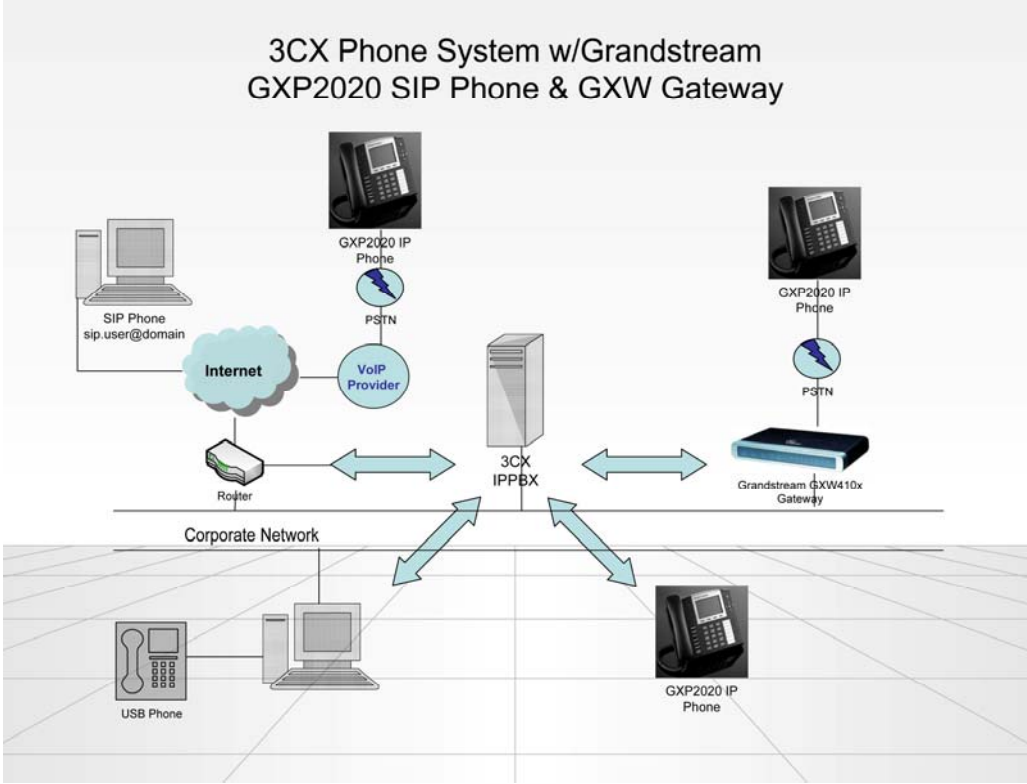
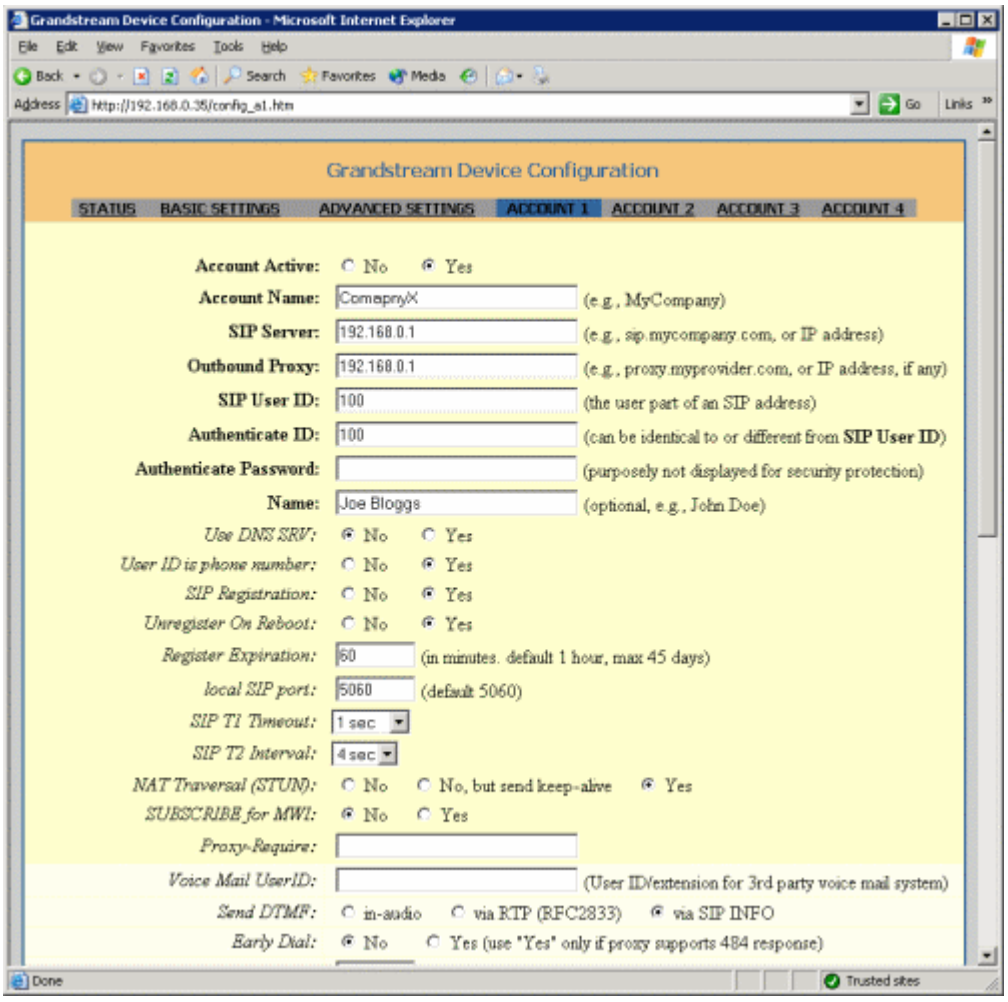
CONFIGURING GRANDSTREAM IP PHONES AND GATEWAYS WITH THE 3CX PHONE SYSTEM



