SolarWinds
Database Mapper
Created on: 20 October 2022
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SolarWinds Account Management

SolarWinds Customer Portal

As of version 2021.8, you must use the SolarWinds Customer Portal to manage your account and product licenses.

Additional Information: For more information about the updated product licensing, see the SQL Sentry, Database Mapper, and Task Factory licensing articles.

SolarWinds Self-Service Options

Once you are logged into the SolarWinds Customer Portal, you have several important self-service options available, including:

1. License and renewal information and management options are on the left.
2. The Technical Support option on the top menu provides a link to Open a Support Case.
3. Links to product downloads and release notes are available in the center.
4. Your open support cases appear below the product downloads section.
**Note:** For SQL Sentry licensing, you can use the **Add Note** feature to keep track of the license keys installed on your server installations.

**Note:** The **View Details** option displays more information about license key activation, including the computer name used for activation.
SolarWinds Product Downloads

On the Product Downloads view, select your products and licenses from the drop-down menus to get the links for your products. In the example below, there are multiple downloads for the different installation and upgrade options for SQL Sentry (e.g. Unified Setup vs. Enhanced Platform Installer).

my.sentryone.com

⚠️Deprecated: As of version 2021.8, you must use the SolarWinds Customer Portal to manage your account and product licenses.

The my.sentryone.com page described below is only for SentryOne branded products before version
SentryOne Account

Go to my.sentryone.com to log into your account, create a new account, or get help with a forgotten password.

How do I edit my SentryOne account information?

Select Edit Account Info from the Welcome banner.

The Edit Account Profile screen lets you update your name, contact address, email address, and password information.

SentryOne Products

Where do I download SentryOne installation files?

The Downloads section contains links to download all the latest versions of products applicable to your account.
How do I get the AWS Marketplace and Azure Marketplace images for SentryOne?

Select the **AWS Marketplace VM** or **Azure Marketplace VM** link from the **Resources** menu on the sidebar.

**SentryOne Licensing**

Where can I view my SentryOne licensing information?

On the **Licenses** sidebar box, there are options for **Perpetual Licenses**, **Evaluations**, and **Subscriptions**. Select the applicable category, then select the license key to get additional information.
How do I add subscriptions to my SentryOne account?

Select **Subscriptions** from the Licenses sidebar box. You will need to contact the SentryOne sales team if your account is not set up for subscription-based licensing.

How do I update the server name on a SentryOne license key for SQL Sentry?

Select the applicable **license key** from the **Licenses** sidebar box, then:

1. Go to the **Update Server Name** section and enter the new **Friendly Name** and **Server Name** for the license key. You may optionally enter a reason for requesting this change.
2. Select the **Update** button.
3. Select **Email Key** or **Copy Key to Clipboard** to get a copy of the license key text.

**Additional Information:** See The Hardware Key and Applying a New License sections of the License Management article for additional instructions on using the new license key.

How do I manually activate a license for SentryOne Task Factory, SentryOne Document, or Workbench products?

This option is needed for machines that do not have internet access to automatically activate a license during product setup.

1. For SentryOne Document, Task Factory, SentryOne Test, BI xPress, DBA xPress, DOC xPress, LegiTest,
DTS xChange, and Pragmatic Workbench products, go to the **S1 TaskFactory/Workbench Licenses** section.

2. Select the applicable **Activation Key** from the table. This opens the **Manage License** screen.

3. Go to the **Manually Activate License** section.

4. Enter the **Environment Identifier** and **Environment Key** for the license you are activating.

5. Select the **Manually Activate License** button.

![Manually Activate License](image)

**Manually Activate License**

<table>
<thead>
<tr>
<th>Activation Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Activation Key Field]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Environment Identifier Field]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Environment Key Field]</td>
</tr>
</tbody>
</table>

**MANUALLY ACTIVATE LICENSE**

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**How do I manage SentryOne license contacts?**

1. For SentryOne Document, Task Factory, SentryOne Test, BI xPress, DBA xPress, DOC xPress, LegiTest, DTS xChange, and Pragmatic Workbench products, go to the **S1 TaskFactory/Workbench Licenses** section.

2. Select the applicable **Activation Key** from the table. This opens the **Manage License** screen.

![S1 TaskFactory/Workbench Licenses](image)

**S1 TaskFactory/Workbench Licenses**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Activation Key</th>
<th>Quantity</th>
<th>Activation Count</th>
<th>Company Name</th>
<th>Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>SentryOne Document</td>
<td>Q123456789012345-ABC-12345</td>
<td>1</td>
<td>1</td>
<td>SentryOne</td>
<td>07-16-2025</td>
</tr>
</tbody>
</table>

3. On the **Manage License** view, select **View Contacts**.

![Manage License](image)

**Manage License**

<table>
<thead>
<tr>
<th>Activation Key</th>
<th>[View Activations]</th>
<th>Quantity</th>
<th>[View Contacts]</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Activation Key Field]</td>
<td>![View Activations Button]</td>
<td>![Quantity Field]</td>
<td>![View Contacts Button]</td>
</tr>
</tbody>
</table>

**View Activations**

**View Contacts**

From the **Contact Details** view, you can **add** or **remove** contacts.

1. To add a new contact, select **Add Contact** from the **Contact Details** view.
On the Add Contact form, enter the Name and Email information, then select Add.

Add Contact

Name: Melissa Connors
Email: mconnors@sentryone.com

Important: For Database Mapper (previously known as SentryOne Document), you must add users as contacts to the license in addition to adding them as users to Organization Settings. The Name and Email must match what is entered in Organization Settings.

How do I view license activation history for SentryOne Task Factory, SentryOne Document, or Workbench products?

1. For SentryOne Document, Task Factory, SentryOne Test, BI xPress, DBA xPress, DOC xPress, LegiTest, DTS xChange, and Pragmatic Workbench products, go to the S1 TaskFactory/Workbench Licenses section.
2. Select the applicable Activation Key from the table. This opens the Manage License screen.
3. Select View Activations from the Manage License screen. This displays the Environment Key, Date Last Activated, and Environment Identifier information.
Database Mapper Release Notes
Last Modified on 18 October 2022

For more information on the additional steps SolarWinds is taking to improve our security posture and policies, please reference this blog by SolarWinds President and CEO Sudhakar Ramakrishna.

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

2022

Version 2022.4 [October 18, 2022]

Features
- 69095: Database Mapper (Cloud) not releasing sources
- 69153: Add Card View to the redesigned Solution's Dashboard
- 69154: Add Solution Snapshot status on the Solution’s Dashboard Card View
- 69393: Add error icons & tooltips to the Database Mapper Solution Configuration Tool
- 69566: Add onboarding enhancements to the Database Mapper Configuration Tool

Fixes
- 68953: "Binding Could Not be validated" validation to be handled
- 69422: Issue with Cancel button during snapshot
- 69601: Cors error in Database Mapper Software when the application is in Idle mode for a long time

Version 2022.3 [July 21, 2022]

Features
- 68712: Improve filter and validation speed for SSIS datasources
- 68844: Display group membership and associated permissions when displaying effective permissions
- 69005: Add Business Analyst and Developer Documentation output types to Start Snapshot screen
- 69058: Add Combined Remote Agents and Remote Agent Pools screen
- 69059: Logically group all implicit items in the Lineage Navigator
- 69078: Add Lineage export options
- 69116: Add Help context menu
Fixes

- **69003**: Changed Config Utility default ports
- **69009**: Fixed Documentation page link from lineage to documentation

Version 2022.2 [April 19, 2022]

Features

- **54812**: Can automatically assign Solution Items to new Remote Agent pool when reassigning Solution
- **57445**: Solution Explorer in lineage and documentation now scroll to ensure selected item is in view
- **57966**: Paging support for retrieving history entities from Data Dictionary
- **58253**: Improved styling for task history
- **59638**: Manual snapshot cannot be taken if there is a running/pending snapshot for that solution
- **62804**: Improve usability of application items when configuring data dictionary
- **64009**: Enable Typescript Strict Mode
- **66602**: Document Comparison UI Improvements
- **66696**: Documentation search remembers location when navigating back to results
- **66959**: Improved feedback when configuring remote agent
- **67148**: Can view a user’s effective permissions
- **67286**: Data dictionary analysis mode UI improvements
- **67433**: (On-Prem) Display a banner if license is expired
- **68056**: Improved consistency of Remote Agent Pool deletion process
- **68502**: Circular references no longer expand infinitely when using Lineage text view
- **68555**: Data Dictionary now orders DacFx technology type/applicable items correctly
- **68584**: [On Prem] Configuration Tool no longer gets out of sync on service installation status
- **68671**: [On Prem] Configuration Tool usability improvements
- **68672**: [On Prem] Improve IP and Hostname support in Configuration tool
- **68673**: [On Prem] Improve port selection and defaults in Configuration Tool
- **68714**: Data grid no longer shows browser console errors in certain scenarios
- **68779**: Documentation Compare now has linked scroll bars for navigating differences
- **68780**: Documentation Compare now allows inline/combined view of differences

Fixes

- **65626**: Data Dictionary for Excel
- **66172**: Typing in a file location doesn’t validate in solution configuration tool
- **67552**: Dialogs flickering when saving Data Dictionary configuration
- **68270**: Parameter link for SPROCs are broken
- **68343**: [On Prem] Dependency filter reversed for Lineage
- **68358**: Error snapshotting Azure SQL DB using DacFx provider
- **68583**: [On Prem] Bi-directional dependencies show when inbound/outbound-only selected in Lineage
• **68748**: [OnPrem] Browser console errors showing when hovering over Lineage links
• **68750**: [OnPrem] Lineage sending incorrect dependency data

## 2021

### Version 2021.18.7 [November 30, 2021]

**Fixes**

• **68556**: DMR Software couldn't retrieve documentation icons.
• **68579**: SSRS reports couldn't be captured due to log4net.
• **68419**: Snapshots failed when retrieving data dictionary categories from the host.

### Version 2021.18 [September 20, 2021]

**Features**

• **67499**: Add DacFx provider.
• **68153**: Add a Configuration Utility for Database Mapper Software.
• **68264**: Modify solution configuration tool to list all providers.
• **68289**: Add Permissions Check to the Remote Agent Config tool.

**Fixes**

• **67959**: Can't undelete or recreate a Value List with the same name.
• **68326**: Old logo displaying in documentation.
• **68342**: Identically named SSRS reports counted as one object.

### Version 2021.12 [July 15, 2021]

**Features**

• **68072**: Add ability to add Users to a Group from the Group UI.

**Fixes**

• **67934**: Issue with "Snapshot Not Found" errors.
• **68054**: Add Remote Agent Pool dialog does not disappear after selecting Save.
• **68074**: Close button can be pushed offscreen in Version History view.

### Version 2021.8 [May 25, 2021]

**Notes**

• SentryOne Document has been renamed and rebranded to SolarWinds Database Mapper.
• In addition to logos and icons being updated, the licensing has been switched to SolarWinds licensing.
Starting with version 2021.8, your license and software downloads are available through the SolarWinds Customer Portal. Older versions (prior to the 2021.8 rebranding) are still managed through your SentryOne account.

- You may still encounter the SentryOne Document name in things such as program directories and log files.

**Features**

- **66297**: Implement Data Dictionary Grid Analysis View.
- **67042**: Cross solution comparison now available in Standard and Premium tiers.
- **68041**: Oracle Provider added as a supported data source.
- **68042**: MySQL Provider added as a supported data source.
- **68043**: PostgreSQL Provider added as a supported data source.
- **68047**: Feature based permissions added.

**Fixes**

- **67353**: Search does not honor chosen point in time.

**Version 2021.3 [February 25, 2021]**

**Notes**

- **66717**: SentryOne Document requires accepting the SolarWinds EULA.

**Features**

- **64322**: New Deleting status for solutions.
  - Prevents solution from being imported again while they are still deleting.

**Fixes**

- **66606**: Data Dictionary Save button within documentation will appear disabled, but can still be clicked.
- **66632**: Issue with duplicate object names in the Power BI provider.
- **66633**: Progress dialog "Please wait" status does not disappear after deleting a solution alias.

**2020**

**Version 2020.24 [December 3, 2020]**

**Note:** Version 2020.24 includes two new features: Document Comparison and Data Dictionary Search. Snapshots taken with a remote agent version prior to 2020.24 did not gather the required metadata to support these features. Therefore, only snapshots taken with a remote agent version 2020.24 or higher will be capable of leveraging these new features.

**Data Dictionary Search** will automatically work for new solutions added after upgrading to 2020.24.
Existing solutions require a manual process to convert them. Follow these steps:

1. Go to **Data Dictionary ➔ Categories**.
2. Create a new **Category** (this can be deleted later).
3. Ensure the new **Category** applies to **All Solutions**, **Solution Items**, and **Global Technology Type**.
4. In the **Applicable Items** drop down, select every item, then save the new **Category**.
5. Request a new snapshot for the solution.
6. Once the snapshot completes, you can delete the **Category** that was created for this process.

**Features**

- **66308**: Add Document comparison view
- **66497**: Improve lineage support for connections between PowerBI and AS cubes
- **66511**: Add ability to export snapshot from SentryOne Document for analysis
- **66533**: Display task progress during document generation
- **66534**: UI updates to workflow history grid header
- **66543**: Improve Document finalization progress updates to account for search indexing

**Version 2020.23 [November 17, 2020]**

**Fixes**

- **65938**: Workflows cannot recover after an IIS App pool recycle/restart
  - Note: **Software** version only
- **65940**: Track and surface Lineage and Document Finalization task progress in the task history UI

**Version 2020.22 [November 3, 2020]**

**Fixes**

- **66258**: Longer object names are not visible in documentation treeview

**Version 2020.21 [October 20, 2020]**

**Fixes**

- **66043**: Lineage graph spacing was off in certain scenarios
- **65093**: Error loading values in Lineage Text View
- **65980**: Current version/point in time button was not disabled when no solution selected
- **64900**: Better handling and recovery after several failed attempts to generate a corrupted snapshot
- **66116**: Server nodes show up as 'Unknown' in Environment Map
- **66067**: Cannot establish link from SSAS to PowerBI

**Features**
• **66044**: Lineage Graph layout enhancements

• **64209**: SSRS provider support for Visual Studio 2019 prerequisites

• **66157**: Surface underlying error code when SentryOne Document Remote Agent user account validation fails during install

**Version 2020.20 [October 8, 2020]**

**Fixes**

• **Fix 65893**: Some users unable to view point in time documentation

• **Fix 65906**: Request body too large error
  
  This requires updating the SentryOne Document remote agent software

  If you are using the SentryOne Document Software version, that software must be updated as well

**Version 2020.19.2 [October 1, 2020]**

**Notes**

• Updated styling for Lineage Graph

**Version 2020.19 [September 22, 2020]**

**Fixes**

• **Fix 65716**: Errors when installed on machines using time zones outside the US

  • **Note**: Software version only


**Fixes**

• **Fix 65194**: API fails to start when using SQL Authentication and the password contains a comma

  • **Note**: Software version only

**Version 2020.15.1 [August 11, 2020]**

**Features**

• **Feature 64536**: Improved in-app guides for SentryOne Document

  • **Note**: Cloud version only

**Version 2020.15 [July 29, 2020]**

**Features**

• **Feature 57935**: Ability to collapse the legend in the lineage view
- **Feature 64400**: Update organization for drop downs

**Fixes**
- **Fix 64289**: Resolved an issue with text resizing when the window is resized

**Version 2020.14 [July 14, 2020]**

**Features**
- **Feature 63885**: SentryOne Document Environment Map: Support to add SentryOne Database as a data source
- **Feature 64373**: Ability to limit what is produced from snapshot for Environment Map

**Version 2020.12 [June 17, 2020]**

**Features**
- **Feature 63862**: Performance improvements to snapshot finalization process
- **Feature 64321**: Performance improvements to snapshot deletion process
- **Feature 64239**: Ability to view lineage in a text view

**Version 2020.11 [June 2, 2020]**

**Features**
- **Feature 64044**: Enable installer to change server name and host name via command line installation
  - **Note**: SentryOne Document Software version only
- **Feature 63913**: Add ability to filter lineage by technology subclass so that only certain types of dependencies are shown

**Version 2020.10 [May 20, 2020]**

**Features**
- **Feature 62115**: DOC xPress to SentryOne Document Migration Tool (Import feature)
- **Feature 60545**: SentryOne Document Software (an on-premises, self-hosted version of SentryOne Document)

**Fixes**
- Various technical and UI/UX enhancements

**Version 2020.1.4 [April 17, 2020]**

**Fixes**
- **Fix 63538**: Jump To Documentation does not load selected object when single solution exists in

Fixes
- **Fix 63181**: Limit lineage dependency level limit from 5 to 3

Version 2020.324.0 [March 24, 2020]

Features
- **Feature 62767**: Added support for Azure Synapse Analytics (formerly named Azure Data Warehouse) as a documentation data source

Fixes
- Various technical and UI/UX enhancements

Version 2020.225.0 [February 27, 2020]

Features
- **Feature 61323**: Added support for SalesForce as a documentation data source

Version 2020.128.1 [February 4, 2020]

Features
- **Feature 58672**: Added support for Azure Data Factory as a documentation data source

Fixes
- **Fix 61867**: Various bug fixes.

Version 2020.128.0 [January 28, 2020]

Features
- **Feature 46817**: Added Export Documentation feature
- **Feature 58221**: Data dictionary values for an object are now available via context menu on Lineage graph
- **Feature 59076**: Value lists in Data Dictionary can now be ordered
- **Feature 59098**: S1D License Tiers
- **Feature 60488**: Improved connection stability in the remote agent
Version 2019.1119.3 [January 7, 2020]

Fixes

- **Fix 61075**: Lineage finalization failure attempting to execute empty batch

Version 2019.1119.2 [December 17, 2019]

Fixes

- **Fix 61020**: Batches could be oversized in the LinkRouteInfo repository

Version 2019.1119.0 [November 18, 2019]

Features

- **Feature 58110**: Ability to jump from documentation to lineage for a chosen object
- **Feature 58409**: Workflows are now abandoned when associated Remote Agent or Solution is deleted
- **Feature 59200**: Ability to trigger a Remote Agent update from the portal
- **Feature 59655**: Improved document compare experience when there is only a single version of a document

Version 2019.1105.0 [November 4, 2019]

Features

- **Feature 56669**: The Data dictionary feature is now available
- **Feature 58002**: Hide expansion icons if a tree has no children
- **Feature 58150**: Improved the styling of the documentation content
- **Feature 58224**: Documentation version comparison is now available
- **Feature 59368**: Full browser refresh is now no longer required to pick up newly deployed changes

Version 2019.1022.0 [October 23, 2019]

Features

- **Feature 57521**: Add Remaining Data Source Tracker
- **Feature 57524**: Add unsupported browser message
- **Feature 57944**: Add user guidance available on lineage view
- **Feature 58408**: Add ability to delete future pending workflows
- **Feature 58418**: Add ability to see running tasks and installed providers from the remote agent screen
- **Feature 58424**: When queuing a workflow, ensure that there are agents in the pool
- **Feature 58627**: Show version number and update history in Remote Agents display
- **Feature 58763**: User guidance is available on documentation view
- **Feature 58804**: Add workflow locking
• **Feature 58818**: Improved Lineage toolbar and Legend display when window is shrunk

Fixes

• **Fix 58521**: Issue loading ISPAC
• **Fix 58600**: Mark workflow items as completed after a stage failure
• **Fix 58630**: Workflow cancellation does not cancel running task

Version 2019.1008.0 [October 8, 2019]

Features

• **Feature 57577**: Fetch workflow history periodically to show updates
• **Feature 57995**: Enable S1D remote agent installer to run without launching the config tool (file upgrade only mode)
• **Feature 58003**: Short circuit workflow when tasks fail
• **Feature 58004**: Updated template package

Fixes

• **Fix 58044**: Task History section headers may show failure status incorrectly
• **Fix 58624**: Task History New Task Status "Abandoned" is not supported on the UI
• **Fix 58609**: Workflow Refresh Service should not add additional loggers

Version 2019.924.0 [September 24, 2019]

Features

• **Feature 57653**: [Lineage] Links between nodes now show icons indicating the link type
• **Feature 57724**: Manage menu item has moved to a settings cog
• **Feature 57739**: Ability to switch between solutions on the Lineage view
• **Feature 58027**: Ability to switch between solutions on Documentation view & new top level Documentation menu

Version 2019.910 Preview Release [September 11, 2019]

Features

• **Feature 46877**: View lineage as a graph
• **Feature 55379**: Add ability to cancel all tasks in a workflow
• **Feature 55799**: Automatic license installation for the remote agent
• **Feature 55808**: Ability to show command line to schedule a snapshot
• **Feature 55897**: [Metadata] Ability to view metadata for a vertex within lineage
• **Feature 55898**: [Endpoint Aliases] Ability to manage endpoint aliases for a solution
- **Feature 56574**: Ability to *jump to documentation* from lineage
- **Feature 57078**: [Lineage] Ability to search solution explorer

**Version 2019.814 [August 16, 2019]**

**Features**
- **Feature 55805**: Ability to show command line to schedule a snapshot
- **Feature 50482**: Scale out support for Remote Agent reply list tracker
- **Feature 55999**: Improvements to Documentation view layout for scrolling

**Fixes**
- **Fix 56153**: Clicking node icon in documentation table of contents does not highlight the whole selected item
- **Fix 55671**: Buttons aren't styled correctly

**Version 2019.730.1 [July 31, 2019]**

**Features**
- **Feature 54176**: Documentation table of contents now shows topic icon for each node
- **Feature 55452**: Solution Items action Icon Missing Tool Tip
- **Feature 55453**: Hide hamburger menu on all grids by default
- **Feature 55672**: Fix to allow log output dialog to grow big to better show more content

**Fixes**
- **Fix 55335**: Table of contents display can run out of space

**Pilot [July 22, 2019]**
- Pilot version released
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

System Requirements

Compatible Browsers (Cloud and On-Prem)

- Chrome
- Edge

Note: Using an unsupported browser to access Database Mapper prompts an Improve Your Experience message, and asks you to use Chrome or Microsoft Edge for the best experience.

Database Mapper Software (On-Prem Only)

Database Mapper Software is an on-premises, browser-based option for documenting your data estate. This product is a replacement for the DOC xPress product and is the self-hosted version of Database Mapper cloud.

Note: Hardware requirements are workload-specific. The specs listed below are the minimum recommended.

If you’re using Database Mapper Software (the on-premises, self-hosted version), the hardware requirements are:

- 2 CPU cores
- 8+ GB RAM
• 40+ GB free storage space

The software requirements for Database Mapper Software (the on-premises, self-hosted version) are:

• SQL Server 2012 or later (to host the Database Mapper database)
• Database Mapper Software uses port 44302 for the UI host and port 44322 for the API.

Database Mapper Software Host (On-Prem Only)

To install the Database Mapper Software Host, your machine must have Microsoft .NET Core 3.1 Desktop Runtime (v3.1.19).

Database Mapper Software Additional Permissions (On-Prem Only)

This user (or the account you change it to) must have read/write access to:

• C:\Program Files (x86)\SentryOne\SentryOne Document (or your custom installation directory)
• C:\Windows\Temp
• C:\ProgramData\SentryOne\Document\_blobStorage

If you are using Windows authentication to access the Database Mapper database, the user account must:

1. Exist as a login account on the database server
2. Have access to the Database Mapper database
3. Be added to the db_datareader, db_datawriter, and db_ddladmin roles on the Database Mapper database

Note: The Database Mapper Software installer grants the required access to the SentryOneDocument database for the NETWORK SERVICE account.

Remote Agent (Cloud and On-Prem)

Note: Hardware requirements are workload-specific. The specs listed below are the minimum recommended. Because agent workloads do not benefit significantly from parallelization, one or two cores for each agent is recommended.

Remote Agent Permissions

Remote Agent Service Account

The remote agent service account must have the following for both Database Mapper Cloud and Database Mapper Software:
• Log on as a service rights
• Log on as a batch job rights
• Write access to the remote agent’s config file located at
  \(C:\text{ProgramData}\text{PragmaticWorks}\text{ServiceCore}\text{SentryOneDocumentRemoteAgentService.}\{\text{Agent Name}\}.xml\)

**Additional Information:** See the Log on as a service article on Microsoft Docs for instructions.

**Multi-Factor Authentication**

Using service accounts that require Multi-Factor Authentication (MFA) is not currently supported for connecting the remote agent service to Azure SQL Database targets. It is recommended that generalized service accounts are used for configuring connection credentials rather than accounts that are directly linked to users. For environments that require MFA for Azure Active Directory users, a service account can be excluded from the MFA requirement by using an exclusion for conditional access.

**Additional Information:** See the Use Azure AD access reviews to manage users excluded from Conditional Access policies article on Microsoft Docs for guidance on how to set up exclusions for MFA.

**Remote Agent Hardware**

• Recommend a relatively recent 64-bit processor, 8+ GB of RAM, and 20+ GB free storage space.

**Remote Agent Software**

• Windows PC with .NET 4.6.1 installed

**Remote Agent Supported Operating Systems**

<table>
<thead>
<tr>
<th>64-bit (x64) Operating Systems</th>
<th>32-bit (x86) Operating Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Server 2012</td>
<td>Windows Server 2012</td>
</tr>
<tr>
<td>Windows Server 2016</td>
<td>Windows 8</td>
</tr>
<tr>
<td>Windows 8</td>
<td>Windows 10</td>
</tr>
<tr>
<td>Windows 10</td>
<td></td>
</tr>
</tbody>
</table>

**Supported Provider Versions (Cloud and On-Prem)**
**Unsupported:** SQL, SSAS, SSIS, and SSRS versions 2008 R2 and earlier are not officially supported. The providers remain accessible in the software if the prerequisites are met, however, we will not be able to provide support for any issues that are specific to these older releases.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Supported Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySQL</td>
<td>MySQL versions 5.6 through 8</td>
</tr>
<tr>
<td>Oracle</td>
<td>Oracle versions 12c Release 1 through 21c</td>
</tr>
<tr>
<td>PostgreSQL</td>
<td>PostgreSQL versions 9.5 through 13.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SQL</th>
<th>64-bit Operating Systems</th>
<th>32-bit Operating Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Microsoft SQL Server 2012 (or later)</td>
<td>Microsoft SQL Server 2012 (or later)</td>
</tr>
<tr>
<td></td>
<td>Shared Management Objects x64</td>
<td>Shared Management Objects x86</td>
</tr>
<tr>
<td></td>
<td>Microsoft SQL Server 2012 (or later)</td>
<td>Microsoft System CLR Types for</td>
</tr>
<tr>
<td></td>
<td>Shared Management Objects x86</td>
<td>Microsoft SQL Server 2012 (or later)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x86</td>
</tr>
<tr>
<td></td>
<td>Microsoft System CLR Types for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microsoft SQL Server 2012 (or later)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>x64</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Microsoft SQL Server Transact-SQL ScriptDom is included in the Database Mapper installer.

