

Quest[®] Migrator for Notes to Exchange 4.16.0 Release Notes

September 2019

These release notes provide information about the Quest® Migrator for Notes to Exchange release.

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About Migrator for Notes to Exchange

Migrator for Notes to Exchange (MNE) is a set of coordinated software applications designed to facilitate a variety of migration strategies for organizations moving from a Domino server, with Notes clients, to a Microsoft Exchange environment with Outlook clients. MNE can migrate either to a proprietary Exchange environment, or to a hosted Exchange service like Microsoft's Office 365.

MNE 4.16.0 is a minor release, with enhanced features and functionality. See the Enhancements and Resolved issues sections that follow.

New Features

Support for MAPI over HTTP protocol for server mailbox migration

Previously, Migrator for Notes to Exchange (MNE) used Outlook MAPI to write migrated data to the target server mailbox or PST file. Though Outlook MAPI works well for PST file creation, it has limitations related to authentication when targeting a server mailbox.

With the introduction of Modern Authentication in Office 365, it was impossible to implement a solution that allowed MNE to authenticate using Modern Authentication with Outlook MAPI. As a result, MNE has discarded Outlook MAPI when migrating to a server mailbox target. Instead, MNE provides its own API library that uses the same communication protocol that Outlook MAPI uses to talk to the Exchange server (MAPI over HTTP protocol). This library is called the MNE MAPI/HTTP library.

The MNE MAPI/HTTP library was introduced in version 4.15.2 with support for Modern Authentication but functionality was limited to migrations with the SSDM. The 4.15.2 version library supplemented the other protocols (such as Exchange Web Services and the newer REST API) that handled most migrations in the SSDM using Modern Authentication.

In version 4.16, the MNE MAPI/HTTP library is extended to provide the functionality to perform a full migration, eliminating the need to use other protocols. This ensures a robust migration, allowing data to be handled by a single protocol. The MNE MAPI/HTTP library is used for all migrations to server mailboxes to both on-premises Exchange and Office 365.

The MNE MAPI/HTTP library has the following advantages over the Outlook MAPI library:

- MNE can connect to the Exchange mailbox without an Outlook profile. There is no need to create temporary profiles during migration.
- Exchange administrator credentials can be provided programmatically to the Exchange server. There is no need to monitor for the mailbox logon prompt to automatically enter credentials into the dialog.
- There are no authentication issues when migrating without a user interface, such as when using the MNE Task Scheduling service.
- Modern Authentication can be used to authenticate when logging onto Office 365 mailboxes, both with the SSDM and also on the MNE server.
- Large attachments can be migrated much faster with the MNE MAPI/HTTP library than with Outlook MAPI.

NOTE the following:

- Outlook MAPI is still used when migrating to PST files. The MNE MAPI/HTTP library only handles communication with a server, and does not provide file handling capabilities.
- MNE only supports Multi-Factor Authentication when migrating with the SSDM. The SSDM fully supports
 interactive logons, using both legacy and modern authentication dialogs. Migrations on the MNE server are
 not interactive and cannot provide the user interface needed to complete a Multi-Factor Authentication
 cycle. The MNE server does support using Office 365 Modern Authentication when using standard user
 name and password authentication.
- MNE 4.16.0 has not been validated for use with Hybrid Modern Authentication where on-premises Exchange servers leverage Azure Active Directory to handle authentication.

Support for new Domino 10 features

As part of support for Domino 10 and Domino 10.0.1, Migrator for Notes to Exchange (MNE) provides the following features:

Messages can be scheduled to be delivered at a specific time and date: Domino 10 allows scheduling
email for future delivery. After migration, since any deferred unsent mail is still in the Domino queue, MNE
will create a XXX-DeferredEmails.tsv in the MNE (or SSDM) log folder. The file will contain information
about any unsent deferred emails that are timestamped for delivery after a specified date. The specified
date is configured in an INI file. For information about configuring the date, see the [General]
DeferredMailDate parameter in the *Program Parameters Reference Guide*.

If you plan to shut down the Domino server after the migration, before migration, notify your Notes users not to schedule email delivery past the shut down date. Be sure to configure forwarding addresses for all migrated users, even the last batch of users that are migrated, to ensure that deferred emails can be forwarded properly to Exchange or Office 365.

Meeting attendees can invite others: Domino 10 supports a new feature for meetings, "Allow attendees
to invite others". The feature has three options: "Allow", "Allow and auto-approve", and "Don't allow".
Outlook provides a similar feature by forwarding a meeting request to other users. However, the Outlook
feature has only two options: "Allow forwarding" and "Do not allow forwarding". The following mapping is
used when MNE migrates a meeting from Domino 10 to Exchange or Office 365.

Allow = Allow forwarding

Allow and auto-approve = Allow forwarding

Don't allow = Do not allow forwarding

If an Exchange/Office 365 meeting is "forwardable", attendees can invite others by forwarding the meeting request. Otherwise, attendees can not forward the request to others.

