VMware Zimbra®

Migrating to ZCS from Microsoft Exchange

Administrator's Guide

ZCS 8.0

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Legal Notices

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1   Overview of Migrating to ZCS

The VMware Zimbra Migration Tool is used to migrate Microsoft® Exchange server email accounts to the VMware Zimbra Collaboration Server (ZCS) and to import the email, calendar, address book, tasks and rules information for the selected Exchange users.

Multiple accounts can be migrated as a server migration or an individual Outlook profile or PST file can be migrated as a user migration.

The migration process replicates the user's Microsoft® Outlook folder hierarchy, importing email messages, calendars, contacts, tasks, rules and other features from the Exchange server to ZCS. Any keywords are converted to tags in ZCS.

Accounts from Microsoft Exchange 2003, 2007, and 2010 can be migrated.

Planning the Server Migration

Before you migrate from the Exchange server, select a migration strategy, prepare for migration, and create a communication plan to notify users about the ZCS email program.

Migration Strategy

Performing the ZCS migration usually follows one of the following strategies:

- **Quick migration**: Replaces a legacy email system with ZCS in a single migration. Be sure to perform the migration during off-peak use times. You do not need to stop your existing email server in order to migrate accounts, but any email that is sent or delivered after the account is migrated is not saved to the Zimbra account. This can be avoided by taking the Exchange server offline while the quick migration takes place.

- **Phased Migration (Split Domain):** Phased migration allows the ZCS servers to run in parallel with the legacy email system for an extended period of time. Migration is implemented in stages so that some accounts are migrated to ZCS, while other accounts continue on the existing email system. This allows for migrating reasonably sized groups at one time, testing of targeted groups and key users before the general migration

occurs, and for testing of a recovery process. The migration tool includes a scheduling option that lets you schedule when the migration should take place.

The phased migration (split domain) scenario is possible if your email system offers some of the mail routing features Zimbra offers. For more information, see the wiki page about split domain at http://wiki.zimbra.com/wiki/Split_Domain.

Identify the Domain Strategy

When migrating from Exchange to ZCS, you select which domain the users' accounts migrate to. Make sure the destination domain is created in ZCS before you migrate your data.

The migration process contains a few considerations regarding naming:

- Only data from a single domain can be imported. For example, you might migrate users from **marketing.domain.com** on your Exchange server to **marketing.example.domain.com** on your ZCS server.

- The local part of the user's SMTP address in Exchange becomes the first portion of the email address on the ZCS server. For example, if migrating from an Exchange domain **marketing.domain.com** to ZCS domain **example.marketing.domain.com**, the **joe@marketing.domain.com** would become **joe@example.marketing.domain.com** in ZCS.

- If your users use the Calendar application, and you are employing the phased migration method (you are not migrating all users to ZCS at the same time), configure ZCS with the same domain name as used on the Exchange server. When ZCS is configured with the same domain name, a user's existing email address will be retained when the account migrates to ZCS.

- If user email addresses are changed when you migrate (for example, from "joe@marketing.domain.com" to "joe@example.marketing.domain.com"), users no longer receive meeting updates on existing meetings because appointments and meetings requests contain organizer and recipient information in the form of email addresses.

Identify the Type of User Data to Migrate

Before you migrate users with the Migration Wizard, determine how the migration should be implemented. Consider the following

- How many users are you going to migrate in one session?

- What is the account quota to be given to users that migrate? This is the storage limit allowed for an account. Email messages, address books, calendars, tasks, and files contribute to the quota.

- What type of user data will be migrated? You can select to migrate the complete account data, including junk and trash folders or you can select specific items to migrate and a specific date.

Define the Password Strategy

If authentication is managed from an external LDAP directory, users can continue to use their existing passwords.

Otherwise, you can create a default password that all accounts will use the first time they log in.

Set up Classes of Service

Before migrating user accounts, you can create Classes of Service (COS) on the ZCS server to match users existing features and preferences as closely as possible. You also configure the account quota in the class of service.

When you run the migration wizard, you can select which COS to assign to this specific migration.

Scheduling Migrations

You can schedule migrations to take place immediately or at a specific time and date from the migration wizard.

2 Migrating Server Accounts

The migration tool guides you through the process of migrating users from a Microsoft Exchange server to the Zimbra Collaboration Server (ZCS). This chapter explains how to perform a Server Migration.

