Polycom® Multipoint Layout Application (MLA) for Use with Polycom Telepresence Solutions
Trademark Information
POLYCOM® and the names and marks associated with Polycom's 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 the property of their respective owners.

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.
About this Guide

The Polycom Multipoint Layout Application User Guide describes the functionalities of the Polycom Multipoint Layout Application (MLA). This guide is intended for anyone who installs or uses this product.

Prerequisites

To perform the tasks in this guide, you should have prior knowledge and experience with:

- Polycom Immersive Telepresence solutions
- Polycom HDX systems
- Polycom RealPresence Group Series systems

In addition, depending on your configuration, you may also need to be familiar with:

- Polycom RealPresence Collaboration Server 2000 and higher with the Telepresence option enabled (refer to the Polycom Immersive Telepresence Release Notes or the Compatibility Matrix on the Support site for specific hardware model and software version compatibility)
- Polycom Multipoint Layout Application (needed for use with the RealPresence Collaboration Server conference platform)
- Polycom® RealPresence® Resource Manager

Related Documentation

For additional information, refer to these related Polycom documents:

Polycom Multipoint Layout Application (MLA) User’s Guide


- XMA (Resource Manager) documentation: *Polycom XMA System Operations Guide*


Many of the documents listed on this page, as well as additional Polycom documents, are available at [http://www.polycom.com/support/video/index.html](http://www.polycom.com/support/video/index.html).

**Support**

For telepresence support or service, please call one of these numbers:

- North America: 888-248-4143
- EMEA: +44 1753 723020
- APAC (Asia Pacific): +612 997 88098

Alternatively, you can access the Polycom Support Portal at [http://support.polycom.com](http://support.polycom.com).
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing the Multipoint Layout Application</td>
<td>7</td>
</tr>
<tr>
<td>Task Overview</td>
<td>8</td>
</tr>
<tr>
<td>Installing the Multipoint Layout Application</td>
<td>9</td>
</tr>
<tr>
<td>System Requirements</td>
<td>9</td>
</tr>
<tr>
<td>User Privileges</td>
<td>9</td>
</tr>
<tr>
<td>Installing the Multipoint Layout Application</td>
<td>9</td>
</tr>
<tr>
<td>Upgrading Multipoint Layout Application to Multipoint Layout Application Version 3.1.4</td>
<td>10</td>
</tr>
<tr>
<td>Connecting to the MCU</td>
<td>11</td>
</tr>
<tr>
<td>Specifying the MCU Connection Settings</td>
<td>11</td>
</tr>
<tr>
<td>Viewing the MCU Connection Settings</td>
<td>14</td>
</tr>
<tr>
<td>Understanding the Multipoint Layout Application</td>
<td>15</td>
</tr>
<tr>
<td>Modes of Operation</td>
<td>15</td>
</tr>
<tr>
<td>Automatic Mode</td>
<td>15</td>
</tr>
<tr>
<td>Manual Mode</td>
<td>16</td>
</tr>
<tr>
<td>Conferences and Participants List</td>
<td>17</td>
</tr>
<tr>
<td>Conferences</td>
<td>17</td>
</tr>
<tr>
<td>Participants</td>
<td>18</td>
</tr>
<tr>
<td>Site Naming Conventions</td>
<td>20</td>
</tr>
<tr>
<td>Layout Templates</td>
<td>20</td>
</tr>
<tr>
<td>Working with Layout Templates</td>
<td>22</td>
</tr>
<tr>
<td>Including Disconnected Sites</td>
<td>22</td>
</tr>
<tr>
<td>Creating a Layout Template for an Active Conference</td>
<td>23</td>
</tr>
<tr>
<td>Selecting a Layout Configuration</td>
<td>26</td>
</tr>
<tr>
<td>RPX 400 Series and ATX 400</td>
<td>26</td>
</tr>
<tr>
<td>RPX 200 Series, TPX 204M, and ATX 200</td>
<td>27</td>
</tr>
<tr>
<td>OTX 300, TPX 306M, ATX 300, and 3 Screen</td>
<td>28</td>
</tr>
<tr>
<td>OTX 100, TPX 100, CTS 1000, and Standalone (Traditional) Video Conferencing Systems</td>
<td>28</td>
</tr>
<tr>
<td>Applying an Existing Layout Template to an Active Conference</td>
<td>30</td>
</tr>
</tbody>
</table>
Managing Templates ............................................................... 33
Viewing Templates .............................................................. 34
Adding a New Template ........................................................ 35
Updating an Existing Template ............................................. 37
Deleting a Template ............................................................. 38
Copying a Template ............................................................. 38
Sharing Templates ............................................................... 39

Troubleshooting ................................................................. 41

End-User License Agreement .................................................. 43
Introducing the Multipoint Layout Application

The Multipoint Layout Application (MLA) is a Windows application that allows the conference administrator to configure and apply personal layouts for telepresence systems and traditional standalone video endpoints in multipoint video conference calls.

The main purpose of the MLA is to automatically control the video layouts for multipoint calls involving Polycom Immersive Telepresence (ITP) systems. The administrator can also customize the layouts that will be used in the automatic mode. The conference operator may also control layouts manually and interactively.

The MLA works in conjunction with Polycom RealPresence Collaboration Server 2000 and higher (refer to the Polycom Immersive Telepresence Release Notes or the Compatibility Matrix on the Support site for specific hardware model and software version compatibility).

The MLA has the capability of simultaneously connecting to multiple MCUs. An MCU is hardware that allows three or more video conferencing systems to participate in an interactive multi-way conference.

The MLA provides a set of Windows forms and controls for listing and selecting an active conference, configuring framing layouts for participants in a selected conference, and saving the configured layout settings.

