# User Migration

## Cisco User Migration Tools

Cisco provides the following tools to aid the user migration process from Lync/OCS to IM and Presence Service:

- Export Contact List tool—allows you to export contact lists in bulk from the Microsoft server for migrating users

- Disable Account tool—allows you to disable the Microsoft server account of migrating users

- Delete Account tool—allows you to delete migrating users from the Microsoft server so that presence requests for these users are later routed to IM and Presence Service

These user migration tools can be collectively downloaded as a zip file from the IM and Presence Service Download Software page on cisco.com at http://software.cisco.com/download/release.html?mdfid=286269517&flowid=50462&softwareid=282074312&release=UTILS&relind=AVAILABLE&rellifecycle=&reltype=latest.

The zip file contains the three tools and a text file called version.txt. The text file contains the current version number of the tools and must be saved in the same folder as the tools. If the tools are stored in different folders, you must store a copy of the text file in each location. If the text file is not in the same folder when you run a tool, you receive an error and the tool does not run.

**Tip**   While attempting to run any of the user migration tools you may receive the following error: "Application failed to initialize properly". The reason for this error is that you are attempting to run the user migration tools without the .NET 2.0 Framework installed. Each of the user migration tools that Cisco provides requires that at least version 2.0 of the .NET Framework is installed on the server where you are running the tool.

The .NET 2.0 Framework comes installed as standard on Windows Server 2003 R2 or newer.

# Recommendations before Migration

Cisco recommends that you perform the following tasks before you begin to migrate users from Lync/OCS to IM and Presence Service:

- Set unlimited contact lists and watchers

- Enable automatic authorization of subscription requests

- Disable new subscriber notification pop-ups on Microsoft Lync

The IM and Presence Service IM addresses can be set to match the OCS/Lync SIP URI (msRTCSIP-PrimaryUserAddress) so that the user's identity is maintained throughout the migration. If that is not possible, then user rename is required.

For more information about setting the IM address value for IM and Presence Service nodes in the cluster, see *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager*.

## Set Unlimited Contact Lists and Watchers

Before you migrate users from Lync/OCS to IM and Presence Service, Cisco recommends that you set the Maximum Contact List Size and Maximum Watchers settings on IM and Presence Service to unlimited. This ensures that each migrated user contact list is fully imported to IM and Presence Service.

After all users have been migrated to IM and Presence Service, reset the Maximum Contact List Size and Maximum Watchers settings on IM and Presence Service to the desired values. The system default value is 200 for Maximum Contact List Size and 200 for Maximum Watchers size.

The following procedure describes how to set unlimited values for the Maximum Contact List Size and Maximum Watchers settings.

**Note**   If you have a multicluster deployment, you must perform this procedure on each cluster. When you change Presence settings, they are applied to all nodes in the cluster; therefore you need to set them only on the IM and Presence Service database publisher node within any given cluster.

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**Procedure**

**Step 1**   Log in to the **Cisco Unified IM and Presence Administration** user interface. Choose **Presence** > **Settings**.

**Step 2**   For **Maximum Contact List Size (per user)**, check the **No Limit** check box.

**Step 3**   For **Maximum Watchers (per user)**, check the **No Limit** check box.

**Step 4**   Click **Save**.

**Step 5**   Restart the Cisco XCP Router on all IM and Presence Service nodes in the cluster. To restart the Cisco XCP Router, log in to the **Cisco Unified IM and Presence Serviceability** user interface and choose **Tools** > **Control Center − Network Services**.

# Enable Automatic Authorization of Subscription Requests

To improve user experience during migration, Cisco recommends that you allow automatic authorization of subscription requests before you begin the migration process. Otherwise, each IM and Presence Service user is forced to manually authorize subscription requests each time they are imported as a contact into the IM and Presence Service. This setting should only be disabled, if desired, after all migrations are complete.

The following procedure describes how to enable automatic authorization of subscription requests.

**Note**   This setting is enabled by default on IM and Presence Service.

**Note**   If you have a multicluster deployment, you must perform this procedure on each cluster. When you change Presence settings, they are applied to all nodes in the cluster; therefore you need to set them only on the IM and Presence database publisher node within any given cluster.

**Procedure**

**Step 1**   Log in to the **Cisco Unified IM and Presence Administration** user interface. Choose **Presence** > **Settings**.

**Step 2**   Check the check box for **Allow users to view the availability of other users without being prompted for approval**.

**Step 3**   Click **Save**.

**Step 4**   Restart the Cisco XCP Router on all IM and Presence Service nodes in the cluster. To restart the Cisco XCP Router, log in to the **Cisco Unified IM and Presence Serviceability** user interface. Choose **Tools** > **Control Center − Network Services**.

