

Quest® Migrator for Notes to SharePoint 6.16
Installation Guide



© 2021 Quest Software Inc.

ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.
Attn: LEGAL Dept.
4 Polaris Way
Aliso Viejo, CA 92656

Refer to our website (www.quest.com) for regional and international office information.


Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at www.quest.com/legal.

Trademarks

Quest and the Quest logo are trademarks and registered trademarks of Quest Software Inc. in the U.S.A. and other countries. For a complete list of Quest Software trademarks, please visit our website at www.quest.com/legal. Microsoft, InfoPath, Word, Office 365, Internet Explorer, SharePoint, Windows, Windows Server, SQL Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. IBM, Notes, Lotus Notes, Domino, QuickPlace, and Quickr are trademarks or registered trademarks of International Business Machines ("IBM") Corporation in the United States, other countries, or both. All other trademarks, servicemarks, registered trademarks, and registered servicemarks are the property of their respective owners.

Legend

 **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

 **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

Contents

Migrator for Notes to SharePoint: Overview	4
Overview of Migrator for Notes to SharePoint	4
Migrator for Notes to SharePoint features and functions	5
Choosing between Import Service and web services	9
Choosing a client	10
Installing Migrator for Notes to SharePoint clients	11
Prerequisites	11
Deploying the Sandbox Redirector page	13
Installing Migrator for Notes to SharePoint clients	13
Licensing and product editions	14
Installing a new license	15
Verifying and troubleshooting your client installation	15
Verifying Notes connectivity	15
Verifying SharePoint connectivity	16
Uninstalling Migrator for Notes to SharePoint	16
Installing Migrator for Notes to SharePoint services	17
Prerequisites	17
Installing Migrator for Notes to SharePoint services	18
Deploying solutions	19
Deploying solutions using SharePoint Central Administration	20
Verifying your installation	20
Uninstalling Migrator for Notes to SharePoint services	21
Migrator for Notes to SharePoint: Configuration and administration	22
Configuring Migrator for Notes to SharePoint services	22
Link Tracking database	22
Import Service shared folders	24
Configuring Link Tracking Service	24
Configuring Import Service for a SharePoint site collection	26
Verifying your configuration from Migrator for Notes to SharePoint Designer or Console ..	29
Upgrading Migrator for Notes to SharePoint	30
About us	31
Technical support resources	31
Index	32

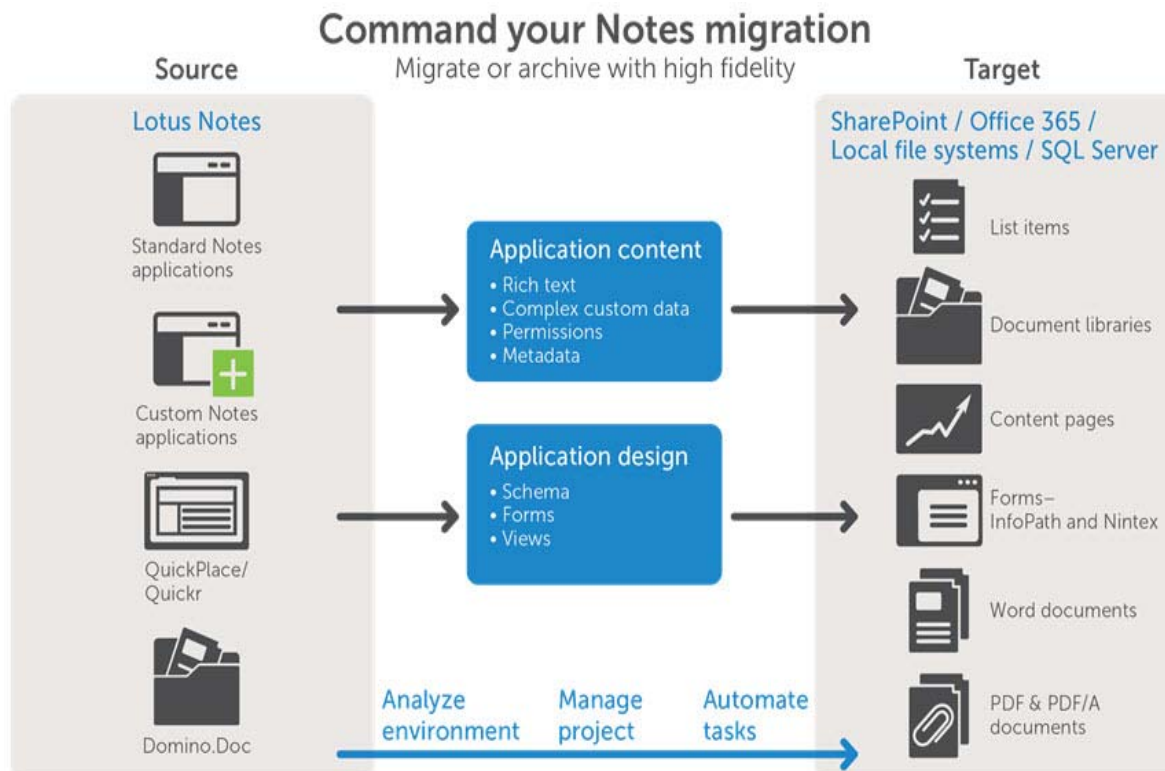
Migrator for Notes to SharePoint: Overview

- [Overview of Migrator for Notes to SharePoint](#)
- [Migrator for Notes to SharePoint features and functions](#)

Overview of Migrator for Notes to SharePoint

Migrator for Notes to SharePoint provides "Point and click" migration of Lotus Notes®, Lotus QuickPlace®/Quickr®, or Lotus Domino®.Doc documents to SharePoint Lists, Libraries and InfoPath® Form Libraries. This simple but powerful tool makes it easy for technical or non-technical users to select data from a Lotus data source, define any desired data mapping rules, and write the data out to SharePoint. Information technology professionals can take advantage of the tool's many features to perform enterprise-level migration projects.

Figure 1. Overview of Migrator for Notes to SharePoint.



Migrator for Notes to SharePoint features and functions

This section describes the capabilities of Migrator for Notes to SharePoint, including some options of that require your selection.

Clients

Migrator for Notes to SharePoint (MNSP) supports the following methods to control your migration. For information on choosing a client, see [Choosing a client](#) on page 10.

Table 1. Clients

Client	Description
MNSP Designer	Allows you to design, edit, test and run migration jobs. The scope of this tool is one migration job, moving data from one Notes database to one SharePoint list or library or SQL Server® database.
MNSP Console	Allows you to look across many databases (potentially all the databases in your organization), and helps you to control the entire migration process from pre-migration assessment to provisioning and content migration.
MNSP Command Line	Allows migration jobs to be run from the command line, from batch scripts, and from scheduling tools. Allows certain job parameters to be overridden for easy automation of large quantities of similar migration job.

Migrator for Notes to SharePoint services

Migrator for Notes to SharePoint migrates content through the native SharePoint and SharePoint Online web services.

For increased performance and additional functionality on an on-premises SharePoint Server, you may install several of the server-side component described in this section. For information on choosing the Import Service or Web Services, see [Choosing between Import Service and web services](#) on page 9.

