



GETTING STARTED GUIDE

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# Polycom<sup>®</sup> RealPresence<sup>®</sup> Platform Director<sup>™</sup>



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# About This Guide

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This Guide provides the first time setup information that you need to install and configure a Polycom® RealPresence® Platform Director™ system for the first time. Once you have completed the first time setup, see the *Polycom RealPresence Platform Director Administrator Guide* for additional configuration tasks you can perform.

## RealPresence Platform Director System Editions

The RealPresence Platform Director system is available in an Appliance Edition (for use with a Polycom Rack Server) and a Virtual Edition (packaged as software only).

Most of the functionality described in this document applies to both editions, and so the product references are general—that is, the RealPresence Platform Director system. However, when information applies to a specific edition, the reference will be specific, that is, RealPresence Platform Director, Virtual Edition or RealPresence Platform Director, Appliance Edition.

## Audience, Purpose and Required Skills

This guide is written for a technical audience. You will be configuring system networking, and certificates as well as integrating with a time server, and directory server.

This guide assumes that you are starting with a RealPresence Platform Director system that has never been installed or previously configured.

## Get Help

For more information about installing, configuring, and administering Polycom products, refer to **Documents and Downloads** at [Polycom\\_Support](#).

## Polycom and Partner Resources

In addition to this guide, the available documentation that describes the RealPresence Platform Director system includes:

- *Polycom RealPresence Platform Director Release Notes*
- *Polycom RealPresence Platform Director Administrator Guide*

The documentation is available on the [RealPresence Platform Director](#) support site.

To learn more about Polycom® RealPresence® Platform products, visit [Polycom Support](#) or links to information and downloads for the following:

- Polycom® RealPresence® DMA® 7000
- Polycom® RealPresence® Resource Manager
- Polycom® RealPresence® Access Director™
- Polycom® RealPresence® Collaboration Server
- Polycom® RealPresence® Web Suite
- Polycom® RealPresence® Media Suite

To find all Polycom partner solutions, see [Strategic Global Partner Solutions](#).

VMware vSphere support and documentation is available at:

- <https://www.VMware.com/support/pubs/vsphere-esxi-vcenter-server-pubs.html>
- <https://my.VMware.com/web/VMware>

Microsoft Hyper-V support and documentation is available at:

- <https://technet.microsoft.com/en-us/library/hh831531.aspx> (Hyper-V in Windows Server 2012 R2)
- <https://technet.microsoft.com/library/hh833684.aspx> (Hyper-V Server 2012 R2)

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## The Polycom Community

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# Preparation for System Installation

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The sections that follow describe the steps required to perform the initial installation and setup of a Polycom RealPresence Platform Director system including:

- [Get Licensing Information](#)
- [Prepare Client System](#)
- [Get Needed Credentials](#)
- [Confirm Required Portsareavailable](#)
- [Download Software](#)
- [Reserve IP address](#)
- [Configure DNS](#)
- [Complete the Setup Worksheet](#)
- [Confirming Desired Functionality \(VMware Only\)](#)

## Get Licensing Information

Obtain the URL and login credentials for the Polycom Licensing Center. Both are contained in the email that Polycom sent to your organization to confirm the purchase of license entitlements for any RealPresence Platform products, or RealPresence Web Suite products.

## Get Needed Credentials

Ensure you have the correct credentials needed for the installation.

- For a Hyper-V deployment, the server name and log-in credentials of the Microsoft Hyper-V server that will host the RealPresence Platform Director system, or if applicable, the Microsoft System Center Virtual Machine Manager (VMM) that manages the Hyper-V host(s).
- For a VMware deployment, ensure that your VMware user login has permission to deploy OVF/OVA files.
- If deploying in a vCenter environment and you want to use RealPresence Platform Director to deploy software and monitor your VM infrastructure, you need to obtain administrator login credentials for the vCenter environment where RealPresence Platform Director is being installed.
- See [Appendix 1: Required vCenter Permissions](#) for information on specific permissions required.

## Confirm Required Ports are available

Confirm that the required ports are available. For a list of ports used in a RealPresence Platform Director installation, see Appendix 1 of the RealPresence Platform Director Administrator Guide.

## Download Software

Download the RealPresence Platform Director \*.zip file (for Hyper-V), \*.ova file (for VMware), or ISO image (for Appliance Edition) from its [Polycom Support](#), and note the location of the file on your network.

## Reserve IP address

Allocate an IP address for the RealPresence Platform Director instance, and note the network mask and default gateway to be used with the address.

Although the RealPresence Platform Director can be used in a carefully configured DHCP environment that guarantees an unchanging IP address, Polycom recommends that you allocate and configure a static address for the instance.

## Configure DNS

Obtain the names and IP addresses of the DNS servers on your network that will resolve the domain and other system names for the RealPresence Platform Director instance.

Assign a local host name to identify the RealPresence Platform Director instance within your organization's root domain. The host name and root domain names together constitute the fully qualified domain name (FQDN) that allows users to access the instance and administrator console with a web browser. Configure this FQDN on the appropriate DNS server or servers.

## Complete the Setup Worksheet

As you prepare for deployment of the RealPresence Platform Director system, use the following worksheet to record the information needed for your system.

Field	My System Values	Description
<b>Network Settings</b>		
IP Address (IPv4)		Static, physical IP address for the RealPresence Platform Director system.
Network Mask		Network subnet mask to be used with the IP address assigned to the RealPresence Platform Director.
Default Gateway		IP address of the gateway server/router.