Using the Migration Tool to Migrate Multiple Accounts

At any point during your configuration, you can navigate between dialog boxes by clicking the navigation links in the left panel. This allows you to go back and forth between dialogs to enter or view information.

Start the Migration

1. Execute the **ZimbraMigration.exe** file.
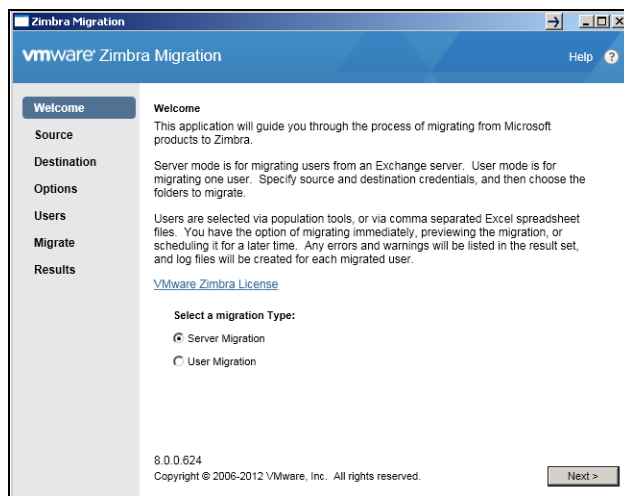
2. On the Welcome dialog box, select **Server Migration**.

3. Click **Next**.

Select the Source of Data to Migrate

1. On the **Source** dialog box, enter the relevant Exchange server information:

    •   Select **Outlook Profile** if you already have an Exchange admin profile account, which allows you access to all other profiles you want to migrate.

    •   If you do not have an Exchange admin profile account and want to create a temporary one, select **Exchange Server**. Enter the Exchange server credentials.

        •   **Hostname/IP**: Host name of the Exchange server name or IP address.

        •   **Admin ID**. Name of the administrator account on the Exchange server.

        •   **Password**. Password of the administrator account on the Exchange server.

        An Exchange admin profile is created for this migration. The profile is automatically deleted after the migration process.

2. Click **Next**.

Enter Destination Server Information

1. In the **Destination** dialog box, enter the Zimbra server credentials.

   - **Hostname**. Name of the destination Zimbra server.

   - **Admin Port**. Default admin services port is 7071.

   - **Admin ID.** Name of the administrator account on the destination Zimbra server.

   - **Password**. Password of the administrator account on the destination Zimbra server.

2. Click **Next**.

Select Migration Options

1. In the **Options** dialog box, select the account data to migrate.

- **Items**: Select to migrate email messages and attachments, calendar data, contact lists, task lists, rules and out of office settings.

- **Additional Folders**: Select to migrate Sent, Deleted Items (Trash), and Junk (Spam) folders.

- **Filters**: Select how to filter the information you are migrating.

  - **Migrate On or After**: Enter a date to migrate accounts on or after the specified date. This lets you discard old messages.

  - **Maximum message size**: The message size includes the message and attachments. If you do not configure a value here, the ZCS server setting for maximum message size is used. If you set a value here, this value cannot be larger than the global MTA setting for maximum size of a message. The default maximum message size is 0 (indicating no size limit). Note that this will not override the limits imposed by the ZCS server.

Note: *You can view and change the ZCS server* **Maximum size of a message** *value from the Administration Console* **Global Settings>MTA** *tab.*

  - **Skip these folders (separate with a comma):** Enter names of folders that you do not want to migrate.

- **Verbose Logging**: This allows extra data to be logged. If a message is not migrated and this option is enabled, you can inspect the log to determine the cause of failure.

2. Click **Next**.

Select Users to Migrate
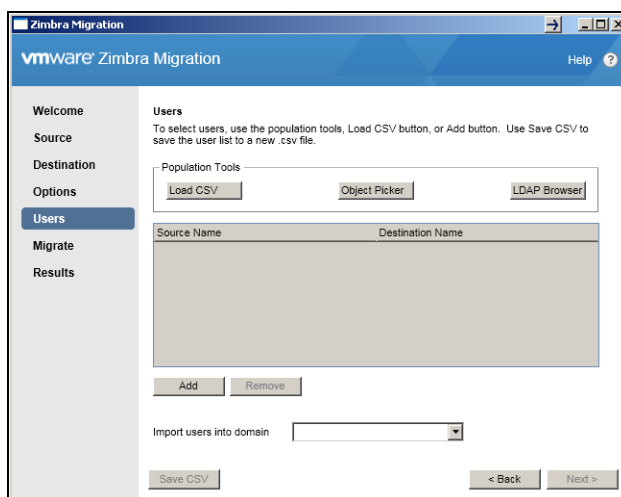
In the **Users** dialog box, select the users to migrate. The users are added to the **Source Name** and **Destination Name** fields.

