## Oracle® Communications Connector for Microsoft Outlook

System Administrator's Guide Release 8.0.1

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# ORACLE

Oracle Communications Connector for Microsoft Outlook System Administrator's Guide, Release 8.0.1

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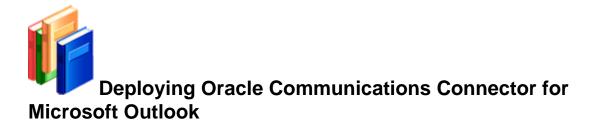
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# Chapter 1. Getting Started with Connector for Microsoft Outlook





The future. For documentation beginning with Connector for Microsoft Outlook 8.0.1 and will not the future. For documentation beginning with Connector for Microsoft Connector

m/technetwork/documentation/oracle-communications-185806.html

The Connector for Microsoft Outlook enables users in your organization to use Microsoft Outlook as their email and calendar client while connected to Unified Communications Suite servers. The Connector for Microsoft Outlook must be installed and configured on each user desktop to facilitate the necessary ongoing communications between Microsoft Outlook and the server. The Connector for Microsoft Outlook software is installed one desktop at a time by a Setup Wizard that can also convert any existing Microsoft Outlook data files to a format that the new software can read and use.

Topics:

- Introduction and Orientation
- Administrator's Process Overview

# Introduction and Orientation

To simplify both the administrator's work associated with deployment and the user's tasks in actually installing and configuring the new software, Oracle provides a Deployment Configuration Program. This tool lets the administrator create customized end-user installation packages for the software, with pre-set configuration parameters to simplify and streamline the user's process, and to enforce any configuration settings the administrator deems necessary or desirable for a particular user or group of users. The Deployment Configuration Program saves those pre-set configuration parameters in an .ini text file, and then bundles the .ini file with an installation program, the Setup Wizard, for end users. When an end user activates the package, the Setup Wizard reads the .ini file to install and configure the Connector software on the user's desktop according to the administrator's specifications.

A system administrator may create different installation packages for individual users or for groups of users. For example, to provide different configuration schemes for users in the Sales department versus the Engineering department and so forth, or to offer configuration options to some groups of users while setting fixed parameters (eliminating the choices) for others.

# **Administrator's Process Overview**

In a typical deployment scenario, an administrator will perform four primary tasks to deploy the Connector for Microsoft Outlook.

## To Deploy the Connector for Microsoft Outlook

1. Prepare a comprehensive Deployment Plan.

Planning and foresight are critical to a smooth deployment. The process of developing a comprehensive Deployment Plan is a valuable exercise that will lead you to consider and accommodate all of the factors likely to influence your organization's migration. The Connector for Microsoft Outlook sections of the Communications Suite Deployment Planning Guide explain important migration concepts, prerequisites, and strategic choices, and explain how to develop a Deployment Plan that will guide you through your migration. Every administrator should therefore read these sections and prepare a comprehensive Deployment Plan.

- 2. Install the Deployment Configuration Program. The administrative software obviously must reside on the administrator's computer before it can be used to create end-user installation packages. See *Connector for Microsoft Outlook Installation Guide* for more information.
- 3. Configure end-user package.

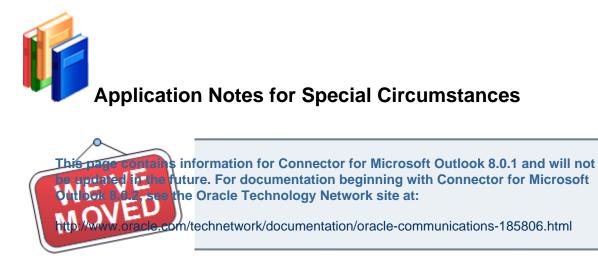
Configuring End-User Packages explains how to use the Deployment Configuration Program to create customized packages for Outlook end users. These packages can be configured to install the necessary software on user desktops, or to convert users' existing Outlook and Exchange data files for use with the new software—or both, depending on your circumstances.

4. Deploy each end-user package. Once you have created an installation package for your users, you must tell them where to find it and how to use it. Many administrators simply copy the package and the associated Connector for Microsoft Outlook User's Guide to a shared folder, and then provide links to the installation package and documentation in an announcement email to users.

Steps 1 and 2 of this process overview are a good place to start regardless of your unique configuration and preferences. If your migration strategy calls for two or more different installation packages for different users or user groups, simply repeat steps 3 and 4 for each package until all users have been migrated.

The deployment process can proceed along different paths depending on your original and destination network configurations, the administrative structure of your organization, and your own informed sense of the extent to which your users should be involved in the process of installing and configuring their own desktop software. Moreover, your network configuration or preferences may dictate some variation to the standard scenario described above. Application Notes for Special Circumstances provides application notes for the most common of these variations.

# Chapter 2. Application Notes for Special Circumstances



The information explains how to deploy Connector for Microsoft Outlook for Oracle Communications Unified Communications Suite under certain special circumstances or network configurations.

Topics:

- "Push" Method Deployment, If End Users Lack Installation Privileges
- Command-Line Switches for the User Installation Package
- Designating Outlook as the Default Client
- Removing Sun Java System Synchronization Program
- Undoing (Reversing) a User's Migration

# "Push" Method Deployment, If End Users Lack Installation Privileges

The Deployment Configuration Program lets an administrator create installation packages that end users can run to install and configure their own local desktop copies of the Connector for Microsoft Outlook software. Software installation, however, requires access privileges that often are disallowed to many or most end users. Most enterprises therefore implement a "push" method for software distribution from the system administrator to user desktops that bypasses the requirement for user access privileges. If your network serves "locked-down" Windows environments where end users cannot install software, we strongly recommend this sort of automated configuration management as a way to avoid many individual desktop visits.

This section describes a "push" method for distributing the Connector for Microsoft Outlook to user desktops using Microsoft's SMS administration tools. Remember that the Deployment Configuration program can prepare desktop installation packages that both install the Connector for Microsoft Outlook software and convert existing Outlook profiles and data files for use with the new software. If your users had sufficient administrator privileges to install new software on their own desktops, you could prepare a single installation package that would perform both the installation and conversion functions in a single

pass. But if the user who runs the installation package lacks the administrator privileges to install software, then the installation portion of the package would be unable to run and the conversion would fail.

When users cannot install their own software, we have to separate those two tasks so that the installation function can be facilitated separately by an SMS installation package. The SMS installation package can then be run on each user desktop by a local SMS account that has full administrator rights, and is therefore authorized to install new software on the local desktop. After the necessary software for the Connector for Microsoft Outlook has been installed, we use the Deployment Configuration Program to prepare a second installation package to convert any existing Outlook profiles and data files for use with the new Connector for Microsoft Outlook.

The conversion functions will convert any existing Outlook profiles and data files associated with the specific user who is running the desktop installation program. But the SMS account that will run the first installation package is a generic account, with administrator privileges so that it can install software, but not associated with any particular user. The installation tasks and conversion tasks must therefore be performed by two separate installation packages, because the generic SMS account necessary to physically install the software lacks the user specificity necessary to convert a user's existing profile and data files.

A typical SMS "push" scenario consists of the five steps detailed below.

## To Deploy the Push Method

1. Prepare the necessary shared folders.

Create two new shared directories, named LOGS and WPW, on a computer that is part of the same SMS site as the end-user desktops. The nature of Windows NT local accounts requires that you assign full control share permissions for all three folders for the SMSCliToknLocalAcct\$ account.

These assignments will provide the necessary read/write access to these directories for the SMS local account (which requires a password), and lets you avoid having to open the system to guest access. Also, assign full control permissions for all three of the NTFS folders to SMSCliToknLocalAcct\$.

2. Prepare an installation package to install the necessary software.

Use the Connector for Microsoft Outlook Deployment Configuration program (Admin.exe) to create an installation package that will **only** install the necessary software to each user's desktop, but **not** convert existing Outlook profiles and data files. The Admin.exe program is described in Configuring End-User Packages, but note these special requirements, on the Processes tab, for preparing this package for SMS distribution:

- Be sure the User mode is set to Silent.
- Be sure to uncheck the option to Create/convert/upgrade user profile.
- Use UNC paths (\servername\sharename) for all three of the path fields.
- 3. Push the first installation package to user desktops via an SMS installation package. Use Microsoft's SMS Packaging Wizard to prepare an installation package that will contain the Connector for Microsoft Outlook installation package you created in step 2, and then "push" the package to run automatically on user desktops— without any user initiative or interaction.
  - a. Launch the SMS 2.0 Management console. Right-click on the collection to which you want to push the Connector for Microsoft Outlook, and click **Distribute Software**. SMS then launches its Distribute Software Wizard.
  - b. On the Distribute Software Wizard's Welcome screen: Click Next to begin.
  - c. On the Package screen: Click the option to **Create a new package and program**, and click **Next**.
  - d. On the Package Identification screen: Enter the appropriate values and click Next.
  - e. On the Source Files screen: Select Create a compressed version of this source, and click Next.
  - f. On the Source Directory screen: Click the **Browse** button to locate and specify the directory where the Connector for Microsoft Outlook installation package was created. The path specification can be either local or UNC. When you have specified the correct path, click

Next.

- g. On the Program Identification screen: Click the **Browse** button to locate and specify the name of the program .exe file for the **Command line**, and click **Next**.
- h. On the Program Properties screen: Make sure the program will **Run with administrative rights**, and click **Next**.
- i. Specify whether and how you want to advertise the program on the next five screens, titled: Advertise a Program, Advertisement Target, Advertisement Name, Advertise to Sub collections, and Advertisement Schedule. As you enter your choices, click **Next** to advance to each next screen.
- j. On the Assign Program screen: Select **Yes** to assign the program, specify the date and time of assignment, and click **Next**.
- k. On the Completing... screen: Review your settings for the creation of this installation package. You may use the **Back** button to go back and change any settings now, before you actually create the package. When the settings appear as you want them, click **Finish** to create the package, which will then be pushed to user desktops according to the Assignment and other parameters you have specified in this Wizard. A user's Advertised Programs Monitor will report the package.

In any case, every user will be alerted to the imminent run of the package by a Countdown dialog box.

Because the desktop installation program (desktop.exe) will be run by the SMS administrator program, as a local user, access to network shares will require a password, even if the shares are made available to the group "everyone." If the network denies access to log directories and install directories during a user run of the installation package, enable guest access on the computer hosting the log files and installation media, to allow the local account from one system to access the data from another system.

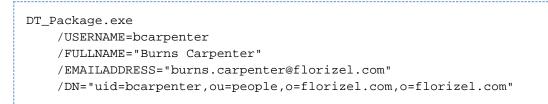
- 4. Prepare a second installation package to convert existing Outlook profiles and data files. Use the Connector for Microsoft Outlook Deployment Configuration program (Admin.exe) to create a second installation package for the Connector for Microsoft Outlook— this time to **only** convert any existing Outlook profiles and data files for use with the new Connector for Microsoft Outlook software. The Admin.exe program is described in Configuring End-User Packages, but note these special requirements in the Processes tab for preparing this package:
  - Set the User mode to Interactive.
  - Under Processes to include in this configuration :
    - Be sure that none of the Install or upgrade... options is marked.
    - Mark the Create/convert/upgrade user profile option.
- 5. Push the second installation package to user desktops via an SMS installation package. Use Microsoft's SMS Packaging Wizard to prepare another SMS installation package—this one to contain the installation package you created in step 4. Use the same settings you used in step 3 above to prepare the first SMS installation package, except for these differences on the Program Properties screen:
  - Program can run: Select the option Only when a user is logged on.
  - Mark the User input required option, and be sure that Run with administrative rights is unmarked.

