Polycom® Better Together over Ethernet Connector 3.9.0

Applies to Polycom® VVX® 200 Series, 300 Series, 400 Series, 500 Series, and 600 Series Business Media Phones and Polycom® VVX® 250, 350, and 450 Business IP Phones running UC Software 5.9.0 or later

Contents

What’s New in Polycom® Better Together over Ethernet Connector 3.9.0 ........................................ 2
Release History .................................................................................................................................. 3
Security Updates .................................................................................................................................. 5
Software Requirements ..................................................................................................................... 5
System Constraints and Limitations ................................................................................................ 5
Known Issues and Suggested Workarounds .................................................................................... 5
Updates to Previous Software Releases .......................................................................................... 7
Release History .................................................................................................................................. 8
Security Updates .................................................................................................................................. 10
Software Requirements ..................................................................................................................... 10
System Constraints and Limitations ................................................................................................ 10
Known Issues and Suggested Workarounds .................................................................................... 11
Release History .................................................................................................................................. 16
Security Updates .................................................................................................................................. 17
Software Requirements ..................................................................................................................... 17
System Constraints and Limitations ................................................................................................ 18
Known Issues and Suggested Workarounds .................................................................................... 18
Get Help ........................................................................................................................................... 38
Copyright and Trademark Information ............................................................................................ 39
What’s New in Polycom® Better Together over Ethernet Connector 3.9.0

Polycom® Better Together over Ethernet (BToE) Connector application 3.9.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.9.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the BToE feature.

The BToE Connector application 3.9.0 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phone
- Polycom VVX 300, 301, 310 and 311 business media phones
- Polycom VVX 400, 401, 410 and 411 business media phones
- Polycom VVX 500 and 501 business media phones
- Polycom VVX 600 and 601 business media phones
- Polycom VVX 250 business IP phone
- Polycom VVX 350 business IP phone
- Polycom VVX 450 business IP phone

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

New or Enhanced Features

The Polycom BToE Connector application 3.9.0 includes no new features.

Enhanced Capabilities

The Polycom BToE Connector application 3.9.0 includes the following enhanced capabilities:

- Enhanced capability to detect and auto recover from failed communication between Skype for Business client and the BToE Connector application.
- Increased the BToE Connector application priority to “High” to reduce the audio clipping issues in heavy load conditions.
Resolved Issues

The following table lists the resolved issues in Polycom BToE Connector application 3.9.0.

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>EN-103196</td>
<td>3.8.0</td>
<td>Fixed the removal of Polycom Desktop Connector(PDC) application while upgrading/uninstalling the BToE Connector application</td>
</tr>
<tr>
<td>BToE</td>
<td>EN-96039</td>
<td>3.8.0</td>
<td>Disabled weak Cipher-Block Chaining(CBC) Ciphers and MAC Algorithms used by SSH server</td>
</tr>
</tbody>
</table>

Required BToE Licenses

The Polycom BToE Connector application does not require a separate license to operate. However, as this application only works in Lync and Skype for Business deployments, a Lync or Skype for Business Server license is required for each phone that uses this feature.

Configuration File Enhancements

There are no configuration file changes.

New Ports Required

No extra ports are required.

Downloading the ZIP File

The Polycom® BToE Connector application is available for download on the Polycom Support website. For instructions on how to install the application, see Connecting Polycom VVX Business Media Phones with Better Together over Ethernet at Polycom Support.

Release History

The following table lists the recent release history of BToE.

<table>
<thead>
<tr>
<th>Release</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9.0</td>
<td>December 2018</td>
<td>This release includes enhancements and bug fixes.</td>
</tr>
<tr>
<td>3.8.0</td>
<td>May 2018</td>
<td>This release includes critical security enhancements.</td>
</tr>
<tr>
<td>Release</td>
<td>Release Date</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3.7.0</td>
<td>December 2017</td>
<td>This release supports the following features:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• BToE support in Citrix XenDesktop VDI Environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• VDI Session Management for pairing and unpairing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Manual Pairing support without PC Port Dependency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quality of Service (QoS) support for Playback Session over wired network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enhanced Tool Tip Notifications and simplified UX</td>
</tr>
<tr>
<td>3.6.0</td>
<td>July 2017</td>
<td>This release includes bug fixes.</td>
</tr>
<tr>
<td>3.5.0</td>
<td>May 2017</td>
<td>This release includes feature enhancements and bug fixes.</td>
</tr>
<tr>
<td>3.4.2</td>
<td>February 2017</td>
<td>This release updates the software to run exclusively on Windows 10 version 1607.</td>
</tr>
<tr>
<td>3.4.1</td>
<td>December 2016</td>
<td>This release updates the names from “Lync” to “Skype for Business” on the installation screens as well as inside files.</td>
</tr>
<tr>
<td>3.4.0</td>
<td>September 2016</td>
<td>This release adds the PIN-based manual pairing feature.</td>
</tr>
<tr>
<td>3.3.0</td>
<td>November 2015</td>
<td>This release supports the following features:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can control the VVX phone’s volume from the computer when paired.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provided an option to display the credentials in a popup box when password is changed.</td>
</tr>
<tr>
<td>3.2.0</td>
<td>September 2015</td>
<td>This release adds an option to launch phone’s web UI from BToE application.</td>
</tr>
<tr>
<td>3.1.0</td>
<td>July 2015</td>
<td>This release includes feature enhancements.</td>
</tr>
<tr>
<td>3.0.0</td>
<td>March 2015</td>
<td>This release includes added support for the audio playback feature. This release also includes Polycom BToE connector application enhancements and information on new ports.</td>
</tr>
<tr>
<td>2.3.0</td>
<td>July 2014</td>
<td>This release includes feature enhancements.</td>
</tr>
<tr>
<td>2.2.0</td>
<td>April 2014</td>
<td>This release adds support to different log levels based on the value set in the registry. This release also includes feature enhancements.</td>
</tr>
<tr>
<td>2.1.0</td>
<td>January 2014</td>
<td>This release supports the following features:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enabling or disabling the notifications of the Polycom BToE Connector.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rebooting the computer after an installation, uninstallation, or upgrade is no longer required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enabling or disabling the capability to launch the application and launch the readme file from the exit window after installation.</td>
</tr>
<tr>
<td>2.0.0</td>
<td>December 2013</td>
<td>This release enables the user to run the Polycom BToE connector application without admin privileges.</td>
</tr>
<tr>
<td>Release</td>
<td>Release Date</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.1.0</td>
<td>September 2013</td>
<td>This release adds support for BToE auto-pairing.</td>
</tr>
<tr>
<td>1.0.0</td>
<td>September 2013</td>
<td>This release includes support for the Lync Better Together over Ethernet (BToE) feature.</td>
</tr>
</tbody>
</table>

### Security Updates

Refer to the Polycom Security Center for information about known and resolved security vulnerabilities.

### Software Requirements

The following software requirements were determined based on test scenarios. Your system’s actual performance may vary based on software or hardware configurations.

Polycom BToE Connector 3.9.0 is supported on the following operating systems:

- Microsoft® Windows 10
- Microsoft® Windows 8.1
- Microsoft® Windows 8
- Microsoft® Windows 7
- Microsoft® Windows Vista

Note: Better Together over Ethernet is enabled by default on supported VVX business media phones with UC Software 5.6.0 or later and Polycom BToE Connector 3.9.0 is compatible with UC Software 5.8.0 or later.

