

ADMINISTRATOR GUIDE

1.1.0 | May 2016 | 3725-69715-004A

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: http://support.polycom.com/PolycomService/support/us/support/video/index.html:

- 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 here for future reference. The serial number for the system is printed on the unit.

S١	stem Serial Number:	

Audience, Purpose, and Required Skills

The primary audience for this guide is administrators who need to configure, customize, manage, and troubleshoot RealPresence Debut systems. This guide provides concepts and general guidance to the system administrator. Polycom expects the administrator to be a mid-grade IT professional who is experienced in system administration.

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.

Introducing the Polycom RealPresence Debut System

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

- Polycom RealPresence Debut System
- Set Up Your System Hardware
- Position the System
- Power On and Off
- Configure the RealPresence Debut System

Polycom RealPresence Debut System

Your RealPresence Debut system is a state-of-the-art visual collaboration tool. With crisp, clean video and crystal-clear sound, RealPresence Debut systems provide natural video conferencing interaction using the most robust video communications technology. To fit your space and functional requirements, there are several RealPresence Debut systems available.

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 to be easily hidden away, or taken outside the room or building for mobile applications.

Set Up Your 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.

Install Batteries in the Remote Control

The RealPresence Debut system remote control is powered by two size AAA batteries that you must install.

To install or replace the remote control batteries:

- 1 Slide the battery cover on the remote that is located under 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.

Position the System

The RealPresence Debut is versatile enough to accommodate being set up in a variety of ways. This section describes how to position your RealPresence Debut system.

Mount the RealPresence Debut System on a Table or Thin Display

You can mount the RealPresence Debut system on a tabletop, such as a desk or shelf, or a thin display. Polycom recommends that you mount the RealPresence Debut 150 centimeters above a finished floor, about eye-level for participants setting in the room.



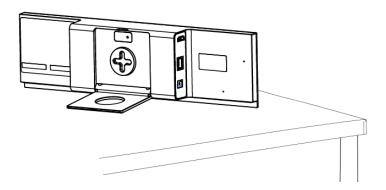
Allow ventilation and ample clearance

Keep ventilation openings free of any obstructions. Make sure there is ample space in front, above, and below the RealPresence Debut system to prevent overheating and accidental bumping.

To mount the system on a table:

- 1 Remove the protection film from the mount cover (bracket) located on the back of the system.
- 2 Place a thumb in the recessed area of the mount cover and gently pull open the mount cover.
- 3 Place the system on the table. The mount cover acts as a stand when the system is in this position.
- 4 Place the system cables in the hole of the mount cover to keep them neatly in place.

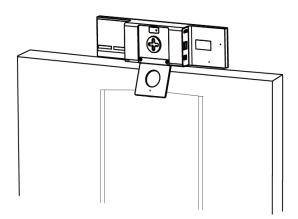
Mount the RealPresence Debut system to a table



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 a thumb in the recessed area of the mount cover and gently pull open the mount cover.
- 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 40 inches above a finished floor or at eye-level for participants sitting in the room.

Conference room walls should be built from slab to slab. That is, there should be no gaps from the concrete of one floor to the concrete of the next floor. Resilient, gypsum board mountings should be used to close any gaps. The thickness of the gypsum board should be 5/8" or more (one layer of 5/8" and one layer of 1/2" bonded together would be ideal) on the inside of the room, with 1/2" thick (or as required by local building codes) appropriate for the outside of the walls.

There should always be a difference in thickness between the materials used on the inner versus the outer walls. That difference in thickness subdues mechanical coupling (vibration) between the two layers. A good overall wall thickness is 6". It is recommended that "offset stud" construction be used, typically a 6" header and footer with 3.5" verticals attached in an alternating pattern one toward the outside of the footer, the next toward the inside and so on. Fiberglass dense batting or mineral rock wool, 4" to 6" thick (the equivalent of R-11 to R-13) should be placed in the wall space. The thickness of the batting is not critical. The critical aspect is that it must be loosely placed in the wall space, not compacted to fit. The resultant wall will have excellent acoustic isolation from the outside world. More significant acoustic isolation can be achieved by placing an additional barrier layer within the wall space. Typically this barrier will be made of a dense polymer material, about 1/8" thick, and the improvement regarding loss of sound transmitted through the wall will be roughly a factor of 10. These materials are available from a variety of manufacturers.



