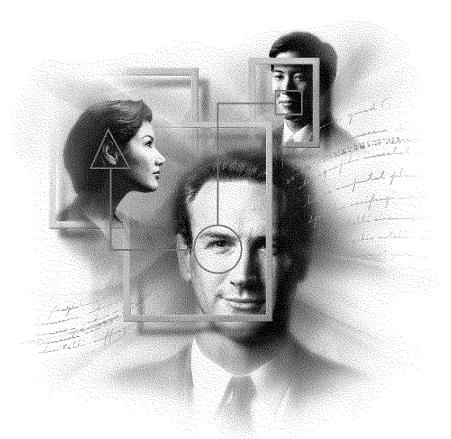
GATHER, ACCESS, AND COMMUNICATE INFORMATION

GroupWise Archive

Migration Utility

for Microsoft Mail



Novell

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Novell, Inc. 122 East 1700 South Provo, UT 84606 U.S.A.

www.novell.com

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1

Understanding the Utility

The GroupWise [®]Archive Migration Utility for Microsoft* Mail provides you the functionality to convert Microsoft Mail backup files (*.MMF) into a GroupWise 5.x archive. This includes the ability to select multiple backup files across systems on the network and migrate them to a GroupWise archive. The migrated messages are archived in GroupWise under the Cabinet folder.

Migrating messages to the GroupWise format preserves all message components, including attachments.

Relationship between Microsoft Mail Backup Files and the GroupWise Archive

In Microsoft Mail, all the messages are archived in a backup file. When these messages are migrated to GroupWise, they are archived under the Cabinet folder retaining the same folder hierarchy. If the utility is unable to find folder information for a message, it will be placed in the Mailbox folder of the GroupWise archive.

IMPORTANT: If you already have folders in GroupWise with the same name, the messages will be migrated into existing folders.

Features

The GroupWise Archive Migration Utility for Microsoft Mail lets you:

• Run the utility using a wizard or from the command line. See "Migrating Microsoft Mail Backup Files to GroupWise" on page 14.

- Migrate archives of a single user or several users at one time. See
 "Migrating Microsoft Mail Backup Files to GroupWise" on page 14.
- Use the wizard to migrate multiple backup files in a single run. Multiple runs are required only when more than one GroupWise archive needs to be created.
- Obtain information about the migration depending on the log levels. In addition, summary, statistics and errors are logged for easy traceability. In the wizard mode, progress can be continuously monitored.

The migration utility

- Leaves the source backup file unchanged after the migration.
- Filters the messages to migrate based on your requirements.
- Can be distributed through Novell[®] Application Launcher[™] (NAL) after necessary organization-wide customizations that may be required for distribution. See "Distributing the Utility" on page 29.

The following table summarizes the features that are supported:

Features	Supported	Remarks
GroupWise Archive creation	Yes	If no archive exists at the destination, a new one will be created.
Multiple Microsoft Mail backup files	Yes	Multiple .MMF backup files can be migrated to one GroupWise archive.
Message body migration	Yes	None
Text attachment migration	Yes	None
Binary attachment migration	Yes	None
Rich text migration	No	None
Distribution with Novell Application Launcher (NAL)	Yes	None

Limitations

The following are the limitations of the GroupWise Archive Migration Utility for Microsoft Mail:

- Message subjects will be truncated to a maximum of 128 characters.
- While migrating Microsoft Schedule+* appointments, the venue of the appointment is not migrated. This field is included in the message body of the appointment after migration.
- Empty folders will not be archived in GroupWise.
- The migrated message contains display names of recipients. In order to reply, recipients must be manually added from the GroupWise Address Book.

2

Setting Up the Utility

This section provides information for setting up the GroupWise[®] Archive Migration Utility for Microsoft* Mail. If you are the administrator, and want to use Novell[®] Application LauncherTM (NAL) to distribute the utility, see "Distributing the Utility" on page 29.

System Requirements

Your system must meet the following hardware and software requirements for the migration utility to function.

Hardware/SoftWare	Minimum Requirements	Recommended Requirements
Processor	486/33 MHz	Pentium* or higher
Hard disk	20 MB or more	20 MB or more
Operating system	Windows* 95, Windows 98, Windows NT* 4.0	Windows 95, Windows 98 or Windows NT 4.0 SP3 or later
Memory	32 MB	64 MB
GroupWise	5.x	5.5
(GroupWise Client is required only to view the migrated messages)		

Installing the Utility

To install the GroupWise Archive Migration Utility,

1 Run the self extracting file SETUPMSAR.EXE.

The install wizard launches automatically. If the GroupWise Archive Migration Utility for Microsoft Mail is already installed, click Yes to reinstall.

