# Technical Bulletin 53522

## Upgrading the Polycom® VVX™ 1500 Phone to SIP 3.2.2

This technical bulletin explains how to upgrade a Polycom® VVX™ 1500 phone to SIP software version 3.2.2.

> The information in this bulletin applies to VVX 1500 phones running SIP software version 3.2.1 or earlier.

**Warning**  After you upgrade the phone to SIP software version 3.2.2, you cannot install an earlier version of the SIP software on the phone.

**Warning**  If the phone loses power during a part of the upgrade process, the phone could become inoperable and require RMA to address the issue. To avoid an RMA, read this bulletin completely before you begin the upgrade process.

**Note**  After the upgrade, the BootROM software will be contained within the main software (SIP) distribution. Separate BootROMs will not be required for the VVX 1500 phone. (All other Polycom SoundPoint® IP/SoundStation® IP phones still support separate BootROMs.)

The topics include:

- Overview
- Upgrading the Phone
- Confirming the Upgrade
- Troubleshooting

**Note**  Polycom recommends that you use Adobe® Reader® 8 or 9 to view this technical bulletin and the attachments. Click the paperclip icon on the far-left to view attachments.

## Overview

The SIP 3.2.2 release for the VVX 1500 phone includes a change in the real-time operating system. As a result, the upgrade procedure is more complex than usual.

To upgrade the VVX 1500 phone to SIP 3.2.2, changes to the SIP software, BootROM, and BootBlock software elements are required. Normally, the BootBlock (a small piece of software that runs during initial phone power-up) does not need to be upgraded from the version that is installed at the factory.

If the changes to the SIP software, BootROM, and BootBlock are not made, the phone will not operate correctly. This technical bulletin details how to upgrade the VVX 1500 phone so that the required changes are made.

This upgrade will take 20-30 minutes to complete.

**Note**    If you upgrade the VVX 1500 phone, and then want to use the H.323 feature, see the H.323 Protocol section in the *Administrator's Guide for the Polycom SoundPoint IP/SoundStation IP/ VVX Family*, available from http://www.polycom.com/support

# Upgrading the Phone

You can upgrade the phone in one of two ways:

*   Automatically — Use this method if you do not have direct access to the phones you need to upgrade, or you need to upgrade a large number of phones. This method involves updating **<*MAC address of phone*>.cfg** or **000000000000.cfg** to include a reference to the BootBlock.

*   Manually — Use this method if you have direct access to the phones you need to upgrade and you only need to upgrade a small number of phones. This method does not require you to update **<*MAC address of phone*>.cfg** or **000000000000.cfg**.

## Upgrading Automatically

If you do not have direct access to the phones you need to upgrade, or you need to upgrade a large number of phones, upgrade the BootBlock software automatically.

### To perform an automatic upgrade:

**1.** Download and extract the following to your boot server:

    —   BootROM version 4.1.4

    —   BootBlock version 2.9.0

    —   SIP software version 3.2.2

    To download the above, go to http://www.polycom.com/support/voice/business_media_phones/vvx1500.html.

**Note**    Make sure the phones are configured to access your boot server.

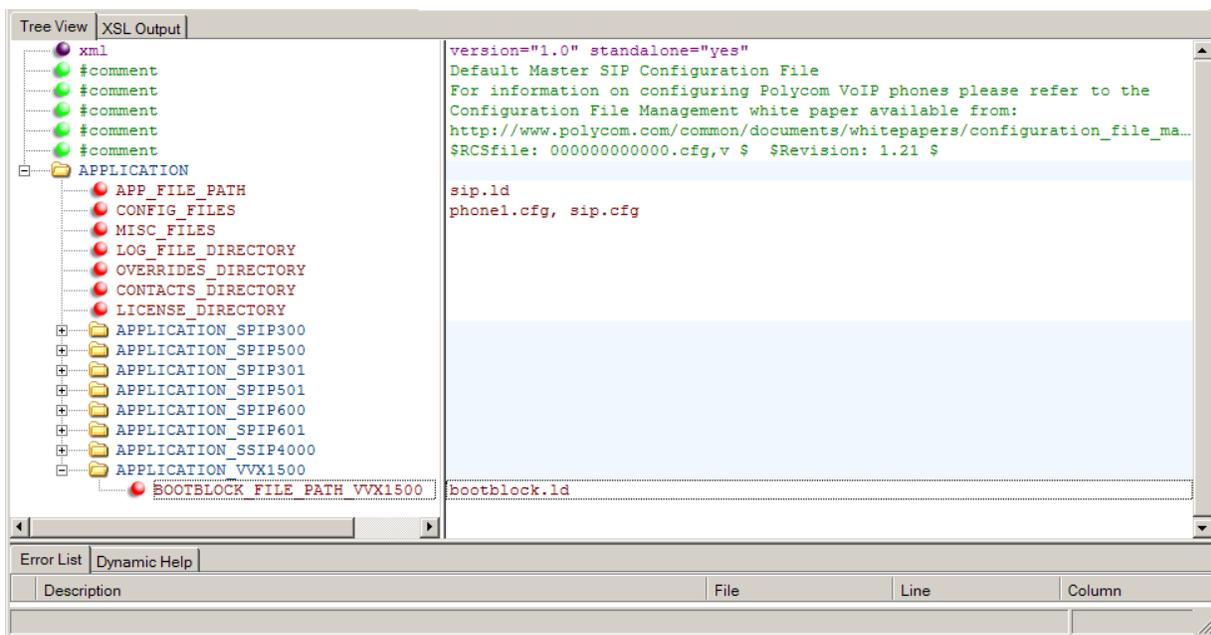**2.** From your boot server, open **<MAC address of phone>.cfg** or **000000000000.cfg** in an XML editor and add the following line:

```
<APPLICATION_VVX1500 BOOTBLOCK_FILE_PATH_VVX1500="bootblock.ld">
```