# Subscriber Notification Pop-ups

When you migrate users from Microsoft Lync to IM and Presence Service, users that remain on Lync may receive subscription notification pop-ups from some of those migrated users. Such a notification only occurs when:

- the migrated user has the Microsoft Lync user in their contact list

  **and**

- the Microsoft Lync user does not have that same migrated user in their contact list

If the Microsoft Lync user has the migrated contact in their contact list also, then there is no notification pop-up. When an individual notification pop-up has been handled by the Microsoft Lync user, it will not re-appear.

If you do not want Lync users to receive new subscriber notification pop-ups you can disable Lync pop-ups. You have two options when disabling these notification pop-ups:

- you can disable pop-ups for the entire duration of user migration

- you can disable pop-ups only during the migration of a batch of users

If you disable pop-ups, then all pop-ups for all Lync users will be disabled until you re-enable them.

**Note** Disabling and enabling Microsoft Lync pop-ups requires a restart of the Lync front-end services.

## Disable Microsoft Lync Pop-ups

If you want to disable all pop-ups for all Microsoft Lync users, complete the following procedure before you begin the user migration or the migration of a batch of users.

### Procedure

**Step 1** On the Lync front-end server choose **Start** > **All Programs** > **Microsoft Lync Server 2010** > **Lync Server Management Shell**.
**Tip** Enter either Microsoft Lync Server 2010 or 2013, depending on your Microsoft Lync Server version.

**Step 2** Enter the following powershell command:
`Set-CSClientpolicy -EnableNotificationForNewSubscriber $False`

**Step 3** Choose **Start** > **Programs** > **Administrative Tools** > **Services**.
**Step 4** Right-click the service **Lync front end server** and click **Restart**.

## Restore Microsoft Lync Pop-up Behavior

To restore the previous client behavior for notification pop-ups for Microsoft Lync users complete the following procedure after user migration is complete or after the migration of a batch of users is complete.

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**Procedure**

**Step 1**  Enter the following command to restore client pop-up behavior on Lync:

```
Set-CSClientpolicy -EnableNotificationForNewSubscribers $Null
```

**Step 2**  Choose **Start** > **Programs** > **Administrative Tools** > **Services**.

**Step 3**  Right-click the service **Lync front end server** and choose **Restart**.

# Verify Microsoft Server SIP URI Format for Migrating Users

Use this procedure to check that the IM address format that is configured on IM and Presence Service aligns with the IM address format of the Microsoft servers.

IM and Presence Service supports two IM address schemes. If you use the Directory URI IM address scheme, the IM address format between IM and Presence Service and the Microsoft servers align. However, if you use the *UserID@Default_Domain* IM address scheme, misalignment of the IM address schemes is possible.

The *UserID@Default_Domain* IM address scheme URIs are composed by joining the Cisco Unified Communications Manager user ID with the IM and Presence Service default domain. If any Lync/OCS URIs do not match the *UserID@Default_Domain* IM address format, you must modify the URIs of the migrating users. You can modify a batch of Microsoft server URIs before you migrate each batch of Microsoft server users to IM and Presence Service.

> **Note**  For releases earlier than release 10.0(1), you must modify all Microsoft server URIs before the first batch of users are migrated from a Microsoft server to IM and Presence Service.

When the Directory URI IM address scheme is used, Microsoft server users do not have to be renamed if they are from domains that differ from the domains which are configured on the Cisco Unified Communications Manager and IM and Presence Service clusters. Individual users can be assigned a different email domain. You must configure IM and Presence Service for interdomain federation with the Microsoft servers and set up the email for federation feature if the Microsoft server users are on a different domain.

For more information about the SIP URI format, see topics related to maintaining user identity during migration.

For more information about the IM and Presence Service IM address schemes, see *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager*.

For more information about setting up interdomain federation between IM and Presence Service and Microsoft servers, see the *Interdomain Federation for IM and Presence Service on Cisco Unified Communications Manager* guide.

**Procedure**

**Step 1**  Verify that the IM address scheme is set to Directory URI and that the directory URI maps to msRTCSIP-PrimaryUserAddress on Cisco Unified Communications Manager.

If the Directory URI IM address scheme is configured and is properly mapped, then alignment is guaranteed. If it is not possible to configure IM and Presence Service to use the Directory URI address scheme, proceed to the next step.

**Step 2** Check that the format of the current IM address scheme for IM and Presence Service matches the format that the Microsoft server uses. If the IM address formats do not align, then you must rename the users on the Microsoft server before migration. See the following procedures for more information about modifying the Microsoft server SIP URI.

