



QAComplete Integration for JIRA Plugin

Installation and Configuration Instructions

QAComplete Release 11.4

This guide walks you through installing, configuring and using the QAComplete Integration for JIRA Plugin for synchronizing JIRA issues with QAComplete defects and requirements

QAComplete Release 11.4

June 2017

Integration With JIRA	3
About QAComplete Integration for JIRA Plugin	3
Enabling Synchronization	3
How Synchronization Works	3
Known Limitations	4
Alternatives	4
Requirements	4
Installing QAComplete Integration for JIRA Plugin	6
On JIRA Server	6
On JIRA Cloud	7
Connecting to JIRA from QAComplete	7
Connecting to JIRA Server	8
Connecting to JIRA Cloud	8
Getting Started With Synchronization	9
1. Prepare JIRA and QAComplete for Synchronization	9
2. Configure Basic Field Mapping	9
Selecting Projects and Issues to Synchronize	10
Configuring Basic Field Mapping	11
Saving Mapping Data	12
3. Verify Synchronization	13
Where to Go Next	13
Advanced Synchronization	13
Mapping Lookup and User Fields	13
Synchronizing Attachments	14
Configuring User Mapping	15
Saving Updated Mapping	17
Disconnecting from JIRA	17

Integration With JIRA

JIRA is an issue-tracking system by Atlassian. You can use JIRA to manage your projects and track bugs, issues, use cases and requirements.

You can connect QAComplete to JIRA and synchronize JIRA issues with defects and requirements in QAComplete to:

- Integrate issues you create in JIRA into your application/testing lifecycle in QAComplete.
- Track and report on JIRA issues in QAComplete.
- Track QAComplete entities in JIRA.

About QAComplete Integration for JIRA Plugin

To integrate QAComplete with JIRA, you use the **QAComplete Integration for JIRA** plugin. The plugin enables synchronization between JIRA issues and QAComplete defects and requirements.

Enabling Synchronization

To synchronize items:

- In JIRA, install the QAComplete Integration for JIRA plugin.
- In QAComplete, enable synchronization and set up synchronization rules.

How Synchronization Works

While the synchronization is enabled, when you update an item in one system, the corresponding item will be updated in another system automatically.

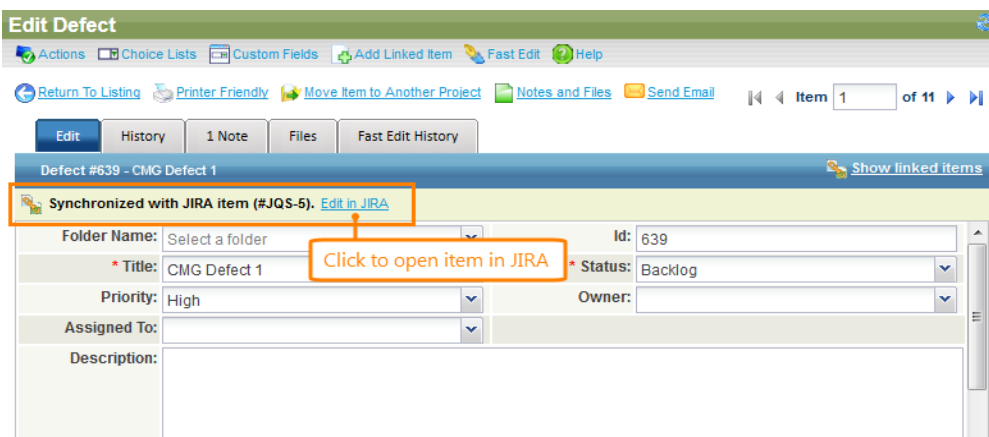
The synchronization is real-time. Changes you made to an item in one system are copied to another system immediately.

When you add a comment (note) to an item, the comment (note) will be copied to the corresponding item in another system. The information on the comment's (note's) author will be copied as well.

