Introduction

The information in this document is intended as a general guide to help you set up the Cloudli service on your SIP compatible telephone system. It contains only Cloudli-specific parameters that need to be configured on your IP-PBX. For full and proper functioning of the Cloudli service and all other features, your IP-PBX should be set up according to the detailed instructions provided by the manufacturer in their configuration guide.

Step 1 - Gather all the necessary information

Your User ID and Web password were provided to you in the Signup Confirmation email. Go to the Cloudli website (www.cloudli.com) and login using your ID and password. (The login command can be found at the top right corner of the page.) Click on **Device Configuration** to expand the menu and then click on **SIP Parameters**. A page similar to the example shown below will be displayed, with values relevant to your account.
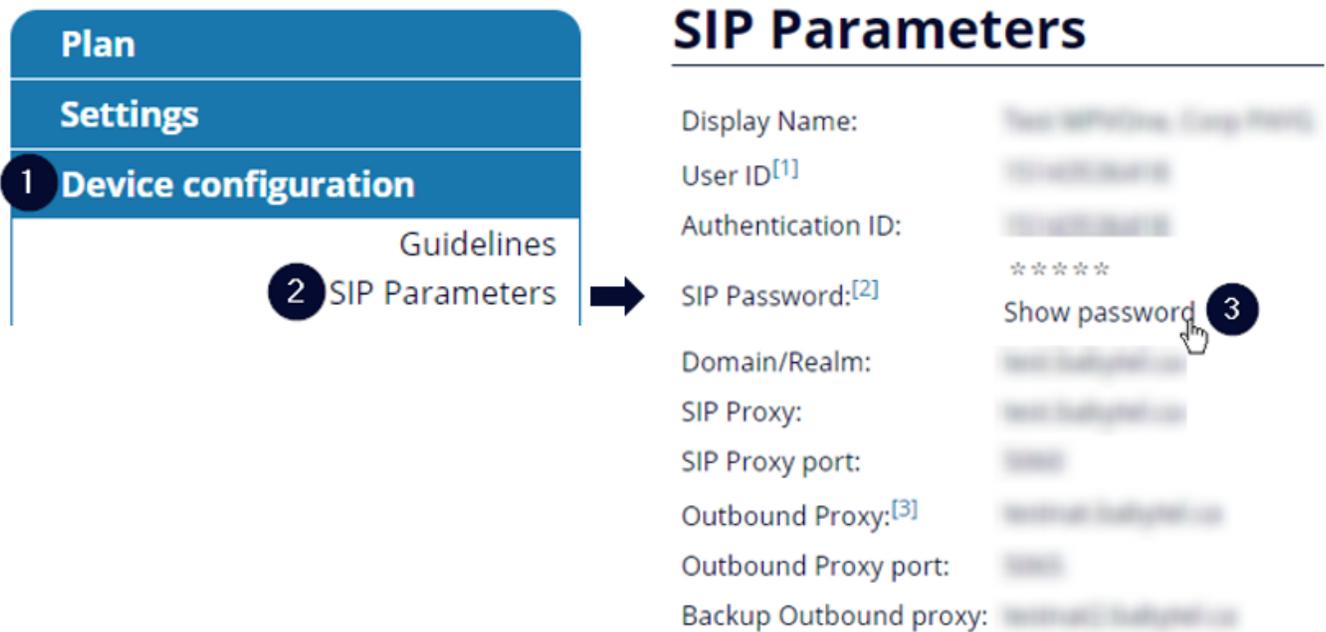
Please have this information at hand when you configure your system.

Step 2 - Configure the Asterisk PBX system

Cloudli is compatible with all versions of Asterisk.