CONFIGURING GRANDSTREAM GXP SERIES WITH THE 3CX PHONE SYSTEM

1. Ensure that you have created the extension that you wish to use with the phone in 3CX Phone System first. Take note of the ID field and the password that you have entered for the extension.
2. Connect the GrandStream GXP-2000 phone to the network and mains power supply. The phone will boot up, and providing you have DHCP installed on your network, will obtain an IP and display it at the bottom of the phone's LCD screen.
3. Now point your browser to the web interface of the phone: 'http://' where is the IP address shown on the phone.
4. Enter the password of the phone and click login to access the phone's configuration. For this particular phone, the default password is "admin".



GXP-2000 Account Configuration Page

5. Click on ‘Account 1’ from the available links at the top of the page.
6. Now configure the account for the phone. First of all make sure that ‘Account Active’ is set to YES. Enter an account name for the phone in the ‘Account Name’ box. This setting is not used by 3CX Phone System. It is only used when making calls to other phones directly.

7. In the SIP server field, enter the IP or server name of the 3CX Phone System server.
8. Repeat the same setting for the Outbound Proxy option
9. Enter the extension number you want to associate with this phone in the ‘SIP User ID’ setting.
10. Now enter an ‘Authenticate ID’ & ‘Authenticate Password’ in the appropriate fields. **These fields must match the ID & password configured in the ‘ID’ &**

'Password' fields in the Authentication section of the 'Add Extension' page in the 3CX Management Console.

11. Scroll to the bottom of the page and press 'Update' to save these settings.
12. Click 'Reboot' to reset your GrandStream phone and put your changes into effect.
13. When the phone boots, it should register with 3CX Phone System.
14. Now switch to the 3CX Phone System Management console, and click on Phone System > 'Line Status' (This is the default page). The extension should be listed, and the status should show 'Registered (idle)'.