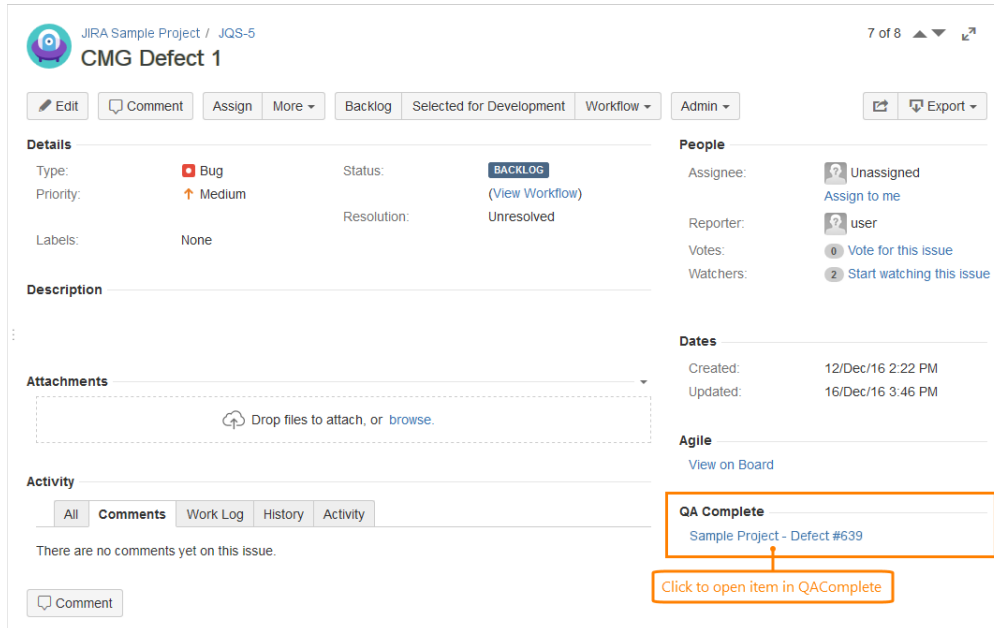
When you attach a file to an item in one system, the attachment will be automatically copied to the corresponding item in another system. When you update the attachment in one system, the corresponding attachment will be updated in another system (if the attachment names coincide).

The cross-referencing links between items are not synchronized. For example, if a JIRA issue has links to other JIRA issues, those links will not be copied to the appropriate QAComplete item.

In QAComplete, synchronized items are marked with the *Synchronized with* note and with a link to the corresponding JIRA issue:



In JIRA, synchronized issues have a link to the corresponding QAComplete defect or requirement:



JIRA Sample Project / JQS-5

7 of 8

CMG Defect 1

Edit Comment Assign More Backlog Selected for Development Workflow Admin Export

Details

Type: Bug Status: BACKLOG (View Workflow)

Priority: Medium Resolution: Unresolved

Labels: None

Description

Attachments

Drop files to attach, or browse.

Activity

All Comments Work Log History Activity

There are no comments yet on this issue.

Comment

People

Assignee: Unassigned Assign to me

Reporter: user

Votes: 0 Vote for this issue

Watchers: 2 Start watching this issue

Dates

Created: 12/Dec/16 2:22 PM

Updated: 16/Dec/16 3:46 PM

Agile

View on Board

QA Complete

Sample Project - Defect #639

Click to open item in QAComplete

Click the link to open the corresponding item.

Note: If you change the type of a JIRA item (for example, move it from Bug to Story), QAComplete items synchronized with it will not change their type.

Known Limitations

- Currently, JIRA items of the *Sub Task* type cannot be synchronized with QAComplete items.
- One-to-many synchronization limitation:** If you have a QAComplete item (for example, a Requirement) synchronized with several JIRA items (for example, Task, Story and Epic), you can face the following scenario:
 - When you create a new item (for example, a Task) in JIRA, the appropriate item (Requirement) will be created in QAComplete.
 - Based on the created QAComplete item, items of the appropriate types (Story and Epic) will be created in JIRA.
 - The QAComplete item will contain links to all JIRA items with which it is synchronized.

Alternatives

The plugin supports QAComplete version 11.3 and later.

If you have an earlier version of QAComplete, you will have to use the QAComplete - JIRA Connector standalone service to synchronize items. To learn more about the service, see [About QAComplete - JIRA Connector Service](#).

To learn more about requirements that must be met to use the plugin, see [Requirements](#).

Requirements


To use the QAComplete Integration for JIRA plugin to synchronize JIRA issues with QAComplete defects and requirements, the following requirements must be met:

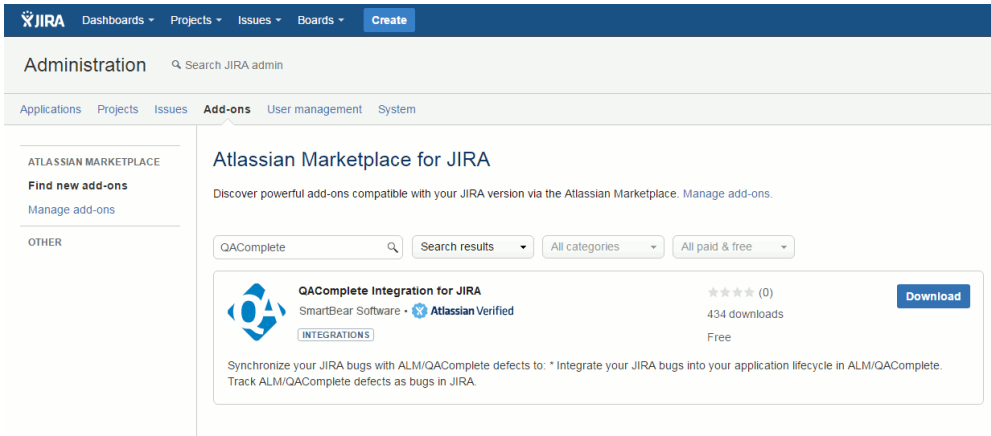
- The QAComplete version you use must be 11.3 or later.
- You must use Atlassian JIRA Server 7.0.0 - 7.3.1.