### System Constraints and Limitations

The following list includes information on system constraints and limitations.

- If you are running UC Software versions earlier than version 5.8.0 with BToE Connector 3.9.0, any mode of pairing is strictly not supported. Pairing with BToE Connector 3.9.0 is only supported from UC Software 5.8.0 or later.

### Known Issues and Suggested Workarounds

The following table lists known issues and suggested workarounds for this release and previous releases.

Note: These release notes do not provide a complete listing of all known issues that are included in the software. Issues not expected to significantly impact customers with standard voice and video conferencing environments may not be included. In addition, the information in these release notes is provided as-is at the time of release and is subject to change without notice.
## Known Issues and Suggested Workarounds for Polycom BToE Connector Application

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Release</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>EN-56433</td>
<td>5.7.0</td>
<td>BToE mode is sometimes not activated automatically after connecting to Citrix XenDesktop VDI Session.</td>
<td>In such cases, Skype for Business Client application needs to be relaunched for BToE Mode to get activated.</td>
</tr>
<tr>
<td>BToE</td>
<td>EN-42854</td>
<td>5.7.0</td>
<td>Automatic pairing or unpairing of VVX phones on Citrix XenDesktop VDI Session for connect or disconnect may sometimes not work as expected on enabling <code>VDI_SESSION_CONTROL_EN</code> parameter.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-86478</td>
<td>5.0.0</td>
<td>In a BToE scenario, placing or receiving video calls from or to the Lync 2013 client from the phone is not supported.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-86901</td>
<td>5.0.0</td>
<td>In a BToE scenario, the call control window is not available when there is an active call in the Lync client and you try to pair the phone with your computer.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87129</td>
<td>5.0.0</td>
<td>You must manually set the base profile of the phone to Lync before establishing a BToE connection.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87292</td>
<td>5.0.0</td>
<td>In a BToE scenario, the phone does not update the manually configured location information set in the Lync client when the location information is removed from the server.</td>
<td>Set the location information manually on the phone.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87552</td>
<td>5.0.0</td>
<td>In a BToE scenario, a Lync client restarts when the paired phone does not have the correct time stamp in the absence of the NTP server.</td>
<td>Ensure that the phone displays the correct date and time before connecting the Ethernet cable to your computer.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87785</td>
<td>5.0.0</td>
<td>In a BToE scenario, some issues occur when you answer a call on the phone while sharing content in the Lync client.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87843</td>
<td>5.0.0</td>
<td>The BToE Connector application only supports devices that have 48 kHz or 16 kHz sampling frequency capability.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87908</td>
<td>5.0.0</td>
<td>The Polycom BToE Connector application does not work if your computer is running on IPv6 mode.</td>
<td>No workaround is currently available.</td>
</tr>
</tbody>
</table>
## Updates to Previous Software Releases

This section lists new, enhanced, and discontinued software features in previous software releases.

### Updates to BToE Connector 3.8.0

Polycom® Better Together over Ethernet (BToE) Connector application 3.8.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.8.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the BToE feature.

The BToE Connector application 3.8.0 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phones

---

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Release</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>VOIP-88034</td>
<td>5.0.0</td>
<td>The Polycom BToE Connector application is not supported on Windows XP platform.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88062</td>
<td>5.0.0</td>
<td>In a BToE scenario, the phone does not fetch the call when BToE pairing is initiated during an active call on the Lync client.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88749, VOIP-89308</td>
<td>5.0.1</td>
<td>You need administrator privileges to install the Polycom BToE Connector application.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89543</td>
<td>5.0.1</td>
<td>In a BToE scenario, the phone displays the message “Successfully Paired” and is not usable when already signed-in and connected to the Lync client with a different user.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89791</td>
<td>5.0.1</td>
<td>In a BToE scenario, the phone does not display the message “BToE successfully unpaired” when you disable BToE on the phone.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89962</td>
<td>5.0.1</td>
<td>The Polycom BToE application does not start automatically when a user without administrator privileges runs the application and switches to another user with administrator privileges.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-93308</td>
<td>5.0.2, 5.1.1</td>
<td>In a BToE connector scenario, the phone does not update the presence status to <strong>Away</strong> after the connected computer has been locked for 10 minutes.</td>
<td>No workaround is currently available.</td>
</tr>
</tbody>
</table>
These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

**New or Enhanced Features**
The Polycom BToE Connector application 3.8.0 includes no new features.

**Enhanced Capabilities**
The Polycom BToE Connector application 3.8.0 includes the following enhanced capabilities:
- Critical Security enhancements.

**Resolved Issues**
The Polycom BToE Connector application 3.8.0 includes no new resolved issues.

**Required BToE Licenses**
The Polycom BToE Connector application does not require a separate license to operate. However, as this application only works in Lync and Skype for Business deployments, a Lync or Skype for Business Server license is required for each phone that uses this feature.

**Configuration File Enhancements**
There are no configuration file changes.

**New Ports Required**
No extra ports are required.

**Downloading the ZIP File**
The Polycom® BToE Connector application is available for download on the Polycom Support website. For instructions on how to install the application, see Connecting Polycom VVX Business Media Phones with Better Together over Ethernet at Polycom Support.

**Release History**
The following table lists the recent release history of BToE.

**Release History**

<table>
<thead>
<tr>
<th>Release</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8.0</td>
<td>May 2018</td>
<td>This release includes critical security enhancements.</td>
</tr>
</tbody>
</table>
| 3.7.0   | December 2017| This release supports the following features:  
|         |              | • BToE support in Citrix XenDesktop VDI Environment  
|         |              | • VDI Session Management for pairing and unpairing  
|         |              | • Manual Pairing support without PC Port Dependency  
|         |              | • Quality of Service (QoS) support for Playback Session over wired network  
|         |              | • Enhanced Tool Tip Notifications and simplified UX |
| 3.6.0   | July 2017    | This release includes bug fixes. |
| 3.5.0   | May 2017     | This release includes feature enhancements and bug fixes. |
| 3.4.2   | February 2017| This release updates the software to run exclusively on Windows 10 version 1607. |
| 3.4.1   | December 2016| This release updates the names from “Lync” to “Skype for Business” on the installation screens as well as inside files. |
| 3.4.0   | September 2016| This release adds the PIN-based manual pairing feature. |
| 3.3.0   | November 2015| This release supports the following features:  
|         |              | • Can control the VVX phone’s volume from the computer when paired.  
<p>|         |              | • Provided an option to display the credentials in a popup box when password is changed. |
| 3.2.0   | September 2015| This release adds an option to launch phone’s web UI from BToE application. |
| 3.1.0   | July 2015    | This release includes feature enhancements. |
| 3.0.0   | March 2015   | This release includes added support for the audio playback feature. This release also includes Polycom BToE connector application enhancements and information on new ports. |
| 2.3.0   | July 2014    | This release includes feature enhancements. |
| 2.2.0   | April 2014   | This release adds support to different log levels based on the value set in the registry. This release also includes feature enhancements. |</p>
<table>
<thead>
<tr>
<th>Release</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2.1.0   | January 2014 | This release supports the following features:  
• Enabling or disabling the notifications of the Polycom BToE Connector.  
• Rebooting the computer after an installation, uninstallation, or upgrade is no longer required.  
• Enabling or disabling the capability to launch the application and launch the readme file from the exit window after installation. |
| 2.0.0   | December 2013| This release enables the user to run the Polycom BToE connector application without admin privileges. |
| 1.1.0   | September 2013| This release adds support for BToE auto-pairing. |
| 1.0.0   | September 2013| This release includes support for the Lync Better Together over Ethernet (BToE) feature. |

## Security Updates

Refer to the Polycom Security Center for information about known and resolved security vulnerabilities.