You can enter user information manually, or upload user information using one of population tools: Load CSV, Object Picker, or LDAP Browser.

Adding Users Manually

1. On the Users dialog box, click **Add**.

2. Enter the source name to migrate. The destination name is optional.

If you want to remove a source and destination from the list, select from the list and click **Remove**.

Use Load CSV

The Load CSV option selects a file containing account information in comma-separated value format. To save the user list as a new .csv file:

1. On the Users dialog box, click **Save CSV**. You can use this file at a later time to populate the Users dialog box.

Use Object Picker

The Object Picker option selects specific accounts to migrate, including users, computers, groups, and the location to search. You can also enter the object name to select.
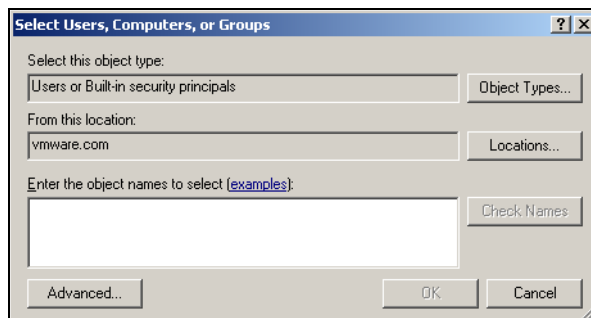
1. **Select this object type:** Click **Object Types** to select the types of object you want to find, such as built-in security principals, computers, groups, or users.

   - **Build-in security principals**: Objects that represent default built-in groups and security principals. Examples include: administrators, system operators, users, power users, everyone, authenticated users, anonymous logon, guests, and system.

   - **Computers**: Objects used to represent a computer's access to network resources.

   - **Groups**: Objects that can have users, computers, and other groups as its members.

   - **Users**: Objects used to allow people to access network resources.

2. **From this location:** Click **Locations** to select the root location from which to begin your search.

3. **Enter the object names to select:** Type the user names or partial user names and click **Check Names**. When you type partial object names, you get a list of names that partially match. For example, if you type Jo, all names that begin with Jo are displayed, i.e., Joe Smith, Joseph Flanders, Joanna Writh.

4. (Optional) **Advanced** specifies a more detailed search.

   • **Common Queries**

      • **Name**: Lists the search variables used to find user, computer, or group names and provides a space for you to type the name of the query.

      • **Description**: Lists the search variables used to find user, computer, or group descriptions and provides a space for you to type a description of the query.

      • **Disabled accounts**: Specifies whether the search will include disabled accounts.

      • **Non expiring password**: Specifies whether the search will include user accounts with non-expiring passwords.

      • **Days since last logon**: Specifies the number of days that users within the specified query root last logged on to the domain.

   • **Columns** changes the columns shown in the Search results list for this view.

   • **Find Now** starts your search. If you want to search for all objects specified in Object Types and Locations, do not enter any search values. Note that this type of search could require significant network resources depending on the scope of the search. To minimize the impact on network resources, specify search values.

   • **Search results**: Lists the results of the search for user, computer, or group names by the columns you choose.

   When the object name is selected, click **OK**. The source and destination mailboxes dialog box displays with your selections listed.

Use LDAP Browser

1. LDAP Browser selects groups of accounts to migrate. Select the root group in the left column, or enter a name or wildcard (*) in the Filter dialog box and click Query. The right column populates with accounts you can select to migrate. click **OK**.

Start or Schedule the Migration and Provision Users
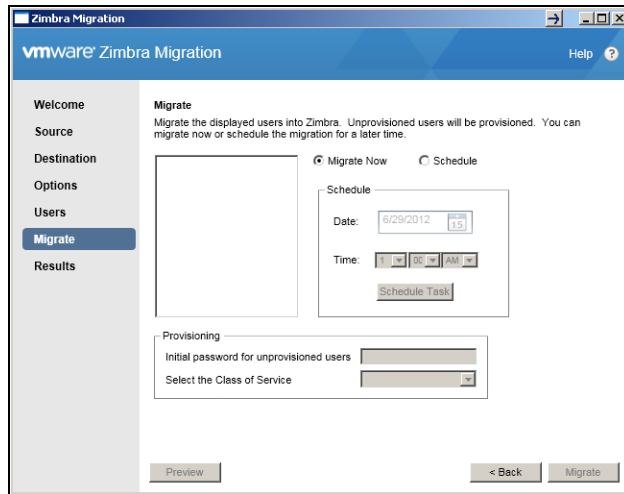
1. In the **Migrate** dialog box, select which option to use to migrate the users to ZCS. During the migration process if a user does not already have an account on the ZCS server, an account must be created after completing the provisioning fields in the dialog box.