**Multipoint Layout Application**

![Diagram of MLA architecture](image-url)
Telepresence systems consist of one, two, three, or four individual HDX video endpoints, depending upon their model.

The MLA supports most layout options available in the MCU. It implements the same framing configuration capabilities that the RealPresence Collaboration Server user interface currently provides. The MLA also allows the user to save the configured layout templates for a conference and retrieve the saved layout templates to apply to the same conference in the future.

**Task Overview**

The following table outlines the typical task flow for a first time user when creating and applying templates.

**Task Overview**

<table>
<thead>
<tr>
<th>First time...</th>
<th>Creating templates...</th>
<th>Applying templates...</th>
<th>Automatic mode...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install the MLA.</td>
<td>Start the MLA.</td>
<td>Start the MLA.</td>
<td>Start the MLA.</td>
</tr>
<tr>
<td>Start the MLA.</td>
<td>Start the MLA.</td>
<td>Start the MLA.</td>
<td>Start the MLA.</td>
</tr>
<tr>
<td>Set up the MCU login information in the MLA.</td>
<td>Create a template.</td>
<td>Create conferences on an MCU.*</td>
<td>Configure the MCU login for automatic mode (one time).</td>
</tr>
<tr>
<td>Verify the MCU connections.</td>
<td>Configure the template layouts.</td>
<td>Select the MCU and conference.</td>
<td>Create custom user templates to be applied automatically (optional).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select the template.</td>
<td>Configure conferences on an MCU with a special keyword as described in the Automatic Mode section on page 15.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apply the template to an active conference.</td>
<td>The MLA handles everything automatically.</td>
</tr>
</tbody>
</table>

* The MLA is not used for this step. Other tools, such as the RealPresence Collaboration Server web user interface or the Polycom RealPresence Resource Manager are used for creating the MCU address book entries and for creating and managing conferences.
Installing the Multipoint Layout Application

This chapter lists the privileges available for each login type and describes the steps you must take to install or uninstall the MLA. The MLA can only be installed by an administrator on a Windows PC.

System Requirements

Before you install MLA version 3.1.4, make sure your PC meets these requirements:

- Windows 7, Windows XP SP2/SP3, or Windows Server 2008
- .NET Framework 2.0 or later

If you do not have .NET Framework, you can download it from [http://windowsupdate.microsoft.com](http://windowsupdate.microsoft.com).

Note that the MLA is not supported on Virtual Machines (VM).

User Privileges

The following table outlines the privileges of each login type.

<table>
<thead>
<tr>
<th>User Privileges</th>
</tr>
</thead>
<tbody>
<tr>
<td>If this is your login type...</td>
</tr>
<tr>
<td>Administrator</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>User</td>
</tr>
</tbody>
</table>

Installing the Multipoint Layout Application

To install the Multipoint Layout Application:

1. Unzip the PolycomMultipointLayoutApplication.zip file you received to your desktop. The MultipointLayoutApplicationSetup.exe icon will appear.
Double-click the MultipointLayoutApplicationSetup.exe icon, and then follow the on-screen instructions to complete the installation.

The Multipoint Layout Application program will appear in Program Files/Polycom, and the PolycomMultipointLayoutApplication.exe icon will appear on your desktop.

Upgrading Multipoint Layout Application to Multipoint Layout Application Version 3.1.4

If you are upgrading from MLA to MLA version 3.1.4, you can install MLA version 3.1.4 directly over the previous installation. All of your templates and settings will be preserved.

To upgrade Multipoint Layout Application to Multipoint Layout Application version 3.1.4:

1. Unzip the PolycomMultipointLayoutApplication.zip file you received to your desktop.
   The MultipointLayoutApplicationSetup.exe icon will appear.

2. Double-click the MultipointLayoutApplicationSetup.exe icon, and then follow the on-screen instructions to complete the installation.
   The Multipoint Layout Application program will appear in Program Files/Polycom, and the PolycomMultipointLayoutApplication.exe icon will appear on your desktop.
Connecting to the MCU

This chapter describes how to specify and view the MCU connection settings.

Specifying the MCU Connection Settings

To specify the MCU connection settings:

1. Double-click the PolycomMultipointLayoutApplication.exe icon.
2. When the MLA starts, it retrieves the MCU login information from the configuration file. If no MCU login information has been entered, enter the following MCU information on the MCU Connection screen:
   - MCU Name
   - IP Address or IP Address:Port Number
     - Any TCP port is supported to access the MCU through a NAT. If the Port Number is not supplied in the Address column of the MCU Connection Setting screen, the default port 80 will be used.
     - Encrypted communication using HTTPS is supported. MLA automatically uses encryption if RealPresence Collaboration Server is configured for it.
   - Username
   - Password (The password will be encrypted in the configuration file.)

The MLA supports up to twenty simultaneous MCU connections. Therefore, you can enter the names, addresses, and other information for up to twenty MCUs on the MCU Connection screen.
If you want an MCU to automatically apply a layout template to a conference, select the Active check box in the Automatic Layout column.

When this check box is selected, the MLA will automatically apply layouts to any conference name on the MCU containing a special keyword as described in the Automatic Mode section on page 15.

When there are multiple instances of MLA connected to the same MCU, only one MLA should be configured to have Automatic Layout enabled. Currently, the MLA cannot tell if Automatic Layout has been set by another MLA instance. If you allow multiple copies of the MLA to automatically apply layouts to the same MCU, you will not achieve your desired results. This is an unsupported configuration.

Click Save to connect to the MCU.

