Polycom® RealPresence® Web Suite

Contents

Before You Begin

This Getting Started Guide provides the information you need to install and configure a Polycom®
RealPresence® Web Suite or RealPresence Web Suite Pro system for the first time. After completing the
steps described in this guide, see the *RealPresence® Web Suite Administrator Guide* for instructions on
how to set up and manage your RealPresence Web Suite or RealPresence Web Suite Pro system.

Except where otherwise noted, references throughout this guide to RealPresence Web Suite also apply to
RealPresence Web Suite Pro.

Audience, Purpose, and Required Skills

This *Getting Started Guide* is written for a technical audience with knowledge of virtual machine
environments, networking, security certificates, software configuration, and the basics of video
conferencing network and traffic requirements.

This guide assumes that you are deploying and setting up instances of the RealPresence Web Suite
Services Portal and Experience Portal in a VMware vSphere or Microsoft Hyper-V virtual data center.

Virtual Environment Requirements

The RealPresence Web Suite system can be deployed in the following virtual environments:

- An environment equipped with a VMware vSphere infrastructure (vCenter or ESXi host).
- An environment equipped with a Microsoft Hyper-V infrastructure (Microsoft Windows Server 2012
  R2 with the Hyper-V role).

The environment into which the RealPresence Web Suite portals are deployed must meet the
requirements outlined in the Release Notes for the version you are deploying. The Release Notes outline
the latest hardware, software, network port, web browser, and virtual machine requirements for running
the application in your virtual environment.

Get Help

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

Reference Documentation

In addition to this *Getting Started Guide*, the following documentation is available on the RealPresence
Web Suite support site:

- *RealPresence® Web Suite Release Notes*
- *RealPresence® Web Suite Administrator Guide*
- *RealPresence® Web Suite User Guide*

VMware® vSphere® support and documentation is available at:

- https://www.VMware.com/support/pubs/vsphere-esxi-vcenter-server-pubs.html (and select documentation for your respective version)
- 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)

Polycom and Partner Resources

To learn more about Polycom RealPresence Platform products, visit Polycom Support for 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® Platform Director

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.

Documentation Feedback

We strive to improve the quality of our documentation, and we appreciate your feedback. Please send your email with questions or suggestions to DocumentationFeedback@polycom.com.

Preparation for System Installation

The sections that follow describe preparing for the initial installation and setup of a Polycom® RealPresence® Web Suite system, including:

- Prepare for Software Deployment
- Complete the Setup Worksheets
- Start and Restart Order for RealPresence Web Suite Components

Prepare for Software Deployment

Complete the tasks outlined below to prepare to deploy the RealPresence Web Suite portals in your virtual data center environment. Record the relevant information in the setup worksheets that follow this section.

1 Read the *Release Notes* for the version of RealPresence Web Suite that you are deploying, and confirm that your system meets the requirements.

2 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 your RealPresence products.

3 To access the VMware or Hyper-V host and configure the Web Suite portals, ensure that you have a PC with:

   ➢ 1280x1024 (SXGA) minimum display resolution; 1680x1050 (WSXGA+) or greater recommended.

   ➢ Current version of Mozilla Firefox or Google Chrome browser.

   ➢ Network access to your data center.

   ➢ The vSphere Client or Hyper-V Manager, as appropriate for your environment.

4 Ensure you have the correct credentials needed for the installation.

   ➢ For a Hyper-V deployment, the server name and login credentials of the Microsoft Hyper-V server that will host the RealPresence Web Suite portals, 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 and monitor your RealPresence Web Suite portals, ensure that RealPresence Platform Director has the appropriate administrator login credentials for the vCenter environment where RealPresence Web Suite is being installed.

   See Appendix 1 of the *RealPresence Platform Director Administrator's Guide* for information on specific permissions required.

5 Confirm that the required ports are available. For a list of ports used in a RealPresence Web Suite installation, see "Ports and Protocols" in the *RealPresence Web Suite Administrator's Guide*.

6 Download the RealPresence Web Suite VHD files (for Hyper-V) or OVA files (for VMware) from its Polycom support web site, and note the location of the files on your network.

7 Allocate IP addresses for the two RealPresence Web Suite portals, and note the network mask and default gateway to be used with the addresses.

Although the RealPresence Web Suite portals can be used in a carefully configured DHCP environment that guarantees unchanging IP addresses, Polycom recommends that you allocate and configure a static address for each portal.

8 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 Web Suite portals.

9 Assign local host names to identify the RealPresence Web Suite portals within your organization's root domain. The host names and root domain name together constitute the fully qualified domain names (FQDNs) that allow users to access the Services Portal, the Experience Portal, and the administrator interface of each with a web browser. Configure these FQDNs on the appropriate DNS server or servers.