**What to Do Next**

Rename Contact IDs in IM and Presence Service Contact Lists, on page 7

# Modify Lync SIP URI

Complete the following procedure to change the format of a Lync user's SIP URI.

**Procedure**

**Step 1** From the Lync Control Panel, choose the Users tab.

**Step 2** Search for the user that you want to change and double-click the user.

**Step 3** Change the SIP address field.

**Step 4** Click **Commit**.

**Tip** To modify SIP URIs in bulk, use the `Set-CsUser` cmdlet. For more information, see http://technet.microsoft.com/en-us/library/gg398510.aspx.

**What to Do Next**

Rename contact ids in the IM and Presence Service contact lists.

# Modify OCS SIP URI

Complete the following procedure on the Active Directory server to change the format of the SIP URI for an OCS user.

**Procedure**

**Step 1** On the Active Directory server, choose **Start** > **Control Panel** > **Administrative Tools** > **Active Directory Users and Computers**.

**Step 2** Search for the user that you want to change and double-click the user.

**Step 3** From the **Properties** window, choose the Live Communications tab.

**Step 4** Change the SIP URI field.

**Step 5** Click **OK**.

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**Note**    To modify SIP URIs in bulk, use the System.DirectoryServices that are provided by Microsoft to update the msRTCSIP-PrimaryUserAddress property for each affected user. For more information, see http://msdn.microsoft.com/en-us/library/ms180835(v=vs.80).aspx.

### What to Do Next

Rename contact ids in the IM and Presence Service contact lists.

# Rename Contact IDs in IM and Presence Service Contact Lists

**Note**
- This procedure is necessary only if you modified any Lync/OCS SIP URIs . For more information about URI formats, see topics related to maintaining user identity during migration.

- You must complete this procedure before the modified Microsoft server users are enabled for IM and Presence Service.

- Cisco recommends that you run this tool during a scheduled maintenance window.

Before you can rename the contact IDs for a set of users, you must upload a file containing a list of contact IDs and the corresponding new format of each of those contact IDs. The file must be a CSV file with the following format:

Contact ID, New Contact ID

where Contact ID is the user's IM address as it appears on the **Presence Topology User Assignment** window.

The following is a sample CSV file with one entry:

```
Contact ID, New Contact ID
john.smith@example.com, jsmith@example.com
```

**Note**
- It is your responsibility to compile the CSV file with the appropriate contact IDs.

- You must ensure that the header Contact ID, New Contact ID is present in all CSV files.

When you run the job, the IM and Presence Service Bulk Administration Tool (BAT) updates the contact lists of any user that referenced the old contact IDs.

Complete the following procedure to upload the CSV file and rename the contact IDs for a list of users.

**Note**    You must complete this procedure on each IM and Presence Service cluster.

### Procedure

**Step 1**    Upload the CSV file with the list of contact IDs that you want to rename in all contact lists. Do the following:

a) On the IM and Presence Service database publisher node, log in to the **Cisco Unified CM IM and Presence Administration** user interface. Choose **Bulk Administration** >  **Upload/Download Files**.

b) Click **Add New**.

c) Click **Browse** to locate and choose the CSV file.

d) Choose **Contact** as the Target.

e) Choose **Rename Contacts – Custom File** as the Transaction Type.

f) Click **Save** to upload the file.

**Step 2**  On the publisher node, log in to the **Cisco Unified CM IM and Presence Administration** user interface. Choose **Bulk Administration** >  **Contact List** >  **Rename Contacts**.

**Step 3**  In the **File Name** field, choose the file that you uploaded.

**Step 4**  Choose one of the following actions:

- Click **Run Immediately** to execute the Bulk Administration job immediately.

- Click **Run Later** to schedule a time to execute the Bulk Administration job. For more information about scheduling jobs in the BAT, see the Online Help in **Cisco Unified CM IM and Presence Administration**.

**Step 5**  Click **Submit**. If you chose to run the job immediately, the job runs after you click Submit.

**What To Do Next**

# Results of the Rename Contact IDs Job

You can check the results of the Rename Contact IDs job from the **Job Scheduler** window (**Bulk Administration** > **Job Scheduler**). Depending on the number of entries in the CSV file, the Bulk Administration Tool processes the contents of the file in a few minutes. However, it may take several hours for all of the contact lists to be updated. The Job Status shows as Processing during this time and the current progress of the job is shown in the Job Results section.

**Note**  The Job Results area on the Job Scheduler window is shown only when the CSV file has been processed. The Number of Records Processed and the Number of Records Failed values do not represent the number of entries that were processed on the CSV file; these values represent the number of contact lists that have been updated and the number of failed contact list updates.

After the contact ids are renamed, you can proceed to provision Lync/OCS users on Cisco Unified Communications Manager.