Field	My System Values	Description
DNS server names		Names of the domain name servers on your network that will resolve the domain and other system names for the RealPresence Platform Director instance.
DNS server IP addresses		IP addresses of the domain name servers.
Local host name		Host name to identify the RealPresence Platform Director instance within your organization's root domain. The host name and root domain names together constitute the fully qualified domain name (FQDN) that allows users to access the instance and administrator console with a web browser.
<b>Virtual Environment Information</b>		
Provider Name		For a VMware vCenter environment, a unique name for the provider in your vCenter. Not applicable to a Hyper-V or non-vCenter VMware environment.
URL		The IP address or FQDN of the server you log into in order to deploy the system in your virtual environment.
User name		The login name of the user that has permission to deploy the software.
Password		The password for the user.

## Prepare Client Systems

To log into the RealPresence Platform Director system, you need a client system running Microsoft® Windows® with the following hardware and software:

- A computer running Microsoft® Windows® with the following hardware and software:
  - Hardware
    - 1024x768 (SXGA) minimum display resolution; 1400x900 (WSXGA+) or greater recommended
    - Ethernet ports (Appliance Edition only)
  - Software
    - Browser: the current version of Mozilla Firefox or Google Chrome™

## Confirming Desired Functionality (VMware Only)

In a VMware environment, you can deploy RealPresence Platform Director within a vCenter or any EXSi host or cluster. But if you want to use RealPresence Platform Director to deploy RealPresence Platform Virtual Editions and monitor your VM infrastructure, you must have vCenter and you must have the correct write permissions to instantiate a virtual instance within vCenter.

See [Appendix 1: Required vCenter Permissions](#) regarding the specific permissions required for RealPresence Platform Director to deploy instances and monitor your VM infrastructure.

VMWare Environment	RealPresence Platform Director Functionality
infrastructure	
vCenter with appropriate permissions	Full functionality
vCenter with read-only permissions	Cannot use "Create a new instance" Cannot power on, power off, or delete instances
vCenter with no permissions	Cannot use "Create a new instance" or "Add new virtual instance" Cannot monitor VM infrastructure Cannot power on, power off, or delete instances
Non-vCenter environment	Cannot use "Create a new instance" or "Add new virtual instance" Cannot monitor VM infrastructure Cannot power on, power off, or delete instances

# System Installation

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The RealPresence Platform Director system is available either a Virtual Edition or Appliance Edition.

This section includes the following topics:

- [Virtual Edition Installation](#)
- [Appliance Edition Installation](#)

## Virtual Edition Installation

RealPresence Platform Director can be installed in a virtual environment with a Microsoft Hyper-V infrastructure or VMware infrastructure. Follow the instructions for your environment. This section includes the following topics:

- [Install the System in a VMware Environment](#)
- [Install the System in a Hyper-V Environment](#)

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**Note:** The speed of your network determines how quickly the image loads. Completing the RealPresence Platform Director deployment can take as little as five minutes or as long as an hour or more.

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## Install the System in a VMware Environment

The installation package for deploying an instance of the RealPresence Platform Director system in a VMware environment is delivered as a VMware Open Virtual Appliance (OVA) Template file.

A vSphere client connected to an ESXi server or vCenter can be used to deploy the RealPresence Platform Director OVA Template in your VMware virtual environment. Use your data center's standard VMware deployment procedure. If necessary, consult the appropriate documentation at [vmware.com/support.html](http://vmware.com/support.html).

After the RealPresence Platform Director instance is deployed and running, perform the initial configuration described in [Initial Configuration](#).

## Install the System in a Hyper-V Environment

The installation package for deploying an instance of the RealPresence Platform Director system in a Hyper-V environment is delivered as a Hyper-V Export (.zip) file, which contains:

- A Virtual Hard Disk (VHD) file containing the Platform Director application running on the CentOS 6.6 operating system, the most recent version of Microsoft Linux Integration Services (LIS), and the Platform Director system's End User License Agreement (EULA).
- A configuration (XML) file containing information about its virtual machine environment.

Hyper-V Manager or Windows PowerShell can be used to deploy the RealPresence Platform Director VHD in your Hyper-V virtual environment. Use your data center's standard Hyper-V deployment procedures. If necessary, consult the appropriate documentation at [technet.microsoft.com](http://technet.microsoft.com).

After the RealPresence Platform Director instance is deployed and running, perform the initial configuration described in [Initial Configuration](#).

## Appliance Edition Installation

If you have ordered an Appliance Edition, you need to set up the appliance. If the RealPresence Platform Director system software is not pre-installed on your server, you can install the system software using a DVD.

You'll need to do the following to install an Appliance Edition

- Review the *Polycom RealPresence Platform Director System Release Notes*.
- [Verify Shipment Contents](#)
- [Unpack and Install the Hardware](#)
- [Create a DVD for the System Software](#)
- [Install the RealPresence Platform Director System Software](#)

## Verify Shipment Contents

Polycom Rack Server shipments include the server and other contents. You should verify the type of server and other contents of your shipment when you unpack the system.

The following table describes shipment contents based on the type of server you purchased. Note that some items may arrive in a separate shipment from the server.

Item	R630	R220
1 Polycom Rack Server	X	X
1 blank USB flash drive	X	X
1 USB flash drive labeled <i>Diagnostics</i> that contains server diagnostics utilities. Use these utilities only under the direction of Polycom Global Services.	X	X
Power cord(s)	May be shipped separately	May be shipped separately
Rail kit	Slide rails with cable management arm	Static rails
Bezel with Polycom badge	X	X
Polycom warranty letter	X	X
<i>Product Information Guide</i>	X	X

## Unpack and Install the Hardware

The RealPresence Platform Director system, Appliance Edition can be installed on the following servers:

- Polycom Rack Server 630 (R630)
- Polycom Rack Server 220 (R220)

You should verify the type of server and other contents of your shipment when you unpack the system.