**Important:** The SQL Server provider works against SQL Server 2005 and above when connecting to both SQL Server On-Premises and Azure Instances. The SQL Server Provider can collect columns with the Sensitivity Classification in Azure, and SQL Server 2019.
<table>
<thead>
<tr>
<th>Provider</th>
<th>Supported Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SSAS</strong></td>
<td><strong>64-bit Operating Systems</strong></td>
</tr>
<tr>
<td></td>
<td>Microsoft SQL Server 2012 (or later) Analysis Management Objects x64</td>
</tr>
<tr>
<td></td>
<td><strong>32-bit Operating Systems</strong></td>
</tr>
<tr>
<td></td>
<td>Microsoft SQL Server 2012 (or later) Analysis Management Objects x86</td>
</tr>
<tr>
<td></td>
<td><strong>SSAS Azure Analysis Services</strong></td>
</tr>
<tr>
<td></td>
<td>• Microsoft Azure Analysis Services Client Libraries</td>
</tr>
<tr>
<td></td>
<td><strong>Important:</strong> The SSAS provider works against SSAS 2005 and above when connecting to Multidimensional Instances and SSAS 2012 and above when connecting to a Tabular Instances.</td>
</tr>
<tr>
<td><strong>SSIS</strong></td>
<td>SQL Server Integration Services 2012 or later.</td>
</tr>
<tr>
<td><strong>SSRS and Power BI Report Server</strong></td>
<td>• SQL Server Reporting Services (2012 or later)</td>
</tr>
<tr>
<td></td>
<td>• Support provided for the following report locations:</td>
</tr>
<tr>
<td></td>
<td>• File System: SQL Server 2012 or later</td>
</tr>
<tr>
<td></td>
<td>• Native Web Services: SQL Server 2012 or later</td>
</tr>
<tr>
<td></td>
<td>• SharePoint Web Service: SQL Server 2012 or later</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>• These requirements are for Power BI Report Server. Power BI itself does not have any additional requirements beyond what is required for Database Mapper.</td>
</tr>
<tr>
<td></td>
<td>• KPIs and Mobile Reports are currently not supported when connecting to an SSRS 2016 or above Report Server.</td>
</tr>
<tr>
<td><strong>Tableau</strong></td>
<td>Tableau Servers with REST API enabled with the following API Versions: 2.3, 2.2, 2.1 and 2.0.</td>
</tr>
</tbody>
</table>

**Required Provider Files (Cloud and On-Prem)**

⚠️ **Important:** Provider files must be installed on the machine that will run your Database Mapper **Remote Agent**. For more information about installing the Remote Agent, see the **Remote Agent** article.
**Note:** Due to legal restrictions, some libraries cannot be redistributed by software providers. Database Mapper does not include the following libraries:

<table>
<thead>
<tr>
<th>Provider</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSAS</td>
<td>You need to install <a href="https://docs.microsoft.com/en-us/dotnet/netframework/install/install-x64-compatible">Microsoft .NET 4.5</a> to monitor SSAS 2017.</td>
</tr>
<tr>
<td></td>
<td>To connect to Azure Analysis Services, you need to download and install the latest Microsoft Analysis Services Client Libraries.</td>
</tr>
<tr>
<td>SSIS</td>
<td>To monitor SSIS 2012 or later, you need to install <a href="https://docs.microsoft.com/en-us/sql/ssis-development/sql-server-data-tools-overview">SQL Server Data Tools for Visual Studio</a> or <a href="https://docs.microsoft.com/en-us/sql/ssis-development/sql-server-data-tools-overview">Business Intelligence Development Studio</a>, and you need to install the SSIS Version that you want to document.</td>
</tr>
<tr>
<td></td>
<td><strong>Additional Information:</strong> For more information about SSIS Prerequisites in Database Mapper, see the SSIS Software prerequisites for DOC xPress, S1 Document, BI xPress KB article.</td>
</tr>
<tr>
<td></td>
<td><strong>Important:</strong> You need to have the SSIS Version that you want to document installed.</td>
</tr>
<tr>
<td></td>
<td><strong>Important:</strong> You need to have any Third-Party Products (Connection Managers, Tasks, Components, etc) that are used within the SSIS Package(s) installed to document your packages.</td>
</tr>
<tr>
<td></td>
<td><strong>Important:</strong> You need to select <a href="https://docs.microsoft.com/en-us/sql/ssis-development/sql-server-data-tools-overview">SQL Server Integration Services</a> when installing SQL Server features in Microsoft SQL Server Data Tools for Visual Studio.</td>
</tr>
<tr>
<td>Server</td>
<td><strong>Note:</strong> You need to select <a href="https://docs.microsoft.com/en-us/sql/reporting-services/sql-server-reporting-services">SQL Server Reporting Services</a> when installing SQL Server features in Microsoft SQL Server Data Tools for Visual Studio.</td>
</tr>
</tbody>
</table>

**Downloading Provider Files from Microsoft (Cloud and On-Prem)**
Note: These instructions reference an external system from Microsoft and may appear differently than described below.

Download the additional provider requirements by completing the following steps:

1. Navigate to the Microsoft SQL Server 2012 SP4 Feature Pack.

2. Select the following additional files:
   - SharedManagementObjects.msi 6.4mb
   - SharedManagementObjects.msi 7.6mb
   - SQL_AS_AMO.msi 3.6mb
   - SQL_AS_AMO.msi 2.7mb
   - SqlDom.msi 2.4mb
   - SqlDom.msi 2.2mb
   - SQLSysClrTypes.msi 2.1mb
   - SQLSysClrTypes.msi 2.4mb

3. Select Next.

4. Select Download to install the selected components.
Permissions (Cloud and On-Prem)

It's recommended that the machine running the remote agent has network access and permission to access all the solution items that you want to scan. See the Remote Agents article for additional recommendations about where to install them.

Note: Database Mapper (the cloud version at document.sentryone.com) uses https://document-api.services.sentryone.com/ as the communication endpoint and port 443 for HTTPS. These will need to be allowed by your firewall.

Technology-Specific Permissions

<table>
<thead>
<tr>
<th>Technology</th>
<th>Required Permissions</th>
</tr>
</thead>
</table>
| Azure Power BI | • Content.Create  
|              |   ◦ Delegated  
|              |   ◦ Create content  
|              | • Dashboard.Read.All  
|              |   ◦ Delegated  
|              |   ◦ View all dashboards  
|              | • Dashboard.ReadWrite.All  
|              |   ◦ Delegated  
|              |   ◦ Read and write all dashboards  
|              | • Dataset.ReadWrite.All  
|              |   ◦ Delegated  
|              |   ◦ Read and write all datasets  
|              | • Group.Read  
|              |   ◦ Delegated  
|              |   ◦ View user’s groups  
|              | • Report.ReadWrite.All  
|              |   ◦ Delegated  
<p>|              |   ◦ Read and write all reports  |</p>
<table>
<thead>
<tr>
<th>Technology</th>
<th>Required Permissions</th>
</tr>
</thead>
</table>
| **MySQL** | - Requires `SELECT` permission on `mysql.user`.  
- Permissions on any tables that will be documented.  
- For triggers to be included, the `TRIGGER` privilege is required.  
- For the definitions of stored procedures and functions to be included in the documentation, user must be named in the `DEFINER` clause for the object; or for MySQL prior to version 8, user needs `SELECT` permission on `mysql.proc`, or for MySQL version 8 (or later), user needs `SHOW_ROUTINE` privilege.  
  - 🔄 **Note:** If permissions for these are not in effect, but the user has a permission (`SELECT`, `INSERT` etc.) on the object, then that object will be in the documentation but the definition section will be missing.  

**Examples**

Setting permissions on a limited user account (to enable configuring a solution item and taking a snapshot):

```sql
GRANT SELECT ON mysql.user TO 'MyUserName'@'%';
GRANT SELECT, TRIGGER ON myschema.* TO 'MyUserName'@'%'; -- ALL tables/views
```

For stored procedures or functions:

**MySQL prior to version 8:**

```sql
GRANT SELECT ON mysql.proc TO 'MyUserName'@'%';
```

**MySQL version 8 (or later):**

```sql
GRANT SHOW_ROUTINE ON *.* TO 'lockdownuser'@'%';
```

| **Oracle** | - Permissions are required to connect to the database.  
- Permissions are required to access any objects that will be documented.  
- For triggers to be documented, the `CREATE ANY TRIGGER` privilege is required.  

---

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### Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>Required Permissions</th>
</tr>
</thead>
</table>
| **PostgreSQL**                                 | • Requires *LOGIN* privilege  
• Requires *CONNECT* privilege to the database  
• Requires permissions on any objects you want to document.  
  ◦ **Note:** For triggers to be included, extra privileges on the table other than *SELECT* alone are required (e.g. *INSERT*)  

**Example**  
Setting permissions on a limited user account (to enable configuring a solution item and taking a snapshot):  

```sql  
ALTER ROLE myusername WITH LOGIN;  
GRANT CONNECT ON DATABASE mydatabase TO myusername;  
GRANT SELECT, INSERT ON ALL TABLES IN SCHEMA myschema TO myusername;  
```  |
| **SQL Server**                                 | • Sysadmin permissions for the SQL Server you want to document  
• Definition permissions for any object you want to document  
• Non-sysadmin users must be granted View Server State permissions to view log file objects within the documentation. |
| **SQL Server Analysis Services**               | • Multidimensional:  
  ◦ Read definition permission on each database object you want to document  
• Tabular:  
  ◦ Administrator permission on each database object you want to document  
• Azure Analysis Services  
  ◦ Azure Active Directory credentials are required |
| **SQL Server Integration Services**            | • SSIS Catalog:  
  ◦ Read and Modify permission for each project within the SSISDB you want to analyze  
• SSIS Azure Data Factory:  
  ◦ See the [Connect to Azure Data Factory article](#). |
### Technology

<table>
<thead>
<tr>
<th>Required Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Folder Security Settings:</strong></td>
</tr>
<tr>
<td>• Minimum Predefined User Roles required:</td>
</tr>
<tr>
<td>- My Reports</td>
</tr>
<tr>
<td>- Content Manager</td>
</tr>
<tr>
<td>• Minimum Tasks required for a custom User Role:</td>
</tr>
<tr>
<td>- View Reports</td>
</tr>
<tr>
<td>- View Folders</td>
</tr>
<tr>
<td>- View Data Sources</td>
</tr>
<tr>
<td>- View Models</td>
</tr>
<tr>
<td>- Consume Reports</td>
</tr>
<tr>
<td><strong>Web Service Security Settings:</strong></td>
</tr>
<tr>
<td>• Minimum Predefined System Role required:</td>
</tr>
<tr>
<td>- System User</td>
</tr>
<tr>
<td>- Browser in the report tree</td>
</tr>
<tr>
<td>• Minimum Tasks required for a custom System Role:</td>
</tr>
<tr>
<td>- Execute Report Definitions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tableau Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You must be a part of the Server Administrator role</td>
</tr>
</tbody>
</table>

### Accessing Database Mapper Solutions

The following script shows you how to grant the necessary permissions to users so that all server level objects, databases, associated database objects and SQL Server Agent objects can be read. This needs to be executed against any SQL Server that exists as a solution in Database Mapper.

### SQL Server

```sql
USE [master];
GO
IF NOT EXISTS
(
   SELECT *
   FROM syslogins
   WHERE [name] = 'Domain\Account'
)
CREATE LOGIN [Domain\Account] FROM WINDOWS WITH DEFAULT_DATABASE = [master];
GRANT VIEW SERVER STATE TO [Domain\Account];
GRANT VIEW ANY DEFINITION TO [Domain\Account];
GRANT CONNECT ANY DATABASE TO [Domain\Account];
GO
USE [msdb];
GO
CREATE USER [Domain\Account] FOR LOGIN [Domain\Account];
GO
USE [msdb];
GO
ALTER ROLE [SQLAgentOperatorRole] ADD MEMBER [Domain\Account];
GO
```
SSIS

If the server hosting the solution also has SSIS and the solution contains SSIS items, then permissions must be granted for the SSISDB in addition to the SQL Server permissions above.

```
USE [SSISDB];
GO
CREATE USER [Domain\Account] FOR LOGIN [Domain\Account];
GO
USE [SSISDB];
GO
ALTER ROLE [SSIS_Admin] ADD MEMBER [Domain\Account];
GO
```

BSD 2-Clause "Simplified" License Disclaimer

A component of the Database Mapper remote agent is attributed to MarkDig and licensed with the BSD 2-Clause "Simplified" License.

BSD 2-Clause "Simplified" License text as of November 26, 2019:

```
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DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER
CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY,
OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
```
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Now available: Database Mapper Software is available as a virtual machine on the Azure Marketplace. With this VM, Database Mapper Software is pre-installed, and you can immediately begin configuring solutions for your environment. Launch Database Mapper on the Azure Marketplace, and start configuring solutions now!

Overview

This article summarizes the steps to installing each product and provides links to more in-depth step by step instructions.

Cloud vs. Software

There are two versions of Database Mapper:

1. Database Mapper (the cloud version at document.sentryone.com)
2. Database Mapper Software (the on-premises, self-hosted version)

Additional Information: For information about product pricing and licensing, see the Database Mapper product page.
Summary of installation steps

Installing Database Mapper (Cloud)

1. Purchase or download a trial of Database Mapper (Cloud).

2. Install & configure the Database Mapper Remote Agent and Configuration Tool.


Installing Database Mapper Software (On-Prem)

1. Purchase or download a trial of Database Mapper (On-Prem).

2. Install the Database Mapper Software Web client.

3. Install and configure the Database Mapper Configuration Utility.

4. Install & configure the Database Mapper Remote Agent and Configuration Tool.

5. Activate your Database Mapper Software license(s) through the SolarWinds License Manager.

6. Sign in to Database Mapper at your on-premises host server URL for Database Mapper Software.

Step-by-Step Installation

Each article below includes instructions for the full product installation for Database Mapper (Cloud) and Database Mapper Software (On-Prem).

Choose the installation method for your product:

- Database Mapper (Cloud) Installation
- Database Mapper Software (On-Prem) Installation
Cloud vs. Software

There are two versions of Database Mapper:

1. **Database Mapper** (the cloud version at document.sentryone.com)
2. **Database Mapper Software** (the on-premises, self-hosted version)

The following article provides instructions for **Installing Database Mapper Cloud** (the cloud version of Database Mapper at document.sentryone.com).

- **Additional Information**: For information about installing the On-Prem Database Mapper Software, see the Installing Database Mapper Software article.

Prerequisites

Before installing Database Mapper, review the System Requirements to make sure your system meets all prerequisites.

Summary of installation steps

**Installing Database Mapper (Cloud)**

1. Purchase or download a trial of Database Mapper (Cloud).
2. Install & configure the Database Mapper Remote Agent and Configuration Tool.
Installing Database Mapper Cloud (step-by-step)

Step 1 Purchasing licenses for Database Mapper (Cloud)

After ensuring you meet the system requirements, you can purchase your license(s) for Database Mapper (Cloud). For information about product pricing and licensing, see the Database Mapper product page.

Step 2 Installing the Database Mapper Remote Agent and Configuration Tool

For complete step-by-step instructions for Installing and configuring the Database Mapper Remote Agent and Solution configuration tool, see the Installing the Database Mapper Remote Agent and Configuration Tool article.

Step 3. Sign in through your browser

⚠ Important: You need a SentryOne account to log into Database Mapper. Select Sign In To Get Started > Create account to make your account.

After installing and configuring the remote agent, you can log into Database Mapper by completing the following steps:

1. Open Database Mapper at document.sentryone.com and select the Sign In To Get Started button.

2. Enter your SentryOne account username and password, then select Log In. ⚠ Note: You must use the local account option. You cannot log in with a Microsoft Account.
Important: If you don’t have a SentryOne username and password, select Create Account to make a new account.

Additional Information: Database Mapper users must be added to your organization as well as the license. For information about user management within Database Mapper, see the Organization Settings article.

What's Next?

Now that you've signed in, you'll notice that things are a bit empty until you configure your first solution. Once you've got a solution configured, you're ready to generate documentation and explore the Solutions Dashboard.

Opening Documentation, Submitting a Ticket, or Submitting Feedback

Once you've completed the process above and signed into Database Mapper, you can use the question mark button along the top navigation bar to open the Database Mapper documentation, open SolarWinds Support, or leave product feedback.
You can use this as often as you need. We appreciate you taking the time to help us improve our products!
Installing Database Mapper Software

Introduction

Database Mapper Software is an on-premises, browser-based option for documenting your data estate. This product is a replacement for the DOC xPress product and is the self-hosted version of Database Mapper cloud.

⚠️ Important: If you are using the cloud version of Database Mapper at https://document.sentryone.com/, this article is not applicable to you.

System Requirements

- Database Mapper System Requirements

Additional Permissions

This user (or the account you change it to) must have read/write access to:

- C:\Program Files (x86)\SentryOne\SentryOne Document (or your custom installation directory)
- C:\Windows\Temp
- C:\ProgramData\SentryOne\Document\_blobStorage

If you are using Windows authentication to access the Database Mapper database, the user account must:

1. Exist as a login account on the database server
2. Have access to the Database Mapper database
3. Be added to the db_datareader, db_datawriter, and db_ddlamin roles on the Database Mapper database

💡 Note: The Database Mapper Software installer grants the required access to the SentryOneDocument database for the NETWORK SERVICE account.
Installation Instructions

Where to Install

Database Mapper Software supports both single-server and multi-server setups. There are additional steps needed for multi-server configurations.

Additional Information: See the blog post A New, On-Premises Approach to Documentation and Data Lineage: Database Mapper Software for details about the steps needed for multiple-server setup.

There are two install files for Database Mapper Software:

1. SolarWinds.DatabaseMapper.Setup..msi is the file used to install Database Mapper Software on premises as shown in the steps below. It is the web client software.
2. SolarWinds-DatabaseMapper-RemoteAgent.msi is the file used to install the Database Mapper Remote Agent and Configuration Tool. This file should be installed after the SolarWinds.DatabaseMapper.Setup..msi installation is complete (as described below). This does not need to be installed on the same server as the web client software. It can be installed on a web server, database server, or other server entirely (as long as it has the needed access to both the web server hosting the Database Mapper web client and the database server hosting the Database Mapper database).

.NET Core Framework and Windows Hosting Services

The first part of the installation process ensures that you have the Microsoft .NET Core Framework required for Database Mapper Software. It installs Windows Server Hosting (if necessary).

1. Execute SolarWinds-DatabaseMapper-Host-.exe on the machine where you want to install the web client to get started.
2. Select Accept and Install to continue.

3. You may need to install Windows Server Hosting (if so, you’ll see a series of popups similar to the ones...
below). Select the box next to **I agree to the license terms and conditions**, then select **Install**, wait for the installation to complete, and then select **Close**.

4. The **Setup Progress** window will remain open while the installation continues.

Database Mapper Setup

1. Select **Next** on the **Database Mapper Setup** screen.

2. Select the box next to **I accept the terms in the License Agreement**, then select **Next**.
3. Accept the default destination folder for installation, or use Change to specify a non-default location, then select Next.

4. Select Install to begin the installation with the configured settings. You can select Back to change any settings or select Cancel to exit the process without installing Database Mapper.
5. The installation process will proceed.

6. The web client for Database Mapper has been installed. Select Finish to complete the process, and launch the Database Mapper Configuration Utility.
What's next?

Using the Database Mapper Configuration Utility

Use the Database Mapper Configuration Utility to configure your Database Mapper software connection.

Opening Database Mapper

Open Database Mapper in your browser.

1. Navigate to your server:port (In this example, it is http://localhost:44302)

2. Log in using your Windows credentials. **Note:** You may need to use the format DOMAIN\User name (depending on your environment).

3. Enter your Username and Password on the second Sign in screen for port 44322.
Success: The self-hosted Database Mapper application is ready for you to begin.

Note: There’s not much to see at this point. You’ll need to configure a solution and generate some documentation to see the real magic of Database Mapper.

Installing Database Mapper Remote Agent and Configuration Tool

See the Installing Remote Agents and Remote Agents articles for more information and step-by-step instructions.

Using Database Mapper

After you install the Database Mapper Remote Agent and Configuration Tool, you can proceed to configure your first solution, then continue to the Using Database Mapper section for guides to using all the features.

Opening Documentation, Submitting a Ticket, or Submitting Feedback

Once you’ve completed the process above and signed into Database Mapper, you can use the question mark button along the top navigation bar to open the Database Mapper documentation, open SolarWinds.
Support, or leave product feedback.

You can use this as often as you need. We appreciate you taking the time to help us improve our products!

Upgrading

To upgrade Database Mapper Software, run the latest DatabaseMapperSetup.msi file and follow the installation instructions above. The defaults for the server and host names may have changed since your previous installation. Please verify those values are correct for your configuration when upgrading.

No additional configuration (re-adding) is required for the remote agents when upgrading Database Mapper Software. If an update is available for the remote agent software, that will need to be applied separately. To update a remote agent, see the Database Mapper Remote Agents article.


Uninstalling

Uninstall Database Mapper through Add or remove programs in Windows.

Note: This does not remove the Database Mapper Remote Agent software, which must be uninstalled separately. To delete a remote agent, see the Database Mapper Remote Agents article.

Troubleshooting

Additional Information: See the Database Mapper Troubleshooting article for information about troubleshooting.
Database Mapper 2022.2 Legal Notices

This software distribution contains some components that require license terms be distributed with the software. This software includes code and libraries from:

<table>
<thead>
<tr>
<th>Component</th>
<th>License and Notices</th>
</tr>
</thead>
<tbody>
<tr>
<td>IdentityModel</td>
<td></td>
</tr>
</tbody>
</table>

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2022

Version 2022.4 [October 18, 2022]

Features

- 69095: Database Mapper (Cloud) not releasing sources
- 69153: Add Card View to the redesigned Solution's Dashboard
- 69154: Add Solution Snapshot status on the Solution's Dashboard Card View
- 69393: Add error icons & tooltips to the Database Mapper Solution Configuration Tool
- 69566: Add onboarding enhancements to the Database Mapper Configuration Tool

Fixes

- 68953: "Binding Could Not be validated" validation to be handled
- 69422: Issue with Cancel button during snapshot
- 69601: Cors error in Database Mapper Software when the application is in Idle mode for a long time

Version 2022.3 [July 21, 2022]

Features

- 68712: Improve filter and validation speed for SSIS datasources
- 68844: Display group membership and associated permissions when displaying effective permissions
- 69005: Add Business Analyst and Developer Documentation output types to Start Snapshot screen
- 69058: Add Combined Remote Agents and Remote Agent Pools screen
- 69059: Logically group all implicit items in the Lineage Navigator
- 69078: Add Lineage export options
- 69116: Add Help context menu
Fixes

- **69003**: Changed Config Utility default ports
- **69009**: Fixed Documentation page link from lineage to documentation

Version 2022.2 [April 19, 2022]

Features

- **54812**: Can automatically assign Solution Items to new Remote Agent pool when reassigning Solution
- **57445**: Solution Explorer in lineage and documentation now scroll to ensure selected item is in view
- **57966**: Paging support for retrieving history entities from Data Dictionary
- **58253**: Improved styling for task history
- **59638**: Manual snapshot cannot be taken if there is a running/pending snapshot for that solution
- **62804**: Improve usability of application items when configuring data dictionary
- **64009**: Enable Typescript Strict Mode
- **66602**: Document Comparison UI Improvements
- **66696**: Documentation search remembers location when navigating back to results
- **66959**: Improved feedback when configuring remote agent
- **67148**: Can view a user's effective permissions
- **67286**: Data dictionary analysis mode UI improvements
- **67433**: (On-Prem) Display a banner if license is expired
- **68056**: Improved consistency of Remote Agent Pool deletion process
- **68502**: Circular references no longer expand infinitely when using Lineage text view
- **68555**: Data Dictionary now orders DacFx technology type/applicable items correctly
- **68584**: [On Prem] Configuration Tool no longer gets out of sync on service installation status
- **68671**: [On Prem] Configuration Tool usability improvements
- **68672**: [On Prem] Improve IP and Hostname support in Configuration tool
- **68673**: [On Prem] Improve port selection and defaults in Configuration Tool
- **68714**: Data grid no longer shows browser console errors in certain scenarios
- **68779**: Documentation Compare now has linked scroll bars for navigating differences
- **68780**: Documentation Compare now allows inline/combined view of differences

Fixes

- **65626**: Data Dictionary for Excel
- **66172**: Typing in a file location doesn’t validate in solution configuration tool
- **67552**: Dialogs flickering when saving Data Dictionary configuration
- **68270**: Parameter link for SPROCs are broken
- **68343**: [On Prem] Dependency filter reversed for Lineage
- **68358**: Error snapshotting Azure SQL DB using DacFx provider
- **68583**: [On Prem] Bi-directional dependencies show when inbound/outbound-only selected in Lineage
• **68748: [OnPrem] Browser console errors showing when hovering over Lineage links**
• **68750: [OnPrem] Lineage sending incorrect dependency data**

### 2021

#### Version 2021.18.7 [November 30, 2021]

**Fixes**

- **68556:** DMR Software couldn’t retrieve documentation icons.
- **68579:** SSRS reports couldn’t be captured due to log4net.
- **68419:** Snapshots failed when retrieving data dictionary categories from the host.

