

Quest[®] Migrator for Notes to Exchange 4.16.1

Release Notes

November 2020

These release notes provide information about the Quest[®] Migrator for Notes to Exchange (MNE) 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 such as Microsoft Office 365.

MNE 4.16.1 is a minor release, with enhanced features and functionality. See the [Enhancements](#) and [Resolved issues](#) sections that follow.

New features

The following new features are available in this release:

Migration of oversized attachments to OneDrive

When you are migrating messages to an Office 365 target, you can now migrate oversized attachments to the Microsoft OneDrive store associated with the user mailbox. Oversized attachments are defined using the maximum size limit for attachments that is set in the Data Migration Wizard (or in the SSDM) on the *Select Date and Size Filters* screen.

You must register the Migrator for Notes to Exchange application with the Microsoft Azure portal and grant necessary permissions to allow the attachments to be migrated to OneDrive. For more information, see the Microsoft Azure AD Application Registration section in chapter 1 of the *MNE Administration Guide* and the [Exchange] MigrateOversizedAttachments parameter in the *MNE Program Parameters Reference Guide*. (174360, 174827)

A new Powershell cmdlet called Initialize-MNEOneDriveUserCollection is introduced to the Quest.MNE.PowerShell module to provision a user's OneDrive store before migration of user data to an Office 365 target. The cmdlet is useful when you enable the feature for migration of oversized attachments to OneDrive.

By default, the first time that users browse to OneDrive, their OneDrive store is automatically provisioned. In most cases, it is impossible to require that all users in a user collection log in and browse to OneDrive so that their OneDrive store is provisioned and ready. The new cmdlet is used to provision the OneDrive store associated with each user in a user collection so that all the required OneDrive stores are provisioned in advance of the migration.

Converting Notes RTF to HTML format

MNE uses a Notes RTF (rich text format) exporter to export Notes RTF to Microsoft RTF when migrating an RTF message body. MNE now supports converting the Notes RTF format to HTML. By default, this feature is disabled. You can enable the feature using the following new parameter: [Exchange] MigrateRtfToHtml. (194667, 111669)

Previously, MNE might encounter performance issues when using the Notes RTF exporter to export Notes RTF to Microsoft RTF. Also, MNE would extract embedded images and convert the images to DIB (device independent bitmap) format since OWA does not support RTF. The DIB format could cause the image file size to become very large. If you have encountered these issues, you might want to enable this feature to convert RTF to HTML.

The new feature has the following limitations:

- If MNE is running in offline mode ([Notes] Offline=1) or the Notes User ID path or password is not set, the new feature is not enabled. MNE will revert to exporting Notes RTF format to Microsoft RTF when migrating an RTF message body even if the [Exchange] MigrateRtfToHtml=1 parameter is set.
- The new feature only supports Memo type for the Notes client. For details see the following [support article](#). If MNE fails to convert Notes RTF to HTML, MNE will attempt to export Notes RTF to Microsoft RTF.
- Some application, document, database, view, or folder links might be lost after converting RTF to HTML.
- The new feature supports Domino/Notes version 8.5.3 or later.

Parameter changes

The following parameters are removed or added to Migrator for Notes to Exchange in this release.

Removed

- [ActiveDirectory] BypassAddGroupMemberSecurityCheck=<#>

Added

The following new parameters are added:

- [ArchiveData] RecordOriginalFolderNameAsKeyword
- [ArchiveData] UseSpecialArchiveFolder (added in 4.16.0 but not listed in release notes)
- [ActiveDirectory] AddADContainerPermission
- [DirectoryExport] CreateTsvForAutoResolvedAddresses
- [DirectoryExport] ResolveStaleAliases
- [Exchange] AddReceiveAsPermission
- [Exchange] AdminAcctPoolUserNamePrefix
- [Exchange] AllowO365MailboxMaxMessageSize
- [Exchange] AzureApplicationClientId
- [Exchange] AzureApplicationClientSecret
- [Exchange] MaxMailboxConnectionRetryWaitTime
- [Exchange] MigrateAllowedSendersOrMembers
- [Exchange] MigrateOversizedAttachments
- [Exchange] MigrateRtfToHtml
- [Exchange] MigrateTopicAsCategory
- [Exchange] O365Tenant
- [Exchange] OversizedAttachmentsTargetFolderPath
- [Exchange] SupportOversizedAttachmentsInLegacyOutlook
- [Notes] RecipientBccWords
- [Notes] RecipientCcWords
- [Notes] RecipientToWords
- [Notify] SMTPHost
- [Notify] SMTPPort
- [Notify] AdminRecipientsSMTP
- [Notify] AdminSummarySubject
- [Notify] AdminSummaryTemplate
- [Notify] SendMailToAdminWithSummary
- [MsOnlineSmtpHosts] section
- [MigrationSummary] section