Allow ventilation and ample clearance

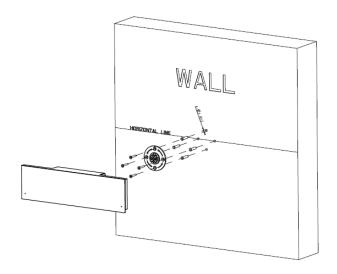
Keep ventilation openings free of any obstructions.

Make sure there is ample space in front, above, and below the RealPresence Debut system to prevent overheating and accidental bumping.

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 horizontal and vertical in alignment with the holes on the wall mount.
- 3 Insert expanding tubes into the four holes.
- **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



Power On and Off

Power-On Self Test (POST)

After being powered on, the RealPresence Debut system automatically performs system health checks before the system is initialized. This process is known as a power-on self test, or POST. The status of the POST sequence is displayed with the LED indicator light on the front of the device. For more information about what the colors of the indicator lights mean, refer to RealPresence Debut System Indicator Lights. When the POST sequence completes with no severe errors, the RealPresence Debut system starts normally.

Test results for the RealPresence Debut system are logged in the system memory. If any warnings occur during POST, you can view them after the system starts by going to **Settings** > **About** in the local interface. If a severe error occurs during startup, the system does not start up. Contact Polycom technical support.

Power On the RealPresence Debut System

You can power on the RealPresence Debut system using Power over Ethernet (PoE). You can also power on the RealPresence Debut system using the remote control, immediately after you have powered off the system using the remote control.

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

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

To power on the RealPresence Debut system:

- 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 by Power over Ethernet (PoE).
- 3 If it is not already connected, connect the LAN cable to the system for network connectivity.



Recommended LAN Cable Length

You might experience a low signal strength when connecting the RealPresence Debut with a LAN cable that is longer than 100 feet. Polycom recommends that you use an externally powered Ethernet hub or PoE switch to limit the LAN cable length to shorter than 100 feet.

Power on the RealPresence Debut System Using the Remote Control

You can power on the RealPresence Debut using the remote control immediately after you have powered off the system using the remote control.

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

Power Off the RealPresence Debut System

The RealPresence Debut system is powered off using the following steps:

To power off the RealPresence Debut system:

- 1 Do one of the following:
 - 1 Disconnect the power cord from the RealPresence Debut system or disconnect the LAN cable when the system is powered by PoE.
 - 2 On the remote control, press and hold **Hang Up** for 5 seconds.

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 POST sequence, 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 POST sequence, 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 POST sequence, 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 IR (infrared) 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.

Polycom RealPresence Debut Modes of Operation

RealPresence Debut has two modes of operation:

• Enterprise mode You can configure RealPresence Debut settings manually or automatically. You can manually set up registration and calling with an H.323 gatekeeper or a SIP server. For more information on manually setting up a RealPresence Debut see Networks. You can also register RealPresence Debut with a Polycom provisioning server like a Polycom® RealPresence® Resource Manager system. For more information on registering a RealPresence Debut with a provisioning service see Use a Provisioning Service.

 RealPresence Cloud mode A service provider configures RealPresence Debut with a provisioning service. You must enable RealPresence Debut to access the Polycom[®] RealPresence Cloud[®] service. For information on enabling RealPresence Cloud mode, see Enable RealPresence Cloud Mode.

Configure the RealPresence Debut System

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.

Setup Wizard

When you power on your system for the first time, the setup wizard leads you through the minimum configuration steps required to place a call.

You can run the setup wizard or view the configuration screens. You can navigate the screens in the local interface and enter information by using the remote control and the onscreen keyboard. When you reach a text field, press the Select button on the remote control to display the onscreen keyboard. Note that the onscreen keyboard is automatically displayed when you reach the System name field in the setup wizard.

