



QAComplete - JIRA Connector

Installation and Configuration Instructions

QAComplete Release 11

This guide walks you through installing, configuring and using the QAComplete - JIRA Connector for synchronizing JIRA issues with QAComplete Defects and Requirements

QAComplete Release 11

JIRA Connector Version 2.0

July, 2016

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Integration With JIRA

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

Use the QAComplete - JIRA Connector to synchronize JIRA issues with QAComplete Defects or Requirements modules 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.

QAComplete - JIRA Connector Service

Use the **QAComplete - JIRA Connector** service to integrate JIRA issues with QAComplete Defects or Requirements.

While the service is running, it connects to your QAComplete and JIRA instances at specified intervals and synchronizes items:

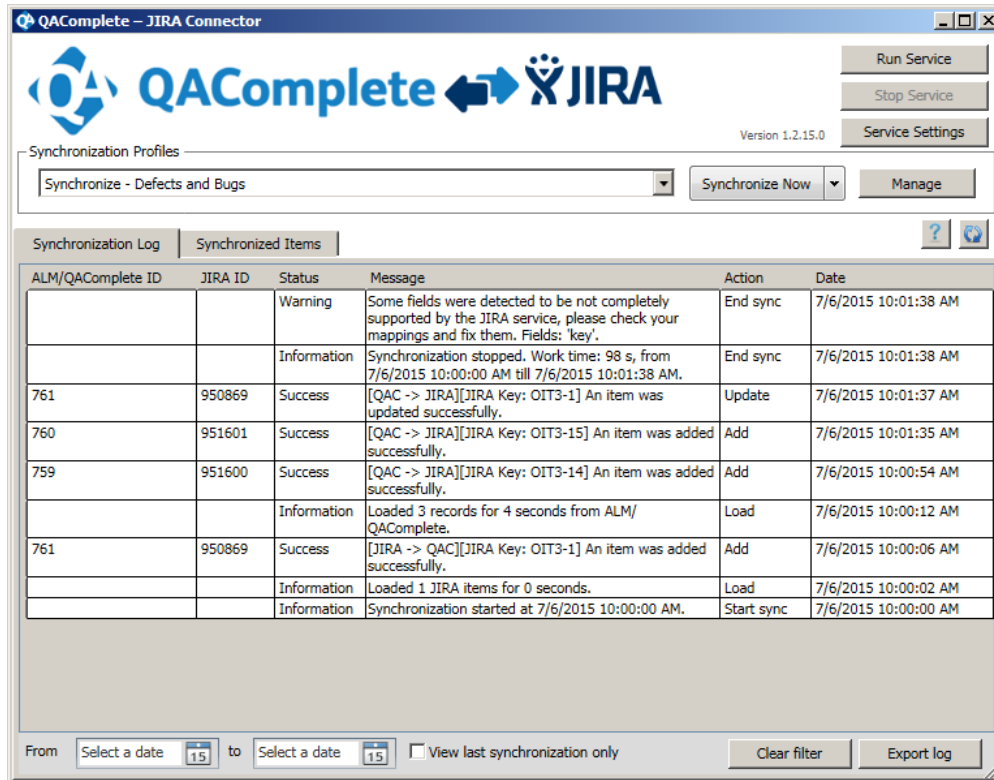
- The service loads data from the source system that was created or edited after the last synchronization.
- The service checks the fields of the source system items and updates the fields of the target system so that they match the source items.
- If the same field has been changed both in the source item and in the target item, the service will update the target item's field only if the source item's field has been edited last. Otherwise, it will leave the target item's field unchanged.
- If you attach a file to an item in a source system, the service will copy the attachment to the appropriate item in the target system.
Note: If you change the attachment in the source system, the service will replace the attachment in the target system as long as the file name remains the same.
- If you comment on an item in a source system, the service will copy the comment to the appropriate item in the target system.
- The service **does not synchronize** cross-referencing links between items. For example, if a JIRA item is linked to other JIRA items, the relationship between these items is not part of the synchronization.

The synchronization can be bi-directional, where both systems share updates to items, or one direction, where an item in the source system changes, the service updates the corresponding item in the destination system.

"Synchronization Profiles" on page 9 specify synchronization parameters for each pair of items.

About the Configuration Tool

To configure and control the service, you use the **QAComplete- JIRA Connector Configuration Tool**.



The tool is shipped and installed together with the synchronization service.

To start the synchronization, click **Run Service**.

To run the synchronization on demand:

- Select the profile in the **Synchronization Profiles** list.
- Click **Synchronize Now** in the drop-down menu.

The service will synchronize items specified by the profile and then stop.

To restore links between synchronized items (you may need this, for example, after you re-install the service):

- Select the profile in the **Synchronization Profiles** list.
Note: To use a profile stored in an external file, import the profile data first. See "Synchronization Profiles" on page 9
- Click **Repair Database** in the drop-down menu, under Synchronize Now.

The service will connect to the databases and restore the links between items using the existing synchronization information.

You can view information about synchronized items in the **Synchronized Items** tab of the configuration tool's main window.

To stop the service, click **Stop Service**.

Requirements and Prerequisites

To integrate QAComplete with Atlassian JIRA, the following requirements must be met:

- Atlassian JIRA 5.0 - 7.0 must be installed on the server that hosts your JIRA database, or you can use JIRA Cloud 7.0.
- JIRA must accept remote calls. For information on how to enable JIRA for remote API calls, please see the [JIRA documentation](#).


- The QAComplete account you use for the integration must belong to a security group that has all privileges for items you synchronize with JIRA.
- The JIRA account you use for the integration must have *Administrator* privileges.
- The computer, where the QAComplete - JIRA Connector service runs, must have access to the QAComplete SOAP service and JIRA REST service.
- The computer cannot have SQL Server installed due to a conflict with SQL Compact used by the connector.

Note: QAComplete do not support extended or Unicode characters. If items in your JIRA projects include extended or Unicode characters, the service may fail to synchronize the text in these items correctly.

Exporting JIRA Workflow Data

To synchronize your workflow across QAComplete and JIRA, export your JIRA workflow to an .xml file and import it into the QAComplete - JIRA Connector.

To export JIRA workflow:

1. In your JIRA client, login to your JIRA project.
2. Click  and then click **Issues**.
3. Select the **Workflows** section and find the workflow you need to export.
4. In the **Operations** column, click **View**.
5. Click **Export** and then click **As XML**.
6. In the **Opening Your Workflow** dialog, click **Open With** or **Save File**.
7. Locate the file and make sure it has an **XML** extension.

You can import the workflow data when you [create a new synchronization profile](#) or on the **JIRA Workflow** page when you edit a profile.

Note: Currently, JIRA Connector does not support Agile-modified workflow (also known as Agile Simplified Workflow).

Preparation in QAComplete

1. Create **Status Codes** in defects or requirements that correspond to your JIRA Statuses.
2. Create a text **Custom Field** to use for the JIRA Key. Make note of the custom field number (such as "Custom1").

You will need the custom field number when defining the mapping between the JIRA issue and your QAComplete defect or requirement.

Note: Use a name for the custom field that identifies it as the JIRA Key. Do not use the word "Custom" in the custom field name.

On-Premises Only: Allowing Large Attachments

If items you want to synchronize include large attachments, you can adjust the file size limit on your QAComplete server to allow the larger files.

- When you install QAComplete, you configure IIS on your server to allow a maximum file size. (See QAComplete Installation Guide.) If you experience issues with synchronizing items with large files attached you can adjust the IIS setting.
 1. On your QAComplete server, open **IIS Manager** console. Click **Start**, select **Run**, type *inetsrv/iss.msc* and press **Enter**.
 2. In the **Navigation** panel, select **Default Website**.
 3. In the **Features** panel, select **Request Filtering**.
 4. On the **Action** pane, click **Open Feature**.

5. Right-click the feature and then click **Edit Feature Settings**.
 6. Make sure that the **Maximum allowed content length (Bytes)** is set to 100000000.
 7. Click **OK** to save the changes and close the dialog.
- Make sure that your QAComplete web service allows uploading large files.
 1. On your QAComplete server, navigate to the `C:\inetpub\wwwroot\psWS\web.config` file and open it for editing. (It is an XML file that you can open in any XML or Text editor such as Notepad.)
 2. Find the **system.webServer** node in the file.
 3. Make sure that the node has the **httpRuntime** subnode and that the subnode's **maxRequestLength** attribute is set to 122800.
 4. If needed, add the httpRuntime subnode manually and set the **maxRequestLength** attribute to 122800. For example:

```
<configuration>
  <system.webServer>
    <httpRuntime maxRequestLength="122800"/>
    <validation validateIntegratedModeConfiguration="false"/>
  </system.webServer>
  ...
```
 5. Save the file.

Restoring Synchronization Data on Updating or Re-Installing the Service

Before you update or re-install the QAComplete - JIRA Connector service, we recommend that you store your synchronization profiles in external files:

- In the configuration tool, stop the service and click **Manage**.
- In the **Synchronization Profiles** dialog, select the needed profile and click **Export**.
- Specify the file that will store the data.

After you update or re-install the tool, you can restore the existing links between synchronized items instead of creating and configuring the synchronization anew. (Otherwise, synchronized data may be duplicated).