#### Version 2021.18 [September 20, 2021]

**Features**

- **67499:** Add DacFx provider.
- **68153:** Add a Configuration Utility for Database Mapper Software.
- **68264:** Modify solution configuration tool to list all providers.
- **68289:** Add Permissions Check to the Remote Agent Config tool.

**Fixes**

- **67959:** Can’t undelete or recreate a Value List with the same name.
- **68326:** Old logo displaying in documentation.
- **68342:** Identically named SSRS reports counted as one object.

#### Version 2021.12 [July 15, 2021]

**Features**

- **68072:** Add ability to add Users to a Group from the Group UI.

**Fixes**

- **67934:** Issue with "Snapshot Not Found" errors.
- **68054:** Add Remote Agent Pool dialog does not disappear after selecting Save.
- **68074:** Close button can be pushed offscreen in Version History view.

#### Version 2021.8 [May 25, 2021]

**Notes**

- SentryOne Document has been renamed and rebranded to SolarWinds Database Mapper.
- In addition to logos and icons being updated, the licensing has been switched to SolarWinds licensing.
Starting with version 2021.8, your license and software downloads are available through the SolarWinds Customer Portal. Older versions (prior to the 2021.8 rebranding) are still managed through your SentryOne account.

- You may still encounter the SentryOne Document name in things such as program directories and log files.

**Features**

- **66297**: Implement Data Dictionary Grid Analysis View.
- **67042**: Cross solution comparison now available in Standard and Premium tiers.
- **68041**: Oracle Provider added as a supported data source.
- **68042**: MySQL Provider added as a supported data source.
- **68043**: PostgreSQL Provider added as a supported data source.
- **68047**: Feature based permissions added.

**Fixes**

- **67353**: Search does not honor chosen point in time.

**Version 2021.3 [February 25, 2021]**

**Notes**

- **66717**: SentryOne Document requires accepting the SolarWinds EULA.

**Features**

- **64322**: New Deleting status for solutions.
  - Prevents solution from being imported again while they are still deleting.

**Fixes**

- **66606**: Data Dictionary Save button within documentation will appear disabled, but can still be clicked.
- **66632**: Issue with duplicate object names in the Power BI provider.
- **66633**: Progress dialog "Please wait" status does not disappear after deleting a solution alias.

**2020**

**Version 2020.24 [December 3, 2020]**

**Note**: Version 2020.24 includes two new features: Document Comparison and Data Dictionary Search. Snapshots taken with a remote agent version prior to 2020.24 did not gather the required metadata to support these features. Therefore, only snapshots taken with a remote agent version 2020.24 or higher will be capable of leveraging these new features.

**Data Dictionary Search** will automatically work for new solutions added after upgrading to 2020.24.
Existing solutions require a manual process to convert them. Follow these steps:

1. Go to to **Data Dictionary** > **Categories**.
2. Create a new **Category** (this can be deleted later).
3. Ensure the new **Category** applies to **All Solutions**, **Solution Items**, and **Global Technology Type**.
4. In the **Applicable Items** drop down, select every item, then save the new **Category**.
5. Request a new snapshot for the solution.
6. Once the snapshot completes, you can delete the **Category** that was created for this process.

**Features**

- **66308**: Add Document comparison view
- **66497**: Improve lineage support for connections between PowerBI and AS cubes
- **66511**: Add ability to export snapshot from SentryOne Document for analysis
- **66533**: Display task progress during document generation
- **66534**: UI updates to workflow history grid header
- **66543**: Improve Document finalization progress updates to account for search indexing

**Version 2020.23 [November 17, 2020]**

**Fixes**

- **65938**: Workflows cannot recover after an IIS App pool recycle/restart
  - 🔄 Note: Software version only
- **65940**: Track and surface Lineage and Document Finalization task progress in the task history UI

**Version 2020.22 [November 3, 2020]**

**Fixes**

- **66258**: Longer object names are not visible in documentation treeview

**Version 2020.21 [October 20, 2020]**

**Fixes**

- **66043**: Lineage graph spacing was off in certain scenarios
- **65093**: Error loading values in Lineage Text View
- **65980**: Current version/point in time button was not disabled when no solution selected
- **64900**: Better handling and recovery after several failed attempts to generate a corrupted snapshot
- **66116**: Server nodes show up as 'Unknown' in Environment Map
- **66067**: Cannot establish link from SSAS to PowerBI

**Features**
- 66044: Lineage Graph layout enhancements
- 64209: SSRS provider support for Visual Studio 2019 prerequisites
- 66157: Surface underlying error code when SentryOne Document Remote Agent user account validation fails during install

**Version 2020.20 [October 8, 2020]**

**Fixes**
- Fix 65893: Some users unable to view point in time documentation
- Fix 65906: Request body too large error
  - This requires updating the SentryOne Document remote agent software
  - If you are using the SentryOne Document Software version, that software must be updated as well

**Version 2020.19.2 [October 1, 2020]**

**Notes**
- Updated styling for Lineage Graph

**Version 2020.19 [September 22, 2020]**

**Fixes**
- Fix 65716: Errors when installed on machines using time zones outside the US
  - Note: Software version only


**Fixes**
- Fix 65194: API fails to start when using SQL Authentication and the password contains a comma
  - Note: Software version only

**Version 2020.15.1 [August 11, 2020]**

**Features**
- Feature 64536: Improved in-app guides for SentryOne Document
  - Note: Cloud version only

**Version 2020.15 [July 29, 2020]**

**Features**
- Feature 57935: Ability to collapse the legend in the lineage view
• **Feature 64400**: Update organization for drop downs

**Fixes**
• **Fix 64289**: Resolved an issue with text resizing when the window is resized

**Version 2020.14 [July 14, 2020]**

**Features**
• **Feature 63885**: SentryOne Document Environment Map: Support to add SentryOne Database as a data source
• **Feature 64373**: Ability to limit what is produced from snapshot for Environment Map

**Version 2020.12 [June 17, 2020]**

**Features**
• **Feature 63862**: Performance improvements to snapshot finalization process
• **Feature 64321**: Performance improvements to snapshot deletion process
• **Feature 64239**: Ability to view lineage in a text view

**Version 2020.11 [June 2, 2020]**

**Features**
• **Feature 64044**: Enable installer to change server name and host name via command line installation
  • **Note**: SentryOne Document Software version only
• **Feature 63913**: Add ability to filter lineage by technology subclass so that only certain types of dependencies are shown

**Version 2020.10 [May 20, 2020]**

**Features**
• **Feature 62115**: DOC xPress to SentryOne Document Migration Tool (Import feature)
• **Feature 60545**: SentryOne Document Software (an on-premises, self-hosted version of SentryOne Document)

**Fixes**
• Various technical and UI/UX enhancements

**Version 2020.1.4 [April 17, 2020]**

**Fixes**
• **Fix 63538**: Jump To Documentation does not load selected object when single solution exists in

Fixes
- **Fix 63181**: Limit lineage dependency level limit from 5 to 3

Version 2020.324.0 [March 24, 2020]

Features
- **Feature 62767**: Added support for Azure Synapse Analytics (formerly named Azure Data Warehouse) as a documentation data source

Fixes
- Various technical and UI/UX enhancements

Version 2020.225.0 [February 27, 2020]

Features
- **Feature 61323**: Added support for SalesForce as a documentation data source

Version 2020.128.1 [February 4, 2020]

Features
- **Feature 58672**: Added support for Azure Data Factory as a documentation data source

Fixes
- **Fix 61867**: Various bug fixes.

Version 2020.128.0 [January 28, 2020]

Features
- **Feature 46817**: Added Export Documentation feature
- **Feature 58221**: Data dictionary values for an object are now available via context menu on Lineage graph
- **Feature 59076**: Value lists in Data Dictionary can now be ordered
- **Feature 59098**: S1D License Tiers
- **Feature 60488**: Improved connection stability in the remote agent
Version 2019.1119.3 [January 7, 2020]

Fixes

- **Fix 61075**: Lineage finalization failure attempting to execute empty batch

Version 2019.1119.2 [December 17, 2019]

Fixes

- **Fix 61020**: Batches could be oversized in the LinkRouteInfo repository

Version 2019.1119.0 [November 18, 2019]

Features

- **Feature 58110**: Ability to jump from documentation to lineage for a chosen object
- **Feature 58409**: Workflows are now abandoned when associated Remote Agent or Solution is deleted
- **Feature 59200**: Ability to trigger a Remote Agent update from the portal
- **Feature 59655**: Improved document compare experience when there is only a single version of a document

Version 2019.1105.0 [November 4, 2019]

Features

- **Feature 56669**: The Data dictionary feature is now available
- **Feature 58002**: Hide expansion icons if a tree has no children
- **Feature 58150**: Improved the styling of the documentation content
- **Feature 58224**: Documentation version comparison is now available
- **Feature 59368**: Full browser refresh is now no longer required to pick up newly deployed changes

Version 2019.1022.0 [October 23, 2019]

Features

- **Feature 57521**: Add Remaining Data Source Tracker
- **Feature 57524**: Add unsupported browser message
- **Feature 57944**: Add user guidance available on lineage view
- **Feature 58408**: Add ability to delete future pending workflows
- **Feature 58418**: Add ability to see running tasks and installed providers from the remote agent screen
- **Feature 58424**: When queuing a workflow, ensure that there are agents in the pool
- **Feature 58627**: Show version number and update history in Remote Agents display
- **Feature 58763**: User guidance is available on documentation view
- **Feature 58804**: Add workflow locking
• **Feature 58818**: Improved Lineage toolbar and Legend display when window is shrunk

**Fixes**

• **Fix 58521**: Issue loading ISPAC
• **Fix 58600**: Mark workflow items as completed after a stage failure
• **Fix 58630**: Workflow cancellation does not cancel running task

**Version 2019.1008.0 [October 8, 2019]**

**Features**

• **Feature 57577**: Fetch workflow history periodically to show updates
• **Feature 57995**: Enable S1D remote agent installer to run without launching the config tool (file upgrade only mode)
• **Feature 58003**: Short circuit workflow when tasks fail
• **Feature 58004**: Updated template package

**Fixes**

• **Fix 58044**: Task History section headers may show failure status incorrectly
• **Fix 58624**: Task History New Task Status "Abandoned" is not supported on the UI
• **Fix 58609**: Workflow Refresh Service should not add additional loggers

**Version 2019.924.0 [September 24, 2019]**

**Features**

• **Feature 57653**: [Lineage] Links between nodes now show icons indicating the link type
• **Feature 57724**: Manage menu item has moved to a settings cog
• **Feature 57739**: Ability to switch between solutions on the Lineage view
• **Feature 58027**: Ability to switch between solutions on Documentation view & new top level Documentation menu

**Version 2019.910 Preview Release [September 11, 2019]**

**Features**

• **Feature 46877**: View lineage as a graph
• **Feature 55379**: Add ability to cancel all tasks in a workflow
• **Feature 55799**: Automatic license installation for the remote agent
• **Feature 55808**: Ability to show command line to schedule a snapshot
• **Feature 55897**: [Metadata] Ability to view metadata for a vertex within lineage
• **Feature 55898**: [Endpoint Aliases] Ability to manage endpoint aliases for a solution
• Feature 56574: Ability to jump to documentation from lineage
• Feature 57078: [Lineage] Ability to search solution explorer

Version 2019.814 [August 16, 2019]

Features
• Feature 55805: Ability to show command line to schedule a snapshot
• Feature 50482: Scale out support for Remote Agent reply list tracker
• Feature 55999: Improvements to Documentation view layout for scrolling

Fixes
• Fix 56153: Clicking node icon in documentation table of contents does not highlight the whole selected item
• Fix 55671: Buttons aren't styled correctly

Version 2019.730.1 [July 31, 2019]

Features
• Feature 54176: Documentation table of contents now shows topic icon for each node
• Feature 55452: Solution Items action Icon Missing Tool Tip
• Feature 55453: Hide hamburger menu on all grids by default
• Feature 55672: Fix to allow log output dialog to grow big to better show more content

Fixes
• Fix 55335: Table of contents display can run out of space

Pilot [July 22, 2019]
• Pilot version released
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Now available: Database Mapper Software is available as a virtual machine on the Azure Marketplace. With this VM, Database Mapper Software is pre-installed, and you can immediately begin configuring solutions for your environment. Launch Database Mapper on the Azure Marketplace, and start configuring solutions now!

Overview

SolarWinds Database Mapper provides documentation and data lineage analysis capabilities that allow you to maintain up-to-date documentation for your desired data sources. Document data sources such as SQL Server, SQL Server Analysis Services (SSAS), SQL Server Integration Services (SSIS), Power BI, Azure Data Factory (ADF) and more.

Additional Information: For a complete list of the data sources supported by SolarWinds Database Mapper, and for information about each data source, see the Data Sources articles.
Cloud vs. Software

There are two versions of Database Mapper:

1. **Database Mapper** (the cloud version at document.sentryone.com)
2. **Database Mapper Software** (the on-premises, self-hosted version)

This article walks through the steps to getting started with both products and highlights the small differences along the way.

SolarWinds Database Mapper Architecture

SolarWinds Database Mapper consists of the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Cloud or On-Prem?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Mapper Web Client</td>
<td>The Database Mapper Web Client is the self-hosted infrastructure for Database Mapper Software (On-Prem).</td>
<td>On-Prem Only</td>
</tr>
<tr>
<td>Database Mapper Configuration Utility</td>
<td>The Database Mapper Configuration Utility allows you to change database, network, security, and web server binding-related properties for the self hosted Database Mapper Software (On-Prem).</td>
<td>On-Prem Only</td>
</tr>
<tr>
<td>SentryOneDocument Database</td>
<td>A SQL Server Database that’s installed on the server hosting your Database Mapper Software. The SentryOneDocument database collects the data that you want to document in Database Mapper. For example, the SentryOneDocument database stores the documentation, lineage, snapshots, users, data dictionary entries, and Remote Agent data for your Database Mapper solutions and solution items.</td>
<td>On-Prem Only</td>
</tr>
<tr>
<td>Database Mapper Remote Agent</td>
<td>The Database Mapper remote agent is a service that runs in the background on a machine within your environment, and is responsible for generating the snapshots and documentation for the solutions configured within Database Mapper. It feeds the snapshot and documentation back to Database Mapper Cloud. This agent service needs to be installed on a machine that has access and permissions to the environments configured to be documented. See the System Requirements article for more details.</td>
<td>Cloud and On-Prem</td>
</tr>
</tbody>
</table>
The Database Mapper Solution Configuration Tool allows you to add the solutions and solution items you want to document with Database Mapper (Cloud) or Database Mapper Software (On-Prem).

### Summary of installation steps

#### Installing Database Mapper (Cloud)

1. Install & configure the Database Mapper Remote Agent and Configuration Tool.
2. Create an account and sign in to Database Mapper at document.sentryone.com.

#### Installing Database Mapper Software (On-Prem)

1. Install the Database Mapper Software Web client.
2. Configure Database Mapper Software using the Database Mapper Configuration Utility.
3. Install & configure the Database Mapper Remote Agent and Configuration Tool.
4. Activate your Database Mapper Software license(s) through the SolarWinds License Manager.
5. Sign in to Database Mapper at your on-premises host server URL for Database Mapper Software.

#### Step-by-Step Installation

**Additional Information:** For information about Installing Database Mapper or Database Mapper Software, see the Installing Database Mapper article and select the applicable product installation instructions.

#### Using Database Mapper

After you've installed the necessary components for your Database Mapper Installation, you can begin configuring Solutions and Solution Items with the Solution Configuration tool.

**Additional Information:** For more information about Solutions and Solution items, see the Solutions, and Solution Items articles.

Once you have configured your Solution(s) and Solution Item(s), you can begin navigating the Solutions Dashboard, and generating documentation for your Solutions.
With generated documentation, you can explore your Solution meta-data and dependencies with the Documentation and Lineage tabs.
Prerequisites

Before installing Database Mapper Software, ensure your credentials and machine(s) meet the System Requirements as well as the security and additional requirements listed below.

Additional Requirements

- Chrome and Microsoft Edge (the Edge version based on Chromium) are the recommended browsers for using Database Mapper Software.
  - **Note:** Only Windows devices are officially supported.
- The preferred IP address and port that Database Mapper software should use to listen for HTTP traffic.

⚠️ **Important:**

For **Version 2022.3 and later**, the default ports for Database Mapper are as follows:

- The default port for the Database Mapper Software Host is 80.
- The default port for the Database Mapper Host with HTTPS is 443.
- The default port for the Database Mapper Software API is 5000.

For **Versions 2022.2 and prior**, the default ports for Database Mapper are as follows:

- The default port for the Database Mapper Software Host is 44302.
- The default port for the Database Mapper Software API is 44322.

**Note:**

- If you plan to change the binding address or port, ensure that there isn’t already something listening to that address and port on the machine.
  - If you are running Database Mapper Software on a virtual machine, it’s recommended to keep the default IP address of 0.0.0.0. Setting it to 127.0.0.1 may make it so that it can be accessed from the local host, but not other locations in the domain.
- It’s recommended to set the IP address to 127.0.0.1 if you’re planning to route requests through IIS or other reverse proxy on the same machine as the service. This will prevent external requests from directly reaching the service.
Changes to your Database Mapper Software configuration must be made through the Database Mapper Configuration Utility (DMCU).

Installing the DMCU

The Database Mapper Configuration Utility is installed through the Database Mapper Software Installer.

Accessing the DMCU

Database Mapper Software

After installing Database Mapper Software, the Database Mapper Configuration tool is set to launch by default. You can also locate the DMCU through the file directory or use the Windows Start menu as Database Mapper Configuration Utility. When you open the DMCU, use the Run as administrator option to open it.

File path:

1. Navigate to the SentryOne DocumentConfigUtility directory in your Database Mapper Software installation. The default path is C:\Program Files (x86)\SentryOne\SentryOne Document\SentryOneDocumentConfigUtility. In this example, we are using the default file path.
Using the DMCU

The DMCU allows you to change database, network, security, and web server binding-related properties for Database Mapper Software. Select **Next** to apply any changes and continue with the configuration process.

The DMCU also provides an option to stop/start the Database Mapper Host and API Services (Database Mapper Host and Database Mapper API in Windows Services).

⚠️ **Important**: If the Database Mapper Services failed to install, open the Event Viewer for more information.

Start here
The Start here screen opens when you open the Database Mapper Configuration Utility for the first time on a new installation. The Start here screen details that the Database Mapper Configuration Utility will install a new Database Mapper database on your SQL Server Instance, a Host service, and an API service.

Select Start to continue.

Repository Configuration
Configure your SQL Server connection that will contain the Database Mapper database on the **Repository Configuration** screen.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Server</strong></td>
<td>The Server name where Database Mapper software is installed.</td>
</tr>
<tr>
<td><strong>Database Name</strong></td>
<td>The Database name for your Database Mapper software installation.</td>
</tr>
<tr>
<td><strong>Username</strong></td>
<td>The login used for the Database Mapper Remote Agent service.</td>
</tr>
<tr>
<td><strong>Password</strong></td>
<td>The password for the Database Mapper Remote Agent service login.</td>
</tr>
<tr>
<td><strong>Windows Login / SQL Login</strong></td>
<td>The Windows or SQL Server credentials for the server where Database Mapper Software is installed.</td>
</tr>
</tbody>
</table>

**Note:** The Database Name is **SentryOneDocument** by default.
Select Advanced Options to open the advanced configuration options for your SQL Server that will contain the Database Mapper database.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>The port used to connect to your SQL Server that will contain the Database Mapper database.</td>
</tr>
<tr>
<td>Packet Size</td>
<td>The network packet size for your Database Mapper database connection. Select an option from the drop-down list.</td>
</tr>
<tr>
<td>Encrypt Network Traffic</td>
<td>Select the checkbox to encrypt network traffic.</td>
</tr>
<tr>
<td>Trust Server Certificate</td>
<td>Select the checkbox to trust the server certificate.</td>
</tr>
<tr>
<td>Multi Subnet</td>
<td>Select the checkbox to apply multi subnet to the connection.</td>
</tr>
</tbody>
</table>

**Additional Information:** For more information about the settings in the Advanced Properties:

- **Port:** See the Setting the Connection Properties topic from Microsoft Docs for more information on the *portNumber* property.
- **Packet Size**: See the Configure the network packet size Server Configuration Option topic from Microsoft Docs for additional information on SQL Server network packet sizes.
- **Encrypt Network Traffic**: See the Enable Encrypted Connections to the Database Engine topic from Microsoft Docs.
- **Trust Server Certificate**: See the Setting the Connection Properties topic from Microsoft Docs for more information on the `trustServerCertificate` property.
- **Multi Subnet**: See the Setting the Connection Properties topic from Microsoft Docs for more information on the `multiSubnetFailover` property.

### Windows Service Account

Configure the Windows service account that will be used with the Host and API services on the Windows Service Account screen.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>The username for the hosting service.</td>
</tr>
<tr>
<td>Password</td>
<td>The password for the hosting service username.</td>
</tr>
</tbody>
</table>
### IP

The binding IP address for your connection. Use the drop-down list to select an IP address.

### Host Domain

The friendly name (web server address) of the host domain.

**Important:** The Host Domain field will determine your Database Mapper Web URL. For example, if your Database Mapper site will be connected locally with localhost like the example above, you will use localhost in the URL.

If you want your Database Mapper site to be accessible outside of the host machine, enter the host machine name. For example, if the host machine name is AppServer23, you would enter AppServer23 in the Host Domain field.

---

### Advanced Options

Select **Advanced Options** to open the advanced configuration options for your Windows Service account that will be used with the Database Mapper Host and API services.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>API Port</td>
<td>5000</td>
</tr>
<tr>
<td>Host Port</td>
<td>443</td>
</tr>
<tr>
<td>Use HTTPS</td>
<td>Yes</td>
</tr>
<tr>
<td>TLS Certificate</td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td></td>
</tr>
</tbody>
</table>
### Option Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>API Port</strong></td>
<td>The port used to connect to the API Service. Note: The default API Port is 5000.</td>
</tr>
<tr>
<td><strong>Host Port</strong></td>
<td>The port used to connect to the Host Service. Note: The default Host Port is 80.</td>
</tr>
<tr>
<td><strong>Use HTTPS</strong></td>
<td>Select the checkbox to Use HTTPS and enter a TLS certificate. Note: The default Host Port if you select to use HTTPS is 443.</td>
</tr>
</tbody>
</table>

**Use TLS**

To use TLS for SolarWinds Database Mapper:

1. Select the box next to **Use HTTPS**. Once selected, you’ll see the **TLS Certificate** section.
2. Enter the name of the certificate in **Subject**.
3. Select **Next** to continue with the Database Mapper configuration.

**Success:** You have enabled TLS for SolarWinds Database Mapper. Use **HTTPS://** at the beginning of the URL to open it in your browser.
**Note:**

- For a signed certificate from a trusted authority, you must register it on the machine so it goes into the **LocalMachine/My** store.
  - Additional Information: See the System Store Locations and Local Machine and Current User Certificate Stores articles on Microsoft Docs for details.
- When updating a certificate, you need to add it to the machine. Database Mapper will use the latest valid certificate (by expiration date) without requiring a restart of the machine or service. Older, invalid, and expired certificates will be ignored.

Review

The Review screen displays your configured options for your Database Connection and Hosting Connection.

Services
The Services screen displays after you've completed your configuring Database Mapper Software. The Host Service and API Service are installed automatically after configuration, and can be started/stopped from this screen.

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host Service status:</strong></td>
<td>Displays the current status of the Host service. Select <strong>Stop</strong> to stop the host service.</td>
</tr>
<tr>
<td><strong>API Service status:</strong></td>
<td>Displays the current status of the API Service. Select <strong>Stop</strong> to stop the API service.</td>
</tr>
<tr>
<td></td>
<td>Copies your Database Mapper connection URL to the clipboard.</td>
</tr>
<tr>
<td>Launch</td>
<td>Opens your Database Mapper URL connection.</td>
</tr>
<tr>
<td>Edit Configuration</td>
<td>Opens the <strong>Repository Configuration screen</strong> and allows you to change your configuration options.</td>
</tr>
<tr>
<td>Uninstall Services</td>
<td>Uninstalls the API and Host services.</td>
</tr>
</tbody>
</table>
Establishing your Connection

Use the Database Mapper Configuration Utility to create a site for your Database Mapper Software environment. Establish a connection by completing the following steps:

1. Open the Database Mapper Configuration Utility as an administrator.

2. Select **Start** to configure a new Database Mapper Software connection.
Start here for a new installation of Database Mapper. This installation will create:
- A new Database Mapper database on a SQL Server instance of your choice
- Host service – the front-end web server that will be used for accessing Database Mapper
- API service – provides connectivity to the Database Mapper database

3. Enter your Database Server that will host the Database Mapper database.
Note: The database for Database Mapper Software is named SentryOneDocument. If you don't have a Database Mapper Software database, the SentryOneDocument database will be installed onto your Server.

4. Select the login mode to use for your database server connection, and then enter a valid username and password.
5. Select **Advanced Options** and configure any applicable options for your database connection. Select **Next** to continue to the Windows Service Account configuration.
Additional Information: For more information about Advanced Options within the Database Mapper Configuration Utility, see the Advanced Options sections.

6. Enter the username and password that will be used for the Host and API services.
**Note:** The username should use the following syntax: `Domain\Username`.

The DMCU will use the local service account if the Service user username and password are left blank.

7. Select the IP address you want to use from the drop-down menu and then enter the domain name (friendly name) in the **Host Domain** field.
Important: The Host Domain field will determine your Database Mapper Web URL. For example, if your Database Mapper site will be connected locally with localhost like the example above, you will use localhost in the URL.

If you want your Database Mapper site to be accessible outside of the host machine, enter the host machine name. For example, if the host machine name is AppServer23, you would enter AppServer23 in the Host Domain field.