Complete the Setup Worksheets

This section provides worksheets that help you deploy and configure the RealPresence Web Suite Services Portal and Experience Portal. When you have completed the worksheets and are ready to deploy and configure the Services Portal, see System Installation.

Before you begin the portal deployment, complete the fields in the My System Values column of each of the Setup Worksheets that follow. Use the information in these worksheets to help you configure the portals.

Setup Worksheet for the LDAP Server Configuration

LDAP Options	My System Values	Description
Forest Root Domain		The forest root domain name for the organization, for example *polycom.com* or *Microsoft.com*.
Secure		Establishes a secure connection to the LDAP server. Note: If you select Secure, you must upload the trust certificate of the LDAP server in the Services Portal. See "Upload Certificates or a Certificate Chain" in the *RealPresence Web Suite Administrator Guide*.
Port		The port through which LDAP communicates. The standard ports are: • 389 for non-secure (LDAP) • 636 for secure (LDAP-S)
Username		The LDAP service account user ID.

LDAP Options	My System Values	Description
Password		The login password for the service account user ID.

Setup Worksheet for the SMTP Server Configuration

SMTP Options	My System Values	Description
Server		The FQDN or IP address of the SMTP server.
Secure		Establishes a secure connection to the SMTP server.
Port		The port to use to connect to the SM P server. The standard ports are: • 25 for non-secure (SMTP) • 587/465 for secure (SMTP-S)
Login ID		The SMTP service account user ID.
Password		The login password for the service account user ID.
Sender Mail ID		The email ID to be used as the return address for notifications sent by the Services Portal. This is typically configured as a null or no reply address.

Setup Worksheet for the Server Settings

Server Settings	My System Values	Description
Experience Portal (MEA) Server	https://	The URL, including the FQDN assigned to the IP address of the Experience Portal. This information is used to construct the meeting links. Make sure that this domain name is accessible to all users of the solution, including any users that may be located outside the organization.
Services Portal (WSP) Server	https://	The URL, including the FQDN, assigned to the IP address of the Services Portal. This information is used to construct the login link to the Services Portal. Make sure that this domain name is accessible to all users who can access the Services Portal.

Setup Worksheet for RealPresence DMA Configuration on Services Portal

System Configuration Information	My System Values	Description
Name		A nickname to assign to the RealPresence DMA system to distinguish it in the Services Portal configuration.
Host		The FQDN or IP address of the RealPresence DMA system. For an appliance RealPresence DMA system consisting of two co-located redundant servers, enter the system's virtual IP address or FQDN.
Port		The TCP port number used to communicate with the RealPresence DMA system. Port 8443 is standard.
VMR Prefix		The dialing prefix assigned to this RealPresence DMA system, if any. Prefixes added to VMRs can be used to assign a specific set of VMRs to a specific RealPresence DMA system. Specifying this value allows the portals to know where to direct API requests concerning a particular VMR ID. For example, if DMA-1 has the dialing prefix *11* and DMA-2 has no dialing prefix, all portal requests for VMRs with ID *11xxxx* would be directed to DMA-1 and requests concerning any other VMR ID would be directed to DMA-2. To set up a prefix on the RealPresence DMA system, see the *RealPresence DMA 7000 System Operations Guide.*
Common SIP Username		(Optional) The user ID to authenticate SIP sessions for users who have authenticated with the Services Portal.
Common SIP Password		(Optional) The password for Common SIP Username.
Default Admin		A user ID with system administrator privileges on the RealPresence DMA system. If the RealPresence DMA system is integrated with Active Directory, this must be an Active Directory user with access to all domains (not a local user defined on the RealPresence DMA system) to be able to search the VMRs of all users. See the *RealPresence DMA 7000 System Operations Guide* for more information.
Admin Password		The password for the Default Admin user.

System Configuration Information	My System Values	Description
Owner Domain		The domain of the user account assigned to create meetings in the RealPresence DMA system. For a local user (not in Active Directory), enter **LOCAL**.
Owner Username		The user ID of the user account assigned to create meetings in the RealPresence DMA system. The user does not need to be an administrator.
		For information on how to create a user ID in the RealPresence DMA system, see the *RealPresence DMA 7000 System Operations Guide*.
Generate VMR From Range		The range of numbers to use for RealPresence Web Suite virtual meeting rooms (VMRs). The Services Portal generates VMR numbers on the RealPresence DMA system randomly within the specified range.
		This lets you separate the temporary VMRs created specifically for RealPresence Web Suite meetings from other VMRs on the same RealPresence DMA system.
		The range must be positive numbers (10-digit maximum) specified from lowest to highest. For example, a range of 100 to 9999 generates VMRs with 3 or 4 digits from 100 through 9999.