- If you use JIRA Cloud, you can only synchronize your projects with QAComplete SaaS.
If you use JIRA Server (Self-hosted), you can synchronize your projects with both QAComplete SaaS and QAComplete On-Premises.
- The JIRA account you use for configuring synchronization must have Administrator privileges.
- The QAComplete account you use for configuring synchronization must be a security administrator and have access to needed QAComplete projects.
- Your QAComplete server must have access to the Atlassian JIRA server you use.
For SaaS users: your JIRA server must be accessible from the Internet.
For On-Premises users: your JIRA server must be accessible from the network where your QAComplete server is installed.

Installing QAComplete Integration for JIRA Plugin

On JIRA Server

1. Log in to JIRA using your Administrator account.
2. Click  to open the JIRA administration console.
3. From the administration console, connect to the Atlassian Marketplace and locate the **QAComplete Integration for JIRA** plugin:

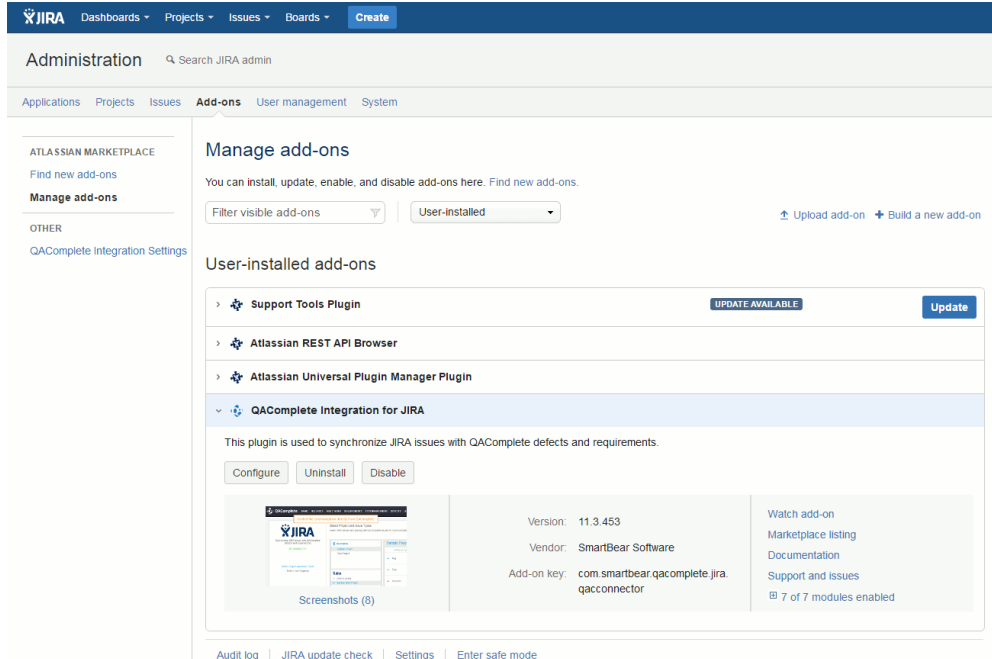


The screenshot shows the JIRA Administration console with the 'Add-ons' tab selected. The 'Atlassian Marketplace for JIRA' section is active, displaying search results for 'QAComplete'. The results show the 'QAComplete Integration for JIRA' plugin by SmartBear Software, which is Atlassian Verified, has 434 downloads, and is free. A 'Download' button is visible next to the plugin listing.

4. Install the plugin.


After the plugin is installed, restart JIRA.

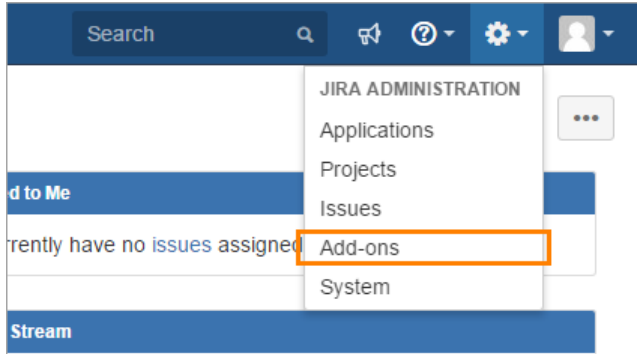
You can find the plugin on the **Manage add-ons** page of the JIRA administration console:



The screenshot shows the JIRA Administration console with the 'Manage add-ons' page. The 'QAComplete Integration for JIRA' plugin is listed under 'User-installed add-ons'. The plugin details show it is version 11.3.453, provided by SmartBear Software, and has an 'Update Available' button. The description states: "This plugin is used to synchronize JIRA issues with QAComplete defects and requirements."

