



INTEGRATION MODULE FOR ATlassian JIRA

For Keverion Runbook Studio and Azure Automation

User Guide

Version 2.5

Microsoft
Azure

Certified

Kelverion Integration Module for Atlassian Jira

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Published: November 2023

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Getting Started

The following sections outline how to deploy and configure the Keverion Integration Module for Atlassian Jira.

System Requirements

The Integration Module for Atlassian Jira requires the following software to be installed and configured prior to implementing the integration. For more information about installing and configuring Atlassian Jira, refer to the respective product documentation.

- Keverion Runbook Studio 5.6
- Microsoft .NET Framework 4.7.2

Atlassian Jira requirements:

- Atlassian Jira Cloud [November 2023]
- Atlassian Jira Software 9.4.11
- Atlassian Jira Service Management 5.4.11

Deploying the Integration Module

The easiest way to install and deploy the Integration Module for Atlassian Jira is from the PowerShell Gallery, but you can also download the module from Keverion and perform the steps manually.

You must install and deploy the Integration Module to each Azure Automation Account and Hybrid Worker host system that you plan to use to run your runbooks. You must also install the Integration Module on any Runbook Studio host systems that you will be using to build and manage your runbooks.

Using the PowerShell Gallery

Using the commands in the **PowerShellGet** module you can download the Keverion Integration Module for Atlassian Jira from the PowerShell Gallery and install it on your local computer. You can also deploy the module directly from the PowerShell Gallery to any of your Azure Automation Accounts.

Install the Integration Module on your local computer:

1. Confirm that you the PowerShellGet module installed.
2. Start a PowerShell window as Administrator and run the command:

```
Install-Module -Name Keverion.Atlassian.Jira -Scope AllUsers
```

Upload the Integration Module to an Azure Automation Account:

1. Go to the [PowerShell Gallery](#).
2. Click the **Azure Automation** tab.
3. Click **Deploy to Azure Automation**. You will be directed to Microsoft Azure.
4. Select the **Automation Account** that you want to deploy the module to.
5. Click **OK**.

Manual Installation

Alternatively, you can download the Integration Module package from Keverion and deploy it manually to your local computer, hybrid workers and Automation Accounts.

The download package from Keverion includes a **.zip** file containing the Integration Module as well as the User Guide and Release Notes. The following instructions assume that you have unzipped the download package and have access to the **.zip** file containing the Integration Module.

Install the Integration Module on your local computer:

1. Copy the **Keverion.Atllassian.Jira.zip** file to your local computer.
2. Right click on the file and select **Properties**.
3. Click the **General** tab. If necessary, click **Unblock**, and then click **OK**.
4. Unzip the **Keverion.Atllassian.Jira.zip** file.
5. Copy the **Keverion.Atllassian.Jira** folder to a location in the %PsModulePath% path.

Important: When installing the Integration Module on a Hybrid Worker, you must use a location that is accessible to all users of the computer.

Upload the Integration Module to an Azure Automation Account:

1. Sign into [Microsoft Azure](#).
2. Open the Automation Account that you want to upload the module to.
3. Click **Modules** under Shared Resources. The list of installed modules is displayed.
4. Click **Add a module** at the top of the list.
5. In the **Upload File** box, select the **Keverion.Atllassian.Jira.zip** file that you downloaded.
6. Click **OK**. Importing the module may take several minutes.

Licensing the Integration Module

Licenses for Keverion Integration Modules are managed and deployed using the *Keverion Runbook Studio* and *Automation Connection Assets*.

Register an Integration Module license with Runbook Studio:

1. Open **Keverion Runbook Studio**.
2. On the **File** tab, click **About**.
3. Click **License Information**.
4. Click the **Integration Modules** tab, and then click **Add License**.
5. Select the integration module license file (.kaml) and click **Open**.
6. You should see your entitlements displayed in the list.
7. Click **OK**.

Important: Entitlements will not display until after the Integration Module has been installed on the Runbook Studio computer.

