

**ADMINISTRATOR GUIDE** 

# Polycom<sup>®</sup> Device Management Service for Service Providers

- UC Software Devices



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## **Contents**

Before You Begin	3
Audience, Purpose, and Required Skills	3
Getting Help	3
The Polycom Community	3
Documentation Feedback	3
Getting Started	4
Polycom Device Management Service Overview	
Polycom Device Management Service for Service Providers Overview	
Supported Endpoints	
Navigating the Service	
Obtaining a PDMS-SP Account	
Sign In to the Portal	
Sign Out	
Change Account Password	
Edit Profile Icon	
Edit Account Profile	
Device Management	8
Add a Polycom VVX Phone Using a Configuration Profile	8
Configure Device General Profiles	9
Managing Devices	10
Check Device Status	10
Restart Device	11
Reboot Device	11
Reboot Multiple Devices	11
Reset Device	11
Reset Multiple Devices	12
Sync Device Configuration	12
Troubleshooting	12
Fetch Device Log	13
Fetch Tech Support Info Dump	13
Perform Remote PCAP	13
Fetch Local Device Information	13
View the UCS Configurations	14
Push Configuration	15
View Device Snapshots	15

Organization Management	16
Create a New Organization	16
Edit an Organization	16
Manage the Organization's Users	17
User Management	18
Create a New Role	
Edit a Role	
Delete a Role	18
Add an Existing PDMS-SP User	19
Invite a User	19
Delete a User	19
Required Ports and Trusted IP Addresses and Hosts	20

## **Before You Begin**

#### Topics:

- Audience, Purpose, and Required Skills
- Getting Help

This guide describes how to monitor, and manage Polycom VVX devices running UC Software using the Polycom Device Management Service for Service Providers (PDMS-SP). For the PDMS-SP Administrator Guide for Obihai devices, refer to PDMS-SP Device Management Platform FAQ.

## Audience, Purpose, and Required Skills

This guide is written for a technical audience, specifically admins who manage the company's endpoints.

You must be familiar with the following concepts before beginning:

- Current telecommunications practices, protocols, and principles
- Telecommunication basics, video teleconferencing, and voice or data equipment
- Virtual machine environments
- Networking, security certificates, and software configuration

## **Getting Help**

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

## 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 welcome your feedback to improve the quality of Polycom documentation.

You can email <u>Documentation Feedback</u> for any important queries or suggestions related to this documentation.

## **Getting Started**

#### Topics:

- Polycom Device Management Service Overview
- Polycom Device Management Service for Service Providers Overview
- Navigating the Service

The Polycom Device Management Service for Service Providers (PDMS-SP) portal enables you to offer your customer organizations a secure, cloud-based management software as a service (SaaS). The PDMS-SP cloud is an external out-of-band tether to the connection between you (the service providers) and Polycom devices. With PDMS-SP, you can remotely track, report, and troubleshoot your customers' supported Polycom endpoints.

## **Polycom Device Management Service Overview**

Polycom Cloud Services amplify your device experience on the platform of your choice with backend management tools and innovations that create an excellent end user & IT support experience. By leveraging cloud technology, we can deliver the specific solutions to address your unique needs as an enterprise or a service provider.

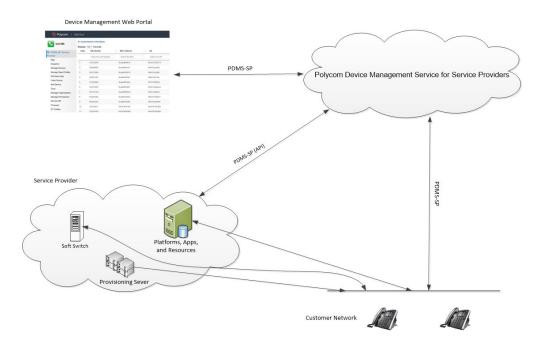
Polycom Device Management Service for Service Providers is an innovative cloud management service that speeds initial deployments, delivers advanced troubleshooting, reduces on-going operating expenses, and helps service providers deliver better life-cycle support to accelerate their business. PDMS-SP is designed for maximum scalability supporting millions of devices and flexible enough to support multiple tenants across the globe.