- In the configuration tool, stop the service.
- Import your existing synchronization profile:
 - Click **Manage** and then click **Import**.
 - Browse for the file storing your synchronization data.

Or create and configure a new profile.

- On the main window of the configuration tool, select the profile in the **Synchronization Profiles** list.
- Select **Repair Database** from the drop-down menu.

The service will connect to the databases and restore the existing synchronized data.

QAComplete - JIRA Connector Installation

Download the [JIRA Connector installation package from our web site](#).

Note: If you are an On-Premises customer, check for your QAComplete Release number and download the corresponding JIRA Connector:

- QAComplete Release 10.0: [JIRA Connector 1.0](#)
- QAComplete Release 10.1: [JIRA Connector 1.2](#)

- QAComplete Releases 10.2 and 11.0: [JIRA Connector 2.0](#)

Copy the installation package to the machine that will run the synchronization. This needs to be a machine that can connect to both your JIRA instance and QAComplete.

Unzip the file and run **QAComplete JIRA Connector 20 Release.exe**.

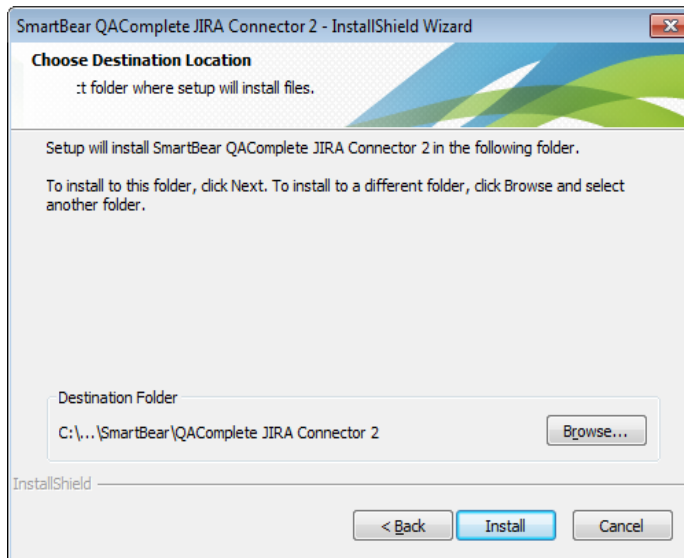
Note: If you do not have SQL Server Compact 3.5 SP2 on the machine, the installation will offer to install it for you. Click **Yes**. Read Microsoft's EULA and click **Next** to continue installation.

If you have a previous version of JIRA Connector installed on the computer, the installation will offer to upgrade it. Click **Yes**.



Read SmartBear's EULA, Click **I Accept**, then click **Next** to continue installation.

If needed, change the installation folder for JIRA Connector.



Click **Install** to confirm the installation.

Note: If you are installing on a machine with SQL Server 2008, there may be a conflict with SQL Server Compact if exists on the machine. To work around the conflict, first uninstall SQL Compact 3.5 (x86 and x64), run the connector installation and select Repair, and re-install SQL Server Compact from the connector installer.

Synchronization Profiles

For each pair of items you synchronize, you create a separate **synchronization profile**. A profile stores the information that QACComplete - JIRA Connector uses to connect to your QACComplete and JIRA instances with rules describing how the service copies data from one system to the other.

Starting from QAC - JIRA Connector version 1.2, you can synchronize QACComplete **Defects** and **Requirements** with JIRA issues of any type.

The profile you create describes how items in a QACComplete project are synchronized with items in a JIRA project and how fields are mapped between the two.

Create and configure profiles with the QACComplete - JIRA Connector Configuration Tool.

To set up a synchronization profile:

- In the configuration tool, stop the service and click **Manage**.
- In the **Synchronization Profiles** dialog, click **Add** to create a new profile. To copy settings from the default profile to your new profile, select **Default profile** in the **Copy settings from** drop down list. For a description of the default profile, "Default Profile" below
- To edit an existing profile, select the desired profile in the list and click **Edit**.

Creating and configuring a synchronization profile includes the following steps:

1. "Creating a New Synchronization Profile" on page 11
2. "Configuring General Settings of the Synchronization Profile" on page 12
3. "Configuring QACComplete Connection Settings" on page 13
4. "Configuring JIRA Connection Settings" on page 15
5. "Synchronizing Item Fields and Values" on page 16
6. "Synchronizing Users" on page 21
7. "Synchronizing Workflows" on page 23

You can create multiple profiles to synchronize different items in different projects. For example, create a profile to synchronize JIRA bugs with QACComplete defects and a second profile to synchronize JIRA user stories with QACComplete requirements.

To disable a profile temporary, clear the check box next to the profile name in the list.

To export profile data to a file for later use, click **Export** and specify the target file that will store the data.

To import profile data from an external file, click **Import** and browse for the need file.

Default Profile

The QACComplete - JIRA Connector comes with two default synchronization profiles to use as a starting point: one that links defects in QACComplete with JIRA issues of the Bug type and another that links Requirements to JIRA Stories. The profiles map default fields and choice list values in QACComplete to the corresponding default fields and values of JIRA bugs.

When creating your customized profile, use the default profile as a starting point by copying it to your new profile.

Note: if you have customized JIRA or QACComplete choice list values, the values will be different for your instance. You will need to modify the values to match your choice lists.

Importing Profiles

If you do not see the default profiles in the configuration tool, you can import them from the Program Files location.

- Start the configuration tool.
- Stop the service.
- Click Manage, then Import.
- Navigate to the location where the configuration tool is installed (c:/Program Files (x86)/SmartBear/qacJIRACConnector).
- In this folder look for the two profile template XML files:

```
templateProfileBugs.xml
templateProfileRequirements.xml
```

- Select the profile and click Open. The default template will be imported and available for use.

Configuration

Once you have copied the Default Profile, complete the [Settings](#), [ALM/QAComplete](#) and [JIRA](#) tabs. After you have configured the profile, click the Field Mapping tab.

Mapping

The default profile maps the following values between QAComplete Defects and JIRA bugs.

ALM/QAComplete Field JIRA Field Field Type

| | | |
|----------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |

JIRA KEY

The default mapping assumes that Custom1 in Defects maps to the "key" field in JIRA. Change this to the correct custom field used in your system.

Status Mapping

QAComplete Status Codes are mapped to default JIRA status values. You can modify the mapping for changes you may have in either system.

ALM/QAComplete Value JIRA Value

| | |
|----------|-------------|
| New | Backlog |
| Active | In Progress |
| Closed | Closed |
| Active | Reopen |
| Resolved | Resolved |

Priority Mapping

QAComplete Priority Codes are mapped to default JIRA priorities. You can modify the mapping for changes you may have in either system.

ALM/QAComplete Value JIRA Value

| | |
|---------------|----------|
| 1-Fix ASAP | Blocker |
| 1-Fix ASAP | Critical |
| 2-Fix Soon | Major |
| 2-Fix Soon | Normal |
| 3-Fix If Time | Minor |
| 4-Fix If Time | Trivial |

Resolution Mapping

QAComplete Resolutions Codes are mapped to default JIRA resolutions. You can modify the mapping for changes you may have in either system.

ALM/QAComplete Value JIRA Value

| | |
|--------------|-------------------|
| By Design | Won't Do |
| Duplicate | Duplicate |
| External | Won't Do |
| Fixed | Done |
| Fixed | Fixed |
| Not Repro | Cannot Reproduce |
| Not Repro | Invalid |
| Postponed | Workaround Exists |
| Will Not Fix | Won't Fix |

Mapping is fully customizable, so you can add mapped fields and modify the mapping as needed.

Important: If you use required fields in either JIRA or QAComplete, make sure that all required fields are fully mapped.

Creating a New Synchronization Profile

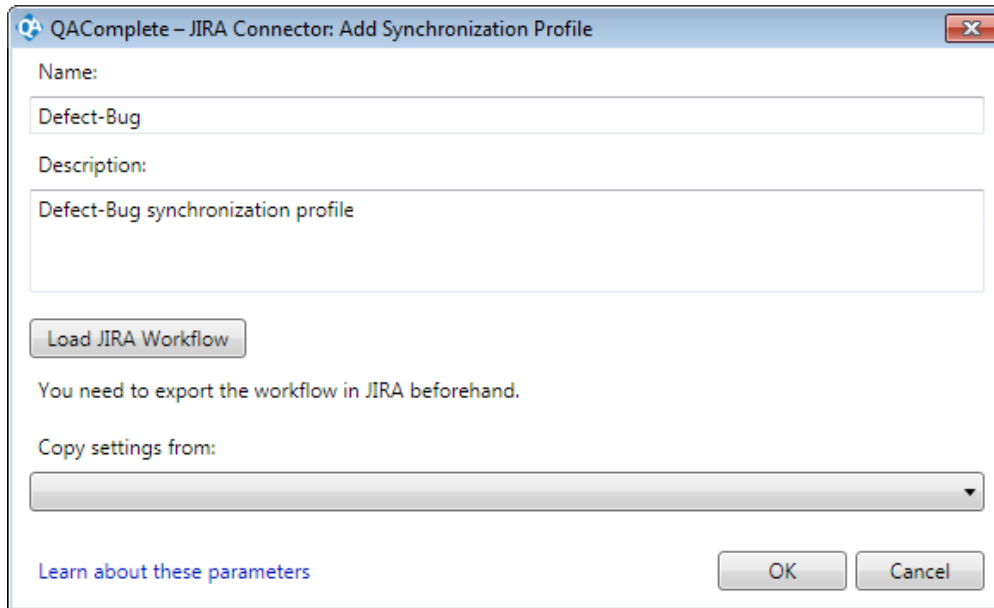
Create a synchronization profile for the items you want synchronized.