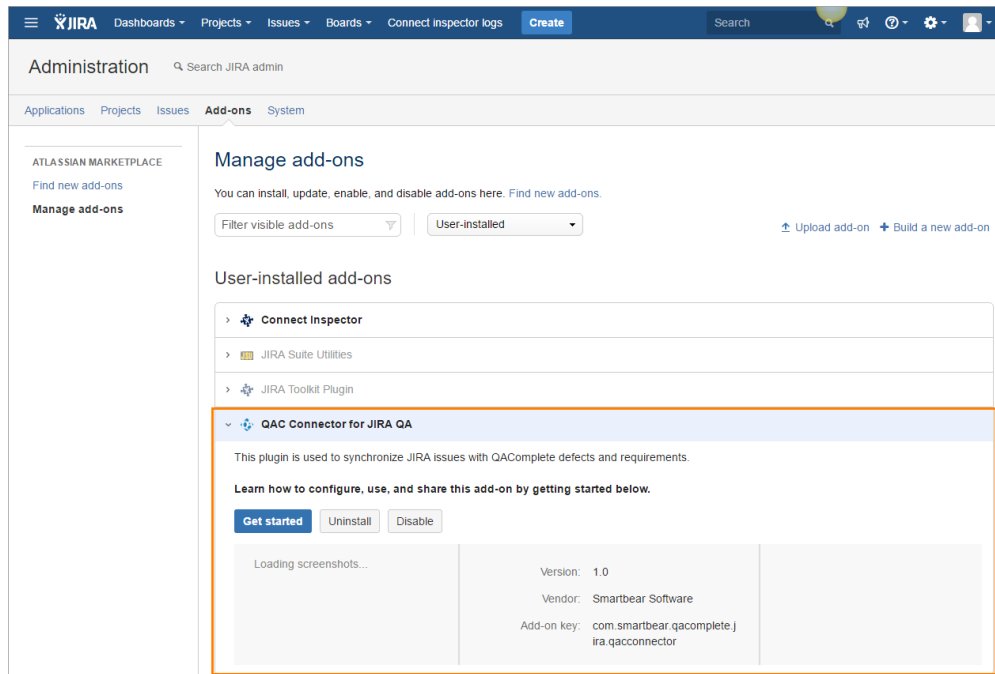
On JIRA Cloud

1. Log in to your JIRA Cloud instance.
Note: The account you use must have the administrator permissions.
2. Select  > **Addons**.




3. On the **Find new add-ons** page, find the QAComplete for JIRA Test Management add-on.
4. Install the add-on.

Once installed, the add-on will appear on the **Manage add-ons** page of the JIRA administration console:



Connecting to JIRA from QAComplete

To synchronize JIRA issues with QAComplete defects and requirements, connect to JIRA from QAComplete:

1. In QAComplete, select  > **Integrations**.
2. On the **Integrations** page, select JIRA integration.

Connecting to JIRA Server

To connect QAComplete to the JIRA server, switch to the **Server** tab.



The screenshot shows the QAComplete interface for connecting to a JIRA Server. The top navigation bar includes 'HOME', 'RELEASES', 'AGILE TASKS', and 'REQUIREMENTS'. The main content area features the JIRA logo and a 'SERVER' tab. Below the logo, it says 'Synchronize JIRA issues with QAComplete defects and requirements'. The status is 'NOT CONNECTED'. There are three callout boxes with instructions: 1. Enter the URL address of your JIRA server. 2. Enter the credentials you use to connect to JIRA. 3. Click to connect to JIRA.

1. In the **JIRA Server instance URL** field, specify the URL address of your server.
2. In the **JIRA Login and Password** fields, specify the user name and password for the JIRA account you will use to configure the synchronization.

Note: The account must have access to JIRA projects containing the issues you will synchronize with QAComplete items.

3. Click **Connect**.

QAComplete will connect to JIRA using the data you have provided.

Connecting to JIRA Cloud

To connect QAComplete to the JIRA Cloud instance, switch to the **Cloud** tab.



1. In the **JIRA Cloud Server instance URL** field, specify the URL address of your cloud server.
2. In the **JIRA Cloud Secret** field, enter your secret key.
Note: To learn how to get the secret key, see [Getting the Secret Key](#).
3. Click **Connect**.

QAComplete will connect to JIRA using the data you have provided.

Getting Started With Synchronization

We recommend that you first start with basic synchronization, that is, synchronize **only** the basic required fields of a single JIRA and QAComplete project before you move to more [advanced synchronization](#). This way, you will be able to detect synchronization problems related to your environment (network or firewall settings, your QAComplete and JIRA configuration) easier.

1. Prepare JIRA and QAComplete for Synchronization

1. Make sure that your JIRA and QAComplete meet all needed requirements. See "Requirements" on page 4.
2. In JIRA, install the QAComplete Integration for JIRA plugin. See "Installing QAComplete Integration for JIRA Plugin" on page 6.
3. In QAComplete, connect to your JIRA Server or JIRA Cloud. See "Connecting to JIRA from QAComplete" on page 7.