Polycom Device Management Service for Enterprises is a dedicated cloud portal that simplifies the staging, management, and monitoring of your Polycom voice devices. With PDMS-E, organizations of any size can apply any one of hundreds of provisioning profiles to enable faster adoption through a custom and consistent user experience. Additionally, enterprise IT administrators can leverage the web portal from anywhere to manage, view, and troubleshoot up to 50,000 devices. For more information about Polycom Device Management Service for Enterprises, refer to Polycom Device Management Service Administration Guide.

# Polycom Device Management Service for Service Providers Overview

PDMS-SP is a highly scalable, multi-tenanted cloud device management service designed specifically for service providers capable of supporting millions of devices. You can troubleshoot and maintain Polycom VVX UCS devices from within the portal.

When admins of a subscribing organization logs in to the PDMS-SP portal, they can access their supported endpoints using a web browser, enabling fast and easy device maintenance.



### **Supported Endpoints**

The PDMS-SP supports the following devices with Polycom UC Software 5.8.0 or higher:

- Polycom VVX 101 business media phones
- Polycom VVX 201 business media phones
- Polycom VVX 300/301/310/311 business media phones
- Polycom VVX 400/401/410/411 business media phones
- Polycom VVX 500/501 business media phones
- Polycom VVX 600/601 business media phones
- Polycom VVX 150 business IP phones
- Polycom VVX 350 business IP phones
- Polycom VVX 250 business IP phones
- Polycom VVX 450 business IP phones

## **Navigating the Service**

Access PDMS-SP features using the PDMS-SP web portal. The web portal enables you to manage devices, users, and organizations and access firmware, documentation, and tools.

## **Obtaining a PDMS-SP Account**

There are multiple ways to obtain a PDMS-SP account.

#### Create a New PDMS-SP User Account

You can create a new PDMS-SP user account.

**Note:** To be eligible to use PDMS-SP, you need to be a registered Polycom partner. Go to <a href="http://www.polycom.com/partners/become-partner.html/partnerapp">http://www.polycom.com/partners/become-partner.html/partnerapp</a> to apply a partner program.

#### **Procedure**

- 1. Go to https://www1.obitalk.com and click Create a new account.
- 2. Fill out the form with your registration information and click **Continue**.
- **3.** Select your country and enter the captcha.
- 4. Agree the Terms & Conditions and Privacy Policy and click Register.
  - PDMS-SP creates a consumer account for you. When system creates an account to you, you receive an invitation email with instructions to confirm your email address and change your password.
- **5.** Send your email address to your Polycom Solution Architect, Sales Engineer, or PDMS-SP ITSP Domain Administrator so they can assign you to a ITSP user account.

#### Adding Users to PDMS-SP

Domain administrators of existing PDMS-SP accounts can add existing users or invite new users to the PDMS-SP account. Refer to the <u>User Management</u> on page 18 to learn more about adding or inviting users.

### Sign In to the Portal

You can sign in to the portal using your PDMS-SP account credentials.

#### **Procedure**

- 1. Go to https://www1.obitalk.com.
- 2. Enter your email address and password and click Sign In.

## Sign Out

Sign out of the PDMS-SP portal.

#### **Procedure**

1. Click **Sign Out** in the upper-right corner of the PDMS-SP portal.

## **Change Account Password**

You can change your PDMS-SP account password.

#### **Procedure**

- 1. Click **Username** in the upper-right corner.
- 2. Click Edit Profile.
- 3. Enter your Old Password and your New Password, then click Change Password.

### **Edit Profile Icon**

You can update the profile picture for your PDMS-SP account.

#### **Procedure**

- 1. Click **Username** in the upper-right corner.
- 2. Click Edit Profile.
- 3. In the Edit Profile Icon section, click Choose File to select a picture from your local system.
- 4. Click Upload.

### **Edit Account Profile**

You can edit your PDMS-SP account profile.

#### **Procedure**

- 1. Click **Username** in the upper-right corner of the screen.
- 2. Click Edit Profile.
- **3.** Edit the following information:
  - Display Name
  - About Me
  - Location
  - Forum Name
- 4. Click Save.

## **Device Management**

#### Topics:

- Add a Polycom VVX Phone Using a Configuration Profile
- Configure Device General Profiles
- Managing Devices
- Troubleshooting
- Push Configuration
- View Device Snapshots

Use PDMS-SP to manage all your endpoints remotely using a web browser to enable fast and easy device deployment and maintenance.