8. Select Advanced Options and configure any applicable options for your windows service account. Select Next to continue to the review screen.
9. Review the information you've entered for the Database Connection and Hosting Connection. Select Next to continue.
10. Select **Start** for the Host Service and API Service.

**Note:** Selecting **Next** automatically installs the Host and API services.
11. Select **Launch** to open your Database Mapper Software connection in your web browser. **Note:** You can also select **\(\)** to copy the Database Mapper URL to your clipboard. Your URL will use the following syntax: `http://ServerName:HostBinding` or `http://IpAddress:HostBinding`.

**Note:** In this example, our Database Mapper Software URL is `http://localhost:44303` or `http://127.0.0.1:44303`. You will be prompted to login with your Integrated or SQL Server Credentials used for the Hosting Services account.
Important: If you selected the Use HTTPS checkbox, your URL will begin with https://.

What's Next?

After configuring your Database Mapper Software installation you need to install the Remote Agent(s) and Solution Configuration Tool.
Installing the Database Mapper Remote Agent and Configuration Tool
Last Modified on 25 May 2022

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Installing

Additional Information:
- See the System Requirements article for important information, including required permissions.
- See the Remote Agent article for details about what it is and where you should install it.


3. Select the box next to *I accept the terms in the License Agreement* to accept the End-User License Agreement, then select **Next** to continue.

4. Select **Next** to accept the default installation direction, or use **Change** to set a custom installation directory before proceeding.
5. Select Install on the Ready to install Database Mapper Remote Agent screen to start the installation process.

6. The Installing Database Mapper Remote Agent screen will display the status of the installation process.

**Note:** Between this step and the next there may be a User Account Control popup message asking you if you want to allow the application to make changes. If the screen seems stuck and the install does not progress, the popup may be behind it.
7. Select Finish to complete the installation. **Launch SolarWinds Database Mapper Remote Agent Configuration Tool** is checked by default and will open the application automatically.

![Database Mapper Remote Agent Setup](image)

**Additional Information:** See the Troubleshooting Database Mapper article if you are having trouble installing the remote agent.

**Configuring**

Configure the settings for your remote agent in the **Database Mapper Remote Agent Configuration Tool**. Complete the following steps to finish your configuration:

1. Enter the instance name for your remote agent, and the service URL. Select **Next** to continue.
Note: If you need to use a proxy to connect to the Internet, use the link on the screen to configure it before proceeding.

Important:

- The **Service Instance Name** is a friendly name for the agent. It appears in the application with this name, and the service name will be *SentryOne Document Remote Agent* on the machine where it is installed.
- The **Target Host URL** (service URL) is set to *https://document.sentryone.com* by default and this is the URL you should use for Database Mapper cloud. For Database Mapper Software, you should use the on-premises host URL where you are hosting Database Mapper.
- The green check marks shown in the image above indicate a valid connection.

2. Enter the remote agent account username and password. Select **Next** to continue.
Note: The service account needs *Log on as a service* rights, as well as write permissions to the agent’s configuration file `C:\ProgramData\PragmaticWorks\ServiceCore\SentryOneDocumentRemoteAgentService.{Agent Name}.xml`. If it doesn’t have write access to this file, you may experience problems during the registration process. Other permissions to resources may be required in order to create snapshots.

3. Enter the number of **Maximum Concurrent Tasks** that the remote agent can complete (the default value is 4) and accept the default **Local Cache Path** or use the ... ellipsis to select a custom path. Select **Next** to continue.
4. Authenticate the account with the target host. Sign in with your SentryOne account or use the **Create Account** option to sign up for an account.

⚠️ **Important:** Step 4 only applies to the cloud version of Database Mapper, not **Database Mapper Software**.
5. You’re now ready to install the remote agent with the configuration values you just set. Select **Next** to start the process.

![Remote Agent Configuration Tool](image)

**Ready to install**

The service is ready to install with the following configuration values:

- **Instance Name:** Localhost
- **Host API URL:** http://localhost:4822
- **Maximum Concurrent Tasks:** 4
- **Local Cache Path:** C:\ProgramData\SentryOne\Document\Cache\Localhost
- **Authentication:** Not required
- **Service Account:** Localhost\jesseRemoteAgentUser

Please note, to register the remote agent, the user associated with the remote agent configuration must have Manage Agents permission enabled. If the remote agent did not successfully register with the host, check the remote agent log.

![Next Button](image)

6. When the installation is complete, you’ll have options to 1) **Start service**, 2) **Configure solutions**, or 3) **Exit**.

![Database Mapper Remote Agent Configuration Tool](image)

**Installation complete**

The service is now ready to use, and can be found in the Windows services control panel. You can now use the solution configuration tool to configure solutions ready for you to document.

![Buttons](image)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start Service</strong></td>
<td>Select <strong>Start Service</strong> to activate the remote agent on your machine.</td>
</tr>
</tbody>
</table>
Configure Solutions

Select **Configure Solutions** to open the Database Mapper configuration tool. Use the Database Mapper configuration tool to configure solutions for your environment. Add Solutions and Solution items with the configuration tool in the same way as the Database Mapper Client. For full instructions on adding solutions and solution items, see **Adding Solutions** and **Adding Solution items**.

Exit

Closes the Database Mapper Remote Agent Configuration tool.

### Launching

**Important:** If you are using the cloud version of Database Mapper, step 1 is required. If you are using the self-hosted software version, you can close this screen and continue to step 2.

1. When the **Database Mapper Solution Configuration Tool** first launches, there is a browser pop up screen that asks you to log in to your SentryOne account.

![Login Screen](image)

2. The **Welcome to Database Mapper!** screen appears. If you didn't log in, you may see a **Credentials are required for this server** error message for the default server. Accept the default **Server** if it is correct (the cloud version is https://document.sentryone.com), or enter the URL of your on-premises host.
3. Select **Validate** to test the connection to the specified **Server**. Once the validate is successful, select **Connect**.

![Cloud Version example](image1)

![On-Prem Host example](image2)

**Note:** If you belong to more than one Organization, please select the correct one from the drop-down list. The drop-down list only appears if there are multiple organizations associated with your account.

4. Select the **Start** button on the **Welcome!** screen to add your first solution.
Welcome!

SolarWinds Database Mapper is a cloud-based documentation and analysis tool that brings together metadata from various sources in order to produce documentation from that metadata as well as analyze the dependencies that exist in your BI Stack.

In order to organize the metadata into logical groups, SolarWinds Database Mapper uses solutions as logical containers for the metadata sources.

This wizard will help you get started in setting up your first solution.

Additional Information: See the Database Mapper Configuring Solutions article to continue adding your first solution.
**Update:** SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

**Note:** While this step isn’t required before signing in, you’ll want to configure a **solution** first so you’ll have something to see once you log into Database Mapper.

## Configuring Your First Solution

After installing the Database Mapper remote agent and configuration tool, you can add **solutions** and **solution items** that you want to document. A Database Mapper **solution** is a user-defined grouping of the data providers that you want to document and analyze in your environment. Each **solution** contains user-added **solution items**. **Solution items** are the individual documentation providers that contain the user-defined credentials needed to connect to and document a specific target technology. For example, you could have a **Production solution**, that consists of the SQL Server **solution items**, and SSIS package **solution items** used in your production environment.

**Note:** **Solution items** can be filtered to contain the amount of information you want to document. For example, you can filter a SQL Server **solution item** to contain only databases, or specific tables. For more information about configuring and filtering **solution items**, see the **Solution Items** article.
Add your first **solution** and **solution item** with the **Database Mapper Configuration tool** by completing the following steps:

1. Select **Configure Solutions** from the **Remote Agent Configuration Tool** to open the **Database Mapper Solution Configuration Tool**.

![Database Mapper Remote Agent Configuration Tool](image)

**Note:** The **Database Mapper Solution Configuration Tool** is installed with the Database Mapper remote agent.

2. Select **Add** to open the **Solution Wizard**, and then select **Start** on the welcome page to continue.
3. Enter a meaningful **name** for your **solution**, then select **OK** to continue.

4. Enter an **item name** for your **solution item**, then select a **source type** for your **solution item** from the drop-down list.
Additional Information: See the Solution Items article for details about the solution wizard and available source types.

5. Enter Source options connection information for the solution item. Select OK to add the solution item, and finalize the solution.
6. Select **Add** to include more solution items or **OK** to complete the process.
Success: Your solution item has been successfully added to your Database Mapper solution.

7. Log into Database Mapper at document.sentryone.com to view your new Solution.

Adding Additional Solution Items

You can add more solution items to your solution by selecting Add, and then repeating steps four and five from above.

What's Next?

Now that you've got a solution configured, you're ready to generate documentation and explore the Solutions Dashboard.
After you have successfully installed the Database Mapper remote agent and configured a solution (see the Getting Started article for instructions), you can use Database Mapper to generate documentation. Generate documentation for your solution by completing the following steps:

1. Log into Database Mapper, then select **Solutions** to open the **Solutions** dashboard or select to open the Solution Card View.

2. Select the **Configure Snapshot** button for the desired solution to open the Snapshot Configuration window. Select the documentation type, and then select **Start Snapshot** to start your snapshot.

**Note:** Your Snapshot Request is processed by the remote agent assigned to the solution. The snapshot may take several minutes. View your snapshot progress on the **Task History** page for the selected solution.
Note: You can cancel a snapshot for a solution that’s pending, or in progress on the solution’s Task History page. Select Cancel to open the Confirm Workflow Cancellation window, then select Confirm to cancel the snapshot.

Important: The Remote Agent pool assigned to your Solution needs at least one Remote Agent to take a snapshot. If your Remote Agent pool doesn’t have an assigned Remote Agent, you are prompted to assign one.
Once your documentation has generated, you can select from the Solutions Dashboard to open the Documentation page and drill down into your solution’s metadata.
Note: You can also select the Documentation tab, then select a Solution from the drop-down list to display documentation.

Additional Information: For more information about the Documentation page in Database Mapper, see the Database Mapper Solutions Dashboard article.
**Update:** SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

## Overview

The Database Mapper **Solutions Dashboard** allows you to manage the solutions that are uploaded to Database Mapper. Select **Solutions** to open the **Solutions Dashboard**.

The Solutions Dashboard displays details about the solutions within your environment.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the selected solution.</td>
</tr>
<tr>
<td>Created</td>
<td>The date and time the solution was created.</td>
</tr>
<tr>
<td>Last Updated</td>
<td>The date and time the solution was last updated.</td>
</tr>
<tr>
<td>Default Agent Pool</td>
<td>The remote agent pool that generates the documentation for the solution.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Image" /></td>
<td>Opens the <strong>Documentation</strong> page for the selected Database Mapper solution. View the most recent snapshot results for the solution. Drill down into the solution, and the solution items within the solution for a more granular view into your environment.</td>
</tr>
</tbody>
</table>
This feature is not available with Essentials or Standard licensing. If you’d like to use this feature, please visit our product pricing page to learn more.

Opens the Lineage page for the selected solution.

Note: You must take a snapshot of your solution before you can view any lineage.

Take a snapshot of the selected solution. Selecting the Snapshot Configuration button opens the Snapshot Configuration window. Select the documentation type, and then select Start Snapshot to take a snapshot of the selected solution with the assigned Remote agent.

The Business Analyst and Developer documentation views are available with Version 2022.3. The Business Analyst view is applied by default, and provides a streamlined view of your data source. For example, the Business Analyst view for a SQL Server data source will display information such as SQL Server databases and tables. The Developer view records more detailed and granular information, such as security logins and roles, SQL Server Agent Jobs, etc.

Note: Starting a Snapshot Request sends the request to the assigned remote agent. After the snapshot has completed, the remote agent generates documentation, and uploads the snapshot and documentation to Database Mapper. Schedule a snapshot using the Database Mapper CommandLine executable.

Note: If you are requesting a snapshot for the first time, you must first authenticate using the command provided in the window.
<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="download.png" alt="Download" /></td>
<td>Select the <strong>Export</strong> button and then select <strong>Export Documentation</strong> to export the current documentation for the selected solution. Select the <strong>Export</strong> button and then select <strong>View Exports</strong> to open Documentation Exports page for the selected solution.</td>
<td><img src="documentation_export.png" alt="Documentation Export" /></td>
</tr>
</tbody>
</table>
| ![Change Pool](change_pool.png) | Select the **Change Pool assignment** button to assign a different remote agent to the selected solution. Selecting this button opens the **Assign to Pool** window. Select the desired remote agent from the drop-down list, and then select **Save** to save the remote agent pool assignment for the solution.  

**Note:** Select the **Include Solution Items** toggle to move all Solution Items associated with your selected Solution to the new Remote Agent Pool. | ![Assign to Pool](assign_to_pool.png) |
| ![Solution Items](solution_items.png) | Opens the Solution items window for the selected solution. The solution items window displays details about the solution items within the selected solution, giving you a more granular look at the items within your environment. | ![Solution Items](solution_items_window.png) |
| ![Manage Aliases](manage_aliases.png) | Opens the Manage solution aliases window for the selected solution. For more information about managing aliases in Database Mapper, see the **Solution Aliases** article. | ![Manage Aliases](manage_aliases_window.png) |
| ![Task History](task_history.png) | Opens the Task History page for the selected solution. | ![Task History](task_history_window.png) |
Solution Dashboard Card View

Starting with Versions 2022.4 and later, you can view your Solutions and Solution Items as cards on the Solutions Dashboard. Open the Solutions Dashboard and select ![button] to open the Solution Card view.

The Solution Card view displays information about your Solution and Solution items. In the Solution Card view, each Solution in your Database Mapper Environment displays as a singular card. The Solution name is displayed at the top of the card, followed by solution meta-data such as the Solution creation date and assigned Agent pool below. Select the **Solution Items Found** toggle to display the Solution Item(s) for the selected Solution.

Solution Dashboard Card View Options

The following information and buttons are presented on each Solution Card:
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>The name of the selected solution.</td>
</tr>
<tr>
<td><strong>Last Updated</strong></td>
<td>The date and time the solution was last updated.</td>
</tr>
<tr>
<td><strong>Created On</strong></td>
<td>The date and time the solution was created.</td>
</tr>
<tr>
<td><strong>Agent Pool</strong></td>
<td>The remote agent pool that generates the documentation for the solution.</td>
</tr>
</tbody>
</table>

Select the ^ Solution Items Found toggle to display the Solution Item(s) for the selected Solution.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>The name of the Solution item.</td>
</tr>
<tr>
<td><strong>Default Agent Pool</strong></td>
<td>Displays the Remote Agent pool that runs the snapshot for the solution item.</td>
</tr>
</tbody>
</table>

Select the Change Pool assignment button to assign a different remote agent to the selected solution. Selecting this button opens the Assign to Pool window. Select the desired remote agent from the drop-down list, and then select Save to save the remote agent pool assignment for the solution.

**Note:** Select the Include Solution Items toggle to move all Solution Items associated with your selected Solution to the new Remote Agent Pool.

Opens the Task History page for the selected solution item.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Documentation" /></td>
<td>Opens the <a href="#">Documentation view</a> for the selected Solution.</td>
</tr>
<tr>
<td><img src="image" alt="Lineage" /></td>
<td>Opens the <a href="#">Lineage view</a> for the selected solution.</td>
</tr>
</tbody>
</table>

Take a snapshot of the selected solution. Selecting the **Snapshot Configuration** button opens the **Snapshot Configuration** window. Select the documentation type, and then select **Start Snapshot** to take a snapshot of the selected solution with the assigned Remote agent. In the Solution Card View for Versions 2022.4 and later, the snapshot button changes based on the Snapshot task history. See the legend below for more information:

- ![Snapshot](image) This button indicates that the last solution snapshot has completed successfully.
- ![Snapshot](image) This button indicates that the last solution snapshot has failed.
- ![Snapshot](image) This button indicates that a snapshot has been configured for this solution.
- ![Snapshot](image) This button indicates that your last Solution Snapshot was canceled.
- ![Snapshot](image) This button indicates that your Solution is configured for a snapshot.

The Business Analyst and Developer documentation views are available with Version 2022.3. The Business Analyst view is applied by default, and provides a streamlined view of your data source. For example, the Business Analyst view for a SQL Server data source will display information such as SQL Server databases and tables. The Developer view records more detailed and granular information, such as security logins and roles, SQL Server Agent Jobs, etc.

- **Note:** Starting a Snapshot Request sends the request to the assigned remote agent. After the snapshot has completed, the remote agent generates documentation, and uploads the snapshot and documentation to Database Mapper. Schedule a snapshot using the Database Mapper CommandLine executable.

- **Note:** If you are requesting a snapshot for the first time, you must first authenticate using the command provided in the window.

| ![Task History](image)   | Opens the [Task History page](#) for the selected solution.                                                                                     |

---

**Solution Items**

---

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
<th>Subscribed Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales DBS</td>
<td>2022/09/28 08:30 AM</td>
<td>Default</td>
</tr>
<tr>
<td>View Field History</td>
<td>2022/09/28 08:30 AM</td>
<td>Default</td>
</tr>
</tbody>
</table>
The Solution Items page displays metadata for the selected solution item in your environment.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the selected solution.</td>
</tr>
<tr>
<td>Created</td>
<td>The date and time the solution was created.</td>
</tr>
<tr>
<td>Last Updated</td>
<td>The date and time the solution was last updated.</td>
</tr>
<tr>
<td>Default Agent Pool</td>
<td>The remote agent pool that runs the snapshot for the solution item.</td>
</tr>
</tbody>
</table>

**Button**

Select the Change Pool Assignment button to select a different remote agent to snapshot the selected solution item. Selecting this button opens the Assign to Pool window. Select the desired remote agent from the drop-down list, then select Save to save the remote agent pool assignment for the solution item.

Opens the Task History page for the selected solution item.

**Task History**

The Task History page displays the usage history for a selected Solution, or Solution item.

Expand a Task to display the individual task steps and their statuses.
The Task History page gives you historical insight into the tasks that run on your Database Mapper solutions and solution items. The following details are provided:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ Checkmark ]</td>
<td>The ![ Checkmark ] task status indicator means the task was successful. The ![ Checkmark ] task status indicator means that the task was unsuccessful. The ![ Checkmark ] task status indicator means the task was cancelled.</td>
</tr>
<tr>
<td>Command Description</td>
<td>The Command Description section provides you with a description of the Task, and the solution name.</td>
</tr>
<tr>
<td>Created</td>
<td>The Created section notes the day and time the task was created.</td>
</tr>
<tr>
<td>Started</td>
<td>The Started section notes the day and time the Task was started for the solution or solution item.</td>
</tr>
<tr>
<td>Completed</td>
<td>The Completed section notes the day and time the Task was completed for the solution or solution item.</td>
</tr>
<tr>
<td>User</td>
<td>The User section notes the user responsible for the Task.</td>
</tr>
</tbody>
</table>

Task History Actions

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
</table>
| ![ Cancel ] | Opens the Confirm Workflow Cancellation window for the selected solution. Select Confirm to cancel the snapshot. ![ Confirm Workflow Cancellation ]

**Note:** You can cancel snapshots that are in progress, or snapshots that are scheduled to take place at a later time. |
When selected, the Task History page refreshes every 20 seconds.

**Note:** This option is active by default. The auto refresh option turns off after ten minutes of activity.

Select the Download Log Output button to download the selected Task history log. Select Open to open the file, or select Save to save the file to your machine.

Select the See log output button to display the log output for the selected task.

### Documentation Exports

The **Documentation Exports** page displays details about your selected solution’s exported documentation. The following details are provided:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requested Documentation Version</td>
<td>The day and time that the documentation was created. The version (referenced by the date and time the documentation was created) of the exported documentation.</td>
</tr>
<tr>
<td>Export Generated</td>
<td>The day and time that the documentation was exported.</td>
</tr>
</tbody>
</table>
The number of pages of the exported documentation.

The file size in MB of the exported documentation.

Documentation Exports Actions

Use the Documentation Exports page to download any of your exported documentation versions.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="download_icon.png" alt="Download Documentation" /></td>
<td>Select the Download Documentation export button to download the selected documentation. Select Open to open the file, or select Save to save the zip file to your machine. <strong>Note:</strong> Database Mapper exports HTML files only. This is applicable to all solution items.</td>
<td><img src="download_icon.png" alt="Download Documentation" /></td>
</tr>
<tr>
<td><img src="delete_icon.png" alt="Delete" /></td>
<td>Select the Delete export button to open the deletion prompt. Select Delete to delete the selected documentation export.</td>
<td><img src="delete_icon.png" alt="Delete" /></td>
</tr>
</tbody>
</table>

Documentation Export window

This will request an export of the Current Version of documentation for solution: S1DOC_Cloud

- Use enhanced logging

Once ready, the documentation will be available to download from the "View Exports" screen.

Select the Export Documentation button for the desired solution, and then select Export Documentation to open the Export Documentation window. The following options are available:
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="current_version" alt="Current Version" /></td>
<td>Select the <strong>Current Version</strong> button to change your view of your Documentation export. Select Point in Time, and then select the Date and Time of the documentation you want to export. Select OK to save your documentation view selection. The Current Version option is the default selection.</td>
</tr>
<tr>
<td><img src="use_enhanced_logging" alt="Use enhanced logging" /></td>
<td>Select the <strong>Use enhanced logging</strong> checkbox to enable enhanced logging for your documentation export.</td>
</tr>
<tr>
<td><img src="request_export" alt="Request Export" /></td>
<td>Select <strong>Request Export</strong> to begin exporting your documentation.</td>
</tr>
<tr>
<td><img src="close" alt="Close" /></td>
<td>Select <strong>Close</strong> to close the Documentation Export window.</td>
</tr>
</tbody>
</table>
Creating a Database Mapper Solution

Create a new Database Mapper Solution in the Database Mapper Solution Configuration tool by completing the following steps:

1. Open the Database Mapper Solution Configuration Tool, and then select Add to open the Solution Wizard.

2. Enter a meaningful name for the solution and then select OK to create your Solution.
Success: You have now created a new Database Mapper Solution!

Note: The next screen prompts you to name the item and then select a source type. For more detailed information about adding solution items, and the specific steps for those items, see the Solution Items article.

Managing an existing Solution

To make changes to an existing Database Mapper Solution, complete the following steps:

1. Open the Database Mapper Solution Configuration tool, and then select the solution you want to manage.

2. Select Open to display the associated solution items. Select the desired Solution item, and then select Edit to begin making changes.
Managing Solutions from Multiple Organizations

If you are a member of multiple organizations, you can navigate to solutions in each organization from the [Database Mapper Solution Configuration Tool](#) and Database Mapper.

Database Mapper Solution Configuration Tool

Manage your solutions within a different organization by completing the following:

1. Open the Database Mapper Solution Configuration Tool, then select **Logout** to sign out of your default organization.

2. Select the **Organization** you want to connect to from the drop-down menu, then select **Connect** to connect to the organization.
Success: You are now connected to your selected organization, and can manage its Solutions and Solution items.

Database Mapper

Manage your solutions and view documentation within a different organization by completing the following:

1. Log into Database Mapper.

2. Select the **Organization** drop-down menu, then select the **Organization** you want to view.

Success: You can now view the documentation from the selected organization.

Viewing your Solutions on the Solutions Dashboard

After configuring your solutions in the Database Mapper Solution Configuration tool, you can log onto your Database Mapper portal and view your snapshotted solutions.
**Additional Information:** For more information about viewing your Solutions on the Solutions Dashboard, see the Solutions Dashboard article.

For more information about beginning a snapshot, see the Database Mapper Generating Documentation article.
Overview

The Database Mapper Solution Configuration tool allows you to add solutions and solution items to your Database Mapper environment. Selecting Add a Solution item opens the Add Solution item window. Each solution item contains the following configurable options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item Name</strong></td>
<td>The name you want to give your solution item.</td>
</tr>
<tr>
<td><strong>Source Type</strong></td>
<td>The type of solution item that you want to add to your solution.</td>
</tr>
<tr>
<td><strong>Only update this item as part of a manual snapshot</strong></td>
<td>Selecting this checkbox only updates the solution item when you choose to manually snapshot the solution.</td>
</tr>
<tr>
<td><strong>Snapshot this item using a 32-bit process</strong></td>
<td>Selecting this checkbox uses a 32-bit process to snapshot the solution item.</td>
</tr>
</tbody>
</table>

You can select from a variety of solutions to document, including the following:
- Azure Data Factory
- Azure Synapse Analytics
- Custom Metadata Import
- Environment Map (SQL Sentry DB)
- Excel Spreadsheet
- MySQL
- Oracle
- PostgreSQL
- Power BI
- Power BI Report Server
- SalesForce
- SQL Server 2005-2019 (Legacy SMO)
- SQL Server 2008+, Azure SQL & DacPac
- SSAS Server 2005-2014
- SSAS Server 2016
- SSAS Server 2017-2019
- SSIS 2005
- SSIS 2008
- SSIS 2012
- SSIS 2014
- SSIS 2016
- SSIS 2017
- SSIS 2019
- SSRS 2008 R2-2019
- Tableau Server

1️⃣ **Note:** If a solution item provider isn't available for you to select in the **Solution Configuration tool**, your system may not meet the provider's system requirements. For information about the individual requirements to document a provider, see the **System Requirements** article.

![Add solution item](image)

**Source type not available**

The source type 'SSIS 2005' is not available on this machine. This is because the pre-requisites for the source type could not be found. Please check the pre-requisites listed at [https://docs.sentryone.com/help/sentryone-document-system-requirements#required-provider-files](https://docs.sentryone.com/help/sentryone-document-system-requirements#required-provider-files) and make sure that the pre-requisites have been met.

If you have recently installed the pre-requisites, please use the 'Rescan' button in order to scan the available source types again.

1️⃣ **Note:** Database Mapper exports HTML files only. This is applicable to all solution item types. See the
Filtering Solution Items

Database Mapper allows you to control the amount of data you want to record within your solution items. Manage the data within new or existing solution items by using the **Edit Filter** button. Complete the following steps to filter your solution item:

1. Open an existing Database Mapper solution (or create a new one).

2. Select **Add** to create a new solution item, or select **Edit** to open an existing solution item.

3. Select **Edit Filter** to open the **Configure filtering** window for the selected solution item.
4. Select the object type(s) you want to exclude from solution item snapshot, and then select Next to continue.
Choose included types

You can prevent the snapshot from containing certain types. To exclude a type of object, click its check box. Type exclusion is not mandatory, and on the next screen you will be able to select individual objects.