ENTERING THE IP ADDRESS MANUALLY IF YOU DO NOT HAVE A DHCP SERVER

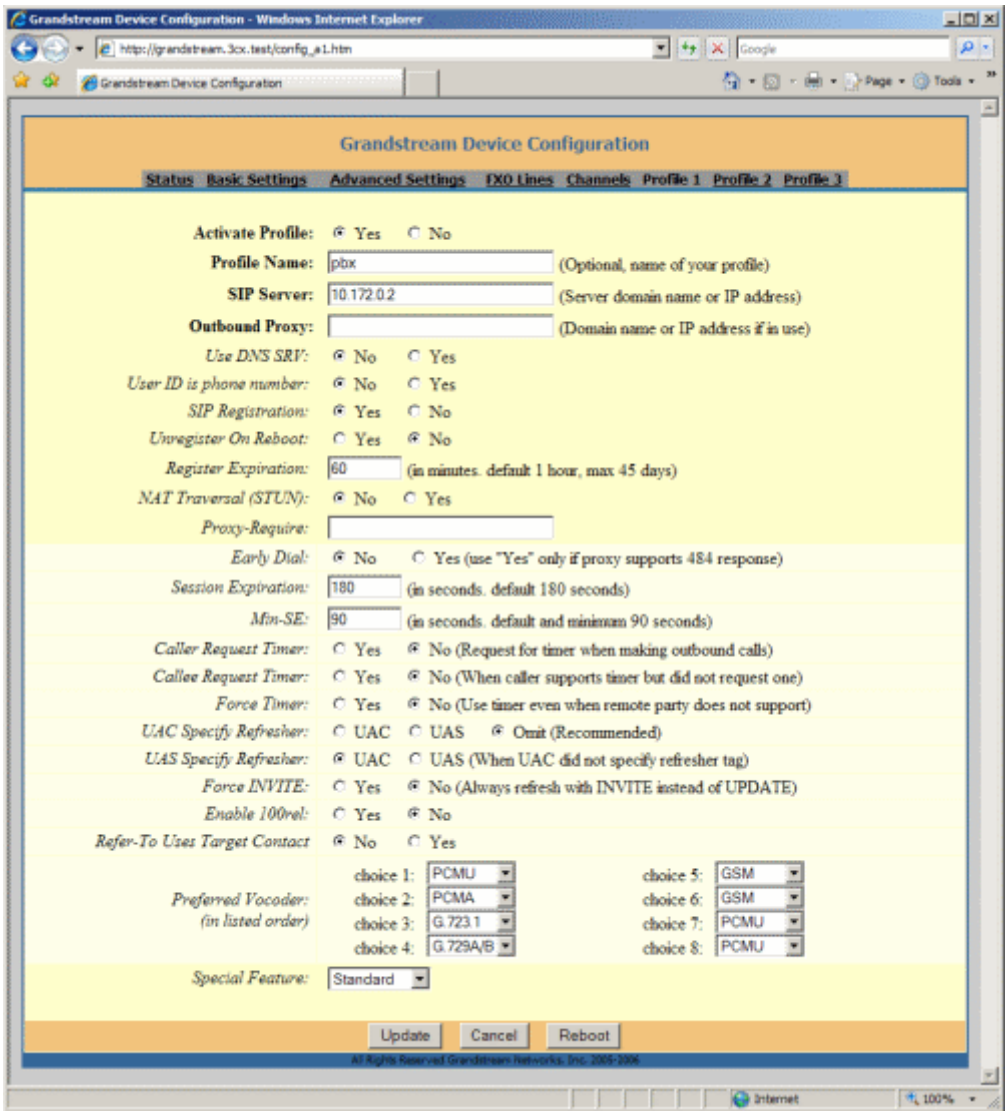
If you don't have a DHCP server, you will need to assign an IP address to the phone before you can access it. To do this:

1. Press the round 'menu' button in the top right corner once to activate the menu. You will see the words '[1] Do Not Disturb -Off' on the phone's LCD screen.
2. Press the down arrow (in the same group of buttons) ONCE to navigate to '[2] DHCP/PPOE mode'. If instead you see '[2] Static IP Mode', skip to #6.
3. Press the round menu button twice to disable DHCP mode. On the phone's screen you should now see '[2] Static IP Mode'.
4. Press the down arrow once to get to the '[3] IP address menu'. Press the round menu button once and key in your desired IP address on the phone's numeric keypad, allowing 3 digits for each octet and leaving out the dots in between. For e.g. 192.168.1.15 would be keyed in as 192168001015. When ready press the round menu button to save this IP address in the phone's configuration.
5. Press the down arrow to go to the Subnet Mask configuration. Press the round menu button once and type in your subnet mask using the same concept as when entering the IP address in #6 (e.g. 255.255.255.0 should be keyed in as 255255255000). Once ready press the round menu button to save the subnet mask.
6. Press the down arrow multiple times until you get to '--RESET--' on the LCD screen and then press the round menu button to reboot the phone and activate the new settings.