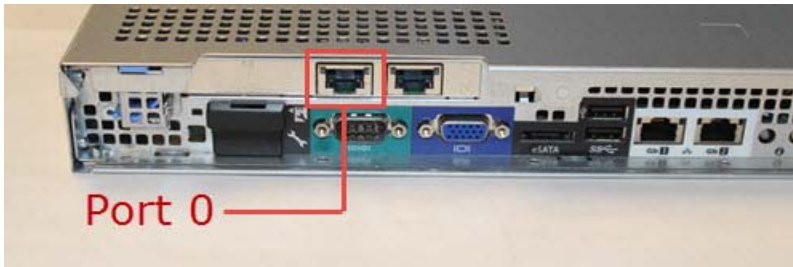
### To unpack and install the hardware:

#### TASK

- 1** Examine the shipping container for damage.  
If you find damage, file a claim with the delivery carrier. is not responsible for damage sustained during shipment of this product.
- 2** Open and review the container packing slips.
- 3** Open the container and examine the contents for damage.  
If you find damage, file a claim with the delivery carrier. Keep all shipping materials in case you need them later.
- 4** Unpack your system and identify each item.  
A single-server RealPresence Platform Director system shipment includes the items listed in [Verify Shipment Contents](#).
- 5** Assemble the rails and install the server in the rack.  
To rack-mount a server, see the following instructions:
  - Polycom Rack Server 630 (R630) server:  
<http://www.dell.com/support/home/us/en/04/product-support/product/poweredge-r630/manuals>
  - Polycom Rack Server 220 (R220) server:  
<http://www.dell.com/support/home/us/en/04/product-support/product/poweredge-r220/manuals>
- 6** Connect the server's power cable(s) to the server and connect a VGA cable from the server to the monitor.
- 7** Connect all power cables into a grounded electrical outlet or separate power source, such as an uninterruptible power supply (UPS) or power distribution unit (PDU).
- 8** Connect a monitor and keyboard to the server.
- 9** Press the power button on the server and on the monitor.  
The power indicators should light.
- 10** Create one access password for the system BIOS.
- 11** Set the correct system time in the system BIOS.
- 12** Install the bezel (optional).
- 13** **For Polycom Rack Server 630 (R630) servers only.** Connect the **GB 1** Ethernet port to the enterprise network.  
The GB 1 Ethernet port is the eth0 network interface, which must be used for this purpose.

- 14 For Polycom Rack Server 220 (R220) servers only:** Connect the **Port 0** Ethernet port to the enterprise network.

The Port 0 Ethernet port is the eth0 network interface, which must be used for this purpose. It is the port that is furthest left on the back of the server.



**Figure 1:** Port 0 Location for Polycom Rack Server 220

## Create a DVD for the System Software

If your RealPresence Platform Director, Appliance Edition does not have the system software pre-installed, you need to download the software ISO image from the Polycom Support site, burn it onto a blank DVD, then use the DVD to install the software onto the RealPresence Platform Director server.

### TASK

- 1 Download the RealPresence Platform Director software ISO image from [Polycom Support](#) to your Windows client system.
- 2 Insert a blank, recordable DVD into your DVD-RW drive.
- 3 Using your DVD recording software, burn the ISO image onto the DVD.
- 4 Verify that the ISO image burned successfully to the DVD, then remove it from your client system.

## Install the RealPresence Platform Director System Software

You can install the system software using the RealPresence Platform Director system DVD.

### To install the system software manually:

### TASK

- 1 Insert the DVD into the server.
- 2 Turn on the server.  
Installation will be done automatically.

# Initial Configuration

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After installing the RealPresence Platform Director system successfully, you need to perform the following tasks before using the system.

- [Configuring the New Instance in the Polycom Management Console](#)
- [Log into the RealPresence Platform Director System](#)
- [Activate the Available Licenses](#)

After finish the initial configuration, you can start from [Set up Basic Configuration](#) in the RealPresence Platform Director system.

## Configuring the New Instance in the Polycom Management Console

The initial configuration of a new RealPresence Platform Director instance is performed using the Polycom Management Console. After completing this initial configuration, you can log into the new system, finish setting it up, and use it to deploy, license, and monitor other RealPresence Platform products.

The initial configuration involves the following tasks.

- [Open the Polycom Management Console](#)
- [Stop RealPresence Platform Director Services](#)
- [Configure the Basic Network](#)
- [Configure the DNS Server Settings](#)
- [Set the FQDN for the Instance](#)
- [Generate a Self-Signed Security Certificate](#)
- [Restart RealPresence Platform Director Instance](#)

Polycom recommends assigning a static IP to the RealPresence Platform Director instance. To do so, perform the initial configuration steps in the order listed, which is the order of the numbered options in the Polycom Management Console menu.