   - If a user account is already provisioned on the ZCS server, the username displays in the Migrate dialog box with a red icon.

   - If a user account is not provisioned on the ZCS server, the user name displays in the Migrate dialog box with a greyed-out icon. Before the user account can be migrated, it must be provisioned on the ZCS server. Complete the provisioning fields in the Migrate dialog box to assign an initial password and class of service. In the **Initial Password** field, enter a default password for the newly provisioned accounts.

2. You can select the migration to take place now, or schedule for a later date and time:

   - Select **Migrate Now** to begin the migration after you complete the Migrate dialog box.

   - Select **Schedule** to schedule the migration to take place at a later date and time. In the Schedule dialog box, enter the date and time and click **Schedule Task**. The migration will start on the selected date and time.

3. (Optional) In the Migrate dialog box, click **Preview** to review the accounts to be migrated. The preview displays user accounts and file information that will be migrated. This is considered a test run of the migration, although a full migration does not take place to the ZCS server. You can make appropriate changes before running a complete migration.

4. When the migration is ready, click **Migrate**.

View Migration Result
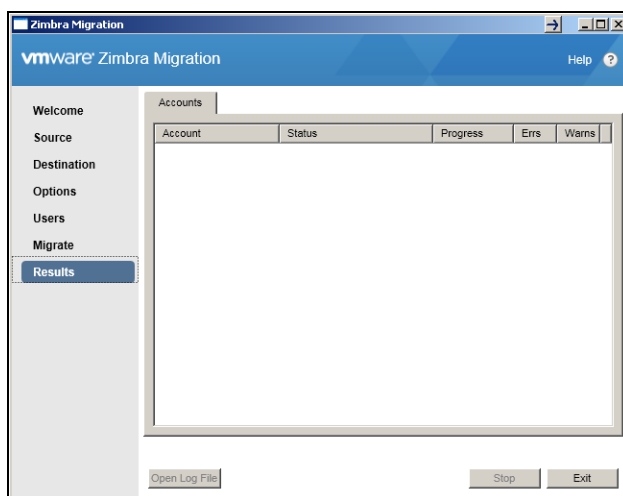
After the migration, the **Results** dialog box displays the accounts that are migrated and their status, including progress, errors, and warnings.

To view a results log, double click the user account and a new tab opens displaying the selected account log information.

Verify Users Can Access Accounts Before Removing Accounts from the Exchange Server

Before removing accounts from the Exchange server, verify that users can access their accounts and that their data was migrated correctly.

3   Migrating an Individual Account

Use the Migration Tool to migrate a Microsoft Outlook profile or account containing personal folders, or PST (.pst) files, to the Zimbra Collaboration Server (ZCS).

Archived PST files can also be migrated. Run the Migration Wizard for each PST file being imported, under archive PST file.

Migrating an Outlook Profile or PST File

Note: *It is recommended that you plan to perform the migration during off-peak use times. The Exchange server does not need to be stopped in order to migrate accounts. Any emails that are sent to or delivered from Exchange after the account is migrated are not saved in the ZCS mailbox.*

Start the Migration

1. Execute the **ZimbraMigration.exe** file**.**
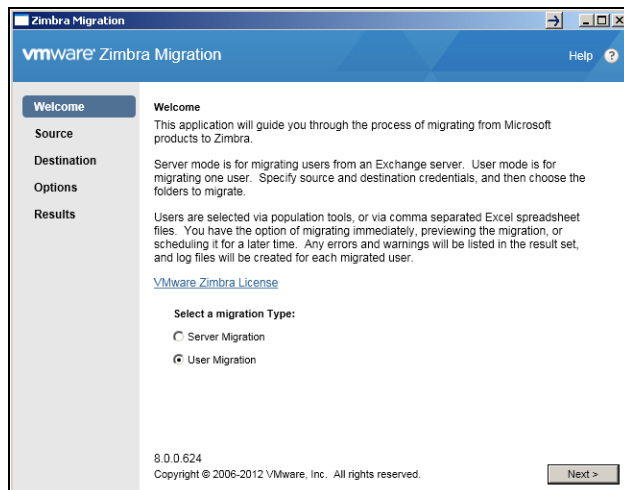
2. On the Welcome dialog box, select **User Migration**.