# Provision of Microsoft Server Users on Cisco Unified Communications Manager

The first step in migrating users from Microsoft Lync or Microsoft Office Communications Server (OCS) to IM and Presence Service is to provision the Microsoft server users on Cisco Unified Communications Manager and license them for IM and Presence Service and an IM and Presence Service supported client.

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**Note**    After users are provisioned on Cisco Unified Communications Manager and IM and Presence Service, Cisco recommends that you complete the full user migration process during the same maintenance window. Leaving users provisioned on both IM and Presence Service and on the Microsoft servers for any time period disrupts message routing for those users.

See *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager* for information about configuring new users in Cisco Unified Communications Manager and the license requirements for IM and Presence Service and supported clients.

**What To Do Next**

Backups of User Microsoft Server Contact List Information

**Related Topics**

Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager

# Backups of User Microsoft Server Contact List Information

The Lync/OCS provides a tool called dbimpexp.exe. Cisco recommends that you use this tool to back up the Microsoft server user contact list information so that you can restore this information on the Microsoft server at a later date, if needed.

For the purpose of migrating Microsoft server users to an IM and Presence Service supported client, you can use this tool to back up the contact list for an individual Microsoft server user or all users.

**Related Topic**

Usage of the dbimpexp.exe tool: http://www.ocspedia.com/Misc/Explore_Dbimpexp.aspx?ArticleID=41

**What To Do Next**

# Export of Contact Lists for Migrating Users

Cisco provides an Export Contact List tool (ExportContacts.exe) to allow an administrator to export contact lists in bulk from Lync/OCS for migrating users. The tool uses the Microsoft server application programming interfaces (APIs) to export contact lists and output to a comma-separated values (CSV) file. This file can then be used by the IM and Presence Service Bulk Administration Tool (BAT) to import these same contact lists into IM and Presence Service at a later point in the migration.

> **Note**
> - You can run this tool against all the supported Microsoft server platforms.
>
> - You can run the tool on any Standard Edition server or Enterprise Edition front-end server.
>
> - To export contact lists for Lync users, the Export Contact List tool requires read access to the Lync RTC database and also read access to LDAP. You must also ensure that dbo execution account privileges are granted to the RTC database.
>
> - Running this tool has no affect on the capabilities of other Microsoft server users who are signed into Microsoft Lync or Microsoft Office Communicator. However, Cisco recommends that you run this tool during a scheduled maintenance window to reduce the load on the Microsoft server and Active Directory system.

After you run the tool, a file that contains the exported contact lists is created in the same directory as the tool. The filename is ExportedContacts<Timestamp>.csv. A time stamp is appended to the filename when the file is created; therefore, each time you run the Export Contact List tool, it creates a unique output file.

The Export Contact List tool also creates a second file that contains the Microsoft server SIP URI of each user that you specify for the contact list export. The filename is UserList<Timestamp>.txt and it is also created in the same directory as the tool.

> **Note** You can use the UserList<Timestamp>.txt file as input to the Disable Account tool and the Delete Account tool.

# Log File

The Export Contact List tool also creates a unique time-stamped log file in the same directory as the output file each time you run the tool. The filename for the log file is ExportContactsLog<Timestamp>.txt.

It is good practice to check the log file each time you run the Export Contact List tool. You can then scan through the log file to fix any issues. At the bottom of each log file, the following information is summarized:

- Number of users that were successfully processed

- Number of users that were not found

- Number of users that were not processed due to errors

- Largest contact list size

- Total number of contacts that were found

- Average contact list size

# Run Modes

The Export Contact List tool has two run modes; NORMAL and STATSONLY. NORMAL is the standard way to run the tool. In this mode, three files are created: the CSV file that contains the exported contacts, the log file and the users' Lync/OCS SIP URI file. In STATSONLY mode, the Export Contact List tool creates

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only the log file. This allows you to run the tool to discover any errors that you can fix before you create the exported contacts CSV file and the Microsoft server SIP URI file.

# Input File Formats

The Export Contact List tool (`ExportContacts.exe`) allows you to specify an input file containing the list of migrating users. The tool then retrieves the contact lists for the users that are specified in that input file. Alternatively, you can specify a command line parameter to export contact lists for all users in the local Lync/OCS database.

**Note** If you use choose to export all users with the Export Contact List tool, the resulting `UserList<Timestamp>.txt` file contains the contact lists of all Microsoft server-enabled users in the domain, regardless of whether they are migrating to IM and Presence Service. If you later use the `UserList<Timestamp>.txt` file as input to the Disable Account tool and the Delete Account tool, be aware that all user accounts in the domain are affected by the Disable Account and Delete Account tools.