Table 2. Migration services

Service	Description
MNSP Import Service	<p>Allows remote users of Migrator for Notes to SharePoint clients the option of sending exported Notes documents directly to the SharePoint server.</p> <p>The Import Service performs the SharePoint provisioning parts of the migration process and is implemented as a web service that can be accessed seamlessly from remote clients. It can provision new Lists and Document Libraries or populate existing ones, and leverages many capabilities of SharePoint including content types, folders, versioning, enhanced HTML, InfoPath forms, and document level security.</p> <p>The Import Service is architected as a Windows Communication Foundation (WCF) web service and allows for efficient, secure connections between clients and the SharePoint server over a variety of protocols. Administrators can configure the Import Service to run on the network port of their choice, who is allowed to access it, and which SharePoint sites are to be accessible through this service.</p> <p>There are two main deployment options for the Import Service.</p> <ul style="list-style-type: none">• Install the Import Service on every front-end server so Migrator for Notes to SharePoint clients can bounce between them.• Dedicate one or two front-end servers to be "Migration Servers" and arrange for all migration traffic to be sent there. This can be done either by using a non-load-balanced URL or by configuring the Load Balancer accordingly. In some cases, it may make sense to keep normal users off the dedicated Migration Servers completely, which again would be a Load Balancer configuration. A dedicated Migration Server can be thought of as a "disposable" server and by using it, you can avoid putting Migrator for Notes to SharePoint code on the "real" production servers. <p>NOTE: The use of this mode of operation requires the Migrator for Notes to SharePoint's Import Service and Front-End Services components, which are part of Migrator for Notes to SharePoint Services. For more information, see Installing Migrator for Notes to SharePoint services on page 17.</p>
MNSP Front-End Services	<p>The Front-End Services component allows you to configure the Import Service and Link Tracking Service using the Site Settings page of your SharePoint site collection (site collection administration rights required). The SharePoint Administration Services component allows you to do the same configuration using a SharePoint Central Administration page (central admin access and site collection administration rights required).</p>

Link Tracking

The method used to track links during migration depends on the migration method used, as described below.

Table 3. Link Tracking

Method	Description
Link Tracking Service (LTS)	<p>The Link Tracking Service (LTS) is part of the Front-End Services component. It ensures that Notes DocLinks continue to work before, during and after the migration process, regardless of the order of document migration. The service maintains a record of every document that is ever migrated and guarantees that users clicking on an intra-document link will always be able to find the current location of the document. Users can view a Link Tracking information page first, or simply be redirected to the desired page in Notes or SharePoint.</p> <p>As each document is migrated to SharePoint, its new location is tracked in a SQL Server database called the LTS database. When migrating Notes rich text fields that contain DocLinks to other Notes documents, these DocLinks are converted to URL links to a Link Tracking service that knows how to resolve them. If a SharePoint user clicks on a link to a document that has <i>not</i> been migrated yet, they will be redirected to the appropriate document in the Notes client. If the user clicks on that same link <i>after</i> the document is migrated, they will be redirected to the new copy of the document in SharePoint (which might be a list item, a document library file, or even an InfoPath form).</p> <p>Documents can be added to the Link Tracking Service whether the migration is accomplished via the Import Service or by using Migrator for Notes to SharePoint products in “local” mode (running the tool directly on the SharePoint server).</p> <p>If, after your migrations, you move your SharePoint site to another server or location, you can update the links in the LTS database using the Link Tracking Finalizer/Updater. If you have relocated the LTS redirector page, the Link Tracking Finalizer/Updater can also update all documents that have links to the LTS redirector page in order to look for that page in the new location. If you would like to remove the Link Tracking Service completely after the migration is done, the Link Tracking Finalizer/Updater can finalize the links to allow for its removal.</p>
MNSP Sandbox-safe Link Redirector	<p>Provides a simple diagnostic page for displaying doc link information. Because the Sandbox-safe Link Redirector page does not connect to an external database, it always offers to redirect user to Notes, even if the document has been migrated to SharePoint (Optional).</p> <p>This solution is a light-weight alternative to the Link Redirector that is part of the Front-End Services component. The Sandbox Link Redirector is intended for cases where you do not have the ability to install custom solutions and/or you cannot establish SQL connections from your server to the shared Link Tracking database. This solution should be used for a Microsoft Office 365 environment and other highly secured hosting environments.</p> <p>This page is packaged as a simple SharePoint solution (Quest.SandboxLinkRedirector.wsp). Because it is a sandbox safe solution, it can actually be installed by any site collection administrator, even on locked down environments such as Office 365, without involving your farm administrators at all.</p> <p>To deploy the Sandbox Redirector Page, see Deploying the Sandbox Redirector page on page 13.</p>

Platform support

The following platform versions and features are supported.

Table 4. Platform support

Platform	Description
Lotus Notes	<ul style="list-style-type: none"> • Supports Notes/Domino R5 or greater locally and can connect to any version of Domino server on any platform • Uses built-in Notes/Domino explorer or drag-and-drop Notes databases from Windows Explorer • Selects documents using view/folder lookups, full-text searches, or dynamic @Formula expressions • Reads note items, pre-computed view column values, attachments, embedded images, OLE objects, multi-valued items, rich text, doc links, dynamically computed values, unread marks and more • Converts Notes Rich Text fields to HTML or MIME (MHT) data formats • Accesses data using credentials of assigned Notes ID file • Includes predefined Data Definitions for Document Library, Discussion, Contacts, Calendar, Address Book, Calendar, Team Room and more
QuickPlace/ Quickr	<ul style="list-style-type: none"> • Accesses any Lotus QuickPlace/Quickr site or sub-room • Selects desired page types or customizes your query by folder, form used, or application of a selection dynamic formula • Extracts standard fields, custom fields, or QuickPlace/Quickr meta-data, including attachments, discussion threads, calendars and user lists • Converts rich text fields to standard HTML or MIME (MHT) data formats, including embedded images and attachments • Preserves folder hierarchy and security settings
Domino.doc	<ul style="list-style-type: none"> • Accesses any Lotus Domino.Doc library, cabinet or binder • Selects desired cabinet or customizes your query by binder, document type, or application of a selection dynamic formula • Provides the option to extract latest draft versions, latest major versions or both • Extracts standard fields, custom fields, or Domino.Doc meta-data • Reads attachments, embedded images, OLE objects, multi-valued items, rich text, doc links, dynamically computed values and more • Converts Notes Rich Text fields to HTML or MIME (MHT) data formats • Preserves binder hierarchy • Preserves checkout status • Preserves security settings for the cabinets

Table 4. Platform support

Platform	Description
SharePoint	<ul style="list-style-type: none"> • Supports SharePoint 2010, 2013, 2016, and 2019 • Writes List Items using original document creation/modification dates and user identities • Adds new fields to existing Lists • Adds file attachments to standard List Items or Document Libraries • Generates InfoPath forms and other XML documents • Supports InfoPath List Forms (SharePoint Server 2010/2013). • Supports Document Sets and Managed Metadata • Supports PDF and PDF/A document generation • Supports Microsoft® Word® document generation • Preserves Reply-To response hierarchies in Discussion applications • Maps calendar items, including recurrence details • Optionally detects already-migrated documents to prevent duplication • Provides advanced security mapping options • Supports advanced SharePoint features such as document level security, versioning, folder support, duplicate document handling, content types and document approval • Tracks migrated documents and ensures that DocLinks continue to work (regardless of the order of document migration)

Choosing between Import Service and web services

The following table summarizes the capabilities and requirements of each implementation option to help you choose which is right for your installation.

Table 5. Selecting the right option

	Quest Import Service	SharePoint Web Services
SharePoint versions supported	2010, 2013, 2016, 2019	2010, 2013, 2016, 2019
Office 365 (BPOS) supported	Dedicated only	Dedicated and Standard
Server installation	Administrator must run MSI, etc.	None
Server configuration	Per site collection	None
Performance	Faster	Slower
Functional Limitations	None	None

Choosing a client

The Migrator for Notes to SharePoint Console allows you to work with many Notes databases at once and supports analysis, site provisioning, and automated migration. The Migrator for Notes to SharePoint Designer and the Command Line clients focus on one database at a time. While there are different clients from which to choose, you only need one. For migrating just one database and to get going with the lowest possible learning curve, the "classic" Designer client is the best option. For analysis projects or large projects involving many Notes databases and SharePoint site provisioning, the Console is best.

