

Supporting the Calendar, Instant Messaging, and Presence Features on Polycom Phones

This engineering advisory shows you how to integrate Microsoft® Outlook, Microsoft® Office Communication Server 2007 R2, and Microsoft® Lync 2010 with certain Polycom® phones. This engineering advisory shows you how to set up the Calendaring, Instant Messaging, and Presence features on the same Polycom phones.

This document includes the following sections:

- [Introduction](#)
- [Supporting the Instant Messaging and Presence Features](#)
- [Supporting the Calendar Feature](#)

This document is intended for system administrators who plan to support the Calendar, Instant Messaging, and Presence features on your existing Polycom phones.

This engineering advisory applies to:

- **For the Calendar feature:**
 - Polycom® SpectraLink® 8400 Series handsets running Polycom UC Software 4.0.0 or later
 - Polycom® VVX® 500 and 1500 business media phones running Polycom UC Software 4.0.1 or later
- **For the Instant Messaging and Presence features:**
 - SpectraLink 8400 Series handsets only running UC Software 4.0.0 or later

Introduction

You can support the following features on certain Polycom phones:

Instant Messaging and Presence features (SpectraLink 8400 Series handsets) This feature enables users to see their contacts' presence—or availability—from their phone. Using the Microsoft Office Communications Server 2007 R2 or Microsoft Lync-based feature, users will also be able to send instant messages to their contacts. Viewing a contact's presence enables users to see if a contact is busy or away from their desk before they send a message.

Calendar feature (SpectraLink 8400 Series handsets and VVX 500 and 1500 phones) This feature enables users to access and view their Microsoft Outlook calendar information directly from their phone. Users can also set up meetings, join meetings, and view meeting notifications from their phone.

To enable these features, you'll also need to install and configure Polycom and Microsoft components. In the following sections, you'll learn which components you need to install and how to configure each feature.

For more details on the Microsoft Office Communications Server 2007 R2, Microsoft Lync, and Microsoft Outlook changes that you will need to make, see the [Polycom Unified Communications Deployment Guide for Microsoft Environments](#) on the Polycom Support Web site.

Supporting the Instant Messaging and Presence Features

You can support the Instant Messaging and Presence features on SpectraLink 8400 Series handsets.

Assembling the Required Software Elements

The following tables show the Polycom and Microsoft products you require to support the Instant Messaging and Presence features on your handsets.

Table 1: Polycom Products Required for Instant Messaging and Presence

| <i>Product</i> | <i>Version</i> | <i>Description</i> |
|----------------|----------------|--|
| API | N/A | <p>The instant messaging client that is implemented on the phone is based on the following reference documents available from Microsoft:</p> <p>[MS-PRES]: Presence Protocol Specification</p> <p>[MS-SIPREGE]: Session Initiation Protocol (SIP) Registration Extensions</p> <p>[MS-SIPRE]: Session Initiation Protocol (SIP) Routing Extensions</p> <p>[MS-SIP]: Session Initiation Protocol Extensions</p> <p>You can search for these documents in the Open Specifications section of the Microsoft Developers Network (MSDN) Library.</p> |

Table 2: Microsoft Products Required for Instant Messaging and Presence

| <i>Product</i> | <i>Version</i> | <i>Description</i> |
|----------------------------------|----------------|--|
| Microsoft® Active Directory® | 2003 or 2008 | <p>Enables account logins and integrates with Office Communications Server 2007 R2.</p> <p>Note: Polycom products currently support only a single-forest Active Directory deployment.</p> |
| Microsoft® Certificate Authority | N/A | Issues certificates for the Active Directory forest. |

| <i>Product</i> | <i>Version</i> | <i>Description</i> |
|---|---|--|
| Microsoft® SQL Server® | N/A | Stores phone information in a database for users to access. Note: SQL Server is required only if you're using Office Communications Server 2007 R2 Enterprise Edition. If you use Office Communications Server 2007 R2 Standard Edition, SQL Server is automatically deployed. |
| Microsoft® Office Communications Server | 2007 R2, Standard or Enterprise Edition | Provides presence-based, real-time instant messaging, as well as voice, video, and data communications. Note: UC Software 4.0.0 doesn't support Microsoft® Lync™ Server 2010. |
| Microsoft® Office Communicator | 2007 R2 | Enables end users to send and receive instant messages and view presence information of their contacts. Note: UC Software 4.0.0 doesn't support Microsoft® Lync™. |
| Microsoft® Lync™ Server | 2010 | Provides presence-based, real-time instant messaging, as well as voice, video, and data communications. Note: Polycom phones must be running UC Software 4.0.1. |