 Delegate calendar but not contacts: MNE supports the feature where you can delegate your calendar to someone but keep your contacts private when the new Domino 10 feature "Calendar and To Do" is selected.

Differential templates

This release introduces differential templates. In the Provisioning Wizard and in the Data Migration Wizard, when **Save as template** is selected, you can choose to create a **Full Template** or a **Differential template**.

A full template is a snapshot of the INI configuration file that was used to run a task when the template was created. This INI file includes all of the settings from the Global Default settings plus any additions or modifications that were made by the wizard used to run the task. A full template does not pick up new Global Default settings after it is created.

Instead of saving all of the INI settings in the template, a differential template only contains the INI settings that are different than those in the Global Default INI file. A differential template can pick up new Global Default settings.

After a software upgrade to 4.16.0, the navigation drawer contains the **Upgrade Templates** option. Click to upgrade all the full templates in the database to differential templates.

Authentication

For information about authentication, including support for modern authentication, see "Authentication" in the *Pre-Migration Planning Guide*.

ApplicationImpersonation role

The MNE Exchange Admin account no longer requires the ApplicationImpersonation role.

In previous releases, when migrating to Office 365, there was a requirement that the Exchange Admin account be assigned the ApplicationImpersonation role. The role group that was created for the Admin Account Pool accounts was also configured with the ApplicationImpersonation role.

Parameter changes

Removed

URL sections and associated parameters

The following configuration file settings were used to provide URLs for the different Office 365 Azure clouds. They are no longer required and have been removed.

- [MsOnlineAuthorityUrls]
- [MsOnlineEwsUrls]
- [OutlookRestApiUrls]

The following parameters were configured using the URL's in the sections above. These parameters have been removed from the product:

- [Exchange] 0365AuthenticationUrl: The correct URL is now automatically retrieve using the Autodiscover service.
- [Exchange] 0365EwsUrl: The correct URL is now automatically retrieve using the Autodiscover service
- [Exchange] OutlookServicesUrl: Not required since MNE no longer uses the REST API for migrating data.

Previously deprecated and removed in this release

The New-GlobalDefaultSettings cmdlet was deprecated in release 4.15.1. The cmdlet has now been removed from MNE in this release.

- [Exchange] RPCAdminMapiProfile
- [Exchange] RPCUseAdminMapiProfile

Other parameters removed

- [Exchange] MapiErrorsToRetry: No longer relevant since migrations to mailboxes are no longer done using Outlook MAPI.
- [Exchange] MigrateWellKnownFolderAclOnly: MNE now always migrates ACL's for all folders to both on-premises and online mailboxes.
- [Exchange] 0365Tenant: The Office 365 tenant is now determined automatically using Autodiscover.
- [PowerShell] PropagationDelay: Replaced by the new parameter [Exchange] O365MaxMailboxConnectionWaitTime.
- [Exchange] EnableModernAuthentication: This SSDM parameter is replaced by the new [Exchange] DisableModernAuthentication parameter that applies to both the migration server and the SSDM. In the 4.15.2 release, Modern Authentication was supported only in the SSDM and was disabled by default. In 4.16.0 Modern Authentication is supported by both the SSDM and the migration server, and is enabled by default.
- [ActiveDirectory] BypassAddGroupMemberSecurityCheck=<#>: Removed since is not needed.

Added

- [ArchiveData] UseSpecialArchiveFolder
- [Exchange] AutodiscoverPreferInternalUrl
- [Exchange] DisableModernAuthentication
- [Exchange] MaxMailboxConnectionRetryWaitTime=<#>

- [Exchange] O365MaxMailboxConnectionWaitTime
- [Exchange] RootFolderAclMode
- [Exchange] UseMneMapiHttpLib
- [General] DeferredMailDate
- [General] NeedUpgradeTemplate
- [General] PromptUpgradeTemplate

Enhancements

The following is a list of enhancements implemented in Migrator for Notes to Exchange 4.16.0.

Table 1. Enhancements

Enhancement	Issue ID
MNE now supports migrating from Domino server 10 using Notes client 10.	122624.
MNE now uses Differential templates.	792367
The Migration Prioritization screen has been added to the Data Migration Wizard. You can use this screen to prioritize users in the migration queue. For a description of the screen, see the <i>MNE Administration Guide</i> .	749250
Added the Note ID of the relevant note to the following error:	155594
ERROR: [4727-33-5-00000000] The update message has an inconsistent number of dates in the date attributes. The message cannot be migrated.	
MNE offers a new parameter, [Notes] RootFolderAclMode that can be used to control how permissions are migrated to the root folder.	124918
MNE utilizes a new component for writing migrated data to Exchange with the MAPI over HTTP protocol. This new component replaces the MAPI library provided by Microsoft Outlook.	
For more information, see "Migrating folder ACLs and delegation (send on behalf of) rights" in the MNE Pre-Migration Planning Guide.	
MNE now supports running the console as a domain user.	123942
The user account used to run the MNE console must belong to the Local Administrators group. You can add the user account to Domain Admins group as the Domain Admins group belongs to the Local Administrators group by default.	
MNE now supports SQL Server 2017.	121101
The new parameter [General]DisableDebugPool allows you to disable the debug pool.	110722
Set [General] DisableDebugPool=1 to tell the program to not write out the previous 128 DEBUG log lines before a WARNING or ERROR log when LogLevel is less than or equal to 2.	
Numbers have been added to log errors that previously did not have numbers.	110115
MNE now supports Windows Server 2019.	110078

Resolved issues

The following is a list of issues addressed in this release.