This final SMS package will require some user interaction, to reply to password prompts, but will not require administrator privileges since this package does not install any new software to the desktop. The passwords will authorize the conversion program's access to password-protected Outlook Personal Folders (.pst) files.

Alternatively, this step can be accomplished by running the installation package from the command line, with an SMS script, as explained below under Command-Line Switches for the User Installation Package

# **Command-Line Switches for the User Installation Package**

Step 5 of the "push" method described above (see "Push" Method Deployment, If End Users Lack Installation Privileges) can also be accomplished by running the installation package from an SMS script, with command-line switches to pass the necessary user passwords to the conversion program as it runs. This would make possible a truly silent installation and configuration, requiring no user interaction whatsoever. For example, you might create an SMS package that runs a conversion package, and have the SMS services issue the following commands when it is run:



#### 🕤 Note -

This and other command-line samples are formatted here for ease of reading, but all of the switches must be typed in one continuous string— which is likely to wrap to multiple lines of its own accord.

You could then substitute environment variables for the users (assuming that the NT usernames and the Sun usernames match):

```
DT_Package.exe
/USERNAME=%username%
/FULLNAME="Change This"
/EMAILADDRESS=%username%@florizel.com
/DN=uid=%username%,ou=people,o=florizel.com,o=florizel.com
```

This command-line approach would permit a silent (or minimally interactive) installation from SMS, which would probably generate far fewer Help desk calls than asking users to click a link in an email and requiring users to enter data.

The installation package will support these command-line switches:

- /USERNAME=*xxx*, where *xxx* is the username on the Sun servers.
- /FULLNAME=*xxx*, where *xxx* is the display name of the user.
- /EMAILADDRESS=*xxx*, where *xxx* is the email address of the user.
- /DN=xxx, where xxx is the user DN on the Sun servers.
- /NEWPROFILENAME=xxx, where xxx is the name of the created profile.
- /SAVEPASSWORD=n, where n = 1 (save) or 0 (don't save).
- /ALTPSTDIR=*dir*, where *dir* is the directory where the local cache is created. If this switch is not present, the default value is Documents and Settings%username%\Local Settings\Application Data\Sun\Outlook Connector

These switches will be useful if you are converting an Exchange profile:

- /OLDDOMAIN=xxx, where xxx is the Exchange domain
- /OLDUSERNAME=xxx, where xxx is the Exchange user name
- 2. Migrating Terminal Service Users from Exchange

The Connector for Microsoft Outlook administrator's tools can also be used to migrate existing Outlook users of Windows terminal service from Exchange to a Communications Suite server. The method described below assumes the following environment:

- Windows 2000 Server with Terminal Services.
- Office 2000 installed with Terminal Services install file from Office 2000 Resource Kit CD (ORK) onto the Windows server.
- Outlook 2000 configured as the default mail client.

## To Migrate Terminal Service Users from Exchange to Communications Suite

- Prepare the server. Log onto the server's local console as an administrator, and configure Outlook to be the default mail client (if it is not already).
- 2. Create an appropriate desktop installation package. Use the Deployment Configuration Program to create a desktop package that does **not** install any services, but simply converts profiles from Exchange to Communications Suite services. (If the user has been in a non-Exchange environment, there will be no profile to convert, so you must configure the desktop package to create a new profile instead.)
- Update the user's desktop.
   Log on to a terminal session as a regular user, and run the desktop installation package that you created in step 2 above— that only converts or creates a user profile, but does not attempt to install or update any services. Then open Outlook and verify that the conversion is complete.

# **Designating Outlook as the Default Client**

Connector for Microsoft Outlook can be installed only at workstations where Microsoft Outlook is set to be the default email client. If Outlook is **not** set as a user's default email client, the Setup Wizard will not install the software, and will prompt the user to correct the problem and run the Setup Wizard again.

## To Designate Microsoft Outlook as a User's Default Email Client

If you are running Windows XP:

- 1. Open the Windows Control Panel.
- 2. Select "Switch to Classic View."
- 3. Double-click Internet Options.
- 4. Select the Programs tab from the Internet Properties window.
- 5. Select Microsoft Outlook from the E-mail pull-down menu.
- 6. Click OK.

If you are running Windows Vista:

- 1. Click the Start menu.
- 2. Select Default Programs.
  - The Default Programs window is displayed.
- 3. Click Set your default programs from the "Choose the program that Windows uses by default" list. A list of available programs is displayed in the left panel.
- 4. Click Microsoft Office Outlook from the programs list. A description of this program appears in the right panel.
- 5. Click the Set this program as default button.
- 6. Click OK.

# **Removing Sun Java System Synchronization Program**

The MAPI services for the Connector for Microsoft Outlook are a required component of the Connector installation, but cannot coexist with the Synchronization Program. If the synchronization program is installed on a user's workstation, the Setup Wizard will notify the user of the problem (in an error message after the Welcome screen), and prompt him or her to acknowledge the notice and exit the program. The user may then rerun the Setup Wizard after the synchronization program has been removed.

## To Remove the Synchronization Program from a User's Workstation

- 1. From the Start menu: Select the **Uninstall...** option for the program you want to uninstall. Choose one of:
- Programs Sun Java System Synchronization ProgramUninstall Sun Java System Synchronization Program
- Programs Sun ONE Synchronization ProgramUninstall Sun ONE Synchronization (old version of Synchronization Program)
- 1. In the Uninstallation window: Follow the prompts to uninstall the software.
- 2. Click Finish to complete the uninstallation process.

To synchronize a Palm device, WinCE device or Pocket PC device with Outlook, we strongly recommend that users use the sync software distributed with their devices, rather than the Sun Java System Synchronization program. Changing to the sync software distributed with a device may require uninstalling and reinstalling the Palm Desktop software.

If a user wants to continue using the Synchronization program to sync to the data of the other device, he or she can reinstall the software, but **not** select the checkbox for the Microsoft Outlook 98/2000 translator during the installation.

# Undoing (Reversing) a User's Migration

To abandon a user's connection to the new Communications Suite server and restore the user's mailbox to service with the old Exchange server:

## To Reverse a User's Migration

- 1. Delete the profile "Xxx (old)."
- 2. Copy the profile "Xxx" to "Xxx Sun"— or some other name, like "Xxx (new)," etc.
- 3. Delete the profile "Xxx."
- 4. Copy the profile "Xxx (Backup)" to "Xxx."
- 5. Delete the profile "Xxx (Backup)."
- 6. Determine where the .pst's are located by viewing Properties on the profile. There is no standard location for .pst files, so the only reliable way to find them is to open the profile (now named " Xxx") and, for each .pst service, click on Properties and note the path.
- 7. For each pst file: Rename Yyy.pst to Yyy.new, and rename Yyy.bak to Yyy.pst.
- 8. Determine where the .pab's are located by viewing Properties on the profile. There is no standard location for .pab files, so the only reliable way to find them is to open the profile (now named "Xxx") and, for each .pab service, click on Properties and note the path.
- 9. For each pab file: Rename Zzz.pab to Zzz.new, and rename Zzz.bak to Zzz.pab. The Yyy.bak and Zzz.bak files will be in the same directory. To remove the profile and leave the Exchange profile resident on the system, skip step 2 (and combine steps 1 and 3).

# Chapter 3. Ability to Customize Attribute Mapping and GAL Display Order





Interns information for Connector for Microsoft Outlook 8.0.1 and will not in the future. For documentation beginning with Connector for Microsoft 1, see the Oracle Technology Network site at:

m/technetwork/documentation/oracle-communications-185806.html

Connector for Microsoft Outlook maps the LDAP attributes to the corresponding display items in Outlook. You can now customize the LDAP attribute mapping and GAL display order by using the Connector for Outlook Deployment Program.

To customize the Attribute Mapping, perform the following steps:

- 1. Click the LDAP tab from the Connector for Outlook Deployment Program.
- 2. In the LDAP Mapping String option, change the attribute mapping to the desired value. For example, you can change it to Firstname = given name, Dept = DeptID.

To customize GAL Display Order, perform the following steps:

- 1. Open the configuration (.ini) file from the location where you stored it when you created the profile.
- 2. Set the attribute to the desired display order. All ini files will have an attribute GALDisplayOrder, which can be modified.

For example, you can set the GAL Display Order to the following:

GALDisplayOrder=Officephonenumber,Address,Title,Company,uid,PrimaryEmailAdd

The first column is the attribute used in the "VLV sort attribute," which by default is cn(displayname), followed by OfficePhoneNumber in second column, then Address in third column, and so forth.

Consider what happens if you set the GAL Display Order to the following:

```
GALDisplayOrder=PrimaryEmailAddress,Officephonenumber,Address,Title,Company
```

The first column is still cn(displayname), but now it is followed by PrimaryEmailAddress in the second column, then Officephonenumber in the third column, and so on.

#### 🖯 Note

VLV sort attribute is used in the LDAP query as a sort attribute. This should be the same as the sort attribute used in the VLV index created at the server side or else performance could be degraded.

# **Chapter 4. Ability to Disable Save Password Field**



# **Disable Save Password Option**



Connector for Microsoft Outlook for Oracle Communications Unified Communications Suite supports a security feature that enables administrators to restrict users from saving the passwords in their profile. As a prerequisite to disabling this option, you must set the Disallow Save Password value to 1 in the Registry Editor.

To disable the Save Password option, perform the following steps:

- 1. Invoke Microsoft Outlook Deployment Configuration Program.
- 2. Click the User Profiles tab.
- 3. Select the Never Save checkbox.
- Click File -> Save to accept the change. Every time you open Connector for Outlook, you will be prompted to enter the password.

# **Chapter 5. Configuring End-User Packages**



# Configuring End-User Packages



If the most recent version of the Administrator's software is not yet installed on your computer, see the Installation Guide. The Administrator's software must be properly installed on your computer before you can run the Deployment Configuration Program.

Topics:

- Creating Desktop Installation Packages
- Processes Tab
- User Profiles Tab
- User .psts Tab
- Servers Tab
- Mail Tab
- LDAP Tab
- Calendar Tab
- Address Book Tab
- Single User Tab

# **Creating Desktop Installation Packages**

Follow these instructions to create a single desktop installation package for a single user, or for a particular group of users who will all install and configure the Connector for Microsoft Outlook in the same way. To create multiple desktop installation packages with a variety of configuration settings for different groups of users, repeat this procedure for each package you want to create.

#### To create an end-user desktop installation package

- Locate and launch (double-click) the file Admin.exe, in C:\Program Files\Sun\Deployment Configuration Program, or from a desktop shortcut icon or from the Start program menu. The Deployment Configuration Program then opens a Configuration Window on your desktop. The Configuration Window contains:
  - · Nine tabbed panels where you enter the information to characterize end user's

configuration of the Connector for Microsoft Outlook (described separately below).

- A **Help** button, which opens a separate window of information about the entry options available on the currently displayed panel.
- Three menus: File, Tools, and Help.
   The File Menu offers several standard, familiar Windows features for file management: New, Open..., Save, Save As..., Print Setup..., Print..., and Exit.
   The Help Menu offers context-sensitive access to the online help system that accompanies this Deployment Configuration Program.
   The Tools Menu offers a Create Package feature that lets you create a new installation package for an existing .ini configuration file that has been opened into this Configuration Window. You may use FileOpen... to locate and open an existing .ini file.
- Complete the information in the nine tabbed panels, as described separately (per tab) below. Click the tab to view the associated panel. If you begin creating an installation package but then decide to finish it at a later time, you may FileSave a partially completed package, and then FileOpen... it later to resume and complete your work.
- 3. When you have entered all of the information requested in the nine tabbed panels, select **FileSave** to save your configuration choices in an .ini file and create a new installation package. Clicking **Save** activates a standard, familiar Windows Save dialog box.
- 4. In the dialog box, enter an appropriate path and filename for the .ini file and .exe file, and click the **Save** button.

