

Introduction to Configuring Phones

HowTo Configure Phones with sipXcom - Introduction

Three different categories of user agent devices (phones and FXS gateways) can be configured for a sipXcom system:

1. Plug & Play Managed Phones
2. Manually Configured Phones (Unmanaged Phones)
3. Configuring FXX Gateways (Terminal Adaptors)

Before you start setting up your phones and gateways, decide on whether to use DNS SRV or instead rely on fully qualified host names. For a full explanation refer to [DNS Verification](#).

Auto-provisioning: Polycom and Avaya IP 12xx series

Polycom and Avaya 12xx phones will automatically connect to the sipXcom system, assuming the network has DHCP option 66 defined or the phones are setup manually to find the sipXcom server. Phones will register using a restricted ID, and are by default allowed to make internal calls. These phones are displayed in the Phones list and lines can then be added to them as usual. The Discover Devices link on the main page now opens up a phone table with all phones that have been Auto-provisioned and have not yet been assigned a SIP User ID/Line.

Configuring Plug & Play Managed Phones

An increasing number of SIP phones and terminal adaptors are plug & play manageable using the sipXcom Configuration Server. For an updated list please refer to the [What Phones to Choose](#).

The sipX Configuration Server provides standard default profiles for every managed phone or terminal adaptor. Therefore, in order to configure a phone to register with sipXcom, all you need to do is create the phone with default parameters, assign a user (line) to the newly created device, and generate a profile. After manually rebooting the device it should register with the sipXcom system using the assigned line ID. For phones which support default provisioning, it is not even necessary to create the phone - it will be auto-provisioned when it first connects to sipXcom and then lines can be assigned to it as usual.

Refer to the [Hardware and Interoperability](#) section on this Wiki for detailed descriptions on how to configure specific phones, including a discussion of advanced features, firmware upgrades, and troubleshooting.

Once a phone has successfully registered with the sipXcom system, remote reboot of the phone can either be initiated manually at any time or is triggered automatically every time you create a new profile for the phone.



This diagram does not reflect auto-provisioning. With auto-provisioning, the phone is connected to the network first, and a default profile is created for it. Lines can then be added to it.

1. Create a new User



2. Add a Phone



3. Profile auto-generated w/ correct default parameter



1. **Create a new user** A user is easily created on the "User" tab by going to "Add a User".
2. **Assign the Phone** From the newly created user, select the "Phone" link. Select the new phone model from the drop-down list and enter the phone's MAC address or serial number. the user's line is automatically assigned to the phone.
3. **The Configuration Profile is Generated** sipX Config Server now automatically generates a configuration profile for the phone and stores it in its database. All config files are backed up on the sipX server.
4. **The Phone is plugged into the Network** The phone can now be plugged into a network connection and should automatically find the sipX server, pickup the profile and come up configured and ready to use.



If a phone is plug & play managed by the sipXcom Configuration Server, its configuration should only be changed through the sipXcom Web interface. Everytime the phone boots, it will load the configuration profile generated by the sipX Configuration Server, overwriting any local changes that might have been made using either the phone top interface or the phone's built-in Web interface.

Creating a New Phone

Adding a phone to the system is simple. Select your model from a growing list of fully managed devices.

Phones

Filter by... Add new phone...

<input type="checkbox"/>	Phone	Description
<input type="checkbox"/>	00032a007	Acme Cisco ATA 186/188 Cisco IP 7905 IP 650 v2.0
<input type="checkbox"/>	000413240	Cisco IP 7912 Cisco IP 7940 IP 430 v1.6
<input type="checkbox"/>	0004f20344	Cisco IP 7960
<input type="checkbox"/>	000413240	ClearOne MAX IP
<input type="checkbox"/>	0004f20344	Grandstream HandyTone 286 00
<input type="checkbox"/>	000413232	Grandstream HandyTone 386 Grandstream HandyTone 486 Grandstream HandyTone 488 Tone
<input type="checkbox"/>	000413243	Grandstream HandyTone 496 Grandstream BudgetTone 000
<input type="checkbox"/>	000413232	Grandstream GXP2000
<input type="checkbox"/>	000413243	Hitachi Wireless IP 3000
<input type="checkbox"/>	00032a033	Hitachi Wireless IP 5000
<input type="checkbox"/>	000413243	Hitachi Wireless IP 5000A
<input type="checkbox"/>	00032a033	KPhone IP 600/601 v1.6
<input type="checkbox"/>	000413243	Mitel 5224 Grandstream HandyTone 386

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Consider the different HowTo documents to find more detailed instructions about how to configure your phone. sipXcom assigns default parameters so that even without configuring any of the parameters the phone should come up and work.

Configuring Unmanaged Phones (Manually Configured Phones)

If you do not see your phone model in the list of phones, do not worry, you can still use the phone with the PBX if it's SIP compliant. This is called an "unmanaged phone" because you need to configure it with all the proper settings yourself or through some other mechanism.

For an unmanaged phone to be able to register with the sipXcom system, the credentials (user name and SIP password) from a user that exists in sipXcom have to be manually configured into the phone. You also have to at least configure the SIP Registration Server or Outbound Proxy. Dependent on whether you are using DNS SRV or fully qualified host names as well as dependent on the capabilities of the phone this setting can vary.



The SIP Password required for registration is not the PIN assigned to the user. The SIP Password can be seen or changed by selecting *Advanced Settings* on the *Users* page.