## Software Requirements

The following software requirements were determined based on test scenarios. Your system’s actual performance may vary based on software or hardware configurations.

Polycom BToE Connector 3.8.0 is supported on the following operating systems:

- Microsoft® Windows 10
- Microsoft® Windows 8.1
- Microsoft® Windows 8
- Microsoft® Windows 7
- Microsoft® Windows Vista

Note: Better Together over Ethernet is enabled by default on supported VVX business media phones with UC Software 5.6.0 or later and Polycom BToE Connector 3.8.0 is compatible with UC Software 5.8.0 or later.

## System Constraints and Limitations

The following list includes information on system constraints and limitations.

- If you are running UC Software versions earlier than version 5.8.0 with BToE Connector 3.8.0, any mode of pairing is strictly not supported. Pairing with BToE Connector 3.8.0 is only supported from UC Software 5.8.0 or later.
# Known Issues and Suggested Workarounds

The following table lists known issues and suggested workarounds for this release and previous releases.

Note: These release notes do not provide a complete listing of all known issues that are included in the software. Issues not expected to significantly impact customers with standard voice and video conferencing environments may not be included. In addition, the information in these release notes is provided as-is at the time of release and is subject to change without notice.

## Known Issues and Suggested Workarounds for Polycom BToE Connector Application

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Release</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>EN-56433</td>
<td>5.7.0</td>
<td>BToE mode is sometimes not activated automatically after connecting to Citrix XenDesktop VDI Session.</td>
<td>In such cases, Skype for Business Client application needs to be relaunched for BToE Mode to get activated.</td>
</tr>
<tr>
<td>BToE</td>
<td>EN-42854</td>
<td>5.7.0</td>
<td>Automatic pairing or unpairing of VVX phones on Citrix XenDesktop VDI Session for connect or disconnect may sometimes not work as expected on enabling <code>VDI_SESSION_CONTROL_EN</code> parameter.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-86478, VOIP-88053</td>
<td>5.0.0</td>
<td>In a BToE scenario, placing or receiving video calls from or to the Lync 2013 client from the phone is not supported.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-86901</td>
<td>5.0.0</td>
<td>In a BToE scenario, the call control window is not available when there is an active call in the Lync client and you try to pair the phone with your computer.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87129</td>
<td>5.0.0</td>
<td>You must manually set the base profile of the phone to Lync before establishing a BToE connection.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87292</td>
<td>5.0.0</td>
<td>In a BToE scenario, the phone does not update the manually configured location information set in the Lync client when the location information is removed from the server.</td>
<td>Set the location information manually on the phone.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87552</td>
<td>5.0.0</td>
<td>In a BToE scenario, a Lync client restarts when the paired phone does not have the correct time stamp in the absence of the NTP server.</td>
<td>Ensure that the phone displays the correct date and time before connecting the Ethernet cable to your computer.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Release</td>
<td>Description</td>
<td>Workaround</td>
</tr>
<tr>
<td>----------</td>
<td>---------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87785</td>
<td>5.0.0</td>
<td>In a BToE scenario, some issues occur when you answer a call on the phone while sharing content in the Lync client.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87843</td>
<td>5.0.0</td>
<td>The BToE Connector application only supports devices that have 48 kHz or 16 kHz sampling frequency capability.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87908</td>
<td>5.0.0</td>
<td>The Polycom BToE Connector application does not work if your computer is running on IPv6 mode.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88034</td>
<td>5.0.0</td>
<td>The Polycom BToE Connector application is not supported on Windows XP platform.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88062</td>
<td>5.0.0</td>
<td>In a BToE scenario, the phone does not fetch the call when BToE pairing is initiated during an active call on the Lync client.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-8749</td>
<td>5.0.1</td>
<td>You need administrator privileges to install the Polycom BToE Connector application.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89543</td>
<td>5.0.1</td>
<td>In a BToE scenario, the phone displays the message “Successfully Paired” and is not usable when already signed-in and connected to the Lync client with a different user.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89791</td>
<td>5.0.1</td>
<td>In a BToE scenario, the phone does not display the message “BToE successfully unpaired” when you disable BToE on the phone.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89962</td>
<td>5.0.1</td>
<td>The Polycom BToE application does not start automatically when a user without administrator privileges runs the application and switches to another user with administrator privileges.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-93308</td>
<td>5.0.2</td>
<td>In a BToE connector scenario, the phone does not update the presence status to Away after the connected computer has been locked for 10 minutes.</td>
<td>No workaround is currently available.</td>
</tr>
</tbody>
</table>

**Updates to BToE Connector 3.7.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.7.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™
for Business Server with UC Software 5.7.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the BToE feature.

The BToE Connector application 3.7.0 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phones
- Polycom VVX 300, 301, 310, and 311 business media phones
- Polycom VVX 400, 401, 410, and 411 business media phones
- Polycom VVX 500 and 501 business media phones
- Polycom VVX 600 and 601 business media phones

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

**New or Enhanced Features**

The Polycom BToE Connector application 3.7.0 now supports following:

- BToE support in Citrix XenDesktop VDI Environment
- VDI Session Management for pairing and unpairing
  
  You can pair and unpair the VVX business media phone with the BToE application installed in a Citrix Virtual Desktop Infrastructure (VDI). When the VDI session is closed or disconnected, the phone automatically unpairs with the BToE application. The VVX business media phone re-pairs when the session is started provided the cached passcode is not changed.

- Manual Pairing support without PC Port Dependency
  
  Polycom UC Software 5.7.0 now allows you to manually pair the Skype for Business-enabled phone to the BToE application installed on your computer using a wired or wireless network. This means you are no longer required to connect the Ethernet cable from your computer to the PC port on your phone to enable the manual pairing feature. When the phone is set to manually pair with your network connected computer, the phone generates a pairing code that you must enter into the Polycom BToE Connector application to pair.

- Quality of Service (QoS) support for Playback Session over wired network
  
  VVX phones can set the Differentiated Services Code Point (DSCP) value for BToE media playback sessions by creating a Group Policy on a computer configured with BToE.

**Create a New Group Policy Object**

Quality of Service policies can be created and managed by using Local Security Policies or by Group Policy. You can manage audio with the Group Policy Management application on a BToE enabled computer by creating a new Group Policy Object (GPO) for DSCP values associated with computer port ranges.

**To Create a New Group Policy Object:**

1. Consolidate all of your computer objects to a single Organization Unit (OU) and log in to a Domain Controller or computer that has Group Policy Management installed.

2. Open the Group Policy Management tool by selecting **Start > Administrative > Group Policy Management.**
3 Locate the container with the new policy.

4 Right-click the container and select **Create a GPO in this domain**, and **Link it here**.
   This action may require Domain Admin permissions.