Deploying the Instant Messaging and Presence Features

To deploy the Instant Messaging and Presence features, you'll need to install and configure several Microsoft products. To enable and use the features on Polycom phones, do the following:

- 1 Update each phone's configuration file(s).
- 2 Define login credentials for each phone user.
- 3 Add contacts to each phone's local contact directory.

Updating Each Phone's Configuration File

On your phones' provisioning server, update each phone's configuration file(s) to enable the features and set additional parameters. For example, update the **features.cfg** and/or **wireless.cfg** files.


Note: Using the UC Software Configuration Template Files

When you create configuration files for your organization, Polycom recommends that you use the UC Software configuration template files—part of the UC Software 4.0.0 deliverables—as a guide to how configuration files should look and which parameter values to use.

The following table shows the parameters you need to set to support the Instant Messaging and Presence features.

Table 3: Instant Messaging and Presence Parameters

| <i>Parameter</i> | <i>Permitted Values</i> | <i>Default</i> |
|--|---|----------------|
| feature.messaging.enabled¹ | 0 or 1 | 0 |
| If 0, the instant messaging feature is disabled. If 1, the feature is enabled. | | |
| feature.presence.enabled¹ | 0 or 1 | 0 |
| If 0, the presence feature — including buddy managements and user status — is disabled. If 1, the presence feature is enabled with the buddy and status options. | | |
| reg.x.address | <IMUsername>@ <OCSHostName>. <OCSDomainName> | Null |
| The user part (for example, <i>1002</i>) or the user and the host part (for example, <i>1002@polycom.com</i>) of the registration SIP URI or the H.323 ID/extension. For these features, the user's instant messaging (IM) identity. | | |
| reg.x.auth.password | string | Null |
| The password to be used for authentication challenges for this registration. If the password is non-Null, it will override the password entered into the Authentication submenu on the Settings menu of the phone. For these features, the Office Communications Server authentication password. | | |
| reg.x.auth.userId | string | Null |
| User ID to be used for authentication challenges for this registration. If the password non-Null, it will override the user parameter entered into the Authentication submenu on the Settings menu of the phone. For these features, t The Office Communications Server authentication name. | | |
| reg.x.server.y.address | dotted-decimal IP address or hostname | Null |
| The IP address or host name of a SIP server that accepts registrations. If not Null, all of the parameters in this table will override the parameters specified in <code>voIpProt.server.*</code> . Note: If this parameter is set, it will take precedence even if the DHCP server is available. If this registration is used for Microsoft Office Communications Server 2007 R2 on SpectraLink handsets, this parameter must be in the form <code>OCShostname.OSCdomain_name</code> . Note: The Office Communications Server or Lync Server address must be resolvable by DNS or local DNS static routing definitions. | | |

| <i>Parameter</i> | <i>Permitted Values</i> | <i>Default</i> |
|------------------|-------------------------|----------------|
|------------------|-------------------------|----------------|

| | | |
|--------------------------------------|---|-----------------|
| reg.x.server.y.specialInterop | standard, ocs2007r2, lcs2005, lync2010 | standard |
|--------------------------------------|---|-----------------|

Specify if this registration should support Microsoft Office Communications Server 2007 R2 (ocs2007r2), Microsoft Live Communications Server 2005 (lcs2005), or Microsoft Lync 2010 (lync2010). **Note:** To use instant messaging on SpectraLink handsets, set this parameter to ocs2007r2 or lync2010.

| | | |
|---------------------------------|--|-----------------|
| reg.x.server.y.transport | DNSNaptr, TCPpreferred, UDPOnly, TLS, TCPOnly | DNSNaptr |
|---------------------------------|--|-----------------|

The transport method the phone uses to communicate with the SIP server.

