



How to Provision a Polycom Phone

This guide shows you how to provision a Polycom® phone with the minimum settings required to place and receive Voice over Internet Protocol (VoIP) calls over IP networks. This document assumes you have no prior familiarity with Polycom phones. If you are familiar with Polycom phones, see the [Polycom® UC Software 4.0.1 Administrators' Guide](#) for full details on how to provision multiple Polycom phones and configure all phone features. The provisioning process outlined in this document is compatible with Polycom Unified Communications Software (UCS) version 4.0.1 or later. This guide also assumes you are set up with one of Polycom's call server partners. Polycom phones support the FTP, TFTP, HTTP, and HTTPS protocols for file provisioning and are configured by default to use File Transfer Protocol (FTP). The example configuration in this guide will use FTP.

The provisioning information in this document applies to the following Polycom phones: SoundPoint IP, SoundStation IP, SoundStation Duo, VVX 500 and 1500 business media phones.

Getting Started

This section shows you how to get your phone ready for the provisioning process. The provisioning method discussed in this guide uses FTP and a personal computer (PC) as the provisioning server.

To begin the provisioning process:

- 1 Provide power to the phone using a PoE switch, if available, or, if no PoE switch is available, using an external power adapter and a network cable to connect the phone to your network.
- 2 If you have an FTP server application installed on your computer, open it now. If not, install one now. [FileZilla](#) and *wftpd* are free FTP applications for windows and *vsftpd* is typically available with all standard linux distributions.
- 3 Create a root FTP directory on the provisioning computer. You will be placing the provisioning files in this root directory. Create a user account for the phone to use and take note of the user name and password as you will need these later in the provisioning process.



Note: Adding Firewall Exceptions

When setting up your FTP server, you may need to add the FTP server as an exception to the computer's firewall to allow the IP phone to communicate with the FTP server.

Gather the Information You Need

Before you begin provisioning, you will need the address, account, and phone information detailed in the following sections.

Obtaining Call Server Information

Take note of the following information:

- **Network address** This is the hostname or IP address of the call server that handles VoIP services on your network.
- **SIP account information** This may include SIP credentials such as a user name and password, and the phone's registration address. Although a user name and password are not required to get the phone working, Polycom strongly recommends using them. You will need to obtain this information from your system administrator.

Obtaining Phone Information

Take note of the following number:

- **MAC address** This is a phone's unique 12-digit serial number just above the phone's bar code on a label on the back of the phone.

Downloading the Configuration Files

Next, you will download the Polycom UCS files from the [Polycom Voice Support](#) Web site. Current build archives include both the split and combined UCS versions for each phone model. The split files, available for specific phone models, are a smaller size, have a faster update time, and reduce internal network traffic during reboots and updates. If you use the split files, you will not be able to upgrade legacy phones. The combined files are a larger size and contain all of the available software files. All configuration files are saved in compressed ZIP file format and must be uncompressed before use.

To download the configuration files:

- 1 Go to the [Polycom Voice Support](#) Web site.
- 2 On the Voice Support Web page, click the link for your phone model.
- 3 Choose either the combined or split file of the Polycom UC Software and download the file to the root FTP directory you created.
- 4 Identify the three files you will be editing in the UCS ZIP file:
 - *reg-basic.cfg*
 - *sip-basic.cfg*
 - *0000000000.cfg* (the master configuration file)

- 5 Right click on each file, and choose **Properties**. On the *General* tab, ensure the *Read-only* option is not checked since you will be modifying these files, and click **OK**.

Configuring the Phone

Next, you will edit your configuration files. Once you have disabled the Read-only status of each file, open each file with an XML editor such as XML Notepad 2007.



Web Info: Provisioning Multiple Phones

The provisioning procedures in this document show you how to provision one phone out of the box. If you are provisioning a number of phones using configuration files, see [Provisioning with the Master Configuration File](#) to gain greater familiarity with how the configuration files work and in particular, the master configuration file.