> **Configure the Asterisk as a sip client of the Cloudli network**

Asterisk Configuration File:/etc/asterisk/sip.conf
This configuration file is used to configure the Asterisk SIP trunk interface. The file below illustrates how to configure the Asterisk to register the SIP Cloudli trunk.

sip.conf:
```
[general]
context=inbound-calls           ; Send incoming calls to context "inbound-calls"

allowguest=no                   ; Protect against anonymous callers
srvlookup=yes                   ; Enable DNS SRV lookups
alwaysauthreject=yes            ; For security to protect from  scans
dtmfmode=rfc2833                ; Send outbound DTMFs using RFC-2833


; ##### Registration #####
; Registration of the main DID:
register =>
<User_ID>@<SIP_Proxy>@:<SIP_Password>:<Authentication_ID>@<Outbound_Proxy>:5065/<User_ID>

;##### Incoming Settings #####
[Cloudli_incoming]
type=peer
qualify=no                      ; Don't send OPTIONS to Cloudli
insecure=invite                 ; Do not require authentication of incoming INVITEs
host==<Outbound_Proxy>          ; Cloudli NAT host DNS address
port=5065                       ; Cloudli NAT uses port 5065

; ##### Outgoing Settings #####
[Cloudli_outbound]
type=peer
username=<Authentication_ID>
fromuser=<User_ID>
fromdomain=<SIP_Proxy>
host=<SIP_Proxy>
outboundproxy=<Outbound_Proxy>:5065
secret=<SIP_Password>
canreinvite=no
insecure=no

; ##### Local Asterisk  Users#####
[200] ; local asterisk user
type=friend
secret=myStrongPasscode200q
context=local_200
callerid="John Smith" <200>
host=dynamic
nat=yes


[201] ;local asterisk User
type=friend
secret=myStrongPasscode201
context=local_201
callerid="Denis Smith" <201>
```

```
host=dynamic
nat=yes

Asterisk Configuration File: /etc/asterisk/extensions.conf
This is an example for your dial plan


extensions.conf:

[general]

 [inbound-calls]
exten => <User_DID>,1,Dial(SIP/200)  ; Incoming calls to main number rings extension
200

[local_200]
exten => _9X.,1,Dial(SIP/${EXTEN:1}@Cloudli_outbound)        ; Ext200 can dial 9 to call
out over Cloudli
exten => 201,1,Dial(SIP/201)                                 ; Ext200 can call Ext 201

[local_201]
exten => 200,1,Dial(SIP/200)                                 ; Ext 201 can only call Ext
200
```

Notes:

Values for the items shown in **RED** should be taken from the SIP Parameters page for your account. When entering data, please do not include the brackets "<" and ">" shown above.

If you wish to register additional numbers (Virtual_DID) from your Cloudli account. Please contact Customer Service first. You will then need to duplicate above configuration and replace <User_ID> by the <Virtual_DID>.

Cloudli requires the use of the Outbound-Proxy feature now available in most new Asterisk versions. All SIP messages must be sent to <Outbound_Proxy> to UDP port 5065, but the Domain/Realm must remain <SIP_Proxy> in the SIP headers.

IMPORTANT:

Always protect your Asterisk system installation to prevent unauthorized access. One of the first actions many people do after they install their PBX Asterisk, is often to create a phone extension with an easy password. This can be easily discovered. Always use strong passwords for the extensions, avoid using short or weak extension passwords. There are various other actions that you can perform to secure your Asterisk PBX.

Contact

If you require assistance you can contact us by email at service@cloudli.com.

You can also reach us by phone Monday-Friday 8am-Midnight EST and Saturday-Sunday 10am-6pm EST :

Canada	USA
Montréal: 514 201-6550 Toronto: 416 848-0990 Toll free: 1-877-258-VoIP (8647)	Toll free: 1-877-808-VoIP (8647)

Address: 1425 René-Lévesque, Suite 700, Montréal, Québec, Canada H3G 1T7

Website: www.cloudli.com

Thank you for choosing Cloudli as your Internet Telephony Service Provider. We at Cloudli will continually strive to provide you a reliable service. As well, we will be regularly adding additional capabilities that you may find useful. Please keep up-to-date by visiting us at the Cloudli website.