Null or DNSNaptr – if `reg.x.server.y.address` is a hostname and `reg.x.server.y.port` is 0 or Null, do NAPTR then SRV look-ups to try to discover the transport, ports and servers, as per RFC 3263. If `reg.x.server.y.address` is an IP address, or a port is given, then UDP is used.

TCPpreferred – TCP is the preferred transport; UDP is used if TCP fails.

UDPOnly – only UDP will be used.

TLS – if TLS fails, transport fails. Leave port field empty (will default to 5061) or set to 5061.

TCPOnly – only TCP will be used.

The protocol to use for communications with the Office Communications Server or Lync Server. ‘TLS’ is the recommended setting.

| | | |
|----------------------------|-------------------------|-------------|
| roaming_buddies.reg | positive integer | Null |
|----------------------------|-------------------------|-------------|

The index of the registration which has roaming buddies support enabled. If Null, the roaming buddies feature is disabled.

| | | |
|----------------------------|-------------------------|-------------|
| roaming_privacy.reg | positive integer | Null |
|----------------------------|-------------------------|-------------|

Specify the index of the registration/line that has roaming privacy support enabled. If Null, roaming privacy is disabled.

| | | |
|-------------------------------|---------------------------------------|-------------|
| messaging.quickNotes.x | String of up to 128 characters | Null |
|-------------------------------|---------------------------------------|-------------|

Up to 10 (x =1 to 10) quick notes for use in instant messages

¹ Change causes phone to restart or reboot.

Defining Login Credentials for Phone Users

To view presence information on a Polycom phone, users must define login credentials using the phone’s main menu. Once you have defined a user’s login credentials, the phone can connect to the Microsoft Office Communications Server or Microsoft Lync Server to display presence, and users can send instant messages to their contacts.

To define login credentials for SpectraLink 8400 Series handsets:

- 1 From the home screen, select **Settings**.

- 2 From the Settings screen, select **Basic Settings > Login Credentials**.
- 3 From the Login Credentials screen, enter the user's domain, user name, and password.

Adding Instant Message Contacts

For each handset, add contacts to the IM Contacts list or the local contact directory. Users will be able to see presence information for the contacts in their network. If users define an IM address for a contact in their network, users can send instant messages to the contact directly from the contact directory.

You can define an IM address as `<username>@<domain>` or `<username>`. If you define it as `<username>`, the domain name will be the value specified for the instant messaging registration line.

Supporting the Calendar Feature

You can support the Calendar feature on SpectraLink 8400 Series handsets and VVX 500 and 1500 phones.

Assembling the Required Software Elements

The following tables show the licenses and products you require to integrate the Calendar feature on your phones.

Table 4: Polycom Products Required for Calendar

| <i>Product</i> | <i>Version</i> | <i>Description</i> |
|---|----------------|---|
| Polycom Conferencing for Microsoft Outlook Add-in | v1.0.3 | Enables Microsoft Outlook users to schedule meetings. In addition, enables invitees to join a video-enabled meeting by clicking a link. |

Table 5: Microsoft Products Required for Calendar

| <i>Product</i> | <i>Version</i> | <i>Description</i> |
|----------------------------|----------------|---|
| Microsoft Active Directory | 2003 or 2008 | Enables account logins and integrates with Microsoft® Exchange Server. Note: Polycom products currently support only a single-forest Active Directory deployment. |
| Microsoft SQL Server | N/A | Stores phone information in a database for users to access. |



| <i>Product</i> | <i>Version</i> | <i>Description</i> |
|---------------------------|--------------------|---|
| Microsoft Exchange Server | 2007 SP3 | Hosts mailboxes and calendars. |
| | 2010 | As a minimum configuration for the Calendar feature to work on your phones, you can accept the default configuration. Note: Exchange Server 2007 and 2010 includes Microsoft Exchange Web Services (EWS), which enables client applications to communicate with the Microsoft Exchange Server. Make sure EWS is enabled. For more information about EWS, see the Exchange Web Services Reference available from the MSDN Library . |
| Microsoft Outlook | 2007 SP2 | Enables users to send Polycom Conferencing for Outlook invitations. |
| | 2010 | |
| Microsoft Office | 2007 SP2 | Provides Microsoft Word, which is required for sending Polycom Conferencing for Outlook invitations. Users of older versions of Microsoft Office can receive invitations. |
| | 2010 (32-bit only) | |

Deploying the Calendar Feature

To deploy the Calendar feature, you'll need to install and configure the Microsoft products. Once you have installed the required products, you will need to do the following:

- 1 Install the Polycom Conferencing for Outlook add-in.
- 2 Update each phone's configuration file.
- 3 Define login credentials for each phone user.