To edit the *reg-basic.cfg* file:

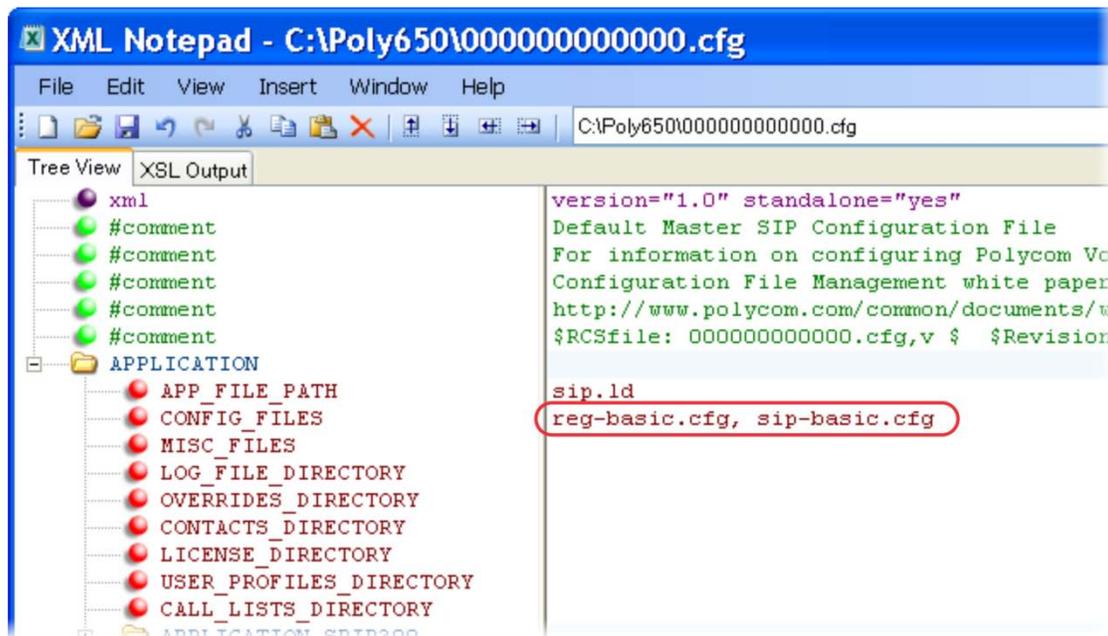
- 1 Open **reg-basic.cfg**.
- 2 In the *reg* element, in the *reg.1.address* attribute, enter the SIP address assigned to the phone.
- 3 Enter the user name in *reg.1.userId* and *password* in *reg.1.auth.password*.
- 4 Save and close **reg-basic.cfg**.

To edit the *sip-basic.cfg* file:

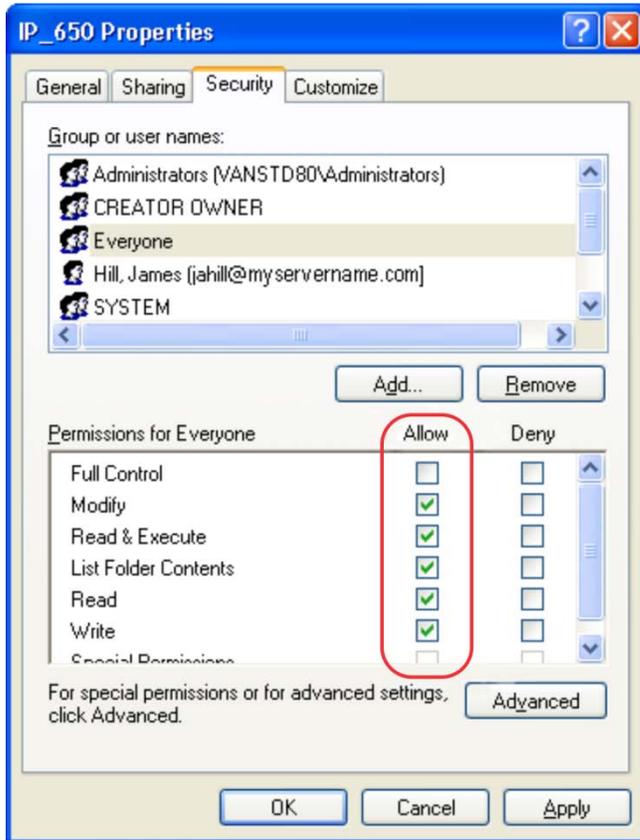
- 1 Open **sip-basic.cfg**.
- 2 In the *voIpProt* element, in the *voIP.server.1.address* attribute, enter the call server information.
- 3 Save and close **sip-basic.cfg**.