Setup Worksheet for Access Point Configuration

System Configuration Information	My System Values	Description
Location		A name for this access point that describes its geographic location or some other property that distinguishes it from other access points.
		An access point is a network location that is routed directly or indirectly to the RealPresence DMA system through which clients or endpoints can connect to join a conference.

System Configuration Information	My System Values	Description
Transport		The transport protocol associated with the location and dial string. Select from SIP, H.323, TUNNEL, ISDN, and PSTN. A single location may have multiple transport protocols configured for it.
		For information on provisioning endpoints for SIP, see the *Polycom RealPresence Resource Manager Operations Guide*.
		For information on enabling SIP calls for mobile apps, see the help files on the Polycom RealPresence Mobile Support page.
		Note: The Experience Portal must have at least one SIP access point configured.
Dial string		Dial strings (SIP URI, Tunnel URI, H.323 E.164 enum, PSTN phone number) are used by a video or audio endpoint to join a conference hosted by the RealPresence DMA system. Typically for SIP, TUNNEL, and H.323 callers, this string includes the IP address or domain name (preferred) of the edge traversal device (RealPresence Access Director or Acme) provisioned to allow external access to this RealPresence DMA system.
Auth Mode		The options available are AUTH, NoAUTH, and SHARED.
		• For an access point that may be used by endpoints without SIP credentials, select **NoAUTH**.
		• For an access point used only by endpoints with SIP credentials (for example, authenticated web and RealPresence Mobile users when the RealPresence DMA system settings have been configured with the Common SIP Username and Password as described), select **AUTH**.
		• For an access point that may be used by either class of endpoints, select **SHARED**.
Dial Prefix (Optional)		A prefix to add to dialing information used when dialing this access point. This prefix can be used by the access point to route the call or to distinguish between authenticated callers and unauthenticated guests.

Setup Worksheet for Date Time Configuration

System Configuration Information	My System Values	Description
NTP Server		The Network Time Protocol server FQDN or IP address. The Services Portal synchronizes time and date settings from this server. Entering the NTP automatically populates the Date and Time fields. Note that the portals are by default configured to the UTC time zone.

Start and Restart Order for RealPresence Web Suite Components

When you start RealPresence Web Suite, be sure to start the Services Portal and the configured RealPresence DMA system before starting the Experience Portal. Failure to do so impacts the API that handles feature functionality on the Experience Portal.

When you restart the Services Portal or the configured RealPresence DMA system, be sure to also restart the Experience Portal afterwards. Failure to do so impacts the API that handles feature functionality on the Experience Portal.

System Installation

The RealPresence Web Suite Services Portal and Experience Portal can be deployed in a VMware vSphere environment or in a Microsoft Hyper-V environment. We recommend deploying the Services Portal first.

This section shows you how to deploy both portals and set them up in your virtual network. After you finish these tasks, you can configure the portals as described in the *RealPresence Web Suite Administrator Guide*.

Before you begin, complete the Setup Worksheets and confirm that your system meets all requirements and includes all prerequisites listed in the most current *Release Notes* for the RealPresence Web Suite.

Complete the setup tasks in the following order.

- Deploy the RealPresence Web Suite Software Packages
- Configure Network Settings
- Verify that Both Portals are Accessible
- Set Up RealPresence Web Suite for the First Time

Deploy the RealPresence Web Suite Software Packages

RealPresence Web Suite Services Portal and Experience Portal installation packages are available as VMWare Open Virtual Appliance (OVA) files or as Microsoft Hyper-V Virtual Hard Drive (VHD) files. This section provides information on deploying the portals as virtual machines using the OVA or VHD files.

VMWare: Deploy the OVA Packages

You can deploy the Services Portal and Experience Portal as virtual machines in a VMWare vSphere environment using the OVA files for the RealPresence Web Suite software package.

A vSphere client connected to an ESXi server or vCenter can be used to deploy the Services Portal and Experience Portal OVA Templates. Use your data center's standard VMware deployment procedure. If necessary, consult the appropriate documentation at vmware.com/support.html.

To deploy RealPresence Web Suite in your VMWare environment using the vSphere client:

1 Confirm that your system includes the prerequisites and meets the requirements listed in the Release Notes for the version of the RealPresence Web Suite software that you are deploying.