Enhancements

The following is a list of enhancements implemented in Migrator for Notes to Exchange 4.16.1.

Table 1. Enhancements

Enhancement	Issue ID
MNE now supports migrating from Domino server 11 using the Notes client 11.	199467
You can now configure automatic messages (notifications) that are sent to a migration administrator, or to a migration team, that provide a summary of the migration results. The message can include an attachment that contains the migration statistics for each user in a collection and/or a list of deferred Notes mail that was scheduled to be sent at a future date. For more information, see the section titled “Configure Migration Notification Messages” in the <i>MNE Administration Guide</i> .	415323
A new Deferred Email Report button is added to the Task Completed screen in the Data Migration Wizard. This button appears only when a migration included Notes messages that were scheduled to be delivered on a future date and MNE generated a deferred email report file named <code>DeferredEmails.tsv</code> in the shared log folder. Click the button to view the report.	161350
A new parameter named <code>[Exchange] AdminAcctPoolUserNamePrefix</code> is added to allow you to specify an account name prefix for accounts created by the Office 365 Admin Account Pool utility. The prefix is used with the number sequence suffix to specify the pool account names. The new parameter allows you to create accounts that are not linked in to the name of the current Office 365 admin user so that if the Office 365 admin user is changed, the accounts in the MNE Admin Account Pool are not affected.	110344
A new parameter named <code>[ArchiveData] RecordOriginalFolderNameAsKeyword</code> is added to allow you, when migrating archives to a different target folder, to set whether the wizard will add a keyword to the migrated archive message that identifies the message’s original folder name.	110354
Improvements are made to the migration of messages to Office 365 where messages with multiple attachments have a total message size that is over the maximum message size limit. New parameters allow you to have the oversized attachments migrated to the Office 365 OneDrive store that is owned by the mailbox user. For details, see the <code>[Exchange] MigrateOversizedAttachments</code> and <code>[General] ApplicationClientId</code> parameters in the <i>MNE Program Parameters Guide</i> .	171620
Previously, any large attachments in Outlook 2016 messages being migrated to Office 365 that were over the size limit were stripped out from the message. Now you have the option of migrating the large attachments to Office 365 OneDrive. For details, see the <code>[Exchange] MigrateOversizedAttachments</code> and <code>[Exchange] AzureApplicationClientId</code> parameters in the <i>MNE Program Parameters Guide</i> .	110707 453545
When migrating to Office 365, you can now specify the OneDrive folder path associated with a user mailbox to which oversize attachments should be uploaded. For details, see the <code>[Exchange] OversizedAttachmentsTargetFolderPath</code> parameter in the <i>MNE Program Parameters Guide</i> .	174827
You can now automatically configure the required permissions for the Exchange administrator account for an on-premises Exchange or Office 365 target using the MNE console (Notes Migration Manager). When you select the Automatically grant permissions check box on the Exchange Server configuration screen, and the target is on-premises, MNE grants Receive-As permission on the mailbox database container. A new parameter [Exchange] AddReceiveAsPermission is added. Previously, you had to grant the permission on a mailbox database through a PowerShell command. Now you can grant permissions automatically using the Notes Migration Manager.	170695
When the target is Office 365, MNE checks to see if the Migration Account (or assigned Admin Pool account) has Full Access permission on the target mailbox. If it does not, MNE temporarily grants Full Access permission for the duration of the migration. This feature corresponds to the existing parameter [Exchange] AddFullAccessPermission . However, the recommended method is to use the PowerShell cmdlet to grant Full Access (clearing the check box) before a migration.	