If you are using an input file, the following input file formats are supported:

**Input File Format 1: Microsoft server SIP URIs**

Note the following:

- Each line in the input file represents a contact list owner.

- The contact list owner is represented by the owner's Microsoft server SIP URI, for example, sip:bobjones@foo.com.

- The following is a sample input file:

```
sip:ann@foo.com
sip:bob@foo.com
sip:joe@foo.com
sip:chuck@foo.com
```

**Input File Format 2: Users by Organizational Unit in Active Directory**

In this input file format, you can specify the Organizational Unit (OU) in Active Directory that contains the users that you want to migrate. The input file must have the following format:

```
DN:OU=OrgUnit1,OU=OrgUnit2,DC=DomainComp1,DC=DomainComp2
```

where OrgUnit1 is an OU in the OrgUnit2 OU and DomainComp1 and DomainComp2 are the domain components. Domains usually have two domain components in AD, for example cisco and com for the cisco.com domain.

You can also specify multiple distinguished names (DNs) in a single input file to export contact lists for users from different OUs. The format of an input file with multiple DNs is as follows:

```
DN:OU=firstOU,DC=DomainComp1,DC=DomainComp2
DN:OU=secondOU,DC=DomainComp1,DC=DomainComp2
DN:OU=thirdOU,DC=DomainComp1,DC=DomainComp2
```

The following procedure describes how to export contact lists in bulk from the Microsoft server for migrating users.

### Procedure

**Step 1**  Copy and extract the zip file containing the Cisco user migration tools to the Standard Edition server or Enterprise Edition front-end server.

**Note**  After extraction, if you move any of the Cisco user migration tools to a different location on the Microsoft server, you must also copy the `version.txt` file to the new location to ensure that the tool prints out its current version.

**Step 2**  Open a command prompt and change directory to the location of the Export Contact List tool.

**Step 3**  At the command prompt, run the tool as follows:

| If you want to... | Enter this command |
|---|---|
| Export the contact list for a list of users as specified in a Microsoft server SIP URI input file<br><br>or<br><br>Export the contact list for a list of users in an Organizational Unit in AD, as specified in a Users by Organizational Unit in AD input file | `ExportContacts.exe -s/`*LDAPServer* `-f/`*input_file* `-l/`*logLevel* `-r/`*run_mode* `-i/`*database_instance*<br><br>where:<br><br>• *LDAPServer*—The IP or FQDN of the AD server where Microsoft server users are stored<br><br>• *input_file*—A text file that contains a list of Microsoft server SIP URIs, or, a text file that contains a list of distinguished names for AD Organizational Units that contain the users that you want to migrate<br><br>• *logLevel*—The logging level, which must be one of the following:<br><br>  ◦ error<br><br>  ◦ info<br><br>  ◦ debug (recommended)<br><br>• *run_mode*—The run mode, which must be one of the following:<br><br>  ◦ NORMAL<br><br>  ◦ STATSONLY<br><br>• *database_instance*—The Lync datastore instance name. This parameter is required only when you are exporting contacts for Lync users.<br><br>Sample entries are as follows:<br><br>  ◦ Lync 2010 Standard Edition server: `localhost\rtc`<br><br>  ◦ Lync 2010 Enterprise Edition server: `LyncDatastoreFqdn\rtc`<br><br>  ◦ Lync 2013 Standard Edition server: `localhost\rtclocal`<br><br>  ◦ Lync 2013 Enterprise Edition server: `AnyLyncFrontendServer\rtclocal` |

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| If you want to... | Enter this command |
|---|---|
| Export the contact list for all Microsoft server-enabled users in the domain | **ExportContacts.exe -s/***LDAPServer* **-f/ALL -l/***logLevel* **-r/***run_mode* **-i/***database_instance*<br><br>where:<br><br>• *LDAPServer*—The IP or FQDN of the AD server where Microsoft server users are stored<br><br>• *logLevel*—The logging level, which must be one of the following:<br><br>◦ error<br><br>◦ info<br><br>◦ debug (recommended)<br><br>• *run_mode*—The run mode, which must be one of the following:<br><br>• NORMAL<br><br>• STATSONLY<br><br>• *database_instance*—The Lync datastore instance name. This parameter is required only when you are exporting contacts for Lync users.<br><br>**Note** This command exports the contact lists for all Microsoft server enabled users in the specified domain, regardless of whether they are migrating to IM and Presence Service. If you use the `UserList<Timestamp>.txt` file, which is created from this command, as input to the Disable Account tool and the Delete Account tool, be aware that all user accounts in the domain are affected by the Disable Account and Delete Account tools. |

**Note** To ensure correct contact list migration, the owners of the exported contact lists must be completely disabled on the Microsoft server before you import the contacts lists into IM and Presence Service.

