

ADMINISTRATOR GUIDE

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Polycom[®] RealPresence Debut™



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Before You Begin

The *Polycom RealPresence Debut Administrator Guide* is for administrators who need to configure, customize, manage, and troubleshoot Polycom[®] RealPresence Debut[™] systems.

Please read the RealPresence Debut system documentation before you install or operate the system. The following related documents for RealPresence Debut are available from: Polycom Support

- Polycom RealPresence Debut Quick Tips, which provides instructions about how to perform video conferencing tasks
- Setup sheet
- Release notes
- Polycom RealPresence Debut Regulatory Notices, which describes safety and legal considerations for using Polycom RealPresence Debut

Polycom recommends that you record the serial number of your RealPresence Debut system for future reference. The serial number for the system is printed on the unit.

Get Help

For more information about installing, configuring, and administering Polycom products, refer to **Documents and Downloads** at Polycom Support.

For support or service, please contact your Polycom distributor or go to Polycom Support at support.polycom.com.

Polycom and Partner Resources

To find all Polycom partner solutions, see Strategic Global 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, simply 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 topics.

Getting Started with RealPresence Debut

The following topics provide an overview of the RealPresence Debut system, including information on starting the system and cameras:

Features and Capabilities

Features and Capabilities

RealPresence Debut systems provide natural video conferencing interaction using the most robust video communications technology.

For technical specifications and detailed descriptions of features available for RealPresence Debut systems, please refer to the product literature available at Polycom Support.

For smaller meeting rooms, huddle rooms, and offices, the RealPresence Debut system delivers high-quality and easy-to-use video collaboration at an affordable price.

RealPresence Debut system



The RealPresence Debut system includes an integrated camera and two integrated microphones. Limited cable connections simplify setup. The sleek design enables the RealPresence Debut system to be easily hidden away or taken outside the room or building for mobile applications.

Powering On and Off

Power On the RealPresence Debut System Using Power over Ethernet (PoE)

You can power on the RealPresence Debut system using Power over Ethernet (PoE). You might experience a low signal strength when connecting the RealPresence Debut system with a LAN cable that is longer than 30 m (100 ft). Polycom recommends that you use an externally powered Ethernet hub or PoE switch to limit the LAN cable length to be shorter than 30 m (100 ft).

Power On the RealPresence Debut System

The RealPresence Debut system is powered on using the following steps.

To power on the RealPresence Debut System:

» Connect the LAN cable to power on the system by Power over Ethernet (PoE).

Power On the RealPresence Debut System using the Remote Control

You can power on the RealPresence Debut using the remote control.

To power on the RealPresence Debut System using the remote control:

» Press and hold Call for 5 seconds.

Install Batteries in the Remote Control

You must first install two AAA batteries before you can use the RealPresence Debut system remote control.

To install or replace the remote control batteries:

- Slide the battery cover on the remote that is located below the
 button.
- 2 Insert two size AAA batteries. The RealPresence Debut system ships with a set of size AAA batteries.
- 3 Replace the bottom cover.

Power Off the RealPresence Debut System

You can power off the RealPresence Debut System by disconnecting the power source or using the remote control.

To power off the RealPresence Debut system:

- » Do one of the following:
 - Disconnect the power cord.
 - > Disconnect the LAN cable when the system is powered by PoE.

> On the remote control, press and hold **Hang Up** for 5 seconds.

Setting Up System Hardware

This manual provides information to supplement the setup sheets provided with your system and its optional components. A printed copy of the system setup sheet is provided with each RealPresence Debut system. PDF versions of the system setup sheets are available at Polycom Support.

To set up the system hardware:

- 1 Use the HDMI cable to connect the RealPresence Debut system to the monitor.
- 2 Connect the power cord to the RealPresence Debut system or connect the LAN cable to power on the system.

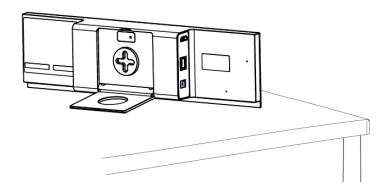
Position the RealPresence Debut System on a Table

You can position the RealPresence Debut system on a tablet, desk, or shelf. Polycom recommends that you position the system about 1.25 m to 1.5 m (4 ft to 5 ft) above a finished floor or 0.5 m (18 in.) above the table surface, close to eye-level for participants sitting in the room.

To position the system on a table:

- 1 Remove the protection film from the mount cover (bracket) located on the back of the system.
- 2 Place your thumb in the recessed area of the mount cover and gently pull it open.
- 3 Place the system on the table with the opened cover lying flat on the table. The mount cover acts as a stand when the system is in this position.

Position the RealPresence Debut system on a table



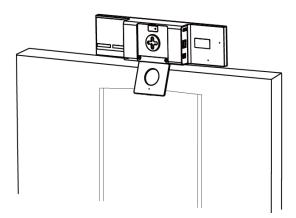
Mount the RealPresence Debut System on a Thin Display

RealPresence Debut system has the provision to mount on a thin display for close to eye-level contact with the participants sitting in the room.

To mount the system on a thin display:

- 1 Remove the protection film from the mount cover (bracket) located on the back of the system.
- 2 Place your thumb in the recessed area of the mount cover and gently pull it open.
- **3** Place the system on the display with the rubberized side of the mount cover clamped onto the display.
- 4 Place the system cables in the hole of the mount cover to keep them neatly in place.

Mount the RealPresence Debut system on a thin display



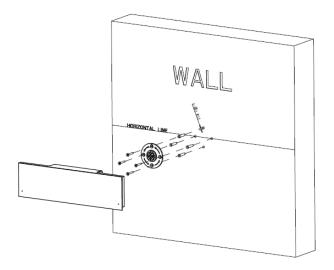
Mount the RealPresence Debut System on the Wall

You can mount the RealPresence Debut system on a wall, at least 1 m (40 in.) above a finished floor or close to eye-level for participants sitting in the room.

To mount the system on the wall:

- 1 Draw a horizontal line on the wall to indicate the location of the wall mount bracket. Note that this line must be level to ensure the RealPresence Debut system is properly installed. Use a gradienter, if necessary.
- 2 Drill four 6 mm holes in the desired location on the wall where you want to position the system. These holes should be horizontally and vertically in alignment with the holes on the wall mount.
- 3 Insert the expanding tubes (drywall anchors) into the holes if needed.
- **4** Using a cross-recess screwdriver (type H, size 2) and the screws in the wall mount kit, screw the wall mount to the wall.
- **5** Push and rotate (at a 45-degree angle) the RealPresence Debut system onto the wall mount. The mount should lock to indicate the system is secure.

Mount the RealPresence Debut system on the wall



Running the Setup and Configuring the General System Settings

This section describes how to configure your RealPresence Debut system by using the setup wizard that walks you through the initial steps. It also explains how to access administrative settings in the local and web interfaces.

RealPresence Debut Modes of Operation

RealPresence Debut has two modes of operation:

- Enterprise Mode You can configure RealPresence Debut system settings manually or automatically. You can manually set up registration and call with an H.323 gatekeeper or a SIP server. For more information on manually setting up a RealPresence Debut see Configuring Network Settings. You can also register your RealPresence Debut system with a Polycom provisioning server like the Polycom® RealPresence® Resource Manager system. For more information on registering a RealPresence Debut system with a provisioning service see Provisioning the System.
- RealPresence Cloud Mode A service provider configures the RealPresence Debut system with a
 provisioning service. You must enable the RealPresence Debut system to access the Polycom[®]
 RealPresence Cloud service.