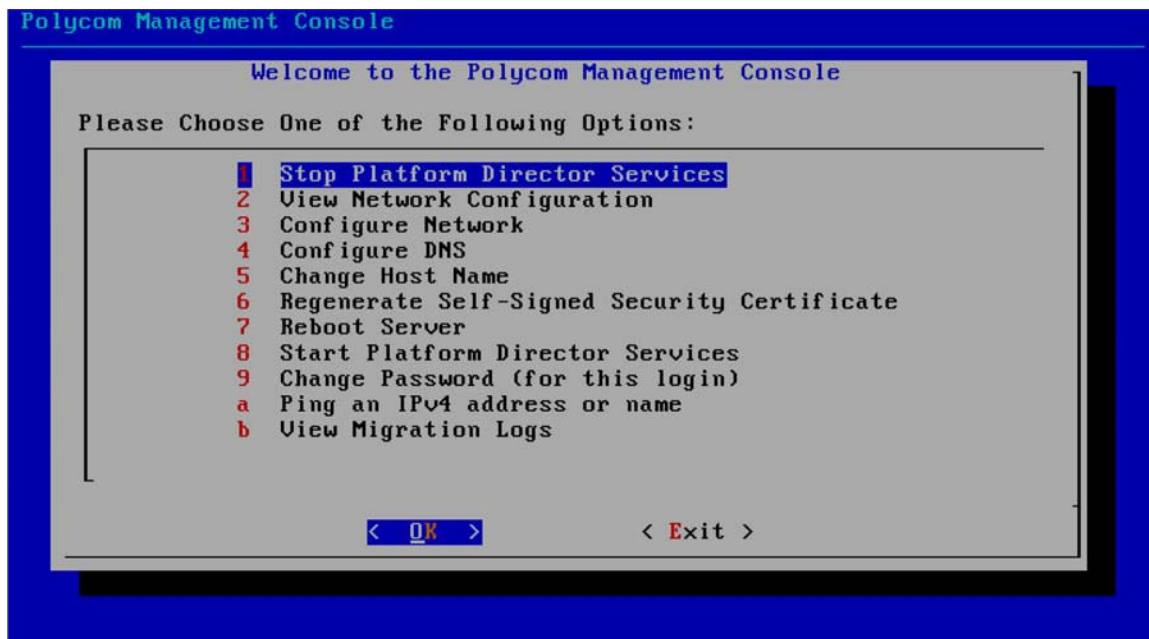
If you choose to use DHCP to assign IP and related network information to the RealPresence Platform Director instance, you can skip the network configuration steps and then generate a security certificate to make the instance available in your network environment.

## Open the Polycom Management Console

When the image deployment is complete (for Virtual Edition) or the installation is complete (for Appliance Edition), open the Polycom Management Console. This console helps you configure the RealPresence Platform Director instance to run in your virtual environment.

### TASK

- 1 Open the Polycom Management Console.
  - For Virtual Edition, in the vSphere or Hyper-V client connected to the VM on which you deployed the instance, select the new instance and select Console. Click in the Console and at the localhost login prompt, type `polycom` for both the user name and password.
  - For Appliance Edition, after the installation, at the server login prompt, type `polycom` for both the user name and password (with a monitor and a keyboard connected to the server).
- 2 Start to configure RealPresence Platform Director in the Console as shown next.



With the Polycom Management Console open, you can begin configuring the RealPresence Platform Director instance to run in your virtual environment.

**Note:** Polycom recommends changing the Management Console password for the Polycom user. To change the password, select option 9- Change Password (for this login). Follow the prompts to change the password.

## Stop RealPresence Platform Director Services

To begin configuring the RealPresence Platform Director instance, you must first stop the RealPresence Platform Director services.



## TASK

- 1 From the Polycom Management Console menu, select option **1-Stop Platform Director Services**.
- 2 Select **Yes** in the confirmation window.

You can move to the next step when a message confirms the services have been stopped. If a message reports that a service failed to stop, you can continue. But later, when it is time to restarts the instance, select option 7-Reboot Server, not option 8-Start Platform Director Services.

## Configure the Basic Network

You must associate a network card and IP address with the RealPresence Platform Director instance.

## TASK

- 1 From the Polycom Management Console menu, select option **3-Configure Network**.
- 2 In the **Choose Network Interface** window, select the network interface card to control the Ethernet connection to the server.
- 3 In the **Choose Interface Mode** window, do one of the following:
  - To set a permanent IP address for the network card (recommended), select option **1-Static address setup**. Then, in the next window, enter the IP address, network mask, and default gateway, and select **OK**.
  - To assign an address dynamically, select option **2-Set DHCP On**.  
The system stops the network services and restarts them with the new IP settings.
- 4 From the Polycom Management Console menu, select option **2-View Network Configuration**.
- 5 In the **Current Network Setup** window, verify that the network settings are correct.
- 6 Select **OK** to return to the Polycom Management Console menu.

## Configure the DNS Server Settings

The DNS server settings identify the server(s) that RealPresence Platform Director uses to resolve host names.

## TASK

- 1 From the Polycom Management Console menu, select option **4-Configure DNS**.
- 2 In the **DNS Configuration** window, specify the **Domain**, **Search Domain**, and **Name Server** settings for at least one and up to three DNS servers.
- 3 Select **OK** to return to the Polycom Management Console menu.

## Set the FQDN for the Instance

Next, set the fully qualified domain name (FQDN) for the RealPresence Platform Director instance you are installing.

## TASK

- 1 From the Polycom Management Console menu, select option **5-Change Host Name**.

- 2 In the **Change Host Name** window, use the Delete or Backspace key to delete the default **localhost.localdomain** name setting.  
Then type the new host name along with your organization's domain to form the fully qualified domain name to be used to access the RealPresence Platform Director system from a web browser.
- 3 Select **OK** to return to the Polycom Management Console menu.

## Generate a Self-Signed Security Certificate

Because RealPresence Platform Director requires HTTPS to secure data transactions, you must generate a new self-signed trust certificate before you complete the configuration and open the RealPresence Platform Director administrator interface for the first time.

### TASK

- 1 From the Polycom Management Console menu, select option **6-Regenerate Self-Signed Security Certificate**.
- 2 In the confirmation window, click **Yes** to regenerate the certificate.  
The certificate is generated and the Polycom Management Console menu returns.

