Polycom® RealPresence® Capture Server - Appliance Edition

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Система	Номер регистрации	Дата истечения срока
Capture Server	Д-СПД-6758	June 02, 2017

A 급 기기 (업무용 방송통신기자재)

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Safety Considerations and Storage

- RealPresence Capture Server has a 7 year period of life.
- RealPresence Capture Server has a 7 year period of storage.

Follow existing safety instructions and observe all safeguards as directed

Environment	
Operating temperature	5° to 40°C (40° to 100°F).
Non-operating temperature	-40° to 5° (-40° to 40°F), 40°C to 60°C (100° to 140° F).
Operating Relative humidity	8% to 90% non-condensing.
Non-operating Relative humidity	5% to 8%, 90% to 95% non-condensing

About This Guide

This guide explains how to install and set up the Polycom RealPresence Capture Server, it will step you through how to record your first video call and how to play the media file in a compatible web browser. The topics in this guide include:

- Set up RealPresence Capture Server

  Gives a general introduction of this product and describes the steps required to perform the initial installation and setup.

- Record and View Meetings

  Details how to record your first video call, view live streaming and how to play back the archive media file in a compatible web browser.

Set up RealPresence Capture Server

The following sections give a general introduction of the RealPresence Capture Server and describe the steps required to perform the initial installation and setup.

- RealPresence Capture Server Introduction
- Before You Begin
- Install RealPresence Capture Server

RealPresence Capture Server Introduction

The Polycom® RealPresence Capture Server is a streaming and recording system that participates in standards-based video and telepresence calls that can be used alone or as an integrated component of Polycom Video Content Management solution. As a native part of the Polycom RealPresence Platform, the RealPresence Capture Server records, archives, and streams telepresence and video conferences for playback on a variety of client devices including tablets, smart phones, desktop computers, and standards-based video endpoints.

By leveraging RealPresence Capture Server with existing telepresence systems, video conferencing endpoints and video infrastructure, or familiar unified communications (UC) tools, your organization can easily convert real-time conferences and events into reusable multimedia assets. Following are some features of RealPresence Capture Server:

- It integrates with Polycom endpoints and conference platforms for automated recording and playback.
- It supports H.323 and Session Initiation Protocol (SIP) standards for interoperability with third-party conferencing systems.
- It can output a maximum stream (live or video on demand) of 1080p HD (people + content combined).
- It provides access to live and video call archive streams on devices with compatible browsers including PC, MAC, iOS, and Android devices.
- It enables you to access video call archives via any standard-based endpoint.
- It provides REST API support for third-party integrations.

Before You Begin

Before you begin installing this product, make sure you follow these rules to ensure general safety:

- Keep the area around the RealPresence Capture Server unit clean, free of clutter, and well ventilated.
- Choose a suitable location for the equipment rack that will hold the unit and ensure that it is near a grounded power outlet.

● Use a regulating UPS (uninterruptible power supply) to protect the RealPresence Capture Server unit from power surges and voltage spikes, and to keep it operating in case of a power failure.

Unpack the Package

When you unpack the RealPresence Capture Server package, ensure check to be sure that the following items are included:

● One RealPresence Capture Server appliance (weighs about 50 lbs)

● Rail-mount kit for standard 19-inch equipment rack

● One power cable for your regional power

● Two RJ-45 network cables

● Documentation DVD, which contains the links to the latest RealPresence Capture Server documentation on the Polycom Support web site.

● A piece of paper containing the license information.

Take all items out of the package and check to ensure they are in proper condition.

> If you find damage, file a claim with the delivery carrier. Polycom is not responsible for damage sustained during shipment of this product.

Install RealPresence Capture Server

After you unpack and examine the product package and remove all of the components from their containers, you can start to install the product.

To install RealPresence Capture Server:

1 Place the RealPresence Capture Server unit on a stable flat surface.

2 Peel off the protective film from the top and bottom of the appliance.

3 If appropriate, install the rack-mount rail kit following the instructions provided.

4 Place the appliance in a properly ventilated equipment rack (shelf or rails) or similar environment.

5 Insert the power cable connector into the rear of the chassis and connect it to an appropriately rated socket outlet.

6 Connect a network cable to LAN 1 on the back of the unit.

7 Power on the system.

Hardware Specifications

The following table shows the hardware specifications for the RealPresence Capture Server.