Create a Connection Asset with a license key and upload it to Azure:

1. On the **Home** tab, click **Sign In**. The Sign In dialog appears.
2. Sign into your account.
3. In the **Active Azure Automation Account** box, select the account that you want to add the connection asset to.
4. Click **New Asset** and then click **Connection**. The New Connection dialog appears.
5. In the **Name** field, enter a name to identify the connection.
6. In the **Connection Type** field, select the desired connection type.
7. Enter the appropriate connection information in the provided fields.
8. Click **OK**.

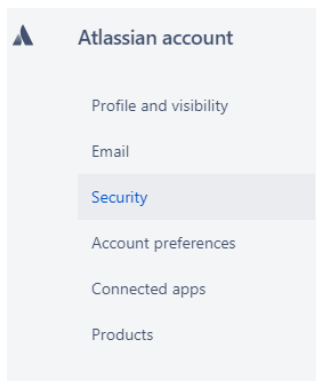
Update all Connection Assets license keys and upload them to Azure:

1. On the **Home** tab, click **Sign In**. The Sign In dialog appears.
2. Sign into your account.
3. In the Explorer panel, click the **Azure (Online)** group.
4. Right-click the Azure Automation Account that contains the connection assets you want to update, and then click **Update License Keys**. A summary is displayed.

Acquiring an API Token for Jira Cloud

A Jira Cloud API Token is required when configuring a connection for Jira Cloud.

1. Log into Jira Cloud with the user you will use for your connection.
2. Click the **user avatar** in the bottom left corner of the page.
3. Click **Account Settings**.
4. Click **Security**.



5. Under the API Token section, click **Create and Manage API tokens**.

API token

A script or other process can use an API token to perform basic authentication with Jira Cloud applications or Confluence Cloud. You must use an API token if the Atlassian account you authenticate with has had two-step verification enabled. You should treat API tokens as securely as any other password. [Learn more](#)

[Create and manage API tokens](#)

6. Click **Create API token**.

API Tokens

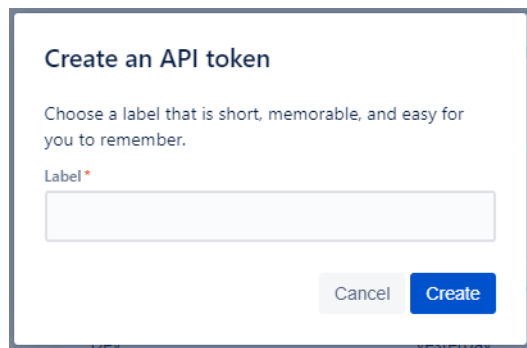
Create API token

Revoke all API tokens

You must use an API token to perform basic authentication with Jira Cloud applications on Confluence Cloud. You'll also need to use an API Token if your account has two-step verification enabled. [Learn more](#) about API tokens.

Your API tokens need to be treated as securely as any other password. You can only create a maximum of 25 tokens at a time.

7. Give your token a label and click the **Create**.



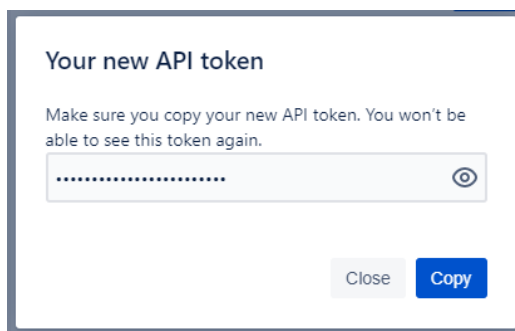
Create an API token

Choose a label that is short, memorable, and easy for you to remember.

Label *

Cancel Create

8. Click **Copy** to copy your token for use in your connection.



Your new API token

Make sure you copy your new API token. You won't be able to see this token again.

.....

👁

Close Copy

Working with Activities in Runbook Studio

The following sections outline some of the common configuration options that are available to you when working with the activities in the Keverion Integration Module for Atlassian Jira.