Installing the Polycom Conferencing for Outlook Add-in

The Polycom Conferencing for Outlook (PCO) add-in must be installed on each Microsoft Outlook client.

The PCO software and documentation are available from the Polycom Resource Center (PRC) on the [Unified Communications Professional Services](#) Web page. To access the PRC, you'll need to register for an account. For more information, contact your Polycom sales representative or your certified Polycom partner.

From the Unified Communications Professional Services page, you can download the PCO software (.msi) file, and the *Polycom Conferencing for Microsoft Outlook Administration Guide*. The guide explains

how to install and configure the PCO, how to deploy it to your users, and how to use it to create Polycom Conferencing meeting invitations.

Updating Each Phone's Configuration File

On your phones' provisioning server, update each phone's feature configuration file (for example, **features.cfg**) to configure the feature.



Note: Using the UC Software Configuration Template Files

When you create configuration files for your organization, Polycom recommends that you use the UC Software configuration template files—part of the UC Software 4.0.0 deliverables—as a guide to how configuration files should look and which parameter values to use.



Note: Using the Web Configuration Utility

You can use the Web Configuration Utility to change the Calendar parameters. To enable Microsoft Exchange Calendar Integration and configure the settings, navigate to **Settings > Applications** and expand **Exchange Applications**.

The following table shows the parameters you need to set to enable the Calendar feature and provide access to the EWS interface for your phones.

Table 6: Calendar Parameters

| Parameter | Permitted Values | Default |
|---|------------------|-------------|
| exchange.meeting.phonePattern | String | Null |
| <p>The pattern used to identify phone numbers in meeting descriptions, where "x" denotes any digit and " " separates alternative patterns (for example, <i>xxx-xxx-xxxx/604.xxx.xxxx</i>).</p> <p><i>Note:</i> You can use this parameter in locations other than North American if the numbers you use numbers that look like 7 or 10 digits phone numbers, or if you use tel: URIs in the meeting descriptions. For example, in the meeting description, enter a meeting phone number as <i>(0098) 216 602 0855</i> or <i>tel:00982166020855</i>.</p> | | |
| exchange.meeting.reminderEnabled | 0 or 1 | 1 |
| <p>If 0, meeting reminders are disabled. If 1, they are enabled.</p> | | |
| exchange.server.url¹ | String | Null |
| <p>The Microsoft Exchange server address. For example, enter the Exchange Server Web Services OOF URL.</p> | | |
| feature.exchangeCalendar.enabled¹ | 0 or 1 | 0 |
| <p>If 0, the calendaring feature is disabled. If 1, the feature is enabled.</p> | | |

¹ Change causes phone to restart or reboot.

**Admin Tip: Finding the Microsoft Exchange Server URL**

To find the Microsoft Exchange Server URL, see the tip at http://www.msexchange.org/articles_tutorials/exchange-server-2007/management-administration/configuring-exchange-server-2007-web-services-urls.html.

Defining Login Credentials for Phone Users

To view personal calendar information on a Polycom phone, you must define user's login credentials and users must enter these login credentials using the phone's user interface. Once a user's login credentials are entered, the phone can connect to the Microsoft Exchange Server and display the user's calendar information.

To define login credentials for VVX 500 and 1500 phones:

- 1 Press the **Menu** key, and then select **Settings > Basic > Login Credentials**.
- 2 From the Login Credentials screen, enter the user's domain, user name, and password.

To define login credentials for SpectraLink 8400 Series handsets:

- 1 From the home screen, choose **Settings**.
- 2 From the Settings screen, choose **Basic Settings > Login Credentials**.
- 3 From the Login Credentials screen, enter the user's domain, user name, and password.

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