Hardware Specifications

Component	Description
CPU	Dual Intel® E5-2620 (single for China 6/3 port license) @ 2.0 GHz 12 cores Note: The hyper-thread core is 24.
RAM	32GB (16 GB for China 6/3 port license) DDR3 ECC Registered memory
System storage	2.5 inch 120 GB SSD used for system image and database.
Local media storage	Supports up to 4 TB storage: 4 * 3.5 inch 2TB removable hard disk with RAID 10.
	Supports up to 2 TB storage: 4 * 3.5 inch 2TB removable hard disk with RAID 1. (For 6/3 port license which is available in Chinese market)

Web Browser Requirements

The following table shows the web browser requirements for RealPresence Capture Server.

User Portal Web Browser Requirement

Operating System	Browser Name	Version
PC (Windows 7, and Windows 8)	Internet Explorer	9, 10, 11
	Firefox	32, 33
	Chrome	38, 39
MAC OS-X (Intel-based Leopard, Snow, and Lion)	Safari	7.1, 8.0
	Firefox	32, 33
	Chrome	38, 39
iOS 7, 8	Safari	7.1.2, 8.1.1
Andriod phone and tablet	Android browser	4.3, 4.4.2

To save your media files on a network file system:

1 Click **Configuration > Media Storage Settings**.
2 Choose from the listed Media Storage policies.

   If select policy other than **"Local Storage First"**, you need to configure following settings for network file system.
3 Configure the following settings for the network file system.

Media Storage Setting

Parameter	Description
NFS Server Name	Enter a name for the NFS server.
NFS Server Address	Enter an address of the NFS server.
NFS Storage Folder	Specify the folder path to the NFS storage. Note: Make sure the NFS server is set up beforehand.
Test	Test whether the NFS server is reachable.

Synchronize archives when storage setting changed	When this option is checked, the archives on the storage will be synced up with the archive record in the system database, and could be viewed from portal (viewer or admin). The sync-up action takes effect after the system restarts.
Send warning e-mail to Admin when remaining NFS free space reaches: (GB)	Set a NFS storage space threshold. You can set a value in the range of 10-50GB. After the system reaches the threshold, RealPresence Capture Server will send notifications to specified receivers.
Send warning e-mail to Admin when remaining LOCAL free space reaches: (GB)	Set a local storage space threshold. You can set a value in the range of 10-50GB. After the system reaches the threshold, RealPresence Capture Server will send notifications to specified receivers.

    4   Click **OK.** The server restarts to apply your changes.

Initial System Configuration

To configure the system for use, you need a compatible web browser to access and use the Administration user interface (Hereafter referred to as Admin Portal) to achieve this. The initial configuration consists of three steps:

- Obtain the Product Activation Key from Polycom
- Set the RealPresence Capture Server IP address
- Set up the Gatekeeper

Obtain Product Activation Key from Polycom

You must activate the license shipped with your order with the product serial number (you can find this by choosing **Admin > Product Activation)** identified within RealPresence Capture Server v1.7.

To obtain the product activation key:

    1   Obtain the serial number from rear panel of the Capture Server system. Write it down for later use.

    2   Enter the following web site address in the address bar of the web browser: support.polycom.com. and go to **Support Home**.

    3   Go to **Licensing & Product Registration > Activation/Upgrade**.

    4   Click **All other Polycom Products** in the pop-up window.

    5   Enter your e-mail address and password to log in to or register for a new account.

    6   Follow the page prompts step by step to generate the Key Code required for system activation.

    7   Enter the **Serial Number** you recorded and click **Next**.

    8   Follow the page prompts step by step to generate the Key Code required for system activation.

    9   Note down the activation key (Key Code) on the page and click **Upgrade**.

    10 Go back to Capture Server Admin Portal and activate the system under **Admin > Product Activation**.

Configure IP Settings through Console

You can configure IP settings from either Capture Server system's Console or Admin Portal.