The following figure shows the new line (in XML Notepad).

| Note | A template **000000000000.cfg** file with this modification is included as an attachment to this document. Click the paperclip icon on the far-left to view the attachment. |
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**3.** Reboot the phones, either remotely or locally:

— To reboot phones remotely, use a SIP-NOTIFY (Check-Sync) command.

or

— To reboot phones locally, do the following:

**a** From the phone's idle screen, tap [icon] > **Settings > Advanced**.

**b** From the Password screen, enter your password (the default is **456**), and then tap the **Enter** soft key.

**c** From the Advanced screen, tap **Reboot Phone**. When the "Are you sure?" message displays, tap the **Yes** soft key.

The phone will reboot at least three times. In the process, it will upgrade all three software elements. The process will take several minutes. When the upgrade completes, the phone's idle screen displays.
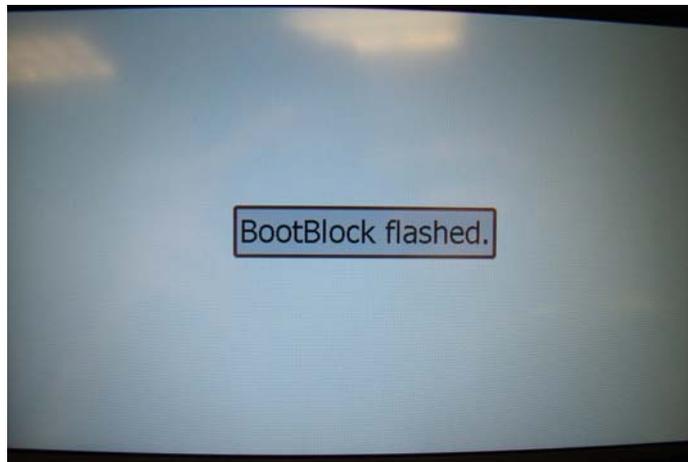
During a part of the upgrade process, the phone will display "Flashing BootBlock. Do not remove power."

**Warning**    While this message displays, do not move, touch, unplug, or remove any cables from the phone. If the upgrade (flash) process is interrupted, the phone may become inoperable and require RMA to address the issue.
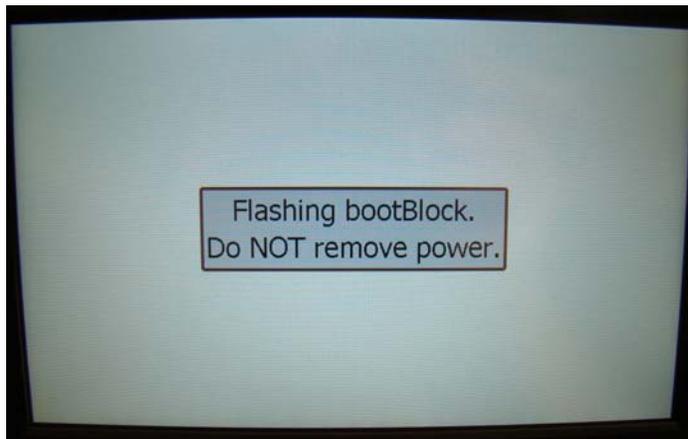


If the BootBlock was successfully upgraded (flashed), the phone displays "BootBlock flashed." When this message displays, you no longer have to worry about disturbing your phone.

| Note | If the upgrade (flash) fails, the phone will retry several more times. For more information about what happens when the upgrade (flash) fails, see Troubleshooting on page 8. |
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**4.** When the idle screen displays, confirm the upgrade (see Confirming the Upgrade on page 8).