CONFIGURING GRANDSTREAM GXW-4104 GATEWAY FOR 3CX PHONE SYSTEM

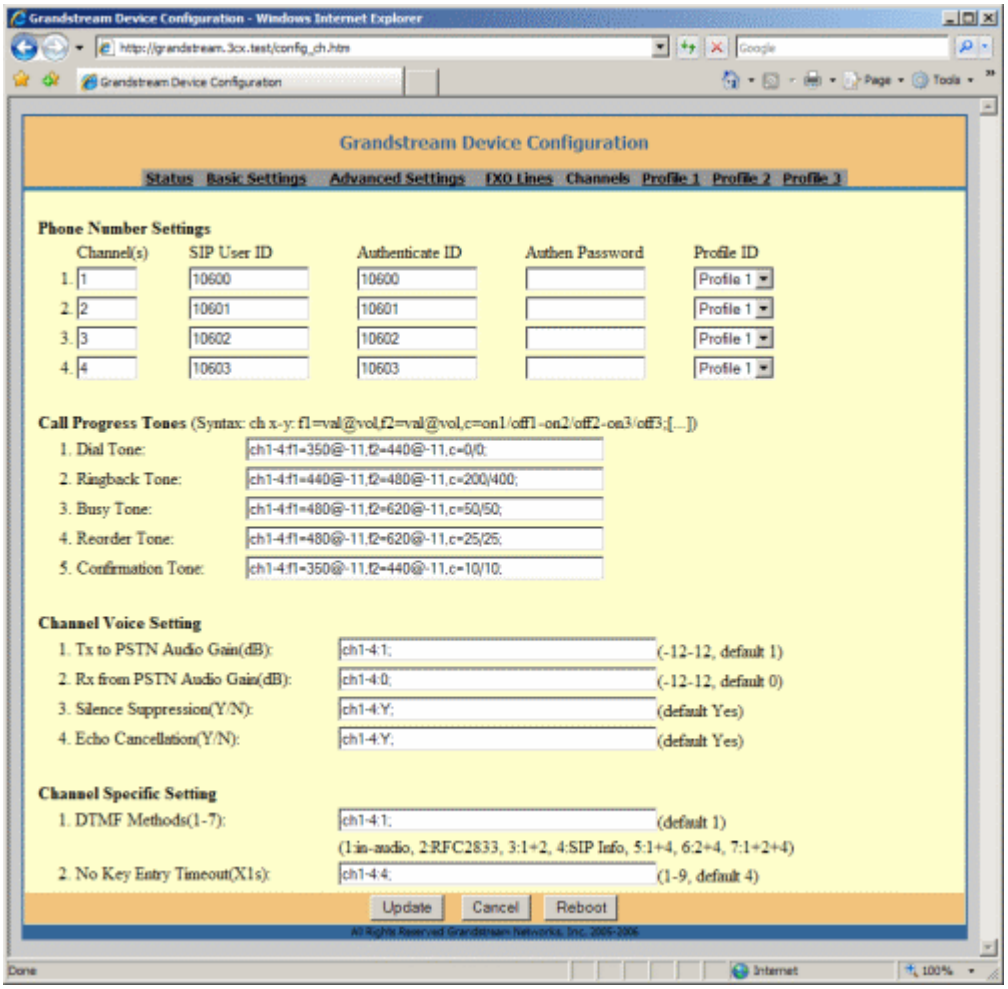
Follow these steps to set up a GrandStream GXW-4104 gateway for 3CX Phone System:

1. Ensure that you have created the PSTN lines in 3CX Phone System first. Take note of the Authentication ID field and the Authentication password that you have entered for each line connected to the VOIP Gateway.
2. Connect the GrandStream GXW-4104 gateway to the network and mains power supply. The device will boot up, using its factory-configured default IP address 192.168.0.160.
3. Now point your browser to the gateway's configuration site: http://192.168.0.160.
4. Enter the password of the device and click 'OK' to access the gateway's configuration. The default password is "admin".