# Add a Polycom VVX Phone Using a Configuration Profile

You can add a Polycom VVX phone with UC Software 5.8 or higher by setting the phone's configuration profile.

#### **Procedure**

- 1. Obtain a PDMS-SP onboarding service tag.
  - a. Log in to the PDMS-SP portal.
  - b. Click Service API.
  - c. Copy your Onboarding Service Tag value.



- 2. Optional: Obtain a PDMS-SP onboarding service tag for a specific organization. If you have created a hierarchy of multiple organizations under your top level Tenant, each organization has a unique Onboarding Service Tag allowing devices to be immediately linked with that specific organization.
  - a. Click Manage Organizations.
  - **b.** Click the organization name.
  - c. Click Service API
  - d. Copy the Onboarding Service Tag value of the organization.
- 3. Set the following values in your Polycom VVX phone configuration file on the provisioning server:

Parameter	Value
device.set	1
device.da.enabled	1
device.da.enabled.set	1
feature.obitalk.enabled	1
diags.pcap.enabled	1
obitalk.accountCode	<your obitalk="" onboarding="" service="" tag=""></your>

The following is an example of the Polycom VVX phone configuration file.

- **4.** Update your phone with the new configuration parameters.
- **5.** After the phone reboots, refresh the PDMS-SP webpage to view the Polycom VVX phone on your PDMS-SP dashboard.

Note: It takes a couple of minutes for the device to register to your PDMS-SP account.

## **Configure Device General Profiles**

You can configure or go through the general profiles of your devices.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- **3.** Go through the general device information below:

Parameters	Description
OBi Number	A unique 9-digit number used to identify the VVX within the PDMS-SP system.

Parameters	Description
MAC Address	The MAC address of the device.
Serial No.	The serial number of the device.
Firmware	The firmware version that the device is running.
OBiTALK Status	The status of the device's connection to the PDMS-SP cloud service.
Last Update	The last time the device contacted the PDMS-SP cloud service.
ITSP Status	The SIP service registration status.

#### **4.** Configure the device parameters shown in the following table:

Parameters	Description
Device Note	Specify the note to identify the device. The filed is searchable, and is helpful in organizing your devices within PDMS-SP. The common uses of the field are the customer name, primary phone number, purchase order, or the customer account code.
Device Note 2	Specify the note to help describing the device. The filed is not searchable and is best used for device specific, work history details, or other detailed descriptions.
Organization	Specify the destination sub-organization under the PDMS-SP account for this device.

#### 5. Click Save.

## **Managing Devices**

You can restart (warm reboot), reboot (cold reboot), and reset the device through PDMS-SP portal.

#### **Check Device Status**

You can check the device basic information through Manage Devices page.

#### **Procedure**

1. Click Manage Devices.

System shows the Model, MAC Address, SN, Status, and Last Updated of the devices.

#### The Colors for Status

Status	Color	Description
Connected	Green	The device connects to the PDMS-SP.
Offline	Red	The device is offline.

#### **Restart Device**

You can restart the phone application.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click **Restart Device** to restart the phone application.

#### **Reboot Device**

You can reboot the device.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click Reboot Device to reboot all system.

## **Reboot Multiple Devices**

You can reboot multiple devices from the PDMS-SP portal.

A .csv file is used to process the list of MAC addresses to be rebooted. Obtain the .csv template by clicking Tools > Reset Devices > mac/obino list.

#### **Procedure**

- 1. Go to Tools > Reboot Devices.
- 2. Click Choose File to select the device list file (.csv).
- 3. Click Reboot.

#### **Reset Device**

You can factory reset the device which removes all configuration and stored settings including the address of your provisioning server and its PDMS-SP account oboarding tag.

#### **Procedure**

1. Click Manage Devices.

- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click **Reset Device** to factory reset the device.

**Warning:** After the device factory resets, device loses contact with PDMS-SP until it is reconfigured and reconnects to PDMS-SP. If your service does not include a Zero Touch deployment strategy such as Polycom Zero Touch Provisioning (ZTP) or DHCP option 66, the phone can not automatically return to service. This may require manual configuration on-site by the end user or a Support Technician to recover.

## **Reset Multiple Devices**

You can reset multiple devices using the device MAC address.

A .csv file is used to process the list of MAC addresses to be factory reset. Obtain the .csv template by clicking Tools > Reset Devices > mac/obino list.