5 Right-click the new GPO and select **Edit** to open the Group Policy Management Editor.

6 Expand **Computer Configuration, Policies**, and **Windows Settings**. Then right-click **Policy-based QoS** and select **Create new policy**.

7 In the Policy-based QoS dialog box, create a policy name. For example, type “PBC-Audio” in the **Name box**. Select **Specify DSCP Value** and set the DSCP value. For example, set the value to “46” and then select **Next**.

8 Select **Only application with this executable name** and type your file name in the input box. Using the previous example, you would type “PBC.exe”.

9 Make sure the BToE Connector Application correctly matches packets from the specified port range with the specified DSCP value.

10 On the next page, make sure that both **Any source IP address** and **Any destination IP address** are selected to ensure that packets will be managed regardless of which computer sends or receives the packets.

11 On the next page, select **UDP** for the protocol. Select both **Only for the following source IP address or prefix** and **Only for the following destination IP address or prefix**, and set the port value as 24802.

12 Select **Finish**.

   The new policies you create will only be applied when Group Policy has been refreshed, which happens automatically on a periodic basis. Otherwise, you can force an immediate refresh by running the following command on each computer where Group Policy needs to be refreshed:
   
   - `Gpupdate.exe /force`

   This command can be run from the Lync Server Management shell or any command window run under administrator credentials.

   To run a command window under administrator credentials:
   
   - Select **Start**, right-click **Command Prompt**, then select **Run as administrator**.


---

**Enhanced Capabilities**

The Polycom BToE Connector application 3.7.0 includes the following enhanced capabilities:

- Enhanced Tool Tip Notifications and simplified the User Experience
- Pair Mode selection added on Polycom BToE Connector Application
- Support to Enable or Disable Pair Code Caching using configuration parameter
Resolved Issues

The following table lists the resolved issues in Polycom BToE Connector application 3.7.0.

### Resolved Issues

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>EN-33814</td>
<td>3.5.0</td>
<td>Fixed memory leak in Playback Session</td>
</tr>
</tbody>
</table>

**Required BToE Licenses**

The Polycom BToE Connector application does not require a separate license to operate. However, as this application only works in Lync and Skype for Business deployments, a Lync or Skype for Business Server license is required for each phone that uses this feature.

**Configuration File Enhancements**

The following table includes the configuration parameters modified in this release.

### Configuration File Enhancements

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Permitted Value</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDI_SESSION_CONTROL_EN</td>
<td>0 (default) - When the session is closed or disconnected from the Virtual Desktop Infrastructure, the VVX business media phone does not unpair with the paired BToE application</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 - When the VM session is closed or disconnected from the Virtual Desktop Infrastructure, the VVX business media phone with the BToE application gets unpaired. However, when the session is started and the passcode is not changed, the VVX business media phone pairs automatically with the BToE application.</td>
<td></td>
</tr>
<tr>
<td>PASSCODE_CACHE_EN</td>
<td>1 (default) - Enables the caching of Pair Code while installing BToE Application.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0 - Disables the caching of Pair Code while installing BToE Application.</td>
<td></td>
</tr>
</tbody>
</table>
New Ports Required

The following table includes the ports that were added in this release.

Ports for BToE Connector 3.7.0

<table>
<thead>
<tr>
<th>Port Number</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>24804</td>
<td>TCP</td>
<td>VVX and the computer application will communicate with each other using this port (secure connection). This port is used by VVX Business Media Phones when in Manual Pairing Mode</td>
</tr>
</tbody>
</table>

Downloading the ZIP File

The Polycom® BToE Connector application is available for download on the Polycom Support website. For instructions on how to install the application, see Connecting Polycom VVX Business Media Phones with Better Together over Ethernet at Polycom Support.

Release History

The following table lists the recent release history of BToE.

Release History

<table>
<thead>
<tr>
<th>Release</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 3.7.0   | December 2017| This release supports the following features:  
  - BToE support in Citrix XenDesktop VDI Environment  
  - VDI Session Management for pairing and unpairing  
  - Manual Pairing support without PC Port Dependency  
  - Quality of Service (QoS) support for Playback Session over wired network  
  - Enhanced Tool Tip Notifications and simplified UX |
<p>| 3.6.0   | July 2017    | This release includes bug fixes. |
| 3.5.0   | May 2017     | This release includes feature enhancements and bug fixes. |
| 3.4.2   | February 2017| This release updates the software to run exclusively on Windows 10 version 1607. |
| 3.4.1   | December 2016| This release updates the names from “Lync” to “Skype for Business” on the installation screens as well as inside files. |
| 3.4.0   | September 2016| This release adds the PIN-based manual pairing feature. |</p>
<table>
<thead>
<tr>
<th>Release</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 3.3.0   | November 2015| This release supports the following features:  
• Can control the VVX phone’s volume from the computer when paired.  
• Provided an option to display the credentials in a popup box when password is changed. |
| 3.2.0   | September 2015| This release adds an option to launch phone’s web UI from BToE application. |
| 3.1.0   | July 2015     | This release includes feature enhancements. |
| 3.0.0   | March 2015    | This release includes added support for the audio playback feature. This release also includes Polycom BToE connector application enhancements and information on new ports. |
| 2.3.0   | July 2014     | This release includes feature enhancements. |
| 2.2.0   | April 2014    | This release adds support to different log levels based on the value set in the registry. This release also includes feature enhancements. |
| 2.1.0   | January 2014  | This release supports the following features:  
• Enabling or disabling the notifications of the Polycom BToE Connector.  
• Rebooting the computer after an installation, uninstallation, or upgrade is no longer required.  
• Enabling or disabling the capability to launch the application and launch the readme file from the exit window after installation. |
| 2.0.0   | December 2013 | This release enables the user to run the Polycom BToE connector application without admin privileges. |
| 1.1.0   | September 2013| This release adds support for BToE auto-pairing. |
| 1.0.0   | September 2013| This release includes support for the Lync Better Together over Ethernet (BToE) feature. |

## Security Updates

Refer to the Polycom Security Center for information about known and resolved security vulnerabilities.

## Software Requirements

The following software requirements were determined based on test scenarios. Your system’s actual performance may vary based on software or hardware configurations.

Polycom BToE Connector 3.7.0 is supported on the following operating systems:  
• Microsoft® Windows 10  
• Microsoft® Windows 8.1
Note: Better Together over Ethernet is enabled by default on supported VVX business media phones with UC Software 5.6.0 or later and is compatible with UC Software 5.0.1 or later.

For Citrix XenDesktop VDI Session Management for pairing and unpairing, the following are minimum version requirements:

- Citrix XenDesktop Version 7.11
- ICA Clients Version 11.2
- WFAPI SDK Version 7.8

**System Constraints and Limitations**

The following list includes information on system constraints and limitations.

- If you are running UC Software versions earlier than version 5.7.0 with BToE Connector 3.7.0, only Auto Pairing Mode will be supported. Manual Pairing with BToE Connector 3.7.0 is only supported from UC Software 5.7.0 or later.
- BToE mode is not activated automatically sometimes after connecting to a Citrix XenDesktop VDI Session. The Skype for Business Client application needs to be relaunched in such cases for BToE Mode to get activated.
- Automatic Pairing or Unpairing of VVX Phone on Citrix XenDesktop VDI Session Connect or Disconnect may sometimes not work as expected on enabling VDI_SESSION_CONTROL_EN configuration parameter
- Citrix XenApp VDI Environment is not supported.
- Citrix XenDesktop with HDX Optimization Solution enabled is not supported.
- Citrix XenDesktop running on Windows Server Operation System is not supported.
- BToE Connector Application running on Thin Client or Client Machine in VDI Environment is not supported.
- Device Lock Functionality in BToE mode is not supported in Citrix VDI Environment.