Profile 1 Settings

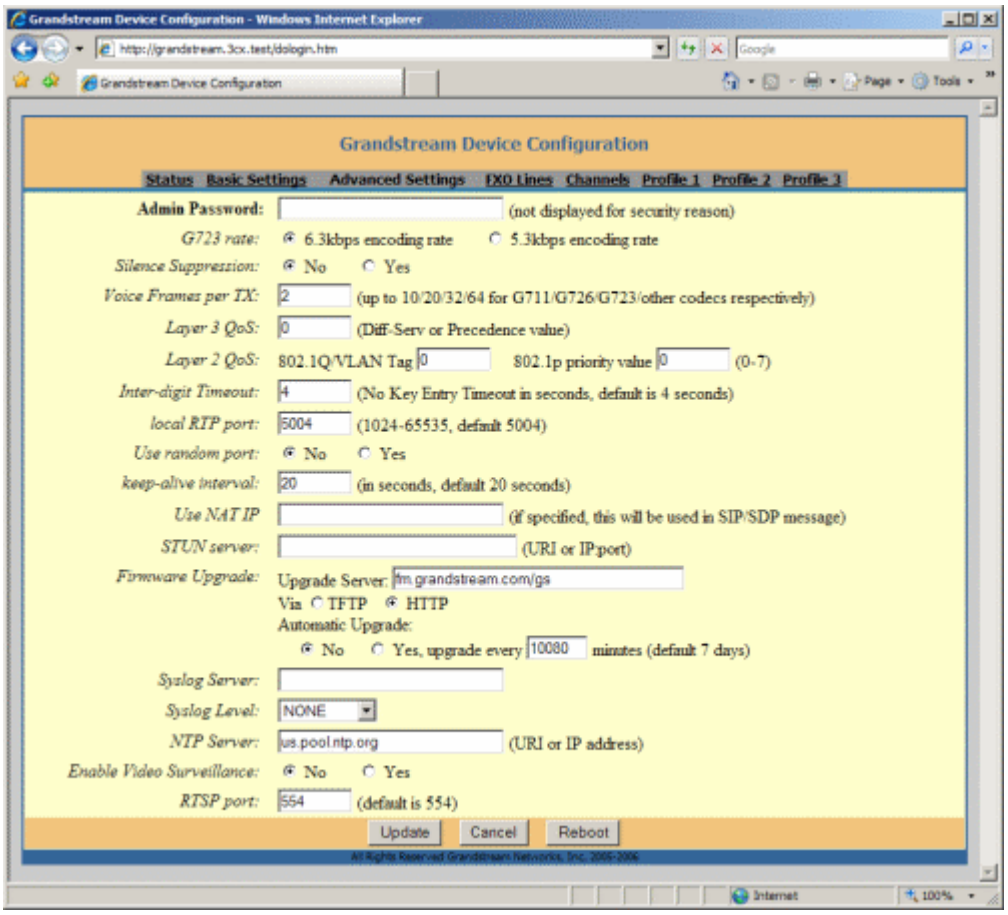
5. Once the page loads click on the “Profile 1” tab at the top of the page:
    a. Set the “SIP Server” field to the IP Address or FQDN of the server on which 3CX Phone System is installed.
    b. Set the “SIP Registration” field to “yes”.
    c. Click the “Update” button at the bottom of the page.



Channel Settings

6. Click on the “Channels” tab at the top of the page. In the “Phone Number Settings” table, the rows represent the 4 PSTN lines connected to the gateway. Configure each line as follows:
    a. The “Channel(s)” field should contain the order number for the line. Normally 1 for the first enabled line, 2 for the second enabled line, and so on.
    b. The “SIP User ID” field should match the Internal Line Number field of the line created for this PSTN line in the 3CX Phone System Management Console.
    c. In the “Authenticate ID” and “Authentication Password” fields enter the ID and Password that you entered for the line in the 3CX Phone System Management Console. **These fields must match the ID and password set for that line in the 3CX Phone System Management Console.**

d. Click the “Update” button at the bottom of the page.



FXO Lines Settings

7. Click on the “FXO Lines” tab at the top of the page. Configure this page as follows:
   a. Set the “Stage Method” field to “ch1-4:1;”
   b. Set the “Off hook Auto Dial(VoIP)” field to “ch1-4:yyyyy;” where yyyyy is the SIP User ID for the first line defined in the “Channels” page.
   c. Click the “Update” button at the bottom of the page.
8. Click on the “Reboot” button to restart the device.
9. After the gateway has restarted, switch to the 3CX Phone System Management Console, and click on Phone System -> ‘Line Status’ (This is the default page). In the section ‘External Lines’, the PSTN lines connected to the VoIP Gateway should be listed with a green status light.

SPECIAL NOTES REGARDING THE GRANDSTREAM GXW-4104

This device may appear to hang up calls which are not answered within 30 seconds. This behaviour is due to the device considering that the call is NOT ESTABLISHED until some extension answers.

To enable complex call forwarding which may require over 30 seconds before call pickup, a workaround will be necessary.

1. Create a Digital Receptionist, attaching a short audio prompt (we suggest you use a silent 1-second WAV file).
2. Set Timeout to 1 second.
3. Set your intended forwarding using the “Action after timeout” and “Extension Number” fields.
4. Leave all key actions to “0 No Action”
5. Go to the bottom of the page and click OK.

Additional information can be found here: http://www.3cx.com/support/grandstream-gxw.html