Table 2. Resolved Issues

Resolved issue	Issue ID
Resolved an issue in which the customer experienced permissions errors during deletion of distribution group members. Now the BypassSecurityGroupManagerCheck parameter is added to the PowerShell command when removing group members.	168164
Resolved an issue with notification messages where MNE always accesses Active Directory to get user attributes even when they are not required.	793299
Resolved an issue where Get-MNEMigrationResult returns the same value for NorkItemRunStartTime and WorkItemRunEndTime.	131818
Resolved an issue where SSDM users receive the error message "Unable to update profile First .ast".	130934
Resolved an issue where user mailboxes are automatically mapped into the Outlook profile of the nigration admin account after executing the Add-MneMailboxAdminPermission cmdlet.	129919
Resolved an issue where private folders are migrated to Exchange with more permissions than ntended.	129747
Resolved an issue with re-migration mode using MAPI/HTTP lib.	126462
Resolved an issue with Notes ACL rights migration where the user is unable to expand the folders of the shared mailbox.	125133
Resolved an issue where hotspots containing certain non-English characters (such as umlaut) are not migrated properly.	124013
Resolved an issue where, when using Azure PowerShell module v2, all admin accounts created by he admin pool utility are created with Force Change Password Next Login enabled.	123534
 Resolved the following issues with RunOnce scheduled tasks: The Next Start Date value in Managed Scheduled Operations is different from the start date specified for the scheduled task. RunOnce tasks are not executed at the time of day specified for the scheduled task. 	121872
Resolved an issue where duplicate PST files are created when re-migrating multiple archives with he SSDM.	121862
Resolved an issue where the Invoke-MNEProvisionGroupCollection and Invoke-MNEProvisionUserCollection commands do not query a group / user dynamic collection.	121164
Resolved an issue where migration fails if Modern Authentication is enabled on the SSDM when he user's Office 365 account name is different from the mailbox's primary email address.	120619
Resolved an issue where the MNE can not support multiple Invoke-MNEMigrateUserData commands in a machine.	120471
Resolved an issue where Notes hotspots pointing to a file system do not work after migration.	120441
Resolved an issue a user may encounter the following error when migrating a Notes embedded Windows Metafile: ERROR: Failed to resize Gdiplus::Image. Error 0x2.	116954
Resolved an issue when migrating to Office 365 using the SSDM with Modern Authentication enabled, contacts could not be migrated if the target mailbox was the Office 365 Online Archive nailbox.	790039
Resolved an issue when migrating to Office 365 using the SSDM with Modern Authentication enabled and the migration target was not the root of the user's primary mailbox, only message content was migrated. Tasks and calendar appointments were not migrated.	790015
Resolved an issue when migrating to Office 365 using the SSDM with Modern Authentication enabled, custom attributes configured with a custom attrs.tsv file were not supported.	787934

Table 2. Resolved Issues

Resolved issue	Issue ID
Resolved an issue when, if you tried to retrieve a group collection using Get-MneCollection and specified the collection GUID, you got an error indicating that you specified an incorrect group type. Now if you specify the GUID, the correct collection is retrieved.	154789
Resolved an issue where, If there is an inline monochromatic Bitmap inside a user's mail, the following Gdiplus error can be encountered during the migration: ERROR: Failed to save Gdiplus::Image. Error 0x2.	155524
Resolved an issue where a user incorrectly got an error about not enough available licenses when they tried to reduce the size of the admin account pool. The user was running out of licenses and tried to reduce the size of the admin account pool to free up more licenses. The new pool size was greater than the number of licenses available, which incorrectly resulted in an error. However, the user was not trying to consume licenses but to free them.	156967
Resolved an issue that, when using the <i>Mail-In 2. Set Forwarding</i> configuration template, the "Append Domino domain to the forwarding address" check box was not saved so the template had to be modified each time it was used. Also, to change the "Append Domino domain to the forwarding address" check box, you had to change the option in the dropdown list for "Build address from" from Internet Address to Targeting Forwarding Address and back to Internet Address to make the check box editable.	123125

Known issues

Most of the known issues and limitations of any migration process are due to feature inconsistencies between the source and target environments. That is, features that are available in the Notes environment simply cannot be migrated to a target environment that does not offer the same or comparable features. Other limitations are due to feature incompatibilities, where similar features are available in both the source and target environments, but their implementations are so different that the migration may be impractical. In any case, most administrators regard these sorts of limitations as trivial or incidental to an overall migration project.