NOTE: The product installer (*MigratorforNotestoSharePoint-Clients-6.X.msi*) installs all three clients.

The following table summarizes each client's capabilities to help you choose which client is best suited to meet your needs:

Table 6. Choosing a client

Capability	Designer	Console	Command Line
Discover and Analyze Notes databases		X	
Design migration jobs	X	X	
Generate InfoPath Forms	X	X	
Run migration jobs	X	X	X
Automate target and migration job assignments		X	
Run many migration jobs in batches		X	X
Provision SharePoint lists & libraries	X	X	X
Provision list and document level security	X	X	X
Provision SharePoint sites & sub-sites		X	
Provision site level permissions		X	
Support use of intermediate XML data files	X		X
Manage migration project and track progress		X	
Support reports, charts and data export		X	
Intended for I.T. pros and consultants	X	X	X
Support scripting			X

Installing Migrator for Notes to SharePoint clients

- [Prerequisites](#)
- [Deploying the Sandbox Redirector page](#)
- [Installing Migrator for Notes to SharePoint clients](#)
- [Licensing and product editions](#)
- [Verifying and troubleshooting your client installation](#)

Prerequisites

Before installing Migrator for Notes to SharePoint clients, ensure the system requirements are met.

Table 7. System requirements

Requirement	Details
Client Hardware and Software	<ul style="list-style-type: none"> • Windows Vista® Service Pack 2, Windows® 7 Service Pack 1, Windows 8, Windows 2008, Windows 2008 R2, Windows 10, Windows 2012, Windows 2012 R2, Windows 2016, or Windows 2019 • .NET® Framework 3.5 • Windows Identity Foundation is required for the Office 365 Authentication environment type • At least 1 GB of RAM is recommended for running migration jobs and doing small analysis projects. For large analysis projects or bulk migrations involving over hundreds of databases, we recommend at least 4 GB of RAM.
Notes Data Extraction	<ul style="list-style-type: none"> • Windows Vista Service Pack 2, Windows 7 Service Pack 1, Windows 8, Windows 2008, Windows 2008 R2, Windows 10, Windows 2012, Windows 2012 R2, Windows 2016, or Windows 2019 • Lotus Notes 8.5.3 to 10.0.1 • Both .NET Framework 3.5 and 4.0 are required
Privileges	<ul style="list-style-type: none"> • Administrator access to your local computer. • Administrator access on the SharePoint server, content database, and site collection (if you are installing on a 32-bit SharePoint server and plan to migrate directly without using the Migrator for Notes to SharePoint Import Service)

Table 7. System requirements

Requirement	Details
Lotus Notes or Domino	<ul style="list-style-type: none"> Some form of the Notes "engine" be installed on the same computer. <p>NOTE: Notes/Domino does not need to be running</p> <ul style="list-style-type: none"> Install and configure your Notes client (or Domino server). Run the product at least once to make sure that you can connect to other Domino servers in your organization. Any user accounts that runs the Migrator for Notes to SharePoint clients should have Full Control access to the Notes program and data folders. <p>NOTE: On Windows Vista or Windows 7 environments employing User Access Control, the operating system virtualizes the Program Files folder that interfere with Migrator for Notes to SharePoint's access to Notes configuration and data files. Therefore, install Notes in a different location outside the Program Files folder, such as C:\Lotus\Notes.</p> <p>NOTE: Domino servers installed on Windows 2003 are supported.</p>
Migrator for Notes to SharePoint Console	<ul style="list-style-type: none"> Microsoft Management Console (MMC) 3.0 <p>NOTE: You can download the MMC Console from http://support.microsoft.com/?kbid=907265.</p> <ul style="list-style-type: none"> a local Notes database to store data that is gathered through analysis and user input. The Setup Wizard that is run after the Console is installed will create this database for you. Microsoft Report Viewer 2008 or 2012 to display and export reports. If this component is not installed, the Discovery, Analysis and Migration reporting options are not enabled. The Report Viewer 2008 can be downloaded from: http://www.microsoft.com/downloads/details.aspx?familyid=6AE0AA19-3E6C-474C-9D57-05B2347456B1&displaylang=en. The Report Viewer 2012 can be downloaded from: http://www.microsoft.com/en-us/download/confirmation.aspx?id=35747 Microsoft's Visual Studio Report Designer to create custom report templates (RDLC files). The Express versions are not supported however. For more information about this report designer and how to build reports using it, go to http://msdn.microsoft.com/en-us/library/ms157166.aspx.
Database	<ul style="list-style-type: none"> SQL Server® 2005, 2008, 2012, 2014, 2016
SharePoint Data Load using web services	<ul style="list-style-type: none"> Any SharePoint 2010, 2013, 2016 or 2019 server with web services enabled
SharePoint Data Load using Import Service	<ul style="list-style-type: none"> Windows 2008, Windows 2008 R2, Windows 2012, Windows 2012 R2, Windows 2016, or Windows 2019 SharePoint 2010, 2013, 2016, or 2019 .NET Framework 3.5 Administrator access on the SharePoint server, database and site collection
System path	<ul style="list-style-type: none"> The program directory must be included in your system's path environment variable to locate the Notes DLL. Set the system environment variable NOTESNTSERVICE equal to 1 to make sure that Notes background processes are not terminated unexpectedly. Reboot the system after making these changes. <p>NOTE: You can access the environment variables through the Control Panel.</p>
Content migration	<ul style="list-style-type: none"> Ensure that SharePoint Workflows or SharePoint Event Receivers are disabled/removed before you begin a migration.

Deploying the Sandbox Redirector page

To determine if this optional component is required, see [Link Tracking](#) on page 7. Prior to deployment, the solution file must be copied from the Migrator for Notes to SharePoint distribution package to a local folder. For the Sandbox Link Redirector page, the file to copy is 'Quest.SandboxLinkRedirector.wsp'.

To deploy using the Site Collections Solution Gallery

- 1 Select **Site Settings | Solutions**.
- 2 Click **Upload Solution** and locate the Quest.SandboxLinkRedirector.wsp file. Click **OK**.
- 3 Select the file and click **Activate**.

When you activate a solution, site-collection-scoped features are automatically activated as well. The Solution Gallery lists the solution name and modified date as well as its activated status and the resources consumed by the solution. You can delete a solution from the gallery only after you have deactivated it. If you want to copy a solution from one site collection to another, save the .wsp file to disk and upload it to another Solution Gallery.

Installing Migrator for Notes to SharePoint clients

Migrator for Notes to SharePoint requires access to both SharePoint and the migration data source.

Remove any prior versions of Migrator for Notes to SharePoint. For more information, see [Uninstalling Migrator for Notes to SharePoint](#) on page 16.

i | **NOTE:** The Migrator for Notes to SharePoint client can be installed on a 32-bit or 64-bit computer but it will run in 32-bit mode.

Migrator for Notes to SharePoint is distributed as a Microsoft Installation program (for example, MigratorforNotestoSharePoint-Clients-6.x.msi).

To install the Migrator for Notes to SharePoint Client on a single computer

- 1 Run the installation program from Windows Explorer or the command line. Click **Next**.
i | **NOTE:** If downloading the installation program from a web site, do not attempt to open it directly from the web browser. Instead, save it to a local directory and run it from there.
- 2 Read and accept the license agreement. Click **Next**.
- 3 Select the components you would like to install and the location of where to install them. Click **Next**.
i | **NOTE:** Generally all components will be installed to your local drive. If you do not want to install a component, select that component and in the dropdown menu, select **Entire Feature will be unavailable**.
NOTE: To change where the components will be installed, click **Browse**.
NOTE: To view how much disk space a component requires and how much is available, select the component and click **Disk Usage**.
NOTE: To reset these selections to the default, click **Reset**.