Table 1. Enhancements

Enhancement	Issue ID
On the Active Directory configuration page, if the check box Automatically grant permissions is selected, MNE not only adds the account as a member of the Exchange Organization Management role group and enables remote PowerShell, but also grants the account Full Control to the root container of the Organizational Units (OU).	183117
A new Address Issues Report button is added to the Task Completed screen in the Directory Export Wizard. This button appears only if any address is auto-resolved by MNE and a TSV file is created during running Directory Export. A new parameter named [DirectoryExport] CreateTsvForAutoResolvedAddresses allows you to control whether a .TSV file that lists any auto-resolved addresses is created. Previously, the auto-resolved addresses were stored only in the MNE database. Now MNE can export the addresses to a .TSV file and display a button so you can open the file and confirm the addresses.	177102
A new parameter [DirectoryExport] ResolveStaleAliases allows you to clear stale secondary addresses generated during the Directory Export. Set [DirectoryExport] ResolveStaleAliases=1 to tell the Directory Export Wizard to replace stale secondary addresses with the latest address for each user to accommodate Domino directory updates during the transition.	175527
A new option (Automatically grant permissions check box) on the Active Directory configuration page in the Notes Migration Manager allows you to automatically grant permissions to a specified AD administrative account. If the check box is selected, MNE adds the account as a member of the Exchange Organization Management role group and enables remote PowerShell.	172960
Modifications are made to the [Exchange] ExtractEmbeddedImages and the [Exchange] MaxExtractedImageArea parameters to better support the new feature that allows oversized inline attachments to be migrated to OneDrive for migrations to Office 365.	184310
A new parameter called [ArchiveData] UseSpecialArchiveFolder is added to allow you, when migrating an archive to the primary mailbox, to migrate the archive directly to the special Archive folder. By default the parameter is set to 1, meaning the wizard will migrate archives to the special Archive folder if the folder exists in the target mailbox (primary or archive depending on migration settings). The parameter works with UsePseudoRoot as well to determine whether special Archive folder is involved with pseudo root folder or not. (The parameter was added in 4.16.0 but was not mentioned in the 4.16.0 Release Notes).	129746
A new parameter called [Exchange] AllowO365MailboxMaxMessageSize is added to allow you to override the message size restrictions set for an Exchange Online mailbox during a migration and use the maximum limit allowed for the target mailbox. MNE restores the original message size restrictions at the end of the migration.	185159
MNE now supports the Microsoft OLE DB Driver for SQL Server for all Exchange versions. The SQL Server Native Client has been deprecated by Microsoft.	180851
MNE now supports the Microsoft Exchange Online PowerShell V2 module when using modern authentication to connect to Office 365 using remote PowerShell. For information about installing the module, see To install Exchange Online Remote PowerShell V2 Module .	192215
MNE now supports converting Notes RTF format to HTML when migrating an RTF message body. For details, see Converting Notes RTF to HTML format .	194667
MNE now supports Microsoft SQL Server 2019.	111669
MNE now supports Microsoft Windows 10.	110077
MNE now supports Microsoft Windows 10.	114427