Quest distinguishes between known "issues" (listed here), which are believed to be temporary and likely to be resolved in a future release, and known "limitations," which are believed to be inherent to the process and environmental architectures, and are likely permanent. Appendix A of the MNE *Pre-Migration Planning Guide* provides a list of all such known limitations of the migration process as facilitated by the current version of Migrator for Notes to Exchange.

The following is a list of issues, including those attributed to third-party products, known to exist at the time of this release.

Table 3. General known issues

Known issue	Issue ID
Draft calendar items are migrated to Exchange, but after migration they are not fully functional.	100000
MNE truncates a Notes user's name if the Domino name exceeds the maximum name length in Exchange, but any subsequent run of the Directory Export Wizard will generate a duplicate object record, since the Wizard will not recognize the truncated name compared to the Notes original.	100071
When the Data Migration Wizard removes forwarding from an Office 365 user, and there is no local AD, the Wizard successfully completes its run, but generates three errors-two of which are failed attempts to locate the user in AD.	100088
When a recurrence pattern for a series of meetings is supported in Notes but not supported in Outlook, and when the organizer OR attendee, but not both, has been migrated, some updates/cancelations/responses for single occurrences will not work.	227308
A migrated recurring meeting may not correctly show the accept/decline status of a Notes user to whom a meeting invitee delegated the invitation, when the delegation and the delegee's acceptance or decline occurred prior to migration.	242781

Table 3. General known issues

Known issue	Issue ID
Exchange does not let other applications (including Notes Migrator for Exchange) set the owner property of items migrated to resource mailboxes.	57381
When migrating only iNotes contacts, the Notes Mail Files screen does not appear, so you cannot choose to migrate via the server or the file system. The program will run via file system if that's what you chose for your last migration, unless you go into the Task Parameters or INI file and change it.	57447
The MNE Migration Worker process may crash when configured to share a single MAPI profile across all worker processes. This issue only occurs when the MAPI/HTTP protocol is enabled. The product's default configuration settings have been chosen to avoid this issue, but you may encounter this issue if the following combination of INI settings are used:	727841

[Exchange]

AutodiscoverDisableMapiHttp=0

MapiUseSharedProfile=1

Table 4. SSDM known issues

Known issue		
The SSDM may crash when installed on a non-English operating system with Outlook 2016 and	7007/2	١

The SSDM may crash when installed on a non-English operating system with Outlook 2016 and [Notes] RewriteDocLinks=1.

To resolve the issue, set [Exchange] RewriteRTF=7.

Table 5. Offline Migration known issues

Known issue Issue ID

When migrating off-line, the *HTMLdoclinks* program parameter, in the [General] section of the Data Migration Wizard's task parameters, must be set to 0 (zero). The *HTMLdoclinks=0* setting tells the Wizard to migrate Notes doclinks as Notes-style doclinks, which can be opened in Exchange only if a Notes client is installed on the client workstation. By default (*HTMLdoclinks=1*), Notes doclinks would migrate to Exchange as HTML-style links, which can be opened in a web browser if the user is able to use iNotes, but that default setting will cause errors in an offline migration.

Table 6. Outlook known issues

Known issue Issue ID

Outlook archiving is not applied to migrated messages within the age range set for auto-archiving, because Outlook determines message age by Last Modified time, which it updates to the migration date/time upon migration. Since all migrated messages become zero days old as soon as they are migrated, and Outlook won't let the Data Migration Wizard reset that property to its true premigration date/time, the Outlook archiving feature skips the messages until they have "re-aged" to the archive age (typically 30 days) following migration, at which time all of the migrated messages will be archived.

System requirements

- · Domino servers
- Microsoft Exchange servers
- SQL server
- MNE admin migration servers

30886

58004

- · End-user desktops (if running the SSDM)
- · Server hosting the SSDM scheduling utility web service
- **i IMPORTANT:** The requirements listed here document the basic hardware and software requirements for Migrator for Notes to Exchange. MNE also requires certain configuration considerations and account permissions. Be sure to see these additional requirements in the MNE *Pre-Migration Planning Guide*, in chapter 1 under *Configuration requirements and account permissions*.

Before installing MNE, make sure your environment meets (or will meet) these minimum hardware and software requirements.

Domino servers

Supported Domino source environments (all ranges inclusive):

- Notes/Domino 10.0.0 and 10.0.1
- Notes/Domino 9.0.0 and 9.0.1
- Notes/Domino 8.5.0-8.5.3, and 8.0.0-8.0.2
- Notes/Domino 7.0.0-7.0.4
- Notes/Domino 6.x
- SmartCloud Notes support: MNE provides partial support for migrations from SmartCloud Notes, via the SSDM, for Notes client versions 8.5.3 or newer. This feature also requires you configure your local Notes client for SmartCloud Notes, as described in the MNE *Pre-Migration Planning Guide*, in chapter 1 under "Configuration requirements and account permissions".

Microsoft Exchange servers

NOTE: Migrator for Notes to Exchange supports Cumulative Update (CU) releases for all supported versions of Exchange. If you encounter an incompatibility with a newly released CU, contact Quest Support for a resolution.