**Known Issues and Suggested Workarounds**

The following table lists known issues and suggested workarounds for this release and previous releases.

Note: These release notes do not provide a complete listing of all known issues that are included in the software. Issues not expected to significantly impact customers with standard voice and video conferencing environments may not be included. In addition, the information in these release notes is provided as-is at the time of release and is subject to change without notice.
### Known Issues and Suggested Workarounds for Polycom BToE Connector Application

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Release</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>EN-56433</td>
<td>5.7.0</td>
<td>BToE mode is sometimes not activated automatically after connecting to Citrix XenDesktop VDI Session.</td>
<td>In such cases, Skype for Business Client application needs to be relaunched for BToE Mode to get activated</td>
</tr>
<tr>
<td>BToE</td>
<td>EN-42854</td>
<td>5.7.0</td>
<td>Automatic Pairing or Unpairing of VVX Phone on Citrix XenDesktop VDI Session Connect or Disconnect may sometimes not work as expected on enabling VDI_SESSION_CONTROL_EN configuration parameter</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-86478</td>
<td>5.0.0</td>
<td>In a BToE scenario, placing or receiving video calls from or to the Lync 2013 client from the phone is not supported.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-86901</td>
<td>5.0.0</td>
<td>In a BToE scenario, the call control window is not available when there is an active call in the Lync client and you try to pair the phone with your computer.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87129</td>
<td>5.0.0</td>
<td>You must manually set the base profile of the phone to Lync before establishing a BToE connection.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87292</td>
<td>5.0.0</td>
<td>In a BToE scenario, the phone does not update the manually configured location information set in the Lync client when the location information is removed from the server.</td>
<td>Set the location information manually on the phone.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87552</td>
<td>5.0.0</td>
<td>In a BToE scenario, a Lync client restarts when the paired phone does not have the correct time stamp in the absence of the NTP server.</td>
<td>Ensure that the phone displays the correct date and time before connecting the Ethernet cable to your computer.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87785</td>
<td>5.0.0</td>
<td>In a BToE scenario, some issues occur when you answer a call on the phone while sharing content in the Lync client.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87843</td>
<td>5.0.0</td>
<td>The BToE Connector application only supports devices that have 48 kHz or 16 kHz sampling frequency capability.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87908</td>
<td>5.0.0</td>
<td>The Polycom BToE Connector application does not work if your computer is running on IPv6 mode.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Release</td>
<td>Description</td>
<td>Workaround</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88034</td>
<td>5.0.0</td>
<td>The Polycom BToE Connector application is not supported on Windows XP platform.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88062</td>
<td>5.0.0</td>
<td>In a BToE scenario, the phone does not fetch the call when BToE pairing is initiated during an active call on the Lync client.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88749</td>
<td>5.0.1</td>
<td>You need administrator privileges to install the Polycom BToE Connector application.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-889308</td>
<td>5.0.1</td>
<td>You need administrator privileges to install the Polycom BToE Connector application.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89543</td>
<td>5.0.1</td>
<td>In a BToE scenario, the phone displays the message “Successfully Paired” and remains unusable when it is already signed-in and connected to the Lync client of a different user.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89791</td>
<td>5.0.1</td>
<td>In a BToE scenario, the phone does not display the message “BToE successfully unpaired” when you disable BToE on the phone.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89962</td>
<td>5.0.1</td>
<td>The Polycom BToE application does not start automatically when a user without administrator privileges runs the application and switches to another user with administrator privileges.</td>
<td>No workaround is currently available.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-93308</td>
<td>5.0.2</td>
<td>In a BToE connector scenario, the phone does not update the presence status to Away after the connected computer has been locked for 10 minutes.</td>
<td>No workaround is currently available.</td>
</tr>
</tbody>
</table>

**Updates to BToE Connector 3.6.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

The BToE Connector application 3.6.0 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phones
- Polycom VVX 300, 301, 310, and 311 business media phones
- Polycom VVX 400, 401, 410, and 411 business media phones
- Polycom VVX 500 and 501 business media phones
- Polycom VVX 600 and 601 business media phones
These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

**New or Enhanced Features**

The Polycom BToE Connector application 3.6.0 includes no new features.

**Enhanced Capabilities**

There are no enhanced capabilities.

**Resolved Issues**

The following table lists the resolved issues in Polycom BToE Connector application 3.6.0.

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>VOIP-126057</td>
<td>3.6.0</td>
<td>Fixed the delayed pairing time when PC wakes up from sleep mode.</td>
</tr>
</tbody>
</table>

**Required BToE Licenses**

The Polycom BToE Connector application does not require a separate license to operate. However, as this application only works in Lync and Skype for Business deployments, a Lync or Skype for Business Server license is required for each phone that uses this feature.

**Configuration File Enhancements**

There are no configuration file changes.

**New Ports Required**

No extra ports are required.

**Updates to BToE Connector 3.5.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.5.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.5.1 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

The BToE Connector application 3.5.0 is compatible with the following Polycom endpoints:
• Polycom VVX 201 business media phones
• Polycom VVX 300, 301, 310, and 311 business media phones
• Polycom VVX 400, 401, 410, and 411 business media phones
• Polycom VVX 500 and 501 business media phones
• Polycom VVX 600 and 601 business media phones

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

New or Enhanced Features
The Polycom BToE Connector application 3.5.0 includes no new features.

Enhanced Capabilities
The Polycom BToE Connector application 3.5.0 includes the features and functionality of previous releases and includes the following enhanced capabilities:

● VVX business media phones are locked or unlocked based only on the connected PC lock or unlock state when the device lock feature is enabled on the phone (VOIP-120869).
● The Polycom BToE kernel driver is qualified with Microsoft HCK test for Windows 7, Windows 8, and Windows 8.1 operating systems. No driver warning message displays during the BToE installation on systems running these operating systems (VOIP-124613).
● The Skype for Business client shows the credentials popup after every sign-in and sign-out when the VVX business media phone is not signed in and in paired mode (VOIP-124241).

Resolved Issues
The following table lists the resolved issues in Polycom BToE Connector application 3.5.0.

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>VOIP-123839</td>
<td>3.3.0</td>
<td>Fixed the BToE pairing issue when the PuTTY default connection is set to serial.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-125903</td>
<td>3.5.0</td>
<td>Fixed the BToE choppy audio playback issue on Windows 8 and Windows 10 operating systems.</td>
</tr>
</tbody>
</table>

Consider the following information when installing or updating to Polycom BToE Software 3.5.0.

● UC Software 5.5.2 is required for use with BToE Connector 3.5.0. For best results, Polycom recommends deploying BToE Connector 3.5.0 prior to deploying UC Software 5.5.2. While BToE Connector 3.5.0 is backwards compatible with previous versions of UC Software, Polycom does not recommend running previous versions of the BToE Connector application with UC Software 5.5.2.
● If you are running UC Software 5.5.2 and the BToE Connector 3.4.1 application, the phone does not correctly lock or unlock when the paired computer locks or unlocks.

