



INTEGRATION PACK FOR MICROSOFT ENTRA ID

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 **Keverion_Integration_Pack_for_Microsoft_Entra_ID_3.1**

For System Center 2022 and later, you must use the 64-bit version of the integration pack, which has the name **Keverion_IP_Microsoft_Entra_ID_x64_3.1**

Release Notes

Version 3.1

December 2023

Introduction

The **Integration Pack for Microsoft Entra ID** is an add-on for System Center Orchestrator that enables you to integrate and automate user management functionality in your Microsoft Entra ID environment.

The integration pack provides the following activities:

- Add Group Member
- Add User
- Add User License
- Get Groups
- Get Group Members
- Get User
- Get User License
- Get Users
- Remove Group Member
- Remove User
- Remove User License
- Update User
- Update User Password
- Update User UPN

System Requirements

The Integration Pack for Microsoft Entra ID requires the following software to be installed and configured prior to implementing the integration. For more information about installing and configuring Orchestrator and Microsoft Entra ID, refer to the respective product documentation.

Kelverion_Integration_Pack_for_Microsoft_Entra_ID (32-bit)

- Microsoft System Center Orchestrator 2016, 2019
- Microsoft .NET Framework 4.6.2
- Microsoft Azure or Office 365 Subscription

Kelverion_Integration_Pack_for_Microsoft_Entra_ID (64-bit)

- Microsoft System Center Orchestrator 2022
- Microsoft .NET Framework 4.6.2
- Microsoft Azure or Office 365 Subscription

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_Microsoft_Entra_ID**

- For System Center 2022 and later, you must use the 64-bit version of the integration pack, which has the name **Kelverion_IP_Microsoft_Entra_ID_x64**

To register the integration pack:

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.

To deploy the integration pack:

1. In the navigation pane of the **Deployment Manager**, right-click **Integration Packs**, click **Deploy IP to Runbook Server or Runbook Designer**.
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.

Version History

Version 3.1

- Renamed from the **Kelverion Integration Pack for Microsoft Azure AD to Kelverion Integration Pack for Microsoft Entra ID**.
- Verified with current version of Microsoft Entra ID.

Version 3.0

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

Version 2.0

With the deprecation of the Microsoft Active Directory Module for Windows PowerShell (MSOnline), the Integration Pack for Microsoft Azure Active Directory ID will now be using the Microsoft Graph REST API to integrate with Azure Active Directory. While the same activities are supported in version 2.0 of the integration pack, significant changes were necessary to integration pack configuration options, as well as activity properties, published data and filters.

No PowerShell Session

Since the integration pack is now using a REST API to communicate with Azure AD, the benefits, and limitations of using a PowerShell module no longer apply. Runbooks will no longer be running in the context of a local PowerShell session, which was maintaining state and synchronizing with the remote cloud environment. Instead, integration pack activities now communicate in a stateless manner with Azure AD, with Azure operations potentially taking longer to complete, in some cases after the integration pack activity has finished execution. For example, when creating a new AD user with the Add User activity, there may be a delay until user creation is complete and the user is available to be retrieved with the Get User activity.

Configuration Options Changes

The integration pack Configuration Options have been revised. Configuration properties pertaining to PowerShell integration have been removed. After upgrading to version 2.0, make sure to open your existing Configuration Options and specify the new configuration properties. Runbook activities will continue to operate with existing configuration options after they have been modified, *provided that the configuration options name remains the same*.

Note that Tennant ID is now part of integration pack Configuration Options and it is no longer available in as an input property in individual integration pack activities.

For details, please refer to the **Configuring the Integration Pack Section** in the integration pack User Guide.

Server-Side and Client-Side Filtering

Some of the integration pack activity filtering operations are now performed server-side, through the capabilities provided by the Microsoft Graph REST API. The integration pack can also perform client-side filtering, for operations that are not supported by the API for server-side filtering. In the case of client-side filtering, larger data sets are first retrieved from Azure AD, and then filtered down by the integration pack before publishing onto the Orchestrator data bus.

It is recommended that you use server-side filtering whenever possible, to reduce the amount of data that the integration pack retrieves from Azure AD. Be sure to refer to activity inputs and filters, to determine which operations are supported for server-side filtering. If a filter operator is not specified in the list of server-side filters, then that filtering operation is performed client-side.

Activity Changes

Add Group Member

- The **Group Member Type** property has been removed.

Add User

- The **Alternate Mobile Phones** property has been removed.
- The **License Agreement** property has been removed.
- The **Mail Alias** property has been added.
- The **Tenant ID** property has been removed.