Be aware that only those configuration screens needed to get the system connected are included in the local interface. Most of the administrative settings are available only in the web interface.

The setup wizard is available during initial setup, after a system reset with system settings deleted, after using the restore option, or after you enable RealPresence Cloud mode.

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 Polycom 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*.

Use the RealPresence Debut System Web Interface

You can configure, manage, and monitor RealPresence Debut systems from a computer with an internet connection using the system web interface. The following internet browsers are supported with the web interface:

- Microsoft® Internet Explorer® version 10 or 11
- Google Chrome[™] 46.0.2490.86
- Mozilla[®] Firefox[®] 42.0
- Apple[®] Safari[®] 9

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.

To access the system using the web interface:

- 1 In a web browser address line, enter the system's IP address, for example, https://10.11.12.13.
- 2 When a password is not set, the web interface automatically displays. When a password is set, enter the Admin ID as the user name (default is admin), the Admin password, and click **Login**.

Manage System Login Information

You can manage RealPresence Debut system login information from the web interface. *Local access* means using a RealPresence Debut system through the local interface.

To configure system login information:

- 1 In the web interface, 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 Server Settings > Provisioning and select Disable to disable Provisioning Mode.
- 2 In the web interface, go to System Settings > General.
- 3 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 System Settings > Date and Time.
- 2 Choose Manual from the Time Server drop down menu.
- 3 Enter the address in the **Time Server Address** field.
- 4 Click Submit.



24 hour clock format for Russia

RealPresence Debut systems support a 24 hour clock format for Russia.

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 When the image name appears next to Choose File, click **Upload**.

The image is uploaded to the system Home screen.

Networks

Before you begin configuring network options, make sure your network is ready for video conferencing. Polycom offers contract high-definition readiness services. For more information, contact your Polycom distributor.

The topics in this section cover network types used worldwide, but keep in mind that not all network types are available in all countries. To get started configuring your network, see the following topics:

- Connect to the LAN
- Set Preferred Speeds
- Manage Certificates

Connect to the LAN

You must connect the system to a LAN to do any of the following with your RealPresence Debut system:

- Make H.323 or SIP calls
- Register with a management system
- Access the web interface

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 Network Settings

You can configure network settings for RealPresence Debut systems including IP address (IPv4) settings and VLAN settings.

To configure RealPresence Debut System network settings:

- 1 Do one of the following:
 - ➤ In the web interface, go to **System Settings** > **Network Setting**.
 - ➤ In the local interface, go to **Settings** > **Network** > **LAN Network**.

Configure IP Address (IPv4) Settings:

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

To configure IP Address (IPv4) Settings:

1 Configure the following IP address (IPv4) settings in the web interface:

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 .
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 .
DNS	Displays the DNS servers currently assigned to the system. This field is disabled when the DHCP Mode is DHCP .

2 Configure the following IP address (IPv4) settings in the web interface:

Setting	Description
LAN Network	Static or DHCP. Selecting the Static option displays additional settings:
	IP address
	Subnet mask
	Gateway
	DNS Server

LLDP Support

Link Layer Discovery Protocol (LLDP) is now 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.

Behavior When LLDP is Enabled

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 VLAN Settings

You can configure VLAN Settings in the web interface and in the local interface. In order 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.	

H.323 Settings

If your network uses a gatekeeper, 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.



RealPresence Debut does not support enabling both H.323 and SIP protocols

RealPresence Debut does not support enabling both the H.323 and SIP protocols. If both protocols are enabled by a provisioning service during system provisioning, the SIP protocol has higher priority than the H.323 protocol and will be used when making calls.

To specify H.323 settings:

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

Setting	Description	
Communication Protocol	col 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.	

Setting	Description	
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.	
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.	

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 these 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.	
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.	

Setting	Description
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.

Configure the System for Use with a Firewall or 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.

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

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

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 accuracy.



Firewalls are recommended

Systems deployed outside a firewall are potentially vulnerable to unauthorized access. Visit the Polycom Security section of the Knowledge Base at support.polycom.com for timely security information. You can also register to receive periodic email updates and advisories.

