

## **IMAP4 TO MICROSOFT OUTLOOK/EXCHANGE CONVERSIONS With Transend Migrator Standard and Forensic Editions**

### **OVERVIEW**

Transend® Migrator is a client-based utility for converting IMAP4 based email systems to any of the Transend Supported email systems. This document gives an overview on how to convert from an IMAP4 email system to Microsoft Exchange.

The following IMAP4 based email servers have been converted with the Transend Migrator email converter: Mirapoint, Cyrus, First Class, Incredimail, iPlanet, Sun One, Courier, MailEnable, MDaemon, GroupWise, and Microsoft Exchange. Other email servers, with the IMAP4 protocol enabled, may also be converted using the Transend Migrator email conversion software.

All versions of Outlook/Exchange are supported. If converting to Microsoft Exchange/Outlook, the Outlook email client must be installed on the PC running Transend Migrator, which can be installed on a network drive or the end user's PC. Optionally, or if the Outlook client is not present, an intermediate file format called Transport File can be used in a two-step process.

Transend Migrator typically is run from the end user's PC, but can also be run for multiple users from a central location (see below). Transend Migrator includes both a graphical Windows interface with easy to follow wizard-like instructions as well as a powerful command line batch mode processor.

### **REQUIREMENTS**

#### Minimum Requirements

- Windows 98 through Windows Vista with current service packs
- 16 MB RAM (in addition to operating system requirements)
- Enough disk space to store converted files
- Exchange/Outlook: MAPI32.DLL and associated DLLs

#### Recommended System Requirements

- Windows XP or Vista with current Service Packs
- Pentium 4, 1.7GHz, system or greater
- 512MB RAM or greater
- 10/100/1000 Network adapter

To install Transend Migrator, run the install file i.e. TM62inst.msi (the file name may change to correspond with the version number). You may select the install directory, and optionally create a program group for the main executable TM.EXE.

All documentation is provided via a Windows Help file. You can invoke the help

system by running TM.EXE and pressing the HELP button.

The setup program will copy files required by all conversion types. For a smaller installation, you may remove DLL files that are not required by the type of conversion you are doing.

## **MESSAGE/FOLDER CONVERSION**

Messages are converted from a live IMAP4 based email server. The email folder structure is maintained in Outlook (in either the Exchange server mailbox or a .pst file). All RFC822 message properties are maintained, including: to/from addresses, cc and bcc fields, dates, message priority and subject. Attachments are converted and maintained with the migrated messages or can be detached from the message and copied to a specified directory.

## **ADDRESS BOOK CONVERSION**

If the source email server contains address book information then the address books must first be exported into a format that Transend Migrator supports. The most common export format is the LDIF file, which is a text file containing the contact and distribution list entries. Once the address book is in the LDIF format then the LDIF can be converted into the supported destination address book with the graphical interface, or with the Batch Mode Processor.

## **Calendar Conversion**

If the source email server contains calendar information then the calendars must first be exported into a format that Transend Migrator supports. The most common calendar export format is the VCS file, which is a text file containing the calendar entries. Once the calendar information is in the VCS format then the VCS files can be converted into the supported destination calendar with the graphical interface, or with the Batch Mode Processor.

## **RUNNING TRANSEND MIGRATOR IN INTERACTIVE MODE (GUI)**

When Transend Migrator starts, it displays the Conversion Type screen. This allows you to indicate which type of conversion you will be performing. For IMAP4 email, LDIF address books, and VCS calendar files you may select:

- Message Folders
- Address Books
- Calendar

The logon screen for IMAP4 asks you to enter values for the IMAP4 user name, IMAP4 Server IP Address or DNS Name, and password.

In order to access Exchange or Outlook for the migrated data, you must have already installed the Exchange or Outlook client on your machine. In most cases Outlook will be accessed via a "profile". If you are using a profile, enter the name of the profile here. As an alternative to using predefined profiles, you can tell Transend Migrator to create a .pst file that you specify. If you are converting address book data, this screen will include the field "Contact Folder", where you may enter an alternate name of the folder containing your contacts if you are not using the standard default.

#### Convert Directly to Exchange without an Outlook profile

Another option, when converting to an Exchange Server, is to tell Transend Migrator to convert directly to an Exchange account without a profile. To do this, use the following syntax in the Profile or PST text box or in the ToDatabase = <value> keyword.

**Syntax:**

<servername or cluster name>!!<username>

**For example:**

EXCH02!!jsnuffy

The folder selection screen presents a list of all existing IMAP4 folders (what you are converting from). IMAP4 folders in a multi-level hierarchy (folders within folders) will be separated from higher levels by a slash. Single or multiple folders can be selected for conversion.

Prior to running the conversion, the following options can be set from the Miscellaneous Options screen:

**Convert only those...:** To convert only those messages that contain the given string. Leave this field blank to convert all messages.

**Max Attachment Size:** This field allows you to limit the size of attachments that are converted. If you want all attachments to pass, enter all 9's in this field. There is a command line switch that allows you to specify that deleted attachments will be copied to a directory.