- **2** Click Next. The default installation directory is shown.
- **3** Click Next to accept the default.

or

If this is not the directory where you want to install the utility, enter a name with a path > click Next.

If the directory you have entered does not exist, it will be created during installation.

4 Click Install.

The status bar displays the progress of the installation.

NOTE: If the utility detects an older version of COMCTL32.DLL, you may be prompted to update to a later version. You can download this update from Microsoft* support Web site (http://support.microsoft.com/support/kb/articles/Q186/1/76.ASP).

5 Choose from the following options:

View Readme: Recommended. Select this option to view the Readme file included with the software.

Launch the Migration Utility: Select this option to automatically launch the utility.

- 6 Click Finish.
- 7 Continue with "Migrating Backup Files" on page 13.

After successful installation, an item named *Microsoft Mail Backup File Migration* is added to the Windows Start > Programs menu.

If you need to uninstall the utility, see "Uninstalling the Utility" on page 33.

3

Migrating Backup Files

This chapter describes how to prepare to migrate the Microsoft* Mail backup files to GroupWise[®], and gives details on how to use the migration wizard, how to use the command line to migrate backup files of a single user, and how to use a batch file to migrate backup files of several users at a time.

- "Preparing for Migration" on page 13
- "Using the Migration Wizard" on page 14
- "Using the Command Line" on page 16
- "Using a Batch File" on page 17

Preparing for Migration

Before migrating your Microsoft Mail backup files to GroupWise,

- Ensure that you have enough disk space at the destination machine to hold the migrated backup files. See "Relationship between Microsoft Mail Backup Files and the GroupWise Archive" on page 7.
- Ensure that you know the GroupWise User ID, GroupWise password, the path to the mailbox or the TCP/IP address and port number of the mail server, and the path to the GroupWise archive directory. If the GroupWise archive directory does not exist, it will be created during migration.

The following tips will help you plan the migration:

- If you are migrating multiple backup files to a single GroupWise archive, you need to run the utility only once.
- GroupWise has only one archive active at any time, so it may be advisable to migrate all Microsoft Mail backup files to a single GroupWise archive. If the same message exists in more than one backup file, it will be migrated twice.
- By default, the messages in the Deleted Mails folder are also migrated. Delete the messages in this folder if you do not want to migrate them.
- If two backup files share the same folder hierarchy, messages from both the backup files will be migrated to the GroupWise archive in the same folder hierarchy.

Migrating Microsoft Mail Backup Files to GroupWise

You can migrate Microsoft Mail backup files to GroupWise using one of the following methods:

- Use the migration wizard to step you through the process (see "Using the Migration Wizard" on page 14)
- Use the command line to migrate the backup files for one user at a time (see "Using the Command Line" on page 16)
- Use a batch file to migrate the backup files for several users at a time ("Using a Batch File" on page 17)

Before using any of the methods, make sure you have reviewed the items mentioned in "Preparing for Migration" on page 13.

Using the Migration Wizard

To migrate Microsoft Mail backup files to GroupWise using the migration wizard,

1 Click Start > Programs > Microsoft Mail Backup File Migration > Migrate > Next.

Locate MIGRATE.EXE from the directory where you have installed the utility > run MIGRATE.EXE > Next.

- **2** Select the files to migrate.
 - **2a** Click Browse > select the Microsoft Mail backup files.

Select the file types you want to migrate. If all Microsoft Mail backup files have a .MMF extension, select *.MMF from the list; otherwise, select *.*.

- 2b Click Select.
- **2c** (Optional) Select the files you don't want to migrate and click Remove, or click Remove All if you want to make a fresh selection of backup files.

You can browse multiple times to select files across directories.

3 (Optional) Click Advanced to refine the migration process.

language to be used during the conversion.

- **3a** Select a log level.
- **3b** Select the language of your Microsoft Mail system.

 By default, the machine's code page is used to determine the
- **3c** Enter or select the date in Migrate Messages Created On or After. Messages created on or after the date specified will be migrated.
- **3d** Click either Yes or No from the Drop Attachments list.

 If you select Yes, messages will be migrated without the attachments.
- **3e** Click OK > Next.
- **4** Enter the GroupWise Details. You must specify either the mailbox path or specify its TCP/IP address and port.

UserID: The GroupWise user ID of the person whose Microsoft Mail backup files are being migrated.

Password: The GroupWise password. Passwords are case-sensitive.

Mailbox Path: The path to your GroupWise post office. If you do not know the location, ask your system administrator.

TCP/IP Address: The TCP/IP address of the mail server. If you do not know the TCP/IP address, ask your system administrator.