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 use this traversal, configure the RealPresence Debut systems and firewalls as follows:

- 1 Enable firewall traversal on the RealPresence Debut system.
 - a In the web interface, go to Admin Settings > NAT Setting.
 - **b** Select **Enable** for the **H.460 Firewall Traversal** setting.
- 2 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.

Basic Firewall/NAT Traversal Connectivity

Basic Firewall/NAT Traversal Connectivity enables RealPresence Debut systems to connect to the SIP-based RealPresence solutions using RealPresence® Access Director™ Session Border Controllers (SBCs). A RealPresence Debut system connects to the RealPresence Access Director as a remote enterprise endpoint. The remote enterprise endpoint is registered to the enterprise's SIP infrastructure and connects to an internal enterprise endpoint through the enterprise firewall.

For details about the use and configuration of the RealPresence Access Director used in conjunction with this feature, refer to RealPresence Access Director documentation at Polycom Support.

Set Preferred Speeds

To configure call speeds:

- In the web interface, go to System Settings > Call Settings > Call Rate and select the desired rate.
- In the local interface, go to **System Settings > General > Call Rate** and select the desired rate.

Manage 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. This process is sometimes referred to as *installing* a certificate.

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



Add server certificate before using web interface

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.

Monitors

The topics in this section detail high-definition video conferencing and how to set up monitors with your system.

Experience High-Definition Video Conferencing

Polycom RealPresence Debut systems offer the following high-definition (HD) capabilities:

- Send people or content video to the far site in HD
- Receive and display video from the far site in HD
- Display near-site video in HD
- Full-motion HD

Send Video in High Definition

Polycom RealPresence Debut systems are HD-capable and can send video in wide-screen, HD format.

Receive and Display Video in High Definition

When the far site sends HD video, the RealPresence Debut system with HD capability and an HD monitor, can display the video in wide-screen, HD format. RealPresence Debut systems have 1080 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.

Use Full-Motion HD

With RealPresence Debut Series systems, Polycom sets a higher bar for video and audio performance. Seeing participants in full 1080p 30 fps, or full-motion HD, brings video to a new level of realism. Full-motion HD provides those clear, vibrant visuals and flawless audio that are critical to replicating an "in the same room" experience.

Maximize 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.

Finally, before attaching your Polycom 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 HDMI Interfaces

The RealPresence Debut system includes two HDMI interfaces: one for wired content sharing and another for the monitor connection. The RealPresence Debut 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
XGA	1024 x 768p
WXGA	1280 x 768
SVGA	800 x 600

Share Content with RealPresence Debut

You can share content with a RealPresence Debut system from a personal computing device, using a wired HDMI connection. When you connect an HDMI cable from a personal computing device to a RealPresence Debut system, HDMI content automatically starts sharing with the RealPresence Debut system when the system is in a call and when the system is out of a call. When the system is in a call, you can stop and start shared content. When the system is out of a call, you can also stop content.

Stop Content in a Call

You can stop content in a call.

To stop content in a call:

» Select Stop HDMI 💽.

Start Content in a Call

You can start content in a call.

To start content in a call:

» Select Start HDMI (03).

Stop Content out of a Call

You can stop content out of a call.

To stop content out of a call:

- 1 Do on of the following:
 - ➤ Select Stop HDMI (=).
 - Press the Back or Hang Up buttons on the remote control.
 - Disconnect the HDMI cable from a personal computing device and from the RealPresence Debut system.



Note: H.263 Content

RealPresence Debut systems can receive H.263 content, but are unable to share H.263 content.

Enable SmartPairing Auto Detection

SmartPairing Auto Detection uses ultrasound frequencies to enable you to detect and pair a RealPresence Debut system from the RealPresence Mobile application on an Apple system or from RealPresence Desktop. Polycom recommends increasing the monitor volume for optimum SmartPairing detection. SmartPairing Auto Detection is automatically disabled when RealPresence Debut systems are in sleep mode. For a list of interoperable Polycom products and supported product versions, refer to the *Polycom RealPresence Debut Release notes*.