# Upgrading Manually

If you are upgrading a small number of phones, and you have direct access to the phones, upgrade the BootBlock software manually.

| Note | Before you perform a manual upgrade, make sure your boot server is running. |
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**To perform a manual upgrade:**

**1.** Download and extract the following to your boot server:

— BootBlock version 2.9.0

— BootROM version 4.1.4

— SIP software version 3.2.2

To download the above, go to
http://www.polycom.com/support/voice/business_media_phones/vvx1500.html.

| Note | Make sure the phones are configured to access your boot server. |
|------|------|

**2.** Reboot the phones:

— From the phone's idle screen, tap [ 🔲 ] **> Settings > Advanced**.

— From the Password screen, enter your password (the default is **456**), and then tap the **Enter** soft key.

— From the Advanced screen, tap **Reboot Phone**. When the "Are you sure?" message displays, tap the **Yes** soft key.

The phone reboots. After several seconds, the phone displays the Welcome! screen. The Welcome! screen displays the Start, Setup and About soft keys.

**3.** While the Welcome! screen displays, upgrade the BootBlock by pressing the following key combination:

| Note | The key combination only works when the Welcome! screen (with the Start, Setup, and About soft keys) displays. To display the Welcome! screen again, reboot the phone. |
|------|---|

**4.** Enter the administrator password (by default, the password is **456**), and then tap the **OK** soft key.

The phone displays "You are about to reflash the BootBlock, loss of power will render the phone unusable. Do you wish to continue?"
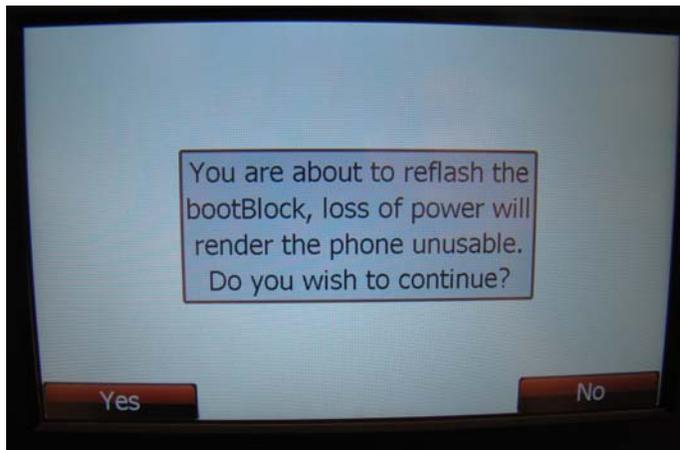


**5.** To upgrade (flash) the BootBlock, tap the **Yes** soft key.

The phone displays "Preparing to flash the BootBlock." This message displays for a few seconds.
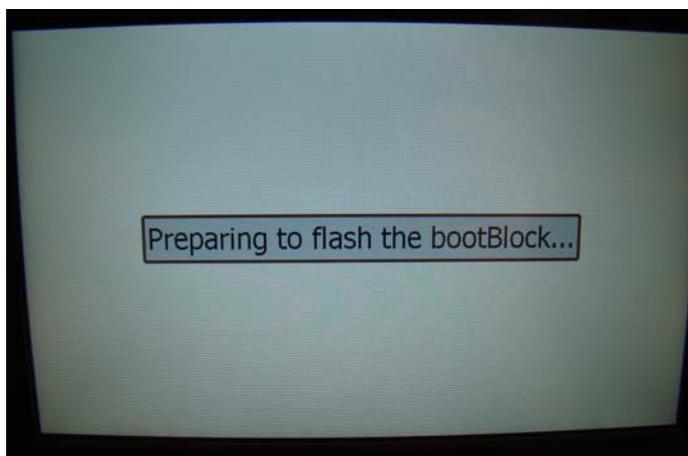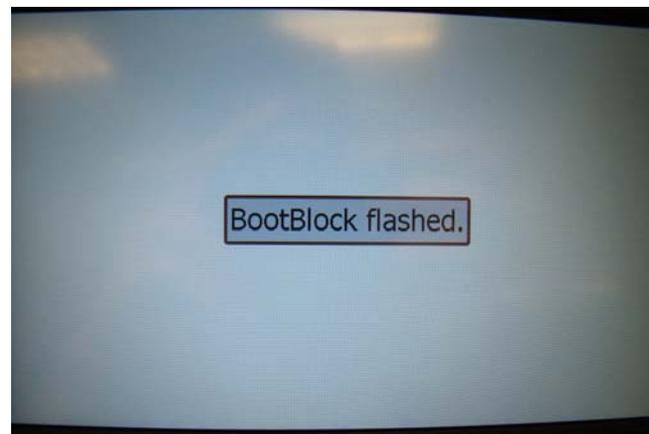
After a few seconds, the phone displays "Flashing BootBlock. Do not remove power."