As the MLA tries to connect to specific MCUs, a Connection Progress dialog box will be displayed. If a connection fails, an error message will be displayed.
**Connection Progress Screen**

The figure "Multipoint Layout Application Main Screen" shows the MLA main screen with two connected RealPresence Collaboration Server sites. Each tab displays the names of the connected MCUs. The status line at the bottom of the screen shows the IP address for the selected MCU and will specify if automatic layout is enabled.

**Multipoint Layout Application Main Screen**
Viewing the MCU Connection Settings

To view the MCU connection settings:

1. On the MLA main screen, click **Preferences**.
2. Select **Connections** in the Category column to view the current list of connected MCUs.

*Multipoint Layout Application Preferences Screen*
Understanding the Multipoint Layout Application

This chapter explains the MLA in more detail including:

- The modes of operation
- The conference and participants list
- The site naming conventions
- The layout templates

Modes of Operation

The MLA can be configured to run in a fully automated mode or in manual mode. The conference operators configure the mode at the individual conference level, allowing them to have flexibility in determining the best mode for each conference.

Automatic Mode

When running in automatic mode, the MLA works in conjunction with the Polycom RealPresence Collaboration Server 2000 and higher (refer to the Polycom Immersive Telepresence Release Notes or the Compatibility Matrix on the Support site for specific hardware model and software version compatibility) to create and apply layouts to all participants in the conference. It also reacts dynamically as participants are added or dropped from the conference, adjusting the layouts immediately so that the best possible layout combination is always applied for any given set of participants.

MLA version 3.1.4 supports two types of automatic conference modes:

- **Room Continuous Presence**: In this mode, the multipoint view will automatically be generated either to follow the general principles of Polycom immersive telepresence multipoint (that is, all participants are “present” during a multipoint conference) or to fit a custom-set view configured by the conference administrator for the combination of sites in a particular conference.

  Room Continuous Presence is activated by MLA when the conference name contains the word “AUTO” and the RealPresence Collaboration Server hosting the conference is controlled by the MLA with Automatic Layout enabled. If you are running RealPresence Collaboration Server version 6.0 or later, you do not need to follow this naming convention. Instead, you may select Room Continuous Presence, the default, in the RealPresence Collaboration Server web user interface. You will also need to specify one of the following RealPresence Collaboration Server Telepresence Modes:

  - **Auto**: The RealPresence Collaboration Server will disable certain video options only if the conference participants include any ITP endpoints.
  - **On**: The RealPresence Collaboration Server will disable certain video options whether or not there are any ITP endpoints in the conference.
Voice Activated Room Switching (VARS): VARS is different from Room Continuous Presence in that the speaker’s site is the only site seen by others. The view of the speaker’s site is sized to be as large as possible on all of the other participants’ displays. The current speaker sees the previous speaker’s site (that is, the speaker’s layout remains unchanged). Layouts used in VARS are not customizable.

VARS is activated by MLA when the conference name contains the word “ROOMSWITCH” and the RealPresence Collaboration Server hosting the conference is controlled by MLA with Automatic Layout enabled. If you are running RealPresence Collaboration Server version 6.0 or later, you do not need to follow this naming convention. Instead, you may select “Room Switch” in the RealPresence Collaboration Server web user interface. You will also need to specify one of the following RealPresence Collaboration Server Telepresence Modes:

- **Auto:** The RealPresence Collaboration Server will disable certain video options only if the conference participants include any ITP endpoints.
- **On:** The RealPresence Collaboration Server will disable certain video options whether or not there are any ITP endpoints in the conference.

Although Automatic Layout is enabled in the MLA, the generic templates typically used for Room Continuous Presence will not be applied. Instead, the MLA creates a specific layout based on the model of the telepresence system at the site viewing the conference and the model of the telepresence system at the speaking site.

If the RealPresence Collaboration Server system is configured to manage the conference in VARS mode, MLA will not be used. The RealPresence Collaboration Server system is responsible for managing the layout. Refer to the *Polycom RealPresence Collaboration Server 1500/2000/4000 Administrator’s Guide* for more information.

Note that the RealPresence Collaboration Server system can handle multiple conferences. While the RealPresence Collaboration Server system manages a conference in VARS mode, MLA can be used to manage a conference in Room Continuous Presence mode.

**Manual Mode**

When running in manual mode, layout views are controlled manually and interactively by the conference operator through the MLA user interface.
Conferences and Participants List

The MLA main screen contains the list of active Conferences and Participants.

*Multipoint Layout Application Main Screen - Conferences and Participants Lists*

### Conferences

When the MCU is connected, the MLA main screen displays the currently active conferences. The Conferences list is automatically updated whenever any new conference becomes active or is terminated in the MCU. All conferences must be set up in the RealPresence Collaboration Server using direct Dial-in to a meeting room, Dial-out participants, or Entry Queue Access.

- The Layout Templates for Selected Conference column displays the available templates for the selected conference. Templates applied automatically or applied by another instance of the MLA are not displayed. The selected template is manually applied by clicking *Apply Layout to Conference*.
- The Description column displays details for the selected layout template.
Participants

The MLA main screen displays the conference participants for the selected conference.

- The Site column displays the preconfigured participants' name without the number suffixes. For more information about naming conventions, refer to the following section, Site Naming Conventions.
- The Type column displays the participants' type, such as RPX 400, RPX 200, OTX, TPX, 3 screen, or Standalone (traditional video conferencing system).

Refer to table "Site Types" for more information about site types.
The figure "Multipoint Layout Application Main Screen - Active Conference" shows an active conference containing an RPX 200 Series site, an OTX, ATX, or TPX site, and a site with a traditional HDX video conferencing system.