2. Configure Basic Field Mapping

We recommend that you get started with synchronization by configuring mapping rules only for required fields.

Selecting Projects and Issues to Synchronize

On the **Select Projects and Issue Types** page, you select QAComplete and JIRA projects that you want to synchronize and configure synchronization between their items.

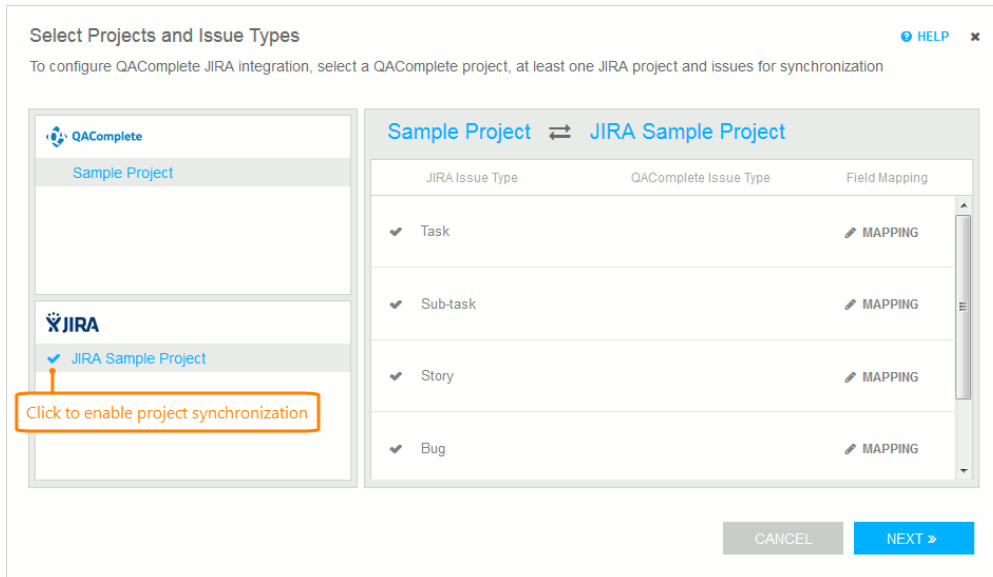
Each QAComplete project can be synchronized with one or several JIRA projects. Each JIRA project can be synchronized with a single QAComplete project.

We recommend that you start with synchronizing a single JIRA project with a single QAComplete project.

Select Projects

1. Select the QAComplete project that you want to synchronize.
2. Select the JIRA project you want to synchronize with the selected QAComplete project.

To enable synchronization, click the check box next to the needed JIRA project:



Select Projects and Issue Types HELP x

To configure QAComplete JIRA integration, select a QAComplete project, at least one JIRA project and issues for synchronization

QAComplete

- Sample Project

Sample Project ↔ JIRA Sample Project

JIRA Issue Type	QAComplete Issue Type	Field Mapping
<input checked="" type="checkbox"/> Task		MAPPING
<input checked="" type="checkbox"/> Sub-task		MAPPING
<input checked="" type="checkbox"/> Story		MAPPING
<input checked="" type="checkbox"/> Bug		MAPPING

JIRA

- JIRA Sample Project

Click to enable project synchronization

CANCEL NEXT >

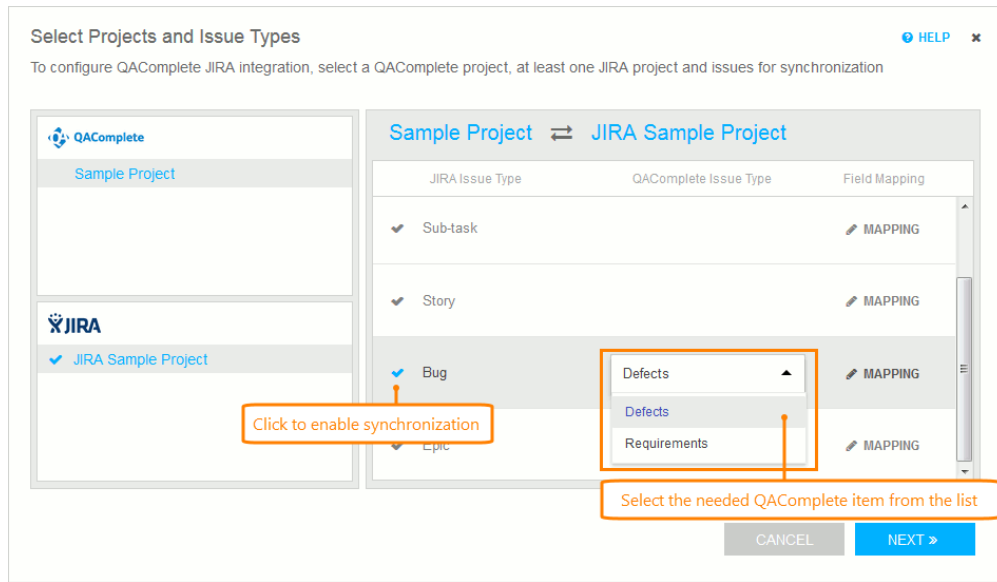
The page will show the list of issues in the selected JIRA project.