Port: The port number. If you do not know the port number, ask your system administrator.

Path: The path to the GroupWise archive directory.

5 Click Next > Start.

The status of migration is displayed in the progress bar.

- 6 Click OK.
- **7** Click a button to get the corresponding details.

Summary: Displays statistics of the current migration.

Errors: Displays details about the errors that were encountered during current migration.

Log: Displays the currently active log file, depending on the log level selected in Step 3c on page 15.

8 Click Finish.

The migrated files are in GroupWise format and can be read from GroupWise. To read the migrated messages, open GroupWise > click File > Open Archive.

NOTE: Ensure that you have set the GroupWise archive path to the directory where you migrated the Microsoft Mail backup files.

Using the Command Line

You can customize the startup configuration file in the installation directory to specify the startup switches with their values. See Appendix A, "Startup Switches," on page 19 and Appendix B, "Configuration File," on page 25.

If you are using the default configuration file, type the following command at the console prompt after you have specified the values for the startup switches:

```
Migrate @msml.cfg
```

If you want to use a different configuration file (see "Configuration File" on page 25), use the following syntax:

```
Migrate @<Configuration filename with path>
```

If you are not using the MSML.CFG file, you can type all the switches and their values as command line parameters, as in the following example:

```
Migrate /MMFiles-c:\myarchives /UserID-HarrisJ /Password-
harris /POPath-g:\po /GWArchiveDir-c:\gwarchive
```

In the example, HarrisJ's Microsoft Mail backup files present in the c:\MYARCHIVES directory are migrated to C:\GWARCHIVE.

During migration, the utility logs the information into the log files, which you can use to find the migration results. See "Log Files" on page 18 for more information.

Using a Batch File

You can use a batch file to migrate the backup files of several users at a time. To do this, create a configuration file (see "Sample Configuration File" on page 26) for each user and then run MIGRATE.EXE in batch mode.

Example

Suppose you want to migrate backup files of three users. Use the following procedure:

- Create three configuration files USER1.CFG, USER2.CFG, USER3.CFG.
- 2. Create a batch file BATCHMIG.BAT as follows:

```
Migrate @USER1.CFG
Migrate @USER2.CFG
Migrate @USER3.CFG
```

If any of the configuration files are not in the same directory as MIGRATE.EXE, you need to give the full path of the configuration files.

3. At the command line, enter BATCHMIG

To view the result of migration and the errors encountered, examine the log file in *Installation directory*\LOG directory. See "Log Files" on page 18.

Log Files

The utility creates the log files in a subdirectory named LOG under the directory where you have installed the migration utility. The naming convention for the log file is *MMDDLOG.xxx*, where *MMDD* is the month and day and *xxx* is the number (such as, 001, 002, etc.). The level of detail in the log file depends on the logging level you choose in Step 3c on page 15. The logging levels are:

- Normal Minimal logging
- Verbose Progress information
- Diagnostic Troubleshooting information

A log file is created for each run. When a log file's size reaches 128 KB, logging switches to a new log file. When the total disk space occupied by all the files exceeds 1 MB, the oldest log file is deleted. Log files older than seven days will be deleted automatically.



Startup Switches

Startup switches give you the capability to specify various commands and paths to various files that the migration utility reads or writes to, and to set other operational parameters. You can use these switches at the command line or within a startup batch file.

If you use startup switches on the command line, use the following syntax: / <switch>-<parameter> (see "Configuration File" on page 25).

The startup switches for GroupWise Archive Migration Utility for Microsoft Mail are categorized into the following areas:

- "Microsoft Mail Details" on page 19
- "GroupWise Details" on page 20
- "Message Filters" on page 22
- "Logging Level" on page 23

Microsoft Mail Details

Use the following switches to specify the Microsoft Mail details required for migration of Microsoft Mail backup files.

/MMFFiles

Specifies the path to the .MMF files to migrate. You can use this switch to migrate one or more backup files.

Syntax: /MMFFiles-Microsoft Mail backup file path

Short Syntax: /MF-Microsoft Mail backup file path

Example: /MMFFiles- "c:\msbackup\backup1.mmf,

c:\msbackup\backup2.mmf"

/MMFLang

Specifies the language that should be used to interpret the Microsoft Mail backup files. The GroupWise Archive Migration Utility uses the operating system language if no language is specified. See Appendix D, "Language Codes," on page 31 for a complete list of languages and codes used by the utility.

Syntax: /MMFLang-Language Code

Short Syntax: /AL-Language Code

Example: /MMFLang-ru (Migrates a Russian Microsoft Mail backup file on

a non-Russian machine)

GroupWise Details

Use the following switches to specify the GroupWise details required to perform the migration.

