

SOLARWINDS TECHNICAL REFERENCE

Orion NPM Migration

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This technical reference includes steps to complete a successful Orion Network Performance Monitor (Orion NPM) server migration. Depending on the complexity of your implementation, you may need to perform a number of different procedures when transferring Orion NPM to different hardware. This document guides you through the following migration procedures:

- Backing up the Orion NPM database
- Installing Orion NPM on the new server
- Reassigning nodes to the new polling engine
- Moving custom Map Maker maps to the new server
- Moving custom reports to the new server
- Updating report schemas
- Uninstalling Orion NPM from the old server

If you have any questions about this process, please contact support@solarwinds.com.

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Introduction

Migrating Orion NPM to a different server is a process that can take as little as 30 minutes or as long as several hours, depending on the size of your Orion NPM database. Consider scheduling an appropriate maintenance window in which to perform your migration.

Requirements

Moving your Orion NPM implementation to a new server requires the following:

- Server hardware meeting minimum requirements for the new Orion NPM implementation. For more information about Orion NPM requirements, see “Installing SolarWinds Orion Network Performance Monitor” in the *SolarWinds Orion Network Performance Monitor Administrator Guide*.
- Windows user account credentials that have been granted administrative rights on both servers.
- A license reset to register Orion NPM on your new server. You will need to install SolarWinds License Manager to manage the required license migration. For more information, see “Maintaining Licenses with License Manager” in the *SolarWinds Orion Network Performance Monitor Administrator Guide*.
- A temporary storage location for custom reports and Map Maker maps. Consider using a memory stick, an external hard drive, a SAN device, or another network drive that is accessible to both Orion NPM servers.

Note: Maps and map objects created or edited in Orion Network Atlas are stored in the Orion database. If the database is successfully migrated, there is no need to migrate any additional Network Atlas map files. For more information about migrating your Orion database, see “Moving Your Orion NPM Database” at <http://www.solarwinds.com/support/orion/orionDoc.aspx>.

Migrating Orion NPM

The following procedure walks you through a migration of Orion NPM from one server to another.

To migrate Orion NPM:

1. Log on to the computer that hosts your current Orion NPM server.
2. Click **Start > All Programs > SolarWinds Orion > Database Utilities > Database Manager**.
3. **If your SQL Server is not listed in the left pane**, add your server, as shown in the following steps:
 - a. Click **Add Server**.
 - b. Select the name of the SQL instance from the SQL Server list. If your server is not listed, type the name or IP address.
 - c. Select the appropriate authentication type, and then click **Connect to Database Server**.
4. Locate and right-click your database in the Database Manager tree in the left pane, and then click **Backup Database**.
5. Type a Description of the database backup, and then specify a Backup Filename, including the path.

Note: Click the ellipsis to directly select the Backup Filename.

6. Select either of the following options:
 - **If you want to attach your new database backup to the end of the selected backup file,** select **Append to the end of the Backup File**.
 - **If you want to overwrite the selected backup file,** select **Overwrite Backup File**.
7. Click **OK**.
8. **If you are moving the SQL database to the new Orion NPM server,** copy the new backup file (typically named `NetPerfMon.BAK`) to a folder on the new server.
9. Install Orion NPM on the new server, but **DO NOT** run the Configuration Wizard yet. Reboot the server if prompted, and then register the software.

Note: A new license key is required, and you will need to install SolarWinds License Manager to manage the required license migration. For more information, see “Maintaining Licenses with License Manager” in the *SolarWinds Orion Network Performance Monitor Administrator Guide*.
10. On the new server, click **Start > SolarWinds Orion > Database Utilities > Database Manager**.
11. **If your SQL Server is not listed in the left pane,** add your server, as shown in the following steps:
 - a. Click **Add Server**.
 - b. Select the name of the SQL instance from the SQL Server list. If your server is not listed, type the name or IP address.
 - c. Select the appropriate authentication type, and then click **Connect to Database Server**.
12. Locate and right-click on your server in the Database Manager tree in the left pane, and then click **Connect to Server**.
13. **If you moved the SQL database to the new server,** perform the following steps:
 - a. Click **Database > Restore Database**.
 - b. Click the ellipsis to Select the Database file to Restore.
 - c. **If you want to verify the validity of the selected database,** click **Verify**.
 - d. Confirm or edit the name of the restored database in the Restore Database as the following Database name field.
 - e. If you want to restore the database as .MDF or .LOG files, provide appropriate filenames in the Restore Database in the following MDF and LOG files fields.
 - f. Click **OK**.