You can create separate profiles for various item types. You can also create separate profiles to synchronize items in various QAComplete projects with issues in various JIRA projects.

To create a new profile, in Synchronization Tool, click **Manage** and then click **Add**.

Note: To create a new synchronization profile (or edit an existing one), stop the service first. When you are done creating or editing the profile, restart the service.

In the **Add Synchronization Profile** dialog, set up a new profile:



1. Enter the new profile name.
2. (Optional) Enter a description for the profile.
3. To synchronize your item workflow in QAComplete with the JIRA workflow, import the JIRA workflow data:

- Click **Load JIRA Workflow**.
- Browse for the .xml file storing the exported workflow. For information on how to export JIRA workflow to a file, please see "Requirements and Prerequisites" on page 5.
- Select the needed file and click **Open**.

Note: You can import the workflow data later on the **JIRA Workflow** page by editing the profile.

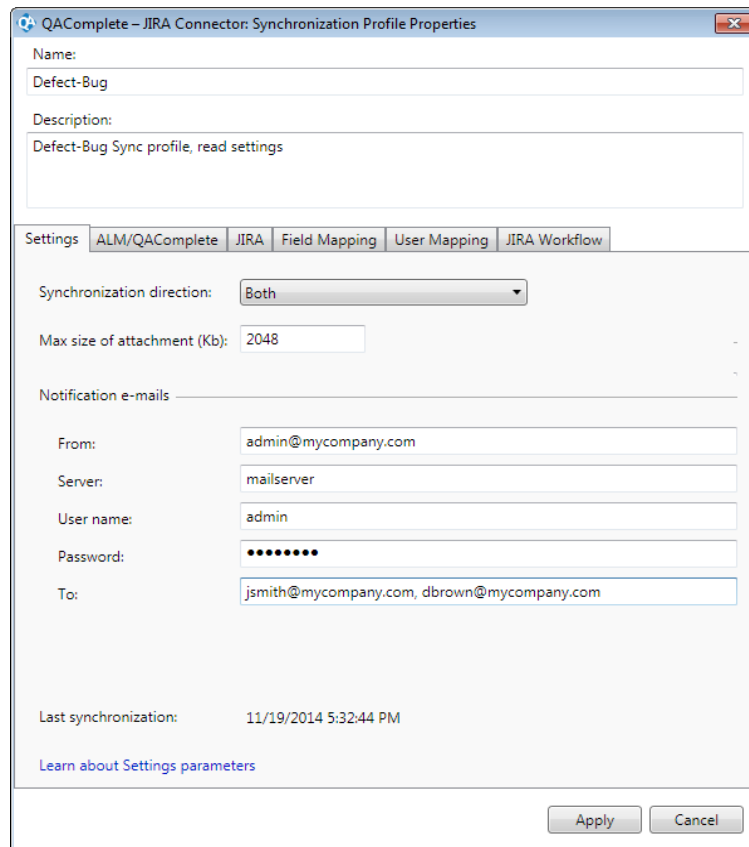
4. Click **OK**.

To copy settings from an existing profile, select the desired profile in the **Copy settings from** list and click **OK**. For ease of configuration, select one of the default profiles as a starting point to creating your new profile.

To configure or edit an existing profile, select it in the **Synchronization Profiles** dialog and click **Edit**.

Configuring General Settings of the Synchronization Profile

On the **Settings** tab of the **Synchronization Profile Properties** dialog, you define the synchronize direction and configure notification emails:



1. In **Synchronization direction** list, choose how the synchronization should work:

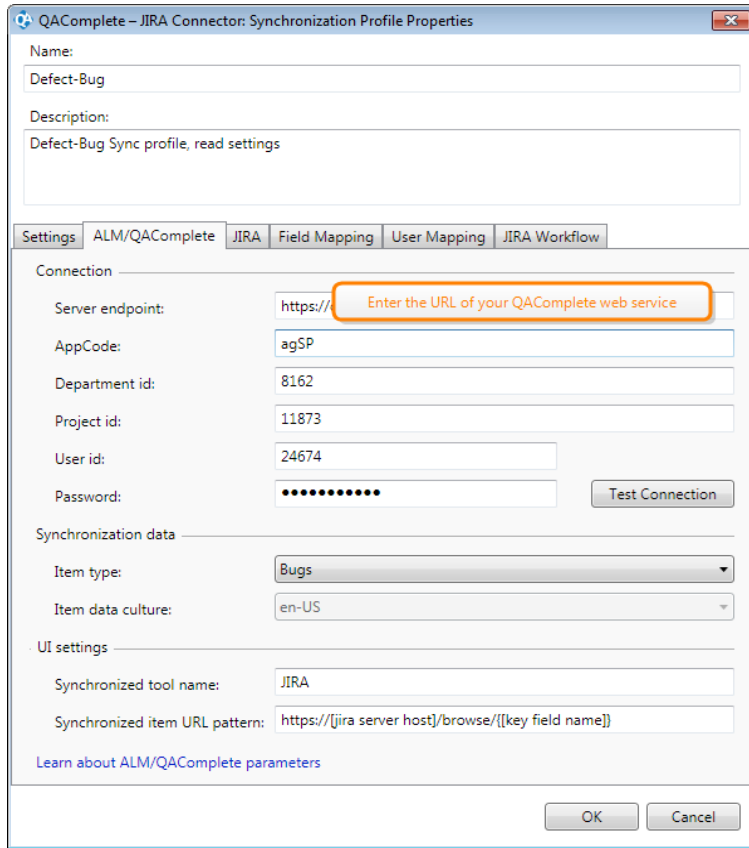
- Choose **Both** to enable a bidirectional synchronization. When an item in either QAComplete or JIRA changes, the service updates the corresponding item in the other system.
- Choose **JIRA -> ALM/QAComplete** or **ALM/QAComplete -> JIRA** to enable the one-way synchronization. When an item in the source (first) system changes, the service updates the corresponding item in the

destination (second) system.

- **JIRA -> ALM/QAComplete:** JIRA issues are pushed to QAComplete items. When the JIRA issue is changed, the change is pushed to QAComplete. If the QAComplete item is changed, it does NOT update the JIRA issue.
 - Note: Changes made in QAComplete will be overwritten by changes made later in JIRA.
 - **ALM/QAComplete -> JIRA:** QAComplete items are pushed to JIRA. When the QAComplete issue is changed, the changed is pushed to JIRA. If the JIRA issue is changed, it does NOT update the QAComplete item.
 - Note: Changes made in JIRA will be overwritten by changes made later in QAComplete.
2. In **Max size of attachment**, enter the maximum size limit for your attachments in Kb. The default value is 2048 Kb and the upper limit is 30 Mb.
 3. To configure the service to send email notifications on synchronization results:
 - In **From**, enter the email address to use as the "From" address for notifications.
 - In **Server**, enter the address of the mail server used to send notifications.
 - In **User Name** and **Password**, enter the account name and password used to connect to the email server.
 - In **To**, enter the email address to receive the notifications. To send notifications to several recipients, enter their email addresses separated by comma.

Configuring QAComplete Connection Settings

On the **ALM/QAComplete** tab of the **Synchronization Profile Properties** dialog, specify the location of your QAComplete web service and login information for the project you want to synchronize with JIRA.




Note: the Department ID, Project ID and User ID are the unique numeric identifiers found in QAComplete.

1. In **Server endpoint**, enter the URL of your QAComplete web service.
 For SaaS clients, the URL address is `http://soap.qacomplete.smartbear.com/psWS.asmx`.
 For On-Premises clients, the URL address is `http://[yourserver]/psws/psws.asmx`.
2. In appropriate fields, enter the following authentication information:
 - In **AppCode**, enter the application code.
 For SaaS clients, use `agSP`.
 For On-Premises clients, use `agSPEnt`.
 - In **Department Id**, enter the numeric ID of your department.
 - In **User Id**, enter the numeric ID of the user that the service will use to access QAComplete items. This user must have full permission to the items in the desired Project.
 - In **Password**, enter the password for the user.
 - In **Project**, enter the numeric ID of the QAComplete project that you want synchronized with JIRA.

You can find the numeric IDs in QAComplete:

To get the application code

- In QAComplete, click  to open the **Setup** page.
- Note down the **AppCode** value.

To get the project ID and department ID

- In the tree on the left, select **Projects (Open & Create)**.
- Note the values in the **ID** and **Dept Id** columns for the desired Project. If the columns are hidden, click **Choose Fields** and add the columns to the **Chosen Fields** list.

To get the user ID

- In the tree on the left, select **Security | Users**.
- Find the desired user and note the value in the **UserId** column. If the column is hidden, click **Choose Fields** and add the column to the **Chosen Fields** list.