Running the Setup Wizard

When you power on your RealPresence Debut system or enter the IP address for the first time, the setup wizard detects the system's IP connections and leads you through the minimum configuration steps. The setup wizard is also called the out-of-box (OOB) wizard. The setup wizard is available during initial setup, after a software update or system reset with system settings deleted, or after using the restore button.

You can install the system software in either of two ways:

- In the room with the system Use the remote control to navigate the screens and enter information.
 You can use the number pad on the remote control to enter text. Point the remote control at the camera to control the system.
- From a remote location If you know the IP address of the system, you can access and configure the system by using the system's web interface.

Admin Settings

After you run the setup wizard, you can view or change the system's configuration by going to the web interface. The local interface has a subset of the administration settings that are available in the web interface.

If you enable a provisioning service, any settings provisioned by the RealPresence Resource Manager system might be displayed as read-only settings in the web interface. For more information about automatic provisioning, refer to the *Polycom RealPresence Resource Manager System Operations Guide*.

Access the Web Interface

You can use the RealPresence Debut system web interface to perform most of the calling and configuration tasks you can perform on the local system. When an Admin password is not set, the web interface automatically displays. When a Admin password is set you need to enter the Admin password to access the web interface. For information on setting the Admin password refer to Changing the Password.

To access the system using the web interface:

- 1 In a web browser address line, enter the system's IP address.
- 2 Enter the Admin ID as the user name (default is admin), the Admin password (when a password is set), and click Login.

Changing the Password

You can change the RealPresence Debut system Admin password from the web interface. *Local access* means using a RealPresence Debut system through the local interface.

To change system login information:

- 1 Go to Admin Settings > Password.
- 2 Configure the following settings. The order in which the settings are displayed differs between the interfaces.

Setting	Description
Old Password	Specifies the existing password for the administrator account used when logging in to the system through the web interface. When creating a password for the first time, leave this setting blank.
	When this password is set, you must enter it when accessing the web interface. The password cannot contain spaces or be more than 40 characters. Passwords are case sensitive.
New Password	Specifies a new password.
Confirm Password	Confirms the new password.

Set Up the System Name

The system name appears on the screen of the far-end site when you make a call.



System name limitations

You cannot configure the System Name when RealPresence Debut Provisioning Mode is enabled.

To configure a system name:

- 1 In the web interface, go to System Settings > General.
- 2 In the **System Name** field, enter a name and click **Submit**.

Set the Date and Time

You can set the date and time of the RealPresence Debut system in the web interface.

To set the date and time:

- 1 In the web interface, go to **Server Settings > Provisioning** and select **Disable** to disable Provisioning Mode.
- 2 In the web interface, go to System Settings > Date and Time.
- 3 Select the time zone from the **Time Zone** drop down menu.
- 4 Choose one of the following options from the **Time Server** drop down menu:
 - > Select Manual and enter the address in the Time Server Address field.
 - > Select Auto.
- 5 Choose the **Date Format** and the **Time Format**.
- 6 Click Submit.

Customizing the User Interface

Change the Background Image on the System Home Screen

The RealPresence Debut system local interface displays a default background image that's similar to the "wallpaper" of a computer. You cannot delete this image, but you can upload your own image to replace it.

You must upload an image less then 10 megabytes with a pixel size of 1920 x 1080 (width by height). The image you upload must be in .jpg, .jpeg, .bmp, or .png format.

To upload and use a background image:

- 1 In the web interface, go to Admin Settings > Upload Background.
- 2 Click Choose File to search for and select the image you want to upload.
- 3 Click Upload.

The image is uploaded to the system Home screen.

Provisioning the System

You can configure, manage, and monitor RealPresence Debut systems from a RealPresence Resource Manager system. RealPresence Resource Manager system require that a management application is installed on your network. A service provider can also configure, manage, and monitor the RealPresence Debut system in RealPresence Cloud mode.

Using a Provisioning Service

If your organization uses a RealPresence Resource Manager system or a BroadSoft BroadWorks Device Management System (DMS), you can manage RealPresence Debut systems in dynamic management mode. In dynamic management mode, the following might be true:

- The Server Address, Domain, User Name, and Password fields are populated on the Provisioning screen.
- Configuration settings that are provisioned, or that are dependent on provisioned values, are hidden on the RealPresence Debut system.
- The RealPresence Debut system checks for new software from the provisioning service every time it
 restarts and at an interval set by the service. It automatically accesses and runs any software updates
 made available by the service.
- A provisioning service system administrator can upload a provisioned bundle from an already
 configured RealPresence Debut system. When RealPresence Debut systems request provisioning,
 the provisioned bundle and any automatic settings are downloaded. A RealPresence Debut system
 user with administrative rights can change the settings on the RealPresence Debut system after the
 provisioned bundle is applied. If you later download a new provisioned bundle from the provisioning
 service, the new bundle overwrites the manual settings.
- If the system has previously registered successfully with a provisioning service but fails to detect the
 service when it restarts or checks for updates, an alert appears on the System Status screen. If the
 system loses registration with the provisioning service, it continues operating with the most recent
 configuration that it received from the provisioning service.

If you use BroadSoft DMS provisioning, ensure the following:

- Bundled provisioning is not supported.
- Provisioning uses the same XML-based profile used for dynamic provisioning.
- Provisioned fields are read only.

Locate the MAC address

Before you begin provisioning, you need to know the MAC address for the RealPresence Debut system you want to provision.

To locate the RealPresence Debut system MAC address:

- 1 In the web interface, go to **Device Status**.
- **2** Write down or save the MAC address, without the colons. For example, if the MAC address is 00:e0:db:30:e7, use 00e0db30e7 to provision the RealPresence Debut.

Create a Provisioning Profile

To provision the RealPresence Debut system, you need to create a RealPresence Debut provisioning profile on the provisioning server.

To create a provisioning profile:

- 1 On a personal computing device, go to Polycom support and download the provisioning template file, RealPresence_Debut_Provisioning_Template.cfg.
- 2 Rename the provisioning template file using the MAC address of the Polycom RealPresence Debut system: <macddress> profile.cfg.
- **3** Go to the specified location for the provisioning server.

Provisioning Server Profile Locations

Provisioning Server	Location
Polycom RealPresence Resource Manager	Refer to the <i>Polycom RealPresence Resource Manager Operations Guide</i> .
Polycom Zero-Touch Provisioning	Refer to the Polycom Zero-Touch Provisioning User Guide.
BroadSoft BroadWorks Device Management System (DMS)	https://ipaddress/dms/filepath
FTP/FTPS	ftp/ftps://ipaddress/filepath
HTTP/HTTPS	http/https://ipaddress/filepath

- **4** For Broadsoft DMS and HTTP/HTTPS provisioning servers, create a new folder on the provisioning server. The provisioning server location changes to include the folder.
- **5** Copy the **<***macaddress***>**_**profile.cfg** file to the provisioning server.