● The user must upgrade to UC Software 5.5.2 and the BToE Connector 3.5.0 application to have smooth Device Lock functionality in BToE mode.

If the user deploys the BToE Connector application prior to updating UC Software, the older device lock functionality in BToE mode works since prior VVX changes did not expect any events from the BToE application. If the user deploys updates to UC Software prior to the BToE Connector application, the Device Lock functionality does not work in BToE mode. This functionality is effective only in the BToE mode.

**Required BToE Licenses**

The Polycom BToE Connector application does not require a separate license to operate. However, as this application only works in Lync and Skype for Business deployments, a Lync or Skype for Business Server license is required for each phone that uses this feature.

**Configuration File Enhancements**

There are no configuration file changes.

**New Ports Required**

No extra ports are required.

**Updates to BToE Connector 3.4.2**

Polycom® Better Together over Ethernet (BToE) Connector application 3.5.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.5.1 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

The BToE Connector application 3.4.2 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phones
- Polycom VVX 300, 301, 310, and 311 business media phones
- Polycom VVX 400, 401, 410, and 411 business media phones
- Polycom VVX 500 and 501 business media phones
- Polycom VVX 600 and 601 business media phones

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.
New or Enhanced Features

Polycom BToE Connector application 3.4.2 supports Windows 10 version 1607 with driver signing changes added by Microsoft (VOIP-123645). For more information regarding Windows 10 version 1607, refer to Driver Signing changes in Windows 10.

Enhanced Capabilities

There are no enhanced capabilities.

Resolved Issues

The Polycom BToE Connector application 3.4.2 includes no new resolved issues.

Required BToE Licenses

The Polycom BToE Connector application does not require a separate license to operate. However, as this application only works in Lync and Skype for Business deployments, a Lync or Skype for Business Server license is required for each phone that uses this feature.

Configuration File Enhancements

There are no configuration file changes.

New Ports Required

No extra ports are required.

Updates to BToE Connector 3.4.1

Polycom® Better Together over Ethernet (BToE) Connector application 3.5.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.5.1 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

The BToE Connector application 3.4.1 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phones
- Polycom VVX 300, 301, 310, and 311 business media phones
- Polycom VVX 400, 401, 410, and 411 business media phones
- Polycom VVX 500 and 501 business media phones
- Polycom VVX 600 and 601 business media phones

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.
New or Enhanced Features

Polycom BToE Connector application 3.4.1 includes the features and functionalities of previous releases and the following new feature enhancements:

- Added PIN based manual pairing (VOIP-90415).
- Creates a backup log file before overwriting log file (VOIP-119246).

Enhanced Capabilities

Polycom BToE Connector application 3.4.1 includes the features and functionalities of previous releases, as well as the following enhanced capability: enhanced the debug log levels into multiple log levels by module (VOIP-119007).

Resolved Issues

The following table lists the resolved issues in Polycom BToE Connector application 3.4.1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>VOIP-111292</td>
<td>3.4.1</td>
<td>Fixed the BToE tray icon reappearance issue when disabled.</td>
</tr>
</tbody>
</table>

Configuration File Enhancements

The following table includes the configuration parameters modified in this release.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Permitted Value</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG_LEVEL</td>
<td>0 to 6</td>
<td>3</td>
</tr>
</tbody>
</table>

This parameter sets the logging level.

New Ports Required

No extra ports are required.

Updates to BToE Connector 3.3.0

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.
The BToE Connector application 3.3.0 is compatible with the following Polycom endpoints:

- Polycom VVX 201 business media phones
- Polycom VVX 300, 301, 310, and 311 business media phones
- Polycom VVX 400, 401, 410, and 411 business media phones
- Polycom VVX 500 and 501 business media phones
- Polycom VVX 600 and 601 business media phones

Polycom BToE Connector 3.3.0 is supported on the following operating systems:

- Microsoft Windows 10
- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista

Note: Better Together over Ethernet is enabled by default on supported VVX business media phones with UC Software 5.4.0 or later and is compatible with all previous UC software versions except UC Software 5.0.0.

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

**New or Enhanced Features**

Polycom BToE Connector application 3.3.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: added support for Windows 10 OS (VOIP-105831).

**Resolved Issues**

The following table lists the issues resolved in this release.

**Resolved Issues for Better Together over Ethernet Connector 3.3.0**

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BToE</td>
<td>VOIP-96115</td>
<td>3.3.0</td>
<td>Can control VVX Phone's volume from PC when VVX Phone is selected as default audio device.</td>
</tr>
</tbody>
</table>
**Configuration File Enhancements**

There are no configuration file changes.

**New Ports Required**

No extra ports are required.

**Updates to BToE Connector 3.2.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

The BToE Connector application 3.2.0 is compatible with the following Polycom endpoints:

- VVX 201 business media phones
- VVX 300/310 business media phones
- VVX 400/410 business media phones
- VVX 500 business media phones
- VVX 600 business media phones

Polycom BToE Connector 3.2.0 is supported on the following operating systems:

- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista

Note: Better Together over Ethernet is enabled by default on supported VVX business media phones with UC Software 5.4.0 or later and is compatible with all previous UC software versions except UC Software 5.0.0.

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.
**New or Enhanced Features**

Polycom BToE Connector application 3.2.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: users can launch the phone’s web UI from BToE popup menu when it is paired with phone (VOIP-104519).

**Enhanced Capabilities**

Polycom BToE Connector application 3.2.0 includes the features and functionality of previous releases and includes the following enhanced capabilities:

- Fixed sign in issues with BToE when password starts with special character (VOIP-104392).
- When paired, Sign in popup on LC would be removed automatically if user tries to sign in from phone’s web UI (VOIP-104388).

**Configuration File Enhancements**

There are no configuration file changes.

**New Ports Required**

No extra ports are required.

**Updates to BToE Connector 3.1.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

The BToE Connector 3.1.0 is compatible with the following Polycom endpoints:

- VVX 201 business media phones
- VVX 300/310 business media phones
- VVX 400/410 business media phones
- VVX 500 business media phones
- VVX 600 business media phones
- VVX 1500 business media phones

Polycom BToE Connector 3.1.0 is supported on the following operating systems:
Note: Better Together over Ethernet is enabled by default on supported VVX business media phones with UC Software 5.3.0 or later and is compatible with all previous UC software versions except UC Software 5.0.0.

These release notes provide important information on software updates, application features, feature licenses, known issues, and previous BToE Connector software versions.

**New or Enhanced Features**

Polycom BToE Connector application 3.1.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: delivered as a single Microsoft Installer (MSI) software package for both 32-bit and 64-bit computers (VOIP-100341).

**Enhanced Capabilities**

Polycom BToE Connector application 3.1.0 includes the features and functionality of previous releases, as well as the following enhanced capability: BToE certificates are no longer maintained in the Trusted Certificate Authority list (VOIP-99534).

**Configuration File Enhancements**

There are no configuration file changes.

**New Ports Required**

No extra ports are required.

**Updates to BToE Connector 3.0.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 3.0.0 is supported on the following operating systems:

- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista
Note: Better Together over Ethernet is enabled by default on VVX business media phones with UC software 5.3.0 or later.