After you have completed the configuration and logged into the RealPresence Platform Director management interface, you can update your certificate configuration as required. See the *RealPresence Platform Director Administrator Guide* for information regarding certificate management.

## Restart RealPresence Platform Director Instance

To apply new configuration settings, you must restart the RealPresence Platform Director instance.

### TASK

- 1 From the Polycom Management Console menu, select option **7-Reboot Server** to reboot the VM entirely (slower, but safer) or option **8-Start Platform Director Services** to just restart the services without restarting the OS (faster).  
If a service failed to stop earlier, select **option 7-Reboot Server**.
- 2 In the confirmation window, click **Yes**.

With either option, the RealPresence Platform Director application starts automatically. After the restart is complete and the application is fully functional (3-5 minutes), you can log into the system and finish configuring it for basic operation.

## Log into the RealPresence Platform Director System

Log into the RealPresence Platform Director system using a supported web browser. For a list of supported web browsers, see the release notes.

## TASK

- 1 In the address bar of a supported web browser, type the address of the main login page using the IP address or FQDN of the instance, as follows:  

```
https://[IP address or FQDN for the RealPresence Platform Director instance]
```

The RealPresence Platform Director login screen opens.
- 2 Do one of the following:
  - If this is your first time logging into this instance, enter admin in the **User ID** field and Polycom12#\$ in the **Password** field. Accept the End User License Agreement (EULA), and then follow the prompt to change the admin password.
  - If this is not your first time logging into this instance, enter the correct admin password.  
The initial login may take a minute or more.  
On the first login, the menu includes only **License Management**, and the License Setup page is displayed. The full menu becomes available after you set up licensing.

## System License

Licenses for the RealPresence Platform system must be activated and validated before you can use RealPresence Platform Director to manage your RealPresence Platform system.

Setting up licensing for the RealPresence Platform system involves the following steps:

- [Create a License Server in the Polycom Licensing Center](#)
- [Activate the Available Licenses](#)

### Create a License Server in the Polycom Licensing Center

When your organization purchased licensing for RealPresence Platform Director, Polycom sent an email containing a URL and login credentials for the Polycom Licensing Center. Use that information to log into the Polycom Licensing Center, set up RealPresence Platform Director as a license server, and manage your Polycom RealPresence licenses.

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**Note:** If your RealPresence Platform Director instance does not have direct access to the internet, you can log into the Polycom Licensing Center from a computer that does have internet access and then use the offline process to activate the license. With the offline process, you can download a license file from the Licensing Center and then upload it into the virtual Platform Director environment.

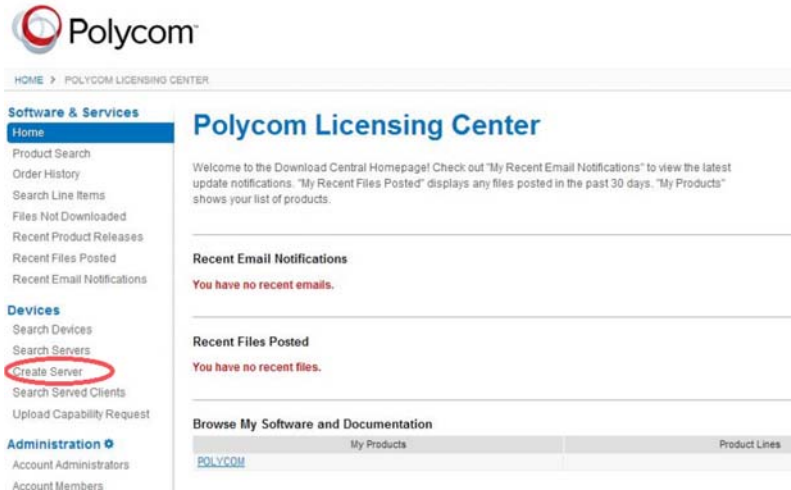
---

## TASK

- 1 In the RealPresence Platform Director management interface, go to **License Management > Setup**.  
A message indicates that the system is not licensed or the license has expired on the **LICENSE SETUP** page.  
Keep the LICENSE SETUP page open so that you can refer to the system identifier again in the next steps. To activate RealPresence system licenses on the Polycom Licensing Center site, you need this System Identifier number.

- In a different browser window, log into the Polycom Licensing Center using the URL and credentials sent to you.

A successful login opens the **Polycom Licensing Center** page.



- On the **Polycom Licensing Center** page, click **Create Server** to open the **Create Server** page.
- Enter information as outlined in the following table to create a license server for your RealPresence products.

Field	Value Description
License Server ID	Copy and paste the System Identifier number from the RealPresence Platform Director <b>License Management</b> page.
Backup Device	Currently not supported. Leave this field blank.
ID Type	Select PUBLISHER_DEFINED. Note: This is a change from previous versions, which required an ID Type of VM_UUID.
Alias	(Optional) A unique name for your license server. If your organization deploys more than one, aliases make it easier to identify each specific instance.
Site Name	(Optional) A descriptive name for your Polycom RealPresence license management site.

- Click **Create**.

After the license server is successfully created, the **View Server** page displays your valid License Server ID, ID Type, and Site Name.

Next, you map and generate available licenses to your RealPresence Platform system. See [Activate the Available Licenses](#).

## Activate the Available Licenses

After setting up RealPresence Platform Director as your license server, you must activate the available licenses. You can manage licenses for individual components of your RealPresence system after those components have been added to the system.

### TASK

- 1 On the **Polycom Licensing Center View Server** page, click **Map Add-Ons** to show a list of available units for features your organization has purchased, as shown next.