The **Save** command actually creates two new files: the .ini file, which is saved in the folder you designate in the Save dialog box, and an .exe file (the bundled installation package, including a copy of the .ini file), which is saved by default to the same folder where the .ini file is saved. Both the .ini and .exe files carry the filename you designate in the Save dialog box.

#### Troubleshooting

If the program reports a Logon failure or "Could not locate..." a necessary resource while it is running, and if you know that the resource exists in the location that you have specified, then the administrator account you are using to run the Deployment Configuration Program is not authenticated to the file server where the resource resides. Make sure that you are logged in to the locations of all such resources and then run the Deployment Configuration Program again.

## **Processes Tab**

The Processes tabbed panel is shown in Figure 2-2.

#### Figure 2-2 Deployment Configuration Program: Processes Tab

🌮 oc.ini - Connector for Microsoft Outlook fo	r Oracle Communications Unified Communicatio 🛛
Elle Iools Help	
Processes User Profiles User .psts Servers Mail	LDAP Calendar Address Book (Single User)
User mode <u>Silent (user sees nothing during configuration)</u> <u>Interactive (user steps through a setup wizard</u> during configuration and can make selections other than the default)	Log file settings
Processes to include in this configuration         Install or upgrade Connector for Microsoft Dutlook for Dracle Communications Unified Communications Suite         Requires:       Outlook 2003         Outlook 2007         For more information consult the online help         Image: Ima	Status file settings         Post a one-line status of user activity to a .csv file:         (Enter shared file for status entries)
	Help

#### User mode

You can choose to install the package in any of the two modes. These two modes, Silent installation vs. Interactive, are mutually exclusive:

Silent: The user program will install and configure the user's software, and convert the existing default Exchange user profile and Personal Folders (.pst) files, without any user involvement whatsoever, according to the administrator's pre-set parameters for this process (as set in this and the other tabs in this Deployment Configuration Program).

Interactive: The user program will present the user with at least some choices for the installation, configuration, and conversion processes. The extent of user involvement will be as determined by the administrator (as set in this and the other tabs in this Deployment Configuration Program).

#### Processes to include in this configuration

The installation of these software components to user desktops will require access privileges that often are disallowed to many or most end users. If your network serves "locked-down" Windows environments where end users cannot install the software, we strongly recommend a "push" method for software distribution from the system administrator to user desktops that bypasses the requirement for user access privileges. This "push" method of distribution is explained in "Push" Method Deployment, If End Users Lack Installation Privileges.

For a full explanation of any or all of the processes offered in this panel, and the implications of installing or not installing them, please see Connector for Microsoft Outlook High-Level Architecture.

**Install or upgrade Connector for Microsoft Outlook.** Tells the program to install the software that facilitates necessary ongoing communications between the user's Outlook client application and the Oracle Communications Unified Communications Suite server. If Connector for Microsoft Outlook is already installed, the user program will check the installed version and, if appropriate, upgrade to the newer version.

System requirements for the Connector for Microsoft Outlook include:

- Operating System Windows XP and Windows Vista.
- Outlook 2003 or Outlook 2007.
- Microsoft Outlook must be designated as the user's default email client. If Outlook is not set as a user's default email client, see Designating Outlook as the Default Client resolve this problem.
- The software cannot be installed to any workstation that contains the Sun Java System Synchronization program, which is incompatible with Connector for Microsoft Outlook. If the synchronization program has been installed on a particular user's desktop, it must be removed (see Removing Sun Java System Synchronization Program.

The Connector for Microsoft Outlook Setup Wizard will detect any discrepancy between these requirements and the actual installation environment, and in that case will not install Connector for Microsoft Outlook.

**Create/convert/upgrade user profile**. Activates the User Profiles tabbed panel, so the user program can convert an existing eligible Outlook user profile or create a new profile for use with the new Connector. The user program will convert only an "eligible" profile, meaning that the profile must:

- Include message services of at least one type designated in the User Profiles tabbed panel (in the Converted/upgraded Profile Settings section).
- Not have been fully converted (all of its .pst files converted) by a previous run of the user program (although the remaining, unconverted .pst files of a partially converted profile can be converted).

If this box is **not** marked, the entire User Profiles tabbed panel will be grayed out and unavailable, and no user profile will be converted or created. For example, you may want to create a user installation package to simply install or update MAPI services without converting or creating any profiles.

#### Log file settings

These settings pertain to the directory where the user program will write its log files for the user's migration session. The first two options are mutually exclusive:

- Store log files locally: Tells the user program to write its log files to the user's local "temp" directory.
- Store log files in a shared directory: Tells the user program to write its log files to a particular shared directory, which you must specify in the accompanying text box. Use the Browse ("...") button to locate and specify the path, or type it into the text box. You can enter a drive letter or a UNC path.

#### If the Browse feature for Log files does not display the location you need to specify (but you

**know that it exists):** This is an unlikely scenario, but chances are you are not authenticated in the domain to which you have browsed. To correct this problem, right-click the target computer and select Explore, and enter your administrator user ID and password at the prompt. You may then return to the Browse feature and select the computer you need to browse.

Include debug logging: Tells the user program to log its activities in the more verbose, more
explicit "debug" style. If a user encounters a problem with the installation package and you can't
diagnose the problem by reviewing the default-style log entries, the more verbose debug-style
logging may provide enough additional information to help you or your associates solve the
problem. This option is off by default.

### **Status file settings**

Post a one-line status of user activity to a .csv file: Adds a one-line summary of user activity to the .csv file you specify in the accompanying text box. Each line represents one run of the desktop tool by a user. A single user who runs the tool multiple times should generate multiple lines in the .csv file.

If you mark this checkbox, you must also specify the shared file to which the status lines will be written. Use the Browse ("...") button to locate and specify the path, or just type it into the text box. If the file already exists, it will be updated each time the installation kit is run.

### Notes (optional)

Any notes or comments you care to include about this configuration can be entered into this field.

# **User Profiles Tab**

The settings in this User Profiles panel, shown in Figure 2-3, apply only if this package will create or convert user profiles. Therefore, the features in this panel are available only if the Create/convert user profile option is checked on the Processes tabbed panel. This entire User Profiles panel will be grayed out if the Create/convert/upgrade user profile option is unmarked.

#### Figure 2-3 Deployment Configuration Program: User Profiles Tab

🌮 oc.ini - Connector for Microsoft Outlook for Oracle Communications Unified Communicatio	×
<u>Eile I</u> ools <u>H</u> elp	
Processes User Profiles User .psts Servers Mail LDAP Calendar Address Book (Single User)	
<ul> <li>* IMPORTANT, consult documentation for description of files that will be affected during conversion/upgrade/creation.</li> <li>User profile settings</li> <li>Select the profile mode.</li> <li>© convert/upgrade existing eligible user profiles</li> <li>© Create new user profiles without conversion/upgrade</li> <li>© Convert/upgrade or create, depending on whether an elligible user profile exists</li> <li>Converted/upgraded Profile Settings</li> <li>If converting/upgrading, select the types of profiles eligible for conversion/upgrade.</li> <li>If converting/upgrading, select the types of profiles eligible for conversion/upgrade.</li> <li>If xchange profiles</li> <li>MS POP profiles</li> <li>MS IMAP profiles</li> <li>Upgrade Version 6.0 Sun Java System Connector for Microsoft Outlook profiles (GAL support)</li> </ul>	
If converting/upgrading, change the profile name to the following: Name for converted/upgraded profiles: Sun Java System	
Created Profile Settings If creating new profiles, specify the following settings: Name for new grofiles: Dracle Unified Communic Allow user to change profile name Set profile as <u>d</u> efault, when creating new profiles. (Does not apply to converted/upgraded profiles)	
Option to save profile user password during configuration This refers to the user password used to access Outlook after configuration. © <u>G</u> ive user the option to save Save Password checkbox displayed and unchecked. (Not an option in Silent Mode) © <u>A</u> lways save © Ne <u>v</u> er save	
Help	

The settings in this panel determine how Exchange users' Contacts, Journal and Notes data will be converted to local (desktop) Personal Folders (.pst) files.

#### **User profile settings**

Mark options in this section to specify whether and how user profiles will be converted and created:

- Convert/upgrade existing eligible user profiles: Tells the user program to convert an existing Outlook profile, as follows:
  - In Silent Mode: Converts the user's default profile if it can be found, or does nothing if a default profile cannot be found.
  - In Interactive Mode: Prompts the user to select a single profile to convert if it finds:
    - Two or more eligible profiles connecting to Exchange server(s)
    - Two or more eligible IMAP/POP profiles
    - Any profile of a Connector for Microsoft Outlook before 7.2 without GAL support

• Only one eligible profile that is not set as the user's default

If the program finds only one eligible profile, and it is set as the user's default, the program automatically converts that profile without any user interaction. If the program finds no eligible profiles, it does nothing--- neither converts nor creates any user profile.

Remember that the user program will convert only an "eligible" profile, meaning that the profile must include message services of at least one type designated in the Converted/upgraded Profile Settings section of this screen (below), and must not have been fully converted (all of its .pst files converted) by a previous run of the user program (although the remaining, unconverted .pst files of a partially converted profile can be converted).

- Create new user profiles without conversion/upgrade: Tells the user program to create a new Outlook user profile, ignoring any existing profiles that may already exist for the user. Note that if a user attempts to run the installation with the same profile name more than once, an error occurs.
- **Convert/upgrade or create:** Tells the user program to convert an existing Outlook user profile if it can find one, or create a new profile if it cannot find an existing one:
  - In Silent Mode: Converts the user's default Outlook profile if it can be found, or creates a new profile if a default profile cannot be found.
  - In Interactive Mode: Prompts the user to select a single profile to convert if it finds:
    - Two or more eligible profiles connecting to Exchange servers
    - Two or more eligible IMAP/POP profiles
    - Any profile of a Connector for Microsoft Outlook before 7.2 without GAL support
    - Only one eligible profile that is not set as the user's default

If the program finds no eligible profiles, it creates a new one.

#### O Note:

The administrator can configure the desktop install to modify an existing user profile for Connector for Microsoft Outlook 7.1 or later versions (which are configured with GAL) for Calendar migration. The ModifySun71PlusProfile=0/1 parameter is used. If the value is set to 0, the user profile cannot be modified. If the value is set to 1, user profile can be modified with the property values specified in the configurator.

#### **Converted/upgraded Profile Settings**

**Special Note for Version Upgrade:** For any users running this package who are upgrading from Sun Java System Connector version 6 or version 7, the user program will ignore any server-parameter changes that may be entered on the Servers panel--- except for the Address Book Server, since it is new in version 7. The program will, however, apply any server-parameter changes to any of the other types of converted profiles. If you want to change any server parameters for users who are upgrading, you should create a separate package for those users and set it to **Create new user profiles ...** (under **User profile settings** above).

• If converting/upgrading, select the types of profiles eligible for conversion/upgrade: Check the box(es) that correspond to the profile type(s) that the user program should consider "eligible" for conversion. Remember that an "eligible" profile must include message services of at least one type designated here, and must not have been fully converted (all of its .pst files converted) by a previous run of the user program (although the remaining, unconverted .pst files of a partially converted profile can be converted).

The "Upgrade Version 7.0 Sun Java System Connector for Microsoft Outlook profiles (GAL Support)" corresponds to the removal of the Microsoft LDAP provider. The new GAL feature replaces Microsoft LDAP. This option does not perform any data migration.

Note that different types of data associated with different profile types are migrated differently, as shown in Table 2-1.

