INTEGRATION PACK FOR MICROSOFT SQL SERVER

For Microsoft System Center Orchestrator

For System Center 2016 and 2019, you must use the 32-bit version of the integration pack, which has the name **Kelverion_Integration_Pack_for_SqlServer_3.2**

For System Center 2022 and later, you must use the 64-bit version of the integration pack, which has the name **Kelverion_IP_SqlServer_x64_3.2**

Release Notes
Version 3.2
December 2023

Introduction

The **Kelverion Integration Pack for Microsoft SQL Server** is an Integration Pack for **Microsoft System Center Orchestrator** that lets you manipulate and query data in SQL Server databases.

The integration pack includes the following activities:

- Delete Rows
- Insert Row
- Monitor Rows
- Select Rows
- Select Join
- Run Procedure
- Run Query
- Update Rows

System Requirements

The Kelverion Integration Pack for SQL Server requires the following software to be installed and configured prior to deploying the integration. For more information about installing and configuring Orchestrator and the SQL Server, refer to the respective product documentation.

Kelverion_Integration_Pack_for_SqlServer (32-bit)

- Microsoft System Center Orchestrator 2016, 2019
- Microsoft .NET Framework 4.6.2

Kelverion_IP_SqlServer_x64 (64-bit)

- Microsoft System Center Orchestrator 2022
- Microsoft .NET Framework 4.6.2

One of these database servers:

- Microsoft SQL Server 2017
- Microsoft SQL Server 2019
- Microsoft SQL Server 2022
- Azure SQL Database

Registering and Deploying the Integration Pack

After you download the integration pack, you register the integration pack file with the Orchestrator management server, and then deploy it to runbook servers and computers that have the Runbook Designer installed.

IMPORTANT: Ensure that you are deploying the correct version of the Integration Pack.

- For System Center 2016 and 2019, you must use the 32-bit version of the integration pack, which has the name **Kelverion_Integration_Pack_for_SqlServer.**

- For System Center 2022 and later, you must use the 64-bit version of the integration pack, which has the name **Kelverion_IP_SqlServer_x64.**

1. On the management server, copy the **.OIP** file for the integration pack to a local hard drive or network share.
2. Confirm that the file is not set to **Read Only** to prevent unregistering the integration pack later.
3. Start the **Deployment Manager**.
4. In the navigation pane of the Deployment Manager, expand **Orchestrator Management Server**, right-click **Integration Packs** to select **Register IP with the Orchestrator Management Server**. The **Integration Pack Registration Wizard** opens.
5. Click **Next**.
6. In the **Select Integration Packs or Hotfixes** dialog box, click **Add**.
7. Locate the **.OIP** file that you copied locally from step 1, click **Open** and then click **Next**.
8. In the **Completing the Integration Pack Wizard** dialog box, click **Finish**.
9. On the **End User Agreement** dialog box, read the Kelverion License Terms**,** and then click **Accept**.
10. The **Log Entries** pane displays a confirmation message when the integration pack is successfully registered.

1. In the navigation pane of the **Deployment Manager**, right-click **Integration Packs**, click **Deploy IP to Runbook Server or Runbook**.
2. Select the integration pack that you want to deploy, and then click **Next**.
3. Enter the name of the runbook server or computers with the Runbook Designer installed, on which you want to deploy the integration pack, click **Add**, and then click **Next**.
4. Continue to add additional runbook servers and computers running the Runbook Designer, on which you want to deploy the integration pack. Click **Next**.
5. In the **Installation Options** dialog box configure the following settings.
6. To choose a time to deploy the integration pack, select the **Schedule installation** check box, and then select the time and date from the **Perform installation** list.
7. Click one of the following:
    a. **Stop all running runbooks before installing the integration pack** to stop all running runbooks before deploying the integration pack.
    b. **Install the Integration Packs without stopping the running Runbooks** to install the integration pack without stopping any running runbooks.
8. Click **Next**.
9. In the **Completing Integration Pack Deployment Wizard** dialog box, Click **Finish**.