3. The **Item type** is the QAComplete module to synchronize with JIRA. Choose **Bugs** or **Requirements** from the drop-down list.
4. The **Item data culture** is the locale used in QAComplete. Leave the default value of *en-US*.
5. In **Synchronized tool name**, enter an identifying name for the JIRA instance that you are synchronizing with QAComplete. Enter *JIRA*. This name is used in synchronization messages.
6. To open JIRA items directly from the synchronized item in QAComplete, enter the location of your JIRA instance and the custom field that you defined in QAComplete to hold the JIRA Id in **Synchronized item URL pattern**. Use the Custom Field number preceded by "Custom" as "CustomX"

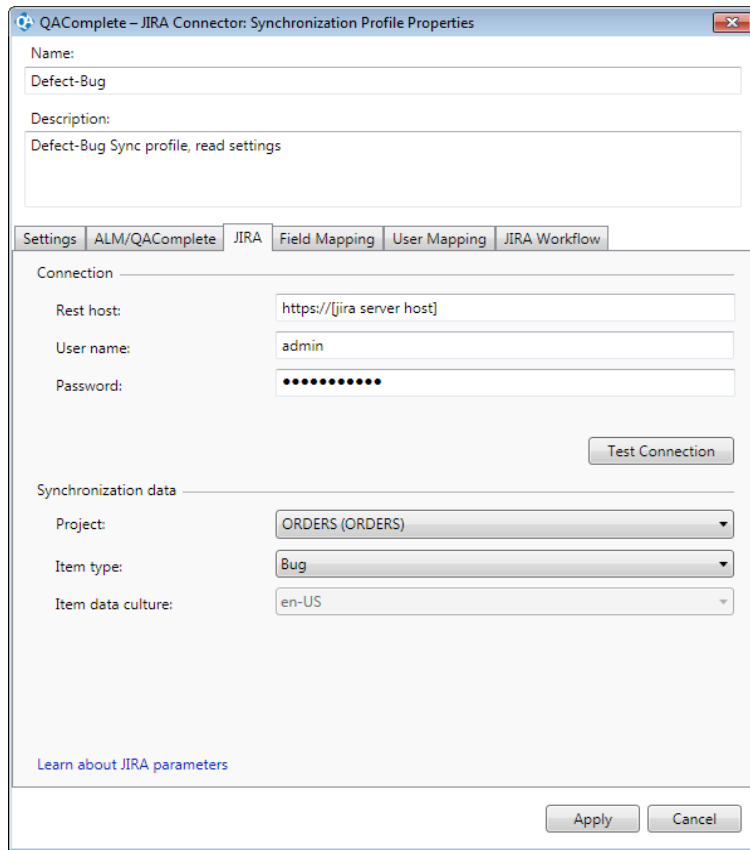
Example: `http://myteam.atlassian.com/browse/{Custom2}`.

The service will use the pattern to generate proper links to each synchronized JIRA item.

Click **Test Connection** to verify the credentials.

Configuring JIRA Connection Settings

On the **JIRA** tab of the **Synchronization Profile Properties** dialog, specify the JIRA database that you want to synchronize with QAComplete:



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | **JIRA** | Field Mapping | User Mapping | JIRA Workflow

Connection

Rest host: https://[jira server host]

User name: admin

Password: ●●●●●●●●

Test Connection

Synchronization data

Project: ORDERS (ORDERS)

Item type: Bug

Item data culture: en-US

[Learn about JIRA parameters](#)

Apply Cancel

1. In **Rest host**, change [jira server host] to your JIRA server.
2. In **User name** and **Password**, enter the name and password for user account used to access and update JIRA items.
3. In the **Project** drop-down list, select the JIRA project that you want to integrate with the QAComplete project. The list contains all JIRA projects that the specified user has access to.
4. In **Item type**, select the type of JIRA issues you want to synchronize with the specified QAComplete items.
5. In **Item data culture**, leave the default locale of "en-US".

Click **Test Connection** to verify the credentials.

Synchronizing Item Fields and Values

On the **Field Mapping** tab of the **Synchronization Profile Properties** dialog, you set up synchronization rules for each individual field. These rules define what the service copies from specific fields in one system to corresponding fields in the other.

Notes:

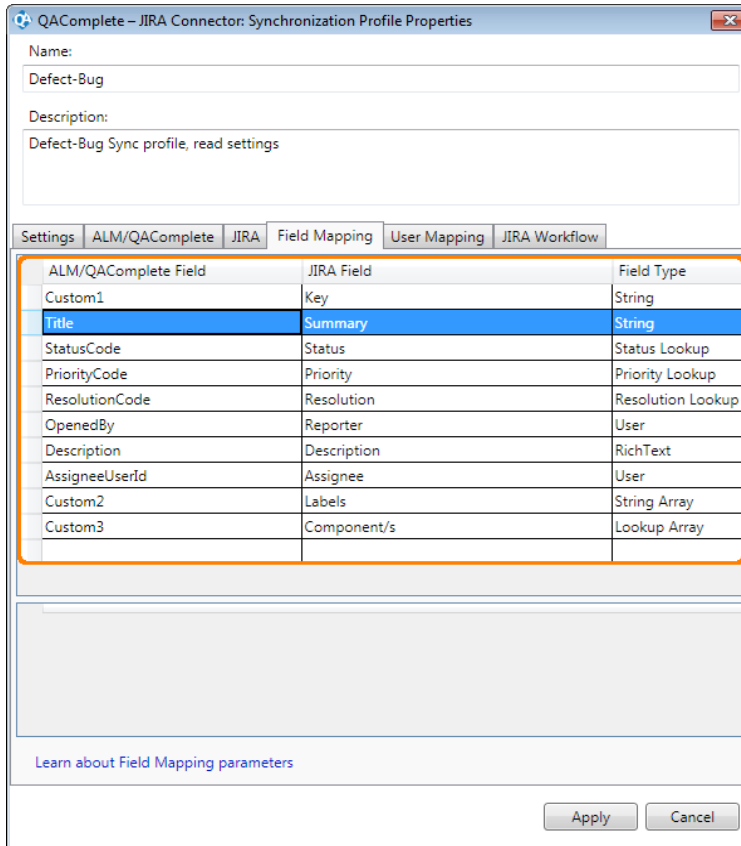
- Make sure you know of all required fields in both QAComplete items and in JIRA issues. You need to map all required fields for a successful synchronization
- If you have synchronization rules set in QAC - JIRA Connector version prior to version 1.2, you may get the "Some fields in Field Mapping are not supported by JIRA service" warning.

This happens because earlier versions of the tool used JIRA SOAP service to work with JIRA. Starting from version 1.2, the tool uses the JIRA REST service. The format of issue fields the JIRA REST service uses may differ from the format the JIRA SOAP service uses. As a result,

some fields in your field mapping may be missing. Please check your field mapping and fix the missing fields.

Synchronizing Fields

1. In the table, click in an **ALM/QAComplete Field** cell to open a drop-down list of fields. Select the desired field to synchronize with the corresponding data in JIRA. You can set synchronization rules for both the built-in and custom fields.
2. Click in the **JIRA Field** cell to open the drop-down list of JIRA fields for the selected item type. Select the field that corresponds to the QAComplete field.



| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| Custom2 | Labels | String Array |
| Custom3 | Component/s | Lookup Array |

Note: If you change the JIRA item type, the JIRA Field column will be cleared and you need to reconfigure the field mapping.

3. In the **Field Type** column, choose the type of the QAComplete field.
 - For lookup fields (fields that take values defined in a choice list), choose the **Lookup** field type. (See below.)
 - For fields that store information on a user, for example, *AssigneeUserId*, choose the **User** field type.

Note: In order for the service to copy information on users properly, first synchronize the account information. See "Synchronizing Users" on page 21
 - For fields, that store information on the item status, priority and resolution, choose the **Status Lookup**, **Priority Lookup** or **Resolution Lookup** types. (See below.)

- For JIRA fields that accept multiple string values (for example, the **Labels** field), choose the **String Array** field type. The service will copy values from JIRA to QAComplete as string values separated by a comma.
- For JIRA fields that accept multiple predefined values (for example, the **Component/s** field), choose the **Lookup Array** field type. (See below.)