Note: Database Manager cannot create new folders. Therefore, specify a path that already exists.
14. Run the Configuration Wizard and specify the existing (or newly restored) database on the Database setup section of the wizard. When prompted, click **Yes** to use the existing database.

Note: **DO NOT** skip tabs or deviate from the tab order. Click **Start**, and then click **Continue** to complete the wizard in order. Completing tabs out of order may adversely affect the install process. For more information, see “Installing SolarWinds Orion Network Performance Monitor” in the *SolarWinds Orion Network Performance Monitor Administrator Guide*.

Reassigning Nodes

If a new name is used for the new Orion NPM server, it is added to the database as a new polling engine. All current nodes remain assigned to the old polling engine name and must be reassigned to the new polling engine, as shown in the following procedure.

To reassign items to the new polling engine:

1. *If you are migrating Orion NPM version 8.1 or earlier*, click **Start > All Programs > SolarWinds Orion Network Performance Monitor > Advanced Features > Shutdown NetPerfMon**.
2. *If you are migrating Orion NPM version 8.5 or later*, click **Start > All Programs > SolarWinds Orion > Advanced Features > Orion Service Manager**.
3. Stop all SolarWinds services.

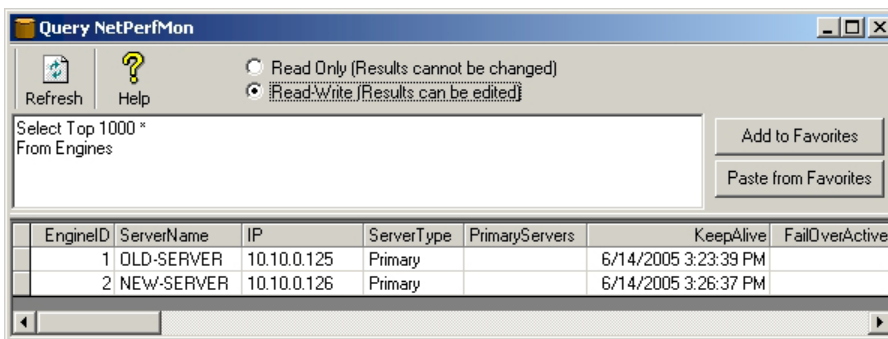
Notes:

- If you have more than one Polling Engine, you will need to stop each additional Polling Engine before continuing.
- Do not stop the SQL Service. The SQL Service needs to be running in order to make the necessary changes to the database.

4. Click **File > Exit**
5. Click **Start > SolarWinds Orion > Database Utilities > Database Manager**.
6. Expand your SQL Server in the tree.
7. Expand the Orion database.

Note: By default, this database is named `NetPerfMon`.

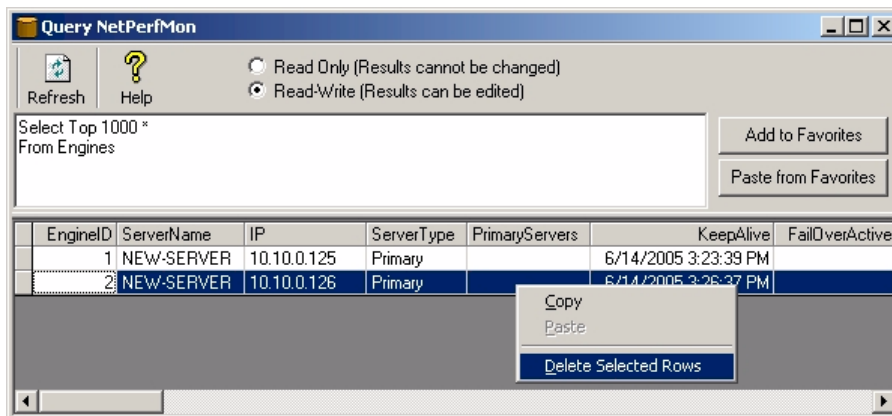
8. Right-click on the Engines table, and then click **Query Table**.
9. Click **Refresh** to display the table entries.
10. Select **Read-Write (Results can be edited)**.