• If converting/upgrading, change the profile name to the following: The name by which the converted profile will be identified in the drop-down list that appears on Outlook's user login screen.

	Migrating To	Migrating From		
	Exchange	Microsoft POP	Microsoft IMAP	Connector for Microsoft Outlook 6.x
Mail	Not migrated (server data)	SJOC-local.pst	SJOC-local.pst	Not migrated (server data)
Contacts	Address Book Server	Address Book Server	Address Book Server	Address Book Server
Calendar	Not migrated (server data)	Calendar Server	Calendar Server	Not migrated (server data)
Tasks	Not migrated (server data)	Calendar Server	Calendar Server	Not migrated (server data)
Sticky Notes	SJOC.pst	SJOC.pst	SJOC.pst	SJOC.pst
Journals	SJOC.pst	SJOC.pst	SJOC.pst	SJOC.pst

#### Table 2-1 Destinations of Migrated Data from Various Sources

#### **Created Profile Settings**

These options apply **only** to new profiles that the user program creates, and not to converted or upgraded profiles.

- Name for new profiles: The name by which the new profile will be identified in the drop-down list that appears on Outlook's user login screen.
- Set new profile as default: If this box is checked, the new profile will be set as the user's default Outlook profile.

#### Option to save profile user password during configuration

- Give user the option to save: Tells the user program to display a checkbox that lets the user choose whether Outlook should prompt the user for a password upon each login, or save ("remember") the password so the user can skip that login step. Within the user program, the instructions displayed with the checkbox explain: "If checked, you will not need to enter your information each time you launch Outlook." This option is not available in any user package configured to run in Silent mode.
- Always save: Tells the user program to **not** offer the user the choice described above (for **Give user the option...**). Instead, the screen will display this message: Your password will be saved. You will not need to enter your password each time you launch Outlook.
- Never save: Tells the user program to **not** offer the password choice, and to configure Outlook to always prompt for the user's password, by default. The user program will display no checkbox or related explanatory text.

# User .psts Tab

The settings in this User .psts panel, shown in Figure 2-4, define how the program will save users' Personal Folders (.pst) files. Depending on your choices in other panels in this program, certain sections of this screen may not apply and may appear grayed-out (unavailable) in the display.

The settings in this panel determine how Exchange users' Contacts, Journal, and Notes data will be converted to local (desktop) Connector for Microsoft Outlook Personal Folders (.pst) files.

🐉 oc.ini - Connector for Microsoft Outlook for Oracle Communications Unified Communicatio 🔀
Eile Iools Help
Processes   User Profiles   User .psts   Servers   Mail   LDAP   Calendar   Address Book   (Single User)
General settings for Personal folder (.pst) files
Size for new Connector for Microsoft Outlook for Oracle Communications Unified Communications Suite .pst: 64 MB
Exchange profile settings for .psts
Migrate Exchange server Contacts to Oracle Communications Unified Communications Suite Address Book Server
✓ Update ALL addresses to SMTP format
By default, automatically convert a .pst if 100 MB file is smaller than:
Auto-minimize <u>s</u> etup wizard and convert .psts in the background, if total size of all .psts exceeds:
Password-protected Exchange .psts
Prompt user for password and convert (not an option in Silent mode)
C Do not convert but keep old .pst in profile
C Do not convert and remove from profile
IMAP/POP profile settings for .psts
<ul> <li>Migrate PDP/IMAP .pst Calendar and Tasks to Oracle Communications Unified Communications Suite Server</li> <li>Associate all existing desktop data with the new Connector for Microsoft Outlook for</li> </ul>
Oracle Communications Unified Communications Suite profile
Help

Figure 2-4 Deployment Configuration Program: User .psts Tab

## General Settings for Personal Folder (.pst) Files

**Size for new Connector for Microsoft Outlook....pst:** \_\_\_\_\_ **MB:** The expected amount of disk space required for the new .pst file into which selected items from the old Exchange server are copied. The user program aborts the conversion if a user does not have this much disk space available. Leave this value set at its default, unless you have some particular reason to expect that your .pst files will be larger.

#### **Exchange Profile Settings for .pst Files**

**Migrate Exchange server Contacts to Oracle Communications Unified Communications Suite Address Book Server:** Tells the user program to migrate the user's Exchange Contacts and copy them to Address Book Server. If this option is unmarked, no Exchange Contacts will be migrated.

**Update ALL addresses to SMTP format:** Tells the user program to convert all addresses that occur within Personal Folders (.pst) files to SMTP (Internet standard) format.

By default, automatically convert a .pst if file is smaller than: \_\_\_\_\_ MB: In Silent mode: The user program will ignore (not convert) any .pst files larger than or equal to the size specified here. In Interactive mode: If any existing .pst files are larger than or equal to the specified size, the program will prompt the user to specify which (if any) of the large files to convert.

Auto-minimize setup wizard and convert .psts in the background, if total size of all .psts exceeds:

**MB:** This setting is irrelevant in **Silent** mode. In the **Interactive** mode, if the total size of all .pst files to be converted exceeds the size specified here, the user program will convert the profiles first, and then automatically minimize itself to the user's Task Bar to convert the .pst files as a background process. Once the profile has been converted, the user can run Outlook and access the converted profile.

**Password-protected Exchange .psts:** Choose one of these mutually exclusive options for converting password-protected .pst files:

- **Prompt user for password and convert (not an option in Silent mode):** Tells the user program to prompt the user for the password to open each .pst file and convert it.
- **Do not convert but keep old .pst in profile:** Tells the user program to **not** convert the .pst file, but to keep the unconverted .pst file in the profile.
- Do not convert and remove from profile: Tells the user program to not convert the .pst file, and to remove the unconverted .pst file from the profile. (The old .pst file is not, however, physically deleted from the user's hard drive.)

## **IMAP/POP Profile Settings for .psts**

**Migrate POP/IMAP .pst Calendar and Tasks to Oracle Communications Unified Communications Suite Server:** Tells the user program to migrate the user's POP/IMAP calendar data and tasks to the server. If this option is unmarked, no calendar data or tasks will be migrated. Note that Contacts are migrated by default, so no settings are needed for Contacts.

Associate all existing desktop data with the new Connector for Microsoft Outlook profile: Tells the user program to associate the user's existing POP/IMAP desktop data with the new Connector for Microsoft Outlook for Oracle Communications Unified Communications Suite profile. If selected, the local .pst file is not deleted.

# **Servers Tab**

The Servers tabbed panel is shown in Figure 2-5.

#### Figure 2-5 Deployment Configuration Program: Servers Tab

🐉 oc.ini - Connector for Micros	oft Outlook for Oracle Communications Unified Communicatio 🔀
<u>Eile I</u> ools <u>H</u> elp	
Processes User Profiles User .psts	Servers   Mail   LDAP   Calendar   Address Book   (Single User)
Oracle Communications Unified Com	munications Suite Server Information
Incoming Mail Server:	Port Use SSL
bugatti.example.com	143
Outgoing Mail Server:	
bugatti.example.com	25
LDAP Server (Global Address List)	
bugatti.example.com	389
LDAP <u>S</u> erver (User Settings)	
bugatti.example.com	389
Address Book Server (Contacts):	
bugatti.example.com	80
<u>C</u> alendar Server:	
bugatti.example.com	80
Eree/Busy Server:	
bugatti.red.iplanet.com	80
	Default
	Help

## **Server Settings**

**Server Name:** The host name for each Oracle Communications Unified Communications Suite server: Incoming Mail (IMAP), Outgoing Mail (SMTP), LDAP (Global Address List and User Settings), Address Book (WABP), Calendar (WCAP), and Free/Busy (WCAP).

**Port:** The default port number for each server. The default changes if you use SSL to connect to the server.

Use SSL: Mark this box to require an SSL to connect to the associated server.

#### 1 Note:

If the **Use SSL** box is not marked for the Calendar server, the Free/Busy server values will be the same as for the Calendar, and the Free/Busy line will therefore be grayed out in this panel. But if **Use SSL** is marked for the Calendar, then you must specify a different port for Free/Busy.

**Default:** Restores all Port numbers back to their original default values (if you have changed the values but now want to restore the defaults). The default values for SSL vs. non-SSL are different, and this feature will restore the appropriate default for any given server depending on whether the Use SSL box is marked.

## Mail Tab

The Mail tabbed panel is shown in Figure 2-6.

#### Figure 2-6 Desktop Deployment Configuration Program: Mail Tab

Oc.ini - Connector for Microsoft Outlook for Oracle Communications Unified Communications	catio 🔀
<u>E</u> ile <u>T</u> ools <u>H</u> elp	
Processes   User Profiles   User .psts   Servers   Mail   LDAP   Calendar   Address Book   (Single User)	
Incoming Mail (IMAP)	1
Offline settings	
Download messages locally to Inbox when going offline	
C Do not download messages locally if they are larger than: 50 KB	
IMAP Folder Name Mapping Options	
Please choose one of the following options for the IMAP folder names	
Outlook style (Inbox, Drafts, Deleted Items, Sent Items)	
Communications Express style (Inbox, Drafts, Trash, Sent)	
Polling	
Check for new messages every: 5 minutes	
Enable polling for all folders (default is only Inbox)	
Outgoing Mail (SMTP)	
□ BCC all sent messages to self	
F Requires authentication	
	Help

## **Incoming Mail (IMAP)**

Offline settings (two options, mutually exclusive):

- Download messages locally to Inbox when going offline: Configures mail server to download messages to the user's Inbox when the user goes offline. Alternatively, the user can set the caching status of a given mailbox by highlighting the folder entry in Outlook, then executing the Properties menu, clicking the Mail tab, and selecting the Cache all message parts (attachments) for this folder option.
- Do not download messages locally if they are larger than: \_\_\_\_\_KB: The per-message size limit for the message server's local message cache. This option is intended primarily to reduce download times when the user goes into offline operations. This value, however, will also affect re-display times in online mode, because the message will have to be re-retrieved if it hasn't been cached.

**IMAP Folder Name Mapping Options:** Select either **Outlook style** or **Communications Express style** to indicate which of these two standards the user program should use to name users' IMAP folders. Your selection here determines which of the two map files, outlook\_folders.map or uwc\_folders.map, will be used to map users' IMAP folder names. An administrator may, before running this program, edit these files to suit local requirements, as long as the original filenames remain the same.

For more information, and instructions on how to manually define the system folders, see Tuning Communications Express to Work With Connector for Microsoft Outlook.

#### Polling:

- Check for new messages every: \_\_\_\_ minutes: This is the interval, in minutes, after which a server mailbox will be polled for newly arrived messages. If any new message has arrived, the mailbox is refreshed and redisplayed in Outlook. If this field is cleared or set to zero, no polling will be done for this server connection.
- Enable polling for all folders: Enable this checkbox if you want Connector for Microsoft Outlook to poll all folders, including your Inbox, for unread messages. The default, if this checkbox is not enabled, is to poll only your Inbox. This option can be useful if message filters have been set up to automatically move incoming messages to specific users' folders other than the Inbox, or if the direct delivery to a specific folder option has been enabled.

## **Outgoing Mail (SMTP)**

**BCC all sent messages to self:** Configures the user software to automatically insert the user's email address into the BCC field of every outbound message (effectively lets a sender file a copy of every message sent). The messages are filed within a sender's server INBOX, and subsequently will be affected by any server-based message filtering rules.

**Requires authentication:** Tells the user software to configure the SMTP Service so as to require user authentication for outbound SMTP mail.

# LDAP Tab

This LDAP tabbed panel, shown in Figure 2-7 , lets you specify the settings for the LDAP Directory Service.