Supported Exchange target environments:

- Exchange 2019: RTM
- Exchange 2016: RTM
- Exchange 2013: RTM and SP1
- Exchange 2010: RTM, SP1, SP2 and SP3
- Microsoft Office 365:
 - All Office 365 license plans that include an Exchange mailbox and permit connecting to that mailbox with Outlook and the Exchange Web Service (EWS).
 - Office 365 environments:
 - Office 365 Global
 - Office 365 Germany
 - Office 365 operated by 21Vianet

SQL server

MNE requires access to a Microsoft SQL Server. The following versions are supported:

- SQL Server 2008
- SQL Server 2008 Express Edition
- SQL Server 2008 R2
- SQL Server 2008 R2 Express Edition
- SQL Server 2012
- SQL Server 2012 Express Edition
- SQL Server 2014
- SQL Server 2014 Express Edition
- SQL Server 2016
- SQL Server 2016 Express Edition
- SQL Server 2017
- SQL Server 2017 Express Edition

Note the following:

- SQL must be installed either on the admin's migration server or on a separate server, with a minimum of 20GB free disk space.
- You may use an existing (installed) MS SQL Server, or install a new instance of SQL Server using one of the supported versions listed above.
- Quest recommends a full-featured (non-Express) edition of SQL Server for best performance of MNE's Directory Export Wizard, particularly for sites with a large number of groups or domains.

MNE admin migration servers

Operating systems supported for migration to		Exchange 2019/2016/2013/2010	Office 365
Windows Server 2019	64-bit	•	•
Windows Server 2016	64-bit	•	•
Windows Server 2012 or 2012 R2	64-bit	•	•
Windows 8	32-bit	•	
	64-bit	•	•
Windows Server 2008 SP2	32-bit	•	
	64-bit	•	
Windows Server 2008 R2	64-bit	•	•
Windows 7	32-bit	•	
	64-bit	•	•

Requirement

Description

Workstation hardware

- Must be a separate machine from the Exchange server, but a member of the same domain as AD and Exchange.
- · Minimum hardware requirements:
 - 2 GHz dual-core processor, 4GB memory, 20GB free disk space.
- Recommended for improved performance, especially for high-volume migrations:
 - 2 GHz quad-core processor, 8GB memory.
 - 1 Gbps NIC, and 1 Gbps or faster network connections among all migration servers and the Exchange and Domino servers.

Required for all Exchange target types, including Office 365

- .Net Framework 4.5
- · Microsoft SQL 2012 Native Client.
- Microsoft Command Line Utilities for SQL Server (a free download from the link provided in the MNE Autorun). NOTE: This component is required only if SQL Server is not installed locally (iMNE Server is connecting to a remote SQL instance).
- Windows PowerShell 3.0, which is part of Windows Management Framework 3.0 (included with any MNE-supported OS except pre-SP1 editions of Windows Server 2008 R2 and Windows 7). If PowerShell 3.0 does not come with your OS, you can download Windows Management Framework 3.0 at this Microsoft link.
- Notes must be installed in single-user mode and configured. The Notes client version must be one of 6.0.0-10.0.1 (all ranges inclusive), and should match or be higher than the Domino server version.
- The 32-bit edition (only) of Outlook 2019, 2016, 2013 or 2010. The Outlook client
 must also conform to Microsoft's version requirements for the applicable
 Exchange target version. Outlook 2010 is not supported by Office 365 or
 Exchange 2019. See the Exchange Server supportability matrix for more details.
- The MAPI DLLs required to perform a migration must be those that are part of Outlook, not the downloadable Exchange "server" MAPI.
- Update for Universal C Runtime in Windows. See the Microsoft knowledge base article KB299226.

Also required for Office 365 target

- To use modern authentication when connecting to Office 365 using remote PowerShell, the Microsoft Exchange Online Remote PowerShell module must be installed. For more information, see To install Exchange Online Remote PowerShell Module.
- Microsoft's Azure Active Directory PowerShell for Graph General Availability version (available at this Microsoft link).

NOTE: Azure AD Module for Windows PowerShell x64 edition (PowerShell V1) has been deprecated. MNE will remove support for this module in a future release.

 For systems running Windows 2008 R2, TLS 1.2 must be enabled as the default secure protocol. See this Microsoft support page.

To install Exchange Online Remote PowerShell Module

- 1 In Internet Explorer or Edge, open the Exchange admin center (EAC) for your Exchange Online organization.
- 2 A browser that supports ClickOnce deployment (such as Internet Explorer or Edge) is needed for the next step.
- 3 In the EAC, go to **Hybrid | Setup** and click the appropriate **Configure** button to download the Exchange Online Remote PowerShell Module.
- 4 In the Application Install window that opens, click Install.

Windows Remote Management (WinRM) on your computer must allow basic authentication (enabled by default).