10. When the integration pack is deployed, the **Log Entries** pane displays a confirmation message.

For more information about how to install integration packs, see the [How to Install an Integration Pack](https://technet.microsoft.com/en-us/library/hh420346.aspx) (https://technet.microsoft.com/en-us/library/hh420346.aspx).

Version History

Version 3.2

- Added support for column-level encryption.
- Add support for running functions to the **Run Procedure** activity.
- Improve how procedure output parameters are supported.

Version 3.1

- In the **Insert Row** activity, columns that do not allow NULL values, but have a default value are now optional by default.

Version 3.0

- Added new 64-bit product version with support for System Center Orchestrator 2022.

Version 2.5

- Added support for Microsoft SQL Server 2019.
- Add views to list of tables to the Delete Rows and Insert Row activities.
- Fixed spelling mistakes in the description of the Record Count published data item.

Version 2.42

- Verified support for TLS 1.2.
  Note: This requires either installing the latest **Security and Quality Rollup for .NET Framework 3.5, 4.52** or upgrading to .Net 4.6.2 on each Runbook Designer and Runbook Server machine. For more information, see [TLS 1.2 support for Microsoft SQL Server](https://support.microsoft.com/en-us/help/3135244) (https://support.microsoft.com/en-us/help/3135244).
- Verified support for SQL Server 2017.
- Fixed problem with applying the 'Connect Timeout' option that could cause activities in the integration pack to stop working when connecting to a mirrored database.

Version 2.4

- Update to the licence and maintenance period validation.
- Update Insert and Update Row activities with support for XML data types.
- Added support for Microsoft SQL Server 2014 and 2016

Version 2.3

- General update to improve logging and diagnostics.

Version 2.2

- Added new **Select Join** activity that can be used in a runbook to retrieve data from multiple joined tables based on logical relationships between the tables.
- Updated the **Monitor Rows** activity with optional **Select Top, Order By** and **Ascending Order** properties to allow the monitor to trigger on a maximum number or records each cycle.
- Updated the **Update Rows** and **Insert Row** activity so that that interprets a string with the value **NULL** as a NULL value. As before, an empty string will also be interpreted as *NULL*.
- Added support for selecting rows using NULL criteria. In the filters tab users can now specify *NULL* in the **Value** box and then select *Equals* or *Does not equal* in the **Relations** box to add the appropriate *IS NULL* or *IS NOT NULL* clause to their query.

Version 2.1

- Introduced a new licensing model that distinguishes evaluation, production, and non-production licenses. Evaluation licenses enable the integration pack to run on any Runbook Server and are valid for a specified number of days from the start of the evaluation. Production and non-production licenses enable the integration pack to run on a predefined set of Runbook Servers, the names of which must be provided to Kelverion before the license can be generated. Furthermore, each license file can now enable multiple integration packs thus eliminating the need to have separate license files for each integration pack that you have in your environment.

- **IMPORTANT:** If you are upgrading an existing deployment of this integration pack and you are currently using version 2.0 or earlier, must contact your sales contact or info@kelverion.com to obtain a new license before upgrading to this version.

Version 2.0

- Added support for System Center 2012 R2 Orchestrator.

Version 1.2

- Added new **Run Query** activity that lets you run your own SQL queries. Data returned from the query are published as comma-delimited text.
- Added optional **Command Timeout** property to all activities that lets you increase the timeout for long running database operations.
- Added an optional cascading **Database Name** property with database browser to all activities. This new property is only added when the **Database Name** property is not defined in the configuration that you select when you define the activity.

Version 1.3

- Fixed an issue with the Monitor Rows activity that could, in rare instances, result in unpublished rows. **It is important to note that the changes required to resolve this issue require the target table to have a column with the Identity property enabled. As a result, it may be necessary to update the tables targeted by the Monitor Rows activity to ensure that this requirement is met.**