- The Status column displays whether the participant in the conference is connected or disconnected. This column uses the same icons as the RealPresence Collaboration Server to identify if the participant has video or is audio only.
**Site Naming Conventions**

You must name the participant sites following an established naming convention. This convention applies to each MCU address book entry for each codec in the telepresence system. Follow the naming convention in the “Setting Up Naming on the HDX Codecs” section in the *Polycom Immersive Telepresence (ITP) Administrator’s Guide* or the “Setting Up Naming on the RealPresence Group Series Codecs” section in the *Polycom RealPresence Immersive Studio Administrator’s Guide*.

**Layout Templates**

The MLA supports personal layout templates for RPX, OTX, TPX, ATX, 3 Screen, and traditional video conferencing systems. The following personal layouts represent the Room Continuous Presence view for a single codec.
## Codec Layout Templates

<table>
<thead>
<tr>
<th>Number of Sites</th>
<th>OTX/TPX/ATX</th>
<th>RPX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
<tr>
<td>2</td>
<td><img src="image3" alt="Diagram" /></td>
<td><img src="image4" alt="Diagram" /></td>
</tr>
<tr>
<td>3</td>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
<tr>
<td>4</td>
<td><img src="image7" alt="Diagram" /></td>
<td><img src="image8" alt="Diagram" /></td>
</tr>
<tr>
<td>5</td>
<td><img src="image9" alt="Diagram" /></td>
<td><img src="image10" alt="Diagram" /></td>
</tr>
<tr>
<td>6</td>
<td><img src="image11" alt="Diagram" /></td>
<td><img src="image12" alt="Diagram" /></td>
</tr>
<tr>
<td>8</td>
<td><img src="image13" alt="Diagram" /></td>
<td><img src="image14" alt="Diagram" /></td>
</tr>
<tr>
<td>9</td>
<td><img src="image15" alt="Diagram" /></td>
<td><img src="image16" alt="Diagram" /></td>
</tr>
<tr>
<td>10+</td>
<td><img src="image17" alt="Diagram" /></td>
<td><img src="image18" alt="Diagram" /></td>
</tr>
<tr>
<td>13</td>
<td><img src="image19" alt="Diagram" /></td>
<td><img src="image20" alt="Diagram" /></td>
</tr>
</tbody>
</table>

**OTX/TPX/ATX**
These are useful for display on OTX/TPX/ATX/3 Screen or any 16:9 site, when one or more of the video sources is from RPX.

**RPX**
These are useful for display on RPX, OTX, TPX, ATX and 3 Screen.
Working with Layout Templates

In a Room Continuous Presence conference, the MCU enables the conference operator to select a personal layout and apply it to an active ongoing conference.

Depending on how it’s configured, the MLA may apply a certain layout to a conference when it connects to an MCU. If the Automatic Layout check box is selected on the MCU Connection screen and the conference name on the MCU contains a special keyword as described in the Automatic Mode section on page 15, the MLA will automatically apply a layout template to the conference. Otherwise, you must create a new template or select an existing template and apply it to an active conference manually.

Including Disconnected Sites

MLA version 3.1.4 includes a Site Management system preference category. With the Site Management preference, a check box allows you to specify whether or not the MLA should include disconnected sites when creating manual layouts and when listing available templates to apply to any given conference.

Preferences Screen - Site Management

By default, the check box is not selected, which means that disconnected sites are not included. Note that this preference applies to manual mode only. When the MLA is in automatic mode, disconnected sites are not considered.
Creating a Layout Template for an Active Conference

To create a layout template for an active conference:

1. On the MLA main screen, select a conference from the Conferences List. Refer to the Modes of Operation section on page 15 for more information about the lists on this screen.

2. Click the **Configure New Layout** button. The Create New Template screen will appear.

Any existing layout templates for the selected conference will be displayed. If no layout templates exist, a message will appear that no matching templates were found.

2. Click the **Configure New Layout** button. The Create New Template screen will appear.
Create New Template Screen

3 Enter a Name and Description for the template.

4 Select the **Apply automatically** check box to allow the layout template to be applied automatically to a conference when it starts. Automatic Layout must be enabled on the MCU and the conference name must contain a special keyword as described in the Automatic Mode section on page 15. For more information about selecting a layout for the sites in your conference, refer to the Selecting a Layout Configuration section on page 26.

5 Select the **Generate suggested layout** check box to display the suggested video source selection for that site (which will appear after you click the **Config** button).

6 Select a site and select the **Generic** check box if you want the MLA to match the site type instead of the site name when searching for available templates for a conference.

7 Click **Config** to configure the layout for the selected site.

   The Site Layout Configuration screen appears. With MLA, the Site Layout Configuration screen automatically contains the layout currently being used in the selected conference. This prevents overwriting layouts in ongoing conferences since the MLA does not know when another MLA applies a layout to the same conference.

Be sure to avoid selecting **Apply Automatically** for multiple user templates containing the same set of participants. If there are multiple user templates configured for automatic application containing the same set of participants, there is no way to determine which template will be chosen by MLA.
8 For each pane on the Site Layout Configuration screen, click a layout. The site layout appears in the pane. The name of the site also appears at the top of the screen. The configuration panes appear in the same order as they actually appear on the telepresence room displays. For example, for an OTX 300, TPX 306M, or ATX 300 site, the center pane represents the primary codec, the left pane represents the secondary codec, and the right pane represents the third codec as shown below.

The configuration pane contains a toolbar for layout selection choices. The drop-down combo box lists all available endpoints in the conference.

*Site Layout Configuration Example*

For more information about selecting a layout configuration, refer to the Selecting a Layout Configuration section on page 26.