#### Figure 2-7 Deployment Configuration Program: LDAP Tab

Oc.ini - Connector for Microsoft Outlook for Oracle Communications Unified Control	nmunicatio 🔀		
<u>E</u> ile <u>T</u> ools <u>H</u> elp			
Processes   User Profiles   User .psts   Servers   Mail   LDAP   Calendar   Address Book   (Single L	lser)		
⊢ Global Address List			
Search base (root of LDAP directory): Example: ou=people,dc=florizel,dc=com	-		
LDAP Mapping String: (Any changes in mapping should be change in filters below accordingly.) Uid=uid,FirstName=givenName,LastName=sn,Initials=i nitials,Department=departmentNumber,Title=title,Home phonenumber=homePhone,PrimaryEmailAddress=mail,	3		
VLV Search filter (See Help before changing [(&(mail=*)(cn=*)) VLV settings):			
Advanced search filter: [(cn=%s*),(givenName=%s*),(sn=%s*),(title=%s*),(uid=%s*)	*).(		
Name resolution filter:         [&(mail=*)[[(mail=%s*)(cn=%s*)(givenName=%s*)(g	111		
Displayname (VLV sort attribute):			
Search times out after:			
Maximum number of search results returned:			
Show "Member Of" tab in contact properties dialog			
✓ <u>R</u> equire authentication (See Help for LDAP syntax examples)			
User DN pattern: uid=%s, <searchbase< td=""><td></td></searchbase<>			
User Settings			
Retrieve user settings from LDAP			
User DN gattern: uid=%s, <search base=""></search>	_		
☐ ₩arn user at startup when out of office message is turned on			
Retrieve full name and email address from LDAP server			
	Help		

## **Global Address List**

The Global Address List (GAL) is a read-only MAPI Address book for Outlook users to view, search, and extract address information of the users, user groups, and calendar resources stored in the corporate directory. The corporate directory here refers to an LDAP server storing user account information including user name, passwords, contact information, and so on. This enables other authorized users on the same network to access the information. Connector for Microsoft Outlook GAL enables Outlook to display the corporate directory as "Global Address List" in conjunction with Contacts, personal address book, and any other address book providers. The GAL provides access to details of individual users, static groups, and calendar resources stored in the corporate directory.

The backend server or the server that is referred to as the corporate directory can be any LDAP address book server adhering to the predefined schema. Here, the term 'user' means the individual whose data or information is stored as an entry in the server.

In order to allow browsing of the directory, Connector for Microsoft Outlook utilizes the Virtual List View (VLV) and server-side sort extension of the directory server. The directory server must be configured for the VLV index. The VLV index is precisely defined by a basedn, search filter, sort attribute, and scope. Any mismatch amongst the settings described below and the VLV index settings on the server results in poor performance.

**Search base (root of LDAP directory):** The LDAP distinguished name of the root of your LDAP directory. Use the pattern specified in the User DN pattern fields.

**LDAP Mapping String:** Contains mappings for the GAL and LDAP directory. Connector for Microsoft Outlook maps the LDAP attributes to the corresponding display items in Outlook as per the mappings provided here. If you change any of the mappings in the LDAP Mapping attribute, these changes should also be made to the LDAP configuration attributes in VLV filter, Advance Search and Name Resolution Filter.

VLV Search filter: The filter that is used for the VLV to display entries within the directory.

Advanced search filter: Determines what fields are used when searching for users within the GAL. You can change this field if you wish to customize the GAL's Find dialog.

**Name resolution filter:** Determines which fields to search when entering a name while composing a new message. Outlook tries to resolve the name after pressing Ctrl-K or selecting ToolsCheck Names from the menu.

VLV sort attribute: The LDAP sort key for the Global Address List. The default value is cn.

Search times out after: \_\_\_\_ minutes: Limits directory search times to the designated number of minutes.

Maximum number of search results returned: Limits the number of entries returned by a search to the number specified here.

**Show `Member Of' tab in contact properties dialog:** Displays the static LDAP groups to which the selected user belongs.

**Require authentication:** Tells the user program to configure the LDAP Directory Service so as to require user authentication in the form of a user Distinguished Name (DN) for each directory query. This option is selected by default, and will require you to specify the User DN pattern in the relevant field.

**User DN pattern:** The elements of the user's Distinguished Name that, when assembled, will form the complete DN to authenticate the user's identity to the LDAP Directory Service (if authentication is required).

The recognized keywords for the DN pattern are:

- %s the full user id.
- %user the left part of the user id (left of the @ symbol) if the user id includes the domain (for example, john@florizel.com). If no @ symbol appears in the user id, the full user id is used.
- %domain the right part of the user id (right of the @ symbol) if the user id includes the domain.

For example, to define a DN consisting of a user ID (uid), an organization unit (ou) and an organization (o): uid=%s,ou=people,o=florizel.com. The user's ID replaces %s after configuration of the user's profile.

If, for example, the user ID includes the domain (john@florizel.com), the DN pattern is: uid=%user,ou=people,o=%domain,o=isp. This will be replaced with uid=john,ou=people,o=florizel.com,o=isp.

Similarly, to define a DN consisting of a common name, an organization and a country: cn=Fred

Smith,o=florizel.com,c=US.

### **User Settings**

The user settings are used to extract information about the user. This information can be used to determine "out of office" settings and how the user's name and email address is displayed when sending email.

**Retrieve user settings from LDAP:** Enable this checkbox if you want your user settings extracted from LDAP.

**User DN pattern:** The elements of the user's Distinguished Name that, when assembled, will form the complete DN to authenticate the user's identity to the LDAP Directory Service (if authentication is required). Use the pattern specified for the User DN pattern field for the Global Address List.

Warn user at startup when out of office message is turned on: If this checkbox is enabled, a dialog box appears when Outlook is started warning the user that the out of office message is turned on. The user can choose to turn off the out of office message with this dialog.

**Retrieve full name and email address from LDAP server:** Enable this checkbox if you want the display of your name and email address updated from the LDAP server.

# **Calendar Tab**

The Calendar panel is shown in Figure 2-8.

Figure 2-8 Deployment Configuration Program: Calendar Tab

Indefined) - Connector for Microsoft Outlook for Oracle Communications Unified Communications <u>File</u> <u>T</u> ools <u>Help</u>	
Processes User Profiles User psts Servers Mail LDAP Calendar Address Book (Single User)	
http:// <enter calendar="" name="" server="">:80 / <enter path="" relative="" wcap=""></enter></enter>	
Enter "wcap", for example if Sun Calendar Server WCAP URL is "http://www.florizel.com:80/wcap". Note: Leave field empty if using Sun Calendar Server 6x and below	
Settings	
Synchronize Outlook calendar i minutes	
	Help

## **Calendar Settings**

**Oracle Communications Unified Communications Suite Calendar Server Settings:** Sets the URL path portion to the server information. This is the URL used to connect to the Calendar Server 7 from Outlook. The default URL is http://server:80/davserver/wcap. This applies to Calendar Server 7 only. If you are connecting to Calendar Server 6, leave this field blank.

**Synchronize Outlook calendar with calendar server every:** \_\_\_\_ **minutes:** Specifies how often the Outlook calendar will synchronize with the calendar server.

## **Address Book Tab**

The Address Book panel is shown in Figure 2-9.

#### Figure 2-9 Deployment Configuration Program: Address Book Tab

🐉 oc.ini - Connector for Microsoft Outlook for Oracle Communications Unified Co	mmunicatio 🔀
Eile Iools Help	
Processes User Profiles User .psts Servers Mail LDAP Calendar Address Book (Single I	Jser)
Oracle Communications Unified Communications Suite Address Book Server Settings	
http://bugatti.example.com:80 / uwc	
Example: If you access the address book web client at the URL "http://www.florizel.com:80/iwc/svc", then enter "iwc/svc" in the field above	
Polling	
Synchronize Dutlook Address Book with Address Book Server every:	
Outlook Address Book Settings	
Show this address list first: Directory search order:	
Contacts     Contacts first, then LDAP Directory	
C LDAP Directory C LDAP Directory first, then Contacts	
	Help

**Oracle Communications Unified Communications Suite Address Book Server Settings:** Enter the portion of the address book web client URL that follows the domain root and a delimiting slash character. The root value appears in the grayed-out text box to the left of this value, drawn from your **Address Book Server** entry on the Servers panel.

To use Convergence address book server, enter iwc/svc, which is the default. To use Communications Express address book server, enter uwc as the value.

#### Polling:

Synchronize Outlook Address Book with Address Book Server every: \_\_\_\_\_ minutes: Enter the time interval (in minutes) after which Outlook Connector should synchronize with the Address Book Server. By default, the time interval is 5 minutes.

#### **Outlook Address Book Settings:**

• Show this address list first: Select Contacts or LDAP Directory (mutually exclusive) to indicate

which of these two should appear first in the user's Outlook Address Book.

• Directory search order: Select Contacts first ... or LDAP Directory first ... (mutually exclusive) to indicate how Directory searches should proceed.

# Single User Tab

The Single User tabbed panel, shown in Figure 2-10, lets you specify and authenticate the identity of a single specific user. This panel applies **only** if you are creating an installation kit for one particular user---e.g., for your CEO, or for some other user whose unique circumstances warrant a more customized configuration.

#### Figure 2-10 Deployment Configuration Program: Single User Tab

🐉 oc.ini - Connector for Microsoft Outlook for Oracle Communications Unified Commu	inicatio 🔀
Eile Iools Help	
Processes   User Profiles   User .psts   Servers   Mail   LDAP   Calendar   Address Book (Single User)	I
(Optional) Fill in the fields below only if creating a configuration for a single use	r.
Eull Name:	
E-mail address:	
Login name:	
Password:	
Password <u>c</u> onfirm:	
	Help

**Full name:** The "friendly" name associated with the user's email address. When sending messages, this name appears in the From box of the user's outgoing messages.

**E-mail address:** Specifies the email address that people should use when sending mail to the user at this account--- must be in the format name@florizel.com.

**Login name:** Specifies the user's account name, which must be the same value for both the IMAP and calendar servers. This is often the same as the part of the user's email address to the left of the "at" sign (@).

**Password:** The user's account password, which must be a single shared password used for both the IMAP and calendar servers.

**Password confirm:** A duplicate field for the user's account password, required as a precaution against typographical errors. (This value must match the **Password** value above.)

# Chapter 6. Configuring Vacation Messages and Mail Filters





Intens information for Connector for Microsoft Outlook 8.0.1 and will not the future. For documentation beginning with Connector for Microsoft see the Oracle Technology Network site at:

com/technetwork/documentation/oracle-communications-185806.html

This configuration applies to **Connector for Microsoft Outlook 7.3** only. The subsequent versions do not need this configuration.

Connector for Microsoft Outlook enables you to use the Communications Express address book service or Convergence address book service to configure vacation messages and mail filters. If your profile is configured to use Convergence, then you cannot invoke vacation messages and mail filters. To invoke vacation messages and mail filters by using Communications Express in your profile that is configured with the Convergence address book service, you must add a value to the UWC\_Url key in the configuration file.

Topic:

• Prerequisites to Configure The Profile

## **Prerequisites to Configure The Profile**

- Users should have both Communications Express and Convergence deployed on their machine.
- Both Communications Express and Convergence should use the same Directory Server. If this feature works from your profile configured with Convergence in SSL mode, then the same user can login to Communications Express in SSL mode.

#### Note

This configuration is required only if you have created a profile with Convergence address book service.