- 4 Enter the Notes program and data directories. Click **Next**.
 - i** | **NOTE:** If you get an error message that the NAMES.NSF file cannot be found, open Lotus Notes, then click **Next**.
- 5 Click **Install**.
- 6 When the installation is complete, click **Finish**.
- 7 Create the Migrator for Notes to SharePoint Console Repository and define the setup options. See the Console Configuration using the Setup Wizard section of the Migrator for Notes to SharePoint User Guide for more information.

Installing on separate "Import" and "Export" computers

Since a single computer configuration is not always feasible, you also have the option of installing the Migrator for Notes to SharePoint client *twice* (once on a computer that has access to your Notes environment and once on a computer that has access to your SharePoint environment) and using intermediate files for transferring data between the two computers.

Migrator for Notes to SharePoint clients can be installed on a system that does not have network access to SharePoint. In this event, certain functions (such as the ability to browse the available SharePoint Sites and Lists) will be disabled. This does not impair the ability to interact with Lotus Notes or export Lotus Notes data.

Migrator for Notes to SharePoint clients can also be installed on a system that does not have Lotus Notes installed. In this event, certain functions (such as the ability to browse the available Notes databases and views) will be disabled. This does not impair the ability to interact with SharePoint or import SharePoint data.

Finally, Migrator for Notes to SharePoint Designer and Command Line clients have the ability to save data to (or load data from) an intermediate XML file. This option is available when you click **Run Job**.

The intention of the above features is to enable the following scenario:

Computer A:

- 1 Install Migrator for Notes to SharePoint on a computer that has a Notes client (remember that you can still connect to other Domino servers in your organization).
- 2 Define your complete data transfer job (Source Definitions, Target Definitions, and Mappings) or load an existing job in the Designer client.
- 3 Click **Save Job** to save the Job Definition.
- 4 Click **Run Job** and save the results to an intermediate XML file.

Computer B:

- 1 Install Migrator for Notes to SharePoint on your target SharePoint server.
- 2 Click **Load Job** in the Designer client to save the Job Definition you saved in step #3.
- 3 Change the SharePoint target site, list, and transfer options if needed. However, you should not change the Data Definitions or Mappings.
- 4 Click **Run Job** and load from the intermediate XML file you saved in step #4.

Licensing and product editions

Migrator for Notes to SharePoint requires licenses to be installed before any functionality is available for use. In the Console, only the License icon will be shown if no license is installed.

As this was a change in licensing strategy, Quest will supply new licenses to users with existing licenses in a pre-6.6 release and who upgrade to release 6.6 or later.

Migrator for Notes to SharePoint licenses specify the product editions, which differ in the number of databases to which you can migrate. You can purchase a license with an unlimited number of databases.

You can purchase additional licenses later, as your migration needs grow.

Installing a new license

To purchase a new license or install a trial download, go to <https://www.quest.com>. Save your license file in a location where you can easily access it.

You can install a Migrator for Notes to SharePoint license by using License Installer, the Migration Console, or the Designer client.

To install a new license using License Installer

- 1 In the Start menu under Quest products, select **License Installer**.
- 2 Enter the license name or browse to the location of the license file and select it.

To install a new license in the Console

- 1 In the root node of the Console Tree, right click the **License** icon and select **Import License**.
- 2 Enter the license name or browse to the location of the license file and select it.
- 3 Click **Import**.
If the license is accepted, other commands in the dialog are enabled.
- 4 Click **Details** to view license details.
- 5 To show product icons that are now available, right click the **License** icon and select **Refresh**.

To install a new license in Designer

- 1 In the Designer **Help** menu, select **License Details**.
The Product Information Window opens.
- 2 In the **File** menu, click **Import License**.
- 3 Enter the license name or browse to the location of the license file and select it.
- 4 Click **Import**.
If the license is accepted, other commands in the dialog are enabled.
- 5 Click **Details** to view license details.

Verifying and troubleshooting your client installation

- [Verifying Notes connectivity](#)
- [Verifying SharePoint connectivity](#)

Verifying Notes connectivity

If you installed Migrator for Notes to SharePoint on a computer that has the Notes client (or Domino server) installed and you selected the Notes Support option during the Migrator for Notes to SharePoint installation, the Migrator for Notes to SharePoint's Notes-related functions should be enabled. For example, on the Notes tab of the Migration Job Designer, there is a button labeled "Select Database" which allows you to browse local Notes databases and remote services. If this button is disabled or does not show the Notes databases:

- Verify that your system's PATH environment variable includes your Notes program directory.
- Verify that you are logged in with a Windows account that has Full Control access to the local Notes program and data directories.
- Verify that the Notes installation is correct. (Start the Notes client and verify that it can connect to other Domino servers in your organization).
- Verify that no other processes that lock your local Notes resources are running on this system (Domino server, add-in products, etc.).
- Run "NMSP.exe /Debug:NotesAccess" for additional information as to what might be causing the problem.

Verifying SharePoint connectivity

To verify SharePoint Connectivity

- 1 From Migrator for Notes to SharePoint Designer, select **Tools | Options**.
- 2 From the SharePoint tab, select the type of SharePoint connection that you need and click the **Windows Authentication** link to specify the method you want to use to log into the server.
- 3 Click **Add** to add your particular SharePoint site URL to the site collections list. You do not need to specify each sub-site here; Migrator for Notes to SharePoint can discover those automatically.
- 4 Enter the site URL and click **OK**.
- 5 Select the site that has been added to the list, and click the **Test Connect** link. The following tests are performed:
 - Can you access the site with the address and credentials you supplied? If this test fails, correct your address and credentials and try again. You can verify that the SharePoint site address you are using is correct by starting a web browser on the same computer and accessing the site directly.
 - Is the site you specified enabled to allow remote import of documents? If you selected to use the Import Service, this requires that Migrator for Notes to SharePoint Import Service be installed on the remote server and that the Import Service is enabled and configured for that particular site. If you selected to use web services, this requires that SharePoint 2010/2013/2016/2019 web services to be running.
 - If you selected to use the Import Service, can you connect to the Migrator for Notes to SharePoint Import Service? If this test fails, make sure that the Import Service is running and that the service address and endpoint are correctly configured for that particular site. Also, check that the host name and port number being used by the Import Service is not being blocked by a firewall on the client or server.

Uninstalling Migrator for Notes to SharePoint

To uninstall Migrator for Notes to SharePoint, use "Add/Remove Software" from your Control Panel.

Installing Migrator for Notes to SharePoint services

- [Prerequisites](#)
- [Installing Migrator for Notes to SharePoint services](#)
- [Deploying solutions](#)
- [Verifying your installation](#)

Prerequisites

Before beginning installation of Migrator for Notes to SharePoint, ensure the following system requirements are met.