#### **Procedure**

- 1. Go to Tools > Reset Devices.
- 2. Click Choose File to select the device list file (.csv).
- **3.** Select either reset type option:

Option	Description
Reset Local Configuration	Reset local configuration of the devices in the device list file.
Reset OBiTALK Configuration (Cloud & Local)	Reset local and OBiTALK (cloud) configuration of the devices in the devices list file.

4. Click Reset.

## **Sync Device Configuration**

You can load the latest configuration changes to the phone.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click Sync Device Configuration.

The device contacts the provisioning server for the configuration files and applies the configuration changes.

## **Troubleshooting**

This section describes how to troubleshoot and resolve certain issues with PDMS-SP.

### **Fetch Device Log**

You can fetch the device logs and download the logs for troubleshooting.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click Fetch Device Log.

The PDMS-SP cloud service portal fetches and stores the latest local logs of the Polycom VVX phone.

### **Fetch Tech Support Info Dump**

If the phone detects a crash, it may upload a .tsid file to PDMS-SP. The file appears as a link so that you can save it or provide it to Polycom support for troubleshooting.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click the .tsid file from Tech Support Info Dump (TSID): to download the file.

#### Perform Remote PCAP

You can perform remote PCAP and download the PCAP file for troubleshooting.

Remote PCAP is only available if the PCAP feature has been enabled in the Polycom VVX phone configuration file. Refer to Add a Polycom VVX Phone Using a Configuration Profile on page 8 for information on enabling this feature.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Set a timer of capture in **Timeout**. Units are in seconds.
- 4. Specify the packet filters based on libpcap syntax in Filter.
- 5. Click **Start PCAP** to initiate remote PCAP capture.
- 6. Click **Stop PCAP** to stop remote PCAP capture.
  - System provides a downloadable link of the captured PCAP file.

#### **Fetch Local Device Information**

You can fetch the device, network, and service information through PDMS-SP portal.

#### **Procedure**

1. Click Manage Devices.

- **2.** Click the **OBiNo** of the device that you want to manage.
- 3. Click Local Configuration (Readonly).
- **4.** Select the information that you want to fetch.

Information	Description
Fetch Primary Device Information	Fetch device attributes.
Fetch Secondary Device Information	Fetch the information for Polycom VVX accessories, for example, expansion module and camera.
Fetch Network Information	Fetch the network information, for example, DNS domain, IPv4 address, and IPv4 address source.
Fetch Service Information	Fetch the SIP registration status and proxy server information.

## **View the UCS Configurations**

You can view the UCS configurations from the PDMS-SP portal.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- 3. Click Local Configuration (Readonly).
- **4.** Select the UCS configuration information you want to view.

Information	Description
ALL (except Device Settings)	All configuration parameters that are modified from default values and are not device settings.
Local	Configuration parameters that are modified from the local phone menu.
Web	Configuration parameters that are modified from the Web Configuration Utility.
Config Files	Configuration parameters that are included in the provisioning configuration files.
TR-069	Configuration parameters that are modified through TR-069 provisioning.
SIP	Configuration parameters that are modified through in-band SIP provisioning.
Device Settings	Device parameters

## **Push Configuration**

You can push the configuration to the device through PDMS-SP portal.

The tool adds the changes of the configuration to the phone's web configuration override layer, which has a higher precedence than the configuration pushed using your provisioning server. All configuration changes pushed in this method are cumulative.

#### **Procedure**

- 1. Click Manage Devices.
- 2. Click the **OBiNo** of the device that you want to manage.
- **3.** Enter an XML configuration content in **Profile contents**. The format must follow the UCS provisioning XML format.
- 4. Click **Push Configuration/Web** to push the configuration to the device.

## **View Device Snapshots**

You can view device snapshots that provide information including device model, SP status, SP proxy, firmware, Base Profile, country, region, and origin AS.

#### **Procedure**

- 1. Click Snapshot.
- 2. View the device information.

You can view each facet category by clicking on the corresponding entry or pie chart segment. The facet charts are cross-linked.

## **Organization Management**

#### Topics:

- Create a New Organization
- Edit an Organization
- Manage the Organization's Users

You can arrange your PDMS-SP management portal in such a way that you can partition a group of Polycom devices and only have a selected pool users access it.