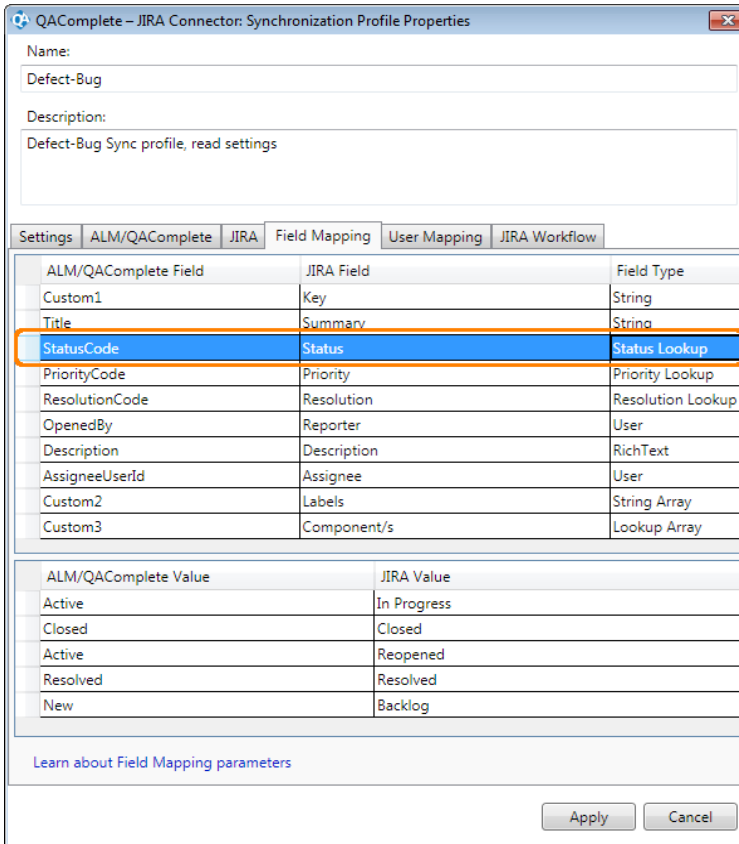
Important: Make sure that the selected field type can be converted to the appropriate JIRA field type explicitly.

4. Map the QAComplete custom field for the **JIRA Key** using the custom field ID such as *Custom1* to the Jira Key field.
5. Continue in the next row, selecting corresponding fields to map.

Synchronizing Status, Priority and Resolution Fields

If the field to be synchronized contains the status, priority or resolution, set the mapping rules for each possible value:

1. In the **ALM/QAComplete Field**, select the field that holds the item status, priority, or resolution.
2. In the **JIRA Field**, select the field that corresponds to that QAComplete field.
3. In the **Field Type**, choose the **Status Lookup**, **Priority Lookup**, or **Resolution Lookup** field type.

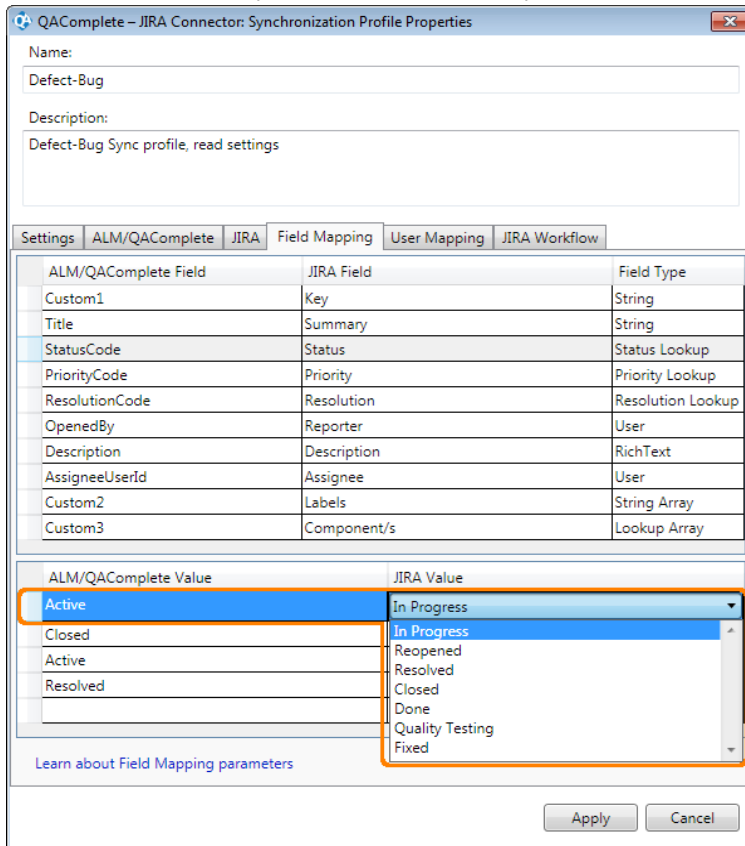


| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| Custom2 | Labels | String Array |
| Custom3 | Component/s | Lookup Array |

| ALM/QAComplete Value | JIRA Value |
|----------------------|-------------|
| Active | In Progress |
| Closed | Closed |
| Active | Reopened |
| Resolved | Resolved |
| New | Backlog |

4. Click in the **ALM/QAComplete Value** cell to open the list of possible item statuses (or priorities, or resolutions) in QAComplete. Select the needed value.

- Click in the **JIRA Value** column to open the list of item statuses (or priorities, or resolutions) in JIRA. Select the value that corresponds to the value in QAComplete.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings: ALM/QAComplete | **JIRA** | Field Mapping | User Mapping | JIRA Workflow

| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| Custom2 | Labels | String Array |
| Custom3 | Component/s | Lookup Array |

| ALM/QAComplete Value | JIRA Value |
|----------------------|-----------------|
| Active | In Progress |
| Closed | In Progress |
| Active | Reopened |
| Resolved | Resolved |
| | Closed |
| | Done |
| | Quality Testing |
| | Fixed |

[Learn about Field Mapping parameters](#)

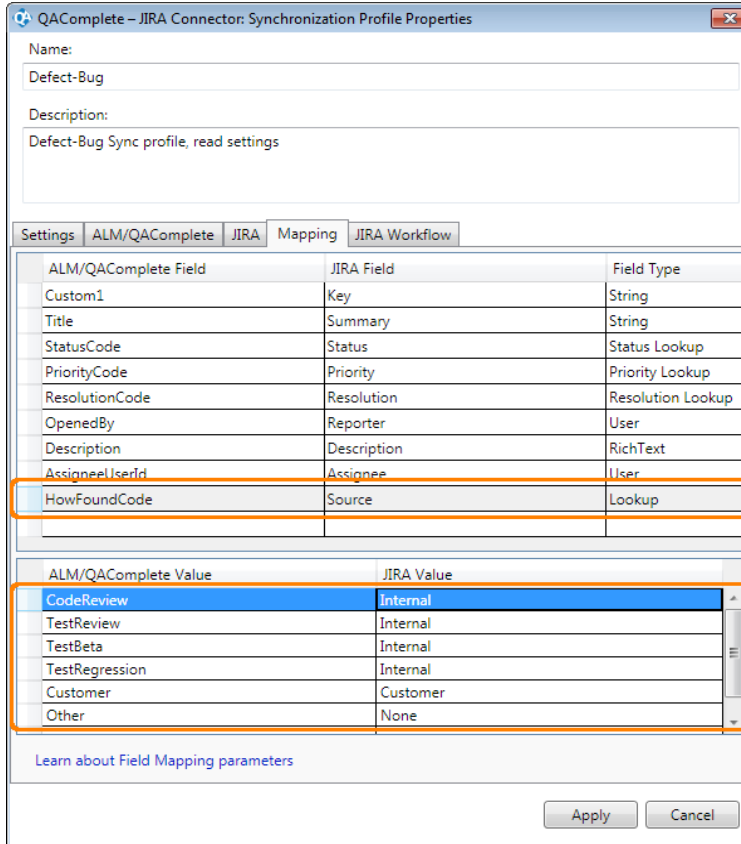
Apply Cancel

Synchronizing Lookup Fields

If a field to be synchronized is a lookup field (values are defined in a choice list), set the mapping rules for each value:

- On the **Field Mapping** tab page, select the lookup field.
- In the **ALM/QAComplete Value** column, enter a value from the choice list in QAComplete.

- In the **JIRA Value** column, for each value, set the corresponding value used in JIRA.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | **JIRA** | Mapping | JIRA Workflow

| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| HowFoundCode | Source | Lookup |

| ALM/QAComplete Value | JIRA Value |
|----------------------|------------|
| CodeReview | Internal |
| TestReview | Internal |
| TestBeta | Internal |
| TestRegression | Internal |
| Customer | Customer |
| Other | None |

Learn about Field Mapping parameters

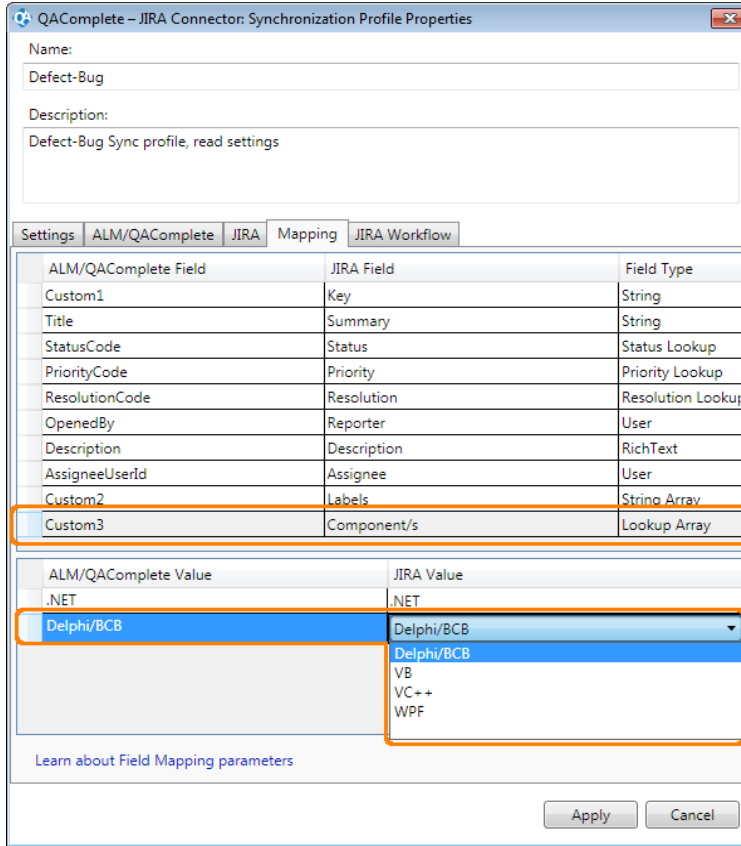
Apply Cancel

Synchronizing Lookup Array Fields

If a field to be synchronized is a multi select field in JIRA (accepts multiple predefined values), set the mapping rules for each value:

- On the **Field Mapping** tab page, select the lookup array field.
- Click in the **JIRA Value** cell to open the drop-down list of available values. Select the needed value.