Select Issues

1. In the **JIRA Issue Type** column, select the JIRA issue which you want to synchronize with the QAComplete item and enable the check box next to the issue.

Important: Despite the fact that JIRA items of the *Sub-Task* type are available for selection, currently, they cannot be synchronized with QAComplete items.
2. In the **QAComplete Issue Type** drop-down list, select the needed QAComplete item - defect or

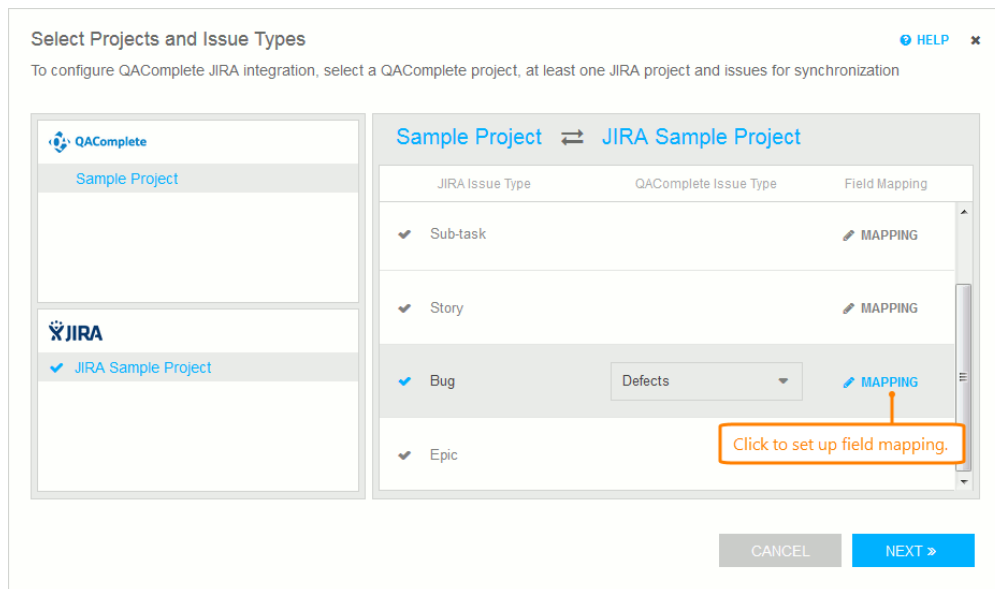
requirement:



Configuring Basic Field Mapping

On the **QAComplete - JIRA Field Mapping** page, you set up mapping rules for the selected pair of items. These rules define how the fields are copied from one system to another.

To open the page, for the specified "JIRA issue - QAComplete item" pair, click **Mapping**:

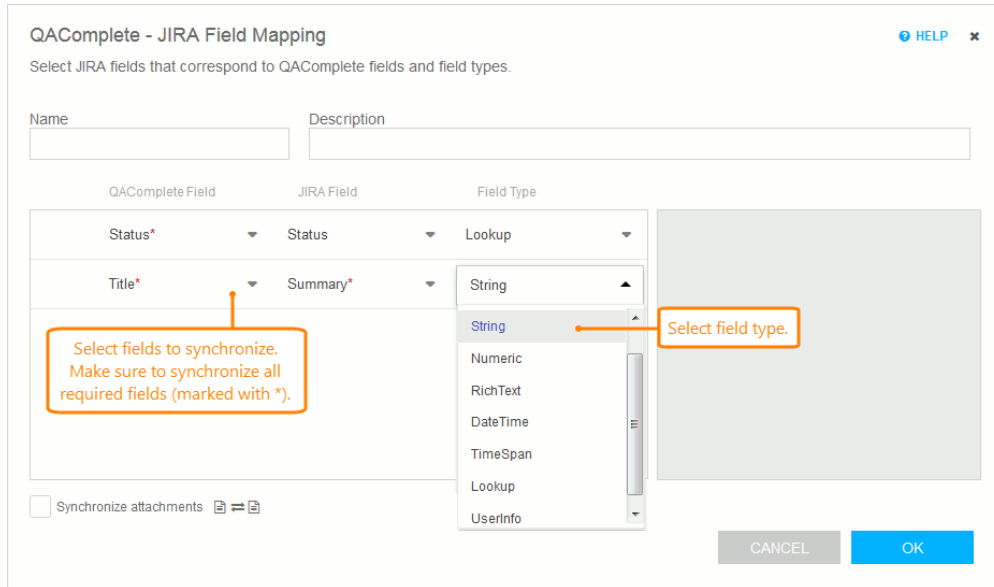


You can synchronize both built-in and custom fields.