To configure your profile, perform the following steps:

- 1. Click the Address book tab in the Outlook Connector Deployment Configuration Program.
- 2. Enter the URL as:

/iwc/svc/

- 3. Click File -> Save to create a package.
- 4. Open the configuration (.ini) file that you created and enter the value for UWC\_Url key in the following format:

servername:portnumber/relativepath

For example, the value of the key may be:

UWC\_Url=florizel.com:80/uwc

- 5. Invoke Outlook Connector Deployment Configuration Program.
- 6. Open the configuration (.ini) file and click File -> Save to create a new package.
- 7. Click Yes when prompted to overwrite the existing package.
- 8. Run the newly created package to create the profile. This profile has the vacation message and mail filter features.

# Chapter 7. Customizing the Location of the Personal Store (.pst) File





In tains information for Connector for Microsoft Outlook 8.0.1 and will not the future. For documentation beginning with Connector for Microsoft a see the Oracle Technology Network site at:

m/technetwork/documentation/oracle-communications-185806.html

This feature enables administrators to decide the location of PST files on a user's machine. By default, Connector for Microsoft Outlook stores PST files at:

C:\Documents and Settings\username\Local Settings\Sun\Outlook Connector

To customize the location of PST file, perform the following steps:

1. Locate the string name ForcePSTPath in the following location in the Registry Editor:

HKEY\_CURRENT\_USER\Software\Microsoft\Office\OLCVersion\Outlook

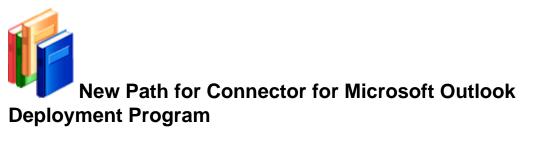
- 2. Right-click and select Modify from the pop-up menu. The Edit String window is displayed.
- 3. Change the path to point to the desired location. For example, you can change it to:

F:/Outlook Connector/Files

# Note:

The OLCVersion for Outlook 2003 is 11.0 and Outlook 2007 is 12.0.

# **Chapter 8. New Path For Deployment Program**

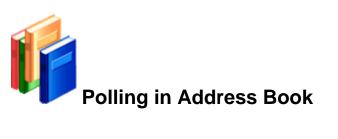




To conform with Oracle's product installation paths, Connector for Microsoft Outlook Deployment Program now uses the following installation path:

Start->Programs->Oracle Communications->Oracle Communications Unified Communications Suite Connector Deployment

# **Chapter 9. Polling in Address Book**





Connector for Microsoft Outlook enables you to set an option to run polling at a certain time interval. This feature enables you to keep your address book updated without any manual intervention.

To reset the polling value, perform the following steps:

- 1. Invoke Connector For Microsoft Outlook Deployment Configuration Program.
- 2. Click the Address Book tab.
- 3. In the Synchronize Outlook Address Book with Address Book Server option, change the value to the time interval you wish to set it to.

By default, the polling value is set to 5 minutes.

# **Chapter 10. Support for Large PST Files**





Connector for Microsoft Outlook supports Personal Storage Table (PST) file size of 20 Gigabytes. Users of Microsoft Outlook 2003 and Microsoft Outlook 2007 will have larger PST files as their local store for Connector for Outlook.

To set the PST file in Outlook 2007, perform the following steps:

- 1. Click Tools from the main menu.
- 2. Select Accounts Settings from the tools list.
- 3. Click Data Files tab.
- 4. Click Add and select the type of storage as Office Outlook Personal Folders File(.pst) from the storage type list.
- 5. Click Finish. The PST file is now set as the storage type in Outlook 2007.

To set the PST file in Outlook 2003, perform the following steps:

- 1. Click Tools from the main menu.
- 2. Select Email Accounts from the tools list.
- 3. Click the View or Change Existing Email Accounts option.
- 4. Click Next.
- 5. Click Change.
- 6. Click New Outlook Data File.
- 7. Select the type of storage as Office Outlook Personal Folders File(.pst) from the storage type list.
- 8. Click Finish.

The PST file is now set as the storage type in Outlook 2003.

# Chapter 11. Using Service Tags with Connector for Microsoft Outlook





The future. For documentation beginning with Connector for Microsoft Outlook 8.0.1 and will not the future. For documentation beginning with Connector for Microsoft section beginning with connector for Microsoft s

m/technetwork/documentation/oracle-communications-185806.html

Oracle Service Tags are only used to identify Oracle products to Oracle. Oracle uses service tag information to provide better support. Registration data is collected when you install the product.



The Service Tag Utility is packaged with the installation package and registers a service tag that is associated with the system. The installation performs the following tasks:

- · Checks if this feature already exists on your system.
- Collects system information such as the product name, product version, operating system details.
- Does not collect sensitive information like hostname and hardware details.

This feature is applicable only for users who install the product and not for those who upgrade the product. If service tags already exist for this product, new tags will not be created.

# Chapter 12. Saving File Attachments in Optimized Mode





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m/technetwork/documentation/oracle-communications-185806.html

This section describes how you can use Optimized mode to save file attachments.

You can save the file attachments outside the PST using the Optimized mode. In Normal mode, the complete message including attachments are stored in the PST file locally. The Optimized mode reduces the local PST file size by not storing the message attachments in the PST. This mode is useful for virtual desktop environments, where the desktop is being stored in a centralized location and is downloaded every time a user logs into the network. The desktop data size that includes the PST file associated with the logged in user, will be reduced in the Optimized mode.

You need to configure to create a profile in either Normal mode or Optimized mode, default being Normal mode.

To configure Optimized mode, in the ini file, set the following value:

OptimizePstStore=1

To configure Normal mode, set the OptimizePstStore value to 0.

### Note

Optimized mode is not recommended for normal desktop users because in this mode, the message and its attachments, when accessed, will be downloaded from the server in every login session.

The attachment data is stored in Windows temporary directory. The file format is as follows:

~oc-(timestamp)-(filename).(ext)

### Limitations of the Optimized Mode

The Optimized mode has the following limitations:

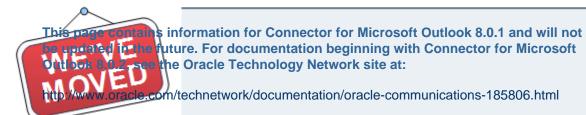
- Messages are stored in the Outbox when they are being sent from Outlook.
- The attachments are in RTF format.
- No optimization for messages stored in the Outbox when a message is being sent.
- The PST used in Optimized mode is incompatible with PST used in Normal mode and vice-versa.
- Upgrade from existing normal mode to optimized mode or vice-versa is not possible.
- Switching between normal mode and optimized mode is not possible.

Optimized Mode does not support the following:

- Offline Access
- Autopreview (the message is not pre-loaded as in Normal mode)
- Calendar attachments
- Contacts/ AB attachments

# Chapter 13. Configuring Shared Calendar Name Format





The default Connector for Microsoft Outlook calendar name format consists of a long and confusing name format, which is used to avoid name clash in Outlook. Starting with version 7.3 patch 13, you can configure the name format.

The default, or legacy format, resembles the following:

```
Calendar - <owner> - <calendar name>(cal ID)
```

You use the SubscribedCalendarNameFormat (hidden) configuration attribute in the Connector for Microsoft Outlook configurator's .ini file to configure the value. It is stored in the following Windows registry key:

HKCU\Software\Sun Microsystems\Outlook Connector\Subscribed Calendar Name Format

The configuration attribute resembles the following:

```
SubscribedCalendarNameFormat=%u-%n
or
SubscribedCalendarNameFormat=legacy
```

where:

• %u - %n

- %u: Refers to the calendar owner name
- %n: Refers to the calendar name (calendar ID, if no calendar name)
- legacy: Specifies the default value (the format prior to patch 13)

Note the following restrictions on the configuration value format:

- Cannot use any other separator characters.
- %n is mandatory.
- An invalid configuration reverts to the legacy format
- The default value for the registry attribute is legacy.
- The configuration does not apply to the host folder name.

In the following examples:

- sub: subscribed
- cal: calendar
- calname: calendar name

Example 1: "%u - %n"

```
Host folderName : <sub cal owner name> - <sub calname>
Sub cal folder name : <sub cal owner name> - <sub calname>
Sub Tasks folder name: <sub cal owner name> - <sub calname> - Tasks
```

Example 2: "%n"

Host folderName : <sub cal owner name> - <sub calname> Sub cal folder name : <sub calname> Sub Tasks folder name: <sub calname> - Tasks

Example 3: "%n - %u"

Host folderName : <sub cal owner name> - <sub calname> Sub cal folder name : <sub calname> - <sub cal owner name> Sub Tasks folder name: <sub calname> - <sub cal owner name> - Tasks

# Chapter 14. Configuring Directory VLV Browsing for Connector for Microsoft Outlook





The future. For documentation beginning with Connector for Microsoft Outlook 8.0.1 and will not future. For documentation beginning with Connector for Microsoft scotthe Oracle Technology Network site at:

m/technetwork/documentation/oracle-communications-185806.html

This article provides step-by-step instructions to set up the VLV browsing index for Directory Server 5.2 and 6 using the latest release of Connector for Microsoft Outlook for Oracle Communications Unified Communications Suite. Directory Server VLV browsing indexes are used by Connector for Outlook to improve the speed of resolving global address-book searches.

This document contains the following sections:

- Using VLV settings in Connector for Microsoft Outlook
- Creating a VLV Browsing Index
- Providing Access to User Data
- For More Information

# Using VLV settings in Connector for Microsoft Outlook

The LDAP settings in the Connector for Microsoft Outlook deployment configuration program directly impacts the required VLV browsing index configuration. Modifications in these settings must be reflected in changes to the appropriate VLV browsing directory index and directory ACI properties described later in this document.

VLV settings are stored in the LDAP Tab in the Connector for Microsoft Outlook program as shown in the following figure.

#### Figure 1 Connector for Outlook Deployment Configuration Program, LDAP Tab

(Undefined) - Connector for Microsoft Outlook for Oracle Communications Unified	Commun 🔀			
<u>File Tools Help</u>				
Processes   User Profiles   Userpsts   Servers   Mail   LDAP   Calendar   Address Book   (Single User)	1			
Global Address List				
Search base (root of LDAP directory): Example: ou=people,dc=florizel,dc=com				
LDAP Mapping String: (Any changes in mapping should be change in filters below accordingly.) Uid=uid,FirstName=givenName,LastName=sn,Initials=i nitials,Department=departmentNumber,Title=title,Home phonenumber=homePhone,PrimaryEmailAddress=mail,				
VLV Search <u>filter</u> (See Help before changing VLV settings): (%(mail=")(cn="))				
Advanced search filter: [(cn=%s*),(givenName=%s*),(sn=%s*),(title=%s*),(uid=%s*),(				
Name resolution filter:         [&(mail=*)([(mail=%s*)(cn=%s*)(sn=%s*)(givenName=%s*)))				
Displayname (VLV sort <u>a</u> ttribute):				
Search times out after:				
Maximum number of search results returned: 100				
Show "Member Of" tab in contact properties dialog				
Require authentication (See Help for LDAP syntax examples)				
User DN pattern: uid=%s, <search base=""></search>				
User Settings				
Retrieve user settings from LDAP				
User DN gattern: uid=%s, <search base=""></search>				
☐ Warn user at startup when out of office message is turned on				
Retrieve full name and email address from LDAP server				
	Help			

These instructions use the following mapping between the LDAP GAL (Global Address List) settings shown in Figure 1 and the requisite VLV index/ACI changes:

LDAP GAL Setting	Mapping Name	Example Value Used
Search base (no default) [1]	search_base	o=aus.sun.com,o=isp
VLV Search filter (default)	vlv_search_filter	(&(mail=*)(cn=*))
VLV sort attribute	vlv_sort_attribute	cn
Require authentication [2]	-	Enabled/Ticked
User DN pattern:	auth_dn	uid=%s,ou=people,o=aus.sun.com,o=isp

Other settings used in this article include:

Mapping Name	Example Value Used
database_backend [3,4]	isp (Directory 6.X), userRoot (Directory 5.2)
directory_server_hostname [3]	directory.aus.sun.com
directory_server_port	389
user_group_base	o=isp
ds6_root_path	/var/opt/SUNWdsee/dsins1/
ds5_root_path	/opt/SUNWdir/slapd- <directory hostname="">/</directory>

### **To Use VLV Settings**

- 1. If you wanted the Outlook GAL search to also provide results from other hosted-domain organisations, you could use the overall base for hosted domains, that is o=isp.
- 2. The security ramifications of the "Require authentication" tick-box are discussed in Providing Access to User Data.
- 3. This article assumes that the directory server has a single database back-end for user/group information (o=isp in this example). If multiple database back ends are used for the user/group tree (that is, one per hosted domain), then you need to add VLV browsing indexes will need to each appropriate back end.
- 4. The easiest mechanism to determine the *database\_backend* setting is to refer to the dse.ldif directory configuration file located under the *ds5\_root\_path*/config/ directory for Directory Server 5.2, or the *ds6\_root\_path*/config/ directory for Directory Server 6.0, and search for nsslapd-suffix: *user\_group\_base*.