**What to Do Next**

Disable Users on Microsoft Servers

**Related Topics**

Export Contact List Tool

# Disable Users on Microsoft Servers

This section describes procedures on how to disable a Lync/OCS account for migrating users and how to verify that Active Directory updates are synchronized to the Microsoft server.

# Disable Microsoft Server Account for Migrating Users

Cisco provides a tool to disable the Lync/OCS account of migrating users. This tool (DisableAccount.exe) connects to Active Directory (AD) and updates the users' Microsoft server attributes to disable their account. Running the Disable Account tool is the first step in a two-step process that must take place to disable a migrating user on the Microsoft server:

1 Disable the Microsoft server user account for migrating user.
2 Delete the Microsoft server user data for migrating user.

After you disable the account for migrating user, wait until the Microsoft server's LDAP changes are synchronized before proceeding with the Delete utility. The LDAP synchronization can take up to 30 minutes.

> **Note**
> - You can run this tool on all supported Microsoft server platforms.
>
> - You can run this tool on any Standard Edition server or Enterprise Edition front-end server.
>
> - Running this tool has no affect on the capabilities of other Microsoft server users who are signed into Microsoft Lync or Microsoft Office Communicator. However, Cisco recommends that you run this tool during a scheduled maintenance window to reduce the load on the Microsoft server and Active Directory system.

The Disable Account tool accepts three inputs:

- The IP or FQDN of the AD server on which the Microsoft server users exist

- An input file containing the list of Microsoft server user accounts to disable

- The logging level, which should be one of error, info, or debug (debug is the recommended setting)

The Disable Account tool reads the list of users to disable from an input file. Each line in the input file represents a contact list owner. The contact list owner is represented by the owner's Microsoft server SIP URI, for example, sip:bobjones@cisco.com. The following is a sample input file:

```
sip:ann@cisco.com
sip:bob@cisco.com
sip:joe@cisco.com
sip@chuck@cisco.com
```

You can create your own input file based on the above format. however, Cisco recommends that you use the UserList<Timestamp>.txt file as the input file for the Disable Account tool. The UserList<Timestamp>.txt file does not contain any duplicate, disabled, or nonexistent users.

After you run the Disable Account tool, the tool generates a unique, time-stamped log file called DisableAccountLog<Timestamp>.txt in the same directory as the tool. The log file contains details about any failures or errors that occurred.

### Before You Begin

You must have read/write permission to AD to run this tool.

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**Procedure**

**Step 1** Copy and extract the zip file containing the Cisco user migration tools to the Standard Edition server or Enterprise Edition front-end server.

**Note** After extraction, if you move any of the Cisco user migration tools to a different location on the Microsoft servers, you must also copy the version.txt file to the new location to ensure that the tool prints out its current version.

**Step 2** Open a command prompt and change directory to the location of the Disable Account tool.

**Step 3** At the command prompt, enter the following command:

`DisableAccount.exe -s/LDAPServer -f/`*`input_file`* `-l/logLevel`

where:

- `LDAPServer`—The IP or FQDN of the AD server on which the users exist

- *`input_file`*—The file containing the list of Microsoft server user accounts to disable, UserList<Timestamp>.txt

- `logLevel`—The logging level, which must be one of error, info or debug (debug is the recommended setting)

**Step 4** Check the DisableAccountLog<Timestamp>.txt log file after each execution of the Disable Account tool to ensure that all users were successfully disabled.

**What to Do Next**

# Verify That Active Directory Updates Synchronized to Microsoft Servers

After the Active Directory updates are made to disable the Lync/OCS accounts, the next step is to verify that those updates have synchronized to the Microsoft server. Verification takes place on the Standard Edition server or Enterprise Edition pool where the disabled Microsoft server account was provisioned. You must wait until the Microsoft server LDAP changes are synched before proceeding with the Delete utility.

**Note** Depending on your Microsoft server deployment, it may take up to 30 minutes for these changes to synchronize to the Microsoft server.

**Procedure**

**Step 1** Depending on your deployment, do one of the following:

- If you are using Lync Server 2010, choose **Start** > **All Programs** > **Microsoft Lync Server 2010** > **Lync Server Control Panel**.

  **Tip** Choose **Microsoft Lync Server 2013** if you are using Microsoft Lync Server 2013.

• If you are using OCS 2007 R2, choose **Start** > **Programs** > **Administrative Tools** > **Office Communications Server 2007 R2Start > Programs > Administrative Tools > Office Communications Server 2007 R2**.

**Step 2** Depending on your deployment, check the following:

• For Lync, choose **Users** and ensure that the disabled user no longer appears in the list of users.