Add User License

- The **Tenant ID** property has been removed.

Get Groups

- The **Descending** property has been added.
- The **Has Errors** property has been removed.
- The **Has License Errors** property has been removed.
- The **Group Types** output has been added.
- The **Group Types** filter has been added.
- The **Is System Group** output has been removed.
- The **Is System Group** filter has been removed.
- The **Mail Enabled** output has been added.
- The **Mail Enabled** filter has been added.
- The **Order By** property has been added.
- The **Security Enabled** output has been added.
- The **Security Enabled** filter has been added.
- The **Validation Status** output has been removed.
- The **Validation Status** filter has been removed.

Get Group Members

- The **Validation Status** output has been removed.
- The **Validation Status** filter has been removed.

Get User

- The **Account Enabled** output has been added.
- The **Alternate Mobile Phones** output has been removed.
- The **Assigned Licenses** output has been added.
- The **Cloud Exchange Recipient Display** output has been removed.
- The **Email Address** output has been added.
- The **From Recycle Bin** property has been removed.
- The **Is Blackberry User** output has been removed.
- The **Last Dir Sync Time** output has been removed.
- The **License Reconciliation Needed** output has been removed.
- The **Microsoft Exchange Recipient Type** output has been removed.
- The **Overall Provisioning Status** output has been removed.
- The **Sign In Name** output has been removed.
- The **Soft Deletion Timestamp** output has been removed.
- The **STS Refresh Token Valid From** output has been removed.
- The **Tenant ID** property has been removed.
- The **Validation Status** output has been removed.

Get User License

- The **Account Name** output has been removed.
- The **Account Name** filter has been removed.
- The **Service Plans Provisioning Status** output has been removed.
- The **Tenant ID** property has been removed.

Get Users

- The **Account Enabled** output has been added.
- The **Account Enabled** filter has been added.
- The **Alternate Mobile Phones** output has been removed.
- The **Assigned Licenses** output has been added.
- The **Cloud Exchange Recipient Display** output has been removed.
- The **Cloud Exchange Recipient Display** filter has been removed.
- The **Domain Name** property has been removed.
- The **Email Address** output has been added.
- The **Email Address** filter has been added.
- The **From Recycle Bin** property has been removed.
- The **Has Errors** property has been removed.
- The **Is Blackberry User** output has been removed.
- The **Is Blackberry User** filter has been removed.
- The **Last Dir Sync Time** output has been removed.

- The **Last Dir Sync Time** filter has been removed.
- The **Last DirSync Time** filter has been removed.
- The **License Reconciliation Needed** property has been removed.
- The **License Reconciliation Needed** filter has been removed.
- The **License Reconciliation Needed** output has been removed.
- The **Microsoft Exchange Recipient Type** output has been removed.
- The **Microsoft Exchange Recipient Type** filter has been removed.
- The **Overall Provisioning Status** output has been removed.
- The **Overall Provisioning Status** filter has been removed.
- The **Sign In Name** output has been removed.
- The **Sign In Name** filter has been removed.
- The **Soft Deletion Timestamp** output has been removed.
- The **Soft Deletion Timestamp** filter has been removed.
- The **Strong Authentication Proofup Time** filter has been removed.
- The **STS Refresh Token Valid From** output has been removed.
- The **STS Refresh Token Valid From** filter has been removed.
- The **Synchronized** property has been removed.
- The **Tenant ID** property has been removed.
- The **Validation Status** output has been removed.
- The **Validation Status** filter has been removed.

Remove Group Member

- The **Group Member Type** property has been removed.

Remove User

- The **Remove Options** property has been removed.
- The **Tenant ID** property has been removed.

Remove User License

- The **Tenant ID** property has been removed.

Update User

- The **Alternate Mobile Phones** property has been removed.
- The **Tenant ID** property has been removed.

Update User Password

- The **New Generated Password** output has been removed.
- The **Tenant ID** property has been removed.

Update User UPN

- The **Tenant ID** property has been removed.

Version 1.4

- Added the following new activities:
 - Add Group Member

- Remove Group Member
 - Get Group Members
 - Get Groups
- Verified with Active Directory Module for Windows PowerShell (MSOnline) version 1.1.183.66.

Version 1.3

- Verified with Active Directory Module for Windows PowerShell (MSOnline) version 1.1.183.57.
- Removed support for TLS 1.0 and 1.1.

Version 1.2

- Added support for TLS 1.2.
- New end user license agreement.

Version 1.1

- New end user license agreement.

Version 1.0

- Initial version.