341231""dialpermission": "8001"}

2. Response

{"status": "Success", "callid": "1672026034.6568", "message": "success", "request_id": "xxx"}

2.12. Queue list

1. Topic: device/${token}/api/v1.0/command/queue

2. Request parameters

Name	Is it necessary	Type	Description
cmd	Yes	String	queue_list
request_id	No	String	The command returns as is

4. Response parameters

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
queuelist	Yes	Array < Queuelistiinfo>	
request_id	Yes	String	Request id

Queuelistinfo

Name	Is it necessary	Type	Description
number	Yes	String	Queue Number

Name	Is it necessary	Type	Description
description	Yes	String	Queue description
members	Yes	String	Queue members
strategy	Yes	String	**Ringing strategy** ● **[Ringall]**: The system will ring all idle queue members at the same time until the incoming call is answered by an extension member. ● **[Random]**: The system will randomly ring an extension member in the queue that is free. ● **[roundrobin]**: The system will ring the idle members of the queue in order. ● **[Rrmemory]**: The system will ring the free members of the queue in the order specified by the configuration file.

● **Practical examples**

    1. Requests

        {"cmd": "queue_list", "request_id": "xxxx"}

    2. Response

        {"message": "success", "queuelist":[{"number": "33222", "description": "n/a", "members": "2003,2004,2005", "strategy": "ringall"}], "status" : "Success", "request_id": "xxxx"}

2.13. Queue status

1.   **Topic: device/${token}/api/v1.0/command/queue**

2.   **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	queue_status
queue	Yes	String	Queue ID
request_id	No	String	The command returns as is

5.   **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.

Name	Is it necessary	Type	Description
queue	Yes	String	Queue ID
params	Yes	Array < Queuestatusiinfo>	
request_id	Yes	String	Request id

Queuestatusinfo

Name	Is it necessary	Type	Description
max	Yes	String	Queue Number
holdtime	Yes	String	
calls	Yes	String	
strategy	Yes	String	**Ringing strategy** • **[Ringall]**: The system will ring all idle queue members at the same time until the incoming call is answered by an extension member. • **[Random]**: The system will randomly ring an extension member in the queue that is free. • **[roundrobin]**: The system will ring the idle members of the queue in order. • **[Rrmemory]**: The system will ring the free members of the queue in the order specified by the configuration file.
talktime	Yes	String	
completed	Yes	String	
abandoned	Yes	String	
members	Yes	Array < Queuenumbersiinfo>	

Queuenumbersiinfo

Name	Is it necessary	Type	Description
agent	Yes	String	Sitting Number
status	Yes	String	
paused	Yes	String	

● **Practical examples**

1. Requests

{"cmd": "queue_status", "request_id": "xxx", "queue": "6666"}

2. Response

```
{ "request_id": "xxx",
   "queue": "6666",
   "params": {
  "max": "0",
   "strategy": "ringall",
    "calls": "0",
    "holdtime": "0",
  "talktime": "",
  "completed": "0",
  "abandoned": "0" },
  "members": [
        { "agent": "2002", "status": "0", "pused": "0" },
        { "agent": "2003", "status": "0", "pused": "0" },
        { "agent": "2004", "status": "0", "pused": "0" },
        { "agent": "2005", "status": "0", "pused": "0" },
        { "agent": "2006", "status": "0", "pused": "0" },
        { "agent": "2007", "status": "0", "pused": "0" },
        { "agent": "2008", "status": "0", "pused": "0" },
        { "agent": "8001", "status": "1", "pused": "1" }
          ],
  "status": "Success" }
```

2.14. Queue add (Queue add)

1. **Topic: device/${token}/api/v1.0/command/queue**

2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	queue_add
request_id	No	String	The command returns as is
queue	Yes	String	Queue number
extension	Yes	String	Seat Number

3. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. f

Name	Is it necessary	Type	Description
			ailed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id

- **Practical examples**
  ### 1. Requests
  {"cmd": "queue_add",　　"request_id": "xxx", "queue": "6666", "extension": "8001"}
  ### 2. Response
  { "request_id": "xxx", "status": "Success", "message": "Added interface to queue" }

2.15. Queue seat removal (Queue remove)

1. **Topic: device/${token}/api/v1.0/command/queue**

2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	queue_remove
request_id	No	String	The command returns as is
queue	Yes	String	Queue number
extension	Yes	String	Seat Number

3. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id

- **Practical examples**
  ### 1. Requests
  {"cmd": "queue_remove",　"request_id": "xxx", "queue": "6666", "extension": "8001"}
  ### 2. Response
  { "request_id": "xxx", "status": "Success", "message": "Remove interface to queue" }

2.16. Queue paused

1. **Topic: device/${token}/api/v1.0/command/queue**
2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	queue_paused
request_id	No	String	The command returns as is
queue	Yes	String	Queue number
extension	Yes	String	Seat Number
paused	Yes	String	yes/no

3. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id

● **Practical examples**

1. **Requests**

{"cmd": "queue_paused", "request_id": "xxx", "queue": "6666", "extension": "8001", "pused": "yes"}

2. **Response**

{ "request_id": "xxx", "status": "Success", "message": " Interface paused successfully" }

2.17. Listening to calls

1. **Topic: device/${token}/api/v1.0/command/call**
2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	listen
request_id	No	String	The command returns as is
monitor	Yes	String	Listener extension number
extension	Yes	String	Extension number of the person being listened to
type	Yes	String	Listening mode. Range of values. listen: normal listening.

Name	Is it necessary	Type	Description
			whisper: cryptic listening. barge: strong plug-in listening.

● **Practical examples**

1. Requests

{"cmd": "listen", "request_id": "xxxx", "monitor": "2008", "extension": "2004", "type": "listen}

2. Response

{"callid": "1669694889.6367", "request_id": "xxxx", "status": "Success", "message": "success"}

2.18. Conference enquiries

1. Topic: device/${token}/api/v1.0/command/conf

2. Request parameters

Name	Is it necessary	Type	Description
cmd	Yes	String	conf_list
request_id	No	String	The command returns as is

3. Response parameters

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
message	Yes	String	Failure message
request_id	Yes	String	Request id
conflist	Yes	Array < Conflistinfo>	

Conflistinfo

Name	Is it necessary	Type	Description
description	Yes	String	Conference room description
number	Yes	String	Meeting Room Number
moderators	Yes	String	Conference Room Facilitator
participantepassword	Yes	String	Participant Code

Name	Is it nec essary	Type	Description
allowinvite	Yes	String	Whether participants are allowed to invite other members. • yes: Yes. • no: No.
moderatorpassword	Yes	String	Facilitator's Code
waitformoderator	Yes	String	Whether to wait for the presiding officer to enter before starting the meeting. • yes: yes • no: No

● **Practical examples**

1. Requests

{"cmd": "conf_list", "request_id": "xxxx"}

2. **Response**

```
{
    "message": "success",
     "conflist":[{"description":"", "number": "33333", "moderators": "2003,2004",
    "participantepassword": "111", "allowinvite": "yes"," moderatorpassword": "11223",
    "waitformoderator": "yes"},
     {"description":"", "number": "4444", "moderators": "2004,2005", "participantepassword":"",
    "allowinvite": "yes", "moderatorpassword":"","     waitformoderator": "no"} ],
    "status": "Success",
    "request_id": "xxxx"
}
```

2.19. Conference Status

1. **Topic: device/${token}/api/v1.0/command/conf**

2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	conf_status
request_id	No	String	The command returns as is
conf	Yes	String	Meeting Room Number

3. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
conf	Yes	String	Meeting Room Number
request_id	Yes	String	Request id
members	Yes	Array < Comfnumberinfo>	

Confnumberinfo

Name	Is it necessary	Type	Description
callerid	Yes	String	
channel	Yes	String	
admin	Yes	String	
markeduser	Yes	String	
waitmarked	Yes	String	
waiting	Yes	String	
muted	Yes	String	
talking	Yes	String	
answeredtime	Yes	String	

● **Practical examples**

1. Requests

{"cmd": "conf_status", "request_id": "e914b5997b762aa7", "conf": "2222"}

2. Response

```
{
  "request_id": "e914b5997b762aa7",
  "members": [ { "callerid": "8001", "channel": "PJSIP\/8001-00000002", "admin": "No", "markeduser":
      "No", "waitmarked": "No", "waiting": "No", "muted": "No", "talking": "No", "answeredtime":
  "2" } ],
  "conf": "2222",
  "status": "Success"
}
```