• For OCS, choose **Users** and ensure that the disabled user no longer appears in the list of enabled OCS users.

**What to Do Next**

**Related Topics**

Disable Account Tool

# Delete User Data from Database for Migrating Users

> **Note** To delete user data from the Lync/OCS database for migrating users, you must have read/write access to the Microsoft server database.

The Microsoft server provides an administrative way to delete a user from the Microsoft server database. However, if you delete a user from the database in this way, the user is removed from other users' contact lists. To prevent the user being removed from the contact lists of other Microsoft Lync or Microsoft Office Communicator users, Cisco provides an alternative means of deleting the user from the Microsoft server database.

This alternative tool (`DeleteAccount.exe`) allows you to delete migrating users so that availability requests for these users are later routed to IM and Presence Service. This tool also ensures that the deleted users are not removed from the contact list of any users that remain on the Microsoft server. Running the Delete Account tool is the second step in a two-step process to disable a migrating user on the Microsoft server. The two-step process is as follows:

**1** Disable the Microsoft server account for migrating user.

**2** Delete the Microsoft server user data for migrating user.

After you disable the account for migrating user, wait until the Microsoft server's LDAP changes are synchronized before proceeding with the Delete utility. The LDAP synchronization can take up to 30 minutes.

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**Note**
- You can run this tool on all supported Microsoft server platforms.

- You can run this tool on any Standard Edition server or Enterprise Edition pool.

- Running this tool has no affect on the capabilities of other Microsoft server users who are signed into Microsoft Lync or Microsoft Office Communicator. However, Cisco recommends that you run this tool during a scheduled maintenance window to reduce the load on the Microsoft server and Active Directory system.

The Delete Account tool reads the list of users to delete from an input file. Each line in the input file represents a contact list owner. The contact list owner is represented by the owner's Microsoft server SIP URI, for example, sip:bobjones@cisco.com. The following is a sample input file:

```
sip:ann@cisco.com
sip:bob@cisco.com
sip:joe@cisco.com
sip@chuck@cisco.com
```

You can create your own input file based on the above format. however, Cisco recommends that you use the UserList<Timestamp>.txt file as the input file for the Delete Account tool. The `UserList<Timestamp>.txt` file does not contain any duplicate, disabled, or nonexistent users.

**Running the Delete Account Tool on Standard Edition Deployments**

When deleting data for a list of users, you must run this tool once on each Standard Edition server. The database is coresident on the Standard Edition server.

**Running the Delete Account Tool on Enterprise Edition Deployments**

When deleting data for a list of users, you must run this tool once on each Enterprise Edition pool. The Lync/OCS database instance name to which the Microsoft server's front-end connects must be specified when running the tool.

**Caution**
For Lync Enterprise Edition, you must run this tool first on the back-end database server and then on each front-end server. The Lync database instance name to which the Lync front-end connects must be specified in both options. The name of the database for the front-end servers is rtclocal. The default name of the database for the back-end server is rtc, but that can be changed during system installation.

For OCS Enterprise Edition, the tool must be run on only the back-end database server.

**Procedure**

**Step 1** Ensure that you have read/write access to the Microsoft server database before you run this tool.

**Step 2** Copy and extract the zip file containing the Cisco user migration tools to the Standard Edition server or one of the Enterprise Edition pool servers (front-end or back-end).

**Note** After extraction, if you move any of the Cisco user migration tools to a different location on the Microsoft server, you must also copy the `version.txt` file to the new location to ensure that the tool prints out its current version.

**Step 3** Open a command prompt and change directory to the location of the Delete Account tool.

**Step 4** At the command prompt, enter the command as follows:

```
DeleteAccount.exe -s/database_instance -f/input_file -l/logLevel
```

where:

- *database_instance*—The database instance name of the Lync/OCS pool

- *input_file*—The file containing the list of Microsoft server user accounts to delete, UserList<Timestamp>.txt

- *logLevel*—The logging level, which must be one of error, info, or debug (debug is the recommended setting)

**Note**     After the command executes, the Delete Account tool generates a unique, time-stamped log file called `DeleteAccountLog<Timestamp>.txt` in the same directory as the tool. The log file contains details about any failures or errors that have occurred.

**Step 5**    For each Standard Edition server or Enterprise Edition pool, repeat Steps 1 to 3.
For troubleshooting tips, see Delete Account Tool

**Step 6**    If you are deleting user data from a Lync database you must also repeat Steps 2 to 4 on each front-end server. To access the front-end server database, the command in Step 4 must be run locally on the front-end server. In addition, you must use *front-end_server_hostname***\rtclocal** as the value for the database instance parameter.

