

PEGASUS TO MICROSOFT OUTLOOK/EXCHANGE CONVERSIONS With Transend Migrator Standard and Forensic Editions

OVERVIEW

Transend® Migrator is a client-based utility for converting the following Pegasus data to Microsoft Outlook/Exchange

- Messages Folders
- Address Books

Pegasus versions 2, 3 and 4 are supported. All versions of Outlook/Exchange are supported. Outlook needs to 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.

Pegasus data can be converted to the user's Exchange mailbox or an Outlook .pst file. Transend Migrator provides a report of the completed migration and generates a detailed log file.

REQUIREMENTS

The following hardware and software are required to use Transend Migrator

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
- Pegasus 2, 3 or 4

Recommended System Requirements

- Windows XP or Vista with current Service Packs
- Pentium 4, 1.7GHz, system or greater
- 512MB RAM or greater

To install Transend Migrator, run the install file i.e. TM61inst.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 AND ARCHIVE CONVERSION

Messages are converted from the Pegasus mailbox files (which have the extension .pmm). Pegasus normally stores these files in mail directory within the Pegasus program directory, which by default is Pegasus, but may be anything. The directory can be selected manually by navigating to the appropriate directory using the "Browse" button (see below). Once the Pegasus mail directory is located, Transend Migrator converts the message data files directly. The Pegasus folder hierarchy is maintained in Outlook (in either the Exchange server mailbox or a .pst file). All message properties are maintained, including to and 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. Addresses can be converted to a format that is reliable through Exchange based on a specified name conversion rule.

ADDRESS BOOK CONVERSION

Transend Migrator converts the user's Pegasus address books to the Outlook Contacts (or Personal Address Book for older versions of Outlook). Pegasus may have multiple address books, stored in the Mail directory under the main Pegasus directory. Each address book has the extension .pmr.

An email address conversion rule may optionally be specified. Address book data converted from Pegasus include name, email address, work phone, home phone, pager, website, fax, cell phone, notes, title, address, company name, and distribution lists.

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 a Pegasus to Outlook/Exchange conversion, you may select Message Folders or Address Books.

The Pegasus Information screen asks you to supply the directory name in which Pegasus mailbox files (which have the extension .pmm) may be found. Pegasus normally stores these files in mail directory within the Pegasus program directory, which by default is C:\Pegasus, but it may be anything.

The Browse button on the Pegasus logon screen allows you to navigate to the

appropriate directory and select a file. The directory in which the file is located will be used as your Pegasus directory.

When the folder selection screen is presented, the list of folders will consist of the folder names found within each .pmm file in the given directory.

Pegasus may have multiple address books, stored in the Mail directory under the main Pegasus directory. Each address book has the extension .pmr. The Pegasus information screen asks you to select a .pmr file for conversion. You may also use the Browse button to select a file.

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 Pegasus folders located in the selected .pmm file (what you are converting from). Pegasus 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

The following command line switches may be used when running the main GUI executable, TM.EXE, or the batch mode processor, TMB.EXE.

General Switch Options:

Work Directory: The work directory is where temporary files used during the conversion are kept. By default this is set to the Windows temp directory, usually C:\Documents and Settings*<profile>*\Local Settings\Temp. You may override this value by using the switch /D <directory>

System Directory: The system directory is where the Transend Migrator configuration file and log file are stored. By default this is set to the C:\Documents and Settings\All Users\Application Data\Transend directory. It may be overridden by using the switch /S <directory>

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.

No Config File Write: To prevent the configuration file UA.CFG from being written back to disk, use the switch /NCFG. This prevents your recent user options from being saved, but will prevent errors if your config file is not in a writable directory.

Detach attachments: The user interface provides a method for restricting the size of attachments that are converted. This option allows you to extend this capability by specifying that such attachments are to be copied to a directory, as well as deleted from the message. Use the switch /DETACH, followed by a space, followed by the name of the directory to which attachments will be copied. Make sure to fill out the "Max Attachment Size" field in the user interface to specify which attachment will be copied.

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
<p>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</p>	
/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:

	http://www.microsoft.com/globaldev/reference/WinCP.msp
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

Sent Mail Folder: When converting a source systems "Sent Mail" folder, you normally want the "To" entry to display in the "From" field, as the sender will always be the same (i.e. yourself). Use the /SENT switch to perform this reversal.

Distribution List: /DLIST inserts the distribution list into the message text.

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).

Interactive Mode: Use the switch /IM to force "Interactive mode" when running the batch processor. This causes some APIs (e.g. Outlook) to put up a dialog box if certain logon information is missing or invalid.

HTML: Use the /HTML switch to make sure HTML encoded messages are tagged correctly. You may also need to use the switch /DETECTHTML, which causes Transend Migrator to do additional processing when determining if a messages is HTML encoded. If the above does not work, try the switch /HTMLATTACH, which cause HTML messages to be appended as attachments. You can then click on the attachment, which will cause the message to display properly via your browser.

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.

Pegasus Switches

The following switches affect behavior when exporting from Pegasus

/D13: When reading address book entries, inserts the name of the address book into the company name.

/D16: When reading address book, consider the book to be a distribution list, not individual entries.

/D18: When writing to Pegasus, force date to be in English format.

/D44: Used to ignore the Pegasus pmail.ini file. Ignores the setting within the pmail.ini to look for an alternate location for inbox .cnm files. This switch assumes they are in the same directory as folder .pmm files.

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. For centralized operation, access is required to the users' Pegasus email files (typically stored locally).

In addition, if the converted Pegasus data is to reside on the Exchange server versus a .pst file, an Outlook profile defined for each user being migrated is required. Otherwise, Pegasus data can be converted to Outlook .pst files (one for each user) and distributed to them for adding to their Outlook profile. Transend Migrator can create the .pst files. Many organizations prefer converting to a .pst file so the new Exchange server doesn't get filled up with old data.

Transend Migrator can be run in an interactive or batch mode. Batch mode can be used to significantly automate the migration process and is described above. A single batch mode .dat file can be created for multiple users, which would enable the conversion of groups of users in a single process. If converting to .pst files, each Outlook .pst file could be named with the corresponding Pegasus user name.

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 a Pegasus 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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