To view the system IP address in the RealPresence Capture Server's console:

1   Connect a VGA monitor to VGA interface of the RealPresence Capture Server system, and connect the USB keyboard to the USB interface of the Capture Server system.

2   Open the console of your RealPresence Capture Server.

3   The default console display is shown in the next illustration

4   The IP address displayed on console is shown in the above illustration, the default IP address is **https://192.168.1.254**

5   Assign the system a static IP from the RealPresence Capture Server's console.

6   Type **Alt+F2** keys to go to the login screen.

7   Enter the user name and password (both are *polycom* by default).

8   Set RealPresence Capture Server a static IP or DHCP for LAN interface using `Network Settings` command, refer to Network Settings for details.

    Note: After you are finished with DHCP setting configuration, go to console and get the IP address information assigned by DHCP server.

9   After you set the IP, the Capture Server system will ask if you want the changes, click **Yes** to reboot.

To view the system activation status:

»   Go to **Admin > Product Activation**. Below system information are displayed:

Parameter	Description
License Type	Permanent license.
Software Version	Current version of the software running on the system.
Serial Number	The product serial number

Activation Status	Whether the system is activated, after the system is successfully activated, **Active** displays.
Max Recording Ports	Maximum number of recording ports supported by the system.
Max Live Streaming Ports	Maximum number of live streaming ports supported by the system.
Max Streaming Sessions	Maximum number of video-on-demand and live streaming sessions supported by the system. Base: 250. Note: After purchasing and activating the license, the streaming sessions capacity will be increased from 250 to 500.
Media Encryption	Whether the AES encryption function of the system is activated. This is a charged function. You can use it only after purchasing and activating the license.
Streaming without recording (no archive)	Whether the streaming without recording function of the system is activated. This function is activated by default, the system performs live streaming without recording and no archives are generated.
Timecode Watermark	Whether the basic timecode watermark capability for transcoded mp4 on-demand files is activated. On-demand archives can be output with basic timecode watermarking.

Configure IP Settings through Admin Portal

The RealPresence Capture Server system supports both IPv4 or IPv4 & IPv6 network communications. You can configure parameters to be used for network communication, including system IP address, DNS server, NAT server.

The RealPresence Capture Server system supports IPv6 system management.

To set IP:

   1   Go to **Configuration > IP Settings** and configure the following settings:

Set IP Parameters

Parameter	Description
Enable Network Separation	Select this check box to route the management, streaming traffic and video call traffic through LAN 1 and LAN 2 interfaces separately. This offers higher security for the signaling data.
Obtain an IP Address Automatically (DHCP)	If you select this radio button, RealPresence Capture Server obtains an IPv4 address automatically via DHCP. **Note:** Obtaining an IP address automatically is not recommended. For best results, assign a static IP to RealPresence Capture Server.

Using the following IP Address	• **IP Address:** the IP address of the system. • **Subnet Mask:** the subnet mask of the system. • **Default IPv4 Gateway:** the address of the interface to use for accessing the IPv4 gateway. • **Preferred DNS Server:** the preferred DNS server address for the system to resolve domain names. • **Alternate DNS Server:** the alternate DNS server address for the system to resolve domain names.
Enable IPv6	Specify whether to enable IPv6 related functions.
Obtain an IP Address Automatically (IPv6)	Specify whether to obtain the IPv6 address automatically using Stateless Address Auto-configuration (SLAAC). **Note**: Obtaining an IP address automatically is not recommended. For best results, the system should be configured with a static IP address.

Using the following IP Address (IPv6)	Select this option to manually configure a static IPv6 address:
	• **Link Local Address**: Specify an address for link local communication.
	  Routers do not forward packets with link local addresses.
	• **Site Local Address**: Specify an address for site local communication.
	  Routers do not forward packets with site local addresses.
	• **Global Address**: Specify one or several address for communication with external IPv6 networks. Separate several addresses with a comma (,).
	• **Default IPV6 Gateway:** Specify the address of the interface to use for accessing the IPv6 gateway.