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.

SmartPairing Auto Detection in an Active Call

To use the SmartPairing Auto Detection feature in an active call, ensure that SmartPairing Auto Detection is already enabled and that the RealPresence Debut table microphone array or a microphone device is connected to the RealPresence Debut. When there is no microphone connected to the RealPresence Debut 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.

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.

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.

Configure Video Input Settings

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)	

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, you can also disable camera privacy from the web interface.

To enable and disable camera privacy:

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

Microphone

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

- RealPresence Debut Microphones
- Audio Input Tips by Microphone Type
- Audio Meters

RealPresence Debut Microphones

The RealPresence Debut system has two built-in microphones as well as one available microphone input.

Audio Input Tips by Microphone Type

Make sure that the RealPresence Debut system is powered off before you connect audio devices to it.

RealPresence Debut System Table Microphone

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

Audio Meters

The audio meters in the user interface 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 system 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.

Place and Answer Calls

Before you start using the RealPresence Debut system, configure your system and call settings. System Settings screens provide access to high-level options for the entire system. For convenience, some of the User Settings options are repeated on these screens.

To get started with calling, see these topics:

- Call Settings
- Manage Directory Contacts
- Connect to Microsoft Exchange Server Calendaring Service
- Place a Call
- Recent Calls
- Stop and Start Video in a Call

Call Settings

The call settings screen allows you to determine which settings are available to users when they place and answer calls in both the web interface and the local interface.

Set the Call Rate in the Local Interface

You can set the call rate in the local interface.

To set the call rate in the local interface:

- 1 In the local interface, select the Settings icon on the Home page.
- 2 Select the General icon.
- 3 Select a Call Rate value from the drop-down list.

Set the Call Rate in the Web Interface

You can set the call rate in the web interface.

To set the call rate in the web interface:

- 1 In the web interface, go to System Settings > Call Settings.
- 2 Select a Call Rate value from the Call Rate drop-down list.

Call Speeds and Resolutions

The following table displays the maximum call speeds and resolutions for RealPresence Debut systems in a call.

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

Set the Encryption Mode

AES encryption is a standard feature on all RealPresence Debut systems. When it is enabled, 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, or 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.

Enable Polycom NoiseBlock[™]

Polycom NoiseBlock[™] is a standard feature on all RealPresence Debut systems. When it 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.

Manage Directory Contacts

Local interface users can select **Contacts** by selecting the Place a Call menu on the Home page.

Web interface users can add contacts in the Contacts screen.

To add a contact:

- 1 To add a contact to the directory list, go to **Contacts** and click + **Contacts**.
- 2 Enter the contact call information and click Save.

Import and Export 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.

Keep the following points in mind 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:

- 1 In the web interface, go to **Contacts** and click **Export 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.

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.



Microsoft integration requires Professional Services

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.

Setting	Description
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.
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.

View Scheduled Meetings

To view more information about a meeting on the calendar, select the meeting. Depending on how your system is configured, private meeting details might not be visible.

To view scheduled meetings:

» With your remote, select the **Calendar** icon the Home screen.

Scheduled meetings are listed for the current day.

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.

Place a Call

In the Place a Call area, you can place a call by searching your contacts or manually.

To call a contact in the directory list:

- 1 In the **Contacts** section, enter a name in the input field.
- 2 Select a contact name and click Call.

For information about editing directory contacts, refer to Manage Directory Contacts.

To place a call manually:

» Enter the number and click Call.

Search

In a text box on the Place a Call screen on the local interface, you can enter a search term to filter items in the Contacts or Recent lists. Select the item you want to place the call.

Recent Calls

The Recent Calls list displays on the Home screen on the RealPresence Debut system local interface. The list includes the following information:

- Site name or number
- Whether call was placed or received
- Date and time

Stop and Start Video in a Call

Using the local interface, you can stop your near-end site video while in a call. You can then start your video again at any time.