Organizations are arranged into hierarchies. Parent organizations may have sub-organizations, each of which can have further sub-organizations. This hierarchical structure gives service providers greater flexibility in managing their device deployments. The arrangement of sub-organizations can be modelled to reflect an organizational structure within the company, geographically categorizing deployments, giving resellers access to the devices they want to manage (for example, a while label reseller model), and many more.

Each organization, whether a root organization or a sub-organization, contains its own set of dedicated resources: devices, email accounts of users, and a default base profile.

## **Create a New Organization**

You can create organizations to group your devices.

#### **Procedure**

- 1. Click Manage Organization.
- 2. Click + Create New Organization.
- **3.** Configure the organization parameters shown in the following table:

Parameter	Description
Organization Name	Specify the organization name.
Allow Create Sub-Organization	Specify whether the organization can create a sub- organization.
Description	Specify description for the organization.

4. Click Create Organization.

## **Edit an Organization**

You can edit the organization parameters.

#### **Procedure**

- 1. Click Manage Organizations.
- 2. Click Edit.
- **3.** Edit the organization parameters shown in the following table:

Parameter	Description
Organization Name	Specify the organization name.
Description	Specify description for the organization.
Allow Create Sub-Organization	Specify whether the organization can create a sub- organization.

4. Click Save Changes.

## Manage the Organization's Users

You can manage the role permissions of the organization.

#### **Procedure**

- 1. Click Manage Organizations.
- 2. Click Manage to manage the role permissions and users of the organization.

## **User Management**

#### Topics:

- Create a New Role
- Edit a Role
- Delete a Role
- Add an Existing PDMS-SP User
- Invite a User
- Delete a User

You can add users and roles to control user privileges.

With roles and role permissions, you can restrict a specific user from the features in the PDMS-SP.

## **Create a New Role**

You can create a role with specified permissions.

#### **Procedure**

- 1. Click Manage Permissions.
- 2. Click Create New Role.
- 3. Specify the user role name in Role Name.
- **4.** Select the permissions that you want to assign to the user role.
- 5. Click Save.

## **Edit a Role**

You can edit a role.

#### **Procedure**

- 1. Click Manage Permissions.
- 2. Click **Edit** on the corresponding row for the role that you want to modify.
- 3. Update the user role information that you want to edit.
- 4. Click Save.

## **Delete a Role**

You can delete an existing role.

#### **Procedure**

- 1. Click Manage Permissions.
- 2. Click **Delete** on the corresponding row for the role that you want to delete.
- 3. Click OK.

## Add an Existing PDMS-SP User

You can add a new user who is already an existing PDMS-SP user to the PDMS-SP portal.

#### **Procedure**

- 1. Click Manage Permissions.
- 2. Click Add User.
- Enter the email address of the registered PDMS-SP user in the Add a user already registered on OBiTALK.
- 4. Click Add.

## Invite a User

You can invite a user not yet registered on PDMS-SP portal.

#### **Procedure**

- 1. Click Manage Permissions.
- 2. Click Add User.
- Add the email address of a new user by email address under the Invite a user not yet registered on OBiTALK.
- 4. Click Add.

PDMS-SP sends an invite email to the recipient email address, and the invite email contains instructions on how create a password and validate the email address.

## **Delete a User**

You can delete a user from the PDMS-SP.

#### **Procedure**

- 1. Click Manage Permissions.
- 2. Click **Delete** on the corresponding row for the user that you want to delete.
- 3. Click OK.

# Required Ports and Trusted IP Addresses and Hosts

#### **Required Ports**

This table lists the open ports on the PDMS-SP.

Protocol	Port	Direction
TCP	6800	out
TCP	5222	out
TCP	5223	out
UDP	5060	out
UDP	5061	out
UDP	10000 to 11000	out
UDP	16600 to 16998	out
UDP	19305	out
UDP	10000	in

#### **Trusted IP Addresses and Hosts**

This table lists the PDMS-SP IP addresses and hosts you should trust.

#### **PDMS-SP Trusted IP Addresses**

Trusted IP Address	UDP/TCP	TLS
54.241.160.4	10000 to 20000 TCP: 6800	443
54.241.163.234	10000 to 20000	443
54.67.107.54	10000 to 20000	443
54.67.113.163	10000 to 20000	443
54.219.101.123	10000 to 20000	443
54.52.249.241	10000 to 20000	443
52.53.96.55	10000 to 20000	443