2 Download the appropriate *.ova files from the Polycom RealPresence Web Suite Support site.

3 Using the vSphere client on your vSphere EXSi host server, deploy the *.ova files for the Services Portal and Experience Portal into your VMWare environment. Select **Thin Provision** and **Power on after deployment**.

Alternatively, in a VMware vCenter with the proper permissions, you can use a Polycom® RealPresence® Platform Director instance to deploy the Services Portal and Experience Portal. See the *RealPresence Platform Director Administrator Guide*. It includes instructions for adding both new and existing instances of RealPresence component products, including RealPresence Web Suite, to the RealPresence Platform Director system.

Hyper-V: Deploy the VHD Packages

You can deploy the Services Portal and Experience Portal as virtual machines on Microsoft Hyper-Visor (Hyper-V) Server 2012 R2 using the VHD files for the RealPresence Web Suite software package.

Hyper-V Manager or Windows PowerShell can be used to deploy the RealPresence Web Suite VHDs in your Hyper-V environment. Use your data center's standard Hyper-V deployment procedures. If necessary, consult the appropriate documentation at technet.microsoft.com.

**To deploy RealPresence Web Suite in your Hyper-V environment using Hyper-V Manager:**

1 Confirm that your system includes the prerequisites and meets the requirements listed in the Release Notes for the version of the RealPresence Web Suite software that you are deploying.

2 Download the appropriate VHD files from the Polycom RealPresence Web Suite Support site and save them to the hard drive where Hyper-V Manager is installed.

3 Open Hyper-V Manager and click **Windows > Virtual Machine** to create a new virtual machine for the RealPresence Web Suite Services Portal.

   The **New Virtual Machine** wizard opens.

4 Click **Specify Name and Location**, and enter a name and location for the virtual machine.

5 On the **Assign Memory** tab, enter **8192MB** as the **Startup memory**.

6 On the **Configure Network** tab, select an active virtual switch.

7 On the **Connect Virtual Hard Disk** tab, select **Use an existing virtual hard disk**, and locate the Services Portal (WSP) VHD file.

8 View the Summary of the virtual machine, and click **Finish**.

   The new virtual machine appears in Hyper-V Manager.

9 Select your virtual machine and click **Settings**.

10 In the **Settings** window, select **Processor**, and change the value to **8**. By default, this is set to 1.

11 In the **Settings** window, click **Hardware > Legacy Network Adapter**.

12 Remove existing network adapters by selecting an adapter and clicking **Remove**.

13 Click **Add a Legacy Network Adapter**, and select the network adapter you want to add.

14 Click **Apply**.

15 In the Hyper-V Manager, select your virtual machine and click **Start**.

A message states that unsupported hardware has been detected, as shown next.

16 Press the space bar on your keyboard.

The installation continues, and the virtual machine restarts. After the restart, the console displays the portal VM's login screen, as shown next.
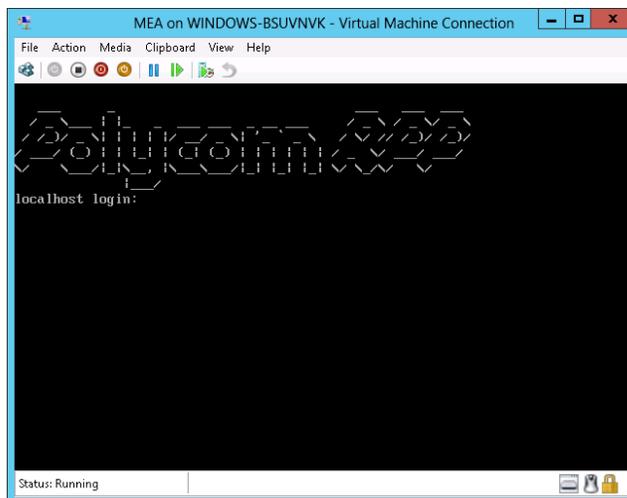
17 Repeat steps 4 through 17 using the Experience Portal (MEA) VHD file.

Configure Network Settings

Because the Services Portal and Experience Portal both operate as web servers within a virtual server environment, you must configure both virtual web servers with IP addresses and DNS names, and those addresses and names must be included in the network settings within your virtual server environment.

Configuring network settings for both portals involves the following tasks:

● Assign Static IP Addresses and FQDNs to Both Portals

● Set the Time Zone and NTP Server

Assign Static IP Addresses and FQDNs to Both Portals

When the portal instances boot up, they attempt to obtain IP addresses using DHCP. You can use the vSphere client or Hyper-V Manager to view the IP and MAC addresses for each instance. Make note of the addresses for both portals.