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, during group migration, MNE could not correctly synchronize membership when MNE encountered Domino group members that had a blank SMTP address. Blank SMTP addresses can occur if Domino groups have members/senders that were added as contacts instead of as mail-enabled user members. Now MNE evaluates the primary SMTP address and only attempts to remove members when the SMTP address is valid.	168173
Resolved an issue where MNE, during group provisioning, would log an error and exit the provisioning process if there was more than one group with the same display name. In on-premises Exchange and Office 365, it is possible to have duplicate group names. Now MNE uses the group SMTP address which is unique.	168171
Resolved an issue in which resource reservations that were created by an Exchange organizer through the Coexistence Manager for Notes (CMN) mail connector were not migrated correctly if the exception list contained Subject. If a recurring meeting has an meeting instance that does not follow the defined recurrence rule, an exception attachment is added. In this case, the migrated subject line incorrectly contained [[CMN]] and [[\CMN]],	117045
Resolved an issue where an HTML email with an inline image (such as a company logo) was migrated and the Outlook email showed an attachment icon but the email had no actual attached files.	169745
Resolved an issue where a customer migrated an iNotes message from a Notes draft folder (reserved view) to an Exchange draft folder. However, the migrated message did not contain the mail recipients (the email addresses in the TO, CC, and BCC fields).	119137
Resolved an issue where the SSDM crashed on exit when run on a workstation that did not have Microsoft .NET Framework 4.0 runtime installed.	170959
Resolved an issue where a customer could not migrate a resource (meeting room) with a long name (left side over 20 characters) to Office 365, using the Microsoft Azure Active Directory Synchronization (DirSync) tool. When attempting to migrate the room, the customer got an error "unable to find object". In addition to limiting the sAMAccountName to a maximum of 20 characters, MNE was incorrectly truncating the mailNickName (Alias) and the userPrincipalName (UPN) to 20 characters as well.	117083
Resolved an issue in which a customer found that two duplicate copies of Group To Do task requests were migrated to the Sent Items folder in Exchange. This issue affected Group To Do tasks that were created with the Notes client and which were set for Repeat (recurrences). The issue did not affect Group To Do tasks created with the iNotes client or created with the Notes client for a single task instance (no repeating).	118314
Resolved an issue in which a data migration task that executed using a template that was configured with the Manage mail routing task set to route new mail to Exchange did not update the forwarding address or retain "Append Domino domain to forwarding address" on the person document in the Notes directory.	171711
Resolved an issue so that the Notes Directory Export is now able to update the primary addresses which had conflicts in a previous Directory Export and for which the conflicts were resolved on the Domino server.	162850
Resolved an issue in which, when migrating a large amount of mail, MNE could not correctly display the migration volume (number of emails and size). Now, when the number of migrated emails is very large (one million or more), MNE displays a rounded value such as 1.2M for the migration volume (number of emails) value. You can hover your cursor over the field to see the exact value.	156189
Resolved an issue where, if you migrated a mail message to Exchange from an external sender, the name is displayed as the sender but there is no SMTP address. If you clicked on Reply in Outlook, you could not respond to migrated emails from external senders. This issue did not occur if you replied in OWA.	172373

Table 2. Resolved Issues

Resolved issue	Issue ID
Resolved an issue so that migrations that use the Mne MapiHttp library will support the migration of Journal Entry messages.	171586
Resolved an issue in which the user status data did not display if the SQL server version was older than SQL Server 2012.	172679
Resolved an issue where MNE failed to migrate to PST if the "Resolve attendees for archive mail" option is selected for an Office 365 target.	175402
Resolved an issue in which the control of "Append Domino domain to forwarding address" was not available when you selected Use current Domino internet address option on the <i>Specify Notes to Exchange Mail Forwarding</i> page in the Data Migration Wizard.	178492
Resolved an issue where the file and the line number was missing from the log entry when the information should be included. For example, the log did not show the file and the line number for a message that was filtered out or skipped in a migration.	180703
Resolved an issue in which a calendar item that was created as an appointment that repeated with a single instance was missing the parent document and deemed corrupted by the MNE tool and MNE skipped migrating the calendar item.	178183
Resolved an issue in which a message is migrated without body due to missing RTF temporary files. Now MNE stops migrating a message if it cannot find the exported RTF files, which allows MNE a chance to remigrate the message.	116969
Resolved an issue when migrating with the MNE MAPI/HTTP library, migrated contacts were displayed multiple times in the Outlook Address Book search dialog with the same Email Address and Display Name.	186552
Resolved an issue in which, after upgrading MNE from 4.15.x to 4.16.0, a customer attempted to migrate the Notes archive to Exchange Online archive. The archive migration created duplicates in Outlook when the archive migration was repeated. The issue was found for migration to both Exchange Online hybrid and native environments.	185192
Resolved an issue in which, when customer was migrating user data for a user collection in a non-English environment, the Data Migration Wizard continuously displayed the Check for Outlook Folders prompt in the Select Destination Exchange Server page. Even when the customer clicked the Do not prompt me again check box, the prompt was displayed for each user in the collection. The prompt was displayed even if the parameter [General] DeclineFolderCheck=0 was set to disable the folder check.	176739
Resolved an issue in which a WMF format image in Domino was extracted and converted to Bitmap format in Exchange by MNE. The file size increased an excessive amount (1.5M to 60M), which resulted in Outlook being unable to display the image.	189513
Resolved an issue to handle the Microsoft deprecation of Basic Authentication for Exchange Online connections using remote PowerShell (RPS) on October 13, 2020. Modern Authentication is now the default authentication mechanism for Exchange Online remote PowerShell calls by Migrator for Notes to Exchange applications. See the Microsoft announcement at this Microsoft link .	187834
Resolved an issue in which MNE failed to migrate folder permissions or delegate access for a mail user when the migration used the MNE MAPI/HTTP library.	192538
Resolved an issue in which the customer experienced permission errors during group provisioning to Office 365 while keeping groups in sync with corresponding Notes groups. Now the BypassSecurityGroupManagerCheck parameter is added to the PowerShell command when setting group properties. It also reports an error if the PowerShell command fails.	194350
Resolved an issue in which the customer wanted user folders to be migrated under the default Inbox in Outlook and edited the INI settings to include: UserFolderPrefix=Inbox Though the folders were migrated to this location, MNE also created an empty folder at the same level as the inbox called Inbox1.	118463