9 Click **Save and Close** to save the site layout for that particular site.

10 Repeat steps 6 through 9 to configure the remaining sites.

11 Click **Save Template** to save the configured layout template.

The new template displays in the list of conference layouts as shown in figure "Multipoint Layout Application Main Screen - Available Templates".
Selecting a Layout Configuration

The available layout templates depend on the type of system you have, the number of sites in the conference, and whether or not you have already created custom templates for your conference. As noted previously, the configuration panes appear in the same order as they actually appear on the telepresence room displays. For example, for an OTX 300, TPX 306M, or ATX 300 site, the center pane represents the primary codec, the left pane represents the secondary codec, and the right pane represents the third codec.

Following are examples of site configurations for:

- RPX 400 Series/ATX 400
- RPX 200 Series/TPX 204M/ATX 200
- OTX 300/TPX 306M/ATX 300/3 screen
- OTX 100/TPX 100/CTS 1000/traditional video conferencing systems

RPX 400 Series and ATX 400

RPX 400 Series sites and ATX 400 sites display four configuration panes on the Site Layout Configuration screen. The figure "RPX 400 Series Site Layout Configuration" shows an example for an RPX 400 Series system.
RPX 400 Series Site Layout Configuration

RPX 200 Series, TPX 204M, and ATX 200

RPX 200 Series, TPX 204M sites, and ATX 200 sites display two configuration panes on the Site Layout Configuration screen. The figure "RPX 200 Series Site Layout Configuration" shows an example for an RPX 200 Series system.

RPX 200 Series Site Layout Configuration
OTX 300, TPX 306M, ATX 300, and 3 Screen

OTX 300, TPX 306M, ATX 300, and 3 Screen sites display three configuration panes on the Site Layout Configuration screen. The figure "TPX 306M Site Layout Configuration" shows an example for a TPX 306M.

TPX 306M Site Layout Configuration

OTX 100, TPX 100, CTS 1000, and Standalone (Traditional) Video Conferencing Systems

OTX 100, TPX 100, CTS 1000, and standalone (traditional) video conferencing systems display one configuration pane on the Site Layout Configuration screen. The figure "Traditional Video Conferencing System Site Layout Configuration" shows an example for a traditional video conferencing system.
To configure a 3 screen system in the layout, all three codecs must be selected. The figure "Traditional Video Conferencing System Site Layout Configuration with a 3 Screen System" shows an example of how to configure a CTS 3000 site in the layout when viewing from a traditional video conferencing system.
Applying an Existing Layout Template to an Active Conference

The MLA enables the conference operator to apply a saved layout template to an active conference. Multiple templates for the same conference are allowed.

Layout templates are matched to active conferences by the site names. Therefore, the names of the template and conference on the MCU do not matter. If all the site names in the conference are the same as the site names in a template, then it is a match and the template can be applied to the active conference. Any saved template that matches the conference sites in a selected conference will display in the list of templates on the MLA main screen. A description will also be displayed for each template. If one or more templates is found, the Apply Layout to Conference button becomes enabled. If no template is found for the conference, a message will appear and the Apply Layout to Conference button remains disabled.

If the Generic check box is selected on the Create New Template screen as shown in figure "Create New Template Screen", layout templates will be matched to active conferences by the site type (for instance, RPX 200 or TPX 306M) instead of the site name. This allows a template to be used for any conference matching the site type even if it is not the exact same site.

A template can have a mix of generic and non-generic sites.
Create New Template Screen

Note that if a site is disconnected in an active conference and the **Include Disconnected Sites in Layout Creation and User Template Matching** check box on the Preferences - Site Management screen is selected, the matching layout templates will still be listed, but the chosen templates will only be applied to connected sites.

Preferences Screen - Site Management
To apply a template automatically:

» Ensure that the conference name contains a special keyword as described in the Automatic Mode section on page 15 and that the Automatic Layout check box is selected in the MCU Connection screen.

If a matching template is found, it will be automatically applied to the conference.

To apply a template manually:

1. On the MLA main screen, select a conference from the Conferences list.
2. Select a template from the Layout Templates for Selected Conference list and click the Apply Layout to Conference button.

A message will display to indicate if the layout application succeeded or failed. The success message confirms that the RealPresence Collaboration Server accepted the layout. It does not confirm that the layout is actually being displayed. If a participant is disconnected, it will show a blank screen instead of the intended layout.

If the site name in the conference is changed in the MCU, the saved template is no longer valid for that conference and it will not be displayed in the list of available templates. If this occurs, you must modify the site name in the saved template to match the name in the MCU. The figure "Multipoint Layout Application Main Screen - Preconfigured Layout Template" shows a selected conference with a preconfigured layout template.
Managing Templates

The MLA allows users to manage layout templates using the Manage Template button on the MLA main screen.

There are two types of templates used by the MLA: the User template and the generic template.

- The User template is defined by the user and is the default. The user can select an existing template from the user template file in the Name drop-down list on the MLA main screen.

  The MLA places the new user templates in the following default locations; however, you can then move the template files to a different location using the preference setting provided by MLA.

User Templates

<table>
<thead>
<tr>
<th>For...</th>
<th>Templates are created in...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 7, Windows Server 2008</td>
<td>C:\Users&lt;username&gt;\AppData\Roaming\Polycom\Polycom Multipoint Layout Application (Note that AppData is a hidden directory.)</td>
</tr>
<tr>
<td>Windows XP</td>
<td>C:\Documents and Settings&lt;username&gt;\Application Data\Polycom\Polycom Multipoint Layout Application (Note that Application Data is a hidden directory.)</td>
</tr>
</tbody>
</table>

- The Generic template is read-only and contains a suggested layout. Generic templates are matched to a conference regardless of the site name. A Generic template may be saved as a user template and then revised.
Viewing Templates

To view the templates:

1. On the MLA main screen, click the **Manage Template** button.

   The Layout Template screen appears with the User Template displayed as the default template in the Type field.