Enable ICMP V6 DAD	Specify whether to enable Duplicate Address Detection (DAD) to ensure the IPv6 address set to the system is unique in the local network.
Enable ICMP Echo	Specify whether to allow the system to respond to an ICMP (Internet Control Message Protocol) echo request (Ping) sent from other devices in the network. In some high-security environments, you may need to disable this option to protect the system from Ping attacks.
MTU	Specify the Maximum Transmission Unit (MTU) size.
LAN Speed	Specify the speed or duplex modes for the LAN port. Select **Auto** to let the system set the speed automatically. **Note:** When setting the LAN port speed, contact your network administrator to ensure that the switch link rate matches the system port speed.
NAT Public (WAN) Address	Set the external IP address in Network Address Translation (NAT) environment. NAT environments use private internal IP addresses for devices within the network, while using one external IP address to allow devices outside the LAN to access Capture Server Web Portal, view live streaming or VoD playback.

2 Configure the following general settings:

General System Network Parameters

Parameter	Description

| Host Name | Specify the host name of the system. |
| Domain | Specify the domain name of the system. |

3 Click **Add** to add static routes. You need to enter the following information for each route:

Set Route Parameters

Parameter	Description
Destination	Specify the IP address of the destination network.
Gateway	Specify the IP address of the gateway to access the destination network.
Subnet Mask	Specify the subnet mask for the destination network.

4 Click **OK**. The system restarts to apply your changes.

Set up the Gatekeeper

If a gatekeeper is configured on your network, you can register RealPresence Capture Server to the gatekeeper to simplify calling.

To register the system to a gatekeeper to make H.323 calls:

1 In the web browser's address line, enter the system's IP address in this format: **https://<system IP address>/admin**.

2 Go to **Configuration > Signaling Settings > H.323**.

3 Select **Register To Gatekeeper**.

4 Configure the following settings. After you finish the configuration, click **OK**.

Parameter	Description
Gatekeeper type	Choose between **Polycom** and **Cisco VCS**.
Primary Gatekeeper	Indicates whether the system is registered to the primary gatekeeper.
Gatekeeper Address	Specify the IP address for the gatekeeper. Note: Never enter Capture Server's IP address.
Gatekeeper Port	Specify the port number for the gatekeeper, the default value is 1719.
Register User Information for Gatekeeper	Specify whether to register the system to a Polycom Gatekeeper server for H.235.0 authentication. When H.235.0 authentication is enabled, the gatekeeper ensures that only trusted endpoints are allowed to access the gatekeeper.
Gatekeeper User	Specify the user name for registration with the Polycom Gatekeeper server.
Gatekeeper Password	Specify the password for registration with the Polycom Gatekeeper server.

Alternate Gatekeeper	Indicates whether the system is registered to the alternate gatekeeper. **Note**: The alternate gatekeeper is used only when the primary gatekeeper is not available.
System Prefix / E.164	Specify the E.164 number for the system.
System H.323 Alias	Specify the H.323 alias for the system.
Remote Display Name	Specify the name to be displayed to the far end. Note: If you set the remote display name with dual-bytes characters like Chinese, you will not see the characters on the far end endpoints in a H.323 call between endpoints and the Capture Server system.

Record and View Meetings

The following topics demonstrate how to record your first video call, view the live streaming, play VoD and live streaming, and how to play back media archives in a compatible web browser.

- User Interfaces
- Start a Recording
- Play Back Media Archives
- View Live Streams

User Interfaces

RealPresence Capture Server provides four interfaces that are used for specific purposes:

- Web-based Admin Portal: Accessed via a compatible web browser, the Admin Portal is used to configure the system, set up recording parameters, monitor system use and health, dial out to endpoints to record meetings, disconnect calls in progress, create different transcoded versions of archived calls, download media files, and give admin users a quick way to access and play archives and live streams.
- Web-based Viewer Portal: Accessed via compatible device/web browser (PC/MAC, iOS and Android), the Viewer Portal UI is used to find, navigate, search, play archives and live streams.
- TV user interface (also called the "TVUI"): Accessed via standards-based video conferencing endpoints, this interface can be used to record meetings.
- Console: Accessed via VGA interfaceor SSH, console is used to view/change IP settings and reboot the system.