**What to Do Next**

# Import Contact Lists for Migrating Users into IM and Presence

You can use the IM and Presence Service Bulk Administration Tool (BAT) to import Lync/OCS user contact lists into IM and Presence Service.

Complete the following steps to import the Microsoft server user contact lists into the IM and Presence Service:

**1**   Upload the CSV File Using BAT.
**2**   Create a New Bulk Administration Job.
**3**   Check Results of Bulk Administration Job.

**Note**     The default contact list import rate is based on the server hardware type. You can change the contact list import rate by logging in to the **Cisco Unified IM and Presence Administration** user interface and choosing **System** > **Service Parameters** > **Cisco Bulk Provisioning Service**, then change the variable under Import Users Contact Rate. However, if you increase the default import rate, this results in a higher CPU and Memory usage on IM and Presence Service.

**Before You Begin**

The procedure to import the Microsoft server user contact lists is one of the final steps in the user migration process. Before you import the Microsoft server user contact lists, you must complete the following procedures:

**1**   Provision the Microsoft server users on Cisco Unified Communications Manager.

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2 Ensure that the Microsoft server users are licensed and assigned to IM and Presence Service.

3 Ensure that the IM and Presence Service Maximum Contact List Size and Maximum Watchers settings are set to unlimited to ensure all contact lists are fully imported. See Set Unlimited Contact Lists and Watchers, on page 2.

4 Run the Export Contact List tool to produce the `ExportedContacts<Timestamp>.csv` file. See Export of Contact Lists for Migrating Users, on page 9.

5 Ensure that the Microsoft server users have been fully disabled on the Microsoft server. See Disable Users on Microsoft Servers, on page 13.

# CSV File Upload Using BAT

You must upload the ExportedContacts<Timestamp>.csv file to IM and Presence Service using the BAT. See *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager* for instructions on how to upload the CSV file.

**Related Topic**

Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager

**What To Do Next**

Creation of a New Bulk Administration Job, on page 19

# Creation of a New Bulk Administration Job

After you upload the CSV file, you must create a new bulk administration job in the **Cisco Unified CM IM and Presence Administration** user interface to update the user contact lists. See *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager* for instructions on how to create a new bulk administration job.

**Related Topic**

Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager

**What To Do Next**

Results of Bulk Administration Job, on page 19

# Results of Bulk Administration Job

When the bulk administration job is complete, the IM and Presence Service Bulk Administration Tool writes the results of the contact list import job to a log file. See *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager* for instructions on how to check the results of the bulk administration job.

**What To Do Next**

Deploy an IM and Presence Service Supported Client on Users Desktop, on page 20

**Related Topics**

> Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager
>
> User Migration Troubleshooting

# Deploy an IM and Presence Service Supported Client on Users Desktop

After you provision the Lync/OCS users on Cisco Unified Communications Manager and license them for IM and Presence Service and an IM and Presence Service supported client, you can install the client software on the users' desktops. See *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager* for information about deploying IM and Presence Service supported clients.

**Related Topics**

> Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager

# Reset Maximum Contact List Size and Maximum Watcher Size

Before migrating users from Lync/OCS to IM and Presence Service, Cisco recommends that you set the Maximum Contact List Size and Maximum Watchers settings on IM and Presence Service to unlimited. This ensures that each migrated user contact list is fully imported to IM and Presence Service.

After all users have been migrated to IM and Presence Service, reset the Maximum Contact List Size and Maximum Watchers settings on IM and Presence Service to the desired values. The system default value is 200 for Maximum Contact List Size and 200 for Maximum Watchers size.

**Note**  If you are performing a phased migration of users from the Microsoft server to IM and Presence Service, do not reset the Maximum Contact List Size and Maximum Watchers values until all users have been migrated.

The following procedure describes how to set values for the Maximum Contact List Size and Maximum Watchers settings.

**Note**  If you have a multicluster deployment, you must perform this procedure on each cluster. When you change Presence settings, they are applied to all nodes in the cluster; therefore you need to set them only on the IM and Presence Service publisher node within any given cluster.

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**Procedure**

**Step 1**  Log in to the **Cisco Unified IM and Presence Administration** user interface. Choose **Presence** > **Settings**.

**Step 2**  For **Maximum Contact List Size (per user)**, uncheck the check box for **No Limit** and enter the desired limit.

**Step 3**  For **Maximum Watchers (per user)**, uncheck the check box for **No Limit** and enter the desired limit.

**Step 4**  Click **Save**.

**Step 5**  Restart the Cisco XCP Router on all IM and Presence Service nodes in the cluster. To restart the Cisco XCP Router, log in to the **Cisco Unified IM and Presence Serviceability** user interface and choose **Tools** > **Control Center − Network Services**.

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