

Maintaining Older Polycom® Phones Beyond Their Last Supported Software Release

This technical bulletin describes how to maintain older phones in deployments running software versions past their respective last supported releases. As of UC Software 3.3.0, the unsupported models include the SoundPoint IP 300, 301, 430, 500, 501, 600, 601 and SoundStation IP 4000. These models, known as *legacy phones*, have been discontinued and are only supported with critical patch releases.

Introduction

Polycom maintains support for legacy phones with critical patch releases that end in .x, where x is the patch version. For example, a phone running 3.1.4 will be supported by release 3.1.x (such as release 3.1.6) but not release 3.2.0 or later. At the time of publishing, the versions of the .x patch releases listed in the following table were 2.1.3, 3.1.6, and 3.2.3. For the current release versions, see Polycom Support at <http://www.polycom.com/support/voice>.



Polycom recommends that all legacy phones be updated to the most recent patch of their last supported SIP and BootROM software versions.

The following legacy phones are supported as of UC Software 3.3.0:

Model	Last Supported Release	Replaced By	Date Discontinued	Product Bulletin Number	Last Supported BootROM
IP 300	SIP 2.1.x	IP 321/331	May 2006	532.PB	4.1.x
IP 301	SIP 3.1.x	IP 321/331	March 2008	803.PB	4.1.x
IP 430	SIP 3.2.x ¹	IP 450	April 2010	1129.PB	4.2.x
IP 500	SIP 2.1.x	IP 450	May 2006	532.PB	4.1.x
IP 501	SIP 3.1.x	IP 450	August 2009	970.PB	4.1.x
IP 600	SIP 3.1.x	IP 650/670	May 2006	532.PB	4.1.x
IP 601	SIP 3.1.x	IP 650/670	March 2008	803.PB	4.1.x
IP 4000	SIP 3.1.x	IP 6000/7000	May 2009	933.PB	4.1.x

Installations that combine legacy and non-legacy models will require changes to the phone configuration files to accommodate the legacy models when an update is deployed.

¹ For simplicity, the most recent 3.1.x release will be supported along with the 3.2.x release for the IP 430. System administrators may choose to remain at version 3.1.x in order to avoid downloading SIP 3.2.x onto the provisioning server just to accommodate the IP 430.



Supporting Legacy Phones with SIP 2.1.2 (or later)

Enhancements in the BootROM 4.0.0 and SIP 2.1.2 releases enable you to deploy phones using different software versions that use a common provisioning server and configuration file set.

For more information on these enhancements, see Technical Bulletin 35361 *Overriding Master Configuration File Parameters for Polycom® SoundPoint® IP, SoundStation® IP, and VVX® 1500 Phones*, at http://www.polycom.com/support/voice/soundpoint_ip/VoIP_Technical_Bulletins_pub.html.

Use the following procedure to configure legacy phones together with phones that use a more recent version of the UC Software. This procedure will also make managing your phone system easier when deploying future updates.

- 1 Ensure that all phones are running BootROM 4.0.0 or later.
- 2 Ensure that all software and configuration files for your non-legacy phones are on the provisioning server.
- 3 Download the sip.ld file associated with each legacy phone's most recent supported software patch release to the provisioning server. Rename the files to sip_xyz.ld where xyz is the software version number of the legacy phone's SIP X.Y.Z release (for example, 213, 316, or 323).



The **phone1.cfg** and **sip.cfg** configuration files are not compatible with UC Software release 3.3.0 or later, but are required to maintain compatibility with legacy phones. Be sure you do not add any legacy phone configuration parameters to a phone configured with UC Software 3.3.0 or later.

For more information on the UC Software configuration, refer to Technical Bulletin 60519 *Simplified Configuration improvements in Polycom UC Software 3.3.0*, available from http://www.polycom.com/support/voice/soundpoint_ip/VoIP_Technical_Bulletins_pub.html

- 4 Copy, rename, or create the sip.cfg and phone1.cfg configuration files for each legacy release. Rename them sip_xyz.cfg and phone1_xyz.cfg matching the xyz of the sip_xyz.ld file.
- 5 Modify the 000000000000.cfg file to match your configuration file structure using the template discussed in the next section.