Automatically Configure a Provisioning Service

When the RealPresence Debut system powers on, the system can automatically detect a provisioning service by reading the address of the provisioning server through DHCP. To successfully provision the

RealPresence Debut system, you need to configure DHCP to return the provisioning server addresses in the following formats:

Provisioning Server Profile Locations

Provisioning Server	Address Format
Polycom RealPresence Resource Manager	https:// <user>:<password>@ipaddress or https://ipaddress</password></user>
BroadSoft BroadWorks Device Management System (DMS)	https:// <user>:<password>@ipaddress/dms/filepath</password></user>
FTP/FTPS	ftp:// <user>:<password>@ipaddress/filepath or ftps://<user>:<password>@ipaddress/filepath</password></user></password></user>

To automatically configure a provisioning service:

- 1 In the web interface, go to Server Settings > Provisioning.
- 2 Select the Auto setting.
- 3 From the **DHCP Server Option** drop-down menu, select **Default** or **Custom**. The default value is 66. If you choose Custom, enter a custom DHCP value. The RealPresence Debut uses this value to read the provisioning server address through DHCP.



When the RealPresence Debut system is automatically provisioned with a RealPresence Resource Manager system, to enable the calendering service you need to manually enter the provisioning credentials. For more information on manual provisioning, refer to Manually Configure a Provisioning Service. For more information on RealPresence Resource Manager, refer to the Polycom RealPresence Resource Manager System Operations Guide.

Manually Configure a Provisioning Service

You can configure the RealPresence Debut system provisioning settings on the web interface.

To manually configure a provisioning service:

- 1 In the web interface, go to Server Settings > Provisioning.
- 2 Select the Manual setting.
- 3 Configure these settings for provisioning. Multiple Polycom RealPresence Debut systems can be registered to a single user.

Setting	Description
Server Type	Specifies the type of provisioning server. Select Polycom RPRM, Polycom ZTP, Broadsoft DMS, or Other.
Server Address	Specifies the address of the system running the provisioning service, in the following formats. • Polycom RealPresence Resource Manager: <i>ipaddress</i> • BroadSoft BroadWorks Device Management System (DMS): <i>ipaddress/dms/filepath</i> • FTP/FTPS/HTTP/HTTPS: <i>ipaddress/filepath</i>

Setting	Description
Domain Name	Specifies the domain for registering to the provisioning service.
User Name	Specifies the endpoint's user name for registering to the provisioning service. The user name cannot contain the @ and : characters.
Password	Specifies the password that registers the system to the provisioning service. The password cannot contain the @ and : characters.

4 Click Submit. The system tries to register with the provisioning service.



Troubleshoot provisioning registration

If automatic provisioning is enabled but the system does not register successfully with the provisioning service, you might need to change the Domain, User Name, Password, or Server Address used for registration. For example, users might be required to periodically reset passwords used to log into the network from a computer. If such a network password is also used as the provisioning service password, you must update it on the Polycom RealPresence Debut system, too. To avoid unintentionally locking a user out of network access in this case, RealPresence Debut systems do not automatically retry registration until you update the settings and register manually on the Provisioning Service page.

Disable the Provisioning Service

You can disable the provisioning service in the web interface.

To disable a provisioning service:

- 1 In the web interface, go to Server Settings > Provisioning.
- 2 Choose the Disable setting.

ZTP Web Service Solution

The ZTP solution is a cloud-based Web service designed to simplify the deployment of Polycom devices. The Polycom ZTP console is a web interface that you can use to create and manage profiles and device associations. The ZTP solution is intended as a one-time step at initial deployment. Usually, end customers require a supplier or skilled installer to deploy devices out of the box. The ZTP web console enables you to create provisioning profiles that you can associate with one or more devices. These profiles enable end customers to install the devices themselves. The profiles also provide a central provisioning server address that automatically redirects multiple customer devices to your provisioning server.

For more information, refer to the Polycom Zero Touch Provisioning User Guide at Polycom Support.

Import Directory Contacts from a Provisioning Server

You can import directory contacts from a RealPresence Debut system using a provisioning server.

To import directory contacts from a server:

- 1 Download the local contact file on the provisioning server.
- **2** Configure the provisioning profile and include the local contact update.
- 3 In the web interface, go to Server Settings > Provisioning > Provisioning Mode.

The contacts automatically import on the RealPresence Debut system. Directory contacts must be updated in the format provided in the RealPresence Debut_Contact_Template.xml and the RealPresence_Debut_Directory_Template.csv on Polycom Support.

RealPresence Cloud Mode

A service provider configures the RealPresence Debut system with a provisioning service. You must enable the RealPresence Debut system to access the Polycom® RealPresence Cloud service.

Enable RealPresence Cloud Mode

RealPresence Cloud service enables service providers to configure a RealPresence Debut system with a provisioning service. After a service provider configures your RealPresence Debut system with RealPresence Cloud service, you need to enable RealPresence Cloud mode in the web interface so the service provider can provision your system.

To enable RealPresence Cloud mode:

- 1 In the web interface, go to Admin Settings > Mode Switch.
- 2 Select the RealPresence Cloud radio button and click Submit.
- 3 The RealPresence Debut starts the setup wizard and leads you through initial configuration screens. For more information the setup wizard, see Running the Setup and Configuring the General System Settings.

Refresh The RealPresence Cloud Service

When a service provider makes configuration changes with RealPresence Cloud service, or when a service provider updates account details for the account used to provision your RealPresence Debut system, you need to refresh the RealPresence Cloud service on the RealPresence Debut system. Refreshing the RealPresence Cloud service ensure the system responds correctly to the new configuration and updates.

To refresh the RealPresence Cloud service:

- 1 In the local interface, go to **Settings > General**.
- 2 With the remote control, select **Logout**, **Ok**, and **Login**.

Configuring Network Settings

LAN Status Lights

The LAN connector on the RealPresence Debut system has two lights to indicate connection status and traffic.

Indicator Light	Connection Status
Both lights off	No 10/100 Base-T connection and no network traffic.
Green and yellow lights on	10/100 Base-T connection.
Green light on and blinking yellow light	10/100 Base-T connection with network traffic.

Configure VLAN Settings

You can configure VLAN Settings in the web interface or in the local interface. To configure VLAN settings and enable LLDP, the RealPresence Debut system network settings must be set to **DHCP**.

To configure VLAN settings:

1 Configure the following settings in the web interface:

Setting	Description
DHCP Mode	When set to DHCP , automatically gets the IP address of the system and allows you to configure VLAN settings. When set to Static IP , allows you to manually enter the IP Address, Subnet Mask, Gateway, and DNS.
VLAN Setting	Specifies the VLAN setting. When set to Enable , enables LLDP. When set to Disable , disables LLDP. When set to Static , allows you to manually configure VLAN priority including VLAN ID, Video Priority, Audio Priority, and Control Priority.
VLAN ID	Specifies the identification of the Virtual LAN. This setting is available only when 802.1 p/Q is enabled. The value can be any number from 1 to 4094.
Video Priority	Sets the link layer priority of video traffic on the LAN. Video traffic is any RTP traffic consisting of video data and any associated RTCP traffic. The value can be any number from 0 to 7, although 6 and 7 are not recommended.

Setting	Description
Audio Priority	Sets the priority of audio traffic on the LAN. Audio traffic is any RTP traffic consisting of audio data and any associated RTCP traffic. This setting is available only when 802.1p/Q is enabled. The value can be any number from 0 to 7, although 6 and 7 are not recommended.
Control Priority	Sets the priority of control traffic on the LAN. Control traffic is any traffic consisting of control information associated with a call: • H.323—H.225.0 Call Signaling, H.225.0 RAS, H.245 • SIP—SIP Signaling, FECC, Binary Floor Control Protocol (BFCP) The value can be any number from 0 to 7, although 6 and 7 are not recommended.