Polycom recommends that you assign static IP addresses to the Services Portal and Experience Portal instances, rather than allowing them to obtain IP addresses through DHCP. Modify the configuration in your DHCP server to map the IP address of each portal VM to its MAC address. Then assign that IP address to the VM by changing its network settings via the restricted shell.

To assign static IP addresses and FQDNs to the two portals:

1 Open the vSphere or Hyper-V Manager console for the Services Portal's VM.

2 Log into the restricted shell using *polycom* as both your username and password. When prompted to do so, change the default password.

   New shell user passwords must include the following:

   ➢ At least 14 characters

   ➢ At least one upper case character

   ➢ At least one lower case character

   ➢ At least one non-alphanumeric character

3 Enter **show_network_info** to view the current network settings.

4 Enter **change_network_settings** and follow the prompts to modify the current network settings. Disable DHCP, enable static IP, and configure the static IP settings and DNS settings.

   The network services are restarted so that the new settings take effect.

5 Open the console for the Experience Portal's VM and repeat steps 2 through 4 to modify its network settings.

6 In your DNS server, assign an FQDN to each portal and associate it with the permanent IP address you assigned to the portal.

For more information on configuring network settings using the restricted shell, see "Restricted Shell Commands" in the *RealPresence Web Suite Administrator Guide*.

Set the Time Settings on Both Portals

You can use each portal's restricted shell to view or change the configured Network Time Protocol (NTP) server and time zone.

> **Note: Time settings are also available in the administration interface of each portal**
>
> Instead of using the shell, you can view or change the NTP server and time zone in each portal's administration interface. See the Platform Settings section for each portal in the *RealPresence Web Suite Administrator Guide*.

To set the time settings of the two portals using the restricted shell:

1   Using the vSphere or Hyper-V Manager console for the Services Portal's VM, log into its restricted shell as user *polycom*.

2   Enter **change_ntp** to view the current NTP server and follow the prompts to specify a new one.

    The factory default is the CentOS NTP server.

3   Enter **change_timezone** to view the current time zone and follow the prompts to change the time zone.

    The factory default time zone is UTC.

4   Log into the Experience Portal's VM and repeat steps 2 and 3 to modify its time settings.

Verify that Both Portals are Accessible

After you deploy both portals and complete the basic network configuration, you can use a web browser to open the portals using the DNS names you assigned to them.

Admin Tip: For increased security, create at least one new Super Admin account

To ensure secure administrator access to the Services Portal, after configuration is complete, we recommend that you create another account with Super Admin credentials to manage the Services Portal going forward. (See the section Create Accounts for more information.) Log in with the new Super Admin credentials, and then delete the default Super Admin account.

Open the Services Portal

The Services portal provides a web interface where authorized administrators can configure and manage the system and authorized users can schedule and start meetings.

To open the administrative and provisioning interface for the Services Portal:

1   Obtain the Service Portal's FQDN, as assigned through your DNS server.

2   In the address bar of your web browser, enter the Services Portal FQDN.

3   Log in with Super Admin credentials. For the first login, enter *admin* as the **Username** and *Polycom12#$* as the **Password**.

4   When prompted, enter a new password for the default administrator account.

5   Click **Agree** to accept the End User License Agreement (EULA) and proceed with the configuration.

You can now configure the Services Portal for use.

Open the Experience Portal

The Experience Portal provides a meeting interface that includes such features as content sharing, group chat, and privacy settings. All users who attend meetings require access to the Experience Portal. It also provides a separate administrator interface for configuring and managing the system.

To open the administrative and provisioning interface on the Experience Portal:

1 Obtain the Experience Portal's FQDN, as assigned through your DNS server.

2 In the address bar of your web browser, enter the Experience Portal FQDN with the port 9445 in the following format: **https://<*ServerFQDN*>:9445**.

3 Log into the Experience Portal administrator interface with Super Admin credentials. For the first login, enter *admin* as the **Username** and *Polycom12#$* as the password.

4 When prompted, enter a new password for the default administrator account.

   New Experience Portal administrator passwords must include the following:

   ➢ At least one upper case character

   ➢ At least one lower case character

   ➢ At least one non-alphanumeric character

5 Click **Save**.

You can now configure the Experience Portal to be accessed by users to attend meetings.

Note: End user access to the RealPresence Web Suite Experience Portal

End users access the RealPresence Web Suite Experience Portal with a web browser, using the URL in the following format: **https://<*Server FQDN*>**. No additional port number is required for end user access.

Next Steps

You are now ready to license the portals, install certificates, and configure the portals for use as described in the *RealPresence Web Suite Administrator Guide*. See "Set Up RealPresence Web Suite" in that guide in order to get started.