Table 2. Resolved Issues

Resolved issue	Issue ID
Resolved an issue in which, when the Keep groups in sync with corresponding Notes' groups check box was selected in the wizard and MNE was unable to contact the GC (Global Catalog) server and verify the group members, MNE deleted the group members from Active Directory.	118289
Resolved an issue in which the sequence numbers of rescheduled, recurring meeting/appointment series and instances were not migrated to the Exchange target as the MAPI property PidLidAppointmentSequence. Some customers had a third party tool which needed to read this property to process the migrated meeting/appointment.	117657
Resolved an issue in which Export Notes Directory tasks and other scheduled tasks would fail to run when MNE was installed using a non-default folder name.	199188
Resolved an issue in which, if you wanted to change the logging levels to verbose for debugging purposes, you had to manually modify the individual configuration files for each MNE component. Now you can set the logging level for all MNE components in the MNE Administrator Console using the Shared Directories Log Level settings.	111019
Resolved an issue to meet the new Microsoft LDAP binding security requirements by changing the default value to 65 (the combination of ADS_SECURE_AUTHENTICATION and ADS_USE_SIGNING) for the [ActiveDirectory] OpenFlags and [ActiveDirectory2] OpenFlags parameters. Microsoft recommends administrators harden the configurations for LDAP channel binding and LDAP signing on Active Directory domain controllers. For more information and a list of valid options, see this Microsoft article .	187023
Resolved an issue in which the data migration would be interrupted by the following error, 'System.OutOfMemoryException', when the customer was migrating a non-standard MIME message using the MNE MAPI/HTTP library for the migration.	203652
Resolved an issue in which, in the Admin console under View Summaries, the customer would export the User and Resource Details Summary report to TSV (tab separated value) format. When the .TSV file was opened, the last three columns were empty.	119106 87705
Resolved an issue in which, when a customer was running a migration job, the following error occurred: "The primary key is duplicated to the table T_NMEDataStoreMigrationWorkItemRuns when migration is canceled." Viewing the log files, it was determined that the migration was canceled and the existing migration results were successfully inserted to the T_NMEDataStoreMigrationWorkItemRuns table, but MNE attempted to store the same results again which caused the error.	204123
Resolved an issue in which a migrated meeting proposal request (such as Propose New Time) did not contain the new Proposal Time and the meeting originator could not respond to the proposal.	205213
Resolved an issue in which MNE appeared to overwrite the first PST file when migrating a large archive. The issue occurred when the PstRootDir contained a valid path separator such as / or \ which caused an issue when MNE was looking for the next PST file into which to migrate. The fix removes the extra path separators if they are specified.	204186
The PSRetryWait parameter was not honored by some PowerShell commands which resulted in provisioning errors. Though MNE was configured to perform multiple retry attempts to issue some PowerShell cmdlets and to wait 60 seconds between retries (PSRetryWait=60), the multiple retries were attempted within one minute.	206489
Resolved an issue in which MNE failed to migrate a base64 encoded MIME message that had a specific message body size (e.g. 8212 bytes).	207700
Resolved an issue in which the SSDM (64-bit version) stopped with the error "[4651-33-126-00000FF6]Unable to migrate recurring appointments/tasks" when scanning recurring appointments.	209667
Resolved an issue in which the Topic field in Notes was incorrectly migrated to the Subject field in Exchange for some special Databases. A new parameter named [Exchange] MigrateTopicAsCategory is added to allow you to correct the issue. By default the parameter is set to 0, meaning that MNE will not change current logic. When you set the parameter to 1, MNE migrates Topic as Category, and will not override Subject with Topic.	214970