2 Configure the following settings in the local interface:

Setting	Description
LAN Network	DHCP or Static. Selecting the DHCP option displays VLAN settings.
VLAN Settings	 Enable, Disable, or Static. Selecting the Static option displays additional settings: VLAN ID Video priority Audio priority Control priority.

Configure IP Address (IPv4) Settings:

You can configure IP address (IPv4) settings in the web interface and in the local interface. To configure IP Address (IPv4) settings, the RealPresence Debut system network settings must be set to **Static IP**.

To configure IPv4 Settings:

- 1 Go to the network setting page by doing one of the following:
 - ➤ In the web interface, go to **System Setting** > **Network Setting**.
 - ➤ In the local interface, go to **Settings** > **Networks**

Setting	Description
DHCP Mode	When set to Static IP , allows you to manually enter the IP Address, Subnet Mask, Gateway, and DNS. When set to DHCP , automatically gets IP address of the system.
IP Address	Specifies the IP address of the system. If the system does not automatically obtain an IP address, enter one here. This field is disabled when the DHCP Mode is DHCP .
Subnet Mask	Displays the subnet mask currently assigned to the system. If the system does not automatically obtain a subnet mask, enter one here. This field is disabled when the DHCP Mode is DHCP .

Setting	Description
Gateway	Displays the gateway currently assigned to the system. If the system does not automatically obtain a gateway IP address, enter one here. This field is disabled when the DHCP Mode is DHCP .
Preferred DNS	Displays the DNS servers currently assigned to the system. This field is disabled when the DHCP Mode is DHCP .
Alternate DNS	Displays the Alternate DNS server assigned to the system. This field is disabled when the DHCP Mode is DHCP
802.1X	Displays enable or disable 802.1X network access.
Authentication User Name	Specifies the system's Authentication User Name for 802.1X authentication. This settings is available only when 802.1X is enabled.
Password	Specifies the system's password used for 802.1X authentication.

Configure IPv6 Settings

You can configure IPv6 settings in the web interface and in the local interface. To order to configure IPv6 settings, the RealPresence Debut system network settings must be set to **Manual**.

To configure IPv6 Settings:

- 1 Go to the network setting page by doing one of the following:
 - ➤ In the web interface, go to **System Setting** > **Network Setting**.
 - > In the local interface, go to Settings > Networks

Setting	Description
IPv6	When set to Manual allows you to manually enter the Link Local, Site Local, Global Address, and Default Gateway. When set to Automatic , automatically gets IP address of the system. When set to Disable , is automatically disabled.
Link Local	Displays the IPv6 address used for local communication within a subnet. This setting is only configurable when Manual is selected.
Site Local	Displays the IPv6 address used for communication within the site or organization. This setting is only configurable when Manual is selected.
Global Address	Displays the IPv6 internet address. This setting is only configurable when Manual is selected.
Default Gateway	Displays the gateway currently assigned to the system. This setting is only configurable when Manual is selected.

Link Layer Discover Protocol (LLDP)

Link Layer Discovery Protocol (LLDP) is supported on RealPresence Debut systems. LLDP is a vendor-neutral link layer protocol in the Internet Protocol Suite used by network devices to advertise their identity and capabilities on an IEEE 802 local area network (LAN). This protocol runs over the data-link layer only, allowing connected systems running different network layer protocols to discover information about each other.

When LLDP is enabled on a RealPresence Debut system, it discovers VLANs advertised by the network switch and automatically configures the system for one of the VLANs. If the room system discovers any of the following VLAN types in LLDP data from the network switch, the system automatically configures itself for one of them. The chosen VLAN type is based on the order of precedence, as follows:

- Video Conferencing VLAN
- Voice VLAN
- Voice Signaling VLAN

If none of the above VLAN types are found, the room system configures itself for the default or native LAN of the switch port to which it is connected.

LLDP packets are transmitted regularly so that the network switch (and the neighboring endpoints) are aware of the system presence on the network.

Configure H.323 Settings

If your network uses a gatekeeper, RealPresence Debut the system can automatically register its H.323 name and extension. This allows others to call the system by entering the H.323 name or extension instead of the IP address.

Polycom does not recommend enabling both H.323 and SIP protocols simultaneously. If both protocols are enabled, the SIP protocol has higher priority and is used when making calls.

To specify H.323 settings:

- 1 In the system web interface, go to Server Settings > Call Server.
- 2 Configure the following settings.

Setting	Description
Communication Protocol	Specifies the registrar protocol. Select H.323 .
Enable H.323 Registration	Allows the H.323 settings to be displayed and configured.
Gatekeeper Address	Gatekeeper address that the network is using.
H.323 Name	Specifies the name that gatekeepers and gateways use to identify this system. You can make point-to-point calls using H.323 names if both systems are registered to a gatekeeper. The H.323 Name is the same as the System Name , unless you change it. Your organization's dial plan might define the names you can use.

Setting	Description
H.323 Extension (E.164)	Lets users place point-to-point calls using the extension if both systems are registered with a gatekeeper, and specifies the extension that gatekeepers and gateways use to identify this system. Your organization's dial plan might define the extensions you can use.
Require Authentication	Enables support for H.235 Authentication. When H.235 Authentication is enabled, the H.323 gatekeeper ensures that only trusted H.323 endpoints are allowed to access the gatekeeper. This setting is available when Enable H.323 Registration is set to Enable .
Authentication User Name	When authentication is required, specifies the user name for authentication with H.235.
Enter Password	When authentication is required, specifies the password for authentication with H.235.

Configure SIP Settings

If your network supports the Session Initiation Protocol (SIP), you can use SIP to connect IP calls.

The SIP protocol has been widely adapted for voice over IP communications and basic video conferencing; however, many of the video conferencing capabilities are not yet standardized. Many capabilities also depend on the SIP server.

To specify SIP settings:

- 1 In the web interface, go to Server Settings > Call Server.
- 2 Configure the following settings.

Setting	Description
Communication Protocol	Specifies the registrar protocol. Select SIP.
Transport Protocol	Indicates the protocol the system uses for SIP signaling. The SIP network infrastructure your RealPresence Debut System operates within determines which protocol is required. TCP—Provides reliable transport via TCP for SIP signaling. UDP—Provides best-effort transport via UDP for SIP signaling. TLS—Provides secure communication of the SIP signaling. TLS is available only when the system is registered with a SIP server that supports TLS. When you choose this setting, the system ignores TCP/UDP port 5060. Select TLS if you want to encrypt SVC calls.
Enable SIP Registration	Allows the SIP settings to be displayed and configured.
Proxy Server	Specifies the DNS FQDN or IP address of the SIP Proxy Server. By default for TCP, the SIP signaling is sent to port 5060 on the proxy server. By default for TLS, the SIP signaling is sent to port 5061 on the proxy server.

Setting	Description
Domain	Specifies the domain of the SIP Proxy Server.
Sign-in Address	Specifies the SIP address or SIP name of the system, for example, mary.smith@department.company.com. If you leave this field blank, the system's IP address is used for authentication.
Authentication User Name	Specifies the user name to use for authentication when registering with a SIP Proxy Server, for example, marySmith. If the SIP Proxy Server requires authentication, this field and the password cannot be blank.
Password	Specifies the password associated with the User Name used to authenticate the system to the Proxy Server. The password can be up to 47 characters in length.