For more information, see the User Guide.

Start a Recording

You can start recording in RealPresence Capture Server using one of the following methods:

- Call from RealPresence Capture Server to an interoperable endpoint from Admin Portal.
- Call from RealPresence Capture Server to an interoperable endpoint from User Portal.
- Call RealPresence Capture Server from an interoperable endpoint.
- Start a recording from Polycom RMX system via recording link.
- Schedule a meeting on RealPresence Media Manager and connect the RealPresence Capture Server to an endpoint.

To start a recording from the Admin Portal:

1 Access Capture Server admin portal by its IP address or host domain name from a compatible browser.

2 Enter the user name and password to log in to the system.

3 Go to **Home.** In the **Signaling Connection** area, click **Dial out to record**.

4 Configure the following settings:

Parameter	Description
Address	Specify the calling address. The system supports entering the calling address with an extended service number in the address box. If you call a H.323 system, you can dial out to endpoints by entering the numbers in the following formats: • [far end E.164 prefix] - Use when every system has registered to a gatekeeper. 　For example, if a far end system E.164 prefix is 9988. • [Far End H.323 ID]- Use when every system has registered to a gatekeeper. 　For example, if a far end system H.323 ID is CS9988. • [Far End IP Address]- Use when a system has not been registered to a gatekeeper. 　For example, if a far end system IP address is 172.22.33.44.
Signal	Set the H.323 or SIP network type for the system to place a call. Your choice depends on the call type used by the peer device.
VRR Name	Click **Select** to select a virtual recording room (VRR). You can use the built-in default VRR, or one you have created.
Event Name	Specify a unique name for this event.
Max Call Rate (Kbps)	Display the maximum call rate specified in VRR.

5 Click **OK**.

> • **Dial out to record** is also available under **Call** menu from Admin Portal.
> • The recording starts immediately if **Start Recording Immediately** is enabled in the selected recording template.
> • Unlike administrators, normal users can only view and manage calls started by themselves.

Dial in from Endpoint

You can start recording by dialing RealPresence Capture Server or dial in to a VRR directly to start recording.

To start recording by dialing RealPresence Capture Server:

» Enter the E.164 prefix or H.323 ID or SIP URL of RealPresence Capture Server on the user interface of an interoperable endpoint, for example, from remote control of HDX or Group Series.

If your system or endpoint is not registered to the gatekeeper or to a SIP server, call the system IP address instead.

You can also dial in to a VRR directly to start recording by dialing one of the following:

For H.323 calls

● `[RealPresence Capture Server IP]##[VRR number]`

For example, if the `RealPresence Capture Server IP is 11.12.13.14,` and the VRR number is `4096,` dial *`11.12.13.14##4096`*.

● `[RealPresence Capture Server E.164 prefix][VRR number]`

For example, if the RealPresence Capture Server E.164 prefix number is 8888, and the VRR number is 4096, dial *`88884096`*.

For SIP calls

● `[VRR number]@[RealPresence Capture Server IP]`

For example, if the `RealPresence Capture Server IP is 11.12.13.14,` and the VRR number is `4096,` dial *`4096@11.12.13.14`*.

● `[SIP peer prefix][VRR number]`

If the system has been registered to a SIP server, the SIP server should configure CaptureServer as a SIP peer. For example, if the SIP peer prefix of the Polycom RealPresence Capture Server system is 8888 and the VRR number is 4096, the dial string should be 88884096.

Record from RMX via Recording Link

If you configure the Recording Link function on the Polycom RMX series conference platform and integrate the platform with the RealPresence Capture Server, the RealPresence Capture Server can be called automatically for recording when a multi-point conference is hosted through MCU.

For more information about configuring the Recording Link function on the RMX, refer to the User Guide provided with the RMX system.

Change Conference Layout for MCU hosted calls

Once the Recording Link function is enabled on RealPresence Collaboration Server system (version 8.4 or higher), If you dial into a conference which is hosted through MCU, the conference layout type can be changed once the call is connected. It's for SIP calls only. You can also set conference layout type in a recording template.