3. Click **Next**.

Select the Source of Data to Migrate
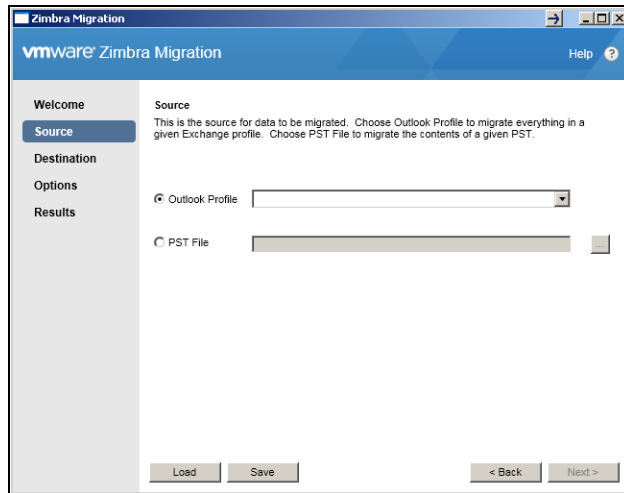
1. On the **Source** dialog box, select:

   - **Outlook Profile** if you want to migrate a profile.

   - **PST File** and browse to the source of the data to be migrated.

     The main PST file is usually in the Microsoft Outlook folder in the **Local Settings>Application Data>Microsoft>Outlook** directory. The Search feature can also be used to find PST files.

2. Click **Next**.

Enter Destination Server Information

1. In the Destination dialog box, enter the Zimbra server credentials.

2. Click **Next**.

Select Migration Options

1. In the **Options** dialog box, select the user account data to migrate.

   - **Items**: Select to migrate email messages and attachments, calendar data, contact lists, task lists, rules and out of office settings.

   - **Additional Folders**: Select to migrate Sent, Deleted Items (Trash), and Junk (Spam) folders.

   - **Filters**: Select how to filter the information you are migrating.

- **Migrate On or After**: Enter a date to migrate accounts on or after the specified date. This lets you discard old messages.

- **Maximum message size**: The message size includes the message and attachments. If you do not configure a value here, the ZCS server setting for maximum message size is used. If you set a value here, this value cannot be larger than the global MTA setting for maximum size of a message. The default maximum message size is 0 (indicating no size limit). Note that this will not override the limits imposed by the ZCS server.

Note: *You can view and change the ZCS server **Maximum size of a message** value from the Administration Console **Global Settings>MTA** tab.*

- **Skip these folders (separate with a comma):** Enter names of folders that you do not want to migrate.

Verbose Logging: This allows extra data to be logged. If a message is not migrated and this option is enabled, you can inspect the log to determine the cause of failure.

View Migration Results
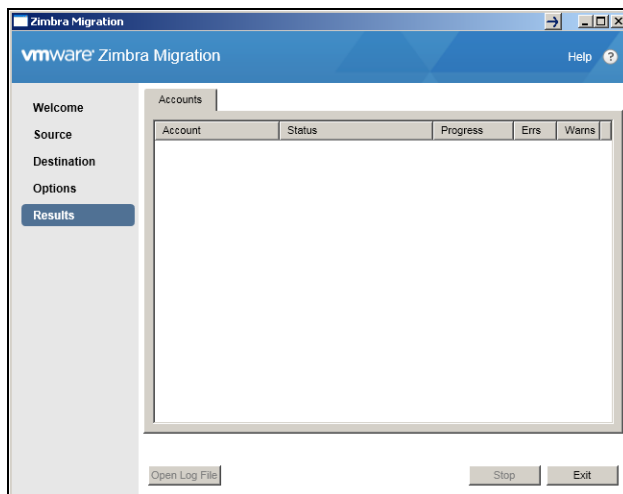
After the migration, the **Results** dialog box displays the accounts that are migrated and their status, including progress, errors, and warnings.

To view a results log, double click the user account and a new tab opens displaying the selected account log information.