The screenshot shows the Polycom Licensing Center interface. The main heading is "Map Add-Ons". Below the heading, there are fields for Device ID (42042A28-C9AC-AC9D-F3E1-D34F8E19F947), ID Type (PUBLISHER\_DEFINED), and Alias (pd-rcombs). A table lists available licenses:

Add-On Name	Activation Code	Order	License Term Expiration	Available Units in Line Item	Total Units in Line Item	Qty to Add
RP1 Uni Concurrent Connect Lic	F264-A998-4061-0ECA	<a href="#">TK-10051</a> (93081193)	May 15, 2015	1	1	<input type="text"/>

Below the table is a "Map Add-Ons" button.

- 2 In the **Qty to Add** column for the available licenses, enter the number to allocate to the RealPresence Platform Director instance.

If your organization is installing a single RealPresence Platform Director instance, allocate all of the available licenses to it. If your organization is using two or more RealPresence Platform Director instances, allocate only a portion of the available licenses to the current instance so that the licenses will be available for subsequent instances when they are installed.

- 3 Click **Map Add-Ons** to allocate the licenses.

The **View Server** page returns, displaying a list of the server's licenses. The status for newly-allocated licenses is License not generated. A license must be generated (activated on the component) to allow the corresponding system component to operate within your RealPresence Platform system.

- 4 If you allocated too many license add-on units to this RealPresence Platform Director instance and want to remove some, click **Remove Add-Ons**.

The **Remove Add-Ons** page lists the license add-ons available on this instance.

- 5 In the **Quantity to Remove** field of the add-ons you want to change, enter the number of units to remove and click **Remove Add-Ons**.

The **View Server** page returns, displaying a list of the server's licenses. The status for licenses with newly-removed units is Copies decreasing. The removed licenses must be deactivated within your RealPresence Platform Director system.

- 6 If your RealPresence Platform Director instance does not have access to the internet, click **Download Capability Response** to download a local copy of the license file.

This download allows you to manage RealPresence Platform system licenses offline. Note the location of the license file when you download it to your local computer. You will upload this file to the RealPresence Platform Director instance to activate the licensing.

If your RealPresence Platform Director system has access to the internet, you must use the online method to license the system and its components. The offline method for managing licenses is not an option when internet access is available.

The screenshot shows the Polycom Licensing Center interface. The main heading is "View Server". A message states "The add-ons were successfully mapped." Below this, the license server ID is 42047F95-78B4-7148-8BC0-5A33CD8C0385. The ID type is PUBLISHER\_DEFINED. There is a field for Site Name and an Update button. Below the form are links for "View Add-Ons", "Remove Add-Ons", "View History", "View Shared Clients", and "Download Capability Response". A table titled "Add-Ons" is displayed with the following data:

Add-On Name	Status	Order	Units Shipped	License Term Expiration	Downloadable File
RPI for Concurrent Connect Lic.	License not generated	35,0001 (2014-11-01)	1	May 15, 2015	None

- 7 Return to the **RealPresence Platform Director License Setup** page, and do one of the following:
- Click **Online** if your virtual environment has access to the Internet and can use the online method for managing licenses.
  - Click **Offline** if your virtual environment does not have access to the Internet and therefore requires use of the offline, file-based method for managing licenses. Prompts guide you through the offline update process using the license file you previously downloaded from the Polycom Licensing Center.
- 8 Click **Update** to complete the license activation process.

A successful activation produces an active license notation. After you click **Update**, it may take up to 30 minutes to activate the license, and you may need to refresh the browser window.

After successful license activation, the full RealPresence Platform Director menu and dashboard become available for managing the system and its components.

After properly activating the RealPresence Platform Director license, you must configure the instance so that it can begin managing and monitoring instances of supported RealPresence component products.

## Basic Configuration Setup

To begin operating a new instance of the RealPresence Platform Director system, you must set up a basic configuration. If you are using vCenter, this includes adding a provider and resource group. In all cases, you must set up a zone.

## Set Up a Zone within the RealPresence Platform Director Instance

A zone is a RealPresence Platform Director concept that helps you configure and manage your Polycom video collaboration environment. It encompasses a time zone, one or more Network Time Protocol (NTP) servers, and in a vCenter environment, one or more resource groups.

The RealPresence Platform Director system associates each virtual machine instance that it manages with a zone.

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**Note:** At this time, most RealPresence Platform components support only two NTP servers. Because of this limitation, we recommend referencing only two NTP servers for each zone.

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Each RealPresence Platform Director system must contain at least one zone in which RealPresence component appliances and virtual instances operate. By default, a new system contains a zone named Default Zone. You can add new ones.

### TASK

- 1 Go to **Instance Deployment > Zones** to open a list of current zones.
- 2 To add a new zone, click **+ ZONE**.  
Alternatively, select the **Default Zone** and click **EDIT** to edit it.
- 3 In the **Add a New Zone** page, enter the zone details, as outlined in the following table.

Field	Value/Description
Name	Enter a name (80 or fewer characters) for the zone.
Description	Enter a brief description (100 or fewer characters) for this zone.
Time Zone	Select the time zone for this zone.
NTP Server	Enter one or two NEP servers for this zone.

- 4 Click **ADD** to add the new zone to the RealPresence Platform Director system.  
An alert directs you to add a resource group to the zone. A resource group is necessary only if you are using vCenter. Instances running on an EXSi or Hyper-V host do not require a resource group.
- 5 In a vCenter environment, click **Add Resource Group** to open the **Add a new resource group** page for this zone.  
Then, follow the instructions in [vCenter Only: Set Up a Provider for the RealPresence Platform Director Instance](#).