11. Replace the value in the **ServerName** field for the old polling engine with the server name of the new polling engine. In the previous graphic, the `OLD-SERVER` is renamed `NEW-SERVER`.

Note: It is not necessary to update the **IP** field. The next time the service is started, Orion NPM discovers the new IP address, and the **IP** field is updated automatically.

12. Delete the newly added engine from the table (EngineID: 2 in this example) by clicking on the blank area to the left of the row to select it. Right-click anywhere in the selected row, and then click **Delete Selected Rows**.



13. Click **Yes** when prompted to confirm deleting the row.

Note: The final result will display the new server name with the IP address of the old server. The next time the service starts, the **IP** field will be updated with the IP address of the new server.

14. Close Database Manager.

Copying Maps

The best way to move your custom Map Maker maps from the old server to the new is to use the Publish to Remote Web Server utility within Map Maker. Using this utility ensures that all your custom maps, icons, and backgrounds transfer correctly.

Note: Maps and map objects created or edited in Orion Network Atlas are stored in the Orion database. If the database is successfully migrated, there is no need to migrate any additional Network Atlas map files. For more information about migrating your Orion database, see "Moving Your Orion NPM Database" at <http://www.solarwinds.com/support/orion/orionDoc.aspx>.

To copy your custom maps to the new Orion NPM server:

1. Click **Start > All Programs > SolarWinds Orion > Map Maker**.
2. Click **File > Publish to Remote Web Server**.
3. Type either the IP address or the name of the new Orion NPM server in the Remote Web Server field.
4. **If you did not install Orion NPM in the default path on the new server**, either click the ellipsis or click **Select the Installation Directory**, and then browse to the \Orion folder on the new server.
5. **If you want to specify which maps you wish to publish to the remote web server**, uncheck **Complete Synchronization**.

Note: This feature helps when multiple users are creating and publishing maps at different intervals.

6. Click **OK** to publish your maps to the new server.
7. Click **OK** when the transfer has completed.
8. Close Map Maker.

Copying Custom Reports

Complete the following task to copy your custom reports to the new Orion NPM server.

To copy your reports:

1. On the old server, copy your custom reports located in the `\Orion\Reports` folder.
2. Paste these reports into the `Orion\Reports` folder on the new server.

Updating Report Schemas

If you have added custom properties to the database, you will need to upgrade the report schemas on the new server. Updating the report schemas allows Report Writer to display and use custom property information.

To update report schemas for custom properties:

1. Ensure that Report Writer is closed, and then click **Start > All Programs > SolarWinds Orion > Advanced Features > Custom Property Editor**.
2. Right-click on the toolbar, and then click **Customize**
3. Click the **Commands** tab.
4. Click the **Properties** in the category list.
5. Drag **Update Report Schemas** to the toolbar to add a new button to the toolbar.
6. Close the **Customize** window.
7. Click **Update Report Schemas** on the toolbar.
8. Click **OK** after the custom properties have been added to the report schemas.
9. Close **Custom Property Editor**.

Uninstalling Orion NPM from the Old Server

Once you have completed the previous steps, check System Manager to ensure that all your nodes were transferred successfully. Verify that your alerts, reports, and maps were copied properly, and then check the Orion NPM website to ensure that everything was successfully migrated. As a last step, fully uninstall Orion NPM from the old server, as shown in the following procedure.

To uninstall Orion NPM from the old server:

1. *If you are uninstalling Orion NPM version 8.5 or later*, on the old Orion NPM server, click **Start > Control Panel > Add or Remove Programs**, click **SolarWinds Orion Network Performance Monitor**, and then click **Remove**.
2. *If you are uninstalling Orion NPM version 8.1 or earlier*, click **Start > SolarWinds Orion Network Performance Monitor > Uninstall > Uninstall Orion Network Performance Monitor**.
3. Complete the uninstall wizard, being sure to remove all shared components when prompted.