- In the **ALM/QAComplete Value** column, enter the corresponding value used in QAComplete.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | JIRA | Mapping | JIRA Workflow

| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| Custom2 | Labels | String Array |
| Custom3 | Component/s | Lookup Array |

| ALM/QAComplete Value | JIRA Value |
|----------------------|------------|
| .NET | .NET |
| Delphi/BCB | Delphi/BCB |
| | Delphi/BCB |
| | VB |
| | VC++ |
| | WPF |

Learn about Field Mapping parameters

Apply Cancel

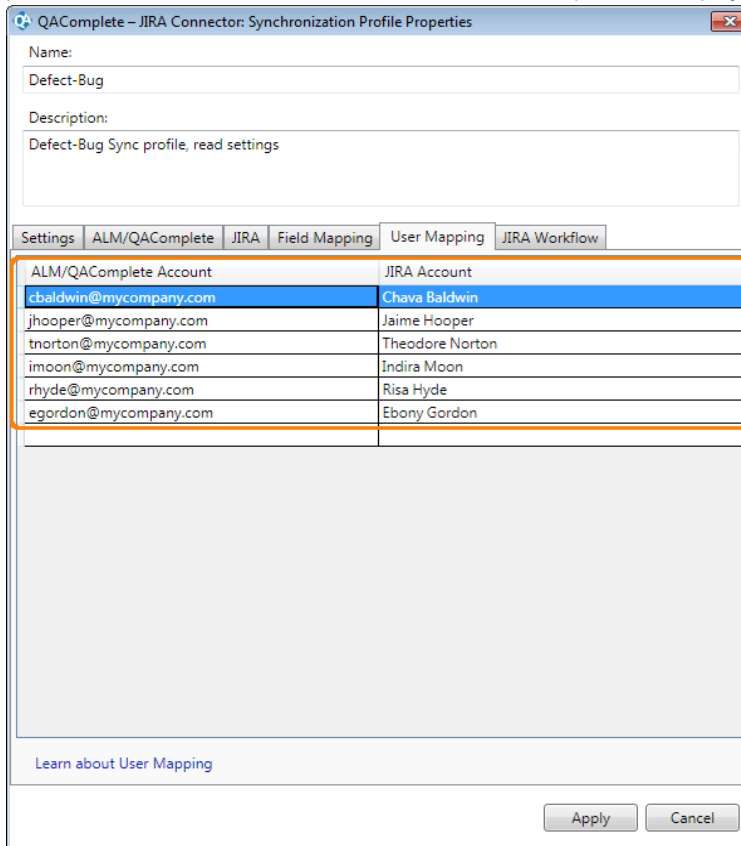
The service will copy the values from JIRA to QAComplete as string values separated with comma.

Synchronizing Users

On the **User Mapping** tab of the **Synchronization Profile Properties** dialog, you associate user accounts in QAComplete with JIRA user accounts. It enables the service to synchronize fields that hold information on users.

- In the **User Mapping** table, click in the **ALM/QAComplete Account** cell and select an email address of an QAComplete user account from the drop-down list.

2. Click in the **JIRA Account** cell and select the JIRA user that you want to associate with the QAComplete user. The list contains the users that have access to the specified JIRA project.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name:
Defect-Bug

Description:
Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | JIRA | Field Mapping | **User Mapping** | JIRA Workflow

| ALM/QAComplete Account | JIRA Account |
|------------------------|-----------------|
| cbaldwin@mycompany.com | Chava Baldwin |
| jhooper@mycompany.com | Jaime Hooper |
| tnorton@mycompany.com | Theodore Norton |
| imoon@mycompany.com | Indira Moon |
| rhyde@mycompany.com | Risa Hyde |
| egordon@mycompany.com | Ebony Gordon |

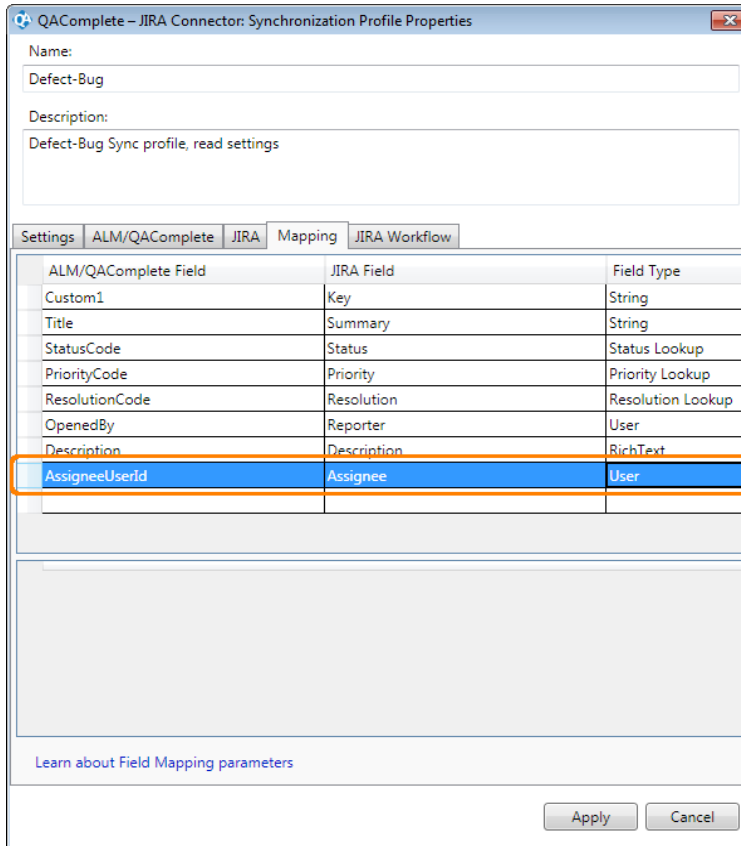
[Learn about User Mapping](#)

Apply Cancel

After you link the user accounts, synchronize the fields that holds user information:

1. Open the **Field Mapping** page.
2. In the **ALM/QAComplete Field** column, select the field that holds the information on the QAComplete user.
3. In the **JIRA Field** column, select the field that holds the information on the JIRA user.

- In the **Field Type** column, choose the **User** field type.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | JIRA | Mapping | JIRA Workflow

| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserid | Assignee | User |

Learn about Field Mapping parameters

Apply Cancel

Synchronizing Workflows

A workflow defines what stages an item passes during its lifecycle in the system. You can synchronize your QAComplete workflow with JIRA workflow so that when an item transfers to a new state in one system, it automatically transfers to the appropriate state in another system.

To synchronize workflow, first you must export the workflow from JIRA. [See Exporting JIRA Workflow](#).

The **JIRA Workflow** tab of the **Synchronization Profile Properties** dialog displays the imported JIRA workflow.