Table 8. System requirements

Requirement	Details
Server Hardware and Software/SharePoint	<p>Same prerequisites as those required by SharePoint.</p> <p>For a list of requirements for SharePoint 2010, see http://technet.microsoft.com/en-us/library/cc288751(v=office.14).aspx.</p> <p>For a list of requirements for SharePoint 2013, see http://technet.microsoft.com/en-us/library/cc262485.aspx.</p> <p>For a list of requirements for SharePoint 2016, see https://technet.microsoft.com/en-us/library/cc262485(v=office.16).aspx.</p> <p>For a list of requirements for SharePoint 2019, see https://docs.microsoft.com/en-us/SharePoint/install/hardware-and-software-requirements-2019</p>
Database	<ul style="list-style-type: none"> • SQL Server 2005, 2008, 2012, 2014, 2016
Installation Privileges	<ul style="list-style-type: none"> • Administrator access on the SharePoint front-end server • Member of the Farm Administrators group • db_owner access to the SharePoint config database • dbcreator server role in SQL Server instance (if creating a Link Tracking database)
Privileges to run Migrator for Notes to SharePoint	<ul style="list-style-type: none"> • Access to SharePoint targets sufficient to perform desired migration tasks (provisioning sites, adding users, provisioning lists, updating list schema, writing records) • Full control access on Shared Files folder (if configured) • Notes ID that can access Domino servers and read content from source databases
SharePoint Privileges	<ul style="list-style-type: none"> • db_owner role in the Link Tracking database (if configured) • Full control access on Shared Files folder (if configured)

Table 8. System requirements

Requirement	Details
Import Services	<ul style="list-style-type: none"> a unique port number and/or host header on your server. <p>NOTE: You can have host headers so that the Import Service and various SharePoint site can coexist on the same computer with the same port number.</p> <ul style="list-style-type: none"> If you are using remote Migrator for Notes to SharePoint, you must have access to the Import Service and not be blocked by any firewall software. a new application pool with the desired service account or select an existing one. The service account must have administrative rights on the local computer and any target SharePoint site to which you plan to migrate. The application pool will also need read, write, and execute privileges for the Link Tracking database: access on front-end server where Import Service is running: <ul style="list-style-type: none"> Administrator access, Member of WSS_WPG group Member of IIS_WPG (Windows 2003 only) Full control access on Shared Files folder (if configured) SharePoint access <ul style="list-style-type: none"> Member of the Farm Administrator's group Site Administrator on site collections being migrated to Database access <ul style="list-style-type: none"> db_owner role in the SharePoint content databases being migrated to db_owner role in the Link Tracking database (if configured)
Configuration Privileges	<ul style="list-style-type: none"> Site Administrator access on the site collections being configured.
Link Tracking Service	<ul style="list-style-type: none"> account used to run the installation program has sufficient rights to create new databases when the database is created, SQL Server administrators can adjust the security settings of the database to control who can write to it (anyone migrating documents, as well as the Central Administration service account) and who can read it (anyone who might want to traverse an intra-document link). <p>NOTE: The Migrator for Notes to SharePoint Services installer can create a database for you, if desired, or you can create this database yourself by using the SQL scripts that are supplied with the product (installed in the Program Files Migrator for Notes to SharePoint bin directory).</p>
Content migration	<ul style="list-style-type: none"> Ensure that SharePoint Workflows or SharePoint Event Receivers are disabled/removed before you begin a migration.

Installing Migrator for Notes to SharePoint services

To install all Migrator for Notes to SharePoint services

- 1 Run the installation program from Windows Explorer or the command line. Click **Next**.

i | **NOTE:** If downloading the installation program from a web site, do not attempt to open it directly from the web browser. Instead, save it to a local directory and run it from there.

- 2 Read and accept the license agreement. Click **Next**.
- 3 Select the components you would like to install.

- 4 Select the components you want to install and the location of where to install them. Click **Next**.

i | **NOTE:** Generally all components will be installed to your local drive. If you do not want to install a component, select that component and in the dropdown menu, select Entire Feature will be unavailable. You will have to manually deploy any uninstalled components later using SharePoint Central Administration.

NOTE: To change where the components will be installed, click Browse.

NOTE: To view how much disk space a component requires and how much is available, select the component and click Disk Usage.

NOTE: If you do not have access to SharePoint Central Administration, you can clear the SharePoint Administration Services component. The Front-End Services component will allow you to configure the Import Service and Link Tracking Service using the Site Settings page of SharePoint.

- 5 Enter a unique port number and host header for the IIS Web site to configure a Web address for the Import Service.

The Import Service is a Windows Communication Foundation (WCF) and allows a variety of transport protocols and security options. It is deployed as a stand-alone IIS web site and needs to be configured with a unique port number and/or host header on your server.

- 6 Use an existing or create a new application pool.
- 7 Enter the service account credentials for the application pool.

The service account must have administrative rights on the local computer and any target SharePoint site to which you plan to migrate. The application pool will also need read, write and execute privileges for the Link Tracking database.

- 8 Click **Next**, then click **Install**.

- 9 Install the Link Tracking Service.

The Link Tracking Service uses a SQL Server database to keep track of documents that have been migrated to SharePoint and intra-document references. If you plan to migrate Notes documents to multiple SharePoint site collections, you may wish to direct each Link Tracking instance to the same shared database so intra-document links will work correctly in as many cases as possible.

i | **IMPORTANT:** If you are creating a new database, enter a server name and credentials, and click Create Database, or if you upgrading an existing Migrator for Notes to SharePoint that is using a Link Tracking Database, enter the server name and credentials, and click Test Database Access.

- 10 Close the Link Tracking Service dialog box. The installation continues.

- 11 Click **Finish**.

i | **NOTE:** If you are upgrading Migrator for Notes to SharePoint Services, uninstall your current version and install 6.16. For more information, see [Uninstalling Migrator for Notes to SharePoint services](#) on page 21.

Deploying solutions

Portions of Migrator for Notes to SharePoint Services are packaged and deployed as SharePoint Solutions. The benefit of the solution package deployment is the ability to auto-deploy Migrator for Notes to SharePoint Services globally across all the server farms.

The Migrator for Notes to SharePoint Services installer adds the following solutions to your SharePoint farm:

Table 9. Solutions

	Package name	Where used	Deployed to
Administrative Services	Quest.nmsp.admin.wsp	Central Administration	Central Administration server
Run-Time Services	Quest.nmsp.frontend.wsp	SharePoint Sites	All front-end servers

The Solution Package Runner creates a log in the Windows Temp directory called solutionrunner.log.

During installation of Migrator for Notes to SharePoint Services, you can choose not to deploy the solutions at installation time. You can deploy them later using the Migrator for Notes to SharePoint Solution Package Runner, SolutionDeployer.exe. This can be found at: C:\Program Files (x86)\Quest\Migrator for Notes to SharePoint\Bin.

To deploy the Administration Services Solution

- Click **Add Administration Services Solution**.

To deploy the Front-End Services Solution

- Click **Add Front-End Services Solution**.

To remove a solution

- Click the corresponding **Remove** button.

Deploying solutions using SharePoint Central Administration

You can also deploy the solutions manually using STSADM command or the standard Solution Deployment interface in SharePoint Central Administration.

To deploy solutions using SharePoint Central Administration

- 1 Select **System Settings | Manage farm solutions**.
- 2 Select **Deploy Solution** for Quest.Migrator for Notes to SharePoint.admin.wsp and/or Quest.Migrator for Notes to SharePoint.frontend.wsp.
- 3 Click **OK**.

Verifying your installation

There are several ways that you can verify that the components of Migrator for Notes to SharePoint Services are installed and operational.

- 1 Migrator for Notes to SharePoint clients use a web service to get configuration information for particular SharePoint Sites. You can verify that this service is operational by accessing **<site url>/_layouts/NMSPServicesInfo.aspx** in your browser (where <site url> is the URL on a configured SharePoint site). You should see a basic ASP.NET web service description page.
- 2 If running the Import Service, you can verify that this service is operational by accessing the Import Service Address from your Import Service configuration. You should see a basic WCF web service description page.
- 3 If running the Link Tracking Service, you can verify that the link redirector page is operational by accessing **<site url>/ QuestLinkTracking.aspx ?unid=xxx** in your browser (where <site url> is the URL on a configured SharePoint site). You should see the basic Link Tracking redirector page, even though it will not reference any actual documents. If you do not see this page, you may need to manually activate the Migrator for Notes to SharePoint Link Redirector feature in Site Collection Settings. The installation program attempts to automatically activate this Feature on all existing site collections, there some environments where this does not work. Also, the feature is not automatically activated when new site collections are created. You may need to go to Site Settings | Site Collection Features and manually activate the "Migrator for Notes to SharePoint Link Redirector" feature.