2.20. Meeting members invited

1. **Topic: device/${token}/api/v1.0/command/conf**

2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	conf_invite
request_id	No	String	The command returns as is
conf	Yes	String	Meeting Room Number
dialpermission	Yes	String	Set which extension number permission to use to call out to an outside number. Caution. • When the caller is an extension, there is no need to set up dialpermission. You can call out directly using your extension privileges. • When the caller is not an extension number (e.g. ringing group or queue), you must set the dialpermission to be an extension number with outbound calling privileges, so that you can use the extension's privileges to call out to external numbers.
member	Yes	String	Meeting Member Number

3. **Response parameters**

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
request_id	Yes	String	Request id
message	Yes	String	Failure message

● **Practical examples**

1. Requests

{"cmd": "conf_invite", "request_id": "e914b5997b762aa7", "conf": "2222", "dialpermission": "8001", "member": "2003"}

2. **Response**

{"status": "Success", "message": "success", "request_id": "e914b5997b762aa7"}

2.21. Meeting members kicked out

1. **Topic: device/${token}/api/v1.0/command/conf**

2. **Request parameters**

Name	Is it necessary	Type	Description

Name	Is it necessary	Type	Description
cmd	Yes	String	conf_kick
request_id	No	String	The command returns as is
conf	Yes	String	Meeting Room Number
channel	Yes	String	Access

3. Response parameters

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
request_id	Yes	String	Request id
message	Yes	String	Failure message

● **Practical examples**

1. Requests

```
{
"cmd": "conf_kick",
"request_id": "e914b5997b762aa7",
"conf": "2222",
"channel": "PJSIP/8001-00000002"
}
```

2. Response

{ "request_id": "e914b5997b762aa7", "status": "Success", "message": "User kicked" }

2.22. Meeting members muted

1. **Topic: device/${token}/api/v1.0/command/conf**
2. **Request parameters**

Name	Is it necessary	Type	Description
cmd	Yes	String	conf_mute
request_id	No	String	The command returns as is
conf	Yes	String	Meeting Room Number
channel	Yes	String	Access

3. Response parameters

Name	Is it necessary	Type	Description

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
request_id	Yes	String	Request id
message	Yes	String	Failure message

● **Practical examples**

1. Requests

```
{
    "cmd": "conf_mute",
    "request_id": "e914b5997b762aa7",
    "conf": "2222",
    "channel": "PJSIP/8001-00000002"
}
```

2. Response

```
{ "request_id": "e914b5997b762aa7", "status": "Success", "message": "User muted" }
```

2.23. Meeting members unmute

1. Topic: device/${token}/api/v1.0/command/conf

2. Request parameters

Name	Is it necessary	Type	Description
cmd	Yes	String	conf_unmute
request_id	No	String	The command returns as is
conf	Yes	String	Meeting Room Number
channel	Yes	String	Access

3. Response parameters

Name	Is it necessary	Type	Description
status	Yes	String	Request status: Success: The request was successful. failed: The request failed.
request_id	Yes	String	Request id
message	Yes	String	Failure message

● **Practical examples**

1. Requests

```
{
    "cmd": "conf_unmute",
```

```
            "request_id": "e914b5997b762aa7",
            "conf": "2222",
            "channel": "PJSIP/8001-00000002"
        }
```

2. **Response**

{ "request_id": "e914b5997b762aa7", "status": "Success", "message": "User unmuted" }

2.24. CDR

- **Topic: device/${token}/api/v1.0/cdr**
- **Response parameters**

Name	Is it necessary	Type	Description
Event	Yes	String	cdr
src	Yes	String	Caller
srctech	Yes	String	Call source
dst	Yes	String	Called
dsttech	Yes	String	Calling destinations
start	Yes	String	Call start time
end	Yes	String	Call end time
billsec	Yes	String	Billable hours
dispositon	Yes	String	Call results
dtmf	Yes	String	Access to IVR function key messages
recordurl	Yes	String	Audio files

- **Practical examples**

1. Response

```
    {
     "event": "cdr",
      "callid": "1672372428.45",
      "src": "2007",
      "srctech": "FXS\/7",
      "dst": "FXS\/7",
      "dsttech": "2005",
      "start": "FXS\/5",
      "end": "2022-12-30 11:53:55",
      "billsec": "0",
```

"disposition": "NO ANSWER",

"direction": "Internal",

"dtmf": "0",

"recordfile": ""

}