/UserID

This is the GroupWise User ID of the person whose backup files are being migrated from Microsoft Mail.

Syntax: /UserID-GroupWise UserID

Short Syntax: /UI-GroupWise UserID

Example: /UserID-HarrisJ

/Password

This is the password to access the GroupWise account. In GroupWise, a password is required to access the archive and is the same as the Mailbox password. Passwords are case-sensitive.

Syntax: /Password-GroupWise password

Short Syntax: /PW-GroupWise password

Example: /Password-asiatic

/POPath

This is the path to the GroupWise post office where the GroupWise user's Mailbox resides. Mapped drives or UNC paths can be used.

Syntax: /POPath-Path to the postoffice

Short Syntax: /*GP-Path to the postoffice*

Example: /POPath-g:\po

/IPAddress

This is the TCP/IP address and port of the GroupWise mail server. If you do not specify the port component, the default port 1677 will be used. If you have specified the path to the post office using /POPath, then this switch will be ignored.

Syntax: /IPAddress-IPAddress[:port number]

Short Syntax: /IA-IPAddress[:port number]

Example: /IPAddress-192.56.54.00:1677

/GWArchiveDir

This is the path to the destination GroupWise archive directory. The Microsoft Mail backup files will be migrated to this location.

Syntax: /GWArchiveDir-GroupWise archive directory path

Short Syntax: /*GA-GroupWise archive directory path*

Example: /GWArchiveDir-c:\GroupWise\Archive

Message Filters

Use these switches to refine your migration.

/MigMsgAfter

Migrates only those messages that are created on or after the specified date. Messages that do not meet this criterion will not be migrated. Specify the date as mm/dd/yyyy.

Syntax: /MigMsgAfter-mm/dd/yyyy

Short Syntax: /MM-mm/dd/yyyy

Example: /MigMsgAfter-07/15/1998

/DropAttachments

Drops the attachment and migrates only the message, if enabled (Yes) Dropping attachments may speed up the migration process.

Syntax: /DropAttachments

Short Syntax: /DA

Example: /DropAttachments

Logging Level

Use this switch to specify the log level to be used for the migration process.

/LogLevel

Specifies the level of logging that is required. The possible values are:

None: Only critical errors will be logged.

Verbose: Logging will contain details of progress, errors, and summary information.

Diagnostic: Logging contains all information logged in verbose mode and in addition provides detailed information required for troubleshooting.

Syntax: /LogLevel-None/Verbose/Diagnostic

Short Syntax: /LL-None/Verbose/Diagnostic

Example: /LogLevel-Verbose

B

Configuration File

The configuration file, MSML.CFG, is an ASCII text file residing in the installation directory. The MSML.CFG file contains all the startup switches and is automatically read when the utility starts.

Keep the following guidelines in mind when modifying this file:

- Retain a copy of the file in case you need to return to the original switch settings.
- Use a text editor to edit the file.
- The comment character is the semicolon (;), which is used to disable a switch or to add comments. The utility ignores any line that begins with a comment character and any text after a comment character.
- Changes made to the configuration file do not take effect until you restart the utility.
- None of the switches or values are case-sensitive, except the /Password switch.
- You can use a dash (-) to separate the switch from the value.
- Switches in the configuration file and in the command line must begin with the switch delimiter / (forward slash).
- If data to be specified to a switch contains a space, enclose the data in double quotes ("").