QAComplete – JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | JIRA | Field Mapping | User Mapping | JIRA Workflow

| Transition ID | Transition Name | Start Status ID | End Status ID |
|---------------|-----------------|-----------------|---------------|
| 2 | Close Issue | 1 | 6 |
| 4 | Start Progress | 1 | 3 |
| 5 | Resolve Issue | 1 | 5 |
| 2 | Close Issue | 3 | 6 |
| 5 | Resolve Issue | 3 | 5 |
| 301 | Stop Progress | 3 | 1 |
| 3 | Reopen Issue | 5 | 4 |
| 701 | Close Issue | 5 | 6 |
| 2 | Close Issue | 4 | 6 |
| 4 | Start Progress | 4 | 3 |
| 5 | Resolve Issue | 4 | 5 |
| 3 | Reopen Issue | 6 | 4 |

Working with workflow Load JIRA Workflow

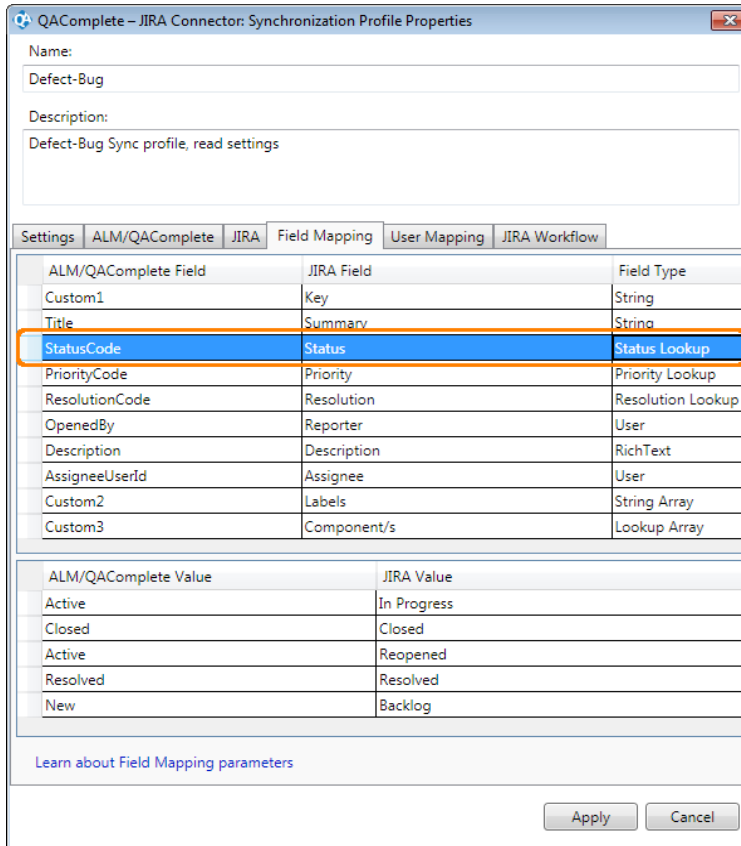
Apply Cancel

Important: To view the JIRA workflow, upload the workflow data first. Click **Load JIRA Workflow** and browse for the exported XML file storing the JIRA workflow. You can also load the workflow data in the **Add Synchronization Profile** dialog when you create a new profile.

To synchronize your QAComplete workflow with your JIRA workflow, synchronize the statuses the item can have:

1. Open the **Field Mapping** page. The page defines synchronization rules for the fields.
2. In the **ALM/QAComplete Field** column, select the field that holds the item status in QAComplete.
3. In the **JIRA Field** column, for that field, set the field that holds the item status in JIRA.

- In the **Field Type** column, choose the **Status Lookup** field type.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings: ALM/QAComplete | JIRA | **Field Mapping** | User Mapping | JIRA Workflow

| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| Custom2 | Labels | String Array |
| Custom3 | Component/s | Lookup Array |

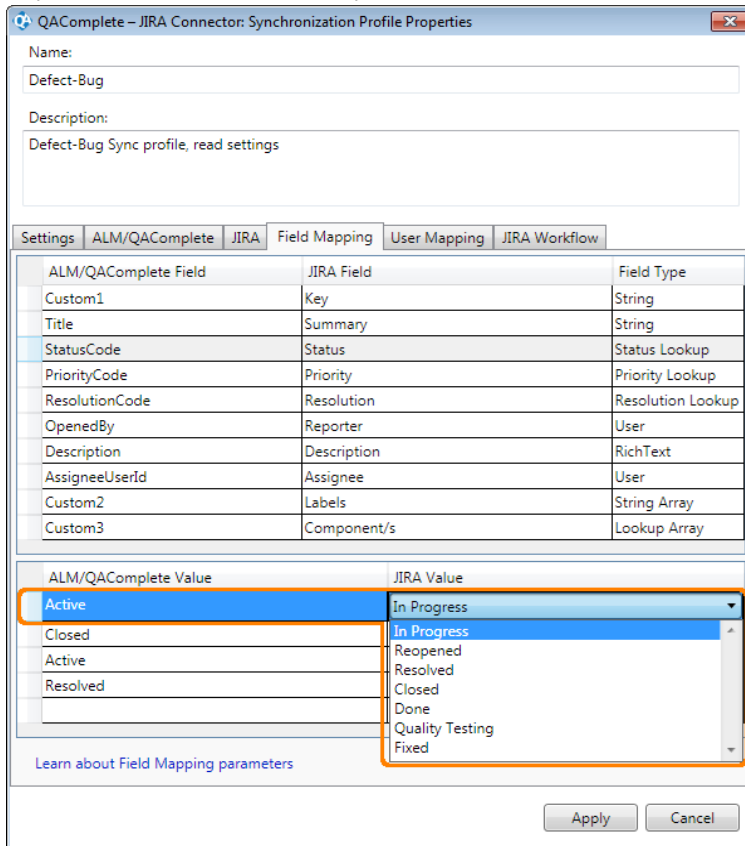
| ALM/QAComplete Value | JIRA Value |
|----------------------|-------------|
| Active | In Progress |
| Closed | Closed |
| Active | Reopened |
| Resolved | Resolved |
| New | Backlog |

[Learn about Field Mapping parameters](#)

Apply Cancel

- Click in the **ALM/QAComplete Value** cell to open the list of item statuses in QAComplete. Select a status.

- Click in the **JIRA Value** cell to open the list of item statuses in JIRA. Select the item status that corresponds to the item status in QAComplete.



QAComplete - JIRA Connector: Synchronization Profile Properties

Name: Defect-Bug

Description: Defect-Bug Sync profile, read settings

Settings | ALM/QAComplete | **JIRA** | Field Mapping | User Mapping | JIRA Workflow

| ALM/QAComplete Field | JIRA Field | Field Type |
|----------------------|-------------|-------------------|
| Custom1 | Key | String |
| Title | Summary | String |
| StatusCode | Status | Status Lookup |
| PriorityCode | Priority | Priority Lookup |
| ResolutionCode | Resolution | Resolution Lookup |
| OpenedBy | Reporter | User |
| Description | Description | RichText |
| AssigneeUserId | Assignee | User |
| Custom2 | Labels | String Array |
| Custom3 | Component/s | Lookup Array |

| ALM/QAComplete Value | JIRA Value |
|----------------------|-----------------|
| Active | In Progress |
| Closed | In Progress |
| Active | Reopened |
| Resolved | Resolved |
| | Closed |
| | Done |
| | Quality Testing |
| | Fixed |

Learn about Field Mapping parameters

Apply Cancel

Configuring the Synchronization Intervals

To configure when and how often the service will connect to databases and synchronize items:

- In QAComplete - JIRA Connector Configuration Tool, click **Service Settings**.
- In the **Service Settings** dialog, set the interval (in minutes) for the service to perform the synchronization.
- Use the **Period Start Time** and **Period End Time** to set the period during which the service will be active.

Configuring Proxy Settings

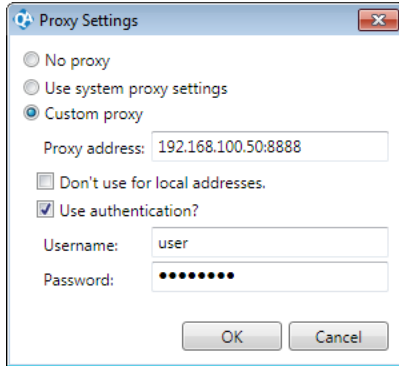
If you connect to your JIRA and QAComplete servers through a proxy:

- In QAComplete - JIRA Connector Configuration Tool, click **Service Settings**.
- In the **Service Settings** dialog, click **Proxy Settings** and configure the proxy settings in the resulting dialog:
 - No proxy** - Select this option to connect to your JIRA and QAComplete servers directly.
 - Use system proxy settings** - Select this option to connect to your JIRA and QAComplete servers through the proxy configured for your operating system. You can find the proxy and proxy settings in the **Local Area Network (LAN) Settings** dialog. (Open Internet Explorer and click **Tools | Internet options | Connections | LAN settings**.)

- **Custom proxy** - Select this option to set the proxy server that you want to use manually:

In **Proxy address**, specify the network name or IP address and (optionally) the port of the proxy server you use to connect to your JIRA and QAComplete servers. For example, *192.168.100.50:8888*.

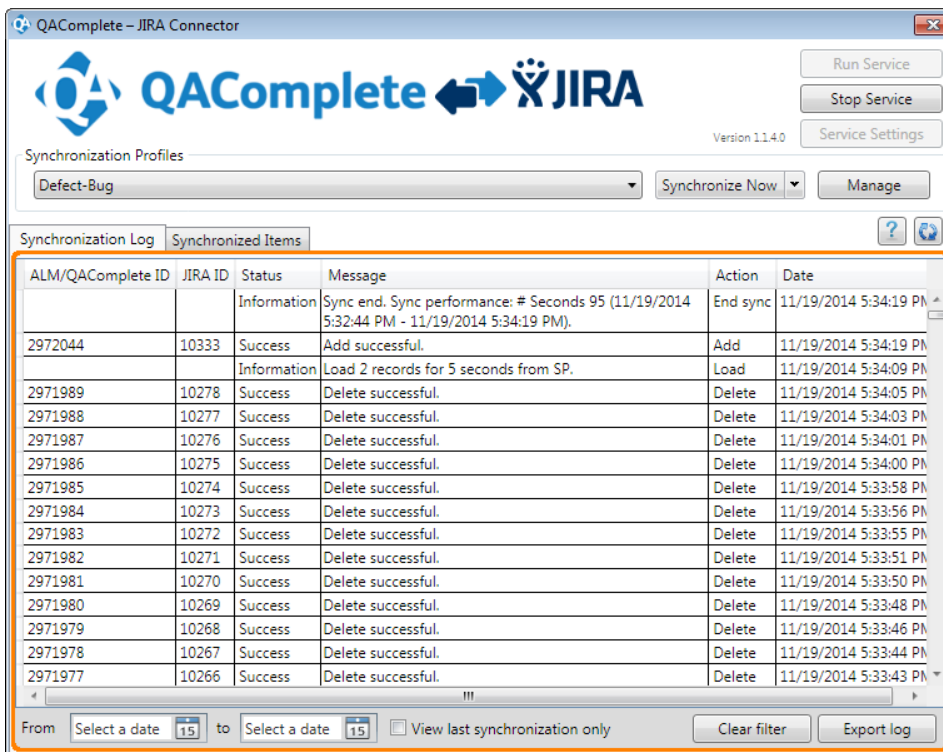
If your proxy server requires authentication, enter the user name and the password to connect to the proxy server.