| Warning | While this message displays, do not move, touch, unplug, or remove any cables from the phone. If the upgrade (flash) process is interrupted, the phone may become inoperable and require RMA to address the issue. |
|---|---|
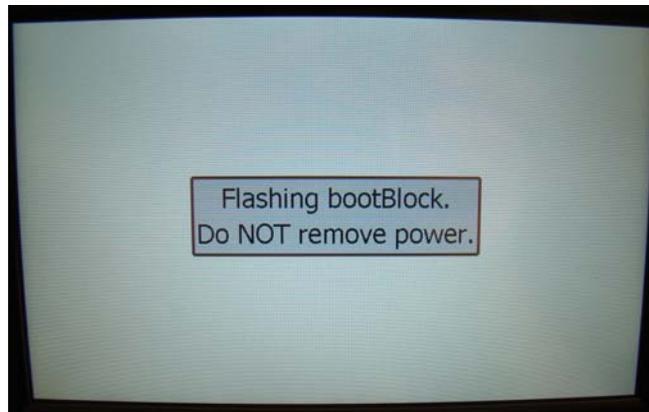


If the BootBlock was successfully upgraded (flashed), the phone displays "BootBlock flashed." When this message displays, you no longer have to worry about disturbing your phone.



| Note | If the upgrade (flash) fails, the phone will retry several more times. For more information about what happens when the upgrade (flash) fails, see Troubleshooting on page 8. |
|---|---|

The rest of the upgrade will proceed automatically and involve at least two reboots. When the upgrade completes, the phone's idle screen displays.

6. When the idle screen displays, confirm the upgrade (see Confirming the Upgrade on page 8).

# Confirming the Upgrade

Confirm that the phone contains the correct BootBlock, BootROM, and SIP software versions.

| Note | If you cannot access the software's menu system, you can confirm the BootROM version while the phone is attempting to reboot. For more information, see Troubleshooting on page 8.<br><br>The BootBlock, BootROM, and SIP software versions are also listed in the phone's log files on your boot server. |
|---|---|

**To confirm the phone contains the correct software versions:**

1.  Tap [     ] > **Status** > **Platform** > **Phone**.

2.  From the Phone screen, scroll to confirm that the following BootBlock and BootROM versions are listed:

    —  **BootBlock**: 2.9.0 (17960-001)

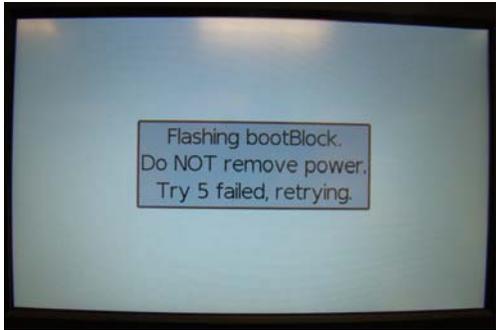    —  **BootROM**: 4.2.1.0334

| Note | The BootROM you downloaded to your boot server (version 4.1.4) is a transitional BootROM that is overwritten with BootROM 4.2.1 when you install SIP software version 3.2.2. |
|---|---|

3.  From the idle screen, tap [     ] > **Status** > **Platform** > **Application** > **Main**.

4.  From the Main screen, confirm that the following SIP software version is listed:

    —  **Version**: 3.2.2.0481

# Troubleshooting

| Issue | Do the following... |
|---|---|
| When I confirm the upgrade, the BootBlock version is incorrect. | The BootBlock was not updated. Confirm you downloaded the correct versions of the BootBlock (2.9.0), BootROM (4.1.4), and SIP software (3.2.2) to your boot server. |
| After I upgrade the BootBlock, the phone enters a reboot loop. | The new SIP software is not compatible with an older BootBlock version. Confirm you downloaded BootBlock version 2.9.0 to your boot server. Examine **<MAC address of phone>-boot.log** to diagnose any errors. |

| Issue | Do the following... |
|---|---|
| How can I check the BootROM version if the phone is in a reboot loop? | While the Welcome! screen displays, tap and hold the **About** soft key. The BootROM version is listed next to **Rev**. |
| The message "Flashing BootBlock. Do not remove power. Try *<number of attempt>* failed, retrying."  | An attempt to upgrade (flash) the BootBlock has failed, and the phone is trying again. <br><br> If all attempts fail, the message "BootBlock failed to flash all times" displays. For more information, see the next row in this table. |
| Upgrading (flashing) the BootBlock has failed multiple times. The message "BootBlock failed to flash all times" displays.  | All attempts to upgrade (flash) the BootBlock failed. Before you tap the Reboot soft key to try again, make sure your boot server is running, and that the BootBlock is downloaded to the boot server. |

# Trademark Information