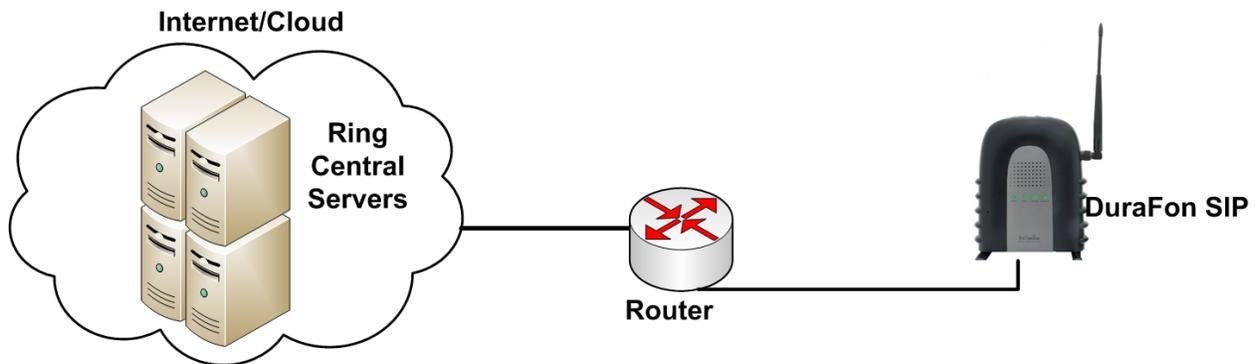


How to setup a DuraFon SIP with a Ringcentral Account

Below is the network topology for this setup guide. Note that the router has opened the appropriate ports for the DuraFon SIP to establish communication with RingCentral cloud servers and vice versa.



Note: In order for this setup to work the Gateway (router at the demark), must be properly configured for the Ringcentral cloud services to establish a connection and operate properly. Please consult with the networking equipment vendor in order to ensure the networking equipment is properly configured.

Below is the RingCentral support article on ports that need to be open for their cloud services to operate:

https://success.ringcentral.com/articles/en_US/RC_Knowledge_Article/9233

Below is an example RingCentral account information that needs to be input into the DuraFon SIP GUI in order for the DuraFon SIP to work with Ringcentral cloud services.

Field	Value
SIP Domain	sip.ringcentral.com:5060
Outbound Proxy	sip10.ringcentral.com:5090
Username	18887357888
Password	ABcDEFG
Authorization ID	1555867530942

First step is for the SIP base unit to be placed on the proper subnet. The LAN settings are found under System>LAN. Below is an example of the screen to perform this function.

System

Status

LAN

Mode Dynamic IP (DHCP) Static IP

LAN IP

IP Address

IP Subnet Mask

Default Gateway

DNS

DNS type

Primary DNS

Secondary DNS

VLAN

VLAN Status

Apply Cancel

Note: Before proceeding to the next steps please register all DuraFon SIP handsets to the system that are going to be utilizing the SIP accounts.

Note: Please refer to the DuraFon SIP FAQ on the default IP address of the DuraFon SIP default IP address.

After registering the DuraFon SIP handsets that will require SIP accounts to the DuraFon SIP base unit, the next step is to configure the SIP accounts in the DuraFon SIP base unit. This is found under VoIP>Basic.



Below is the entire basic SIP options under VoIP>Basic. Below are the highlighted fields that need to be changed from default in order for the DuraFon SIP base unit to successfully communicate with the Ringcentral cloud services.

Single Base

VoIP Server IP	<input type="text" value="sip.ringcentral.com"/>	1
VoIP Server Port	<input type="text" value="5060"/> (5060-5080) <input checked="" type="checkbox"/> Indicating Server Port	
VoIP Dial Mode	<input type="text" value="RFC 2833"/> <input type="checkbox"/> Enable Terminate Key	
Primary Codec	<input type="text" value="G.711 u-law"/>	
Secondary Codec	<input type="text" value="G.729"/>	
SIP Transport	<input type="text" value="Automatic"/>	
STUN	<input type="text" value="Off"/>	
External IP	<input type="text" value="199.255.120.146"/>	2
QoS	<input type="text" value="On"/>	
DNS SRV	<input type="text" value="Off"/>	
Allow SDP NAT Rewrite	<input type="text" value="Off"/>	
Local SIP Port	<input type="text" value="5060"/> (1-65535)	
Local RTP Port	<input type="text" value="20000"/> (even number between 1024-65000)	
RTP Ptime	<input type="text" value="20 ms"/>	
SIP Outbound Proxy	<input type="text" value="sip10.ringcentral.com"/>	3
SIP Outbound Proxy Port	<input type="text" value="5090"/> (1-65535)	
User-Agent Headers	<input type="text" value="SIP-UA/DuraFon"/>	
Registration Expire	<input type="text" value="360"/> (30-65535 seconds)	
MWI Subscribe	<input type="text" value="Off"/>	
Session Timer	<input type="text" value="On"/>	
Call Hold Type	<input type="text" value="RFC 3264"/>	
NAT Keep Alive Method	<input type="text" value="Disable"/>	
NAT Keep Alive Interval	<input type="text" value="15"/> (15-200 seconds)	

Fields #1:

As you can see the values entered in these fields are the SIP Domain and port number provided by the SIP provider.