Table 2. Resolved Issues

Resolved issue	Issue ID
Resolved an issue in which a WMF format image with a transparent background in Domino was extracted and converted to Bitmap format in Exchange by MNE. The conversion had a slight distortion in the image over the transparent background.	190565
Resolved an issue in which the GIF image file size expanded more than 6 times and OWA could not display the image after migration. This issue was introduced in version 4.16.0 Update 5, when resolved issue 190565 improved the GIF image quality but caused the file size to grow excessively. Now MNE will reduce the GIF image file size. You might see minor quality loss for some GIF images which have a transparent background or that have been resized in Domino.	200163

Known issues

Most of the known issues and limitations of any migration process are due to feature inconsistencies between the source and target environments. Features that are available in the Notes environment 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 migration is impractical. In any case, most administrators regard these 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 known limitations of the migration process as facilitated by the current version of Migrator for Notes to Exchange.

The following is a list of known 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 name if the Domino name exceeds the maximum name length in Exchange, but any subsequent run of the Directory Export Wizard generates a duplicate object record since the wizard does not recognize the truncated name compared to the Notes original name.	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 the attendee, but not both, has been migrated, some updates/cancellations/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 if the invitation was delegated and the delegatee accepted or declined the invitation <i>prior</i> to migration.	242781
Exchange does not allow other applications (including Notes Migrator for Exchange) to 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 runs via file system if that is what you chose for your last migration unless you go into the Task Parameters or INI file and change it.	57447

Table 3. General known issues

Known issue	Issue ID
<p>The MNE Migration Worker process can 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 default configuration settings are set to avoid this issue but you can encounter the issue if the following combination of INI settings are used:</p> <p>[Exchange] AutodiscoverDisableMapiHttp=0 MapiUseSharedProfile=1</p>	727841

Table 4. SSDM known issues

Known issue	Issue ID
<p>The SSDM might crash when installed on a non-English operating system with Outlook 2016 and if the following parameter is set:</p> <p>[Notes] RewriteDocLinks=1.</p> <p>To resolve the issue, set [Exchange] RewriteRTF=7.</p>	709742

Table 5. Offline Migration known issues

Known issue	Issue ID
<p>When migrating offline, the <i>HTMLdoclinks</i> program parameter in the [General] section of the Data Migration Wizard task parameters must be set to 0 (zero). The <i>HTMLdoclinks=0</i> 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, (<i>HTMLdoclinks=1</i>) Notes doclinks migrate to Exchange as HTML-style links, which can be opened in a web browser if the user is able to use iNotes, but the default setting causes errors in an offline migration.</p>	30886

Table 6. Outlook known issues

Known issue	Issue ID
<p>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 does not allow the Data Migration Wizard to reset the property to the true pre-migration date/time, the Outlook archiving feature skips the messages until they have "re-aged" to the archive age (typically 30 days) following migration. At this time all of the migrated messages will be archived.</p>	58004
<p>When saving message reference attachments from OneDrive using Outlook 2016/2019, an error message is displayed.</p> <p>Though earlier versions of Outlook client do not support reference attachments, MNE provides parameter settings [Exchange] SupportOversizedAttachmentsInLegacyOutlook=1 to migrate oversized attachments to OneDrive and adds a link to the uploaded attachments as an HTM attachment in the message.</p> <p>However, for newer versions of the Outlook client (2016/2019), when MNE tries to save the migrated message reference attachment, the following error is displayed "Outlook cannot save the file. file name or directory name is not valid." The Outlook Web Client (OWA) does not exhibit this problem and allows the user to save reference attachments.</p> <p>Workaround Instead of clicking Save, the user can click Open and save the attachment from OneDrive.</p>	184487

System requirements

- Domino servers
- Microsoft Exchange servers
- SQL server
- MNE admin migration servers
- 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). 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 11.0.0 and 11.0.1
- 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

i | **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
- SQL Server 2019
- SQL Server 2019 Express Edition

Note the following:

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

MNE admin migration servers

Table 7. Supported operating systems for migrations.