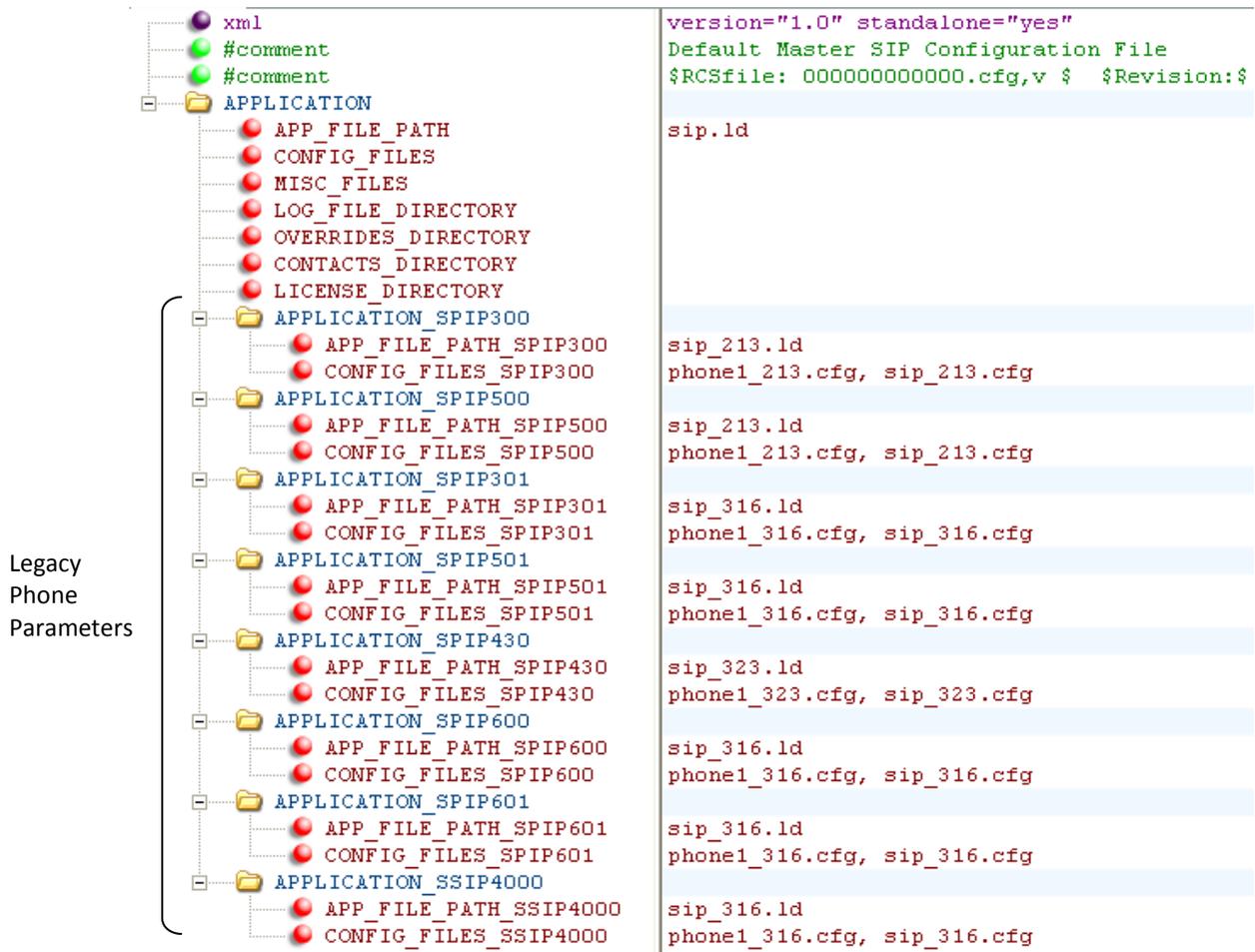


Legacy phones are configured from the **000000000000.cfg** master configuration file. All **<ethernet-address>.cfg** files that match the ethernet addresses of your legacy phones must be deleted from the provisioning server. This will force the legacy phones to use the **000000000000.cfg** configuration file discussed in the next section.