The integration module includes the following activities:

Add-JiraAttachment	Add an attachment to an issue
Add-JiraIssueComment	Add a comment to an issue
Add-JiraIssueWatcher	Add a user as a watcher of an issue
Add-JiraIssueWorklog	Add a worklog to an issue
Get-JiraIssue	Get issue details
Get-JiraIssueAttachment	Get the attachments that have been added to an issue
Get-JiraIssueAttachmentContent	Download the content of an attachment
Get-JiraIssueComment	Get the comments that have been added to an issue
Get-JiraIssueTransition	Get the transitions that can be performed on the issue
Get-JiraIssueWatcher	Get the watchers that have been added to an issue
Get-JiraIssueWorklog	Get the worklogs that have been added to an issue
Get-JiraUser	Get the users that have been assigned to a project
Invoke-JiraIssueTransition	Perform an issue transition
New-JiraIssue	Create a new issue or subtask
Remove-JiraIssue	Remove an issue
Remove-JiraIssueAttachment	Remove an attachment from an issue
Remove-JiraIssueComment	Remove a comment from an issue
Remove-JiraIssueWatcher	Remove a user as a watcher of an issue
Remove-JiraIssueWorklog	Remove a worklog from an issue
Set-JiraIssue	Update an issue
Set-JiraIssueComment	Update an issue comment
Set-JiraIssueWorklog	Update an issue worklog

The advanced discovery capabilities provided by the activities in this integration module are only supported when authoring runbooks in Keverion Runbook Studio.

When you publish your runbooks from Kelverion Runbook Studio to Azure Automation, the parameters and filters of Smart activities will automatically be converted into the parameters provided by the underlying command activities.

Smart Connections

In Kelverion Runbook Studio you can configure one or more Smart Connections to establish reusable links between Runbook Studio and a specific Atlassian Jira instance. You can create as many Smart Connections as you require, specifying links to multiple instances. You can also create multiple Smart Connections to the same instance to allow for differences in security privileges for different user accounts.

Add a Smart Connection in Kelverion Runbook Studio:

1. On the **Home** tab, click **Smart Connections**. The Smart Connection dialog appears.
2. Click **Add a connection** at the top of the list. The Add Smart Connection dialog appears.
3. In the **Name** box, enter a name for the configuration.
4. In the **Connection Type** box, select *Kelverion.Atlassian.Jira*.
5. In the **JiraWebServiceURL** box, type the web service URL of the Atlassian Jira instance.
6. In the **UserName** and **Password** boxes, type the credentials that activity will use to connect to the Atlassian Jira instance.
7. Click **OK**, and then click **OK** again.

Global Connection Assets

The activities in the Kelverion Integration Module for Atlassian Jira require connection information to connect to instances of Atlassian Jira.

The recommended way to pass connection information to your activities in your runbooks is to use Global Connection Assets. Global connection assets let you securely define connection information in Azure which can then be retrieved on demand using either the *Get-AutomationConnection* cmdlet or Connection Asset Data Source.

Add a global connection asset in Runbook Studio:

1. On the **Home** tab, click **Sign In**. The Sign In dialog appears.
2. Sign into your account.
3. In the **Active Azure Automation Account** box, select the account that you want to add the connection asset to.
4. Click **New Asset** and then click **Connection**. The New Connection dialog appears.
5. In the **Name** box, enter a name for the configuration.
6. In the **Connection Type** box, select *Kelverion.Atlassian.Jira*.
7. In the **JiraWebServiceURL** box, type the URL of the Atlassian Jira instance.
8. In the **UserName** and **Password** boxes, type the credentials that activity will use to connect to the Atlassian Jira instance.
9. Click **OK**.

Activity Properties

All activities in the Keverion Integration Module for Atlassian Jira have the following properties:

Property	Description
Label	A unique label that identifies the activity in the runbook. Runbook Studio will provide a default name for each activity, but you can provide your own labels to make their role in the runbook more obvious.
Description	An optional description of the activity. Providing a description is a fantastic way to let everyone understand the function of the activity in the runbook.
Checkpoint	Indicates whether a checkpoint is set in the runbook workflow after the activity runs. Checkpoints are only available for Graphical PowerShell Workflow runbooks. If the runbook uses Azure cmdlets, you should follow best practices and follow a check-pointed activity with an <u>Add-AzureRMAccount</u> in case the runbook is suspended and restarts from this checkpoint on a different worker.

Smart Discovery

When designing runbooks in Keverion Runbook Studio, you will notice that the activities in the Keverion Integration Module for Atlassian Jira include a **Discovery** panel instead of the **Parameter Sets** panel that is present for standard command activities. This is because the activities in the Keverion Integration Module for Atlassian Jira support interactive discovery of the Atlassian Jira assets in your environments.