Note: Better Together over Ethernet Connector version 3.0.0 is compatible with all previous UC software versions except UC software 5.0.0.

New or Enhanced Features

Polycom BToE Connector application 3.0.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: added support for Audio playback feature (VOIP-84530).

Resolved Issues

The following table lists the issues resolved in this release.

Resolved Issues for Better Together over Ethernet Connector 3.0.0

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>VOIP-94591</td>
<td>5.3.0</td>
<td>BToE TCP Control channel transmission is now secured. All the control transfers between phone and computer application are now transferred through SSH client application.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87335</td>
<td>1.0.0</td>
<td>In a BToE scenario, audio quality issues are addressed when the default audio is set to USB-IP (Polycom BToE virtual USB device).</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-87338</td>
<td>1.0.0</td>
<td>Installing the Polycom BToE Connector application will prompt you to restart your computer only once.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88139</td>
<td>1.0.0</td>
<td>In a BToE scenario, the phone now immediately goes to the active state when you answer an incoming call in the Lync client while in active call.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88233</td>
<td>1.0.0</td>
<td>The Polycom BToE Connector application no longer causes any effect on the volume of the media played on YouTube in the web browser when running.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88252</td>
<td>1.0.0</td>
<td>Launching the Polycom BToE Connector application on your computer while a media file is playing in Windows Media Player no longer pauses the media player.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-88313</td>
<td>1.0.0</td>
<td>In a Lync BToE and call park deployment, the phone now displays the name of the parked caller when a call is established from a CX300 or Lync client to a BToE connected phone, and the Lync client answers and parks the call.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-89004</td>
<td>2.0.0</td>
<td>In BToE mode, establishing a local conference is now available when the phone is paired with your computer.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Found in Release</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-90053</td>
<td>2.0.0</td>
<td>On a computer with Windows Vista, closing the Polycom BToE connector application from the system tray while the application is launching after a reboot no longer causes any BToE plug-in crash.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-90268</td>
<td>2.0.0</td>
<td>The Polycom BToE Connector no longer displays any exception error message when you try to log off from your user account on a computer with Windows Vista.</td>
</tr>
<tr>
<td>BToE</td>
<td>VOIP-90650</td>
<td>2.3.0</td>
<td>Multiple BToE icons are no longer displayed on the computer’s system tray when the administrator tries to upgrade the Polycom BToE Connector from the version 2.0.0 when the Polycom BToE connector is running.</td>
</tr>
</tbody>
</table>

**Configuration File Enhancements**

The following table includes the configuration parameters added in this release.

**Configuration Enhancements for BToE Connector 3.0.0**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Permitted Value</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAYBACK_MODE_EN</td>
<td>0 or 1</td>
<td>1</td>
</tr>
</tbody>
</table>

Enable or disable Playback feature.

**New Ports Required**

The following table includes the ports that were added in this release.

**Ports for BToE Connector 3.0.0**

<table>
<thead>
<tr>
<th>Port Number</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>24802</td>
<td>UDP</td>
<td>For audio streaming.</td>
</tr>
<tr>
<td>6000</td>
<td>TCP</td>
<td>For SSH client connection (plink.exe). Used inside computer (BToE application to Plink.exe).</td>
</tr>
<tr>
<td>Dynamic</td>
<td>TCP</td>
<td>Plink.exe uses a dynamic port for connecting to VVX.</td>
</tr>
<tr>
<td>22 (On VVX)</td>
<td>TCP</td>
<td>VVX uses this port to get connected with computer application. (Secure connection)</td>
</tr>
</tbody>
</table>
**Existing Required Ports**

<table>
<thead>
<tr>
<th>Port Number</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2081</td>
<td>UDP</td>
<td>Discovery packet broadcast is done on this port by VVX.</td>
</tr>
<tr>
<td>24801</td>
<td>TCP</td>
<td>VVX and computer application will communicate with each other using this port (non-secure connection).</td>
</tr>
</tbody>
</table>

Note: For more information on configuring the ports required for BToE Connector application version 3.0.0 on a computer, see *Connecting Polycom VVX Business Media Phones with Better Together over Ethernet* at Polycom Support.

**Updates to BToE Connector 2.3.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 2.3.0 is supported on the following operating systems:

- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista

Note: Better Together over Ethernet is disabled by default on VVX business media phones with UC software 5.0.1 or later.

Note: Better Together over Ethernet Connector version 2.3.0 is compatible with all previous UC software versions except UC software 5.0.0.

**New or Enhanced Features**

There are no new enhancements for this release.

**Enhanced Capabilities**

Polycom BToE Connector application 2.3.0 includes the features and functionality of previous releases, as well as the following enhanced capability: signing into BToE on your computer now works without any issue when the password and username contains special characters back to back (VOIP-92935).
Configuration File Enhancements

There are no configuration parameters required for this release.

Updates to BToE Connector 2.2.0

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 2.2.0 is supported on the following operating systems:

- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista

New or Enhanced Features

Polycom BToE Connector application 2.2.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: added support to different log levels based on the value set in the registry (VOIP-90685).

Enhanced Capabilities

Polycom BToE Connector application 2.2.0 includes the features and functionality of previous releases and includes the following enhanced capabilities:

- In a BToE scenario, limitations regarding allowed characters for a password are removed (Umlauted ö ü ä, Ampersand & or even Eszett ß) (VOIP-91236).
- Device Software installation window is no longer shown while installing the Polycom BToE Connector application (VOIP-87815).

Configuration File Enhancements

There are no configuration file enhancements for this release.

Updates to BToE Connector 2.1.0

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 2.1.0 is supported on the following operating systems:
• Microsoft Windows 8
• Microsoft Windows 7
• Microsoft Windows Vista

Note: Polycom BToE Connector 2.1.0 currently does not support Windows 8.1. Support for this windows version will be added in the future.

New or Enhanced Features
Polycom BToE Connector application 2.1.0 includes the features and functionality of previous releases and includes the following new feature enhancements:

• Added support for enabling or disabling the notifications of the Polycom BToE Connector application using configuration parameters (VOIP-90556).
• Rebooting the computer after an installation, uninstallation, or upgrade is no longer required when starting from Polycom BToE Connector 2.1.0 (VOIP-90621).
• Added support for enabling or disabling the capability to launch the application and launch the readme file from the exit window after installation (VOIP-90816).

Enhanced Capacities
Polycom BToE Connector application 2.1.0 includes the features and functionality of previous releases, as well as the following enhanced capability: rebooting or toggling between the user and admin accounts of the computer for a successful installation is not required (VOIP-89992, VOIP-89993, and VOIP-87338).

Configuration File Enhancements
Polycom BToE Connector 2.1.0 includes the configuration parameters listed in the following table.

Configuration Parameters in the BToE Connector 2.1.0

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Permitted Value</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTIFY_MSG_EN</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td>Enable or disable notifications on the system tray.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERR_MSGBOX_EN</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td>Enable or disable error messages on the computer. In case of any error, application may get terminated without the knowledge of the user. Polycom recommends not disabling this parameter.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WRN_MSGBOX_EN</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td>Enable or disable information or warning message displays on your computer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHOW_EXIT</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td>Exiting the app can be enabled or disabled.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Modify Configuration Parameters

You can modify the configuration parameters for the Polycom BToE Connector application on your computer.