After the Migration

After the accounts have been migrated to the Zimbra server, you should verify that the migration was successful before deleting the accounts.

4 Using Command Line Interface to Migrate Accounts

After you set up your migration parameters using the Migration Tool, you can use the migration tool command line utility to change the migration parameters and migrate Microsoft Exchange users to the VMware Zimbra Collaboration Server (ZCS). You can migrate many users or you can migrate one user at a time.

Running the migration tool sets up a configuraton.xml file with the migration parameters you configured and creates a .csv file with the user name, mapped name and password option of the users that are migrated. You save this file the first time you run the migration tool. When you run the migration CLI, you can add arguments that override XML parameters that are set.

Use an editor to edit or modify the .csv file to add or remove users to be migrated or to change their passwords.

Using the Command Line Tool

To run a command, you need the xml configuration file and the csv file on your computer. From the Windows command prompt use the following syntax for the zimbramigrationconsole.exe command.

Always identify the xml file after entering the command

zimbramigrationconsole.exe ConfigxmlFile=c:\\<xmlfilename.xml>

Command Line Attributes

Argument	Description
ConfigxmlFile= <XML file source path>	The location of the migration tool XML file to be used.
Users=CSV file source path>>	Location of the CSV file
MaxThreads= <n>	Set the number of accounts to be migrated simultaneously. The default is 4.
MaxErrors=<n>	Maximum number of errors allowed for the each migration.

MaxWarn-<n>	Maximum number of warnings.
Profile=<Outook Profile>	The Outlook profile that is being imported.
DataFile=<pst_file_name>	PST file name for the user that is being migrated.
ZimbraHost=<zimbrahost.com>	The hostname of the destination Zimbra server
ZimbraPort=<port#>	The default admin services port, 7071
ZimbraID	The Zimbra ID is the name of the administrator account on the destination Zimbra server.
ZimbraPwd	Password for the administrator account on the destination Zimbra server.
Mail Calendar Contacts Sent DeletedItems Junk Tasks Rules OOO	When these are set to true, this is the account data to migrate. You can select to migrate email messages and attachments, calendar data, contact lists, task lists, rules and out of office settings. If the option was not selected in the XML, it is false by default. You can change the option from the CLI.
Verbose	Provides various levels of logging Debug|Info|Trace. This allows extra data to be logged. If a message is not migrated and this option is enabled, you can inspect the log to determine the cause of failure.
IsSkipFolders	Provides skipping of folders.
FoldersToSkip	Comma separated folder names to be skipped.
IsOnOrAfter	Provides the date filter to migration. Options are true and false.
MigrateOnOrAfter	Items from this date and after get migrated. Date format is YYYY-MM-DD.
IsMaxMessageSize	This option provides the maxmessagesize filter to migration. Options are true and false.
MaxMessageSize	Items whose size falls into this numeric value category after get migrated.
IsSkipPrevMigratedItems	Skip previously migrated items. Options are true and false.

Command Line Examples

This section contains examples of command line arguments.

Server migration

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv"

User/PST migration

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml"

Override Arguments

To override arguments in the XML, use the following arguments

User Profile

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Profile=Miguser1

PSTfile

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" DataFile="C:\miguser.pst"

SourceHost

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv" SourceHost="10.127.132.22"

SourceAdminID

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv" SourceAdminID=root

ZimbraHost

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv" ZimbraHost="zdev-062.eng.vmware.com"

ZimbraDomain

- ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv" ZimbraDomain="zdev.eng.vmware.com"

Migration Options

Migration options like Mail, Calendar, contacts, sent, deleted items, junk, tasks, rules, ooo.

■ ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv" Mail=True Contacts=False Calendar=True

Skip Folders

IsSkipFolders and FoldersToSkip

ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv"

IsSkipFolders=True FoldersToSkip="personal,team"

Filter for Date

IsOnOrAfter and MigrateOnOrAfter

ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv"

IsOnOrAfter=TrueMigrateOnOrAfter=12/25/2011

Filter on messagesize

IsMaxMessageSize and MaxMessageSize

ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv"

IsMaxMessageSize=TrueMaxMessageSize=5

Skip Previous Migrated Items

ZimbraMigrationConsole.exe ConfigxmlFile="C:\\Temp\\NewXml.xml" Users="C:\\Temp\\UserMap.csv" IsSkipPrevMigratedItems=true

Stop the Migration Process from the CLI

To stop a migration process, from the command line enter **Ctrl + C**.