All activities in the Keverion Integration Module for Atlassian Jira have a **Connection** option on the **Discovery** panel which lets you specify how Runbook Studio should connect to Atlassian Jira.

When connected to Atlassian Jira, Runbook Studio will provide additional discovery options, such as **Project** and **Issue Type**, which can be used to specify the resources that you want to integrate with. Once you have filled in the discovery options Runbook Studio will provide additional parameters and, in some cases, filters which can be used to configure the activity.

Smart Parameters

Unlike standard command activities, whose parameters are determined by the Parameter Set that is selected, the parameters in the Keverion Integration Module for Atlassian Jira are determined by the Discovery options that you specify.

For example, when using the **New-JiraIssue** activity, the Discovery panel will contain options for selecting a Atlassian Jira Project and Issue Type. Once you have selected a form, Runbook Studio will provide you with parameters that coincide with the fields in the issue type. If you select another issue type, Runbook Studio will provide you with a separate set of parameters automatically.

You must configure all mandatory parameters. To view the optional parameters that are associated with an activity, click **Optional** at the top of the Parameters tab.

In addition, all activities in the Keverion Integration Module for Atlassian Jira include a **Connection** parameter which is used to specify information that the activity will use to connect to Atlassian Jira

when it is executed as part of a runbook running on a Hybrid Worker. Typically, you will assign a Connection Asset data source to this parameter so that the activity can securely use connection information stored in Azure.

The Connection parameter should not be confused with the similarly named Connection option on the Discovery panel which is used to specify how Runbook Studio connects to Atlassian Jira to provide design-time configuration options.

Several factors determine the data sources that are available when configuring a parameter. They include: the parameter's data type, whether it is linked to another activity and whether the runbook has any input parameters.

Runbook studio supports the following data sources.

Activity output	<p>Specify activity whose output will be assigned to the parameter. You may also provide an optional Path to select a specific property of the output objects that are generated by the activity.</p> <p>Available when the activity is linked to a source activity.</p>
Not configured	<p>Clears any value that was previously configured. You must configure all mandatory parameters.</p>
Certificate asset	<p>Specify the name of the global certificate asset that will be used to provide a value for the parameter.</p> <p>If you have connected to Azure and selected a Subscription and Automation Account on the toolbar, the data source will provide the names of the certificates that are available.</p>
Credential asset	<p>Specify the name of the global credential asset that will be used to provide a value for the parameter.</p> <p>If you have connected to Azure and selected a Subscription and Automation Account on the toolbar, the data source will provide the names of the credentials that are available.</p>
Constant	<p>Specify a constant value to assign to the parameter.</p> <p>Available for parameters that have the following data types:</p> <ul style="list-style-type: none">• String• DateTime• Timespan• Decimal• Double <p>When assigning a constant DateTime and Time values, Runbook Studio assumes the value is in UTC.</p>
Connection asset	<p>Specify the name of the global connection asset that will be used to provide a value for the parameter.</p> <p>If you have connected to Azure and selected a Subscription and Automation Account on the toolbar, the data source will provide the names of the connections that are available.</p>
Empty string	<p>An empty string will be assigned to the parameter. Available when the parameter is type <i>System.String</i></p>

Null	A null (\$null) value will be assigned to the parameter. Available when the parameter type is a reference type.
PowerShell expression	Specify a <i>simple</i> PowerShell expression whose output will be assigned to the parameter. You can use variables in the expression to access the output of an activity or a runbook parameter.
Runbook input	Specify the name of the runbook input parameter whose value will be assigned to the parameter. Available when the runbook has one or more input parameters.
Variable asset	Specify the name of the global variable asset that will be used to provide a value for the parameter. If you have connected to Azure and selected a Subscription and Automation Account on the toolbar, the data source will provide the names of the variables that are available.

Smart Filters

Some of the activities in the Kelverion Integration Module for Atlassian Jira include a **Filters** panel which lets you specify filters that can be used to retrieve specific issues in Atlassian Jira.