- Show full type names
- Select all
- Select none
- Search...

- CatalogEnvironment
- Configuration
- ConnectionManager
- DtsEventHandler
- EventInfo
- ExtendedProperty
- LogEntryInfo
- LogProvider
- ProjectParameter
- Variable

**Note:** A checkmark ✓ indicates that the Object type is included in the snapshot. An X mark ✗ indicates that the object type is excluded from the snapshot. All Object types are included for the solution item by default.

**Note:** The next page presents you with a tree diagram that represents the solution item snapshot. You can select to exclude individual objects in this section.

5. Select ➤ to expand the solution item tree, and then select the object(s) you want to exclude from the snapshot.
Choose included and excluded items

The tree below shows a representation of the snapshot content. In order to exclude items, click on their check box. To include an item that is a child of an excluded item, click its check box. To include only a single item within a group, exclude its parent and then include the item.

Note: Selecting an object at the top of a hierarchy automatically excludes the objects below the selected object.

6. Select OK to save your solution item filter.
Choose included and excluded items

The tree below shows a representation of the snapshot content. In order to exclude items, click on their check box. To include an item that is a child of an excluded item, click its check box. To include only a single item within a group, exclude its parent and then include the item.
What is a Solution Alias?

During documentation and lineage generation, there may be implicit items that are a part of your solution which contain undetected links because of server aliases such as localhost. Database Mapper solution aliases are used to specify links between solution items that are implicitly created during lineage.

For example, you could have a SQL Server named MyDBServer that also has a role as a reporting services server. The reports might connect to an alias such as localhost to retrieve the data from the MyDBServer database instead of using the actual server name. You would need to create a solution alias that could be used in the lineage generation process so that you could map localhost to MyDBServer and properly document the lineage.

Access the Manage Solution Aliases Window

Open the Manage solution aliases window by doing one of the following:

- Select for your desired solution on the Solutions Dashboard
• Select **Manage Aliases** from the selected solution’s **Lineage** page

👉 This feature is not available with Essentials or Standard licensing. If you’d like to use this feature, please visit our product pricing page to learn more.

---

**Manage Solution Aliases Window**

The **Manage solution aliases** window displays all of the aliases within your currently selected solution. The following options are available:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add</td>
<td></td>
</tr>
<tr>
<td>Edit</td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>Cancel</td>
<td></td>
</tr>
<tr>
<td>Button</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>OK</td>
<td>Saves all changes to solution aliases and closes out of the window.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Cancels out of all changes made to solution aliases and closes out of the window.</td>
</tr>
<tr>
<td>Add</td>
<td>Allows the user to configure a new solution alias to add to the solution.</td>
</tr>
<tr>
<td>Edit</td>
<td>Edits an existing solution alias.</td>
</tr>
<tr>
<td>Delete</td>
<td>Deletes an existing solution alias.</td>
</tr>
</tbody>
</table>

**Adding a Solution Alias**

Add a new solution alias by completing the following steps:

1. Select **Add** to open the **Manage solution alias** window.

2. Select a **Source solution item**, and **Target Technology type** from their respective drop-down lists.
3. Enter the **Original Target** name and a **Replacement Target** name for your object. Select **OK** to add your alias to the solution.

**Note:** Add multiple aliases at the same time by selecting **More**. Selecting **More** displays an additional
Add Solution Alias Window

The following table describes the options within the **Add solution alias** window:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source solution item</strong></td>
<td>Designates the solution item(s) where the alias will be applied. Setting the <strong>Source solution item</strong> to <strong>Global</strong> applies this alias to all solution items.</td>
</tr>
<tr>
<td><strong>Target technology type</strong></td>
<td>Designates the technology type where this alias will be applied. Setting the <strong>Target technology type</strong> to <strong>None</strong> applies this alias to all technologies.</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td>Designates the string that you want to search for within the target technology.</td>
</tr>
<tr>
<td><strong>Replacement</strong></td>
<td>Designates the string with which you want to replace the Source.</td>
</tr>
<tr>
<td><strong>Match Case</strong></td>
<td>Designates whether Database Mapper matches the <strong>Source</strong> part exactly or whether it ignores case sensitivity.</td>
</tr>
<tr>
<td><strong>Less</strong></td>
<td>Removes an additional <strong>Original target</strong> and <strong>Replacement target</strong> text box from the window.</td>
</tr>
<tr>
<td><strong>More</strong></td>
<td>Adds an additional <strong>Original target</strong> and <strong>Replacement target</strong> text box to the window.</td>
</tr>
</tbody>
</table>
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Database Mapper Documentation Page

The Documentation page displays the most recent documentation for your selected solution by default.

Note: Select the Configure Snapshot button for the desired solution on the Solutions dashboard to generate new documentation for that solution.

Opening the Documentation Page

Open documentation for your solution through one of the following methods:

Select on the Solutions dashboard for the desired solution.

Select the Documentation tab, then select the desired solution from the drop-down list.
Displaying Documentation

On the **Documentation** page in Database Mapper, you have complete control over your uploaded data. Display the data you want to see by completing one of the following steps:

Select ➔ to expand the nodes, then select the desired link from the documentation tree on the left of the page.

Select a link in the documentation on the right to drill down into desired sections.

Changing Views

View your documentation at a specified point in time by completing the following steps:

1. Select the view button (**Current Version**) to expand the documentation view options.
Note: The view button displays as **Current Version**, or a specified date and time depending on the selected view.

2. Select the **Point in time** view, then enter the desired time.

3. Select **OK** to update the documentation.

**Success:** You are now viewing your historical documentation!
Note: Return to the current view of your documentation at any time by selecting the view button, then selecting Current.

Searching for Data

Note: Starting with Version 2021.8, any search terms that you search for will include results for your term in the Documentation and in the Data Dictionary values. You can further condense your search by selecting Documentation Only, Data Dictionary Only, or a Data Dictionary Category from the dropdown menu.

Search for specific metadata within your environment by using the Documentation page search bar.

Select the desired search parameters from the drop-down menu. Enter a specific search term into the search bar, then select Search to display your results.
Select a link from the **Search results** to display the data related to the search.

Note:
Select **Back to Contents** from the search results window to return to the documentation tree view.

Select **Back to Last Search Results** to return to the search results on the left side view.
Searching Data Dictionary Categories

Select the desired Data Dictionary Category from the drop-down menu. Enter the Data Dictionary value into the search bar, then select Search to display your results.

Select a link from the Search results to display the data related to the search.

Comparing Documentation

Use the Database Mapper Documentation page to compare your documentation against previous snapshot versions, and see the changes made to your solution and solutions items over time.
If there have been changes made to your **Solution**, you can view these changes by completing the following steps:

1. Open the Database Mapper **Documentation** page, then select a **Solution**.

2. Navigate to the desired object through the solution explorer, or search for an object.

3. Select **Version History** to open the **Version History** page. Select the object versions you want to compare, then select **Compare** to display the **Side by Side View** comparison.

**Note:** There needs to be captured differences in the documentation to use the **Documentation** button.
Version History feature. Database Mapper displays the following prompt if there are no documented differences:

```
There are no previous versions of documentation for this topic.
Expected to see some history here?
New versions of documentation are created during the snapshot process, any if something has changed for that topic. Taking multiple snapshots may not necessarily result in multiple versions appearing here.
```

**Note:** In this example, the difference between the object versions can be seen in the available databases.

4. Select the **Diff View** tab to display the object with highlighted changes.

```
Note: Text in red has been removed from the object, and text in green has been added to the object.
```

### Comparing Solutions

**Note:** To use the **Comparison** feature, the solution snapshots need to be generated by a remote agent from Version 2022.2 or later. See the release notes for more information.

You can compare two different solutions by selecting the **Comparison** button. This can be useful for
comparing similar solutions that may be used in different environments. For example, you might have two SQL Server solutions; one for your development environment, and the second for your production environment. When comparing two solutions, you can recognize similarities and discover differences with the following icons:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>The solution items are equal in both solutions.</td>
</tr>
<tr>
<td>✗</td>
<td>The solution items are not equal in both solutions.</td>
</tr>
<tr>
<td>←</td>
<td>The solution item is only present in the left solution.</td>
</tr>
<tr>
<td>→</td>
<td>The solution item is only present in the right solution.</td>
</tr>
</tbody>
</table>

To compare two applicable solutions, complete the following steps:

1. Select the **Comparison** button to open the Document Comparison view.

2. Select a solution to compare for the left comparison, then select a solution to compare for the right comparison.

3. Select **Change Left Start Point**, specify a left starting point, then select **update**.

4. Select **Change right Start Point**, specify a right starting point, then select **update**.
5. Compare the two presented solutions.

**Important:** Selecting meta data from the Comparison displays the documentation from both Solutions at the bottom of the screen. The Documentation displays in **Side By Side View** by default.

Select **Side by Side View** to display the selected documentation in the Diff View.

Select **Diff View** to display the selected documentation in Side By Side View.
You can filter your document comparison further with the following options:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[✓] Equal</td>
<td>Remove <strong>Equal</strong> items from the comparison.</td>
</tr>
<tr>
<td>[✗] Not Equal</td>
<td>Remove <strong>Not Equal</strong> items from the comparison.</td>
</tr>
<tr>
<td>← Left Only</td>
<td>Remove <strong>Left Only</strong> items from the comparison.</td>
</tr>
<tr>
<td>→ Right Only</td>
<td>Remove <strong>Right Only</strong> items from the comparison.</td>
</tr>
</tbody>
</table>

**Displaying Lineage**

⚠️ This feature is not available with Essentials or Standard licensing. If you’d like to use this feature, please visit our product pricing page to learn more.

Use the **Jump to Lineage** button to display the data lineage for your selected documentation object.
Note: If there is no Lineage for your selected Documentation, Database Mapper navigates to the closest parent object.

<table>
<thead>
<tr>
<th>Documentation button</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jump To Lineage</td>
<td>Opens the Lineage page focused on the selected documentation object.</td>
<td><img src="image.png" alt="Image of Jump To Lineage" /></td>
</tr>
</tbody>
</table>

Navigate to your desired documentation object, and then select **Jump to Lineage** to display the lineage for that object.

Exporting Documentation

You can export the current version, or a point in time version of your documentation for any selected Solution. Save the exported documentation for your records, or distribute the exported documentation across your team and business leaders. Begin exporting your documentation by completing the following steps:
1. Select Solutions to open the Database Mapper Solutions Dashboard.

2. Select the Export Documentation button and select Export Documentation to open the Documentation Export window.

3. Select the version of the documentation that you want to export. Select Current Version, and then select Point in Time to select a previous documentation version. Select a date and time from the calendar, and then select Ok to save your selection.

4. Select Request Export to begin exporting the documentation.

⚠️ Note: The current version of the documentation is selected by default.
Success: You have requested to export your documentation! View the progress of your export on the Task History page.

**Downloading Exported Documentation**

After your **Documentation Export** request has completed, you can download your documentation. Download your documentation by completing the following steps:

1. Select **Solutions** to open the **Solutions Dashboard**.

2. Select the **Export Documentation** button, then select **View Exports** for the desired solution to open the **Documentation Exports** page.
3. Select the **download** button for the desired documentation version, then select **save** to save the documentation to your machine.

**Additional Information:** See the Documentation Exports section of the Solutions Dashboard article to learn more about exports.
Database Mapper Lineage

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

This feature is not available with Essentials or Standard licensing. If you'd like to use this feature, please visit our product pricing page to learn more.
The Database Mapper Lineage feature allows you to discover where data originates and where it gets used. It simplifies the process of tracing the lineage and impact of data within a system by enabling you to explore the dependencies in your environment.

Feature Highlights

- Diagrammatic and interactive form saves time
- Speeds up development by allowing you to view dependencies clearly
- Enables you to pinpoint the source of data in objects
- Allows business analysts to make clear judgments about the correctness of data
- Enables you to identify areas where errors may be introduced

⚠️ Note: A snapshot must be taken before Lineage allows you to view the dependencies for a solution.

Using Database Mapper Lineage

After creating a solution using the Database Mapper configuration tool, and taking a snapshot, you can view the lineage for your solution. Complete one of the following steps to open Database Mapper Lineage:

Select the on the Database Mapper Solutions Dashboard to open Lineage Analysis for your solution.

Select the Lineage tab to open Lineage Analysis, then select a solution from the drop-down list.
Navigating Database Mapper Lineage

In Database Mapper Lineage, the view diagram panel takes up a majority of the window. All the settings selected with the **Lineage** toolbar apply to the currently selected object within the **Solution Explorer** to create a visual representation of the object's lineage. The following table describes the buttons and settings within the **Lineage** toolbar:

<table>
<thead>
<tr>
<th>Toolbar button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select Solution</strong> &gt;</td>
<td>Use the Solution drop-down list to select the solution you want to display lineage.</td>
</tr>
<tr>
<td><strong>Manage Aliases</strong></td>
<td>The <strong>Manage Aliases</strong> button opens the <strong>Manage Solution Aliases</strong> window and allows you to clarify the location of implicit items for this solution.</td>
</tr>
</tbody>
</table>

*Note:* After aliases have changed, Database Mapper requires a snapshot of the solution in to refresh the dependency links within lineage analysis. For more information about solution aliases, see the **Database Mapper Solution Aliases** article.
The **Granularity Detail** drop-down allows you to adjust the granularity of the objects that are included within the current session of lineage analysis. The following options are available:

- **High Detail**: Allows you to see down to the column, measure, and attribute level of lineage.
- **Medium Detail**: Allows you to see down to the table, component, SSRS item, KPI, and measure group level of lineage.
- **Low Detail**: Allows you to only see the database, package, and report level of lineage.

The **Reset View** button allows you to refresh the lineage data from the Database Mapper database.

The **Legend** button allows you to toggle viewing of the legend.

The **Text View** switch allows you to toggle viewing the lineage in a textual or graphical representation. For a large and complex graph, this text option can help you make sense of the inbound and outbound dependencies.

Example with **Environment Map** lineage:
The **Dependency Direction** drop-down allows you to select the direction types of the dependencies you want to include within the current session of Lineage Analysis. An object’s dependencies are typically created when an object is included within another object’s definition. The following options are available:

- **Bi-directional**: Both inbound (lineage) and outbound (impact) dependencies are included within the current session.
- **Inbound Only**: Only relationships that an object depends on are included within the current session.
- **Outbound Only**: Only relationships that are impacted by objects are included within the current session.

The **Track Selection** button allows you to disable the feature that causes the diagram to re-draw every time a new selection is made within the Solution Explorer.

The **Dependency Levels** drop-down allows you to increase or decrease the number of levels of separation from the currently focused object to display within the Lineage Diagram.

> **Important:** Including too many dependency levels within the Lineage Diagram may cause difficulty in reading it.

The **Filter by Link Type** button allows you to toggle the visibility of relationships. The **key filter** toggles the visibility of relationship links that involve the use of foreign keys.

The **object filter** button allows you to toggle the visibility of relationship links that involve object dependencies.

The **data lineage filter** button allows you to toggle the visibility of relationship links that involve the impact or dependency of another object’s data.

Select the **Filter** button to open the Technology Filter menu. Select the desired filter options and then select **Apply** to apply the filter to your lineage graph.

### Solution Explorer

> **Important:** Beginning with Version 2022.3, the Solution Explorer organizes all of the Implicit Objects...
in your Solution in the *Implicit Objects* category by technology type.

The **Solution Explorer** contains a hierarchically organized tree of all objects within the current detail level that contain lineage. Select an object with **Track Selection** enabled to re-draw the focus of the lineage diagram to the newly selected object within the **Solution Explorer**.

Select ➢ to expand and collapse selected objects and display the object's children.
Note: If an object does not have a ➔ in the Solution Explorer, the object does not have any child objects that contain lineage, or the current detail level prevents it from expanding further.
Searching the Solution Explorer

Search the current solution for the exact object you want to view lineage for with the Search bar. Enter what you want to search for, then select Search to display the results.

Select an object from the search results to display the corresponding lineage graph.

Select Back to explorer view to return to the previous Solution Explorer view.

Note: Your Search Results will vary based on the Granularity Detail level you have selected.

Lineage Graph Views

The icons and colors within the diagram help you to quickly identify the object, and technology types associated with each node. The following legend displays in the Solution Explorer when you select Show Legend:

Hover over an object in the graph to display a tool-tip about the object.
Hover over inbound or outbound dependency routes to display a tool-tip about the route path.

### Lineage Graph Route Legend

<table>
<thead>
<tr>
<th>Line Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blue</strong></td>
<td>Blue lines indicate an object reference.</td>
</tr>
<tr>
<td><strong>Green</strong></td>
<td>Green lines indicate data lineage.</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>Black lines indicate a Foreign key reference.</td>
</tr>
<tr>
<td><strong>Purple</strong></td>
<td>Purple lines indicate references from multiple categories (Foreign key, object, data lineage).</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Extend Item</strong></td>
<td>Displays more dependency levels for the currently selected object.</td>
</tr>
<tr>
<td><strong>Focus on this</strong></td>
<td>Select <strong>Focus on this</strong> to re-draw the diagram with the currently selected object as the main focus.</td>
</tr>
<tr>
<td><strong>View Metadata</strong></td>
<td>Opens the DDL script for the selected object.</td>
</tr>
<tr>
<td><strong>Jump to documentation</strong></td>
<td>Opens the documentation view for the selected object.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>View Data Dictionary</td>
<td>Opens the Data Dictionary window for the selected Lineage object. Select Edit to makes changes to your Data Dictionary Values.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> You can only edit documentation values that have Data Dictionary configured.</td>
</tr>
</tbody>
</table>

Save as Image Lineage Exportation Option

Beginning with Version 2022.3, you can right-click in the background area of the Lineage Analysis view or Lineage Analysis Text View to save an image of the displayed lineage. Right-click the desired lineage display, and then select **Save as Image** to download the lineage as a .png file.

Granularity Detail Views

Select an object in the **Solution Explorer** to display the lineage diagram for the object. The following detail levels are available:

<table>
<thead>
<tr>
<th>Granularity Detail</th>
<th>Graph Example</th>
</tr>
</thead>
</table>
Dependency Level Views

Select an object in the **Solution Explorer** to display the lineage diagram for the object. Dependencies display based on the selected dependency level view. The following dependency level views are available:

<table>
<thead>
<tr>
<th>Dependency Level</th>
<th>Graph Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="Graph Example" /></td>
</tr>
<tr>
<td>Dependency Level</td>
<td>Graph Example</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2</td>
<td><img src="image2" alt="Graph Example 2" /></td>
</tr>
<tr>
<td>3</td>
<td><img src="image3" alt="Graph Example 3" /></td>
</tr>
</tbody>
</table>

### Dependency Directions

<table>
<thead>
<tr>
<th>Direction</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi-directional</td>
<td><img src="image4" alt="Bi-directional" /></td>
</tr>
</tbody>
</table>
Moving the Lineage Graph

You can adjust the view of the Lineage graph by doing one of the following:

<table>
<thead>
<tr>
<th>Movement</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving a Node</td>
<td>Left-clicking on a node and then dragging the mouse allows you to move a single node around the diagram without affecting the other nodes.</td>
<td><img src="image_url" alt="Example Image" /></td>
</tr>
<tr>
<td>Movement</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Panning</td>
<td>Left clicking on the view diagram allows you to pan the lineage diagram and adjust the visual if it does not all fit within the screen.</td>
<td><img src="image1.png" alt="Panning Example" /></td>
</tr>
<tr>
<td>Zooming</td>
<td>Use the mouse wheel to zoom in and out to see more details within the diagram.</td>
<td><img src="image2.png" alt="Zooming Example" /></td>
</tr>
</tbody>
</table>

**Lineage Text View**

You can toggle between the lineage graph view and text view by selecting the **Text View** toggle. The Text view displays your lineage as a textual representation and can help you to better visualize large inbound and outbound dependencies. Adjust your lineage graph using the **Dependency Level**, and **Granularity Detail** drop-down menus.
Note: The icon indicates that the value is a circular reference, and that the value is already displayed in the Lineage.
Database Mapper Data Dictionary

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Data Dictionary Overview

Data Dictionary allows you to annotate the objects within a Database Mapper snapshot, including additional information and comments. Within your documentation, you may want to capture additional information like SLAs, persons responsible for the data, timeliness of the data, and other attributes. This additional information can be captured using the Database Mapper data dictionary. Add annotations to existing objects in your Database Mapper portal to capture any additional information you desire.

Note: Data Dictionary requires an existing solution with at least one snapshot generated. For more information about creating a solution and generating a snapshot, see the Generating Documentation article.

Feature Highlights

- Add business definitions to any item in the documentation
- Provide annotations useful to business users

Categories
Create Data Dictionary categories to enter your annotated data. Categories can be applied to varying object types within your solutions. Define the scope for each category, and set restrictions for technology and data types. For example, you can create a *Use Case* category that applies only to SQL Server database tables.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the Data Dictionary category.</td>
</tr>
<tr>
<td>Scope</td>
<td>The Solutions and Solution items that are applicable to the Data Dictionary category.</td>
</tr>
<tr>
<td>Technology Type</td>
<td>The Technology type of the Data Dictionary category.</td>
</tr>
<tr>
<td>Required</td>
<td>Denotes if the Data Dictionary category is required in the documentation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Deleted</td>
<td>Displays previously deleted Data Dictionary categories.</td>
</tr>
<tr>
<td>Add Category</td>
<td>Opens the <em>Add Category</em> window, and allows you to configure a new Data Dictionary category.</td>
</tr>
<tr>
<td>Edit Category</td>
<td>Opens the <em>Edit Category</em> window and allows you to edit the selected Data Dictionary category. Select <em>Save</em> to save your changes.</td>
</tr>
<tr>
<td>Confirm Action</td>
<td>Opens the <em>Confirm Action</em> window. Select <em>Delete</em> to delete the selected Data Dictionary Cateogry</td>
</tr>
<tr>
<td>Restore</td>
<td>Restores the selected Data Dictionary category.</td>
</tr>
</tbody>
</table>

⚠️ Note: Data Dictionary categories can be applied only to specific solutions or solution items, or can be applied globally throughout your Database Mapper environment.
Before your Database Mapper solutions are annotated with Data Dictionary entries, you need to create categories. A category is a field that contains information about different objects in the solution such as business owner, emergency contact, etc.

Data Dictionary categories can consist of one of the following data types:

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>The Data Dictionary category will store a simple text value on a single line.</td>
<td>Project Level SI/Initial Data Backup</td>
</tr>
<tr>
<td>List</td>
<td>The Data Dictionary category will store values in a bulleted list format.</td>
<td>Reviewers Paul Chris Jihana</td>
</tr>
<tr>
<td>Note</td>
<td>The Data Dictionary category will store a long text value.</td>
<td>Note This is a back-up package. Make copies as needed.</td>
</tr>
<tr>
<td>DateTime</td>
<td>The Data Dictionary category will store a date and time value.</td>
<td>Last Updated 1/20/2019, 10:10 AM</td>
</tr>
<tr>
<td>Number</td>
<td>The Data Dictionary category will store a numerical value.</td>
<td>Component Iteration 4</td>
</tr>
<tr>
<td>DropDownList</td>
<td>The Data Dictionary category will store a drop-down list of values, where you can select one value.</td>
<td>Item Owner Soccer</td>
</tr>
<tr>
<td>PickList</td>
<td>The Data Dictionary category will store a list of values where you can select multiple values.</td>
<td>Review Period January February March April May June July August September October November December</td>
</tr>
<tr>
<td>MarkDown</td>
<td>The Data Dictionary category will store a lightweight markup where you can apply simple formatting like bold or italic. Add italics to your text in this format <em>text</em>. Add bold around your text in this format <strong>text</strong>.</td>
<td>Additional Info This is a resource used by Secondary tabs.</td>
</tr>
</tbody>
</table>

To add Categories to the Database Mapper Data Dictionary, complete the following steps:
1. Select **Data Dictionary > Categories** to open the **Categories** page.

2. Select the + button to open the **Add Category** form.

3. Enter a **Name** for your category, and select the **Solution** where you want the category to be applied. **Note:** **All Solutions** is selected by default. Selecting an individual solution allows you to make a selection in the **Solution Item** drop-down list. **All solutions Items** is selected by default.

4. Select the applicable **Technology Type** for your Data Dictionary category. **Note:** **Global** is selected by default, which applies to all technology types supported by Database Mapper.
5. Select the **Data Type** for your Data Dictionary Category. **Note**: If you select **DropDown**, or **PickList**, the Value List drop-down becomes selectable and allows you to select a previously created Value List.

6. Select the **Required** selector if you want the category to be required, and then select the **Applicable Item(s)** for the category from the drop down list. Select **Save** to create your category.
7. Return to the **Solutions** dashboard, and start a snapshot for the applicable solution(s) to have your category added to the documentation.

**Success:** You have now created a Data Dictionary category for your documentation!

### Adding Values to your Categories

After successfully adding Data Dictionary Categories to your documentation, and creating a new snapshot,
you can begin adding values to applicable objects. Add values to your Data Dictionary categories by completing the following steps:

1. Open the Database Mapper Documentation page, and then select the applicable solution.

2. Select a solution item from the solution explorer, and navigate to an object that applies to the category.

3. Select Edit to begin adding values to your category.

Note: Data Dictionary categories that have Global Entry values are populated automatically. Global Entry values are designated by a icon.
4. Enter the desired values, then select **Save** to commit your changes.

**Note:** While in the **Edit** menu, select **Override global entry** to make changes to a category with a global entry value. Enter your desired change, then select **Save** to save your changes. Select **Revert to global entry** to return the category to the global entry value.
You can add and edit the values for your Data Dictionary categories from your selected solution’s Lineage view. Add values to your existing Data Dictionary categories by completing the following steps:

1. Open the Lineage tab and select a Solution that has configured Data Dictionary categories.

2. Use the Solution Explorer to navigate to a lineage object with applicable Data Dictionary categories. Right click the object in the Lineage graph, and then select View Data Dictionary to open the Data Dictionary window.