To set conference layout type in a recording template

1 Go to **Template > Recording Templates**.

2 Select a recording template you want to edit.

3 Click **Edit**.

4 Choose from the **Conference Layout** drop-down list:

➢ AUTO **Auto:** Automatic layout according to conference setting at RMX side to recording server

> **1x1:** Single view to recording server.

> **1x2:** Dual view to recording server.

To change conference layout type for an ongoing call

1 Go to **Signaling Connection** and click

2 Choose from the following layouts:

> **Auto:** Automatic layout according to conference setting at RMX side to recording server

> **1x1:** Single view to recording server.

> **1x2:** Dual view to recording server.

 When an endpoint or MCU tries to connect by directly dialing the IP address or E.164 prefix of the RealPresence Capture Server system, the default VRR parameters are used to record. You can directly start recording using recording parameters defined in a VRR by adding the VRR number to the dial-in number.

If the RealPresence Capture Server system is configured in connection with a Polycom RMX series system through the recording link, you can specify the VRR to be used by adding the VRR number in the **Recording Link** field on the Polycom RMX system. For more information, refer to the Polycom RMX system Administrator's Guide.

For prefix+VRR format, you need to add SIP Peer to Polycom DMA server, for details, refer to the Polycom DMA server's Administrator's Guide.

 With the newly added Annex-O support, you can start recording by dialing one of the following:

• For incoming calls to Capture Server, the dial-in number is [VRR number]@[RealPresence Capture Server IP address].

• If you call from RealPresence Capture Server to an interoperable endpoint such as Polycom HDX Series system, the dial-out number is [RealPresence Capture Server E.164 suffix]@[HDX IP Address] or [RealPresence Capture Server H.323 ID]@[HDX IP Address]

• If you call from RealPresence Capture Server to a MCU, the dial-out number is [Conference ID]@[RMX IP Address]

Point-to-point Recording

Point-to-point recording allows a user to dial out to two endpoints from the Capture Server Admin Portal or User Portal, and record the two sites into same recording file.

To start point-to-point recording from Admin Portal

1 In the address line, enter the system's IP address in this format: https://<system IP address>/admin.

2 Enter the user name and password to log in to the system.

3 Go to **Home or Call.** In the **Signaling Connection** area, click **2 Sites Recording**.

4 Enter the addresses of the two H.323 endpoint participants.

5 Click **OK**.

> • For now it is only available in H.323 point-to-point calls.
> • For point-to-point recording from User Portal, refer to To start point-to-point recording from User Portal

Play Back Media Archives

You can play back recorded media archives stored in RealPresence Capture Server using one of the following methods:

● Play back from RealPresence Capture Server system's User Portal.

● Play back from the RealPresence Capture Server system's Admin Portal.

● Download recorded files and play back using compatible media players.

For more information, see the User Guide.

> To view archives and live streams, your device must turn off the pop-up blocker. For example:
> • For iPad: From **Settings > Safari**, make sure the option **Block Pop-ups** is **OFF**.
> • For Android devices: From **Browser > Settings > Advanced**, make sure the option **Block Pop-ups** is **OFF**.
> • For PC Internet Explorer (version 9.0 or above): From **Tools > Internet Options > Privacy**, make sure the option **Turn on Pop-up Blocker** is NOT selected.

To play back archives through the User Portal:

1 Log in to the User Portal.

2 Go to **Archives**.

3 Select the archive you want to play back and click .

4 A new window opens to play the video.

View Live Streams

You can view live streams from both RealPresence Capture Server User Portal and Admin Portal:

● View live streams from the RealPresence Capture Server system's User Portal.

● View live streams from the portal of external media servers, if configured.

To view your live streaming from the User Portal:

1 On a device with compatible web browser, open a supported web browser.

2 In the browser address line, enter the system's portal address, for example, **https://System IP**.

3 Click **Live Streaming** from the menu on the left.

4 Click the **Play** button of the live streaming that you want to play.

For more information of viewing live streams from Admin Portal, see the User Guide.