   **Layout Template Screen**

   ![Layout Template Screen]

2. Select an existing template from the Name drop-down list. The template description and the sites list will be updated.

3. Click **View** to see the layout configured for a site.
View Layout

Adding a New Template

To add a new template:

1. On the MLA main screen, click Manage Templates.
   The Layout Template screen appears as shown in figure "Layout Template Screen - Add Template".
2. Click the Add Template button.
   The Name, Description, and Site Layout fields are cleared.
Layout Template Screen - Add Template

3 Enter a name and description for the new template.

4 For each site, enter a site name in the Site column and select the site type from the Type drop-down list. The name in the Site column must match the site name you created in the MCU address book exactly, including spaces, as well as the space between the site name and suffix, if applicable.

   For the site name, you can enter either of the following:
   - A pre-configured site name from the MCU’s address book.
   - A generic site name.

   If you enter a generic site name, you must select the Generic check box. For generic sites, the MLA will match the site type (which indicates the number of parties in the site) rather than the site name when searching for available templates.

   For more information about site types, refer to table "Site Types".

   You should enter all sites for this template before configuring any site layout. This will ensure that every party in the site is listed in the video source drop-down list.

   Enter the site name and type for all sites before clicking Config for each site.

5 Click Config to configure the site layout and choose the video sources for the selected site. If Configure Layout Automatically is checked in the MLA main screen, you can choose either the suggested layout or overwrite it with a new layout.

   - Select the Apply automatically check box if you want the template to be automatically applied to the conference.
Select the Generate suggested layout check box if you want to display the suggested video source selection for that site once you click the Config button.

6 Click Save Template to save the new template or click Cancel to clear the entered data and return to the View Template screen.

7 Repeat steps 5 and 6 for the remaining sites.

Updating an Existing Template

The MLA allows the user to update the site layout configuration and template description.

To update an existing template:

1 On the MLA main screen, click Manage Templates.

2 Select a template from the Name drop-down list on the Layout Template screen.

3 Click Update Template.

4 Make any necessary revisions to the template name, description, site name, and type. Add new sites or delete existing sites from the template, if necessary.
From the Site Layout fields at the bottom of the screen, click **Edit** to view and modify a particular site layout. The current site layout template is displayed.

Select a different video layout for each codec you would like to modify.

Click **Save and Close** to accept the changes.

When the update is complete, click **Save Template**.

Click **Cancel** to return to the MLA main screen.

### Deleting a Template
Deleting a layout template will remove the selected template from the template file.

**To delete a template:**

1. On the MLA main screen, click **Manage Templates**.
2. On the Layout Template screen, select a template from the Name drop-down list.
3. Click **Delete Template**. A warning message appears.
4. Click **Yes** to confirm the deletion or **No** to cancel the deletion.

**Delete Template Message**

When a template is deleted, it is removed from the list of available templates.

### Copying a Template
The MLA allows the user to copy an existing user or generic template and save it with a different name. The new template can only be saved in the user template file since the generic templates are read-only.

**To copy a template:**

1. On the MLA main screen, click **Manage Templates**.
2. On the Layout Template screen, select a template from the Name drop-down list.
3. Click **Save Template As**.
SaveAs Screen

4 Enter a template name and description. The new template name for a user template cannot be a duplicate; however, the new template name for a generic template can be a duplicate.

5 Click Save.
If you clicked Save, the new template name will be validated before it is accepted.

Sharing Templates

In the MLA, these are the defaults for the layout templates:

- Each user has his/her own layout templates that are not shared.
- The templates are stored in the default locations listed on page 9.

However, you can:

- Specify that multiple users can share the same file. This includes multiple users on different computers at the same time.
- Specify any location for the template files.

To enable multiple users to share the same layout template file on different computers:

1 On the MLA main screen, click Preferences.
2 Click Template Location in the Category column.
3 Click Specify Shared File to specify a layout template file that multiple users can share from different computers.
4 Browse to the file you want the users to share.
5 Click OK.
6 Make sure that each user has read and write access to the file you specified.
Preferences Template Location Screen

![Preference Template Location Screen Diagram]

- **Category:** Connections, Template Library, Site Management
- **Template File Location:**
  - Use Default (User)
  - Specify Shared File:
    - File path: `C:\SharedTemplate\Template.xml`
    - Browse...

[OK] [Cancel]
Troubleshooting

This chapter lists some problems that you may encounter while using your MLA and presents the corrective actions for those problems.

If you have referred to this chapter and you still are unable to resolve your issue, contact Polycom Technical Support at http://support.polycom.com.

To find and resolve your problem, look in the following table:

Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The template doesn't show up in the list when I select a conference.</td>
<td>Verify the naming convention for all sites.</td>
</tr>
<tr>
<td></td>
<td>Verify that the site name in the template matches the RealPresence Collaboration Server address book entries exactly since it is case-sensitive.</td>
</tr>
<tr>
<td></td>
<td>Verify that the site name in the template matches the site name you created in the MCU address book exactly, including spaces as well as the space between the site name and suffix, if applicable.</td>
</tr>
<tr>
<td>The list of sites in a conference doesn't include all the sites I expect.</td>
<td>Verify that all the sites are using the RealPresence Collaboration Server address book to connect from the MCU. Anonymous dial-in sites are supported as long as the sites are configured with names as described in the Site Naming Conventions section on page 20.</td>
</tr>
<tr>
<td>I can't connect to the MCU.</td>
<td>Verify the IP address, user name, and password.</td>
</tr>
<tr>
<td></td>
<td>Try to access the MCU through the RealPresence Collaboration Server web user interface, and use the same PC with the same credentials.</td>
</tr>
<tr>
<td>I can't open a user template file.</td>
<td>Verify that the file exists, the network shared drive is accessible, if necessary, and that the logged in user has permission to write to the file. It will not open if the file is read-only.</td>
</tr>
<tr>
<td>Problem</td>
<td>Corrective Action</td>
</tr>
<tr>
<td>---------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| I cannot find a detailed bug log. | A log file named MultipointLayoutApplication.log is created in the following locations:  
- For Windows XP: C:\Documents and Settings\All Users\Application Data\Polycom\Polycom Multipoint Layout Application  
- For Windows 7 and Windows Server 2008:  
  C:\ProgramData\Polycom\Polycom Multipoint Layout Application  
When the log file gets large, the file is renamed with the date added to the name and a new log file is started. |
| A log file is not created. | Depending on the Windows configuration, sometimes the MLA will not create a log file because Windows does not allow the current user to write to the log file folder. To correct this:  
1 Create a folder that allows all MLA users to write to it.  
2 Specify the location of the log file folder in the MLA application configuration file (MultipointLayoutApplication.exe.config), stored in the program install folder, which is typically C:\Program Files\Polycom\Multipoint Layout Application.  
3 Find the following section of the file:  
<add fileName="C:\Documents and Settings\All Users\Application Data\Polycom\Polycom Multipoint Layout Application\MultipointLayoutApplication.log" rollSizeKB="4096" timeStampPattern="yyyy-MM-dd"  
4 Using a text editor, such as Notepad, change the filename to the location you specify. For example:  
<add fileName="C:\MLA_log\MultipointLayoutApplication.log" rollSizeKB="4096" timeStampPattern="yyyy-MM-dd" |
End-User License Agreement for Polycom® Software

IMPORTANT-READ CAREFULLY BEFORE USING THIS SOFTWARE PRODUCT: This End-User License Agreement ("Agreement") is a legal agreement between you (either an individual or a single entity) and the SOFTWARE PRODUCT licensed by Polycom, Inc. The SOFTWARE PRODUCT includes computer software and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). By clicking "Yes" or by installing, copying, or otherwise using the SOFTWARE PRODUCT, you agree to be and will be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, your use is prohibited and you may not install or use the SOFTWARE PRODUCT.

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed (not sold) to you, and its use is subject to the terms of this Agreement. This is NOT a sale contract.

1. GRANT OF LICENSE. Subject to the terms of this Agreement, POLYCOM grants to you a non-exclusive, non-transferable, revocable license to install and use the SOFTWARE PRODUCT. You may use the SOFTWARE PRODUCT subject to the following terms and the proprietary notices, labels or marks on the SOFTWARE PRODUCT or media upon which the SOFTWARE PRODUCT is provided. You are not permitted to lease, rent, distribute or sublicense the SOFTWARE PRODUCT, in whole or in part, or to use the SOFTWARE PRODUCT in a time-sharing arrangement or in any other unauthorized manner. Further, no license is granted to you in the human readable code of the SOFTWARE PRODUCT (source code). Except as provided below, this License Agreement does not grant you any rights to patents, copyrights, trade secrets, trademarks, or any other rights in respect to the SOFTWARE PRODUCT.

2. OTHER RIGHTS AND LIMITATIONS.

2.1 Limitations on Reverse Engineering, Decompilation, and Disassembly. You may not reverse engineer, decompile, modify or disassemble the SOFTWARE PRODUCT or otherwise reduce the Software PRODUCT to human-perceivable form in whole or in part, including but not limited to translating or creating derivative works, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation. The SOFTWARE PRODUCT is licensed as a single product. Its component parts may not be separated for use on more than one PRODUCT. You may not use the SOFTWARE PRODUCT for any illegal purpose or conduct.

2.2 Back-up. Except as expressly provided for under this Agreement you may not copy the SOFTWARE PRODUCT; except, however, you may keep one copy of the SOFTWARE PRODUCT and, if applicable, one copy of any previous version, for back-up purposes, only to be used in the event of failure of the original. All copies of the SOFTWARE PRODUCT must be marked with the proprietary notices provided on the original SOFTWARE PRODUCT. You may not reproduce the supporting documentation accompanying the SOFTWARE PRODUCT.
2.3 Modifications. You may not modify, translate or create derivative works of the SOFTWARE PRODUCT.

2.4 Proprietary Notices. You may not remove or obscure any proprietary notices, identification, label or trademarks on or in the SOFTWARE PRODUCT or the supporting documentation.

2.5 Software Transfer. You may permanently transfer all of your rights under this Agreement, provided you retain no copies, you transfer all of the SOFTWARE PRODUCT (including all component parts, the media and printed materials, any upgrades, this Agreement, and, if applicable, the Certificate of Authenticity), and the recipient agrees to the terms of this Agreement. If the SOFTWARE PRODUCT is an upgrade, any transfer must include all prior versions of the SOFTWARE PRODUCT. However, if the SOFTWARE PRODUCT is marked “Not for Resale” or “NFR”, you may not resell it or otherwise transfer it for value.

2.6 Copyright. All title and copyrights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, animations, video, audio, music, text, and "applets" incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT are owned by POLYCOM or its suppliers. The SOFTWARE PRODUCT is protected by copyright laws and international treaty provisions. Title, ownership rights, and intellectual property rights in the SOFTWARE PRODUCT shall remain in POLYCOM or its suppliers. Title and related rights in the content accessed through the SOFTWARE PRODUCT is the property of such content owner and may be protected by applicable law. This Agreement gives you no rights in such content.