Uninstalling Migrator for Notes to SharePoint services

To uninstall Migrator for Notes to SharePoint services

- 1 From the Control Panel, find uninstall or change a program.
- 2 Right-click **Migrator for Notes to SharePoint Services** and click **Uninstall**.

i **NOTE:** If SharePoint is removed from the computer before removing Migrator for Notes to SharePoint, the Migrator for Notes to SharePoint Services will not uninstall properly. Uninstall Migrator for Notes to SharePoint before uninstalling SharePoint.

Migrator for Notes to SharePoint: Configuration and administration

- [Configuring Migrator for Notes to SharePoint services](#)
- [Verifying your configuration from Migrator for Notes to SharePoint Designer or Console](#)
- [Upgrading Migrator for Notes to SharePoint](#)

Configuring Migrator for Notes to SharePoint services

After installing Migrator for Notes to SharePoint Services on a SharePoint server, you can enable the Import Service, the Link Tracking Service, or both for each individual site collection on your server.

i | **NOTE:** Link Tracking can be performed by the client rather than by the Service. If you do not want to connect your production SharePoint environment to our Link Tracking database, use the client side Link Tracking. If you use the client side Link Tracking, you do not need to configure the Link Tracking Service as described below. You will need to configure Link Tracking using the Link Tracking of the Global Options window of the Console or Designer.

i | **IMPORTANT:** Migrator for Notes to SharePoint services are configured per site collection. Make sure you select each site collection you plan to migrate.

To configure Migrator for Notes to SharePoint Services

- From **SharePoint Central Administration**, select **General Application Settings**. In Quest Migrator for Notes to SharePoint, select **Configure Migrator for Notes to SharePoint Services**.

or

- From the **Site Settings** page of your SharePoint site collection, select **Migrator for Notes to SharePoint settings** in the Site Collection Administration group.

Link Tracking database

The Link Tracking Database keeps track of each document as it is migrated. This enables automatic redirection when users click on Dynamic Links as well as finalization of links after all documents have been migrated.

Use of the default database server and database name is recommended for most cases. Refer to the guide for advanced scenarios where specifying database information is required.

Activating Link Redirector

The Link Redirector feature needs to be activated in the Site collection features if you want to use Link Tracking with the Import Service. In many cases, this feature is not activated automatically for existing site collections. For newly created site collections, it is not activated either.

Redirector page

Notes DocLinks may be converted to Dynamic Links as they are migrated to SharePoint. These are actually URLs to a Redirector Page, which is responsible for redirecting users to the current location of the target document. (At any given time, some documents will have been migrated to SharePoint lists or libraries whereas other may still exist in Notes only.)

By default, Dynamic Links in migrated documents will reference the Redirector Page on the same SharePoint server. In rare cases, you may want to specify a Redirector Page on a different server instead. (This setting impacts future migrations only. To change the Redirector Page location in documents you have already migrated, use the Link Tracking Updater/Finalizer tool.)

You can also decide whether users should be redirected automatically (if possible) or whether they should first see information about the target document.

NOTE: If you do not have access to SharePoint Central Administration and you installed the Front-End Services component, you can use the Site Settings page of SharePoint.

Link Tracking Updater

The Link Tracking Service keeps track of each migrated document in a SQL Database, known as the Link Tracking Database. This database is created when you first install Migrator for Notes to SharePoint Services.

Over time, your Link Tracking Database may contain links to documents that were subsequently deleted or were written using an older version of Migrator for Notes to SharePoint. Analyzing all the links in the database before updating or finalizing your links is strongly recommended.

The Link Tracking Database Updater allows you to update the locations of your migrated documents in the Link Tracking Database. This will be useful if the locations of your migrated documents have changed (for example, you may have changed the external host name of your SharePoint server, changed the path for a SharePoint site, or moved your content database to a different server). You can also preview the changes that will take place in the Link Tracking database, then update to commit the changes to the Link Tracking Database. You can view the log files and see the status of the update.

Link Tracking Finalizer

You can use this tool to update or permanently replace all Dynamic Links in a set of migrated documents. This works for links in SharePoint List Items, SharePoint Pages, InfoPath documents, Word documents or any other SharePoint target you chose to migrate to. A secondary reason might be to change the location of your Redirector Page.

Decide what you want to do with Dynamic Links that point to migrated documents. The most common is to replace them with direct links to the migrated documents (that is, their new URLs in SharePoint). Since this is a permanent, irreversible operation, we refer to it as "Finalization".

You also need to decide what you want to do with Dynamic Links that point to un-migrated documents. Our recommendation is to leave them the way they are, in case you want to migrate the linked-to documents later. If you are really sure that those documents are going to stay in Notes, you can finalize those links with the original Notes/Domino URLs.

Import Service shared folders

The use of the shared folder during data transfer is optional. Even if it is configured on the server, it can be turned off by any of the clients. If it is turned off, the client will transmit the data as encrypted bits in memory which can be a slower process. For migrations using the Console, the option to turn off the shared folder is located in the SharePoint tab of the Global Options window. For migrations using the Designer, the option is located in the SharePoint Options tab of the Global Options window.

The user running the client will need read/write access to this folder. The Import Service accesses the files by impersonating the user specified in the SharePoint authentication section of the Global Options window. This user needs to have read/write access to the shared folder as well. If you are using Windows authentication, then the same identity being used when running the client ("Joe") is the same identity that the server will use to access the files ("Joe"), so only "Joe" needs to have read/write access to this folder. If you are using different SharePoint credentials ("Servername\Sally"), then the Import Service will impersonate "Sally" when accessing the shared folder, so "Sally" needs to be given read/write access to this folder as well.

The files that are copied to the shared folder are automatically deleted by the Import Service once the data transfer is complete. If the Import Service is terminated in an unexpected way (e.g., using IISReset or rebooting the server while a Import Service session is active), then the Import Service will not have had an opportunity to delete the shared folder for that session. The administrator will need to manually delete these "orphaned" session subfolders in these cases.

i | **NOTE:** Migrator for Notes to SharePoint will not make any attempt to encrypt these intermediate files. If privacy is an issue, the system administrator should make sure that only the authorized accounts have access to the folder.

Configuring Link Tracking Service

To configure the Link Tracking Service for a site collection

- 1 Open Migrator for Notes to SharePoint Services configuration page.
- 2 Select the site collection on which that you want to enable the Link Tracking Service.
- 3 Select **Enable Quest Link Tracking Service** check box.
- 4 Enter a database server and name. This is the SQL Server instance and name that contains the Link Tracking database. This value was set by the Migrator for Notes to SharePoint Services installer but may be overridden
- 5 Select a security authentication. These are the credentials that the Import Service or locally running instances of Migrator for Notes to SharePoint should use when accessing the Link Tracking database. This value was set by the Migrator for Notes to SharePoint Services installer but may be overridden.

i | **IMPORTANT:** Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.
- 6 Select a Page Redirector Location to redirect users to the current location of the target document, and Redirection Behavior to determine if users should be redirected automatically (if possible) or if they should first see information about the target document.
- 7 Click the **Update links in the Link Tracking Database** link, if the location of your migrated documents has changed and update the references to the documents. For more information, see [Link Tracking Updater](#) on page 23.
 - a Enter the old URL prefix of the documents as they currently appear in the Link Tracking database.
 - b Enter the new URL prefix that you want to be the replacement for the above URL prefix.
 - c Click **Preview** to preview the current references to documents as stored in the Link Tracking database and the proposed new references to the documents.