**Max Distribution List:** Use this field to cut off a distribution list (to's and cc's) at a given number.

**Oldest Message Date:** This option allows you to convert only those messages that were created more recently than the given date. To convert all messages, enter a very old date (such as Jan 1, 1980, the default).

**Message Store:** This field appears only if you are converting to a system that supports multiple message stores, such as Exchange or Outlook. In that case, you may select the message store from the drop down list.

**Name Conversion:** For many conversions, the original email address of people on the distribution list will not make any sense in the new system. This field allows you to create an Internet style address based on a display name.

## COMMAND OPTIONS

There are many switch options available to customize your conversion project. Review the help file for available switches. The following command line switches are commonly used with an IMAP4 to Exchange migration. They can be set when running the main GUI executable, TM.EXE, or the batch mode processor, TMB.EXE.

### General Switch Options:

**Enable Logging:** Transend Migrator will log various events, including message conversion status, and various errors. By default no log file is produced. To enable logging, use the switch /L to create an appendable log file, or /LX to create a new log file each run. The file is called UALOG.TXT, and is stored in the C:\Documents and Settings\All Users\Application Data\Transend directory.

**Enable Screen logging.** /SL causes logging information to be sent to the display screen during batch mode processing. Alternately, use the /Progress switch option to see incremental message counts during processing.

### Character Conversion

Transend Migrator attempts to automatically determine what type of character set conversion is necessary for your migration by running text through the Windows facility for character conversion. However this process sometimes fails, so it may be necessary to select a different type of conversion. If you notice a problem with non-English character sets not displaying properly, ensure your operating system and Outlook is setup for the required language and try one of the following switch options with Transend Migrator after setting Windows to the required language:

### **Windows Vista**

Windows Vista defaults to "Category View" in the control panel. Switch to "Classic View" for the following steps.

1. Go to the **Control Panel**
2. Double-click the **Regional and Language Options** icon
3. Select the **Administrative** tab
4. Select the **Change System Locale...** button and continue
5. Change the **Current System Locale** to match the language for programs

- that don't support Unicode
6. **Reboot** the computer

## Windows XP

Windows XP defaults to "Category View" in the control panel. Switch to "Classic View" for the following steps.

1. Go to the **Control Panel**
2. Double-click the **Regional and Language Options** icon
3. Select the **Advanced** tab
4. "Select a language to match the language version of the non-Unicode programs you want to use" from the **drop down selection box**
5. **Reboot** the computer

## Windows 2000

1. Go to the **Control Panel**
2. Double-click **Regional Options**
3. Select **General**
4. Select **Language Settings for the System**
5. **Select the language** to use for your conversion.
6. **Click Apply** to complete the installation, and follow the prompts. You may need your Windows 2000 CD-ROM.
7. **Reboot** the computer

## Microsoft Outlook

1. Select **Tools** from the menu
2. Select **Options**
3. Select the **Mail Format** tab
4. Select the **International Options** button
5. **Select the language** from the Preferred encoding for Outgoing Messages drop down selection window
6. **Click OK**
7. Close and **restart Outlook**

Character Conversion Options	
/CC2	Use Western European Character Set
/CC4	Same as CC but does not convert the subject since the subject may already be in the required character set.
/NOCC	Do not perform a character conversion

The following switches are used for converting the codepage 850 character set into Windows 1252. These command line switches are mainly used for Lotus Notes to Outlook conversions, and may not work for other source systems

/CC	Alternative Western European Character Set
/CCA	Arabic Character Set
/CCC	Portuguese Character Set
/CCG	Greek Character Set
/CCI	Italian Character Set
/CCISO	Latin Character Set
/CCISO2	Eastern European Character Set
/CCJ	Asian Languages
/CCN	Nordic Languages i.e. Danish and Swedish
/CCP	Polish Character Set
/CCR	Russian Character Set
/CCT	Turkish Character Set
/CCZ	Czech Character Set
/CC3 <codepage>	The codepage can be found on: <a href="http://www.microsoft.com/globaldev/reference/WinCP.msp">http://www.microsoft.com/globaldev/reference/WinCP.msp</a>
The following switch is used for UTF-8 to codepage 850. Mainly used for Internet clients to Lotus Notes	
/CCW	Used for UTF-8 to codepage 850
/CC8	Used for UTF-8 to codepage 1252

**GMT Offset:** For calendar and email conversions, enter the number of minutes you want to adjust the time by using the switch /TZD, followed by a space, and followed by the value, positive or negative. You may also need to use the switch /DSTOFFSET to alter the number of minutes that Transend Migrator assumes is the difference between daylight and standard times (default is -60).

**Group Folder Name:** When Transend Migrator creates the folder on the output system, it will be named "X Folders", where X is the name of your source system. To change this top level folder name to something else, use the switch /GN.