To add a filter to your activity, select the **Filters** panel and click **Add**. Filters have the following properties.

Filter	The name of the filter.
Operation	The operation used to evaluate the filter. Different operators will be provided based on the filter that is selected. Filter operators include: <ul style="list-style-type: none"> • Equals • Does not equal • Is less than • Is less than or equal to • Is greater than • Is greater than or equal to • Contains • Does not contain • Matches • Does not match • Starts with • Ends with
Value	The data source used to retrieve the value to use to evaluate the filter. The value used to evaluate the filter will be obtained. For more information on data sources, please refer to the Parameters section for more information on configuring data sources.

Retry Behavior

The activities in the Kelverion Integration Module for Atlassian Jira can be configured to run multiple times until a condition, which you specify, is satisfied. You can use the retry behavior options to configure activities that should run multiple times, that are error prone or may need more than one attempt for success.

When you enable retry for an activity, you can configure the runbook to wait a specified number of minutes or seconds before running the activity again. If no delay is specified the runbook will run the activity again, immediately after it completes.

The screenshot shows a 'Retry Behavior' configuration panel. It has three main sections: 'Enable retry' with a dropdown set to 'True', 'Delay before each retry attempt' with a text box containing '10' and a dropdown set to 'Seconds', and 'Retry until this condition is true' with a text box containing the PowerShell expression '\$RetryData.NumberOfAttempts -ge 10'.

The retry condition lets you specify a PowerShell expression that the runbook will evaluate after each time the activity runs. If the result of the expression is true the activity does not run again, and the runbook moves on to the next child activity in the runbook.

When defining the retry conditions for your activity you can take advantage of a global variable called **\$RetryData**. Specific information about the last time the activity ran can be accessed using the following properties.

Property	Description
NumberOfAttempts	Number of times that the activity has ran
Output	Output that was generated by the activity the last time that it ran
TotalDuration	Time elapsed since the activity was started
StartedAt	Time in UTC when the activity was first started

The following are some examples of activity retry conditions

```
# Run the activity exactly five times
$RetryData.NumberOfAttempts -eq 5

# Run the activity until it produces some output
$RetryData.Output.Count -ge 1

# Run the activity until at least 2 minutes has elapsed
$RetryData.TotalDuration.TotalMinutes -ge 2
```

Additional Parameters

The activities in the Kelverion Integration Module for Atlassian Jira let you specify additional PowerShell parameters that you can use to control the behavior of the activity.

For example, to output detailed information about the operation performed by an activity you would specify **-Verbose:\$True**

Complex Jira Field Types

Some fields in Jira are complex and require multiple pieces of data. This list describes those fields and the required data.

Jira Type	Powershell Type	Properties
timetracking	PSObject	OriginalEstimate – TimeSpan RemainingEstimate – TimeSpan

		Example: <pre>[PSCustomObject] @{ OriginalEstimate = New-TimeSpan -Days 2 RemainingEstimate = New-TimeSpan -Days 1 }</pre>
--	--	--

Add-JiraIssueAttachment

The **Add-JiraIssueAttachment** activity adds an attachment to an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue that the attachment will be added to
File Name	The attachment's file name
Content	The content of the attachment

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the ID of the attachment that was added to the issue.

Add-JiraIssueComment

The **Add-JiraIssueComment** activity adds a comment to an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Project	The name of the project

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira.
Comment	The comment text
Issue Key	The key or ID of the issue to add the comment to

Optional Parameters

This activity provides the following optional parameters.

Visibility	The group or role to which the comment is visible. By default, the comment will be visible to all users
-------------------	---

Output

This activity returns the ID of the comment that was added.

Remarks

When using the **Visibility** parameter, the user that initially created the issue must be a member of the group or role that is being specified.

Add-JiraIssueWatcher

The **Add-JiraIssueWatcher** activity adds a Jira user as a watcher of an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to add the watcher to
Watcher	The account ID or username of the user to add as a watcher

Optional Parameters

This activity does not have any optional parameters.

Output

Depending on the Jira instance, this activity returns either the account ID or username of the user that was added as a watcher.

Remarks

When assigning a value to the **Watcher** parameter, whether you use *account ID* or *username* is dependent on the version of Jira to which you are connecting.