Mapping Required Fields

For most required fields, the mapping rules are generated automatically. We recommend that you first start with synchronizing **required fields only**. After you make sure that synchronization works correctly, you can synchronize other fields.

Make sure that mapping rules for all required fields (marked with the asterisk (*)) in both systems are set up. Configure the rules, if needed:



1. In the **QAComplete Field** drop-down list, select the needed QAComplete item field.
2. In the **JIRA Field** drop-down list, select the JIRA issue field, with which you want to synchronize the selected QAComplete item field.
3. In **Field Type**, select the type of the data the fields store.

Important: Make sure that the types of the fields you synchronize are compatible, that is, can be explicitly converted to each other.

Advanced Field Mapping

After you map basic required fields and make sure that your field mapping works correctly, you can advance your field mapping:

To learn how ...	See ...
Map fields that take predefined values	"Mapping Lookup and User Fields" on the next page
Map user accounts	"Configuring User Mapping" on page 15
Synchronize files attached to items	"Synchronizing Attachments" on page 14

Saving Mapping Data

Click **OK** to save the specified field mapping rules.

If you have configured the mapping rules for projects that were not synchronized before, QAComplete will ask you to specify whether you want to synchronize all the existing issues in the projects:

Synchronize existing issues ✕

You have configured field mapping for the specified issues for the first time. Do you want to synchronize all the existing issues now?

Yes, synchronize all the existing issues (it may take time if the projects are large)

No, do not synchronize the existing issues (only new issues will be synchronized)

- Click **Yes** to synchronize all the existing issues. QAComplete will start the synchronization. This can take some time, especially, if your projects have many issues. However, you do not need to stay on the Field Mapping page, or even connected to QAComplete, and keep the browser open. You can return to the Selected Projects and Issue Types page to specify mapping rules for other projects, or you can log off from QAComplete and close your web browser. The synchronization will continue in the background.
- Click **No** to keep the existing issues not synchronized. Only issues that you will create after enabling the synchronization will be synchronized in projects.

3. Verify Synchronization

Make sure that the synchronization [you have configured](#) works correctly:

- You can modify a mapped field in one system and make sure that the appropriate field is updated in another system.
- Make sure that the synchronization is bi-directional, that is, items in both systems are updated.
- Make sure that when you create a new item in one system, the appropriate item is created in another system.

Where to Go Next

After you make sure that your basic synchronization works correctly, you can move to advanced synchronization.

Advanced Synchronization

Mapping Lookup and User Fields

If the fields you want to synchronize take values from a list of predefined values, set the mapping rules for each possible value:

1. In the **QAComplete Field** and **JIRA Field** drop-down lists, select the needed QAComplete and JIRA item fields you want to map.
2. In the **Field Type** drop-down list, select **Lookup**. If the fields you synchronize accept multiple predefined values, select **Lookup Array**.
3. In the **QAComplete Value** drop-down list, select values the field can take in QAComplete.

- For each of those values, select the corresponding value from the **JIRA Value** drop-down list:

QAComplete - JIRA Field Mapping

Select JIRA fields that correspond to QAComplete fields and field types.

Name: Description:

QAComplete Field	JIRA Field	Field Type	QAComplete Value	JIRA Value
Status*	Status	Lookup	Active	In Progress
Description	Description	RichText	Closed	Done
Priority	Priority	Lookup	New	Backlog
Title*	Summary*	String		Backlog
CF01 Text	Key	String		Selected for Development
				In Progress
				Done

Synchronize attachments

CANCEL OK

If the fields that you want to synchronize store information on a user (for example, the AssignedTo field), set the field type to **UserInfo** and then [synchronize user accounts](#):

QAComplete - JIRA Field Mapping

Select JIRA fields that correspond to QAComplete fields and field types.

Name: Description:

QAComplete Field	JIRA Field	Field Type
Title*	Summary*	String
CF01 Text	Key	String
Status*	Work Ratio	String
Priority	Status	Lookup
Assigned To	Assignee	UserInfo

Synchronize attachments

CANCEL OK

Synchronizing Attachments

Select the **Synchronize attachments** check box:

QAComplete - JIRA Field Mapping HELP ✕

Select JIRA fields that correspond to QAComplete fields and field types.

Name Description

QAComplete Field	JIRA Field	Field Type
Priority	Priority	Lookup
Title*	Summary*	String
CF01 Text	Key	String
Assigned To	Assignee	UserInfo
		(Choose Field Type)

Synchronize attachments

CANCEL
OK

When you attach a file to an item in one system, the plugin will copy the attachment to the appropriate item in another system. When you update an attachment in one system, the plugin will replace the attachment in another system if the attachment's name remains the same.

