Manually Configuring a CISCO SPA 501G, 502G, 504G, 508G, 509G, 525G for 3CX Phone System

Important:

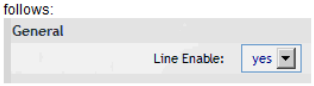
- This guide has been tested with firmware version **7.4.9a.** Be aware that different firmware revisions may have different web interface formats and functionality.
- This FAQ is based on a new phone OR one that has been reset to factory defaults. If in doubt, reset the phone to Factory Defaults.
- To make a "Blind" transfer (where you transfer a call to another extension WITHOUT waiting for the other extension to respond", you need to use the "bxfer" softkey. To make an "Attended" transfer (where you wait for the second extension to answer before transferring the call), you need to use the "xfer" softkey. Using the "Attended" transfer method WITHOUT waiting for the other extension to respond currently does not work with the Cisco phone range.

The preferred method to configure a Cisco SPA5xxG Phone is via Provisioning. You can however follow this guide to manually configure your phone.

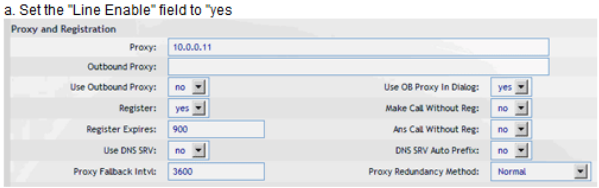
1. Configuring the Phone to Register with 3CX Phone System

1. Start up the phone and identify its IP Address – using the menu key on the phone, go to the "Network" option and press the "Select" button. For this example we will assume the IP Address of the phone is 10.0.0.126, and IP Address of the 3CX Phone System machine is 10.0.0.2
2. Point your browser to the web interface of the phone: http://10.0.0.126

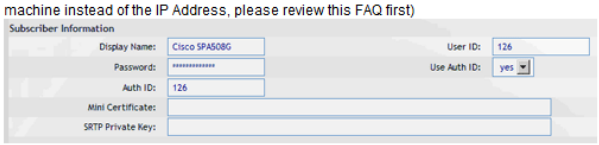
3. Click on the "Admin Login" link, and next click on the "Advanced" link at the top of the page to the phone's advanced administration page
4. We now need to set the phone to register with 3CX Phone System. Click on the "Ext1" tab, and configure as follows:



a. Set the "Line Enable" field to "yes



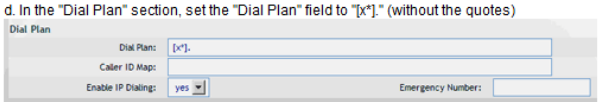
b. In the "Proxy and Registration" section, set the "Proxy" field to the IP Address of the 3CX Phone System machine – in this example, 10.0.0.11. (If you would like to specify the FQDN of the 3CX Phone System machine instead of the IP Address, please review this FAQ first)



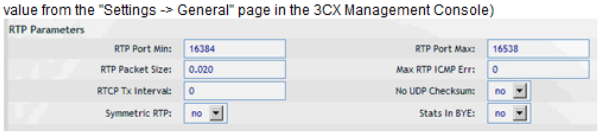
c. In the "Subscriber Information" section:

i. Set the "Display Name" field to the name you want to appear on the Phone display
ii. Set the "User ID" field to the extension number you want to associate with this phone
iii. Set the "Password" field to the extension's Authentication Password
iv. Set the "Use Auth ID" field to "yes"
v. Set the "Auth ID" field to the extension's Authentication ID

d. In the "Dial Plan" section, set the "Dial Plan" field to "[x*]." (without the quotes)



5. Next, we need to configure the Voice Mail Number on the phone to be able to retrieve Voice Mail messages from 3CX Phone System. Click on the "Phone" tab and set the "Voice Mail Number" field to your system's Special Voice Mail Extension Number. (In a 3-digit installation, the default is "999" - you can check the correct value from the "Settings -> General" page in the 3CX Management Console)

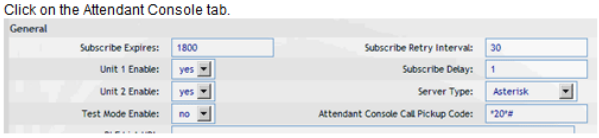


6. Next, we need to adjust the audio parameters. Click on the "SIP" tab and, in the "RTP Parameters" section, set the "RTP Packet Size" field to "0.020"
7. Click the "Submit All Changes" button at the bottom of the page. Your phone will restart. After rebooting, the phone will register with 3CX Phone System. This can be verified via the "Extension Status" page of the 3CX Management Console.

2. Configuring the Cisco SPA500S Extension Module (Optional)

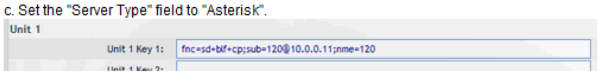
You can also manually configure the Cisco SPA500S Extension Module to monitor the status of other extensions on the system.

1. Click on the Attendant Console tab.



2. In the "General" section:
   a. Set the "Subscribe Expires" field to "1800"
   b. Set the "Unit 1 Enable" field to "yes". If you have a second extension module daisy-chained to the first, also

set the "Unit 2 Enable" field to "yes".
c. Set the "Server Type" field to "Asterisk".



3. For each button on the extension module, configure an extension to be monitored by setting in the "Unit 1 Key 1" field (for example) to:

   fnc=sd+blf+cp;sub=xxx@yyy.yyy.yyy.yyy;nme=xxx

   …where xxx is the extension number to be monitored, and yyy is the IP Address of the 3CX Phone System machine. So if we want a key to monitor the status of extension number 120, and the IP Address of the 3CX Phone System machine is 10.0.0.11, you should set it to:

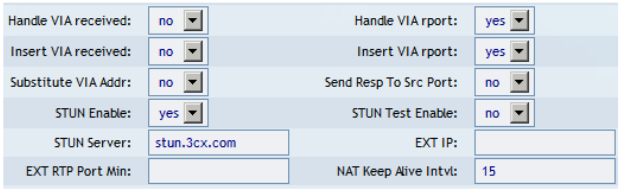
   fnc=sd+blf+cp;sub=120@10.0.0.11;nme=120

4. Click the "Submit All Changes" button at the bottom of the page. Your phone will restart. After rebooting, the phone will register with 3CX Phone System with the monitoring settings enabled.

3. Additional Configuration for Remote Extensions

If you want to configure the phone as a Remote Extension, you will need to ensure that the "Proxy" field is set to the Public IP Address of the PBX, and also perform the following configuration adjustments:

- Go to the "Ext1" tab
- Go to the "NAT Settings" section
- Set the "NAT Mapping Enable" field to "yes"
- Set the "NAT Keep Alive Enable" field to "yes"



- Go to the "SIP" tab
- Go to the "NAT Support Parameters" section
- Set the "Handle VIA rport" field to "yes"
- Set the "Insert VIA rport" field to "yes"
- Set the "STUN Enable" field to "yes"
- Set the "STUN Server" field to "stun.3cx.com" – to allow the phone to discover its external IP Address, and the port mappings that will be applied to the traffic sent and received by the phone
- Click the "Submit All Changes" button at the bottom of the page. Your phone will restart.