(For Directory Server 6, the database\_backend it is based on the user/group suffix supplied during the creation of the database instance and is the value of the cn: attribute, in this example it is "isp")

dn: cn=isp,cn=ldbm database,cn=plugins,cn=config objectClass: top objectClass: extensibleObject objectClass: nsBackendInstance **cn: isp** creatorsName: cn=directory manager modifiersName: cn=directory manager entrydn: cn=isp,cn=ldbm database,cn=plugins,cn=config numSubordinates: 4 *nsslapd-suffix: o=isp* nsslapd-cachesize: -1 nsslapd-cachememsize: 10485760 nsslapd-readonly: off nsslapd-require-index: off nsslapd-directory: /var/opt/SUNWdsee/dsins1/db/isp

(for 5.2 the database\_backend is userRoot by default) dn: cn=userRoot,cn=ldbm database,cn=plugins,cn=config objectClass: top objectClass: extensibleObject objectClass: nsBackendInstance **cn: userRoot** *nsslapd-suffix: o=isp* nsslapd-cachesize: -1 nsslapd-cachememsize: 10485760 nsslapd-readonly: off nsslapd-require-index: off nsslapd-directory: /opt/SUNWdir/slapd-directory/db/userRoot numSubordinates: 3

# **Creating a VLV Browsing Index**

#### 1 Important Note

These steps must be performed on every directory server that will be used by the Outlook Connector. Directory server index configuration settings are not replicated.

The values used in this step are entirely dependent on the settings used earlier in the Outlook Connector deployment configuration and the site settings for user/group organisation base etc.

If an index has not been created, searches will take considerable time (minutes) for large environments and the Outlook will appears to 'hang' when searching for address information, attempting to subscribe to a calendar etc. If the time taken to perform the search is longer then the configured search timeout (1 minute by default), no results will seen by the end-user.

In the directory server logs you will see VLV searches returning after a period of time and a "notes=U" in the result line -- indicating the lack of an index.

An example of such a search is shown below:

```
[04/Dec/2007:08:59:07 -0800] conn=2500737 op=1 msgId=2 - SRCH
base="o=aus.sun.com,o=isp" scope=2 filter="(&(mail=*)(cn=*))" attrs="cn
mail uid objectClass"
[04/Dec/2007:09:00:07 -0800] conn=2500737 op=1 msgId=2 - SORT cn
(12345)
[04/Dec/2007:09:00:07 -0800] conn=2500737 op=1 msgId=2 - VLV 1:1:1:0
0:0 (0)
[04/Dec/2007:09:00:07 -0800] conn=2500737 op=1 msgId=2 - RESULT err=12
tag=101 nentries=0 etime=60 notes=U
[04/Dec/2007:09:04:07 -0800] conn=2500737 op=10 msgId=11 - ABANDON
targetop=9 msgid=10 nentries=0 etime=60
```

### To Apply the VLV Browsing Index Settings

The following Idap modifications will add the required directory settings to allow for the VLV index creation.

Idapmodify -h *directory\_server\_hostname* -p *directory\_server\_port* -D "cn=Directory Manager" dn: cn=Browsing *database\_backend*,cn=*database\_backend*,cn=Idbm database,cn=plugins,cn=config changetype: add objectClass: top objectClass: vlvSearch cn: Browsing *database\_backend* vlvbase: *organisation\_base* vlvscope: 2 vlvfilter: *vlv\_search\_filter* aci: (targetattr="\*")(version 3.0; acl "VLV for Anonymous"; allow (read,search,compare) userdn="Idap:///anyone";)

dn: cn=Sort by *vlv\_sort\_attribute*,cn=Browsing *database\_backend*,cn=*database\_backend*,cn=ldbm database,cn=plugins,cn=config

changetype: add objectClass: top objectClass: vlvIndex cn: Sort by vlv\_sort\_attribute vlvSort: vlv\_sort\_attribute

So using the example settings listed earlier the values would be:

Idapmodify -h directory.aus.sun.com -p 389 -D "cn=Directory Manager" dn: cn=Browsing isp,cn=isp,cn=Idbm database,cn=plugins,cn=config changetype: add objectClass: top objectClass: vlvSearch cn: Browsing isp vlvbase: o=aus.sun.com,o=isp vlvscope: 2 vlvfilter: (&(mail=\*)(cn=\*)) aci: (targetattr="\*")(version 3.0; acl "VLV for Anonymous"; allow (read,search,compare) userdn="Idap:///anyone";)

dn: cn=Sort by cn,cn=Browsing isp,cn=isp,cn=ldbm database,cn=plugins,cn=config changetype: add objectClass: top objectClass: vlvIndex cn: Sort by cn vlvSort: cn

#### To Generate the VLV Browsing Index

These steps which propagate the index with data, require that the directory server be shut-down and should therefore be performed during a scheduled change window.

#### **Directory Server 6 instructions**

cd /opt/SUNWdsee/ds6/bin ./dsadm stop *ds6\_root\_path* ./dsadm reindex -l -t "Sort by *vlv\_sort\_attribute*" *ds6\_root\_path* "*user\_group\_base*" ./dsadm start *ds6\_root\_path* 

So using the example settings listed earlier the values would be:

cd /opt/SUNWdsee/ds6/bin ./dsadm stop /var/opt/SUNWdsee/dsins1/ ./dsadm reindex -I -t "Sort by cn" /var/opt/SUNWdsee/dsins1/ "o=isp" ./dsadm start /var/opt/SUNWdsee/dsins1/

#### **Directory Server 5.2 instructions**

cd ds5\_root\_path ./stop-slapd ./vlvindex -n database\_backend -T "Sort by vlv\_sort\_attribute" ./start-slapd

So using the example settings listed earlier (note that by default database\_backend is userRoot for 5.2):

cd /opt/SUNWdir/slapd-directory ./stop-slapd ./vlvindex -n userRoot -T "Sort by cn" ./start-slapd

# **Providing Access to User Data**

Careful consideration must made when determining the mechanism used to allow access to user and group data in the organisations directory. Organisations are now increasingly under pressure to reduce the amount of private data that non-authorised entities can access. The Sun Outlook Connector on the other-hand must access user data for correct operation of the GAL and other functionality (e.g. sharing calendars).

Directory server installations by default block access to user data which therefore means Access Control changes are required for the Outlook Connector to provide the best end-user experience.

### To Determine the Appropriate ACI Mechanism

The following is a non-exhaustive list from most-to-least preferred from a security perspective of the possible approaches to granting access to user data. Granting access is required to allow the Outlook Connector GAL search to correctly function.

- · Access by authenticated users in same domain to limited attributes
- Access by authenticated users in same domain to all attributes (except userpassword)
- · Access by authenticated users in any domain to limited attributes
- Access by authenticated users in any domain to all attributes (except userpassword)
- Anonymous access to limited attributes
- Anonymous access to all attributes (except userpassword)

For each option you could optionally apply an IP based restrictions i.e. restrict access to clients which are running Outlook Connector software on hosts within a specific IP range. Details on additional ACI mechanisms can be found here: http://docs.sun.com/source/816-6698-10/aci.html#14960

Please also note that each additional ACI's can have the cost of additional processing by the directory server.

The list of 'limited attributes' was compiled based on reverse-engineering a search by an Outlook Connector installation on MS Outlook 2007. The values may change in the future or could be reduced if not appropriate for your environment.

### **To Configure Authenticated User Access**

This is the most desirable approach as it restricts access to only those users who provide the correct authentication details. This has the advantage of being very granular and will allow the administrator to identify which user is attempting to make a search which can be useful for debugging, throttling etc.

If using this approach please also consider the use of SSL encryption for Directory Server access. If you have not configured the Outlook Connector plugin to contact the LDAP server on an SSL port, Outlook Connector will send user login details in clear-text when binding to the directory.

#### a) Configure the Outlook Connector plugin

In the LDAP tab of the Sun Outlook Connector Deployment Configuration software, enable the "Require Authentication" option.

In the same tab, set the User DN: pattern to an appropriate value e.g.

uid=%s,ou=People,o=aus.sun.com,o=isp

This will result in the Outlook Connector binding as the login user (the %s will be substituted with the login username).

#### b) Enable user access to user/group details

To determine the most appropriate ACI for your organisation you should consider *who* is given access to *what*.

In this case the *who*is either any authenticated user (so any user in the directory), which has a special ACI representation of "ldap:///all", or any user at a specific domain level which can be represented as a DN wildcard match e.g. "ldap:///uid=\*,ou=people,o=aus.sun.com,o=isp" You will notice that the DN wildcard match is very similar to the value used in step (a) above.

The *what* is controlled by where in the directory tree you add the ACI, for example at the base of the organisation or at the base of a hosted domain. This is referred to as the *base\_for\_aci* n steps below. The user/group attributes you choose to return will also determine what information is provided back to the client, Outlook Connector in this case.

In a hosted domain environment for example you may want to prevent users from one domain accessing another domain. In this case you would apply the access control at the domain level rather then at the organisation level and allow results to be returned for users who's DN's contain the hosted domain LDAP base path.