Configuring Native Support for Polycom[®] RealConnect[™]

With native support for the Polycom[®] RealConnect[™] technology, video conference users do not have to change their workflow or learn a new process to join together in a video meeting.

Native support for RealConnect eliminates end-user frustration in trying to determine how to connect with people who might have varying devices. Integration between the Polycom® RealPresence® DMA® systems, and Polycom® RealPresence® Collaboration Server (RMX®) solution infrastructure automatically connects all of the environments together.

To set up the Polycom RealConnect technology, H.323 must be enabled and registered to a gatekeeper. For information on enabling H.323 settings and registering to a gatekeeper, refer to Configure H.323 Settings.

On a RealPresence DMA system, the administrator must set up the polycom RealConnect policy for a single dial string plan. In addition a Polycom[®] RealPresence[®] Access Director[™] system must be set up to direct traffic to and from the RealPresence DMA system. For information setting up and configuring a RealPresence DMA system for this feature, refer to the *Polycom Unified Communications for Microsoft Environments Deployment Guide* at support.polycom.com.

Securing the System

Set the Encryption Mode

When you enable encryption, the system automatically encrypts calls to other systems that have AES encryption enabled.

If encryption is enabled on the system, a locked padlock icon appears on the monitor when a call is encrypted. If a call is unencrypted, an unlocked padlock appears on the monitor. To avoid security risks, Polycom recommends that all participants communicate the state of their padlock icon verbally at the beginning of a call.

To set the Encryption Mode:

- 1 In the web interface, go to System Settings > Call Settings.
- 2 Configure the Encryption Mode:
 - ➤ On
 - ➤ Off
 - Auto

When Encryption Mode is set to **On** or **Auto**, the SIP transport protocol setting in Server Settings is automatically set to **TLS**, whether the system is automatically or manually provisioned.

Configure the System for Use with a Firewall/NAT

A firewall protects an organization's IP network by controlling data traffic from outside the network. Unless the firewall is designed to work with H.323 video conferencing equipment, you must configure the system and the firewall to allow video conferencing traffic to pass in and out of the network.

Network Address Translation (NAT) network environments use private internal IP addresses for devices within the network, while using one external IP address to enable devices on the LAN to communicate with other devices outside the LAN. If your system is connected to a LAN that uses a NAT, you will need to enter the **NAT Public (WAN) Address** so that your system can communicate outside the LAN.

In environments set up behind a firewall, firewall administrators can choose to limit access to TCP connections only. Although TCP is an accurate and reliable method of data delivery that incorporates error-checking, it is not a fast method. For this reason, real-time media streams often use UDP, which offers speed, but not necessarily reliability.

To set up the system to work with a firewall/NAT:

- 1 In the web interface, go Admin Settings > NAT Setting.
- 2 Configure the following settings.

Setting	Description
NAT Mode	Specifies whether the system should determine the NAT Public WAN Address: If the system is not behind a NAT or is connected to the IP network through a Virtual Private Network (VPN), select Off . If you don't know the NAT Public WAN Address, select Auto . If you know the NAT Public WAN address, select Manual .
NAT IP Address	Specifies the NAT Public WAN Address. This field is disabled when Nat Mode is set to Auto .
H.460 Firewall Traversal	Allows the system to use H.460-based firewall traversal for IP calls. For more information, refer to Configure H.460 NAT Firewall Traversal.
H.323 TCP Ports Media Ports	Specifies the beginning value for the range of TCP and Media ports used by the system. The system automatically sets the range of ports based on the beginning value you set. Note: You must also open the firewall's TCP ports (80/443/8080/5060/5061/1719/1720) to allow H.323 or SIP traffic.

Configure H.460 NAT Firewall Traversal

You can configure RealPresence Debut systems to use standards-based H.460.18 and H.460.19 firewall traversal, which allows video systems to more easily establish IP connections across firewalls.

To configure the H.460 NAT firewall traversal:

- 1 In the web interface, go to Admin Settings > NAT Setting.
- 2 Select Enable for the H.460 Firewall Traversal setting.
- 3 Register the RealPresence Debut system to an external Polycom Video Border Proxy™ (VBP®) firewall traversal device that supports the H.460.18 and H.460.19 standards.

Managing Certificates

If your organization has deployed a public key infrastructure (PKI) for securing connections between devices on your network, Polycom recommends that you have a strong understanding of certificate management and how it applies to RealPresence Debut systems before you integrate these products with the PKI.

RealPresence Debut systems can use certificates to authenticate network connections to and from the RealPresence Debut system. Other web applications also use certificates, as you might notice when you navigate the Internet. The system uses configuration and management techniques typical of PKI to manage certificates and certificate signing requests.

RealPresence Debut systems can generate requests for certificates (CSRs) that can be then sent to a certificate authority (CA) for official issuance. The CA is the trusted entity that issues, or signs, digital certificates for others. Once signed by the CA, you can install the certificate on the RealPresence Debut system for use in all TLS connections used by the system.

RealPresence Debut systems support, and typically require, the generation and use of one server certificate in .pem format when used in an environment that has a fully deployed PKI. The RealPresence Debut system's web server presents this certificate after receiving connection requests from browsers attempting to connect to the RealPresence Debut system web interface.

When RealPresence Debut systems are deployed in an environment that does not have a fully deployed PKI, you do not need to install these certificates because all RealPresence Debut systems automatically generate self-signed certificates that can be used to establish secure TLS connections. However, when a full PKI has been deployed, self-signed certificates are not trusted by the PKI and so signed certificates must be used.

Certificate Validation

Certificates are authorized externally when they are signed by the CA. The certificates can be automatically validated when they are used to establish an authenticated network connection. To perform this validation, the RealPresence Debut system must have certificates installed for all CAs that are part of the trust chain. A trust chain is the hierarchy of CAs that have issued certificates from the device being authenticated, through the intermediate CAs that have issued certificates to the various CAs, leading back to a root CA, which is a known trusted CA.

A certificate exchange is between a server and a client, both of which are peers. When a user is accessing the RealPresence Debut system web interface, the RealPresence Debut system is the server and the web browser is the client application.

Install a Certificate

You can install a certificate on the RealPresence Debut system.

To install a certificate:

- 1 In the web interface, go to Admin Settings > Certificate and click Import.
- 2 Click Choose File to search for and select a .pem certificate. You might be installing a server certificate that has been signed by a CA after having been previously generated as a CSR, or installing a CA certificate needed by the system to validate a certificate it receives from another system.

The system checks the certificate data and adds it to the list. If you don't see the certificate in the list, the system was unable to recognize the certificate.

When you add a CA certificate to the system, the certificate becomes trusted for the purpose of validating peer certificates.



Note: If you do not add the server certificate for the system before using the web interface, you might receive error messages from your browser stating that the security certificate for the web site "Polycom" cannot be verified. Most browsers allow the user to proceed after this warning is displayed. See the Help section of your browser for instructions on how to do this.

Audio Settings

This section contains placement information for audio input and covers audio settings available from the web interface.

- RealPresence Debut System Table Microphone Array
- Test Your Audio

The RealPresence Debut system has two built-in microphones as well as one available microphone input. Make sure that the RealPresence Debut system is powered off before you connect audio devices to it.