- d Click **Update** when you are ready to make the changes in the Link Tracking database. If you have lots of documents to update, you will see a status page that updates every few seconds and then a final results page.
- 8 Click **Finalize/update links in migrated documents** link, if you want to update your migrated documents to permanently, replace all Dynamic Links with Direct Links to the last known location of the target documents, or to change the location of your Redirector Page. For more information, see [Link Tracking Updater](#) on page 23.
- a Select the documents you want to migrate. Select:
 - All migrated documents:** to update all migrated documents in the Link Tracking Database.
 - All documents migrated to a specific Web Application:** to migrate the documents in a particular web application.
 - All documents migrated to a specific Site Collection:** to migrate the documents in a particular site collection.
 - b Select the links in the migrated documents to update.
 - c Select what you want to do with the links to the migrated documents. Select:
 - Leave as Dynamic Links:** to leave the Dynamic Links as they currently are.
 - Finalize with Direct Links:** to replace the Dynamic Links with direct links to the migrated documents (that is, their new URLs in SharePoint).
 - !** **CAUTION:** You should only perform this operation when you are sure that the documents your links are pointing to are indeed "final" and that they are not still moving around. If you have moved (or plan to move) these documents or otherwise change their external addresses, be sure to run the "Update links in the Link Tracking Database" tool before you finalize your links.
 - Replace with an Alternate URL:** to change the Dynamic Link to reference a different Redirector Page or to a static URL. Be sure to use the {0} notation to encode the unique identifier of the target document in the link.
 - d Select what you want to do with link to the documents that have not been migrated. Select:
 - Leave as Dynamic Links:** to leave the Dynamic Links the way they currently are. This is the recommended option.
 - Finalize with Direct Links:** to change these Dynamic Links to Direct Links that point to the original locations of target documents in Notes/Domino.
 - i** **NOTE:** notes://... URLs are not allowed in SharePoint Items. So finalizing such links in (for example) rich text fields in List Items renders them completely inoperable. It is safe, however, to finalize notes://... links in library files such as InfoPath or Word documents.
 - Replace with an Alternate Url:** to change the Dynamic Link to reference a different Redirector Page or to a static URL. Be sure to use the {0} notation to encode the unique identifier of the target document in the link.
 - e Click **Preview** to preview the current references to documents.
 - f Click **Finalize** when you are ready to make the changes.
- 9 Click **Save**.

Configuring Import Service for a SharePoint site collection

To enable and configure the Import Service client settings for a site collection

- 1 From **SharePoint Central Administration**, select **General Application Settings | Configure Migrator for Notes to SharePoint Services**.
- 2 Select the site collection where you want to enable the Import Service.
- 3 Select the **Enable Import Service** check box.
- 4 Enter the **Import Service Address**. This is the URL that remote Migrator for Notes to SharePoint clients should connect to in order to migrate content to sites in this site collection. This value was set by the Migrator for Notes to SharePoint Services installer but can be overridden.
- 5 Enter an **EndPoint Name**. This is the Windows Communication Foundation (WCF) endpoint that remote Migrator for Notes to SharePoint clients should connect to in order to migrate content to sites in this site collection. Each of the choices listed here correspond to WCF binding that is configured in the Import Service's web.config file *and* the remote clients config file. Migrator for Notes to SharePoint Services, Migrator for Notes to SharePoint currently supports two connection modes:
 - Secure HTTP (using Web Services Security)
 - Secure HTTP (using SSL for Security)
- 6 Enter an **Application Pool Identity**. The application pool identity is what the remote clients should check for when connecting to the Import Service. This is required by Windows Communication Foundation to prevent spoofing when running the Import Service with domain accounts. This may be left blank if using built-in accounts such as Network Service.
 - NOTE:** The application pool must have administrative rights on the local computer and any target SharePoint site you plan to migrate to. The application pool will also need read, write and execute privileges for the Link Tracking database if Link Tracking is enabled.
- 7 Enter a file path to the Shared Files folder.
 - NOTE:** To improve performance during migration, a shared folder can be used when transferring data to the Import Service. If the shared folder option is used, attachments are extracted to disk files instead of loading them all into memory during the data transfer. This is crucial when transferring large files that can take up more memory than what is available. This field is optional. If no shared folder is defined, the data will be transferred as encrypted bits in memory.

This shared folder needs to be accessed by both the clients and the server; the clients will copy files to that location, and then the server will access those files when writing to SharePoint. Specify the path to this folder in the **Shared Files folder path** field. If clients need to use a different path to access this shared folder (for instance, a UNC path), specify this path in the **Shared Files Client Access Path** field. This field is optional. For more information, see [Import Service shared folders](#) on page 24.
- 8 If you want to test your import service settings, click the **Test Import Service Settings** link.
 - NOTE:** Be sure to turn off your pop-up blocker for the site before clicking the Test button
 - NOTE:** User and Group Mapping can be performed by the client rather than the Service. If you prefer to have the client perform the mapping, the below User and Group Mapping configuration is not required. You will need to turn on client mapping using the SharePoint tab of the Global Options of the Console or Designer.
- 9 Select an input translation for the User Mapping.

Notes names can come in different formats (Canonical, Abbreviated, Common). If your input data (from Notes) is in one format and your XML mapping file or ADSI query is using a different format, you should specify a translation option.
- 10 Select a mapping source.

SharePoint tracks "users" as numeric indexes into the SharePoint Site Collection Users list. When using the "Preserve Created/Modified Identities" option in your Job Definition, or when attempting to migrate a Notes name field to a SharePoint User field, Migrator for Notes to SharePoint Services will attempt to map Notes names to Site Collection User identities based on the rules configured here. There are currently three options for doing this:

- **Treat input as Login Name** - The input data provided must equate to a valid Windows login name. Simple name translations are provided (for example, reformat the Notes name "Joe Cool/NMSP" to "NMSP\Joe Cool").
- **Use ADSI/LDAP Lookup** - Use the input data (most likely the Notes Name) as the basis for an Active Directory (or other LDAP) lookup to find the correct Windows login name. If you select this option, the following parameters can also be specified:
 - **ADSI path:** You should specify the path to the Active Directory (or other LDAP) server that contains the user mappings. You can actually use any ADSI path here including "GC://" for the global catalog and "WinNT://" for the local metabase.
 - **Query String:** You should specify a valid query string for finding the user based on the Notes Name. For example, if your policy is to store the Notes Name in the Description field of Person records in Active Directory, you might specify "(&(ObjectClass=Person)(description={0}))" as the Query String.
 - **ADSI login name and ADSI password:** If your directory requires authentication for searching, you can specify that here.
- **Use Text File Lookup** - Use the input data (most likely the Notes Name) as the basis for a lookup in an XML or comma-delimited text file to find the correct Windows login name. In practice, most organizations that have both Notes and Active directory will have the mapping of names stored somewhere and it is usually a simple matter to write a script to generate a simple mapping file. If you select this option, the following parameters can also be specified:

- **Path:** The location of the mapping file.
- **Format:** The mapping file can be formatted as an XML file or a Comma Delimited file. An example of each format is shown below:


```
<?xml version="1.0" encoding="utf-8" ?>
<identityMappings>
  <userMappings>
    <user notes="Joe Cool/Proposion" sharePoint="PROPOSITION\jcool" />
    <user notes="Mike Mulligan/ProposionTest"
sharePoint="BUNTING\mike" />
  </userMappings>
  <groupMappings>
    <group notes="Authorized Users" sharePoint="PROPOSITION\Team
101" />
    <group
notes="QuickPlaceAdministratorsSUGroup"sharePoint="BUILTIN\Admin" />
  </groupMappings>
</identityMappings>
Joe Cool/NMSP, NMSP\jcool
Max Smart/NMSP, BUNTING\mike
```

11 If translating, enter an output translation.

12 If you want to test the user mapping settings, click the **Test User Mapping Settings**.

13 Select an input translation for the Group Mapping.

Notes names can come in different formats (Canonical, Abbreviated, Common). If your input data (from Notes) is in one format and your XML mapping file or ADSI query is using a different format, you should specify a translation option.