2.7 Confidentiality. The SOFTWARE PRODUCT contains valuable proprietary information and trade secrets of POLYCOM and its suppliers that is copyrighted by and remains the property of POLYCOM and you shall protect the confidentiality of, and avoid disclosure and unauthorized use of, the SOFTWARE PRODUCT.

2.8 Dual-Media Software. You may receive the SOFTWARE PRODUCT in more than one medium. Regardless of the type or size of medium you receive, you may use only one medium that is appropriate for your single PRODUCT. You may not use or install the other medium on another PRODUCT.

2.9 Reservation. POLYCOM reserves all rights in the SOFTWARE PRODUCT not expressly granted to you in this Agreement.

2.10 Additional Obligations. You are responsible for all equipment and any third party fees (such as carrier charges, internet fees, or provider or airtime charges) necessary to access the SOFTWARE PRODUCT.

3. SUPPORT SERVICES. POLYCOM may provide you with support services related to the SOFTWARE PRODUCT (“SUPPORT SERVICES”). Use of SUPPORT SERVICES is governed by the POLYCOM policies and programs described in the POLYCOM-provided materials. Any supplemental software code provided to you as part of the SUPPORT SERVICES is considered part of the SOFTWARE PRODUCT and is subject to the terms and conditions of this Agreement. With respect to technical information you provide to POLYCOM as part of the SUPPORT SERVICES, POLYCOM may use such information for its business purposes, including for product support and development. POLYCOM will not utilize such technical information in a form that personally identifies you.

4. TERMINATION. Without prejudice to any other rights, POLYCOM may terminate this Agreement if you fail to comply with any of the terms and conditions of this Agreement. In such event, you must destroy all copies of the SOFTWARE PRODUCT and all of its component parts. You may terminate this Agreement at any time by destroying the SOFTWARE PRODUCT and all of its component parts. This termination shall not prevent POLYCOM from claiming any further damages. If you do not comply with any of the above restrictions, this license will terminate and you will be liable to Polycom, Inc. for damages or losses caused by your non-compliance. The waiver by POLYCOM of a specific breach or default shall not constitute the waiver of any subsequent breach or default.

5. UPGRADES. If the SOFTWARE PRODUCT is labeled as an upgrade, you must be properly licensed to use the software identified by POLYCOM as being eligible for the upgrade in order to use the SOFTWARE PRODUCT. A SOFTWARE PRODUCT labeled as an upgrade replaces and/or supplements the software that formed the basis for your eligibility for the upgrade. You may use the resulting upgraded SOFTWARE PRODUCT only in accordance with the terms of this Agreement. If the SOFTWARE PRODUCT is an upgrade of a component of a package of software programs that you licensed as a single product, the SOFTWARE PRODUCT may be used and transferred only as part of that single SOFTWARE PRODUCT package and may not be separated for use on more than one PRODUCT.
End-User License Agreement for Polycom® Software (continued)

6. WARRANTY AND WARRANTY EXCLUSIONS.

6.1 Limited Warranty. POLYCOM warrants that (a) the SOFTWARE PRODUCT will perform substantially in accordance with the accompanying documentation for a period of ninety (90) days from the date of receipt by you, and (b) any SUPPORT SERVICES provided by POLYCOM shall be substantially as described in applicable written materials provided to you by POLYCOM, and POLYCOM support engineers will make commercially reasonable efforts to solve any problem issues. POLYCOM does not warrant that your use of the SOFTWARE PRODUCT will be uninterrupted or error free, or that all defects in the SOFTWARE PRODUCT will be corrected. You assume full responsibility for the selection of the SOFTWARE PRODUCT to achieve your intended results and for the installation, use and results obtained from the SOFTWARE PRODUCT. POLYCOM's sole obligation under this express warranty shall be, at POLYCOM's option and expense, to refund the purchase price paid by you for any defective software product which is returned to POLYCOM with a copy or your receipt, or to replace any defective media with software which substantially conforms to applicable POLYCOM published specifications. Any replacement SOFTWARE PRODUCT will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer.

6.2 Warranties Exclusive. IF THIS SOFTWARE PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, YOUR SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT POLYCOM'S SOLE OPTION. TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. POLYCOM NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE OR USE OF THIS SOFTWARE PRODUCT. NO ADVICE OR INFORMATION, WHETHER ORAL OR WRITTEN, OBTAINED BY YOU FROM POLYCOM OR THROUGH OR FROM THE SOFTWARE PRODUCT SHALL CREATE ANY WARRANTY NOT EXPRESSLY STATED IN THE LICENSE AND TERMS.

POLYCOM SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT OR MALFUNCTION IN THE SOFTWARE PRODUCT DOES NOT EXIST OR WAS CAUSED BY YOUR OR ANY THIRD PERSON'S MISUSE, NEGLECT, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO MODIFY THE PRODUCT, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, POWER CUTS OR OUTAGES, OTHER HAZARDS, OR ACTS OF GOD.

7. LIMITATION OF LIABILITY. YOUR USE OF THE SOFTWARE PRODUCT IS AT YOUR SOLE RISK. YOU WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO YOUR COMPUTER SYSTEM OR LOSS OF DATA THAT RESULTS FROM THE DOWNLOAD OR USE OF THE SOFTWARE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL POLYCOM OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE PRODUCT OR THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES, EVEN IF POLYCOM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, POLYCOM'S ENTIRE LIABILITY SHALL BE LIMITED TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE PRODUCT OR U.S. $5.00. PROVIDED, HOWEVER, IF YOU HAVE ENTERED INTO A POLYCOM SUPPORT SERVICES AGREEMENT, POLYCOM'S ENTIRE LIABILITY REGARDING SUPPORT SERVICES SHALL BE GOVERNED BY THE TERMS OF THAT AGREEMENT.