### **Outlook Switches:**

Various switches control behavior when converting to Outlook:

/D1: Inserts the email address into the display name field

/CREMPTY: Create output folders even if there are no messages

/D12: When creating distribution lists (dlist) in the Contacts folder, usually each entry of the dlist is also created as a normal contacty. This switch disables that and

dlist entries will only appear in the dlist.

/D17: Do not create distribution lists in the Contacts folder

/CF <value>: Change the default name of the Contacts folder

/CAF <value>: Change the default name of the Calendar folder.

/CAT <value>: Change the default name of the Tasks folder.

/SKIP <value>: Ignore given folder name when building internal table of folders. Usually used with "Public Folders" to avoid a long login time and skip public folders.

### **IMAP4 Switches:**

The following switches affect behavior when exporting IMAP4 email:

/CHARSET <value>: When writing to Netscape/iPlanet, set default character set to something other than "us ASCII".

/COURIER: Alter behavior of code to work with Courier IMAP server

/D64 <string>: This switch limits the IMAP folders to those containing this string.

/DT: Create a TCP dump file in the file named C:\tcpdump (used for troubleshooting).

/D81: Used when converting from RFC822 based email to an IMAP server. This switch prevents Transend Migrator from "double translating" the RFC822 message. This allows the destination message to be exactly as the source format.

/GN <groupname>: change "...folders" to something else when writing to IMAP.

/IC: Use with some versions of Interchange servers

/NOFOLDERSPACE: Change spaces to underscore in created folder names.

/NOMIX: When creating folders on IMAP server, adds another level called "Messages" and subfolders at the same level.

/ProxyAuth <superuserid> <superuserpassword>: ProxyAuth is a non-standard extension to IMAP invented by Sun, and specifically for the iPlanet servers. The SuperUserID and Password should be the account that has complete access to all the accounts being migrated. This eliminates the need to have a password for each account being migrated.

/SSL: Used for converting from IMAP or POP3 servers that support SSL.

/TEXTBOUNDARY: Include extra boundary statement after text. Helps with some servers.

/TO <seconds>: Increase the timeout when connecting to an IMAP server. The default is 15 seconds.

/UNDELETE: Use this switch during an IMAP4 export. This switch will cause messages that are marked as "deleted" to be converted. Normally, deleted messages are ignored.

## **RUNNING TRANSEND MIGRATOR IN BATCH MODE**

Transend Migrator has a batch mode processor that allows you to perform multiple conversions with no user input. This is done by running the program TMB.EXE. TMB by default looks to the file UAB.DAT for its script. You may also supply a different file name.

A script consists of various keywords that supply the same information that is collected by the user interface. When all the required information is present, you trigger a conversion by using the keyword "Start". TMB performs the requested conversion, and then returns to processing the script. If additional data is found, the process begins again. You can have multiple sections in the the .DAT file, each with its own "Start", to convert messages, address books, calendars and tasks in a single process. The UAB.DAT file that is supplied with Transend Migrator can be used as a starting point for your own script.

Transend Migrator includes another program called the Batch File Creator. This tool simplifies the creation of the batch file and DAT file(s). See the Transend Migrator help file for details.

## **RUNNING TRANSEND MIGRATOR FROM A CENTRAL LOCATION**

While Transend Migrator is a client level tool, it can be run from a centralized location, without any user intervention. It can be run in an interactive or batch mode. Batch mode can be used to significantly automate the migration process as described above. A single batch mode script (.dat file) can be created for multiple users, which would enable the conversion of groups of users in a single process; however, a single DAT file for each user is recommended.

IMAP4 data can be converted to the user's Exchange server mailbox or .pst file (one for each user). If converting to a .pst file, access to the Exchange server is not required. The .pst file can be existing or Transend Migrator can create it on the fly. Many organizations prefer converting to .pst files so the new Exchange server doesn't get filled up with old data. When converting directly to the user's Exchange server mailbox, either the user's Outlook/Exchange profile name is required or just the Exchange username and servername, assuming the user has logged into the

Exchange server as the administrator.

Review Transend Migrator's help file under Batch Mode Operation and Batch File Creator for more information.

## **CUSTOMIZATION**

While the standard version of Transend Migrator meets a wide variety of conversion requirements, Transend is pleased to work with IT organizations to tune Transend Migrator if modifications are necessary for a particular environment or needs. For large scale migrations, for example, it may be desirable to modify defaults or assist in the development of a wrapper that draws on Transend Migrator's batch mode processor to fully automate the migration process. Or, it may be desirable to modify the GUI and provide defaults that conform to a particular migration process and environment. Transend has extensive experience working with IT departments around the world in such efforts.

## **FOR MORE INFORMATION**

This document is intended to provide an overview as well as some specific information regarding using Transend Migrator for an IMAP4 to Outlook/Exchange migration.

Transend Migrator is a utility for converting between a wide variety of email systems, including Lotus Notes, Microsoft Outlook/Exchange, Novel GroupWise, Netscape, Eudora, IMAP and more. For additional information, please contact:

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