- 14 Select a mapping source. For more information, see [Select a mapping source](#). on page 26.
- 15 If translating, enter an output translation.
- 16 If you want to test the group mapping settings, click the **Test Group Mapping Settings**.

You can enable SSL and logging with the Import Service.

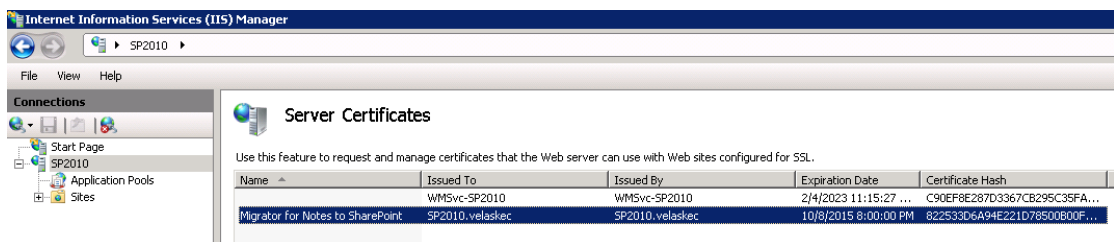
Enabling SSL for Import Service

To enable SSL transport

- 1 If you do not already have one, create a [self-signed server certificate](#).
- 2 In the IIS, add a site binding of HTTPS type for the Import Service with the certificate file.
- 3 Install the certificate on the client computer.

- a From your browser, enter `https://<YOUR_DOMAIN_NAME>/ImportSession.svc`

You can find your domain name from Server Certificates in IIS Manage. You must enter your domain name exactly how it appears in the Issued To column.



- b Click **Continue to this website (not recommended)**.
- c Click **Certificate Error** next to the address bar.
- d Click **View certificates**.
- e Click **Install Certificate**.
- f Follow Certificate Import Wizard steps and accept all defaults to add the certificate.

NOTE: If you do not perform these steps, the following error message appears: **“Unable to connect to the Migrator for Notes to SharePoint Import Service ‘https://<YOUR_DOMAIN_NAME>/ImportSession.svc’. Could not establish trust relationship for the SSL/TLS secure channel with authority <YOUR_DOMAIN_NAME>”**.

- 4 Open the Import Service’s web.config file located in C:\Program Files\Quest\Migrator for Notes to SharePoint Services\Import Service.
- 5 Edit the fields in bold:

```
<system.serviceModel>
  <services>
    <service name="Quest.NMSP.SharePoint.ImportService.ImportSession"
behaviorConfiguration="ImportServiceBehavior" >
      <endpoint binding="wsHttpBinding" address=" "
bindingConfiguration="HttpBinding"
contract="Quest.NMSP.SharePoint.ImportService.IImportSession" />

```

```

        <endpoint binding="wsHttpBinding" address=""
bindingConfiguration="SSLBinding"
contract="Quest.NMSP.SharePoint.ImportService.IImportSession"/>
    </service>
</services>

```

- 6 Configure the import service to a SharePoint site collection. For more information, see [Configuring Import Service for a SharePoint site collection](#) on page 26.

Enabling Logging for Import Service

To enable logging

- 1 Open the Import Service's web.config file located in C:\Program Files\Quest\Migrator for Notes to SharePoint Services\Import Service.
- 2 Edit the fields in bold.

```

<appSettings>
    <add key="writeToEventLog" value="true" />
    <add key="logErrors" value="true" />
    <add key="logWarnings" value="false" />
    <add key="logInformationMessages" value="false" />
</appSettings>

```

You must modify the default Event Viewer settings for the Migrator for Notes to SharePoint event log so that logging does not stop when the event log uses up a fixed amount of memory. Select **Overwrite events as needed** in the Migrator for Notes to SharePoint Properties dialog box.

Verifying your configuration from Migrator for Notes to SharePoint Designer or Console

Migrator for Notes to SharePoint can connect to local or remote SharePoint servers.

To control the mode of operation

- 1 Open the Migrator for Notes to SharePoint Designer.
- 2 Click **Options** and select the SharePoint tab.
- 3 For migrations to a remote SharePoint server, select a type of SharePoint environment.
 - i** | **NOTE:** You can connect to multiple SharePoint environments by clicking the Enable multiple SharePoint environments check box.
- 4 Click **Add** to enter a SharePoint URL.
- 5 Click Test Connections to verify the connection to the URL.

The following tests are performed:

- Can you access the site with the address and credentials you supplied? If this test fails, correct your address and credentials and try again.

- Is the site you specified enabled to allow remote import of documents? This requires that Migrator for Notes to SharePoint Services be installed on the remote server and that the Import Service is enabled and configured for that particular site collection.
- Can you connect to the Migrator for Notes to SharePoint Import Service? If this test fails, make sure that the Import Service is running and that the service address and endpoint are correctly configured for that particular site collection. Also, check that the host name and port number being used by the Import Service is not being blocked by a firewall on the client or server.

Upgrading Migrator for Notes to SharePoint

To upgrade Migrator for Notes to SharePoint from a previous version

- 1 Uninstall Migrator for Notes to SharePoint. See [Uninstalling Migrator for Notes to SharePoint](#) on page 16.
- 2 Install Migrator for Notes to SharePoint 6.16.

If you are upgrading from Migrator for Notes to SharePoint 6.9.1, you need to run the license upgrade tool after installing the new version to make your license consumption data available in the **License Status** dialog box. The tool is located at `<MNSP_Home>\bin\UpgradeLicenseData.exe`, you can run it by double clicking or from a command prompt window.

i | **NOTE:** If you have installed the Import Service on your SharePoint Web Front-End server, you must uninstall it from Control Panel on that computer. Then you can install the current version of this service.

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.

- A
- Analyze/Repair links in the Link Tracking Database 23
- C
- choosing a client 10
- choosing between Import Service and Web Services 9
- client
 - choosing 10
 - installing 13
 - uninstalling 16
- Command Line 5
- Configuring Migrator for Notes to SharePoint Services 22
- Configuring the Import Service 26
- Configuring the Link Tracking Service 24
- Console 5
- D
- deploying the Sandbox Redirector Page 13
- Designer 5
- Domino.doc support 8
- F
- features and functions 5
- Front-End Services 6
- I
- Import Service 6
- Import Service and Web Services
 - choosing 9
- Importing a New License 15
- Installing a License for Migrator for Notes to SharePoint 15
- Installing on separate "Import" and "Export" computers 13
- installing services 18
- installing the client 13
- L
- Lotus Notes support 8
- O
- overview 4
- P
- Prerequisites for Install 11
- Q
- QuickPlace/Quickr support 8
- R
- Running the Installer 13
- Running the NMSP Services Installer 22
- S
- Sandbox Redirector Page 7
 - deploying 13
- Sandbox-safe Link Redirector 7
- services
 - installing 18
 - uninstalling 21
 - verifying the installation 20
- SharePoint support 9
- Simplicity and Power 5
- U
- uninstalling the client 16
- uninstalling the services 21
- V
- Verifying installation from Notes Migrator for SharePoint Console 29
- Verifying Notes Connectivity 15
- Verifying Remote SharePoint Connectivity 16
- verifying the services installation 20