3. Select Edit to begin making changes to your Data Dictionary entries. Make the desired change(s) to your entries, and then select Save to save your changes.

Note: The There is no data to display message displays when your selected lineage object does not apply to any of your Data Dictionary categories.
Success: You have saved your Data Dictionary entries from the Lineage view!

Change History

Select the view history button on the Documentation page or the Lineage page to open the Change History window and review the changes made to your Data Dictionary values.
Select the View button to display the changes made to your Data Dictionary values.

### Note:
The Show Changes only toggle is enabled by default. Deactivate the Show Changes only toggle to display Data Dictionary values that haven’t been changed.

Deleting a Category

Delete a Data Dictionary category within your Database Mapper portal by completing the following steps:

1. Select the Delete button for the desired Data Dictionary category to open the Confirm action prompt.
2. Select **Confirm** to remove your Data Dictionary category.

**Note:** You can use the **Show Deleted** toggle to display previously deleted Data Dictionary categories.
Global Entries are default values that can be applied to varying objects within your documentation if you haven’t already defined the values in the documentation view.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>The Category assigned to the global entry.</td>
</tr>
<tr>
<td>Scope</td>
<td>The Solutions and Solution items that are applicable to the Data Dictionary Global Entry.</td>
</tr>
<tr>
<td>Technology Type</td>
<td>The Technology type of the Global Entry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Deleted</td>
<td>Displays previously deleted Data Dictionary Global Entries.</td>
</tr>
<tr>
<td></td>
<td>Opens the Add Global Entry window, and allows you to configure a new Data Dictionary Global Entry.</td>
</tr>
<tr>
<td></td>
<td>Opens the Edit Global Entry window and allows you to edit the selected Data Dictionary Global Entry. Select Save to save your changes.</td>
</tr>
<tr>
<td></td>
<td>Opens the Confirm action window. Select Delete to delete the selected Data Dictionary Global Entry.</td>
</tr>
<tr>
<td>Button</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><img src="image" alt="Button" /></td>
<td>Restores the selected Data Dictionary Global Entry.</td>
</tr>
</tbody>
</table>

**Note:** You don’t need to take a snapshot to make Global Entries applicable to your documentation.

**Note:** You need to create Data Dictionary Categories before creating Global Entries.

Add **Global Entries** to your Data Dictionary by completing the following steps:

1. Select **Data Dictionary > Global Entries** to open the **Global Entries** page.

2. Select the **+ Add** button to open the **Add Global Entries** form.

3. Select the applicable category for your Global Entry.
Add Global Entry

Note: If you select a Category that only applies to a specific Solution, Solution Items, or Technology Type, your Global Entry will automatically copy the Solution, Solution item, and Technology Type selections from that Data Dictionary category.

4. Select the solution where you want the global entry to be applied. Note: All Solutions is selected by default. Selecting an individual solution allows you to make a selection in the Solution Item drop-down list. All solutions Items is selected by default.
5. Select the applicable Technology type for your Global Entry. **Note:** Global is selected by default, which applies to all technology types supported by Database Mapper.
6. Enter the default value for your Global Entry in the Value section.

7. Select the Applicable Item(s) for the Global Entry from the drop down list, and then select **Save** to create your Global Entry.
Note: When you generate new documentation, the global entries display on each applicable object.

Deleting a Global Entry

Delete a Data Dictionary Global Entry within your Database Mapper portal by completing the following steps:

1. Select the Delete button for the desired Data Dictionary Global Entry to open the Confirm action prompt.

2. Select Confirm to remove your Data Dictionary Global Entry.
Value Lists

Value Lists in Database Mapper are user-defined lists of supported values that can be selected to populate multiple Data Dictionary categories. For example, if you have created an employee category, you can add a value list to the category that lists each employee within your organization. If you decide to create another category that uses this same list of employees, you can add the value list to the category instead of re-creating your employee list.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>List name</td>
<td>The name of the Data Dictionary value list.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Opens the <strong>Add Value List</strong> window, and allows you to configure a new Data Dictionary Value List.</td>
</tr>
<tr>
<td></td>
<td>Opens the <strong>Edit Value List</strong> window and allows you to edit the selected Data Dictionary Value List. Select the + button to add new values, or select the button to reorder the entries within your list. Select <strong>Save</strong> to save your changes.</td>
</tr>
<tr>
<td></td>
<td>Opens the <strong>Confirm action</strong> window. Select <strong>Delete</strong> to delete the selected Data Dictionary Value List.</td>
</tr>
</tbody>
</table>

**Note:** Value Lists are applicable to categories that use the *picklist* or *dropdown* data types.

Create a re-usable Value List for your Database Mapper Data Dictionary by completing the flowing steps:

1. Select **Data Dictionary > Value Lists** to open the **Value Lists** page.
2. Select the **Add** button to open the **Value List** form.

3. Enter a name for the value list, and enter a value. Select the **+** symbol to add the value to the list. You can add as many values as you want.

**Note:** You can select (delete) to remove an entered value. Selecting the **Show-Deleted** toggle
displays all previously deleted values. Select the (restore) button to restore the value to the list.

4. After you are satisfied with the values in your list, select **Save** to create your value list.

❗️ **Success:** You can now use your value list for Data Dictionary categories with the *picklist* or *dropdown* data types.

Organizing a Value List
You can organize the entries within your Value List within the Create new value list, or Edit Value list windows.

Select the icon to begin ordering your list. Drag the entries into the selected order, and then select Save to save your changes.

Deleting a Value List

Delete a desired Value List in your Database Mapper environment by completing the following steps:

1. Select the Delete button for the desired value list to open the Confirm action window.

2. Select Delete to remove your Data Dictionary Value List.

Note: You can use the Show Deleted toggle to display previously deleted Data Dictionary Value
Grid View

The **Grid View** allows for bulk editing and analysis of Data Dictionary values through a single page on a solution-by-solution basis. The **Edit View** is the default landing option and shows the number of invalid or missing required values for the solution items. In the example below, Adrian’s *SuperSimpleDB* solution contains an *SQL Server 2005-2019* item with 8 problematic values.

Grid Edit View

**Edit View** highlights missing values and allows them to be edited for an entire solution on the page without having to go object to object. Expand each level to navigate the object hierarchy.

Since the screen is already in edit mode, enter new values (or edit/remove existing ones), then select **Save**.
Grid Analysis View

**Analysis View** provides a way to identify issues with data dictionary completeness for a solution. It shows a count of corrupted, missing required, and overall missing values for the solution.

**Note:** Use the **Hide Valid Values** option to focus only on entries with missing or invalid information. This filter can be used from both the **Edit View** and **Analysis View**.

With Hide Valid Values selected, the list is condensed to focus on the items that need attention.
Note: You can also edit Values from the Analysis view. Select a row with a missing value, then select the icon in the row to enter the Edit View. Enter your desired Data Dictionary value and then select Save to save your changes.

Important: Select the scroll to top button to return to the top of the Analysis View.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Feature Availability: The SolarWinds Database Mapper API is available only in Database Mapper Software. If you are using the cloud version of Database Mapper at https://document.sentryone.com/, the API is not available at this time.

Introduction

The Database Mapper REST API exposes multiple endpoints:

- DataDictionary
- DataDictionaryConfiguration
- Document
- EndpointAlias
- Export
- Identity
- Import
- License
- Lineage
- MetadataExtraction
- MetadataProvider
- ObjectMap
- Page
- RemoteAgent
- RemoteAgentPool
- Search
- Snapshot
- Solution
- SolutionItem
- TableOfContents
- Task
- TaskHistory
- Templates
- VersionHistory
- WorkflowHistory

Security

Authentication

The API is authenticated by using Windows Authentication.

API Documentation

Accessing the documentation

The REST documentation output for your environment is located at:

http://{DMRHostName}:44322/swagger/index.html

Using the documentation

This documentation includes information about the parameters and examples of the request body and schema.
Note: Expand the **HTTP method** header line in the API documentation page for details.

From here you can use the **Try it out** button to test the API endpoints using your installation.

Once you select the **Try it out** button, you will see the option to **Execute** the request. Enter parameter values as needed, then select **Execute**.
Open API specification

Additional Information: The Database Mapper API has an Open API specification document. There are many client tools that allow you to work with the API. See the Swagger Specification Documentation for more details on getting started.

Examples

Snapshots

You can use the Snapshots endpoint with PowerShell to manage your snapshots. If you wanted to call the API endpoint to get all of your solution IDs and run the request for each ID, you can snapshot all solutions with a single script (instead of scheduling them one-by-one):
```powershell
apiUrl = "http://{DMRHostName}:44322/api/v1/solutions"
$r = Invoke-RestMethod -Method Get -Uri $apiUrl -ContentType "application/json" -UseDefaultCredentials
ForEach($solution in $r){
    $solutionId = $solution.id
    apiUrl = "http://localhost:44322/api/v1/solutions/$solutionId/snapshots"
    $data = @{
        'loggingLevel' = '2'
        'solutionItemIds' = ''
    }
    requestBody = $data | ConvertTo-Json -Compress
    Invoke-RestMethod -Method Post -Uri $apiUrl -Body $requestBody -ContentType "application/json" -UseDefaultCredentials
}

Note: Remember to update {S1DHostName} in the script to your environment's host name.

If you wanted to make a request for a specific solution (instead of using the scheduling command line), you could run this:
```
```powershell
 apiUrl = "http://localhost:44322/api/v1/solutions/{solutionId}/snapshots"
$data = @{
    'loggingLevel' = '2'
    'solutionItemIds' = ''
}
$requestBody = $data | ConvertTo-Json -Compress
Invoke-RestMethod -Method Post -Uri $apiUrl -Body $requestBody -ContentType "application/json" -UseDefaultCredentials
```
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Azure Data Factory

Additional Information: Before adding an Azure Data Factory solution item to your solution, you must enable access to the API through your Azure Portal. For more information about this process, see the Connect ADF article.

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SolarWinds Database Mapper allows you to document the Azure Data Factory components in your environment.</td>
<td></td>
</tr>
</tbody>
</table>

Adding an Azure Data Factory Solution Item

Additional Information: You need to add a Database Mapper solution before adding an Azure Data Factory solution item. For more information about adding a solution, see the Configuring Solutions and Database Mapper Solutions articles.

Add an Azure Data Factory solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution, or select Open to open an existing solution in the Database Mapper configuration tool.
2. Select Add to open the Add Solution Item window.

3. Enter an item name, then select Azure Data Factory from the Source type drop-down list.
4. **Enter the Azure Connection details** for your Azure Data Factory connection (**Tenant ID**, **Application ID**, **Authentication Key**, **Subscription ID**, and **Resource Group**), then select **Validate** to verify the connection.
5. Select **OK** to add the solution item.
**Additional Information:** You need to take a snapshot of your Solution and Azure Data Factory solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a solution with your Azure Data Factory solution item, and taking a snapshot, you are ready to view your documentation.

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.

After adding a solution with your Azure Data Factory solution item, and taking a snapshot, you are ready to view your solution’s lineage within the environment.

**Additional Information:** For more information about the Lineage tab in Database Mapper, see the Lineage article.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Azure Synapse Analytics

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Synapse Analytics" /></td>
<td>SolarWinds Database Mapper allows you to document Azure Synapse Analytics components in your environment.</td>
</tr>
</tbody>
</table>

Adding Azure Synapse Analysis

Additional Information: You need to add a Database Mapper solution before adding an Azure Synapse Analytics solution item. For more information about adding a solution, see the Configuring Solutions and SentryOne Document Solutions articles.

Add an Azure Synapse Analytics solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution, or select Open to open an existing solution in the Database Mapper configuration tool.
2. Select **Add** to open the **Add solution item** window.

3. Enter an item name, and then select **Azure Synapse Analytics** from the **Source** type drop-down list.
4. Enter your Azure Synapse Analytics server name, enter the credentials for your connection, and then select your connection database.
5. Select **OK** to add the Azure Synapse Analytics Solution Item to your Database Mapper solution.
Additional Information: You need to take a snapshot of your solution and Azure Synapse Analytics solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a solution with your Azure Synapse Analytics solution item, and taking a snapshot, you are ready to view your documentation.

Additional Information: For more information about the Documentation tab in Database Mapper, see the Documentation article.

After adding a solution with your Azure Synapse Analytics solution item, and taking a snapshot, you are ready to view your solution’s lineage within the environment.

Additional Information: For more information about the Lineage tab in Database Mapper, see the Lineage article.
Database Mapper Custom Metadata Import

Last Modified on 07 April 2022

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Custom Metadata import

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Solution Item Icon" /></td>
<td>SolarWinds Database Mapper gathers data using providers. If there is no existing provider for a source, then you can use the Custom Metadata Import provider to import custom metadata files. This is useful when there is a need to incorporate data about unsupported platforms such as Access or DB2.</td>
</tr>
</tbody>
</table>

Adding Custom Metadata import

Additional Information: You need to add a Database Mapper Solution before adding a Custom Metadata Import Solution item. For more information about adding a solution, see the Configuring Solutions and Database Mapper Solutions articles.

Add a Custom Metadata import Solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution, or select Open to open an existing solution in the Database Mapper Configuration tool.
2. Select Add to open the Add Solution item window.

3. Enter an item name, then select Custom metadata import from the Source type drop-down list.
4. Enter the file paths for the three necessary files (object file, property file, and lineage file), then select **OK** to add the solution item.
**Note:** Object files contain the names of the objects within the database. Property files contain information about the objects within the database. See the blog post in the Tutorial section below to learn more about these files.

**Additional Information:** You need to take a snapshot of your Solution and Custom Metadata Import solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a Solution with your Custom Metadata Import solution Item, and taking a snapshot, you are ready to view your documentation.

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.

After adding a solution with your Custom Metadata Import solution Item, and taking a snapshot, you are ready to view your solution’s lineage within the environment.
Additional Information: For more information about the Lineage tab in Database Mapper, see the Lineage article.

Tutorial

See the Manually Add a Metadata Source in Database Mapper blog post for a walk through how you can use Custom Metadata Import to manually insert any metadata source.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Environment Map Introduction

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="SQL Sentry Database Icon" /></td>
<td>The Environment Map shows data collected from the SQL Sentry database to map connections between applications, users, clients and targets (sourced from Top SQL and Windows processes). This information complements the lineage analysis feature by showing the dynamic usage of targets in the lineage diagram and shedding light on the processes that are using the database.</td>
</tr>
</tbody>
</table>

- Additional Information: See the SQL Sentry - Database Mapper Environment Map blog post with additional feature highlights and examples.

To drill into the dependencies detected, you can start by selecting a target to find items that connect to it, or an application, client machine or user to see which items connect. Multiple levels are supported in the Environment Map hierarchy, so you can navigate to a target, then a database, and then a client machine to see which applications and users on that client machine connect to the selected target and database.

This dependency map provides a detailed view of dependencies in your environment, which can be particularly useful if you are planning to migrate your on-premises environment to the cloud.
Note: Information is limited to the queries that are collected in Top SQL. If queries do not meet the impact criteria, they are not available in the Environment Map.

Prerequisites

The SQL Sentry database needs to be a version compatible with the Database Mapper Environment Map feature. The database is compatible in SQL Sentry version 2020.14 or later.

Adding Environment Map

Add an Environment Map solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution (or select Open to open an existing solution) in the Database Mapper configuration tool.
2. Select **Add** to open the **Add solution item** window.

3. Enter an item name, then select **Environment Map (SQL Sentry Database)** from the **Source type** drop-down list.

4. Configure the **Source options** for your **SQL Sentry Database**. Select the **Server name** that hosts your SQL Sentry database, select the **Security mode** that you use to connect, then the name of the SQL Sentry.
database.

Using the Environment Map

1. Once you’ve added a new solution item with the Environment Map Source Type, you’ll see the Environment Map item in your list of solutions the same way you see other solutions in Database Mapper.
2. Configure the snapshot to generate documentation.
3. Explore the documentation and lineage.

Documentation

Information displayed in documentation varies depending on your environment. In general, you’ll see the Environment Map targets, (monitored by SQL Sentry), applications (interacting with the targets), clients, and users.
Expand the nodes to see a summary and detail view. For example, if you are viewing a user, you will see a hyperlinked summary of all targets, applications, and clients related to that specific user. You can drill into all of these for a more complete view.

The entries list shows all the associated queries in a table that includes key information such as the target, database, application, number of queries, duration, CPU, reads, and so on.

**Lineage**

*Lineage* provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

*Additional Information:* See the *Lineage* article for details on using the options (e.g. Granularity, Detail, Dependency Direction, Dependency Level, etc.).
You can drill down to the database, schema, table, and column levels.

Filters

The Environment Map allows you to filter the information displayed in Lineage by **application**, **client**, or **user** (in addition to the SQL filters for **database** and **column**).
Select **Apply** to view your filtered lineage graph:

Environment Map at the server level with **users** removed by the filter.
Troubleshooting

Top SQL data is not displaying in the Environment Map

Initially (if you've just started using SQL Sentry or upgraded to a version with this feature), there is a bit of lead time to get the data from SQL Sentry to the Database Mapper Environment Map (about ten minutes), then about 1-2 days for it to fully ramp up and have a decent amount of Top SQL data to use.

Not seeing expected queries in Top SQL

If you're not seeing data in Top SQL, you may need to adjust what is being captured.
Excel Spreadsheet

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Excel Icon" /></td>
<td>SolarWinds Database Mapper allows you to quickly develop a Lineage overview of your Excel Workbooks (*.xlsx) that contain SQL Server and Analysis Services data sources.</td>
</tr>
</tbody>
</table>

Adding Excel Spreadsheet

- **Additional Information:** You need to add a Database Mapper solution before adding an Excel Spreadsheet solution item. For more information about adding a solution, see the Configuring Solutions and Database Mapper Solutions articles.

Add an **Excel Spreadsheet** solution item to your Database Mapper solution by completing the following steps:

1. Select **Add** to add a new solution, or select **Open** to open an existing solution in the Database Mapper Configuration tool.
2. Select **Add** to open the **Add Solution item** window.

3. Enter an item name, then select **Excel Spreadsheet** from the **Source type** drop-down list.
4. Select **File** to document an Excel Workbook on the file system, or select **Folder** to recursively document all Excel Workbook items within the selected folder.

**Note:** Selecting the ellipsis launches the file explorer, allowing you to navigate to the desired file or file folder.

5. Select **OK** to add the Excel Spreadsheet Solution item to your Database Mapper solution.
Additional Information: You need to take a snapshot of your solution and Excel Spreadsheet solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a solution with your Excel Spreadsheet solution item, and taking a snapshot, you are ready to view your documentation.

Additional Information: For more information about the Documentation tab in Database Mapper, see the Documentation article.

After adding a solution with your Excel Spreadsheet solution item, and taking a snapshot, you are ready to view your solution’s lineage within the environment.

Additional Information: For more information about the Lineage tab in Database Mapper, see the Lineage article.
Database Mapper MySQL

Last Modified on 07 April 2022

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

MySQL

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="MySQL Database" /></td>
<td>Database Mapper allows you to document databases across major versions of MySQL. See the System Requirements article for details on prerequisites.</td>
</tr>
</tbody>
</table>

Note: MySQL is a database-level provider. Lineage is not generated for this solution item type.

Adding MySQL

Add a MySQL solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution, or select Open to open an existing solution in the Configuration Tool.

2. Select Add to open the Add Solution item window.
3. Enter an item name, then select **MySQL** from the **Source type** drop-down list.

4. Select **MySQL** then enter a valid connection string. You can either copy and paste a connection string into the **Configuration Tool** or edit the individual values.
5. Select **OK** to add the MySQL solution item to your Database Mapper solution.

MySQL Solution Item Documentation

**Additional Information:** You need to take a snapshot of your solution and MySQL Solution item before viewing any documentation. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.
After adding a solution with your MySQL solution item, and taking a snapshot, you are ready to view your documentation.

Additional Information: For more information about the Documentation tab in Database Mapper, see the Documentation article.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Oracle

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<tr>
<th>Solution Item Icon</th>
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</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Oracle Database" /></td>
<td>Database Mapper allows you to document databases across major versions of Oracle. See the System Requirements article for details on prerequisites.</td>
</tr>
</tbody>
</table>

Note: Oracle is a database-level provider. Lineage is not generated for this solution item type.

Adding Oracle

Add an Oracle solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution, or select Open to open an existing solution in the Configuration Tool.

2. Select Add to open the Add Solution item window.
3. Enter an item name, then select **Oracle** from the **Source type** drop-down list.

4. Select **Oracle** then enter a valid connection string. You can either copy and paste a connection string into the **Configuration Tool** or edit the individual values.
5. Select **OK** to add the **Oracle** solution item to your Database Mapper solution.

Oracle Solution Item Documentation

**Additional Information:** You need to take a snapshot of your solution and **Oracle** solution item before viewing any documentation. For more information about taking a snapshot, see the Generating
After adding a solution with your Oracle solution item, and taking a snapshot, you are ready to view your documentation.

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.
Database Mapper PostgreSQL

Last Modified on 07 April 2022

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

PostgreSQL

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<tr>
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<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="PostgreSQL Database Icon" /></td>
<td>Database Mapper allows you to document databases across major versions of PostgreSQL. See the System Requirements article for details on prerequisites.</td>
</tr>
</tbody>
</table>

Note: PostgreSQL is a database-level provider. Lineage is not generated for this solution item type.

Adding PostgreSQL

Add an PostgreSQL solution item to your Database Mapper solution by completing the following steps:

1. Select Add to add a new solution, or select Open to open an existing solution in the Configuration Tool.

2. Select Add to open the Add Solution item window.
3. Enter an item name, then select **PostgreSQL** from the **Source type** drop-down list.

4. Select **PostgreSQL** then enter a valid connection string. You can either copy and paste a connection string into the **Configuration Tool** or edit the individual values.
5. Select OK to add the PostgreSQL solution item to your Database Mapper solution.

Additional Information: You need to take a snapshot of your solution and PostgreSQL solution item before viewing any documentation. For more information about taking a snapshot, see the Generating
After adding a solution with your PostgreSQL solution item, and taking a snapshot, you are ready to view your documentation.

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Power BI

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>SolarWinds Database Mapper allows you to document the Power BI Files, Folder, or Azure components in your environment.</td>
</tr>
</tbody>
</table>

Adding Power BI

Add a Power BI solution item by completing the following steps:

1. Select **Add** to add a new solution, or select **Open** to open an existing solution in the Database Mapper Configuration tool.

![Image showing the Database Mapper interface with solution options]

2. Select **Add** to open the **Add Solution item** window.
3. Enter an **Item name**, then select **Power BI** from the **Source type** drop-down list.

4. Select the Power BI **File**, **Folder**, or **Azure Power BI**.
5. Select **OK** to add the Power BI solution item to your Database Mapper solution.

**Power BI Solution Item Sample Documentation**

*Additional Information:* You need to take a snapshot of your solution and Power BI solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a solution with your Power BI solution Item, and taking a snapshot, you are ready to view your
For more information about the Documentation tab in Database Mapper, see the Documentation article.

Power BI Solution Item Sample Lineage

After adding a solution with your Power BI solution item, and taking a snapshot, you are ready to view your solution's lineage within the environment. Lineage provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

For more information about the Lineage tab in Database Mapper, see the Lineage article.
SolarWinds Database Mapper allows you to document the Power BI Report Server components within your environment. See the System Requirements article for details on prerequisites.

### Adding Power BI Report Server

Add a Power BI Report Server solution item by completing the following steps:

1. Select **Add** to add a new solution, or select **Open** to open an existing solution in the Database Mapper Configuration tool.

2. Select **Add** to open the Add Solution item window.
3. Enter an **Item name**, then select **Power BI Report Server** from the **Source type** drop-down list.

4. Enter the Power BI Report Server URI in the **Server URI** box, then select **Validate** to verify the connection.
5. Select **OK** to add the Power BI solution item to your Database Mapper Solution.
Additional Information: You need to take a snapshot of your solution and Power BI Report Server Report Server solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a solution with your Power BI Report Server Report Server solution item, and taking a snapshot, you are ready to view your documentation.

Additional Information: For more information about the Documentation tab in Database Mapper, see the Documentation article.

After adding a solution with your Power BI Report Server Report Server solution item, and taking a snapshot, you are ready to view your solution's lineage within the environment.

Additional Information: For more information about the Lineage tab in Database Mapper, see the Lineage article.
SalesForce

Solution Item Icon | Description
--- | ---
![SalesForce Icon](image_url) | SolarWinds Database Mapper allows you to document the SalesForce.com connections within your environment.

Adding SalesForce

Add a SalesForce solution item to your Database Mapper solution by completing the following steps:

1. Select **Add** to add a new solution, or select **Open** to open an existing solution in the Database Mapper configuration tool.

   ![Database Mapper Configuration Tool](image_url)

2. Select **Add** to open the Add Solution Item window.
3. Enter an item name, then select **SalesForce** from the Source type drop-down list.

4. Enter your SalesForce login in the **Username** field, then enter your associated password and security token from SalesForce in the **Password** field.
5. Enter the amount of time in seconds you want the provider to wait before the connection times out.
60 seconds is the default connection timeout value.

6. Enter your connection endpoint in the **Enter the Server URL field.**
Note: For most SalesForce accounts, the Server URL starts with https://login.salesforce.com. For SalesForce sandbox accounts, the Server URL starts with https://test.login.com.

Note: If you want to use a proxy to connect to the Internet, select click here to open the SalesForce Proxy configuration page. Select Use Proxy to begin configuring your credentials. Enter the Host and Port number for your proxy, and then enter the desired Domain. Enter the Username and Password for your proxy, and then select Ok to continue to Step 7.
7. Select **Validate** to validate your connection credentials. After your connection has been validated, select **OK** to save your SalesForce solution item.

SalesForce Solution Item Sample Documentation

**Additional Information:** You need to take a snapshot of your Solution and SalesForce Solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a Solution with your SalesForce Solution Item, and taking a snapshot, you are ready to view your documentation.