RealPresence Debut System Table Microphone Array

You can purchase the RealPresence Debut system with a table microphone array containing three microphone elements for 360° coverage. The table microphone array connects to the RealPresence Debut system microphone input.

For the best audio experience, do the following:

- Place the microphone array on a hard, flat surface (table, wall, or ceiling) away from obstructions, so
 the sound will be directed into the microphone elements properly.
- Place the microphone array near the people closest to the monitor.

The following table describes the behavior of the microphone lights on the RealPresence Debut table microphone.

Status	Status Microphone Light
Off	Not in a call
Green	In a call, mute off
Red	Mute on

Test Your Audio

The audio meters allow you to identify left and right channels. The meters also indicate peak signal levels. Set signal levels so that you see peaks between +3 dB and +7 dB with normal speech and program material. Occasional peaks of +12 dB to +16 dB with loud transient noises are acceptable. If you see +20 on the audio meter, the audio signal is 0 dBFS and the audio might be distorted.

After you configure the system, test the audio configuration and place a test call.

To test your audio:

- 1 In the web interface, go to **Diagnostics > Audio Meters Test.**
- **2** Gently blow on the left leg and right leg of the microphone while watching the bar meters to identify the left and right inputs.
- 3 Test the speakers to check volume and verify that audio cables are connected.

Enable Polycom[®] NoiseBlock[™]

When Polycom[®] NoiseBlock[™] is enabled, the system automatically senses when there is ambient noise in the room and prevents the noise from transmitting to the far-end during video conferences. Ambient noise can include keyboard typing, paper shuffling, or any sounds other than human speech. As soon as the near-end meeting participant begins speaking, the system sends audio to the far-end.

To enable NoiseBlock:

- 1 In the web interface, go to System Settings > Call Settings.
- 2 Choose **Enable** from the Noise Block drop-down list.

Configuring Video Settings

The topics in this section detail High-Definition Video Conferencing and Adding a Touch Monitor with your system.

High-Definition Video Conferencing

RealPresence Debut systems have 1080p capability and can receive 1080p progressive format and can display 1080p progressive or 1080i interlaced format.

Near-site video is displayed in HD format when you use an HD video source and an HD monitor. However, near-site video is displayed in SD if the system is in an SD or lower-resolution call.

Maximizing HDTV Video Display

When you use a television as your monitor, some HDTV settings might interfere with the video display or quality of your calls. To avoid this potential problem, you should disable all audio enhancements in the HDTV menu, such as "SurroundSound."

In addition, many HDTVs have a low-latency mode called Game Mode, which could lower video and audio latency. Although Game Mode is typically turned off by default, you could have a better experience if you turn it on.

Before attaching your RealPresence Debut system to a TV monitor, ensure the monitor is configured to display all available pixels. This setting, also known as "fit to screen" or "dot by dot," enables the entire HD image to be displayed. The specific name of the monitor setting varies by manufacturer.

RealPresence Debut system HDMI Interfaces

The RealPresence Debut system includes two HDMI interfaces: one for wired content sharing and another for the monitor connection. The RealPresence Debut system only supports HDMI to HDMI connections; the system does not support conversions, such as VGA to HDMI cable connections.

The content sharing HDMI interface supports audio streaming. Sharing content from personal computing devices refers to sharing content using a computer with an HDMI connection, sharing content using Polycom RealPresence Desktop, or sharing content using Polycom RealPresence Mobile.

The HDMI monitor connection supports connection to the local interface. In addition to an HDMI connection, the monitor must also have a built-in speaker. Polycom recommends the HDMI interface input resolutions for best results.

Input	Resolution
HD	1920 x 1080p
HD	1280 x 720p

Input	Resolution
XGA	1024 x 768p
WXGA	1280 x 768
SVGA	800 x 600

Adding a Touch Monitor

RealPresence Debut systems have touch user interface capability when connected to touch- capable monitors. The touch monitor works with both touch input and the RealPresence Debut system remote control.

When a USB cable is connected to a Debut system and touch monitor, the touch capability is enabled on your touch monitor. Ensure that the system is powered off before you connect devices to it.

Camera Settings

You can configure RealPresence Debut camera settings to optimize the camera video image. You can also enable camera privacy to hide the camera when the RealPresence Debut system enters sleep mode.

Enable Camera Privacy

You can enable camera privacy to hide the camera when the RealPresence Debut system enters sleep mode from the web interface. When camera privacy is enabled.

To enable camera privacy:

- 1 In the web interface, go to **System Settings > General**.
- 2 From the Camera Hide drop-down list, select **Enable**.

Disable Camera Privacy

You can disable camera privacy from the web interface.

To disable camera privacy:

- 1 In the web interface, go to **System Settings > General**.
- 2 From the Camera Hide drop-down list, select Disable.

Use Sleep Settings to Prevent Monitor Burn-In

Monitors and RealPresence Debut systems provide display settings to help prevent image burn-in. Plasma televisions can be particularly vulnerable to this problem. Refer to your monitor's documentation or manufacturer for specific recommendations and instructions. The following guidelines help prevent image burn-in:

Ensure that static images are not displayed for long periods.

- Set the time before the system goes to sleep to 30 minutes or less. To specify a sleep value, go to **System Settings > General > Time Before Sleep**.
- Be aware that meetings that last more than an hour without much movement can have the same effect as a static image.
- Consider decreasing the monitor's sharpness, brightness, and contrast settings if they are set to their maximum values.

Enhance Video Quality

You can configure the RealPresence Debut video input settings, including white balance color saturation, and brightness, and backlight from the web interface.

To configure the video input settings:

- 1 In the web interface, go to **System Settings > Video Quality**.
- 2 Configure the following settings:

Video Input Settings

Setting	Description
Color Saturation	Use the slider to adjust color saturation.
Brightness	Use the slider to adjust image brightness.
Backlight Compensation	Specifies whether to have the camera automatically adjust for a bright background. Backlight compensation is best used in situations where the subject appears darker than the background. Select Enable or Disable .
White Balance	Specifies how the camera compensates for variations in room light sources. Select Auto or Manual . If you select Manual , select a color temperature value. The color temperature values, measured in degrees Kelvin, correspond to the color of ambient light in a room. Because the available color temperature values vary by camera, this list is only a sampling of some of the values you might see in the interface: • 6500 K (cool daylight) • 4000 K (neutral daylight) • 3500 K (office fluorescent) • 2800 K (tungsten bulb)

Configuring Call Settings

Set the Call Rate

You can set the call rate in the local or web interface.

To set the call rate:

- 1 Do one of the following:
 - In the local interface, click **Settings** and then click **General**.
 - ➤ In the web interface, go to System Settings > Call Settings.
- 2 Select a Call Rate from the drop-down list.

Call Speeds and Resolutions

Call Speed (kpbs)	Resolution	Maximum Frame Rate (fps)
<512	640x360	30
512-1536	1280x720	30
>=1536	1920x1080	30

Set the Auto Answer Mode

You have the option to allow calls to be automatically answered.

To set the call auto answer mode:

- 1 In the web interface, go to System Settings > Call Settings.
- **2** Set the auto answer mode for calls to one of the following:
 - > Enable—Answers calls automatically.
 - > **Disable**-Enables you to answer calls manually.
 - ➤ **Mute on Auto Answer** Can only be set when Auto Answer is enabled. Mutes near-end audio when an incoming call is automatically answered.