Legacy Phone Configuration File Structure

The following graphic shows the 000000000000.cfg master configuration file included with your UC Software download package. You must change the legacy phone parameters to match the file names of the latest sip_xyz.ld, phone1_xyz.cfg, and sip_xyz.cfg files on your provisioning server. In the example shown next, the legacy software xyz versions are 213, 316, and 323 respectively:



If the approach described above is not used, then the <ethernet-address>.cfg file associated with each legacy phone will need to be modified. If you are unsure of the ethernet addresses, you will need to add the legacy phone parameters (shown in the previous graphic) to every <ethernet-address>.cfg configuration file in your deployment.

Upgrading the BootROM Software When a Variety of Phones are Deployed

Since legacy phones are not compatible with BootROM versions after their last supported release, Polycom recommends that *split images* be used for maintenance and upgrade of BootROM releases. Since you cannot rename the BootROM release files like the SIP release files, as discussed in the previous section, the relevant `<PHONE_PART_NUMBER>-bootrom.ld` files will need to be placed on the provisioning server for each phone model. The best way to do this is to download the most recent patch release for every BootROM version (for example, download 4.0.x, 4.1.x, 4.2.x, etc) as follows:

- 1 Download and unzip the most recent BootROM 4.0.x split release.
- 2 Download and unzip the most recent patch release of every subsequent BootROM version (for example, download 4.1.x, then 4.2.x, then 4.3.x, etc).

If you download and unzip the files in chronological order, starting from 4.0.x, the newer files will overwrite the older ones. The newer BootROM package will only contain files for supported versions, so if a newer version does not support a legacy platform, the older BootROM file will stay intact. This way you can ensure the BootROM for each phone is updated to the most recent supported version.

How to Determine if Legacy Phones are Deployed



If the steps in this technical bulletin are followed, it is not necessary to know if there are legacy phones deployed.

There are three ways to determine if legacy phones are deployed in your network. Use any of the following methods to create an inventory of the phones that have been deployed:

- 1 Compare the model numbers on the back of the phones to the legacy phone models listed in the table at the beginning of this document.
- 2 Open a Web browser on your computer and enter your phone's IP address in the Address Bar. You will have to enter your user name and password. The default user name is *Polycom* and the default password is *456*. Compare the model number displayed on the web portal to the legacy phones listed in the table at the beginning of this bulletin.
- 3 Check the phone log files for the phone model numbers. These numbers are logged in the following way each time a phone is rebooted:

```
0406003403|so |3|00|Platform: Model=SoundPoint IP 501,  
Assembly=2345-11500-030 Rev=C
```

Troubleshooting

This section includes information on issues that you may encounter when deploying legacy phones alongside non-legacy models running newer software releases.

What happens to the legacy phones if these changes are not made and SIP 3.2.0 or later is deployed?

The legacy phones will not interpret the new configuration parameters, and will attempt to load the new software. This attempt will fail since there is no legacy phone image contained within the sip.ld file, and the phone will continue to run the current version of the software that it has in memory. Although it may be possible for the phone to operate using the new configuration files, some of your phone's features may not work as expected.

What happens if the configuration files are updated but the legacy phones are not running SIP 2.1.2 or later?

The legacy phones will be unable to interpret the new configuration parameters as the new software is loaded. Without the correct sip.ld legacy image, the update operation will fail and the phone will continue operating with the currently installed version.

What type of errors can be expected if the proper upgrade steps are not followed?

In installations that include a mix of legacy and non-legacy phones, the following restrictions apply:

- UC Software 3.3.0 will not run with pre-UC Software 3.3.0 parameters.
- Legacy phones will not run software versions past their last supported release.
- Legacy phones will not run using UC Software 3.3.0 or later configuration files or parameters.
- Unexpected behavior will occur if the `<ethernet-address>.cfg` files for the legacy phones are on the provisioning server. In this case, the `000000000000.cfg` file will not have priority and the `<ethernet-address>.cfg` configuration will be used instead.
- The file names outlined in the `000000000000.cfg` master configuration file must match those of the sip.ld, sip.cfg, and phone1.cfg legacy files on the provisioning server.

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