With a zone in place, you can begin adding other RealPresence Virtual Edition products to your non-vCenter environment. See [Additional Configuration](#).

## vCenter Only: Set Up a Provider for the RealPresence Platform Director Instance

The Provider includes a URL for the VMware vCenter and user account credentials required to create new instances and manage existing ones. In a vCenter environment, at least one provider must be defined for each RealPresence Platform Director instance.

### TASK

- 1 Log into the RealPresence Platform Director system as a user with Super Admin privileges.
- 2 Go to **Instance Deployment > Providers** and click **+ PROVIDER**.
- 3 In the **Add a Provider** page, enter the provider details as outlined in the following table.

Field	Value/Description
Name	A unique name (80 characters maximum) for the provider.
Provider Type	VMware is the only selection available.
URL	The URL for the VMware vCenter Server. The syntax for a VMware provider URL is: <code>https://&lt;vCenter IP address&gt;/sdk</code> . In place of the IP address, you can use the fully qualified domain name (FQDN) for the vCenter.
Username	The user ID for accessing the VMware vCenter. See the RealPresence Platform Director Administrator Guide for a detailed description of the vCenter permissions required to enable various RealPresence Platform Director capabilities.
Password	The password for user.

- 4 Click **ADD** to add the provider.

Next, you must set up a zone in which to manage the RealPresence component products that will operate in your environment. If you are using vCenter, you must also add at least one resource group to the zone.

See the *RealPresence Platform Director Administrator Guide* for more information on how to manage providers in your RealPresence Platform Director environment.

## vCenter Only: Add a Resource Group to a Zone

Resource groups are required only in vCenter environments. You can add a resource group to any defined zone. It provides a way to logically group and effectively manage the available resources.

For example, you may want to deploy compute- and memory-intensive instances on specific clusters or hosts in your vCenter that have ample capacity. You can create one or more resource groups to encompass those resources and then monitor them separately to ensure appropriate capacity and performance.



## TASK

- 1 Go to **Instance Deployment > Zones**.
- 2 Select an appropriate zone, and click **EDIT**.
- 3 Select the **Resource Groups** tab.
- 4 Click **+RESOURCE GROUP** on the right to add a resource group.
- 5 On the **Add a new resource group** page, enter a unique Name and select a **Provider** for the resource group.  
The system retrieves the resource information from the vCenter for the selected provider.
- 6 In the Computer Resource section, select a **Data Center**, **Host/Cluster**, and **optional Resource Pool** from the lists of those available.  
After you select a **Host/Cluster**, the **+ STORAGE** and **+ NETWORK** buttons appear.
- 7 Click **+ STORAGE**.  
The **Add Storage Resources** page lists the available storage resources and the space available on each, as shown next.
- 8 Select one or more storage resources and click **Add**.  
To select all, click the check box at the top of the column.
- 9 Click **+ NETWORK**.  
The **Add Network Resources** page lists the available virtual networks.
- 10 Select one or more network resources and click **Add**.  
To select all, click the check box at the top of the column.
- 11 From the **Default Network** list, select a default network.  
You can select a default network only after choosing at least one network resource.
- 12 If the data center has folders, and you want to deploy new virtual instances to a folder, enter the folder path in the Inventory **Sub Path** field.  
The system appends what you enter to the end of the **Inventory Full Path** entry, which initially contains the name of the data center, followed by /vm. New virtual instances are deployed to the last folder in the full path.
- 13 Click **Create** to add the new resource group to the system.

With a provider, zone, and resource group in place, you can begin adding other RealPresence Virtual Edition products to your vCenter environment. See [Additional Configuration](#).

## Additional Configuration

After you have installed and configured the RealPresence Platform Director instance, activated licenses, and configured it for basic operation, you can begin setting up RealPresence component products for licensing and monitoring within the RealPresence Platform Director system.

In the *RealPresence Platform Director Administrator Guide*, see the following sections:

- Manage and Configure the RealPresence Platform Director Environment for instructions on how to add RealPresence component products to your RealPresence Platform Director system.
- Manage RealPresence Platform Product Licenses for instructions on how to allocate licenses to RealPresence component products and create license usage reports.
- Monitor the RealPresence Platform Director Environment for instructions on how to configure and use SNMP monitoring to monitor the health of RealPresence component products and the status of system resources and license usage.

# Appendix 1: Required vCenter Permissions

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This section describes the user permissions required in order for a RealPresence Platform Director system to have certain capabilities in a VMware vCenter environment.

## vCenter Permission Overview

In a vCenter environment, the RealPresence Platform Director virtualization management platform can be used to deploy, configure, and monitor the Polycom suite of video collaboration products. It uses the APIs exposed through VMware to perform these actions.

The purpose of this appendix is to define a minimum set of permissions that RealPresence Platform Director requires for basic user workflows related to adding and monitoring virtual machine (VM) instances.

For a more complete description of the roles and permissions available in vCenter, refer to the documentation for VMware vSphere (see [References](#)). The permissions described here can be applied from the vCenter level down to the individual host or cluster level.

## VMware APIs Used by RealPresence Platform Director

RealPresence Platform Director uses a relatively small number of the APIs exposed by VMware. In general, the API usage relates to:

- determining vCenter organization (data centers, hosts/clusters, network, and disk storage)
- manipulating VMs (deployment, power on and off, and deletion)
- monitoring RealPresence Platform Director-managed resources within vCenter

RealPresence Platform Director does not affect the vCenter organization at any level higher than the VMs themselves. In this sense, the permissions required by RealPresence Platform Director are minor compared with the total number of permissions available in vCenter.