Enable Polycom®SmartPairing™ Auto Detection

Polycom[®] SmartPairing[™] allows you to detect and pair a RealPresence Debut system from the Polycom[®] RealPresence[®] Mobile application or from Polycom[®] RealPresence[®] Desktop video collaboration software.

When there is no microphone connected to the RealPresence Debut system and when the RealPresence Debut system is in an active call, SmartPairing Auto Detection is automatically disabled. Polycom also does not support enabling SmartPairing Auto Detection during an active call.

After you pair the application and the system, you can use the RealPresence Mobile application to perform two basic functions:

- Use the application as a remote control for the room system.
- Swipe to transfer a call from the RealPresence Mobile application to the room system.

To enable SmartPairing Auto Detection:

- 1 In the web interface, go to **System Settings > General > SmartPairing Auto Detection**.
- 2 Choose to Enable SmartPairing Auto Detection.

Setting Up a Directory

Connect to Microsoft Exchange Server Calendaring Service

RealPresence Debut systems can connect to Microsoft Exchange Server 2013 to retrieve calendar information for a specific Microsoft Outlook system account. A RealPresence Debut system connects to Microsoft Exchange Server using the credentials you provide. RealPresence Debut systems provisioned with RealPresence Resource Manger with the calendaring connector feature enabled, automatically register to the calendaring service.

Connecting to a calendaring service enables the system to:

- Display the day's scheduled meetings, along with details about each.
- Display a meeting reminder before each scheduled meeting, along with a reminder tone.
- Let users join meetings from the Calendar screen.



Note: Professional Services for Microsoft integration is mandatory for Polycom Conferencing for Microsoft Outlook and Microsoft Office Communications Server integrations. For additional information and details please refer to

http://www.polycom.com/services/professional_services/index.html or contact your local Polycom representative.

To configure the Calendaring Service by connecting to the Microsoft Exchange Server:

- 1 In the web interface, go to Server Settings > Calendar.
- 2 Configure these settings, as appropriate:

Setting	Description		
Enable Calendar	Enables the system to connect to the Microsoft Exchange Server 2013 or and retrieve calendar information.		
Microsoft Exchange Server	The Fully Qualified Domain Name (FQDN) of the Microsoft Exchange Client Access Server. If your organization has multiple Client Access Servers behind a network load balancer, this is the FQDN of the server's Virtual IP Address. If required, an IP address can be used instead of an FQDN, but Polycom recommends using the same FQDN that is used for Outlook clients. Provide a value in this field only if you want to manually provide connection information to Microsoft Exchange Server.		
Domain	Specifies the domain for registering to the Microsoft Exchange Server 2013, in either NETBIOS or DNS notation, for example, either company.local or COMPANY.		

Setting	Description
User Name	Specifies the user name for registering to Microsoft Exchange Server 2013, with no domain information included. This can be the system name or an individual's name.
Password	Specifies the system password for registering with the Microsoft Exchange Server 2013. This can be the system password or an individual's password.

Join Scheduled Meetings

RealPresence Debut systems can get meeting connection information to enable you to join scheduled meetings in the following ways:

- When the Polycom Conferencing for Microsoft Outlook add-in is installed at your site.
- When RealPresence Debut is provisioned with RealPresence Resource Manager and the calendering connector feature is enabled.
- When < video number:> is listed in the location or message of the meeting you want to join followed by a Virtual Meeting Room (VMR) number.

To join a scheduled meeting:

- 1 With your remote, select the **Calendar** icon on the Home screen.
- 2 Scroll down the calendar list to the meeting you want to join.
- 3 Press Select on the remote control to join the meeting.

Importing and Exporting Directory Contacts

The Import/Export Directory feature enables you to download contacts from a RealPresence Debut system to local devices, such as computers and tablets, in CSV file format. It also enables you to upload contacts from a device to a RealPresence Debut system.

Ensure the following when performing these tasks:

- The size of the uploaded CSV file cannot exceed 100 kilobytes. The number of contacts in the file must be less than 1000.
- You can import entries only when you are not in a call on the RealPresence Debut system.
- When the uploaded CSV file includes entries already on your RealPresence Debut system, the duplicate files are deleted.

Import Directory Contacts

You can import directory contacts from the web interface. You can import entries only when you are not in a call on the RealPresence Debut system.

To import directory contacts:

- 1 In the web interface, go to Contacts and click | Import Contacts.
- 2 In the dialog box, select the *directory.csv* file you want to import and click **Open**.
- 3 Select Import to upload the *directory.csv* file to the RealPresence Debut system.

Export Directory Contacts

You can export directory contacts from the web interface. You can export entries only when you are not in a call on the RealPresence Debut system.

To export directory contacts:

- 2 Save the downloaded *directory.csv* file on your local device.

Import Directory Contacts from a Provisioning Server

You can import directory contacts from a RealPresence Debut system using a provisioning server.

To import directory contacts from a server:

- 1 Download the local contact file on the provisioning server.
- 2 Configure the provisioning profile and include the local contact update.
- 3 In the web interface, go to Server Settings > Provisioning > Provisioning Mode.

The contacts automatically import on the RealPresence Debut system. Directory contacts must be updated in the format provided in the RealPresence Debut_Contact_Template.xml and the RealPresence_Debut_Directory_Template.csv on Polycom Support.

System Maintenance

Updating the System Software

You can update your RealPresence Debut system software from a USB storage device, through the web interface, or with RealPresence Resource Manager. For information about updating your software with RealPresence Resource Manager, refer to the *Polycom RealPresence Resource Manager System Operations Guide.* For information about the latest software version, including version dependencies, refer to the *Release Notes for the Polycom RealPresence Group Series.*

Update Software from a USB Storage Device

You can apply software updates from a USB storage device.



Polycom supports USB storage devices in FAT32 format. Polycom does not support USB devices in NTFS format.

To update software from a USB storage device

- 1 On a computer, open a browser and navigate to support, polycom.com
- 2 Navigate to the r RealPresence Debut system.
- **3** Save a software package in *polycom-debut-release-x.x.x-xxxx.tar.gz* format from the Polycom web site to the root directory of a USB storage device.
- **4** Save the file with your key code or key codes to the root directory of the USB storage device. Make sure your key code file name is debute.key.
- 5 Connect the USB storage device to the USB port on the back of the RealPresence Debut system. The system detects the USB storage device and prompts you to confirm that you want to update the software.
- **6** Follow the on-screen instructions to the setup wizard to complete the update. The setup wizard is available during initial setup, after a system reset with system settings deleted, after using the factory restore button, or after you enable RealPresence Cloud mode.

Update Software from the Web Interface

You can apply software updates from the web interface.

To apply software updates from the web interface:

- 1 In the web interface, go to **Admin Settings > Software Upgrade**.
- 2 Click Choose File to select the upgrade file.

- 3 In the Software Upgrade Key field, enter the software key code.
- 4 Click **Upgrade** to start the upgrade process. The RealPresence Debut system will restart automatically and start to upgrade.
- **5** Wait a few minutes, and then refresh your browser.

Software Key Codes

To perform a major or minor software update, obtain a key code before you run the software update. A *key code* is the number that activates software on a specific system. A key code is valid only on the system for which it is generated.

Make a note of your system serial number. You must provide this numbers in order to get the key codes that activate software updates. The 14-digit *serial number* is the unique number that identifies your system. You can find it on the System Information screen and on a label on the system. Serial numbers are case sensitive.