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	•	•

Table 7. Supported operating systems for migrations.

Operating systems supported for migration to...		Exchange 2019/2016/2013/2010	Office 365
Windows 10	32-bit	•	
	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	•	•

Table 8. Requirements

Requirement	Description
Workstation hardware	<ul style="list-style-type: none"> • Must be a separate machine from the Exchange server, but a member of the same domain as AD and Exchange. • Minimum hardware requirements: <ul style="list-style-type: none"> • 2 GHz dual-core processor, 4GB memory, 20GB free disk space. • Recommended for improved performance, especially for high-volume migrations: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • .Net Framework 4.5 • Microsoft OLE DB Driver for SQL Server 18.2 (or later) or Microsoft SQL 2012 Native Client. • Microsoft Command Line Utilities for SQL Server (a free download from the link provided in the MNE Autorun). <p>NOTE: This component is required only if SQL Server is not installed locally (i.e. the MNE Server is connecting to a remote SQL instance).</p> • 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 6.0.0-11.0.1 (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 the Microsoft 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 KB2999226.

Table 8. Requirements

Requirement	Description
Also required for Office 365 target	<ul style="list-style-type: none">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 V2 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 V2 Module

- 1 Install or update the Microsoft PowerShellGet module. For details, see [Installing PowerShellGet](#).
- 2 Close and re-open the window.

Now you can use the Install-Module cmdlet to install the EXO V2 module from the PowerShell Gallery. Typically, you want the latest public version of the module, but you can install a preview version if one is available.

- 3 To install the latest public version of the module, run the following command:

```
Install-Module -Name ExchangeOnlineManagement
```

- OR -

To install a preview version of the module, replace <PreviewVersion> with the necessary value, and run the following command:

```
Install-Module -Name ExchangeOnlineManagement -RequiredVersion <PreviewVersion> - AllowPrerelease
```

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

- 4 To verify that basic authentication is enabled for WinRM, run the following command in a Command Prompt:

```
winrm get winrm/config/client/auth
```

- 5 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 *can* be a virtual machine, but a dedicated physical machine will likely yield better migration performance.

Table 9.

Requirement	Description
Supported operating systems	<ul style="list-style-type: none"> Windows 10, Windows 8.1, Windows 8 or Windows 7: 32-bit or 64-bit edition. 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	<p>Outlook 2019, 2016, 2013, or 2010: 32-bit or 64-bit edition.</p> <p>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.</p>
On each end-user SSDM desktop	<p>Microsoft .Net Framework version 2.0 or later must be installed.</p> <p>If end users will run the SSDM application from a network share (rather than from each user's own local copy):</p> <p>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 <i>MNE Scenarios Guide</i> for instructions to set the required CAS policy.)</p> <p>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.</p> <p>The MAPI DLLs required to perform a migration must be those that are part of Outlook, not the downloadable Exchange "server" MAPI.</p>
Required Notes client	<ul style="list-style-type: none"> 11.0.0 or 11.0.1 (inclusive) 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	<p>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 <i>MNE Pre-Migration Planning Guide</i>, in chapter 1 under "Configuration requirements and account permissions".</p>

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

There is no need to uninstall a previous version before installing a new version. The upgrade installation and setup are fully automated, and will preserve any data already migrated by an earlier version, so you may simply resume the migration process from wherever you left off with the previous version.

- 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 will back 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 4.16.1. 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 in the MNE 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, 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, the program stamps a "MIGRATION EVALUATION" prefix into the *Subject* of every migrated message, and also imposes the following 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 are 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 transfers the existing license key into the new version, so you do not need to re-install it. For new installations, the license installer only installs the new format license files (.dlv). The older format (.asc) is no longer supported.

i | **IMPORTANT:** Many environments require disabling User Account Control (UAC) 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.
- 2 Run Autorun.exe from the installation folder.