VoIP Server IP
VoIP Server Port (5060-5080) Indicating Server Port

Field #2:

This is derived from the list of Ringcentral Supernets listed in the Ringcentral KB link on page #1.

Table 2. RingCentral Supernets	
Region	Supernet
USA	104.245.56.0/21
	192.209.24.0/21
	199.68.212.0/22
	199.255.120.0/22
	208.87.40.0/22
EUROPE	185.23.248.0/22
ASIA	103.44.68.0/22

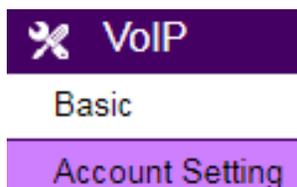
External IP

Fields #3:

These values are derived from the outbound proxy information provided by the SIP provider.

SIP Outbound Proxy
SIP Outbound Proxy Port (1-65535)

Next is to setup the account information. This is under VoIP>Account Settings page.



Click the edit button next to the handset ID you wish to configure with the SIP account settings.

HS ID	BS-Reg Status	SIP Number	Display Name	SIP-Reg Status	Account Active	Action
10	<input checked="" type="radio"/>	10	10	<input type="radio"/>	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>

After clicking the Edit button the User Information Settings page will be displayed.

User Information Settings

SIP Number	<input type="text" value="18887357888"/>	A
Display Name	<input type="text" value="10"/>	
Auth Name	<input type="text" value="1555867530942"/>	B
Password	<input type="text" value="ABcDEFG"/>	C
Account Active	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
	<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

Field A:

The value in this field is the same as the username value provided by Ringcentral

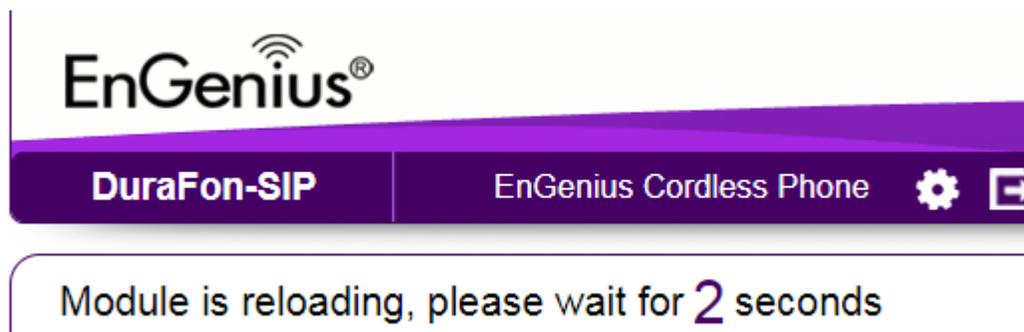
Field B:

The value in this field is the same as the Authorization ID value provided by Ringcentral

Field C:

The value in this field is the same as the Password value provided by Ringcentral

After entering in these fields, click the Apply button and you should see a quick countdown timer similar to the one displayed below.



Below is what should display after entering the values in the User Information Settings page.

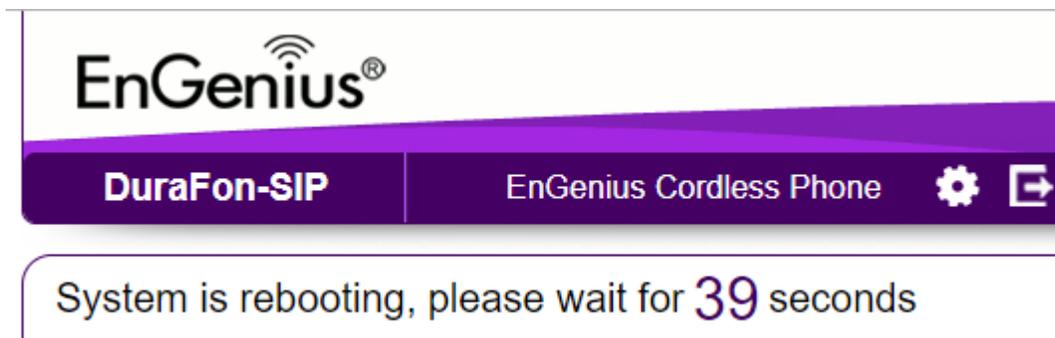
HS ID	BS-Reg Status	SIP Number	Display Name	SIP-Reg Status	Account Active	Action
10		18887357888	10		Enable	Edit Release

Note: The SIP number now displays the value entered in field A, and the Account Active field is set to enable, but the status indicator under SIP-Reg Status is still not green.

Next is to scroll all the way to the bottom of the page below the Group Acc fields and click the Apply button.

[Apply](#)

After clicking the Apply button a longer count down timer is displayed. At this time the DuraFon SIP base unit will reboot.



After the DuraFon SIP base unit reboots, and after you log back into the base unit you should see the SIP Reg Status green.

HS ID	BS-Reg Status	SIP Number	Display Name	SIP-Reg Status	Account Active	Action
10		18887357888	10		Enable	Edit Release