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.

SalesForce Solution Item Sample Lineage

After adding a Solution with your SalesForce Solution Item, and taking a snapshot, you are ready to view your
Solution’s lineage within the environment. **Lineage** provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

**View the lineage for Inbound and Outbound Flows.**

![Database Mapper SalesForce Inbound Flow Lineage](image1)

![Database Mapper SalesForce Outbound Flow Lineage](image2)

**View the lineage for individual objects.**

![Database Mapper SalesForce Lineage](image3)

**Additional Information:** For more information about the Lineage tab in Database Mapper, see the Lineage article.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

SQL Server

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Database Mapper Icon" /></td>
<td>Database Mapper allows you to document databases across major versions of SQL Server. See the System Requirements article for details on prerequisites.</td>
</tr>
</tbody>
</table>

Adding SQL Server 2008+, Azure SQL & DacPac

The SQL Server 2008+, Azure SQL & DacPac Solution item allows you to snapshot a single SQL Database, a .dacpac file, or your entire SQL Server or Azure SQL environments. The SQL Server 2008+, Azure SQL & DacPac Solution item is available for Database Mapper Versions 2021.12 and above, and allows you to snapshot your SQL Server objects much faster than the SQL Server 2005 - 2019 (Legacy SMO) solution item.

Add a SQL Server 2008+, Azure SQL & DacPac Solution item to your Database Mapper Solution by completing the following steps:

1. Select Add to add a new Solution, or select Open to open an existing solution in the Database Mapper Configuration tool.
2. Select **Add** to open the Add Solution item window.

3. Enter an item name, and then select **SQL Server 2008+, Azure SQL & DacPac** from the Source type dropdown list.
4. Choose one of the following options:

Select **SQL Database**, enter a valid server name and connection credentials, and then select your database.
Select **SQL Server**, and enter a valid server name and connection credentials.

Select **Azure SQL**, and enter a valid server name and connection credentials.

Select **DacPac**, and enter a valid .dacpac file connection string.

**Note:** You can select the `***` to search for a valid .dacpac file.

5. Select **OK** to add the SQL Server 2008+, Azure SQL & DacPac Solution item to your Database Mapper Solution.
Adding SQL Server 2005 - 2019 (Legacy SMO)

Add a SQL Server 2005 - 2019 (Legacy SMO) Solution item to your Database Mapper Solution by completing the following steps:

1. Select Add to add a new Solution, or select Open to open an existing solution in the Database Mapper Configuration tool.
2. Select **Add** to open the Add Solution item window.

3. Enter an item name, and then select **SQL Server 2005 - 2019 (Legacy SMO)** from the Source type dropdown list.

4. Select **SQL Server**, or **SQL Azure**, and then enter a valid server name and connection credentials.
5. Select **OK** to add the SQL Server 2005 - 2019 (Legacy SMO) Solution item to your Database Mapper Solution.

⚠ **Important:** Non-sysadmin users must be granted **View Server State** permissions to view log file objects within the documentation.
SQL Server Solution Item Sample Documentation

**Additional Information:** You need to take a snapshot of your Solution and SQL Server Solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a Solution with your SQL Server Solution Item, and taking a snapshot, you are ready to view your documentation. View your SQL Servers and their databases.

Sample SQL Server Database Documentation

View database tables and more granular information such as table columns, or foreign keys.

Sample SQL Server Table Documentation
Sample SQL Server Table Column Documentation
Sample SQL Server Foreign Key Documentation

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.

SQL Server Solution Item Sample Lineage

After adding a Solution with your SQL Server Solution Item, and taking a snapshot, you are ready to view your
Solution's lineage within the environment. **Lineage** provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

Display lineage for your SQL Server Databases and Database tables.

Display more granular lineage for table columns, foreign keys, and indexes.

**Additional Information**: For more information about the Lineage tab in Database Mapper, see the [Lineage article](#).
**SSAS Server**

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="SSAS Cube Icon" /></td>
<td>SolarWinds Database Mapper is able to document SSAS Cubes and Databases across major versions of SQL Server. See the <a href="#">System Requirements</a> article for details on prerequisites. With the SSAS Cube and Database Documentation you can see the properties and attributes of each dimension in a cube.</td>
</tr>
</tbody>
</table>

**Adding SSAS Server**

Add an **SSAS Server** Solution item to your Database Mapper Solution by completing the following steps:

1. Select **Add** to add a new Solution, or select **Open** to open an existing solution in the Database Mapper Configuration tool.

2. Select **Add** to open the Add Solution item window.
3. Enter an item name, and then select **SSAS Server 2005-2014, SSAS Server 2016, or SSAS Server 2017-2019** provider from the Source type drop-down list.

![Add solution item](image)

**Important:**

Use the **SSAS Server provider** when connecting to the following SSAS Modes:
- MultiDimensional instances with server versions between 2005 and 2014
- Tabular instances with server versions between 2012 and 2014

Use the **SSAS Server 2016 provider** when connecting to the following SSAS Modes:
- MultiDimensional instances with server versions above 2016
- Tabular instances with server versions above 2016
- Azure Analysis Services

4. Select **On Premises** or **Azure**, and then enter a valid server name and connection credentials for your connection.

5. Select **OK** to add the SSAS Server Solution item to your Database Mapper Solution.

ℹ️ **Note:** If you have selected **SSAS Server 2016** and are attempting to connect to Azure Analysis Services, Azure Active Directory credentials are required. To connect to Azure Analysis Services, you need to download and install the latest Microsoft Azure Analysis Services Client Libraries.
SSAS Solution Item Sample Documentation

**Additional Information:** You need to take a snapshot of your Solution and SSAS Solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a Solution with your SSAS Solution Item, and taking a snapshot, you are ready to view your documentation.

Display documentation for your SSAS Server connections, SSAS Server Databases, and SSAS Server Data Source views.
Display documentation for more granular data, such as SSAS Server Cube Dimensions, SSAS Server Cube Calculations, and SSAS Server Cube KPIs.

### Additional Information
For more information about the Documentation tab in Database Mapper, see the Documentation article.

### SSAS Solution Item Sample Lineage

After adding a Solution with your SSAS Solution Item, and taking a snapshot, you are ready to view your Solution’s lineage within the environment. **Lineage** provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

Display lineage for your SSAS Server databases and data source views.
Display lineage for more granular data, such as SSAS Server Data Source View Table columns and SSAS Server Cube Measure Groups.

**Additional Information:** For more information about the Lineage tab in Database Mapper, see the Lineage article.
SSIS Package

<table>
<thead>
<tr>
<th>Solution Item Icon</th>
<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>SolarWinds Database Mapper allows you to quickly develop an overview of your Integration Services Packages. With the SSIS Package documentation you can display diagrams of both the control and data flow of an SSIS package. See the System Requirements article for details on prerequisites.</td>
</tr>
</tbody>
</table>

>Note: SSIS provider works against SSIS 2005 and above when connecting to the File System, SQL Server, SSIS Package Store and SSIS 2012 and above when connecting to the SSIS Catalog.

Adding SSIS Package

Add an SSIS Package Solution item to your Database Mapper Solution by completing the following steps:

1. Select Add to add a new Solution, or select Open to open an existing solution in the Database Mapper Configuration tool.
2. Select **Add** to open the Add Solution item window.

4. Select the desired SSIS Package connection option (File, Folder, SQL Server, Package Store, and Catalog) and then enter the connection properties.

Note: The SSIS Provider contains several connection options:

- **File**: Select File to document SSIS Item(s) located on the file system. Select the ellipses to open the file explorer and then navigate to the location of any *.dtsx, *.dtproj, *.sln, or *.ispac files.

- **Folder**: Select Folder to recursively document all Excel Workbook Item(s) located within a specific folder on the file system. Select the ellipses to open the file explorer and then navigate to a folder that contains at least one SSIS item.

- **SQL Server**: Select SQL Server to document SSIS Item(s) deployed to a SQL Server instance.

- **Package Store**: Select Package Store to document SSIS Item(s) deployed to an SSIS Package Store.
**Catalog**: Select Catalog to document SSIS item(s) deployed to an SSIS Package Catalog.

**Important**: Due to Database Mapper’s need to extract metadata from SSIS Packages, Integrated Security is required to connect to an SSIS Catalog.

5. Select **OK** to add the SSIS Package Solution item to your Database Mapper Solution.

**SSIS Solution Item Sample Documentation**

**Additional Information**: You need to take a snapshot of your Solution and SSIS Solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a Solution with your SSIS Solution Item, and taking a snapshot, you are ready to view your documentation. View documentation for your SSIS Projects and Project Connection Managers.
View more granular information, such as Individual Package Tasks, Connection Managers, and Variables.

**Additional Information:** For more information about the Documentation tab in Database Mapper, see the Documentation article.

**SSIS Solution Item Sample Lineage**

After adding a Solution with your SSIS Solution Item, and taking a snapshot, you are ready to view your Solution's lineage within the environment. **Lineage** provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

Display lineage for your SSIS Projects.
Display lineage for SSIS Tasks, and more granular information such as Task Endpoints.

Additional Information: For more information about the Lineage tab in Database Mapper, see the Lineage article.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

SSRS Report

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<th>Solution Item Description</th>
</tr>
</thead>
</table>

SolarWinds Database Mapper documents SSRS Reports found on the File System across major versions of SQL Server. See the System Requirements article for details on prerequisites. With SSRS Report documentation you can view the properties, parameters, and data sources of a report.

Adding SSRS Report

Add an SSRS Report Solution item to your Database Mapper Solution by completing the following steps:

1. Select Add to add a new Solution, or select Open to open an existing solution in the Database Mapper Configuration tool.

2. Select Add to open the Add Solution item window.
3. Enter an item name, and then select **SSRS 2008 R2 - 2017** from the Source type drop-down list.
4. Select the desired SSRS Report connection option (File, Folder, Native Web Service, or SharePoint Web Service) and then enter the connection properties.

Note: The SSRS Provider contains several connection options:

- **File**: Select File to document SSRS Item(s) located on the file system. Select the ellipses to open the file explorer and then navigate to the location of any *.rdl, *.rds, *.rsd, or *.rptproj files.
- **Folder**: Like File, select Folder to document SSRS Item(s) located on the file system. Unlike file, the Folder option will recursively document all SSRS items located within the folder. Select the ellipses to open the file explorer and then navigate to a folder that contains at least one SSRS item.

- **Native Web Service**: Select Native Web Service to document an SSRS Native Web Service. Use the Folder text box to only document specific folders within an Native Web Service.

- **SharePoint Web Service**: Select SharePoint Web Service to document an SSRS SharePoint Web Service. Use the Folder text box to only document specific folders within an Native Web Service.

5. Select **OK** to add the SSRS Report Solution item to your Database Mapper Solution.

---

**Additional Information**: You need to take a snapshot of your Solution and SSRS Solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.
After adding a Solution with your SSRS Solution Item, and taking a snapshot, you are ready to view your documentation.

Additional Information: For more information about the Documentation tab in Database Mapper, see the Documentation article.

After adding a Solution with your SSRS Solution Item, and taking a snapshot, you are ready to view your Solution's lineage within the environment. **Lineage** provides some of the same options on the nodes, but displays graphs and dependency flows of the information and connections. You can adjust the granularity or apply filters.

Additional Information: For more information about the Lineage tab in Database Mapper, see the Lineage article.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Tableau Server

<table>
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<th>Solution Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Solution Item Icon" /></td>
<td>SolarWinds Database Mapper allows you to document databases across major versions of Tableau Server. See the System Requirements article for details on prerequisites.</td>
</tr>
</tbody>
</table>

Adding Tableau Server

Add a Tableau Server Solution item to your Database Mapper Solution by completing the following steps:

1. Select **Add** to add a new Solution, or select **Open** to open an existing solution in the Database Mapper Configuration tool.

2. Select **Add** to open the Add Solution item window.
3. Enter an item name, and then select **Tableau Server** from the Source type drop-down list.

4. Enter your valid server name, and connection credentials.
Important: The credentials used to connect to the Tableau Server must be assigned the Server Administrator role.

5. Select OK to add the Tableau Server Solution item to your SDatabase Mapper Solution.
Additional Information: You need to take a snapshot of your Solution and Tableau Server Solution item before viewing any documentation or lineage. For more information about taking a snapshot, see the Generating Documentation and Scheduling a Snapshot articles.

After adding a Solution with your Tableau Server Solution Item, and taking a snapshot, you are ready to view your documentation and lineage within the environment.
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Database Mapper is licensed per data source. Database Mapper supports most Microsoft Data Platform sources, including the following items:

- SQL Server
- SQL Server Integration Services (SSIS)
- SQL Server Analysis Services (SSAS)
- SQL Server Reporting Services (SSRS)
- Power BI
- Excel

Note: For more information about the data sources you can monitor to generate documentation and the process to add those solution items, see the Solution Items article.

The Features available to you within Database Mapper are based on your license tier. The lists below display the license tiers available in Database Mapper, and their available Features.

### Premium Licensing

The following features are available for Premium Licensing

- Database Documentation
- Documentation Search
- Documentation History
- Metadata Snapshot Comparison
- Historical metadata snapshots
- Data Dictionary
- Impact Analysis
- Data Lineage Analysis
- Exporting Documentation

Unsupported: Essentials and Standard Licensing for Database Mapper are no longer available for purchase.
Essentials Licensing

The following features are available for Essentials Licensing:

- Database Documentation
- Documentation Search
- Exporting Documentation

Standard Licensing

The following features are available for Standard Licensing:

- Database Documentation
- Documentation Search
- Documentation History
- Metadata Snapshot Comparison
- Historical metadata snapshots
- Data Dictionary
- Exporting Documentation

SolarWinds License Manager Online Activation

⚠️ Important: You do not need to activate a license if you are using the free evaluation trial for Database Mapper.

Activate your SolarWinds Database Mapper Software product by completing the following steps:

1. Launch the SolarWinds License Manager (this was installed with the Database Mapper Software).

2. Select Activate from the Action column on the SolarWinds Database Mapper Software Evaluation row.
3. If you have internet access and your activation key from the SolarWinds Customer Portal, select the first option, enter your Activation Key (and proxy server information, if required), then select Next.

4. Enter your contact information to register SolarWinds Database Mapper, then select Next.
Your SolarWinds Database Mapper Software is now licensed and activated, select **Finish** to return to the SolarWinds License Manager.

6. Select **Exit** to close SolarWinds License Manager.

**Success:** Database Mapper is now ready to be launched through your browser.

**Important:** You do not need to activate a license if you are using the free evaluation trial for Database Mapper.
Use the **SolarWinds License Manager** to activate a new license key or upgrade your trial license. Activate your license on an offline machine by completing the following steps:

1. Use the **Windows Start** menu to open **SolarWinds License Manager**.

   **Note:** If you have an existing license, the **Action** will have an **Upgrade** option. If you have an evaluation license or just upgraded from a SentryOne licensed version of Database Mapper and need to apply a SolarWinds branded license, the **Action** will have an **Activate** option.

2. To apply a license, use the **Upgrade** or **Activate** option.

   ![SolarWinds License Manager](image)

3. Select the **This server does not have internet access option** and then select **Next** to continue.

   ![Activate DMR](image)

4. Complete the steps on the Activate Product page:
1. Select **Copy Unique Machine ID** and then paste the id into a text editor. Save the .txt document, and then move the document onto a machine with internet access.

![Image of SolarWinds activation page](image)

**Note:** You can transfer the document to a shared location, or copy the document onto a portal drive for transfer.

2. On your machine with internet access, log into the SolarWinds customer portal, select **Licenses > Manage Licenses**, and then navigate to the product you are trying to activate.

3. Select **Activate license manually** to open the Manage License Activation page.
4. Paste the unique machine id from your .txt file into the **Unique Machine ID** field. Enter a computer name for your machine, and then select **Generate License File**.
5. Select **Download Activation File**, and then move the file onto your offline machine.

![Download Activation File](image)

**Note:** A copy of the download file is emailed to the email associated with your SolarWinds customer account.

![License Activation](image)

5. Select **Browse**, select the location of your license key file, and then select **Next** to continue.

![Activate DMR](image)

6. Select **Finish** to activate your license.
7. Select Exit to close the SolarWinds License Manager.

Viewing your License Status

View the number of items you are currently documenting, and the number of remaining items you can document on the License Status page. Select the User Management button, then select License Status to open your License Status page.

Note: A message will display notifying you if your license has expired.

Used Data Sources

The License status page displays the following information about your environment:
<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source Type</td>
<td>The type of data source that is consuming part of your Database Mapper license.</td>
</tr>
<tr>
<td>Data Source Identifier</td>
<td>The identifier assigned to the selected Database Mapper data source.</td>
</tr>
<tr>
<td>Solution Items</td>
<td>A list of solution items that are within the data source type.</td>
</tr>
</tbody>
</table>

⚠️ **Important:** Removing a solution item does not free license space if you have already generated documentation for the data source. To fully remove a data source from your license, you must delete the solution, and solution item(s) for the desired data source to delete any existing documentation tied to that source.
Applies to the following cloud-based products:

- SolarWinds Database Mapper
- SentryOne Monitor
- SentryOne Test

Overview

The Organization Settings page is applicable to the cloud-based products (Database Mapper, SentryOne Monitor, and SentryOne Test). It can be accessed at https://myorg.sentryone.com.

Organization Settings allows you to add new users to the organization so you can share the same Database Mapper, SentryOne Monitor, or SentryOne Test environment data, as well as assign user roles such as Admin.

Note: The Admin user role in this context is only for the Organization Settings. This is not related to SQL Server or Windows administrator privileges. A user with the Admin role has the ability to manage users for the organization as described below in the Manage Users section.

User Profile

Select the User Profile button in the upper right corner to change your password or log out of Organization Settings.
Manage Users

Note:

- Only users with *Admin* as their *Assigned Role* can access the Manage Users screen and its features.
- The first user added to the account (at the time of account creation) is assigned the *Admin* role.
- If an organization has only one user, the user is assigned the *Admin* role by default.
  - The admin privileges cannot be removed from this sole account, nor can the user be removed if it remains the only one.

Select Manage Users to continue. From the Manage Users screen, you can add, edit, or delete users.

Note: Registered users are brought into the list of users by default. These legacy users may not have name information populated. That information can be edited as described below.
Add New Users

**Note:** All users must have an account at [account.sentryone.com](http://account.sentryone.com) to log into a SentryOne Cloud product.

1. Select **New User** to add a new user to the organization.

2. Enter the **First Name**, **Last Name**, and **Email** address for the user.

3. The **Role** is set to **User** by default. Use the drop-down menu to select **Admin** if necessary.

4. The default **Status** is **Active**, but may be switched to **Inactive** on this screen. **Note:** **Inactive** is intended for situations when you need to temporarily disable users.

5. Select **Save** to complete the process.

**Note:** For **Database Mapper** and **SentryOne Test**, users must be added to both **Organization Settings** and the **Activation Key** in [https://my.sentryone.com/](https://my.sentryone.com/).

1. Log into [https://my.sentryone.com/](https://my.sentryone.com/), then go to the bottom of the page to the **S1 TaskFactory/Workbench Licenses** section.
2. Select the **Activation Key** text for the Database Mapper or SentryOne Test license where you want to add a user.
3. On the **Manage License** view, select **View Contacts**.

4. Select **Add Contact** from the **Contact Details** view.

5. On the **Add Contact** form, enter the matching **Name** and **Email** used in **Organization Settings**, then select **Add**.

   ![Add Contact Form]

   **Success:** Your contact is now ready to use Database Mapper or SentryOne Test!

**Edit Users**

Use the **Edit** button on the **Manager Users** screen to enter the user's detail screens and make changes as needed.

**Delete Users**

Use the **Delete** button on the **Manager Users** screen to delete the user from the organization.
There will be a **Delete user?** popup to confirm that you want to delete the user and a **User removed from the organization** toast notification to confirm the change was successful.
Database Mapper User Permissions

Introduction

Database Mapper permissions may be set at the user or group level. Users are not required to belong to a group and they may be assigned to multiple groups. A DEFAULT user exists as a catch-all and initially has all permissions granted. See the sections below for accessing and customizing the permissions for your organization.

Accessing Permissions

1. Select the Profile button from the top navigation menu.
2. Select the Manage Permissions button from the options.

Permissions

Values

Granted

Represented by a green checkbox. When the permissions box is checked, then the permission is granted.

Denied

Represented by an X in a red square. When the permissions box is x’d out, then the permission is denied.

Unset

Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.
Represented by an empty square. When the permission box is empty, then the permission is **unset**.

**General Permissions**

⚠️ **Important:** Group Permissions are applied to all users in the Group. Group Permissions display in the individual user accounts. In the example below, the User is in the **Lots of Access group**, which allows all General Permissions.

These are system-level permissions that are applied at the user or user group level. General permissions are not tied to specific solutions. They provide access to top-level functionality for the **Organization**.

**Import Solution**

Grants the ability to **import a solution from DOC xPress**.

**Manage Agents**
Grants the ability to install and configure remote agents.

If denied, the user:

- Can view the list of remote agents.
- Cannot perform Edit Description, Change Pool Assignment, Delete actions on the remote agents.
- Cannot perform Create, Edit, or Delete actions on the remote agent pools.
- Cannot perform Change Pool Assignment action for solutions or solution items.
- Cannot install a remote agent using their account.

\[\text{Note: Changing pool assignments requires a combination of Manage Solutions and Solution Access.}\]

Manage Data Dictionary

Grants the ability to configure the Data Dictionary.

If denied, the user:

- Can view the Categories, Global Entries, Value Lists, and Grid View pages for Data Dictionary.
- Cannot perform actions to Create, Edit, or Delete any Categories, Global Entries, or Value Lists.

\[\text{Note: This permission does not control the ability to edit Data Dictionary values for a solution. See Data Dictionary Edit under the Securable Permissions section for available controls.}\]

Manage Permissions

Grants the ability to access the Permissions page and edit permissions for the organization.

\[\text{Note: The Manage Permissions option for the current user is disabled to prevent a user from removing their own ability to manage permissions. Since permissions can be inherited from other places, like Groups or via the DEFAULT user where that checkbox won’t be disabled, proposed changes will be validated and the changes will be rejected if they would result in the current user losing their Manage Permissions access.}\]

Manage Solutions

Grants the ability to Add, Edit or Delete solutions via the Solution Configuration Tool and the ability to manage which Agent Pool is assigned for a solution.
Note: Changing pool assignments requires a combination of Manage Solutions and Solution Access.

Viewing Effective Permissions

Starting with version 2022.2, you can select a user or group and view their effective permissions. Select the desired User Id or Group and then select View Effective Permission to display the active permissions for that selection.

Securable Permissions

Securable permissions are those that apply to specific objects (the securables) within the organization. In Database Mapper, this relates to restricting permissions on a per solution basis.

Securable permissions can be set:

- At the Organization level, which then inherit down to all solutions.
- At the Solution level, which overrides the permission set at Organization level.
**Note:** The minimum permission required to be able to view a solution, is **Solution Access**. The extra permissions listed grant additional rights on the solution.

**Data Dictionary Edit**

**Data Dictionary Edit** grants the ability to edit the data dictionary values for a solution via the **Documentation** page or the **Data Dictionary Grid View** page. If **denied**, the data dictionary values are read-only.

**Export**

**Export** grants the ability to request an export. If **denied**, the **Export** button on the **Solutions** page is disabled.

**Manage Endpoint Aliases**

Manage Endpoint Aliases grants the ability to configure endpoints aliases for the solution. If **denied**, the **Manage Endpoint Aliases** button on the **Solutions** page and **Lineage** page is disabled.

**Snapshot Request**

**Snapshot Request** grants the ability to take a snapshot for the solution. If **denied**, the **Configure Snapshot** button on the **Solutions** page is disabled.

**Solution Access**

**Solution Access** grants the ability to see the solution in the **Solution Configuration Tool** and **Database Mapper**. This is the minimum permission required to view the solution.

**Note:** When you add a solution via the **Configuration Tool**, the current user adding the solution will be explicitly assigned full permissions to that solution at their user level. If you’re already in **Database Mapper** when you add the solution and the solution appears with the snapshot button disabled, refreshing the page should pick up the updated permissions.

**Order of Precedence**

Permissions are checked in order of precedence starting at the most specific level (the user) then proceeding to the most general level as follows:

1. User level permissions for the specific user. If none exist, then
2. User group level permissions for specific user groups to which the user belongs. If none exist, then
3. User level permissions for the **DEFAULT** user. If none exist, then
4. User group level permissions for the **DEFAULT** user for the groups to which the **DEFAULT** user belongs.
Adding Users

Note:

- Users will be added to the list automatically the first time they access the Database Mapper site. They will inherit the DEFAULT permissions.
  - The Add option allows you to add users with specific permissions before they access the site. If they have already accessed the site, follow the instructions for editing a user if you want to modify their permissions from the default.
- Regarding access:
  - Database Mapper Cloud: This does not add a user to the organization. Users must already exist in the organization to access Database Mapper. Use Manage Users to add or remove users.
  - Database Mapper Software: This does not grant access to Database Mapper. If someone is on the same domain as Database Mapper and can access the web server, then they can access the site by default.

To manually add a user’s permissions:

1. Select the Add option under the Users section.
2. Enter a User Id.
   - Note: For Database Mapper Cloud, this is the user’s associated email address that matches the one used in Organization Settings. For Database Mapper Software, this is the user’s associated Windows account (e.g. DOMAIN\username).
3. Enter permission choices or leave as-is to accept the DEFAULT user permissions.
4. Select the Save Changes option.

Success: You have added a user with the associated permissions.

Editing User Permissions

The Permissions page is in Edit mode by default.

To change permissions:

1. Select a user from the User Id list.
2. Edit General Permissions and Securable Permissions as needed.
3. Select the **Save Changes** button (which is enabled when changes exist to save).

---

**Success:** You have updated the permissions for a user.

![Successfully saved changes](image)

---

**Note:** Expand the **Organization** list to set permissions at the **Solution** level instead of the **Organization** level.