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

Windows 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 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 can be downloaded from links on the *Autorun Prerequisites* tab.

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

i | **IMPORTANT:** If your setup includes the Microsoft redistributables, you can install them on your migration server. You must have a Microsoft SQL Server installed in your migration environment to use Migrator for Notes to Exchange.

- 6 Follow the instructions in the MNE Installation Wizard.

i | **NOTE:** Migrator for Notes to Exchange requires access to the Microsoft OLE DB Driver for SQL Server (MSOLEDBSQL). If you have Microsoft OLE DB Driver for SQL Server 18.2 or later installed on your migration server you have met this requirement.
If you do not have the Microsoft OLE DB Driver installed, you can use the download button in the Autorun utility to download the software.

7 Follow the remaining instructions and prompts in the MNE Installer.

i | **IMPORTANT:** MNE includes a wizard that scans the environment and determines whether it meets the system requirements for MNE. The MNE Prerequisites Checker verifies the required software and settings, connectivity, permissions, and access rights.

- You can launch the wizard from the exit page of the MNE installer by selecting the **Launch the Prerequisites Checker when setup exits** check box before you click **Finish**:
- You can also run the checker from your Windows **Start** menu under the *Quest | Migrator for Notes to Exchange* group.

The Prerequisites Checker log file is written to the following location:
`%SystemDrive%\ProgramData\Quest\Prerequisites Checker.`

8 Click **Finish** to complete installation.

The MNE Installer exits and returns you to the *Autorun* utility on the **Install** tab. If you selected the **Prerequisites Checker** check box, that wizard runs in a separate window.

9 If you like, you can browse the other *Autorun* tabs.

10 When you are finished, click the **Close** icon [X] in the top-right corner of the window.

Post upgrade steps

See [Product licensing](#) 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 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

You must configure the SSDM Scheduling Administration utility 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.

```
C:\Program Files (x86)\Quest\Migrator for Notes to Exchange\SSDM 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.

3 In the *MNE Administration Guide*, in the chapter titled SSDM Scheduling Administration utility, see the section “Before you can use the SSDM Scheduling Administration utility”.

4 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, ensure that 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.quest.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.

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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>.

Table 10.

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 .

Table 10.

Component	License or acknowledgment
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ICU4C 57.1	Copyright (c) 1995-2014 International Business Machines Corporation and others. Use of this component is governed by the MIT 1.0 license .
jQuery 1.9.1	Copyright 2012 jQuery Foundation and other contributors. Use of this component is governed by the MIT 1.0 license .
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 Copyright (c) 2005 Sébastien Lorion. Use of this component is governed by the MIT 1.0 license .
Microsoft.IdentityModel.Clients.ActiveDirectory 3.19.8	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT 1.0 license .
Mailkit 2.2.0	MailKit is Copyright (C) 2013-2019 Xamarin Inc. and is licensed under the MIT license. Use of this component is governed by the MIT N/A license .
Microsoft.Graph 1.18.0	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT N/A license .
Microsoft.Graph.Core 1.18.0	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT N/A license .
Microsoft.Identity.Client 4.6.0	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT N/A license .
Microsoft.IdentityModel.JsonWebTokens 5.3.0	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT 1.0 license .
Microsoft.IdentityModel.Logging 5.3.0	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT 1.0 license .
Microsoft.IdentityModel.Tokens 5.3.0	Copyright (c) Microsoft Corporation. Use of this component is governed by the MIT 1.0 license .
Mimekit 2.2.0	MimeKit is Copyright (C) 2012-2018 Xamarin Inc. and is licensed under the MIT license. Use of this component is governed by the MIT N/A license .
Modernizr 2.6.2	Use of this component is governed by the MIT 1.0 license .
Quartz.NET 1.0.3	Use of this component is governed by the Apache 2.0 license .
System.IdentityModel.Tokens.Jwt 5.3.0	Copyright (c) Microsoft Corporation. All rights reserved. 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. Use of this component is governed by the Zlib 1.2.3 license .

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