- Click **OK** to save the changes and close the dialog.

Viewing Synchronization Logs

To view synchronization logs, go to the **Synchronization Log** tab from the main window of the **QAComplete - JIRA Connector Configuration Tool**.



The page lists all synchronization events that occurred for profile selected in the **Synchronization Profiles** list. Check the status column to see whether the synchronization event passed or failed.

To update the log, click **Refresh log data**.

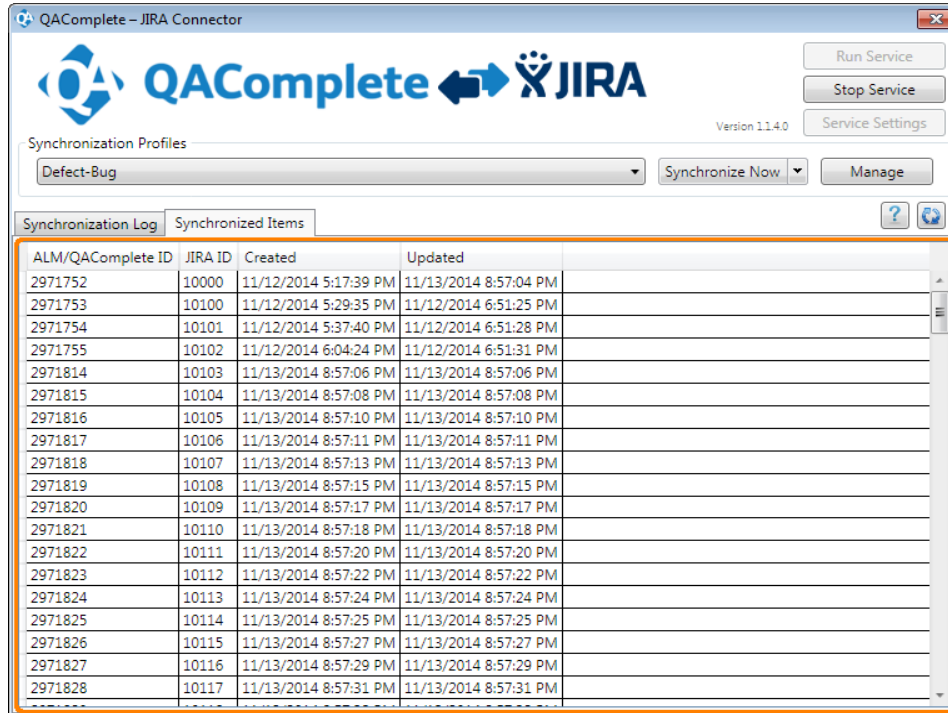
To view synchronization actions performed during a specific time period, set the **From** and **To** dates. To remove the filter, click **Clear filter**.

To view information only for the most recent synchronization action, select **View last synchronization only**.

To export the log to review and save it outside of the QAComplete - JIRA Connector Configuration Tool:

- Click **Export Log**.
- Specify the path and file name for the exported log.
- The service will export the log data to a .log file in the specified folder.

To view information on synchronized items, switch to the **Synchronized Items** tabbed page.



The screenshot shows the QAComplete - JIRA Connector interface. At the top, there are buttons for 'Run Service', 'Stop Service', and 'Service Settings'. Below that, a dropdown menu shows 'Defect-Bug' and a 'Synchronize Now' button. The main area has two tabs: 'Synchronization Log' and 'Synchronized Items'. The 'Synchronized Items' tab is active, displaying a table with the following data:

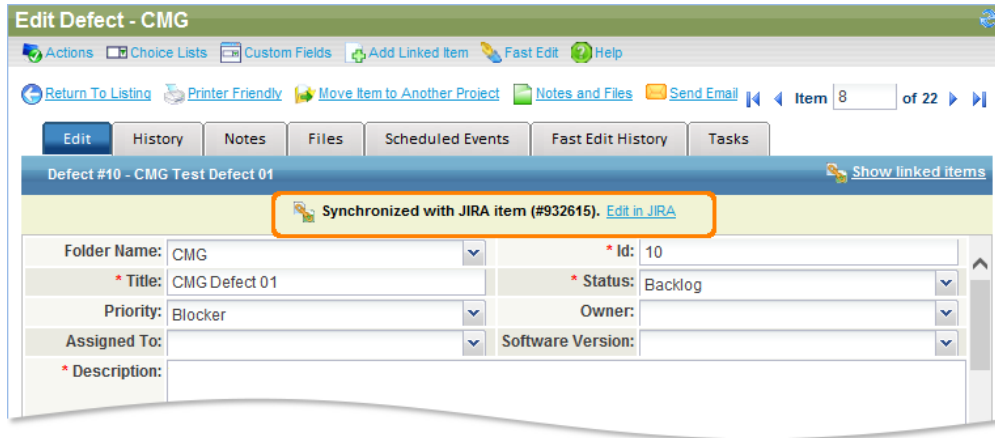
| ALM/QAComplete ID | JIRA ID | Created | Updated |
|-------------------|---------|-----------------------|-----------------------|
| 2971752 | 10000 | 11/12/2014 5:17:39 PM | 11/13/2014 8:57:04 PM |
| 2971753 | 10100 | 11/12/2014 5:29:35 PM | 11/12/2014 6:51:25 PM |
| 2971754 | 10101 | 11/12/2014 5:37:40 PM | 11/12/2014 6:51:28 PM |
| 2971755 | 10102 | 11/12/2014 6:04:24 PM | 11/12/2014 6:51:31 PM |
| 2971814 | 10103 | 11/13/2014 8:57:06 PM | 11/13/2014 8:57:06 PM |
| 2971815 | 10104 | 11/13/2014 8:57:08 PM | 11/13/2014 8:57:08 PM |
| 2971816 | 10105 | 11/13/2014 8:57:10 PM | 11/13/2014 8:57:10 PM |
| 2971817 | 10106 | 11/13/2014 8:57:11 PM | 11/13/2014 8:57:11 PM |
| 2971818 | 10107 | 11/13/2014 8:57:13 PM | 11/13/2014 8:57:13 PM |
| 2971819 | 10108 | 11/13/2014 8:57:15 PM | 11/13/2014 8:57:15 PM |
| 2971820 | 10109 | 11/13/2014 8:57:17 PM | 11/13/2014 8:57:17 PM |
| 2971821 | 10110 | 11/13/2014 8:57:18 PM | 11/13/2014 8:57:18 PM |
| 2971822 | 10111 | 11/13/2014 8:57:20 PM | 11/13/2014 8:57:20 PM |
| 2971823 | 10112 | 11/13/2014 8:57:22 PM | 11/13/2014 8:57:22 PM |
| 2971824 | 10113 | 11/13/2014 8:57:24 PM | 11/13/2014 8:57:24 PM |
| 2971825 | 10114 | 11/13/2014 8:57:25 PM | 11/13/2014 8:57:25 PM |
| 2971826 | 10115 | 11/13/2014 8:57:27 PM | 11/13/2014 8:57:27 PM |
| 2971827 | 10116 | 11/13/2014 8:57:29 PM | 11/13/2014 8:57:29 PM |
| 2971828 | 10117 | 11/13/2014 8:57:31 PM | 11/13/2014 8:57:31 PM |

The page lists all QAComplete items synchronized with appropriate JIRA issues by ID.

Working With Synchronized Items

In QAComplete, items synchronized with JIRA issues are marked with the *Synchronized with* note and a link to open the item in JIRA.

You configure the link in the synchronization tool (See [Configuring URL Pattern](#)).



Defect #10 - CMG Test Defect 01

Synchronized with JIRA item (#932615). [Edit in JIRA](#)

| | | | |
|----------------|---------------|-------------------|---------|
| Folder Name: | CMG | * Id: | 10 |
| * Title: | CMG Defect 01 | * Status: | Backlog |
| Priority: | Blocker | Owner: | |
| Assigned To: | | Software Version: | |
| * Description: | | | |

Important: The link is available only if the initial synchronization between JIRA and QAComplete was completed successfully. (Examine the [log](#) to review the synchronization status.)

Click the link to open the item directly in JIRA.