---

### Deleting User Configurations

**Note:**
- Once a user is in the list for permissions, they cannot be fully deleted from the permissions page.
- Use the available permissions to control their access to Database Mapper.
- To remove access:
  - **Database Mapper Cloud**: This does not delete a user from the organization. Use **Manage Users** within Organization Settings to block their access.
Database Mapper Software: If someone is on the same domain as Database Mapper and can access the web server, then they can access the site by default. Use your Windows security policies to block access.

1. Select the next to a user name (or the Delete User Configuration option under User Settings) to delete configured permissions for a user.
2. A confirmation popup message will display with the text “Are you sure you want to delete the permissions for [USER]? This will reset them to have the DEFAULT user permissions.” Select OK to reset the configured permissions for the user.

Success: You have reset the user permissions.

Creating User Groups

To create a new user group:

1. Select Groups on the Permissions page.
2. Select Create Group text.
3. Select the Name text, then enter a name for the Group.
4. Select the Create Group button.

Success: You have created a user group.

Editing Users Groups

The Permissions page is in Edit mode by default.

1. Select the user group from the Groups list.
2. Make changes to **General Permissions, Securable Permissions,** and **Users.**

3. Select the **Save Changes** button.

![Permissions interface]

**Success:** You have updated the permissions for a user group.

![Success message]

**Adding Users to Groups**

To add a user to a user group from the Users tab:

1. Select the user from the **User Id** list.
2. Select the **Select Groups** text and then select a **Group** from the drop-down list.
3. Select the **Save Changes** button.

![Permissions interface]

**Success:** You have added a user to a group.

![Success message]
To add a user to a selected group from Groups tab:

1. Select the desired group.
2. Search for the desired user in the Add user field and add the user.
3. Select **Save Changes** to save your changes to the Group.

Deleting User Groups

1. Select the user group from the **Groups** list.
2. Select the **Delete Group** text.
3. Select **OK** on the *Are you sure you want to delete [Group Name]*? confirmation window.
Success: You have deleted a user group.

Successfully deleted group.
Remote Agent Overview

What is a remote agent?

A remote agent is a service that runs in the background on a machine within your environment, and is responsible for generating the snapshots and documentation for the solutions configured within Database Mapper. It feeds the snapshot and documentation back to Database Mapper Cloud. This agent service needs to be installed on a machine that has access and permissions to the environments configured to be documented. See the System Requirements article for more details.

Where should a remote agent be installed?

The remote agent may be installed on any on-premises machine that meets the system requirements, including access to all the resources (i.e. a SQL Server) it must connect to in order to create documentation. Keep in mind that since it runs as a Windows service in the background, it can only perform the work while the machine is running. A machine that is shut down overnight will not be able to generate documentation or take snapshots during that time.

How many remote agents are needed?

In general, you should start with a single remote agent. Situations where you may need more than one remote agent include:
You require numerous or large snapshots and they are taking longer than acceptable to complete with a single agent.

Your network environment is locked down in such a way that not one machine has access to all the resources you are trying to document. In this case, you might need to install a remote agent on Machine1 to access SQLServer1, and a remote agent on Machine2 to access SQLServer2.

What is a remote agent pool?

A remote agent pool is a grouping of remote agents in your Database Mapper environment. Database Mapper automatically creates a default system-generated remote agent pool that you can’t change. When you register any remote agent, your remote agent goes into the system-generated pool by default. If you have multiple remote agents, and want to control what work they can pick up, you can group them into pools. When a snapshot is requested for a solution item, it allocates that work to any of the available agents within the pool that’s associated with the solution item.

For example, you could create remote agent pools with remote agents that document only:

- your production server
- your development server
- SSIS packages

Managing Remote Agents

Manage the remote agents assigned to Database Mapper. In Database Mapper, select 🗂 to open the Remote Agents management page. Starting with Version 2022.3, Remote Agents are displayed on the top and Remote Agents Pools are displayed on the bottom of the same page for streamlined management.
### Metadata

<table>
<thead>
<tr>
<th><strong>Description</strong></th>
<th><strong>Metadata</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Machine Name</strong></td>
<td>The name of the machine where the Remote agent is installed.</td>
</tr>
<tr>
<td><strong>Date Registered</strong></td>
<td>The day and time that the Remote agent was registered with Database Mapper.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>A user entered description about the Remote agent.</td>
</tr>
<tr>
<td><strong>Remote Agent Pool</strong></td>
<td>The Remote agent pool to which the remote agent is assigned.</td>
</tr>
<tr>
<td><strong>Last Signal received</strong></td>
<td>The last time a successful connection was made to the remote agent.</td>
</tr>
<tr>
<td><strong>Version</strong></td>
<td>The software version number of the remote agent.  Note: Database Mapper displays an Upgrade button by your Remote Agent if an update is available. Select Update to update your remote agent remotely.</td>
</tr>
</tbody>
</table>

### Managing Remote Agents page buttons

<table>
<thead>
<tr>
<th><strong>Button</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Edit" /></td>
<td>Select the Edit description button to edit the description column for the selected remote agent. Enter your desired description, and then select to save your changes.</td>
</tr>
<tr>
<td>Button</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><img src="image" alt="Change pool assignment" /></td>
<td>Select the <strong>Change pool assignment</strong> button to open the Change pool assignment window. Select the desired remote agent pool from the drop-down list, and then select <strong>Save</strong> to save your changes.</td>
</tr>
<tr>
<td><img src="image" alt="Check connectivity" /></td>
<td>Select the <strong>Check connectivity</strong> button for a remote agent to open the Check remote agent connectivity window. Select <strong>Start connectivity check</strong> to verify the connection.</td>
</tr>
<tr>
<td><img src="image" alt="Task History" /></td>
<td>Select the <strong>Task History</strong> button for a remote agent to open the Task History page for the remote agent.</td>
</tr>
<tr>
<td><img src="image" alt="Software Update History" /></td>
<td>Select the <strong>Software Update History</strong> button to open the Software history window for the selected remote agent.</td>
</tr>
<tr>
<td><img src="image" alt="Manage License" /></td>
<td><strong>Note:</strong> This is no longer an option or requirement in versions 2021.3 and later. Select the <strong>Manage License</strong> button to open the Manage License window.</td>
</tr>
<tr>
<td><img src="image" alt="Show Running Tasks" /></td>
<td>Select the <strong>Show Running Tasks</strong> button to open the running tasks window for the selected remote agent.</td>
</tr>
<tr>
<td><img src="image" alt="Show Available Providers" /></td>
<td>Select the <strong>Show Available Providers</strong> button to open the Available Providers window for the selected remote agent.</td>
</tr>
<tr>
<td><img src="image" alt="Delete" /></td>
<td>Select the <strong>Delete</strong> button to open the Delete Remote agent window. Select <strong>Delete Remote agent</strong> to delete the selected remote agent from the Remote Agents page.</td>
</tr>
</tbody>
</table>

### Updating a Remote Agent

**Note:**

- When using **Database Mapper** (the cloud version at document.sentryone.com), you will see the **Update** option next to the remote agent to upgrade them via the Database Mapper web interface.
when updates are available.

- Selecting **Update** also updates any other remote agents from the same installation directory.
- When using **Database Mapper Software** (the on-premises, self-hosted version), you must download the latest **Database Mapper Remote Agent** software from [my.sentryone.com](http://my.sentryone.com), then run through the installer.
- This updates all remote agents that are part of this installation.
- There’s no need to stop the remote agent services before upgrading them.
- We don’t recommend upgrading them while they are performing work (e.g. generating documentation or a snapshot).

Update your remote agent to the newest software version on the **Remote Agents** page.

1. Select the **Update** option next to an out-of-date remote agent to open the **Update** prompt.

2. Select **Ok** to update the selected remote agent remotely.

Deleting a Remote Agent

You can delete any unused remote agents in your Database Mapper environment by completing the following:

1. Open **Windows Services**, then select the remote agent you want to delete. Right click the remote agent, then select **Stop** to stop the service from running.
Note: Stopping the Database Mapper Remote Agent Service makes the uninstall process easier and does not require you to restart your machine.

2. Select the Windows button, then navigate to the SolarWinds folder. Right click the Database Mapper Solution Configuration Tool, and select Uninstall to open the Control Panel.

3. Right click the Database Mapper Remote Agent that you want to uninstall, then select Uninstall to uninstall the service. Select Yes to confirm your selection.
Viewing a Remote Agent Log

If your remote agent encounters any issues or failures, you can select the **Task History** button for the desired remote agent. On the **Task History** page for the remote agent, you can view or download log output that details the issue.

**Note:** For a more detailed log, you can view the log output for your on premises installation at the following path:

C:\Program Files (x86)\SentryOne\SentryOne Document Remote Agent\SentryOne.Document.RemoteAgent.exe.config

Logging is set to record any **error** by default. If you want your log to record more detailed data, you can change this configuration to **debug**.

Managing Remote Agent Pools Details

Starting with **Version 2022.3**, Remote Agent Pools are located under the Remote Agents Options on the Remote Agents page.
**Note:** Database Mapper automatically creates a default system-generated remote agent pool that you can’t change. When you register a remote agent, your remote agent goes into that pool by default.

Create custom pools, and move agents around between them. If you have multiple remote agents, and want to control what work they can pick up, you can group them into pools. When a snapshot is requested for a solution item, it allocates that work to any of the available agents within the pool that is associated with that solution item.

**Creating a new pool**

Create a new remote agent pool in the Manage Remote Agents pools page by completing the following steps:

1. Select + to open the **New Remote Agent Pool** window.
2. Enter a Pool name, and then select **Save** to create your remote agent pool.

Managing remote agent pool page details

<table>
<thead>
<tr>
<th>Metadata</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pool name</td>
<td>The name of the remote agent pool.</td>
</tr>
<tr>
<td>Agents Assigned</td>
<td>The number of remote agents assigned to the pool.</td>
</tr>
</tbody>
</table>

Managing remote agent pool buttons

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![+]</td>
<td>Select the + button to open the New Remote Agent Pool window.</td>
</tr>
<tr>
<td>Button</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>✍️</td>
<td>Select the Edit Remote agent pool name button to open the Edit Remote Agent Pool window. Enter the desired changes, and then select Update to save your changes.</td>
</tr>
<tr>
<td>🗑️</td>
<td>Select the Delete button to open the Delete Remote Agent pool window. Select Confirm Delete to delete the selected remote agent pool.</td>
</tr>
</tbody>
</table>

### Deleting a Remote Agent Pool

**Important:** Before deleting a selected remote agent pool, you must reassign all the existing remote agents, solutions, and solution items within the pool to another pool.

Delete a selected remote agent pool from Database Mapper by completing the following:

1. Reassign any remote agents, solutions, or solution items that are assigned to the pool you want to delete. In this example, we reassign a remote agent to a different pool.

   ![Reassign Remote Agent](image3.png)

2. Select the Delete button for the remote agent pool you want to delete, then select Confirm Delete to complete the process.

   ![Delete Remote Agent Pool](image4.png)
Success: The remote agent pool has been deleted from your Database Mapper environment.
With SolarWinds Database Mapper, you can schedule snapshots to occur at a time of your choosing. This can be useful for automating the snapshot process, and to continually update documentation for your data sources at consistent intervals. For example, you may want to schedule a snapshot weekly for a dev server to document the changes that occur on a weekly basis.

Additional Information: For information about:

- Manually starting a snapshot, and generating documentation for the first time, see the Generating Documentation article
- Creating a solution, and adding solution items, see the Solutions and Solution items articles

To begin scheduling a snapshot for your selected remote agent, complete the following steps:

1. Open the Solutions dashboard, and select the Configure Snapshot button for the desired solution to open the Snapshot Configuration window. Copy the first snapshot command.
2. Open the Database Mapper install directory, select **SHIFT+ Right Click** to open the context menu, and then select the **Open PowerShell window here** option.

3. Paste and execute the copied command. Go back to Database Mapper, then copy the second snapshot command.

**Note:** In this example, the install directory is `C:\Program Files (x86)\SentryOne\Database Mapper Remote Agent`. Database Mapper uses this by default.
**Note:** You only need to copy the argument. You don’t need to copy the whole statement including the `.exe`.

**Important:** You need to copy the argument starting with the word `snapshot` through the end of the argument. For example, you would only copy the highlighted portion as shown in the snapshot configuration image above. The code snippet provided below is only an example:

```bash
snapshot -s e42684e9-f8aa-4881-9915-26443a852f9f -t https://s1dhost-dev-eus-as.azurewebsites.net/ -o 6d1ff543-dec2-47dc-8a1b-965038adcbc6
```

4. Open **Windows Task Scheduler** and select **Action > Create basic Task** to open the Create Basic Task Wizard.

5. Enter a name and description. Select **Next** to continue.
6. Select a task starting point and select **Next**. Configure your trigger, then select **Next** to continue.

7. Select **Start a program** for the action, then select **Next**. Select **Browse** to open remote agent install directory, then select the **SentryOneCommandLine.exe**. Paste the previously copied Snapshot Configuration command in the Arguments box. Select **Next** to continue.

⚠️ **Important:** You need to paste the argument that you copied in Step 3 in the **Add arguments (optional)** field. For example, you would only paste the highlighted portion as shown in the snapshot.
configuration image in Step 3. The code snippet provided below is only an example:

```
snapshot -s e42684e9-f8aa-4881-9915-26443a852f9f -t https://s1dhost-dev-eus-as.azurewebsites.net/-o 6d1ff543-dec2-47dc-8a1b-965038adc6c6
```

8. Select **Finish** to save your task.

![Create Basic Task Wizard](image)

**Success:** Your Database Mapper Snapshot is now scheduled!
In order to document your Azure Data Factory (ADF) instance with SolarWinds Database Mapper, you’ll first need to enable access to the API through your Azure Portal.

1. Log in to Azure Portal, then select **Azure Active Directory**.

2. Select **App Registrations** from the options.

3. Select **New registration**.
4. Complete the form to fill in the details required to **Register an application**.

5. Add roles to the application.

**Additional Information:** See the official Microsoft documentation for instructions on how to apply permissions to an application. Read and apply the section on **Assign the application to a role**. You may need to be assigned a contributor role to the application to make these changes. If that’s the case, your Azure Portal administrator will need to make any required changes to your role.

6. Gather login details for the **Azure Data Factory provider** to allow Database Mapper to access your Azure Data Factory.

   1. For the **Client ID** and **Tenant ID**, select the **Overview** page of your ADF App in Azure Portal. On this page, you’ll see the **Application (client) ID** used as the **Application ID** and the **Directory (tenant) ID** used as the **Tenant ID** on the connection details.
2. Create a new secret that will be used as the **Authentication Key** on the login screen. Select **Certificates & Secrets** from the **Manage** menu.

3. Select **New client secret**.

4. Enter a **Description** and set a duration for the **Expires** value. Select **Add** to view the new secret.
5. Select **Properties** from the **General** menu to view the **Subscription** and **Resource group** information.

7. Add all collected values to the **Enter the Azure Connection details** form on the **Azure Data Factory Connection** screen, then select **Validate**.
Success: You have connected your application to Azure Data Factory!
Update: SentryOne Document is now SolarWinds Database Mapper (DMR). See the Database Mapper product page to learn more about features and licensing. Want to explore Database Mapper? An interactive demo environment is available without any signup requirements.

Introduction

SolarWinds Database Mapper replaces the DOC xPress product. The Import option in the Database Mapper configuration tool is designed to migrate a DOC xPress metabase to Database Mapper (the cloud or on-premises software version).

Note: The Import option only appears if you have a compatible version of the Database Mapper configuration tool and are connected to a Database Mapper endpoint that supports the import functionality. This is not available by default for cloud.

Import Process

Before you can migrate your data from DOC xPress to Database Mapper, you must install and configure a version of Database Mapper (cloud or on-premises). The import process uses the installed Database Mapper configuration tool to perform the migration.

1. Open the Database Mapper configuration tool

The Database Mapper configuration tool is installed on-premises for both the cloud and self-hosted versions of Database Mapper. The instructions for the import are essentially the same for either, but you will have different server endpoints.

1. On the Welcome to Database Mapper! screen you’ll need to enter your Server URL.

Note: The Server value defaults to the cloud server (https://document.sentryone.com). If you
are using the self-hosted version, you'll need to use your hosted server URL. In these instructions, we're using the self-hosted version with a **Server** value of .

2. Select **Validate** to test the connection. A **Server validated successfully** message appears.

3. Select **Connect** to open the **Solutions** screen.

2. **Import**

The **Import** allows you to choose a DOC xPress metabase to migrate to Database Mapper, as well as how much of the snapshot history you would like to include. Data is prepared on the machine running the configuration tool, then it is sent to the server hosting Database Mapper for additional processing.

1. Select the **Import** button on the **Solutions** screen to get started.

2. On the **Import** screen, enter the **Server name** for your existing DOC xPress database, select a **Security mode** for the connection, select a **Database**, and then select **Connect to DOC xPress Metabase** to continue.
Note: The default database is typically named DOCxPress.

If you select something that is not a DOC xPress metabase you will see a Could Not Connect popup error.

3. On the Select solutions to import screen you will see a list of the available solutions and solution items from your DOC xPress database. Select the solutions that you would like to import by checking the boxes next to them. Select Next to continue.
Note: By default, selecting a solution will select all the associated solution items listed, however, you can deselect any items that you do not want to import into Database Mapper.

Note: The Import checks your licensing to verify how many data sources you are licensed for. If you select more data sources than you are licensed for, you will receive a Target Limit Exceeded popup message.

4. On the Configure data range for import screen, make a selection for the time range that you want to import snapshots into Database Mapper. Only snapshots from the time range you select will be imported.
Note: There’s also an option called None to import only the configuration. This provides a fresh start with the solution to start taking snapshots in Database Mapper without importing the historical data.

Important: Depending on how much history you have in your DOC xPress metabase, the Full option could take a significant amount of time to migrate.

5. Select Start to begin the migration. A screen appears to show you the progress of the data as it is prepared for the transfer.

6. A green check mark and Preparation completed successfully message indicates that the data has been taken from DOC xPress and the files have been generated and uploaded to Database Mapper. When the preparation step completes, you have the option to Save Log (save a file of the messages from the preparation process) or Close the screen.
Note: If your import fails, see the Failures section at the end of this article.

7. Open Database Mapper in a browser. You’ll see that the solution has a status of **Importing**... while Database mapper processes the data that has been uploaded. You may need to hit refresh.

3. Import Status

While DOC xPress maintains a history of the snapshots, it does not maintain a history of the documentation at each of those points in time the way Database Mapper does. Database Mapper needs to generate all the documentation at each point in time from the data that is being migrated, as well as generate lineage if the licensing level allows for it.

Within the Database Mapper web portal, you can select the **Importing**... status to view a high-level summary about the status (e.g. when the import was created, who requested it, the current status, and total file size).

You can also select the **Task History** button to view additional details. Task History will display all the steps that have been completed and all the steps that have yet to complete. There’s also a **Cancel** option available on the **Task History** screen if you would like to cancel the import.

Example of import progress in **Task History**. The list of commands can vary from import to import.
Note:

- The **Generate lineage for solution** and **Finalize lineage for solution** steps will only display if your licensing level includes lineage analysis.
- These lineage steps require at least one remote agent running in the default agent pool. The lineage steps above will not complete until you have a remote agent running.

4. Import Complete

Once the import process is complete, you will have all the Database Mapper features available with your licensing for that solution.

Success: You have migrated from DOC xPress to Database Mapper! Check out the Using Database Mapper articles to start exploring all the features.

Cancelling an Import

If you changed your mind about what you are importing while it is in progress (i.e. you selected more history than you need and the migration is taking longer than expected):

1. Select **Cancel** from the **Task History** page.
2. Go to the **Database Mapper configuration tool**, select the solution you have canceled, then select **Delete**.
Note: A cancelled import will show a solution in an Import Cancelled status in the web portal. The data deletion in the Database Mapper web portal is asynchronous and will be deleted in the background. There is no status displayed for this process. Attempting to import again right away may cause an error if the solution has not been fully deleted from Database Mapper.

3. You can set up the import again by following the Import process instructions, if needed.

Previously imported solutions

To prevent importing the same solution multiple times, you will see solutions listed under the Previously imported solutions section in the Solution Configuration Tool if you open it again after doing an import.
Troubleshooting

Failures

If an import fails during the Solution Configuration Tool Preparation (step 6 from Import), you will see:

If this happens, select Save Log to view the log output.

If an import fails after the preparation and file upload (step 6 from Import completed successfully), you will
see an **Import Failed** status message next to the solution.

Select **Import Failed** to see more details in the popup.

Select **Task History** to see which steps failed.

**Refresh** the solutions list in the **Solution Configuration Tool** to check for the the **Import Failed** status.

View the log files for more information, particularly the **API.log** file, as described in the **Database Mapper Troubleshooting** article.
Part 1. Update IIS Binding Information

**Unsupported**: The steps for configuring IIS bindings are provided as an example only. Please refer to the official IIS documentation from Microsoft for additional assistance. For information about IIS administration, see **IIS.net**.

1. Open Internet Information Services (IIS) Manager.

2. On the **Connections** panel, expand the server, then expand sites.

3. Select the **SolarWinds Database Mapper Host** site to edit bindings for **Database Mapper Software**.

4. On the **Actions** panel, select **Bindings...** under the **Edit Site** section (or right-click the site and use the context menu to select **Edit Bindings...**).
5. On the **Site Bindings** window, the **Host Name** (default = *localhost*) and **Port** (default = 44302) used during installation are displayed. Select the **Edit...** button to update the binding information.

6. Update the binding **Type**, **IP address**, **Port**, and **Host name** as needed. **Note:** The host name is the name of the server or another custom URL you manage.

7. Select **OK**.

8. Return to the **Connections** panel in **IIS Manager** and repeat the steps to edit the binding information for the **SolarWinds Database Mapper API** site.
9. Continue to **Part 2** (below) to complete the configuration changes for the Database Mapper settings files.

**Part 2. Update Database Mapper Settings Files**

1. In the installation directory, navigate to the **SentryOneDocumentApi** folder.
   For example: `C:\Program Files (x86)\SentryOne\SentryOne Document\SentryOneDocumentApi`

2. Open the `appSettings.json` file.

3. Under the "**CorsAllowedOrigins**" settings, update the URL to match the new binding.

4. Save the changes.

5. In the installation directory, navigate to the **SentryOneDocumentHost** folder.
   For example: `C:\Program Files (x86)\SentryOne\SentryOne Document\SentryOneDocumentHost`

6. Open the `appSettings.json` file.

7. Under the "**ApiServicesUrl**" and the "**HostUrl**" update the URL to match the new binding.

8. Save the changes.
9. Continue to Part 3 (below) to complete the changes in IIS Manager.

Part 3. Restart the Sites

1. Return to IIS Manager and restart the sites that have been updated (SolarWinds Database Mapper Host and SolarWinds Database Mapper API in this example).

Success: You have completed making changes to the IIS Binding for Database Mapper Software!

Permissions

By default, a network service user runs the IIS application pools. This user (or the user you change it to) must have Windows level permissions to the following directories:

- C:\Windows\Temp
- C:\Program Files (x86)\SentryOne (or your custom install directory)
- C:\ProgramData\SentryOne (or your custom install directory)
Remote Agents

Trouble installing remote agents

If you are having trouble installing the Database Mapper Remote Agent, enter the following command in the command prompt:

```
C:\Users\Downloads> SentryOne.Document.Installer.msi /l*v Installer.log
```

This command creates a log file at the installer.log location. Proceed through the installation process, and once you reach an error, send the log file to SolarWinds support for further assistance with your installation.

Remote agent log files

The **general log file** (used during the startup and initialization of remote agents):

```
%ProgramData%\SentryOne\SentryOneDocumentRemoteAgentLog.log
```

The **main log file**, which is specific to the installed remote agent (friendly/service instance name):

```
%ProgramData%\SentryOne\SentryOneDocumentRemoteAgentLog_{Remote Agent Name}.log
```

Software (On-Premises)

Log File

A log file for Database Mapper Software can be found under the installation directory:

```
%PROGRAMFILES(x86)%\SentryOne\SentryOneDocument\SentryOneDocumentApi\App_Data\SentryOne.Document.Web.API.log
```

Logging Level

Logging is set to record any error by default. If you want your log to record more detailed data, you can change the configuration file to debug mode. To adjust the config file, go to:
Note: This is the config file for all remote agents.

Snapshot Log Files

A log file for a failed snapshot can be found in the Solution’s Task History page. Select the button to download the log file.

Solution ID

The Solution can be found in the URL of the Solution’s Task History. Provide the Solution ID to support so they can identify the Solution where you are having issues. The Solution ID is in the URL as displayed below:

Data Storage

Important: The following data stores contain data that is important to the functioning of Database Mapper Software.

SQL Server

After the initial installation, the database is empty. The schema itself is created dynamically, as needed.
File System

Some content is stored to disk in the following location:

%ProgramData%SentryOne\Document\_blobStorage\n
Note: Full read and write access to this location will be required by the account under which the site is running in IIS.

HTTP Error 401.2 - Unauthorized

You are not authorized to view this page due to invalid authentication headers.

Most likely causes:

- No authentication protocol (including anonymous) is selected in IIS.
- Only integrated authentication is enabled, and a client browser was used that does not support integrated authentication.
- Integrated authentication is enabled and the request was sent through a proxy that changed the authentication headers before they reach the Web server.
- The Web server is not configured for anonymous access and a required authorization header was not received.
- The “configuration/system.webServer/authorization” configuration section may be explicitly denying the user access.
What we’ve seen this mean:

This error has shown up when the Windows Authentication feature for IIS has been turned off or disabled. Windows Authentication is a requirement for the self-hosted version of Database Mapper. There are some examples below, but always check with the official Microsoft documentation for up-to-date information on these features and settings.

Step 1. Ensure that Windows Authentication is turned on under Windows Features:
Step 2. Ensure that Windows Authentication is enabled for the Database Mapper API and Database Mapper Host Sites in Internet Information Services (IIS) Manager.

⚠️ Important: Windows Authentication must be enabled for the Database Mapper Sites