Add-JiraIssueWorklog

The **Add-JiraIssueWorklog** activity adds a worklog entry to an issue.

Discovery Options

This activity provides the following smart discovery options:

Adjust Estimate	Indicates how the time spent on the worklog will adjust the issue's estimated time remaining.
Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Project	The name of the project

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to add the worklog to
Time Spent	The time spent working
Started	The date and time that the work was started
New Estimate	The issue's estimated time remaining (when using <i>New</i>)
Reduce Estimate By	The amount by which to reduce the issue's estimated time remaining (when using <i>Manual</i>)

Optional Parameters

This activity provides the following optional parameters.

Work Description	The description of the work.
Visibility	The group or role that the worklog is visible to

Output

This activity returns the ID of the worklog entry that was added to the issue.

Remarks

This activity will fail if time tracking is not enabled in the Jira instance to which you are connecting.

When configuring the activity, you must specify how the issue's estimated time remaining will be adjusted. The following options are available:

- **Automatic:** reduce the estimate by the time spent in the worklog.
- **Leave:** leave the estimate unchanged.
- **New:** assign a new value to the estimate

- **Manual:** reduce the estimate by a specified amount.

When configuring the **Visibility** parameter, the user that initially created the issue must be a member of the group or role that is being specified.

When configuring the **Time Spent**, **New Estimate**, and **Reduce Estimate By** parameters in Runbook Studio, you can provide a *System.TimeSpan* value by selecting the *PowerShell Expression datasource* and using the **New-TimeSpan** cmdlet.

Get-JiraIssue

The **Get-JiraIssue** activity retrieves issue details.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Search By	Indicates the search strategy. Options are <i>Filters</i> , <i>Query</i> , and <i>Issue Key</i> .

Required Parameters

This activity requires the following parameters:

Connection	Hashtable containing information used to connect to Jira
Issue Key	The keys or IDs of the issues to retrieve (when searching by <i>Issue Key</i>).
Query	The JQL query that determines the issues to retrieve (when searching by <i>Query</i>).

Optional Parameters

This activity provides the following optional properties:

Ascending	Indicates that the issues should be returned in ascending order relative to the date and time that the issue was created. The default is descending order
Limit	The maximum number of issues to retrieve
Offset	The number of issues to skip over

Filters

When searching by *Filters*, this activity will provide filter options based on the fields that have been configured in the Jira instance Runbook Studio is connected to.

Output

This activity returns objects that represent the issues that were retrieved. The object properties are determined by the fields that have been configured in the Jira instance that Runbook Studio is connected to.

Remarks

When configuring the activity, you have the following search options:

- **Filters:** search using one or more Runbook Studio filters
- **Query:** search using a Jira Query Language (JQL) expression.
- **Issue Key:** retrieve issue(s) by their key or ID.

When searching by *Filters* and *Query* expression you are responsible for escaping all JQL reserved characters and words. For more information on advanced searching using JQL, refer to the documentation for your Jira instance.

Get-JiraIssueAttachment

The **Get-JiraIssueAttachment** activity gets the attachments that have been added to an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to retrieve attachments from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns objects that represent issue attachments. Each attachment object has the following properties.

AttachmentId	The attachment ID
Author	An object representing the author of the attachment
Created	The date and time that the attachment was added
FileName	The name of the attachment
Filesize	The size of the attachment content, in bytes
IssueKey	The issue key
MimeType	The MIME type of the attachment

Remarks

This activity does not return the attachment content. To download the content of an attachment you must use the **Get-JiraIssueAttachmentContent** activity.

Get-JiraIssueAttachmentContent

The **Get-JiraIssueAttachmentContent** activity downloads the content of an issue attachment.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Attachment ID	The ID of the attachment to download

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the content of the attachment as a byte array.

Get-JiraIssueComment

The **Get-JiraIssueComment** activity gets the comments that have been added to an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to retrieve comments from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns objects that represent issue comments. Each comment object has the following properties.