To edit the master configuration file:

- 1 Open the master configuration file.
- 2 In the *Application* element, in the *CONFIG_FILES* attribute, list the *reg-basic.cfg* and the *sip-basic.cfg* files, as shown next:



- 3 Use the **Save As** command to save a copy of the file using the 12-digit MAC address of the phone as the file name. For example, if the MAC address of the phone is 0004f2000001, name the file *000123456789.cfg*.
- 4 In the **Save As** dialog, save the file to the directory for the FTP user account.
- 5 Set the security permissions on the FTP directory folder. You will need to define a user or group name and allow permissions to read, write, and modify files. Security permissions vary by organization. An example using a Windows platform is shown next:



Your computer will now act as the FTP provisioning boot server.

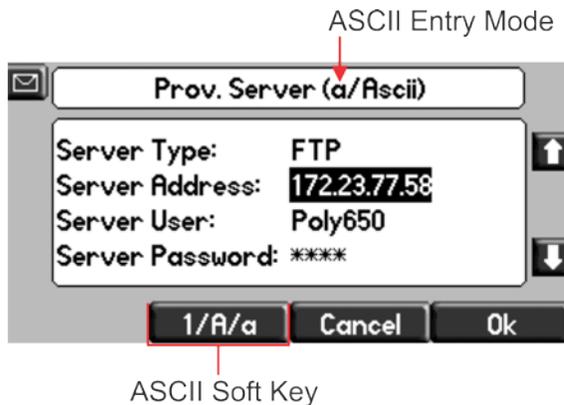
Entering the FTP Provisioning Server Credentials to Your Phone

Next, you will need to enter the FTP provisioning boot server credentials to the phone.

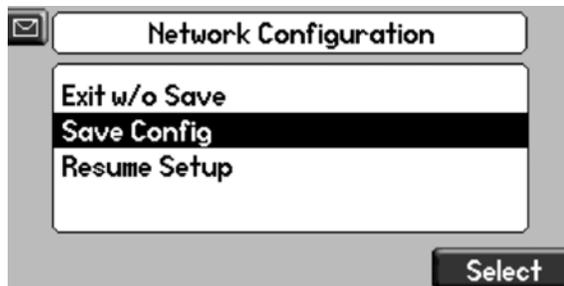
To enter your FTP provisioning boot server information to the phone:

- 1 On the phone, press **Menu > Settings > Advanced** and enter the phone's password. The default is 456.
- 2 Choose **Admin Settings > Network Configuration > Provisioning Server**, and press the **Select** soft key.

- 3 Scroll to a field, press the **Edit** soft key, and enter the FTP provisioning boot server information—in this example your computer’s IP address— user name, and password. Press the alpha-numeric (ASCII) soft key, highlighted in the following illustration, to change entry mode. To enter periods press the star key (*) on your phone’s keypad. If you enter an incorrect number, you can press the backspace/delete button located under the arrow buttons to backspace/delete your entry. Your entries should look like the following example illustration:



- 4 When finished, press the **OK** soft key, and the **Back** soft key once or twice. A prompt screen will display, as shown next.



Choose **Save Config** and press the **Select** soft key to reboot the phone and save the new configuration.

You can now place and receive calls.

Verify Your Setup

As a final step, you can verify that the phone is reading the configuration files and communicating with your provisioning boot server.

- On the phone, press **Menu > Status > Lines**.

Your phone line shows a registration and the call server name displays, as shown next.



This provisioning guide has shown you how to provision a single Polycom phone using FTP and a PC as the provisioning boot server. This guide is intended for users new to Polycom phones and who are setting up a Polycom phone for the first time. If you want more information on Polycom phones, or if you want to begin provisioning multiple phones, the [Polycom UC Software Administrators' Guide 4.0.1](#) provides detailed information in the following areas:

- If you want an overview of Polycom UC Software, see *Chapter 2: The Polycom UC Software Big Picture*.
- If you are familiar with Polycom phones and with provisioning a large number of SIP phones, see *Part II: Setting Up Your System*, which shows you how to set up your phone network and your provisioning server.
- Refer to *Part III: Configuring Your System* of the Administrators' Guide for instructions, with examples, on how to add and modify all Polycom phone features.

If you are familiar with Polycom phones and are provisioning multiple phones, see [Best Practices 35361: Using the Master Configuration File](#) for a detailed explanation, with examples, of how the master configuration file works.

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