

ClickCall Web Service

Protocol Spec Manual

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Document Information

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1.0Ai	1.0	Initial Release of New Document.	2014-06-23
1.0An	1.1	Hangup	2015-04-02

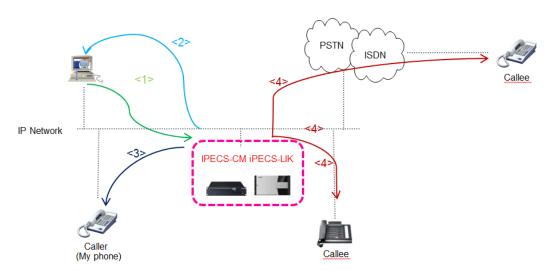
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Overview

What is iPECS ClickCall Web Service

The iPECS ClickCall Web Service is a web service to make a call or hangup by clicking on PC in conjunction with your iPECS System and iPECS desktop phone. ClickCall Service is provided with the steps below. It is accomplished by sending XML message on HTTPS.



- <1> The iPECS ClickCall service send dial numbers to the iPECS system. (Request)
- <2> The system analyses dial numbers and return result. (Response)
- <3> The system send ring command to caller.
- <4> The system make a call with the dial number.

NOTE

iPECS CM does not support hangup.

License and Account Information

Prior to release of iPECS ClickCall Web Service with the host iPECS system, the host iPECS system must have the iPECS ClickCall software license installed. Also, the host iPECS system administrator must input account information in the host iPECS system database as below.

• iPECS-CM system

- Extension Information > Terminal Information > Terminal Attribute, then set the 'Click Call Use Option'
- Extension Information > Number(DN) Information > DN Attribute, then set the 'Extension Password'

• iPECS UCP system

- Station Data > Common Attributes(PGM111) > Routing Attributes > "Click To Call Service", then set "Enable"
- Device Login > Station User Login (PGM443), then set the 'ID', 'Password', and 'Desired Number'.

Protocol Spec

This chapter explains about the protocol of iPECS ClickCall Web Service, so developers can make applications or web service.

Definition of XML document

iPECSService.dtd

```
<?xml version="1.0" encoding="utf-8"?>
<!ELEMENT ipecs svc (request|response)>
<!--request definition-->
<!ELEMENT request (clicktocall) +>
<!ATTLIST request type (service) #REQUIRED>
<!ATTLIST request encrypt (on|off) "off">
<!ATTLIST request servicename (clicktocall) #REQUIRED>
<!-Select Call Method. In case of multi selection, then cmd cnt is required-->
<!ATTLIST request cmd cnt CDATA #IMPLIED>
<!-In case of multi command, insert the number of command.-->
<!ELEMENT clicktocall (userinfo, srcinfo, destinfo)>
<!ELEMENT status (status id)>
<!ELEMENT userinfo (stnnum?, userid, userpwd)><!-User Info: required -->
<!ELEMENT stnnum (#PCDATA)><!-user extension number-->
<!ELEMENT userid (#PCDATA)><!-- user login ID-->
<!ELEMENT userpwd (#PCDATA)><!-- user login password-->
<!ATTLIST userpwd encrypt (on|off) #REQUIRED>
<!ELEMENT destinfo (dialnum+)>
<!ATTLIST destinfo calltype (single|conf|sms|hangup) #REQUIRED>
```

```
<!ELEMENT dialnum (#PCDATA)><!-Dialed Number -->
<!ELEMENT srcinfo (dialnum)><!-- callback receiving number-->
<!-resonse definition-->
<!ELEMENT response (clicktocall r)+>
<!ATTLIST response type (service) #REQUIRED><!-- response type.-->
<!ATTLIST response encrypt (on|off) "on">
<!ATTLIST response responseid CDATA #IMPLIED ><!-If you need to set ID. It can
be leaved out!!-->
<!ATTLIST response servicename (clicktocall) #REQUIRED><!-- Select Call
Method. In case of multi selection, then cmd_cnt is required.-->
<!ATTLIST response cmd cnt CDATA #IMPLIED><!-- In case of multi command,
insert the number of command.-->
<!ELEMENT clicktocall_r (code, message, status_id)>
<!ELEMENT code (#PCDATA)><!--request result-->
<!ELEMENT message (#PCDATA)><!-explanation of the result-->
<!ELEMENT status id (#PCDATA)><!-If it is not an one time command, then the
status id is an index to know the process for of server for the request -->
```

Request Example

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE ipecs svc SYSTEM "iPECSService.dtd">
<ipecs_svc>
<request type="service" encrypt="off" servicename="clicktocall">
        <clicktocall>
               <userinfo>
                       <stnnum>1006058</stnnum>
                       <userid>1006058</userid>
                       <userpwd encrypt="off">1006058</userpwd>
                </userinfo>
                <srcinfo>
                       <dialnum>1006058</dialnum>
                </srcinfo>
                <destinfo calltype="single">
                       <dialnum>01064950821</dialnum>
                </destinfo>
        </clicktocall>
</request>
</ipecs svc>
```

userinfo

stnnum: user extension number

userid : user extension id

userpwd: user extension password

srcinfo

dialnum: number which receives a call(Generally, it is the user extension number)

destinfo

calltype: "single" for making a call, "hangup" for hanging up a phone

dialnum

"single" for call type : dialed number

■ "hangup" for call type : default value "0000"

Response Example

Response Message(code, message)

-	101	Auth Fail	Authorization fail(wrong ID, password)
-	102	Access Denied	Account is denied to access.
-	103	Call Restricted	Account is restricted to make a call.
-	104	NOK Etc	No license and etc.
-	110	CALLER_BUSY	The caller phone is busy.
_	199	Unknown Error	HTTP error message.

100~104 and 110 are response messages iPECS System sends. 199 is a response message https server sends.

NOTE

Response is not classified for each call type(single, hangup).

HTTPS

ClickCall service works by sending XML Request and Response on HTTPS. The port of iPECS System for ClickCall service is basically 7878 and it is changeable.

In case of request, XML information is sent as multipart type on HTTPS. In case of Response, the XML information is received as file type.

NOTICE!

- The Packet Capture file(http_dump.pcap) between Client and System can be downloaded from the iPECS Global Site. You can check out the process for the ClickCall web service specifically.
- The https URI is must be '/ipecs_svc' different from the Packet Capture file.

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