To modify the BToE Connector Application Configuration Parameters application configuration parameters:

1. After installing the application on your computer, open the Run application.
2. Type regedit.
3. Do one of the following:
   - For 64bit, navigate to HKEY_LOCAL_MACHINE > SOFTWARE > Wow6432Node > Polycom > Polycom BToE Connector.
   - For 32bit, navigate to HKEY_LOCAL_MACHINE > SOFTWARE > Polycom > Polycom BToE Connector.
4. Modify the parameters you want to enable or disable.

   Any changes in the configuration parameters will take effect only after application relaunch.

## Updates to BToE Connector 2.0.0

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Permitted Value</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTIFY_ICON_EN</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td>LOG_FLUSH_LIMIT_IN_MB</td>
<td>0 or max limit</td>
<td>20</td>
</tr>
<tr>
<td>RUNBTOE</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td>VIEWRN</td>
<td>0 or 1</td>
<td>1</td>
</tr>
</tbody>
</table>

Disabling this parameter removes the “Notify icon” in system tray. However, the BToE application runs in background.

This Parameter provides the size of the application log file. Value is in order of MB. Once the log file size reaches the value specified in this flag, the file content is flushed on next application run.

Enable or disable Launch BToE application on exit window after installation.

Enable or disable View ReadMe on exit window after the installation.

To achieve your configurations as part of installation, you can invoke the installer from the command-line and pass the parameters names as a command-line argument. For example, enter the following to disable Notify messages, to show exit features, and to not run the BToE application after installation:

```plaintext
C:\> msiexec.exe /i "PathToMSI\Polycom BToE Connector_xxbit_2.1.0.msi" NOTIFY_MSG_EN=0 SHOW_EXIT=0 RUNBTOE=0
```

The default value is used if you do not specify the parameter value.
for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 2.0.0 is supported on the following operating systems:

- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista

**New or Enhanced Features**

Polycom BToE Connector application 2.0.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: user is now able to run the Polycom BToE connector application without any admin privileges (VOIP-88943).

**Enhanced Capabilities**

Polycom BToE Connector application 2.0.0 includes the features and functionality of previous releases and includes the following enhanced capabilities:

- Installation process is now optimized when the user tries to install the new Polycom BToE Connector by repairing the existing application (VOIP-89402).
- Polycom BToE Connector application now supports audio peripheral devices (Speaker and Mic) with 16 KHz in addition to existing 48 KHz support (VOIP-89011).
- BToE application now starts automatically after a successful upgrade (VOIP-89393).

**Configuration File Enhancements**

There are no configuration parameters required for the Polycom BToE Connector application.

**Updates to BToE Connector 1.1.0**

Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 1.1.0 is supported on the following operating systems:

- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista
New or Enhanced Features
Polycom BToE Connector application 1.1.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: added support for BToE auto-pairing (VOIP-87086).

Enhanced Capabilities
Polycom BToE Connector application 1.1.0 includes the features and functionality of previous releases and includes the following enhanced capabilities:

- In a BToE scenario, the phone now generates the corresponding DTMF when a bridge number is copied and pasted on the Lync client (VOIP-88528).
- In a BToE scenario, “Presenter muted the audience” message now displays on the phone’s screen and turns the mute key red when the Lync client mutes a conference call (VOIP-87782).

Configuration File Enhancements
There are no configuration parameters required for the Polycom BToE Connector application.

Updates to BToE Connector 1.0.0
Polycom® Better Together over Ethernet (BToE) Connector application 3.6.0 is a general release for customers using Microsoft® Lync® Server 2010, Microsoft® Lync® Server 2013, and Microsoft® Skype™ for Business Server with UC Software 5.6.0 or later with Polycom® VVX® business media phones. This application must be installed on the user’s computer to enable the Better Together over Ethernet feature.

Polycom BToE Connector 1.0.0 is supported on the following operating systems:

- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista

New or Enhanced Features
Polycom BToE Connector application 1.0.0 includes the features and functionality of previous releases, as well as the following new feature enhancement: added support for Lync Better Together over Ethernet feature (VOIP-75133).

Enhanced Capabilities
There are no enhanced capabilities for this release.

Configuration File Enhancements
There are no configuration parameters required for the Polycom BToE Connector application.
Get Help

For more information about installing, configuring, and administering Polycom products, refer to Polycom Support.

For information about Polycom partner solutions, see Polycom Global Strategic Partner Solutions.

The Polycom Community

The Polycom Community gives you access to the latest developer and support information. Participate in discussion forums to share ideas and solve problems with your colleagues. To register with the Polycom Community, create a Polycom online account. When logged in, you can access Polycom support personnel and participate in developer and support forums to find the latest information on hardware, software, and partner solutions topic.
Copyright and Trademark Information

Copyright © 2018, Polycom, Inc. All rights reserved. No part of this document may be reproduced, translated into another language or format, or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Polycom, Inc.

6001 America Center Drive
San Jose, CA 95002
USA

**Trademarks** Polycom®, the Polycom logo and the names and marks associated with Polycom products are trademarks and/or service marks of Polycom, Inc., and are registered and/or common law marks in the United States and various other countries.

All other trademarks are property of their respective owners. No portion hereof may be reproduced or transmitted in any form or by any means, for any purpose other than the recipient’s personal use, without the express written permission of Polycom.

**Disclaimer** While Polycom uses reasonable efforts to include accurate and up-to-date information in this document, Polycom makes no warranties or representations as to its accuracy. Polycom assumes no liability or responsibility for any typographical or other errors or omissions in the content of this document.

**Limitation of Liability** Polycom and/or its respective suppliers make no representations about the suitability of the information contained in this document for any purpose. Information is provided “as is” without warranty of any kind and is subject to change without notice. The entire risk arising out of its use remains with the recipient. In no event shall Polycom and/or its respective suppliers be liable for any direct, consequential, incidental, special, punitive or other damages whatsoever (including without limitation, damages for loss of business profits, business interruption, or loss of business information), even if Polycom has been advised of the possibility of such damages.

**End User License Agreement**

BY USING THIS PRODUCT, YOU ARE AGREEING TO THE TERMS OF THE END USER LICENSE AGREEMENT (EULA) AT: http://documents.polycom.com/indexes/licenses. IF YOU DO NOT AGREE TO THE TERMS OF THE EULA, DO NOT USE THE PRODUCT, AND YOU MAY RETURN IT IN THE ORIGINAL PACKAGING TO THE SELLER FROM WHOM YOU PURCHASED THE PRODUCT.

**Patent Information** The accompanying product may be protected by one or more U.S. and foreign patents and/or pending patent applications held by Polycom, Inc.

**Open Source Software Used in this Product** This product may contain open source software. You may receive the open source software from Polycom up to three (3) years after the distribution date of the applicable product or software at a charge not greater than the cost to Polycom of shipping or distributing the software to you. To receive software information, as well as the open source software code used in this product, contact Polycom by email at OpenSourceVideo@polycom.com.

**Customer Feedback** We are striving to improve our documentation quality and we appreciate your feedback. Email your opinions and comments to DocumentationFeedback@polycom.com.

**Polycom Support** Visit the Polycom Support Center for End User License Agreements, software downloads, product documents, product licenses, troubleshooting tips, service requests, and more.