Example 1: Authenticated access by users in same domain to limited attributes aci: (targetattr = "cn || displayName || givenName || sn || initials || uid || departmentNumber || title || homePhone || mail || manager || mobile || company || pager || secretary || description || facsimileTelephoneNumber || I || physicalDeliveryOfficeName || postalCode || st || street || c || telephoneNumber || mailAlternateAddress || isMemberOf || objectClass") (version 3.0;acl "Authenticated user access at domain-level"; allow (read,compare,search)(userdn = "Idap:///uid=\*,ou=people,o=aus.sun.com,o=isp");)

Example 2: Authenticated access by users in same domain to all attributes (except userpassword) aci: (targetattr != "userPassword")(version 3.0;acl "Authenticated user access at domain-level"; allow (read,compare,search)(userdn = "ldap:///uid=\*,ou=people,o=aus.sun.com,o=isp");)

Example 3: Authenticated access by users in any domain to limited attributes aci: (targetattr = "cn || displayName || givenName || sn || initials || uid || departmentNumber || title || homePhone || mail || manager || mobile || company || pager || secretary || description || facsimileTelephoneNumber || I || physicalDeliveryOfficeName || postalCode || st || street || c || telephoneNumber || mailAlternateAddress || isMemberOf || objectClass") (version 3.0;acl "Authenticated user access"; allow (read,compare,search)(userdn = "Idap:///all");)

Example 4: Authenticated access by users in any domain to all attributes (except userpassword) aci: (targetattr != "userPassword")(version 3.0;acl "Authenticated user access"; allow (read,compare,search)(userdn = "ldap:///all");)

Once you have determined the most appropriate ACI settings, use the following command to apply the rule to the directory:

Idapmodify -h <directory server host> -p <directory server port> -D "cn=Directory manager" dn: *base\_for\_aci* changetype: modify add: aci aci: *user\_data\_aci* 

e.g.

```
Idapmodify -h directory.aus.sun.com -p 389 -D "cn=Directory manager"
dn: o=aus.sun.com,o=isp
changetype: modify
add: aci
aci
aci
citargetattr != "userPassword")(version 3.0;acl "Authenticated user access at domain-level";
allow (read,compare,search)(userdn = "ldap:///uid=*,ou=people,o=aus.sun.com,o=isp");)
```

#### c) Testing the settings

To test that the setting is working correctly do the following:

ldapsearch -h *directory\_server\_hostname* -p *directory\_server\_port* -D *user\_dn* -b *user\_group\_base* objectclass=inetmailuser dn uid mail

e.g.

ldapsearch -h directory.aus.sun.com -p 389 -D "uid=someuser,ou=people,o=aus.sun.com,o=isp" -b o=isp objectclass=inetmailuser dn uid mail

This should return a list of uid's, mail addresses and dn's of the users and groups in the organisation or domain of the user 'someuser' depending on the ACI that was added in step (b).

#### **To Configure Anonymous Access**

Granting access to data for connections that bind anonymously is not-desirable as it opens up the potential for the data to be accessed by anybody e.g. undesirable elements such as spammers could potentially get access to all the mail addresses of an organisation. At a minimum any anonymous access should be restricted on an IP basis e.g. to just IP addresses used by the organisation's servers and clients.

If your organisation restricts access to the directory servers through some other means (e.g. network perimeter firewalls which block access to port 389/636), you could use the following rules to allow access to data.

Example 1: Anonymous access to limited attributes

aci: (targetattr = "cn || displayName || givenName || sn || initials || uid || departmentNumber || title || homePhone || mail || manager || mobile || company || pager || secretary || description || facsimileTelephoneNumber || I || physicalDeliveryOfficeName || postalCode || st || street || c || telephoneNumber || mailAlternateAddress || isMemberOf || objectClass") (version 3.0;acl "Anonymous access";allow (read,compare,search)(userdn = "ldap:///anyone");)

Example 2: Anonymous access to all attributes (except userpassword) aci: (targetattr != "userPassword")(version 3.0;acl "Anonymous access"; allow (read,compare,search)(userdn = "ldap:///anyone");)

#### a) Configure the Outlook Connector plug-in

In the LDAP tab of the Sun Outlook Connector Deployment Configuration software, disabled the "Require Authentication" option. This will result in Outlook connector using the anonymous bind functionality.

#### b) Grant anonymous access to VLV browsing indexes

The following grants anonymous VLV browsing index request access which by default is denied to non-authenticated bind sessions.

Idapmodify -h *directory\_server\_hostname* -p *directory\_server\_port* -D "cn=Directory Manager" dn: oid=2.16.840.1.113730.3.4.9,cn=features,cn=config changetype: modify add: aci aci: (targetattr !="aci")(version 3.0; acl "VLV Request Control"; allow (compare,read,search) userdn = "Idap:///anyone";)

e.g.

Idapmodify -h directory.aus.sun.com -p 389 -D "cn=Directory Manager" dn: oid=2.16.840.1.113730.3.4.9,cn=features,cn=config

```
changetype: modify
add: aci
aci: (targetattr !="aci")(version 3.0; acl "VLV Request Control";
allow (compare,read,search) userdn = "Idap:///anyone";)
```

If you have not successfully added this ACI, the end-user will see the error "The action cannot be completed" in Outlook 2007 and an error (err=50) will be returned in the directory access logs when attempting to access the VLV control e.g.

```
[06/Dec/2007:12:48:54 +1100] conn=168 op=6 msgId=7 - SRCH
base="o=aus.sun.com,o=isp" scope=2 filter="(&(mail=*)(cn=*))" attrs="uid
mail cn title company
telephoneNumber physicalDeliveryOfficeName objectClass"
[06/Dec/2007:12:48:54 +1100] conn=168 op=6 msgId=7 - RESULT err=50
tag=101 nentries=0 etime=0, VLV Control
```

#### c) Enable anonymous access to user & group details

The following step grants anonymous access to user/group attributes.

```
Idapmodify -h <directory server host> -p <directory server port> -D "cn=Directory manager"
dn: base_for_aci
changetype: modify
add: aci
aci: user_data_aci
```

e.g.

```
Idapmodify -h directory.aus.sun.com -p 389 -D "cn=Directory manager"
dn: o=aus.sun.com,o=isp
changetype: modify
add: aci
aci
aci: (targetattr != "userPassword")(version 3.0;acl "Anonymous access";
allow (read,compare,search)(userdn = "Idap:///anyone");)
```

If you have not successfully added this entry, you will get no results returned from your search (nentries=0) e.g.

```
[06/Dec/2007:13:10:39 +1100] conn=197 op=1 msgId=10 - SRCH
base="o=aus.sun.com,o=isp" scope=2 filter="(&(mail=*)(cn=*))" attrs="uid
mail cn title company
telephoneNumber physicalDeliveryOfficeName objectClass"
[06/Dec/2007:13:10:39 +1100] conn=197 op=1 msgId=10 - SORT cn (10)
[06/Dec/2007:13:10:39 +1100] conn=197 op=1 msgId=10 - VLV 0:9:0:0 1:10
(0)
[06/Dec/2007:13:10:39 +1100] conn=197 op=1 msgId=10 - RESULT err=0
tag=101 nentries=0 etime=0
```

#### d) Testing the settings

To test that the ACI setting is working correctly do the following:

ldapsearch -h *directory\_server\_hostname* -p *directory\_server\_port* -b *user\_group\_base* objectclass=inetmailuser dn uid mail

e.g.

Idapsearch -h directory.aus.sun.com -p 389 -b o=isp objectclass=inetmailuser dn uid mail

This should return a list of uid's, mail addresses and dn's of users in your organisation.

# **For More Information**

- Managing browsing indexes in Directory 6.0
  Configuring and Enabling VLV indexes in Directory Server 5.2
- Directory server ACI information

# Chapter 15. Setting Up and Managing Connector for Microsoft Outlook Security





The future. For documentation beginning with Connector for Microsoft Outlook 8.0.1 and will not future. For documentation beginning with Connector for Microsoft scotthe Oracle Technology Network site at:

m/technetwork/documentation/oracle-communications-185806.html

This information provides an overview about security for the Connector for Microsoft Outlook product. It also provides links to security topics that provide more in-depth information for configuring and administering Connector for Microsoft Outlook security.

Topics:

- Overview of Connector for Outlook
- Secure Installation and Configuration
- Security Features

# **Overview of Connector for Outlook**

For an overview of the features in Connector for Microsoft Outlook, see Introduction to Connector for Microsoft Outlook Software, and Connector for Microsoft Outlook Overview. For information on general security principals, such as security methods, common security threats, and analyzing your security needs, see Designing for Security. For an overview of operating system security, see Oracle Solaris Security for System Administrators. For more information on Connector for Microsoft Outlook high-level architecture, see Understanding Connector for Microsoft Outlook Deployment Process.

# Secure Installation and Configuration

This section outlines the planning process for a secure installation and configuration:

#### **Installation Overview**

This section outlines the planning process for a secure installation and describes recommended

deployment topologies for the systems.

#### **Understanding Your Environment**

To better understand your security needs, ask yourself the following questions:

- 1. Which resources am I protecting?
  - In a Connector for Microsoft Outlook production environment, consider which of the following resources you want to protect and what level of security you must provide:
    - Protocols: HTTP, WMAP, SMTP, WCAP, IMAP, WABP, and LDAP
    - Dependent Products: Directory Server, Messaging Server, Convergence Server (Address book Server), and Calendar Server. Be sure to check the security policies governing these dependent products.
    - Calendar Server front- and back-end hosts
    - Messaging Server front- and back-end hosts
    - Dependent resources, such as Directory Server
- 2. From whom am I protecting the resources? In general, resources must be protected from everyone on the Internet. But should the Connector for Microsoft Outlook deployment be protected from employees on the intranet in your enterprise? Should the system administrators have access to all resources? Should the system administrators be able to access all data? You might consider giving access to highly confidential data or strategic resources to only a few well trusted system administrators. On the other hand, perhaps it would be best to allow no system administrators access to the data or resources.
- 3. What will happen if the protections on strategic resources fail?

In some cases, a fault in your security scheme is easily detected and considered nothing more than an inconvenience. In other cases, a fault might cause great damage to companies or to users who use Connector for Outlook. Understanding the security ramifications of each resource help you protect it properly.

#### **Deployment Topologies**

Connector for Microsoft Outlook depends on a Calendar Server and Messaging Server deployment. For more information, see the following information:

- Developing a Messaging Server Architecture
- Developing a Calendar Server Architecture
- Developing a Communications Suite Logical Architecture

The general architectural recommendation is to use the well-known and generally accepted Internet-Firewall-DMZ-Firewall-Intranet architecture. For more information on addressing network infrastructure concerns, see Determining Your Communications Suite Network Infrastructure Needs.

Connector for Microsoft Outlook is not a server by itself, but a client that communicates with the Calendar Server and Messaging Server in the back-end. So there is no deployment involved. However, to understand Connector for Microsoft Outlook Installation better, and Connector for Microsoft Outlook Pre-Installation, see Understanding Connector for Microsoft Outlook Pre-Installation.

#### Installing Infrastructure Components

As mentioned previously, Connector for Microsoft Outlook does not require installing infrastructure components, as it is a client which interacts with the Calendar Server, Messaging Server, Convergence Server (for Address Book support), and LDAP Server (for Corporate Directory support). For more information about how Connector for Microsoft Outlook communicates with Calendar Server and Messaging Server, see the Calendar Server and Messaging Server documentation. You can refer to the following:

Calendar Server 7 Index

- Calendar Server 6.3 Index
- Messaging Server Index

### Installing Connector for Microsoft Outlook Components

Installing Connector for Microsoft Outlook consists of the following high-level steps:

- 1. Preparing a comprehensive Deployment Plan
- 2. Installing the Deployment Configuration Program
- 3. Configuring end-user packages
- 4. Deploying end user packages

See Administrator's Process Overview and Installing the Desktop Deployment Toolkit for additional information. See Getting Started with Connector for Microsoft Outlook for information about installing Connector for Microsoft Outlook Components.

The Configuration Parameters for Connector for Outlook are configured by entering details in the following tabs:

- Processes
- User Profiles
- User.psts
- Servers
- Mail
- LDAP
- Calendar
- Address Book
- Single User

For information about desktop installation packages for end users, see Configuring End-User Packages. For more information about configuring parameters, see Configuring Connector for Microsoft Outlook.

### **Post Installation Configuration**

For information related to post installation configuration for Connector for Microsoft Outlook, see Connector for Microsoft Outlook Administration Guide.

# **Security Features**

The following are the specific security mechanisms offered by Connector for Microsoft Outlook:

- SSL support for all the protocols, such as IMAPS, HTTPS (WABP and WCAP), SMTP +SSL, and LDAPS
- Option to not store/cache password
- SMIME support (message signing and encryption support)
- Certificate-based authentication

For more information about Certificate-based authentication as part of Connector for Microsoft Outlook Security, see Certificate-based Authentication for Connector for Microsoft Outlook 7.3 Update 1.