Author	An object representing the author of the comment
Comment	The comment text
CommentId	The comment ID
Created	The date and time that the comment was added
IssueId	The issue ID
IssueKey	The issue key
UpdateAuthor	An object representing the author that updated the comment
Updated	The date and time that the comment was last updated
Visibility	The role or group that the comment is visible to

Get-JiraIssueTransition

The **Get-JiraIssueTransition** activity gets the transitions that can be performed on an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key of ID of the issue to retrieve transitions from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns objects that represent issue transitions. Each transition object has the following properties.

IssueKey	The issue key
TransitionId	The transition ID
TransitionKey	The transition key

Get-JiraIssueWatcher

The **Get-JiraIssueWatcher** activity gets details of the watchers that have been added to an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
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Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to retrieve watchers from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns objects that represent issue comments. Each watcher object has the following properties.

AccountId	The user's account ID (empty if not supported)
DisplayName	The user's display name
IsActive	Indicates whether the user is active
IssueKey	The key or ID of the issue that the watcher was added to
Name	The user's username (empty if not supported)
WatcherKey	The watcher key

Get-JiraIssueWorklog

The **Get-JiraIssueWorklog** activity retrieves details of the worklogs that have been added to an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
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Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to retrieve worklogs from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns objects that represent issue worklogs. Each worklog object has the following properties.

Author	The author of the worklog
Comment	The work description
Created	The date and time that the worklog was added to the issue
IssueKey	The key or ID of the issue that the worklog was added to
Started	The date and time that work started
TimeSpent	The time that was spent working
UpdateAuthor	The author that most recently updated the worklog
Updated	The date and time that the worklog was most recently updated
Visibility	The group or role that the worklog is visible to
WorklogId	The worklog ID

Remarks

This activity will fail if time tracking is not enabled in the Jira instance you are connecting to.

Get-JiraUser

The **Get-JiraUser** activity retrieves details of the users that have been assigned to a project.

Note: The Jira API has lowered the maximum users returned from 1,000 to 100.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
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Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Project	The name of the project to retrieve user details from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns objects that represent Jira users. Each user object has the following properties.

AccountId	The user's account ID (empty if not supported)
DisplayName	The user's display name
EmailAddress	The user's email address (empty if not supported)
IsActive	Indicates whether the user is active
Locale	The user's language locale
Name	The user's username (empty if not supported)
TimeZone	The user's time zone

Invoke-JiraIssueTransition

The **Invoke-JiraIssueTransition** performs an issue transition.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Transition By	Indicates whether to use <i>Name</i> or <i>ID</i> to identify the transition to perform

Required Parameters

This activity requires the following parameters. Additional required parameters may be provided depending on the fields that have been configured in the Jira environment that Runbook Studio is connected to.

Connection	Hashtable containing information used to connect to Jira
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Optional Parameters

This activity may provide additional optional parameters depending on the fields that have been configured in the Jira environment that Runbook Studio is connected to.

Output

This activity returns the name or ID of the transition that was performed.

New-JiraIssue

The **New-JiraIssue** activity adds a new issue to a project.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Project	The name of the project that the issue is being added to
Issue Type	The type of issue to be added

Required Parameters

This activity requires the following parameters. Additional required parameters may be provided depending on the type of issue that is being added.

Connection	Hashtable containing information used to connect to Jira
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Optional Parameters

This activity may provide additional optional parameters depending on the type issue that is being added.

Output

This activity outputs the unique key of the issue that was added.

Remove-JiraIssue

The **Remove-JiraIssue** activity removes one or more issues.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
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Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The keys or IDs of the issues to remove

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the keys or IDs of the issues that were removed.

Remove-JiraIssueAttachment

The **Remove-JiraIssueAttachment** activity removes one or more attachments from an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Attachment ID	The IDs of the attachments to remove

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the IDs of the attachments that were removed.

Remove-JiraIssueComment

The **Remove-JiraIssueComment** activity removes one or more comments from an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
-------------------	---

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Comment ID	The IDs of the comments to remove
Issue Key	The key or ID of the issue to remove the comments from

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the IDs of the comments that were removed.

Remove-JiraIssueWatcher

The **Remove-JiraIssueWatcher** activity removes one or more watchers from an issue.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Project	The name of the project

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to remove the watchers from
Watcher	The account IDs or usernames of the users to remove as watchers

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the account IDs or usernames of the users that removed as watchers.