- 5 To verify that basic authentication is enabled, run this command in a Command Prompt: winrm get winrm/config/client/auth
- 6 If you don't see the value Basic = true, run the following command to enable basic authentication for WinRM:

winrm set winrm/config/client/auth @{Basic="true"}

End-user desktops (if running the SSDM)

An SSDM end-user workstation may be a virtual machine, but a dedicated "actual" machine will likely yield better migration performance.

Requirement	Description
Supported operating	Windows 10, Windows 8.1, Windows 8 or Windows 7: 32-bit or 64-bit edition.
systems	Windows Server 2019: 64-bit edition.
	Windows Server 2016: 64-bit edition.
	 Windows Server 2012 or 2012 R2: 32-bit or 64-bit edition.
	 Windows Server 2008 SP2 or 2008 R2: 32-bit or 64-bit edition.
	 Windows Vista (Business, Enterprise or Ultimate): 32-bit or 64-bit edition.
Required Outlook client	Outlook 2019, 2016, 2013, or 2010: 32-bit or 64-bit edition.
	The Outlook client must also conform to Microsoft's version requirements for the applicable Exchange target version. Outlook 2010 is not supported by Office 365 or Exchange 2019. See the Exchange Server supportability matrix for more details.
On each end user's	Microsoft .Net Framework version 2.0 or later must be installed.
SSDM desktop	If end users will run the SSDM application from a network share (rather than from each user's own local copy): Each workstation must also have either .Net 3.5 SP1 (or later) installed, or a Code Access Security (CAS) policy granting full trust to SSDM in the network share. (See "Before Running the SSDM" in chapter 4 of the MNE Scenarios Guide for instructions to set the required CAS policy.)
	For the SSDM to authenticate with Office 365 using Modern Authentication, .Net 4.5 or later must be installed. If .Net 4.5 or later is not installed, the SSDM falls back to migrating without Modern Authentication.
	The MAPI DLLs required to perform a migration must be those that are part of Outlook, not the downloadable Exchange "server" MAPI.
Required Notes client	• 10.0.0 or 10.0.1 (inclusive)
	• 9.0.0 or 9.0.1 (inclusive)
	• 8.5.0–8.5.3 (inclusive)
	• 8.0.0–8.0.2 (inclusive)
	• 6.0.0–7.0.4 (inclusive)
SmartCloud Notes support	MNE provides partial support for migrations from SmartCloud Notes, via the SSDM, for Notes client versions 8.5.3 or newer. This feature also requires that you configure your local Notes client for SmartCloud Notes, as described in the MNE <i>Pre-Migration Planning Guide</i> , in chapter 1 under "Configuration requirements and account permissions".

Server hosting the SSDM scheduling utility web service

ASP.net version 4.5 must be installed. If the SSDM Scheduling Web Service is running, you must change the .NET Framework version of the Application Pool used by the SSDM Scheduling Web Service to .NET 4.5.

Upgrade and compatibility

You do not need to uninstall a previous version before installing a new version. The upgrade installation and setup are fully automated, and preserve any data already migrated by an earlier version, so you can resume the migration process from wherever you left off with the previous version.

- i IMPORTANT: If you are upgrading from 4.14.1 or earlier, you must back up the SSDM Scheduling Administration utility configuration files. See the section below for information on backing up the files.
- IMPORTANT: The upgrade process backs up your existing pabreplicator.nsf, attrs.tsv, msgtypes.tsv, NMEPSErrorFile.xml, wte_template.htm, ybm_template.htm and ynma template.html files and copy them to the target installation folder.

Backing up the SSDM Scheduling Administration utility configuration files

The following locally saved configuration files are overwritten as part of the upgrade to release 4.16.0. Make a backup copy of these files before performing the upgrade.

C:\Program Files (x86)\Dell\Migrator for Notes to Exchange\SSDM Scheduling Web Service\Bin\SchedulingGlobals.config

C:\Program Files (x86)\Dell\Migrator for Notes to Exchange\SSDM Scheduling Administration\AdminConfigPaths.xml

The upgrade procedure contains a step for restoring the files.

Important: Avoiding permission conflicts

If you are migrating to an on-premises Exchange server, it is important to ensure that the Exchange administrator account used by MNE to perform the migration does not belong to the Domain Admins or the Enterprise Admins security group, or to the Organization Management role group. Since these groups are denied *Receive As* rights on all mailbox databases, adding the Exchange account to any of these groups will result in conflicting permissions. These conflicting permissions have always had the potential to cause issues, but due to changes in how MNE connects to the target mailboxes, it is more likely that the conflicting permissions will prevent the new version of MNE from connecting to the mailboxes that are the migration targets.

Product licensing

Migrator for Notes to Exchange is a metered-use product that requires the application of a valid license key. An MNE license key is installed MNE's Notes Migration Manager component.

Quest sells license keys for particular numbers of users to be migrated. When the limit is reached the software continues to function nominally for users that have already been migrated, but will not migrate additional users. The same license is used for all functions of a particular user (provisioning, forwarding, migration, etc.), and the user license count increments the first time any program function is applied to each user. That is, when any feature of any MNE component is applied to a particular user, then all features of all components can be applied to the

same user under the same license. Moreover, users can be re-migrated (if necessary) using the original licenses; re-migration does not require an additional license.