Create a Multiple Serial Number File

If you have multiple systems, you can save time when requesting key codes for purchased software updates from Polycom. To do this, create a text file that has all of the necessary information. This saves you the time of providing each serial number individually on the site. Instead, you can just upload your text file.

To create a multiple serial number text file:

- 1 Create a new file in a text editor.
- **2** Enter the serial numbers of your systems in the text file.
- 3 Save and close the text file.

Create a Single Key Code File to Update Multiple Systems

After you receive your key code files from Polycom, you can create a single key code file to upgrade multiple systems.

To create a single key code file to upgrade multiple systems:

- 1 Concatenate the key code files you received from Polycom by following these steps:
 - a Open the key code files with a text editor, such as Notepad.
 - **b** Copy the contents of one file to the end of the other file.
 - **c** Save the combined file with the name *debute.key*

You now have a single text file that contains all of your key codes for software updates.

2 Use the key codes in the file to upgrade the applicable systems.

Importing and Exporting Web Interface Settings

You can export existing RealPresence Debut web interface settings to local devices, such as computers or tablets, in .txt format. You can also import web interface settings from a device to a RealPresence Debut system to enable quick manual configuration of the RealPresence Debut.

Import Web Interface Settings

You can import RealPresence Debut web interface settings from the web interface.

To import the web interface settings:

- 1 In the web interface, go to System Settings > Import and Export Configuration.
- 2 Click Choose File and select a .txt file to import.
- 3 Click Import to upload the .txt file to the RealPresence Debut system.
 The RealPresence Debut restarts after the file successfully imports.

Export Web Interface Settings

You can export RealPresence Debut web interface settings from the web interface.

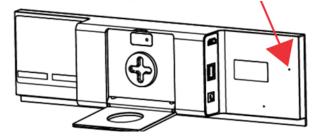
To export the web interface settings:

- 1 In the web interface, go to System Settings > Import and Export Configuration.
- 2 Click Export and save the downloaded .txt file on your local device.

Reset a Polycom RealPresence Debut System

If the RealPresence Debut system is not functioning correctly or you have forgotten the Admin password you can reset the system. This procedure effectively refreshes your system, deleting all settings except the current software version. The RealPresence Debut system restore button pinhole is located on the back of the system, as displayed in the following figure:

RealPresence Debut system restore button



To reset the RealPresence Debut system:

- **1** When the RealPresence Debut system is powered on:
 - > Straighten a paper clip and insert it into the pinhole.
 - Press and hold the restore button.
- 2 In the web interface, go to Admin Settings > Factory Reset and click Reset.

After about 15 seconds, the system restarts and displays the setup wizard.

Perform a Factory Restore

A factory restore completely erases the system and restores it to the software version and default configuration stored in its factory partition.

The factory restore operation completely erases the system's flash memory and reinstalls the software version and default configuration stored in its factory partition.

The following items are not saved:

- Software updates
- Directory entries
- Logs

To restore the system to its factory partition software using the restore button:

- 1 Straighten a paper clip and insert it into the pinhole.
- 2 Using the paper clip, press and hold the restore button.
- 3 Disconnect the power cord from the system.
- **4** While continuing to hold the restore button, connect the power cord to the RealPresence Debut system.
- 5 Keep holding the restore button for 15 more seconds, then release it.

During the factory restore process, the system displays the Polycom startup screen and the usual software update screens on HDMI monitors. Other types of monitors will be blank. Do not power off the system during the factory restore process. The system restarts automatically when the process is complete.

Troubleshooting

For more troubleshooting information, search the Knowledge Base at Polycom Support.

RealPresence Debut System Indicator Lights

The LED on the front of the RealPresence Debut system provides the following information.

Indicator Light	System Status	
Off	System is powered off.	
Blinking blue light	In a system health check, no errors are occurring and tests are successful. The system continues to blink blue and initializes after the sequence is complete if no severe errors occur.	
Blinking amber light	In a system health check, at least one test has resulted in a warning error. The system continues to blink amber but initializes after the sequence is complete if no severe errors occur.	
Blinking red light	In a system health check, at least one test has resulted in a severe error. The system continues to blink red and will not start up.	
Steady red light	Network cable is disconnected or registration for provisioning, SIP, or H.323 failed.	
Steady blue light	System is initializing. System is awake.	
Blinking blue light	System received an infrared (IR) signal. System is receiving a call.	
Steady amber light	System is asleep.	
Alternating blue and amber lights	System is in software update mode. System is in factory restore mode.	
Fast blinking amber light	System is shutting down.	
Steady green light	System is in a call.	

System Health Check

After the system is powered on, the system automatically performs a system health check. The status of the system health check sequence is shown using the LED indicator light on the front of the device. All test

results are logged in the system memory. When the test sequence completes with no severe errors, the system starts normally.

Find Your System IP Address

You can find your RealPresence Debut system's IP address in the local or the web interfaces:

- In the local interface, navigate to the Home page. The IP address is displayed in the bottom-left corner
 of the screen.
- In the web interface, go to Device Status. The IP address is in the status list.

Contact Technical Support

If you are not able to make test calls successfully and you have verified that the equipment is installed and set up correctly, contact your Polycom distributor or Polycom Technical Support.

To contact Polycom Technical Support:

- **1** Go to Polycom Support.
- 2 Enter the following information:
 - The 14-digit serial number from the System Device screen or the back of the system or from the web interface by going to Device Status
 - > The software version from the **System Device** screen
 - Any active alerts generated by the system
 - Information about your network
 - Troubleshooting steps you have already tried

Polycom Solution Support

Polycom Implementation and Maintenance services provide support for Polycom solution components only. Additional services for supported third-party Unified Communications (UC) environments integrated with Polycom solutions are available from Polycom Global Services, and its certified Partners, to help customers successfully design, deploy, optimize, and manage Polycom visual communication within their third-party UC environments. UC Professional Services for Microsoft Integration is mandatory for Polycom Conferencing for Microsoft Outlook and Microsoft Lync Server integrations. For additional information and details please refer to http://www.polycom.com/services/professional_services/index.html or contact your local Polycom representative.

Port Usage

The following topics on port usage are useful when you configure your network equipment for video conferencing:

- Connections to Systems
- Connections from Systems

Connections to Systems

The following table shows IP port usage to RealPresence Debut system.

Inbound Port	Туре	Protocol	Function
443	Static	TCP	WebUI
1719	Static	UDP	H.225.0 RAS
1720	Static	TCP	H.225.0 call signaling
5060	Static	TCP/UDP	SIP
5061	Static	TCP	SIP
3230-3232	Static	TCP	H.245
3230-3238	Static	UDP	RTP/RTCP video and Audio
2424/6888	Static	TCP	Smart Pairing Content sharing from RPD/M to Debut (Control)
6888	Static	UDP	Local Smart Pairing Content sharing from RPD/M to Debut (Media)

Connections from Systems

The following table shows IP port usage from RealPresence Debut system.

Outbound Port	Туре	Protocol	Function
123	Static	UDP	NTP
389	Static	TCP	LDAP
443	Static	TCP	Provisioning/Software update
1719	Static	UDP	H.225.0 RAS
1720	Static	TCP	H.225.0 call signaling
5060	Static	TCP/UDP	SIP
5061	Static	TCP	SIP
3230-3238	Static	UDP	RTP/RTCP video and Audio