Stopping your video allows you to stop sending your near-end, camera-encoded video while still remaining connected to the conference. When your video is stopped, the far-end site does not see near-end video transmission from you. Instead, a video pause image is sent to the far-end site. Stopping your video does not affect the sending or receiving of content.

To stop and start video in a call:

» Select **Video** from the toolbar.

View Network Call Statistics

When you are in a call, you can view call statistics including call type, call rate, and call protocol.

To view call statistics:

» Using the remote control, press *.

Configure the System Remotely

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

Use a Provisioning Service

If your organization uses a RealPresence Resource Manager system or a BroadSoft BroadWorks[®] Device Management System (DMS) you can manage Polycom 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 Polycom 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, keep in mind the following points:

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

Provision RealPresence Debut

You can automatically or manually configure a provisioning service to work with RealPresence Debut. You can also disable a provisioning service after the service has been setup. In order to provision the RealPresence Debut automatically or manually, you need to complete the following two configuration steps:

- Create a provisioning profile for RealPresence Debut on the provisioning server.
- Configure the provisioning settings on the RealPresence Debut web interface.

Provisioning Prerequisites

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, 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 Polycom RealPresence Resource Manager Operations Guide.
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 powers on, the system can automatically detect a provisioning service by reading the address of the provisioning server through DHCP. In order to successfully provision the

RealPresence Debut, 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.



Use the calendar with RealPresence Resource Manager

When the RealPresence Debut is automatically provisioned with RealPresence Resource Manager, in order 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*.

Polycom Zero Touch Provisioning

If the RealPresence Debut is unable to detect a provisioning service through DHCP, the RealPresence Debut automatically connects to the Polycom Zero-Touch Provisioning server to provision the system. For more information about Polycom Zero-Touch Provisioning (ZTP), refer to the *Polycom Zero -Touch Provisioning User Guide*.

If the RealPresence Debut is unable to detect the Zero-Touch Provisioning service, the RealPresence Debut automatically connects to the RealPresence Cloud server to determine if the RealPresence Debut is registered to the RealPresence Cloud service. When the RealPresence Debut is registered to the RealPresence Cloud service, the system automatically enters RealPresence Cloud mode. For more information about RealPresence Debut modes of operation, refer to Polycom RealPresence Debut Modes of Operation.

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: ipaddress • BroadSoft BroadWorks Device Management System (DMS): ipaddress/dms/filepath • FTP/FTPS/HTTP/HTTPS: ipaddress/filepath
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.

Enable RealPresence Cloud Mode

RealPresence Cloud service enables service providers to configure RealPresence Debut with a provisioning service. After a service provider configures your RealPresence Debut 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 Setup Wizard.

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.

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.

Keep your Software Current

You can update your Polycom 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 *Polycom RealPresence Debut Release Notes*.

Update Software from a USB Storage Device

You can apply software updates from a USB storage device.



Supported USB storage device format

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 Under Documents and Downloads, select Telepresence and Video.
- 3 Navigate to the page that has the desired update for the RealPresence Debut system.
- **4** 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.
- 5 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.
- 6 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.
- 7 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.

Export and Import 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.

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.

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.

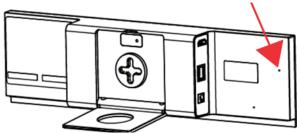
Troubleshoot

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

Polycom RealPresence Debut Restore Button

The Polycom RealPresence Debut restore button pinhole is located on the back of the RealPresence Debut, as displayed in the following figure:

RealPresence Debut Restore Button



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.

To reset the RealPresence Debut system do one of the following:

- When the RealPresence Debut system is powered on:
 - 1 Straighten a paper clip and insert it into the pinhole.
 - 2 Press and hold the restore button.
- 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 on the Polycom RealPresence Debut System

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.
- **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.

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.

How to 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, go to Polycom Support.

Enter the following information, then ask a question or describe the problem. This information helps us to respond faster to your issue:

- The 14-digit serial number from the System Device screen or the back of the system
- 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

You can find the system detail information in the web interface by going to **Device Status**.

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.