A trial license is intended to let you try the MNE software in your own environment, with your own data, to help you determine whether MNE's capabilities are suitable to your needs. Under a trial license, therefore, the program stamps a "MIGRATION EVALUATION" prefix into the Subject of every migrated message, and also imposes these limitations:

- Calendar items more than two weeks into the future are not migrated.
- When migrating personal address books, only five contacts and five groups are migrated per PAB.

You can obtain your first or a subsequent license key by contacting a Quest Software sales representative. For either a trial or perpetual license, the key uses one of the following formats

- MigratorNotesEX-###-####.dlv
- MigratorNotesEX-###-###-dlv

where ###-#### or ###-#### represents your unique license number. The file is sent to you from Quest Licensing as an email file attachment. Copy the license key file to your Desktop, or to some other convenient location.

The product will install without a license key, but will prompt you to apply a license key the first time you try to run the software. You will be prompted to find and specify the license key file that Quest provided. Use the **Browse** feature to locate and specify the .dlv license file.

If you are upgrading from an earlier version, the automated upgrade process will transfer the existing license key into the new version, so you do not need to re-install it. For new installations, the license installer will only install the new format license files (.dlv). The older format (.asc) is no longer supported.

i IMPORTANT: Many environments require disabling User Account Control to install the Quest license into MNE.

Getting started with MNE

- · Upgrade and installation instructions
- More resources

Upgrade and installation instructions

To install Migrator for Notes to Exchange:

1 Download the Migrator for Notes to Exchange zip folder from the Quest.com website, and extract all files into an installation folder. Then run Autorun. exe from the installation folder.

If you are installing from an MNE product CD, the *Autorun* utility runs automatically.

Windows then launches the *Autorun* utility, where you can browse product information including the **Prerequisites** and all MNE **Documentation** before installing the product.

Verify that your environment conforms to the System requirements specified above in this document, and to the requirements specified in "Configuration requirements and account permissions" in the *Pre-Migration Planning Guide*. Several of the required third-party components may be downloaded from links on the *Autorun Prerequisites* tab.

- 2 When you are ready to install, select the Autorun Install tab.
- 3 Select the Migrator for Notes to Exchange product name, and click Next.
- 4 Read and accept the license agreement.

- 5 Follow the instructions in the MNE Installation Wizard.
- i IMPORTANT: If your setup includes the Microsoft redistributables, you may install them on your migration server. You must have a Microsoft SQL Server installed in your migration environment in order to use Migrator for Notes to Exchange.
- NOTE: Quest Migrator for Notes to Exchange requires access to the SQL 2012 Native Client. If you have Microsoft SQL Server 2012 (or later) installed on your migration server then you already have the Native Client installed.
 - If you do not have the Native Client installed, you can use the download button in the Autorun utility to download the software.
 - 6 Follow the remaining instructions and prompts in the MNE Installer.
- **IMPORTANT:** MNE includes a wizard for scanning the environment and determining whether it conforms to the system requirements for the MNE applications. The MNE Prerequisites Checker looks for required software and settings, connectivity, permissions, and access rights. The wizard can be launched automatically from the exit page of the MNE installer, by marking a checkbox before clicking **Finish**:
 - [] Launch the Prerequisites Checker when setup exits

The checker can also be run independently from your Windows **Start** menu, in the **Quest | Migrator for Notes to Exchange** group. The Prerequisites Checker log file is written to

%SystemDrive%\ProgramData\Quest\Prerequisites Checker.

- 7 Click **Finish** from the last screen to complete the installation. The MNE Installer then exits, and returns you to the *Autorun* utility, on the **Install** tab. If you have marked the **Prerequisites Checker** checkbox, that wizard now runs (in a separate window).
- 8 If you like, you may browse the other Autorun tabs.
- 9 When you are finished browsing other *Autorun* tabs, click the **Close** box ([X] in the top-right corner of the window) to close the *Autorun* utility.

Post upgrade steps

Be sure to see Product licensing above before trying to configure or run any MNE component.

i IMPORTANT: Locale-specific configuration: If you are migrating from a non-English Notes environment, you must also configure both the Data Migration Wizard and the SSDM with the appropriate non-English values for certain display elements. See "Appendix A" of the MNE Administration Guide for instructions, under "How Do I Configure MNE for My Non-English Notes Locales?"

Configuring the SSDM Scheduling Administration utility

The SSDM Scheduling Administration utility must be configured after upgrade.

- 1 Prior to upgrade, you made a copy of the SSDM Scheduling Administration utility configuration files. Restore the files to the following directory paths.
 - $\hbox{C:\Program Files (x86)} \label{thm:prop:prop:C:Program Files (x86)} $$ Quest\Migrator for Notes to Exchange\SDM Scheduling Web Service\Bin\SchedulingGlobals.config$
 - C:\Program Files (x86)\Quest\Migrator for Notes to Exchange\SSDM Scheduling Administration\AdminConfigPaths.xml
- 2 Point to the new physical path.