Remarks

Whether you use *account ID* or *username* to identify the watchers to remove is dependent on the Jira instance to which you are connecting.

Remove-JiraIssueWorklog

The **Remove-JiraIssueWorklog** activity removes one or more worklogs from an issue.

Discovery Options

This activity provides the following smart discovery options:

Adjust Estimate	Indicates how the time spent on the worklog will adjust the issue's estimated time remaining. Options include <i>Automatic</i> , <i>Leave</i> , <i>New</i> and <i>Manual</i> .
Connection	The name of the Smart Connection used to connect Runbook Studio to Jira

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue to remove the worklogs from
Worklog ID	The IDs of the worklogs to remove
Started	The date and time that the worklog was started
New Estimate	The issue's new estimated time remaining (when using <i>New</i>)
Increase Estimate By	The amount by which to increase the issue's estimated time remaining (when using <i>Manual</i>)

Optional Parameters

This activity does not have any optional parameters.

Output

This activity returns the IDs of the worklogs that were removed from the issue.

Remarks

This activity will fail if time tracking is not enabled in the Jira instance you are connecting to.

When configuring the activity, you must specify how the issue's estimated time remaining will be adjusted. The following options are available:

- **Automatic:** reduce the estimate by the time spent in the worklog.
- **Leave:** leave the estimated unchanged.
- **New:** assign a new value to the estimate
- **Manual:** increase the estimate by a specified amount.

When configuring the **New Estimate** and **Increase Estimate By** parameters in Runbook Studio, you can provide a *System.TimeSpan* value by selecting the *PowerShell Expression datasource* and using the **New-TimeSpan** cmdlet.

Set-JiraIssue

The **Set-JiraIssue** activity updates one or more issues.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
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Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The keys or IDs of the issues to update

Optional Parameters

This activity provides optional parameters depending on the fields that have been configured in the Jira instance that Runbook Studio is connected to.

Output

This activity outputs the keys or IDs of the issues that were updated.

Set-JiraIssueComment

The **Set-JiraIssueComment** activity updates an issue comment.

Discovery Options

This activity provides the following smart discovery options:

Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Project	The name of the project

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira.
Comment	The comment text
Issue Key	The key or ID of the issue that the comment is for
Comment Id	The ID of the comment to be updated

Optional Parameters

This activity has the following optional parameters.

Visibility	The group or role to which the comment is visible. By default, the comment will be visible to all users
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Output

This activity returns the ID of the comment that was updated.

Remarks

When using the **Visibility** parameter, the user that initially created the issue must be a member of the group or role that is being specified.

Set-JiraIssueWorklog

The **Set-JiraIssueWorklog** activity updates an issue worklog.

Discovery Options

This activity provides the following smart discovery options:

Adjust Estimate	Indicates how the time spent on the worklog will adjust the issue's estimated time remaining. . Options include <i>Automatic</i> , <i>Leave</i> , <i>New</i> and <i>Manual</i> .
Connection	The name of the Smart Connection used to connect Runbook Studio to Jira
Project	The name of the project that contains the issue

Required Parameters

This activity requires the following parameters.

Connection	Hashtable containing information used to connect to Jira
Issue Key	The key or ID of the issue that the worklogs are for
New Estimate	The issue's new estimated time remaining (when using <i>New</i>)
Time Spent	The time spent working
Worklog ID	The ID of the worklog to update

Optional Parameters

This activity has the following optional parameters.

Started	The date and time that the work was started
Visibility	The group or role that the worklog is visible to
Work Description	The description of the work.

Output

This activity returns the ID of the worklog that was updated.

Remarks

This activity will fail if time tracking is not enabled in the Jira instance you are connecting to.

When configuring the activity, you must specify how the issue's estimated time remaining will be adjusted. The following options are available:

- **Automatic:** update the estimate by the difference between the original and updated time spent in the worklog
- **Leave:** leave the estimated unchanged.
- **New:** assign a new value to the issue's estimated time remaining.

When configuring the **Time Spent** and **New Estimate** parameters in Runbook Studio, you can provide a *System.TimeSpan* value by selecting the *PowerShell Expression datasource* and using the **New-TimeSpan** cmdlet.