Sample Configuration File

```
; HARRIS.CFG
; Startup file for the GroupWise Archive Migration utility
; for Microsoft Mail
; MICROSOFT MAIL DETAILS
; This is a sample configuration file that migrates the specified Microsoft Mail
; backup files to HarrisJ archive directory located in c:\gwarchive.
; This is the path to the Microsoft Mail backup file to migrate. You can use
; this switch to migrate one or more backup files.
;/MMFFiles-[Microsoft Mail backup file path]
/MMFFiles-"c:\msbackup\backup1.mmf, c:\msbackup\backup2.mmf"
; (Optional) This switch specifies the language that should be used
; to interpret the Microsoft Mail backup file. The default is the language used
; by the operating system. Use this switch if you need to override
; this default.
;/MMFLang-[Language code]
;/MMFLang-RU
; GROUPWISE DETAILS
; This is the GroupWise User ID of the person whose backup files
; are being migrated from Microsoft Mail.
;/UserID-[GroupWise User ID]
/UserID-HarrisJ
; This is the password to access the GroupWise account. In
; GroupWise, passwords are required to access the archive and
; is the same as the mailbox password. Passwords are case-
; sensitive.
;/Password-[GroupWise password]
/Password-Harrispswd
```

```
; This is the path to the GroupWise post office where the
; GroupWise user's mailbox resides. Mapped drives or UNC
; paths can be used. If path is specified, then do not provide
; IP address and port number.
;/POPath-[Path to post office]
/POPath-g:\po
; This is the TCP/IP address of the GroupWise mail server.
; If you have specified the path to the post office, do
; not provide the TCP/IP address or the port number.
;/IPAddress-<IP address>[:port number]
; This is the path to the destination GroupWise archive
; directory. The Microsoft Mail backup files will be migrated to this
; location.
;/GWArchivePath-[GroupWise Archive path]
/GWArchivePath-c:\gwarchive
; MESSAGE FILTERS
; (Optional) This switch specifies to the utility to migrate
; only those messages that were created on or after the
; specified date. Messages that do not meet this criterion
; will not be migrated and will be filtered out. The date is
; to be specified as mm/dd/yyyy.
;
;/MigMsgAfter-[mm/dd/yyyy]
; (Optional) This switch specifies the utility to drop the attachments in all
; the messages that are migrated. By default, attachemnts are preserved during
; migration. Dropping attachments may speed up the migration process.
;/DropAttachments
; LOG DETAILS
; (Optional) This switch specifies to the utility the logging
; detail that is required. The possible values are
; None - No logging, only critical errors maybe logged.
```

```
;
; Verbose - Logging will contain details of progress, error
; and summary information.
;
; Diagnostic - Logging contains all information logged in
; verbose mode and also provides detailed information
; required for troubleshooting.
; By default, the LogLevel is set to None.
;
;/LogLevel
;/LogLevel-[Value]
```

C

Distributing the Utility

This section may be of interest to the administrators who use Novell® Application Launcher™ (NAL) to distribute the applications to the end-users. (See the NAL Web-based documentation (www.novell.com/documentation/lg/zen2/docui/index.html) for more information.)

NOTE: Ensure that the *AM_MSML_Uninstall* directory does not exist on the machine from previous installations before you start using NAL.

You can customize the startup configuration file, MSML.CFG, (see "Configuration File" on page 25) in the installation directory to define organization-wide criteria for migrating the backup files.

The following switches (see "Startup Switches" on page 19), if they are enabled, will be used as the default when the user launches the migration wizard to migrate the backup files.

- "/MMFLang" on page 20
- "/MigMsgAfter" on page 22
- "/DropAttachments" on page 22
- "/LogLevel" on page 23

During subsequent runs, the value given by the user during the previous runs will be used. If the end-user runs the utility in the command line mode, the value specified in the command parameters will be used.

D

Language Codes

The table lists the languages and their codes. Contact your local Novell $^{\circledR}$ sales office for information about language availability

Language	Code	Language	Code
Afrikaans	AF	German-Switzerland	SD
Arabic	AR	Greek	GR
Catalan	CA	Hebrew	HE
Chinese (Simplified)	cs	Hungarian	HU
Chinese (Traditional)	СТ	Icelandic	IS
Croatian	HR	Italian	IT
Czechoslovakian	CZ	Japanese	JP
Danish	DK	Korean	KO
Dutch	NL	Norwegian	NO
English-Australia	OZ	Polish	PL
English-United Kingdom	UK	Portuguese-Brazil	BR
English-United States	US	Portuguese-Portugal	РО
Finnish	SU	Russian	RU
French-Canada	CF	Slovak	SL
French-France	FR	Spanish	ES

Language	Code	Language	Code
Galician	GA	Swedish	SV
German-Germany	DE	Turkish	TK



Uninstalling the Utility

Use the following procedure to uninstall the GroupWise® Archive Migration Utility for Microsoft* Mail:

1 Click Start > Programs > Microsoft Mail Backup File Migration > Uninstall.

All the utility directories and files, including the log files, will be removed from the system.



System Messages

Microsoft Mail Backup File Migration System Messages

• "Could not allocate memory. Skipping message..." on page 35

Could not allocate memory. Skipping message...

Explanation: Memory has been exhausted because of many applications running on the

machine.

Action: Close other applications and try again.

Explanation: The migration utility was unable to allocate more memory. This could be

because a large part of memory was requested.

Action: Check to see if the basic requirements to run the utility have been met.

Explanation: There is corruption in the Microsoft* Mail backup file.

If only a single backup file produces this error, it may suggest some corruption in the file, so the utility requests memory beyond normal limits. This may occur while processing one message only and may not occur for others.

NOTE: You may see other system messages, which are self explanatory. Simply perform the action suggested in the message.