In the Administration Guide, in the chapter "SSDM Scheduling Administration utility" see the section "Before you can use the SSDM Scheduling Administration utility".

Follow the steps to add the new Virtual Directory:

C:\Program Files (x86)\Quest\Migrator for Notes to Exchange\SSDM Scheduling Web Service

Configuring the Task Scheduler

If you plan to use the optional MNE task scheduling features, make sure the MNE Task Scheduler is configured by following the instructions in Appendix A of the *MNE Administration Guide*, in the section "How Do I Schedule Tasks?"

More resources

Information about MNE, including all product documentation, is available from the Quest Support Portal at https://support.guest.com/.

Migrator for Notes to Exchange and Coexistence Manager for Notes community

The Migrator for Notes to Exchange and Coexistence manager for Notes community is an interactive online community dedicated to issues relating to:

- Migration of email, identity and applications to the Windows Exchange platform, either on-premises or hosted Exchange platforms like Office 365—including migrations from Exchange, GroupWise, and Notes.
- Active Directory migrations.
- · Migrations from Notes application and Exchange public folders to Sharepoint.
- · Coexistence strategies and tools.

The community is designed to foster collaboration between Quest Migration experts and users. It's a place where you can:

- Learn about product releases and betas before anyone else.
- Get access to Quest product leaders and subject matter experts on migration and coexistence.
- · Participate in discussion forums, share insights and ideas, and get common questions answered.

You can browse around the forums and the library, but to take full advantage of the community, post new threads, respond to messages from others, and rate our documents and downloads, you must **Join** the community. If you already have a Quest account or are a member of another Quest community, simply **Sign in**. The **Sign in** and **Join** features are both available from links near the top-right corner of the page.

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan. The release supports Complex Script (Central Asia – India, Thailand).

The SSDM user interface is available in English and French. The SSDM User Guide is also available in English and French.

About us

Quest provides software solutions for the rapidly-changing world of enterprise IT. We help simplify the challenges caused by data explosion, cloud expansion, hybrid datacenters, security threats, and regulatory requirements. We are a global provider to 130,000 companies across 100 countries, including 95% of the Fortune 500 and 90% of the Global 1000. Since 1987, we have built a portfolio of solutions that now includes database management, data protection, identity and access management, Microsoft platform management, and unified endpoint management. With Quest, organizations spend less time on IT administration and more time on business innovation. For more information, visit www.quest.com.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at https://support.quest.com.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- · Submit and manage a Service Request.
- · View Knowledge Base articles.
- · Sign up for product notifications.
- · Download software and technical documentation.
- View how-to-videos.
- · Engage in community discussions.
- · Chat with support engineers online.
- · View services to assist you with your product.

Third-party contributions

This product contains the following third-party components. For third-party license information, go to https://www.quest.com/legal/third-party-licenses.aspx.

Component	License or acknowledgment
7-Zip 9.2.0	Use of this component is governed by the 7-Zip license.
AutoMapper 2.2	Copyright Jimmy Bogard 2008-2012.
	Use of this component is governed by the MIT 1.0 license.
CommandLineParser 1.9	Copyright 2005-2012 Giacomo Stelluti Scala.
	Use of this component is governed by the MIT 1.0 license.
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Entity Framework 5.0	Use of this component is governed by the Apache 2.0 license.

Component	License or acknowledgment
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2.2.1.0	Use of this component is governed by the MIT 1.0 license.
ICU4C 57.1	Copyright (c) 1995-2014 International Business Machines Corporation and others.
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JQuery 1.9.1	Copyright 2012 jQuery Foundation and other contributors.
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JQuery UI 1.10.0	Copyright 2010 John Resig. http://jquery.com/.
	Use of this component is governed by the MIT 1.0 license.
JQuery Validation 1.11	Use of this component is governed by the MIT 1.0 license.
liblz4 1.8.3	Use of this component is governed by the BSD Simple license.
Log4Net 2.0.0	Copyright 2001-2006 The Apache Software Foundation.
	Use of this component is governed by the Apache 2.0 license.
LumenWorks 3.8.0	LumenWorks.Framework.IO.CSV.CachedCsvReader
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Microsoft.IdentityModel. Clients.ActiveDirectory	Copyright (c) Microsoft Corporation.
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sonWebTokens 5.3.0	Use of this component is governed by the MIT 1.0 license.
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Mimekit 2.2.0	MimeKit is Copyright (C) 2012-2018 Xamarin Inc. and is licensed under the MIT license.
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Modernizr 2.6.2	Use of this component is governed by the MIT 1.0 license.
System.IdentityModel.To	Copyright (c) Microsoft Corporation. All rights reserved.
kens.Jwt 5.3.0	Use of this component is governed by the MIT 1.0 license.
zlib 1.2.3	Copyright ©1995-2005 Jean-loup Gailly and Mark Adler.
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- i IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.