The maximum attachment size is specified by your QAComplete and JIRA settings:

- For QAComplete SaaS, the maximum allowed attachment size is **150 Mb**.
For QAComplete On-Premises, the maximum allowed size is specified by the IIS settings on your QAComplete server.
- For JIRA, the maximum allowed size is specified by the **Attachment Size** setting of your JIRA Server. The default value is **10 Mb**. The maximum size a JIRA Server can allow is **2 Gb**.

If the size of a file attached to an issue in one system is larger than the other system allows, the attached file will not be synchronized.

Configuring User Mapping

To synchronize fields that store information on users, for example, the **Assigned To** field, you configure mapping for user accounts.

Requirements and Considerations


In your [field mapping](#), set the type of the fields that store information on users to the **UserInfo** type:

QAComplete - JIRA Field Mapping HELP x

Select JIRA fields that correspond to QAComplete fields and field types.

Name: Description:

QAComplete Field	JIRA Field	Field Type
Title*	Summary*	String
CF01 Text	Key	String
Status*	Work Ratio	String
Priority	Status	Lookup
Assigned To	Assignee	UserInfo

Synchronize attachments 

CANCEL OK

Set the field type to UserInfo.

If user accounts have the same email address in both systems, you do not need to configure user mapping for them. The plugin will use the email address to identify user accounts and synchronize fields that store user data automatically.

Otherwise, configure the user mapping (see below).

Mapping User Accounts

1. On the **Map User Accounts** page, select the needed QAComplete user account from the **QAComplete User** drop-down list.
2. In the **JIRA User** drop-down list, select a JIRA user, with whom you want to associate the selected QAComplete user:

Map User Accounts HELP x

Select QAComplete user accounts and the appropriate JIRA accounts

QAComplete User	JIRA User
Baldwin, Chara (cbaldwin@mycompany.com)	Chara Baldwin (cbaldwin@mycompany.com)
Moon, Indira (imoon@mycompany.com)	Indira Moon (imoon@mycompany.com)
Hyde, Risa (rhyde@mycompany.com)	Risa Hyde (rhyde@mycompany.com)
Gordon, Ebony (egordon@mycompany.com)	<div style="border: 1px solid #ccc; padding: 2px;"> Ebony Gordon (egordon@mycompany.com) </div> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 2px;"> Alden Bart (abart@mycompany.com) </div> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 2px;"> Chara Baldwin (cbaldwin@mycompany.com) </div> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 2px;"> Indira Moon (imoon@mycompany.com) </div> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 2px;"> Risa Hyde (rhyde@mycompany.com) </div> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 2px; background-color: #e0e0e0;"> Ebony Gordon (egordon@mycompany.com) </div> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 2px;"> Nora Shepard (nshepard@mycompany.com) </div>

Both lists include users that have access to the appropriate projects.

Click **Done** to save the user mapping and complete the synchronization configuration.

If the plugin fails to find a proper user account to synchronize user data fields, it will use the user account under which it connects to JIRA (the account you specify on the [Connect page](#)).


Saving Updated Mapping

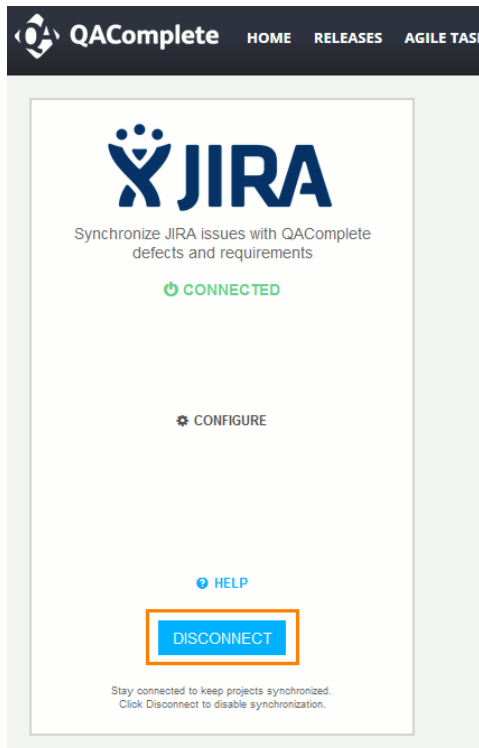
If you modify your existing mapping configuration, for example, map more fields, specify how to update the synchronized items:

- To update all the synchronized items by copying mapped field values from JIRA to QAComplete, click **Synchronize the fields now using JIRA fields as a source**.
- To update all the synchronized items by copying mapped field values from QAComplete to JIRA, click **Synchronize the fields now using QAComplete fields as a source**.
- To postpone synchronization, click **Do not synchronize the fields**. The plugin will update the synchronized items only when you update the appropriate items in JIRA or QAComplete.

Disconnecting from JIRA

To stop synchronization and disconnect from JIRA:

1. In QAComplete, open the  **Integrations** page.
2. Select **JIRA Integration** and click **Disconnect**.



The synchronization will be stopped. Any changes you make to items in one system will not be copied to another system. However, the items will keep the links to items with which they have been synchronized.