Since most APIs only require read-only access to vCenter by RealPresence Platform Director, the rest of this appendix focuses on the features in RealPresence Platform Director that require write access to vCenter.

## Instance Management

Monitoring and managing instances is primarily a read-only operation with respect to vCenter, with a few exceptions. The current state data for VMs is gathered through an API that allows RealPresence Platform Director to access current details of the VM itself. Parameters such as the state (on or off) of the VM, the state of the Guest OS Tools (running or not), and various other parameters are required by RealPresence

Platform Director to reflect the current state of Polycom product VMs and notify an administrator of potential issues.

Instance management also includes write-access actions such as the ability to power on, power off, or delete an individual VM. Permissions required to perform these actions are listed in the following table.

Permissions are listed in the hierarchy in which they are specified in the vSphere client. Please see vSphere client documentation for further details.

#### Privileges Required for Managing a VMware Instance

Entity	Category	Privilege Required
Sessions	N/A	Validate Session
		View and stop sessions
Virtual Machine	Interaction	Power off
		Power on
	Inventory	Remove

## Two Methods for Adding VMware Instances in a vCenter

The two methods for adding a VM instance to RealPresence Platform Director system in a vCenter are:

- Create the VM using RealPresence Platform Director.
- Allow RealPresence Platform Director to scan the vCenter infrastructure to find and add an existing VM instance.

The first method enables RealPresence Platform Director to deploy an instance of a Polycom product to a specific Resource Group. [“Resource Group” is a RealPresence Platform Director abstraction representing the physical location of a VM within a vCenter by specifying the data center, host or cluster, network, and disk resources.](#)

In both cases, after a VM has been added, RealPresence Platform Director monitors several “health” parameters - including CPU, memory and disk usage - for the Resource Group that contains the instance, and can generate alarms based on thresholds that are set for each of those operating parameters.

Note that VM instances are not monitored individually using VMWare APIs. Instead, instance monitoring, or, more appropriately, application monitoring, uses the built-in SNMP infrastructure that exists in most Polycom products.

### Create a VMware Instance

Instance creation, or deployment, is a process in which RealPresence Platform Director dynamically creates an instance based on a Polycom product's OVA. [An OVA is a compressed archive of the Open Virtualization Format \(OVF\). OVA is the format in which Polycom virtual products for the VMware environment are distributed.](#) image. Creating an instance requires several permissions related to the allocation of resources within vCenter. The following table lists the unique permissions required for this operation.

vSphere Permissions vSphere Permissions are listed in the hierarchy specified in the vSphere client. Please see vSphere client documentation for further details. Also, note that these are the specific permissions required for creating an instance and should be merged with the permissions for managing an instance.

### Privileges Required for Creating a VMware Instance

Entity	Category	Privilege required
Datastore	N/A	Allocate space
Global	N/A	Act as vCenter Server
Network	N/A	Assign network
vApp	N/A	Import
Virtual machine	Configuration	Add new disk
		Advanced
	Guest Operations	Guest Operation Program Execution Guest Operation Queries

### Add an Existing VMware Instance

The Add Existing Instance functionality requires no more than read-only access to vCenter, as the added instance is not changed in a virtual sense but may be configured at the application level, depending on the version of the product.

### Monitor vCenter Resources

Regardless of the method used to add a VM to RealPresence Platform Director in a vCenter, a Provider and Resource Group will exist. [When using the Add Existing Instance feature, a Resource Group that does not exist when the instance is added is auto-generated and added to the zone to which the instance is assigned.](#) defining the location for each VM within RealPresence Platform Director. For these entities, monitoring involves polling vCenter APIs to determine whether there are connectivity issues or whether thresholds have been exceeded; alarms are raised in both cases. The same data is also stored for retrieval at a later time.

Since monitoring is a read-only action, the Read-Only role is sufficient to meet the need, and no additional permissions are necessary for RealPresence Platform Director to obtain the information it requires to monitor VM instances.

## Recommendations on vCenter Permissions

The following categories of permissions provide specific functionality within RealPresence Platform Director:

- A read-only role that covers the majority of the APIs used by RealPresence Platform Director.
- A set of permissions for an instance management (power on, power off, and delete) role.
- A set of permissions for instance creation.

The union of the permissions listed above enables full functionality within RealPresence Platform Director.

The next table provides guidance based on the restrictions in your organization for allowing a third-party application to control the virtualization solution. A more restricted vCenter environment causes some actions within RealPresence Platform Director to fail with a permissions error.

**Note:** Because RealPresence Platform Director does not track permissions assigned to a specific vCenter role, it cannot allow or disallow actions within RealPresence Platform Director. Restricted environments at the vCenter level can cause failures within RealPresence Platform Director; however, such conditions are temporary and recoverable.

**Recommendations for vCenter Permissions in RealPresence Platform Director**

Customer Environment	Role	Caveats
No write access	Use predefined Read-Only in vCenter	<p>Attempting to power on, power off, or delete an instance temporarily puts the instance into an Error state and makes license allocations unavailable for the instance.</p> <ul style="list-style-type: none"> <li>Corrective Action: State will correct itself in 10 minutes or less. No other side effects.</li> </ul> <p>Attempting to create an instance fails immediately.</p> <ul style="list-style-type: none"> <li>Corrective Action: Delete the instance.</li> </ul>
Limited write access (no ability to create, power up, power down, or delete)	Instance Management permissions only	<p>Attempting to create an instance fails immediately.</p> <ul style="list-style-type: none"> <li>Corrective Action: Delete the instance.</li> </ul>
Full RealPresence Platform Director functionality	Union of Instance Management and Instance Creation permissions	None. All permissions defined for all features in RealPresence Platform Director.