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Contour 2.9.7 JIRA Connector 2.0

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1 Welcome to Contour

CONTOUR 2.9.7

JIRA Connector 2.0 Setup Guide

OVERVIEW

Welcome to Contour.

Jama Contour is designed to provide you and your entire team a centralized, light-weight application for managing requirements. This installation guide is written to help you get the JIRA Connector installed in either an evaluation or production environments.

Installation is relatively straightforward, but we are happy to remotely install and configure Contour for you if you'd prefer. If you run into trouble, give us a call (Technical Support) at 1-800-679-3058 or support@jamasoftware.com Thanks for choosing Contour. Enjoy the freedom of collaborative requirements management.

[503.922.1058](tel:503.922.1058) | success@jamasoftware.com | www.jamasoftware.com

2 JIRA Connector

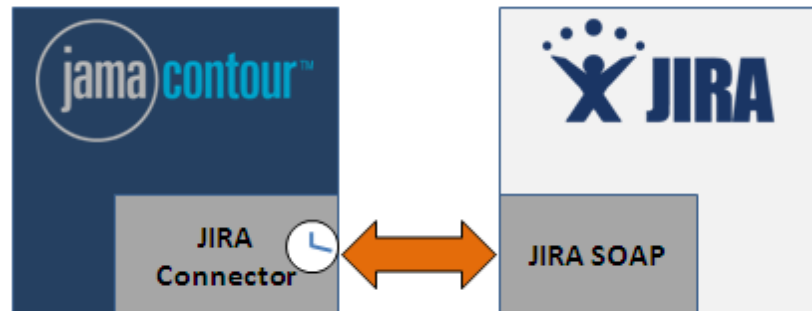


The JIRA Connector helps bridge the gap between Product Management and development. Create items in Contour, and the connector will keep JIRA up-to-date!

2.1 Getting Started

Overview

The JIRA Connector is a behind the scenes job that runs based on a schedule defined by the administrator. When the job runs it looks for items in Contour that match the synchronization criteria specified by the administrator and for each item either creates a new associated item in JIRA or Contour or synchronizes an existing one based on previous synchronizations.



Reasons for the JIRA Connector

Here are some common examples of how the JIRA Connector can be used.

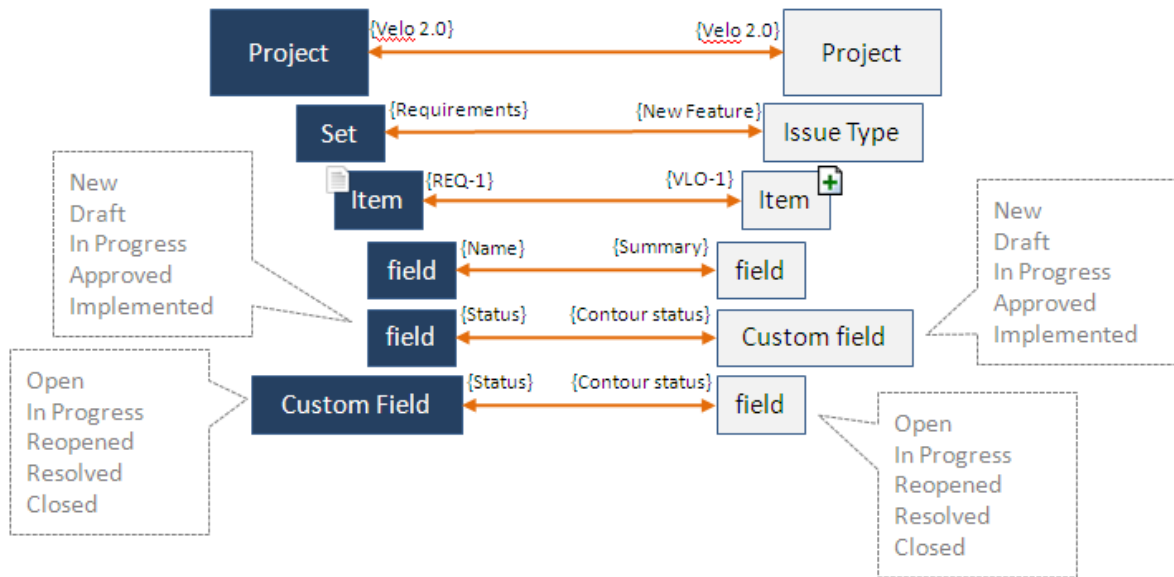
- Defect to Defect** Defects can be created in Contour which will then create defects in JIRA. The defect's life-cycle can subsequently be managed in JIRA by the development team. Once complete, the defect in Contour is updated so the Business Analyst or QA knows the defect is complete and ready for testing or documentation.
- Requirement to Feature** Business Analysts use Contour to gather, collaborate, and define requirements for a product. Once a requirement is ready for implementation the BA can set the requirements to a status of "Approved for development". The JIRA connector can be configured to only synchronize requirements in Contour that match this status. Once a requirement is synchronized and an associated Feature in JIRA is created, the development team can prioritize and schedule the JIRA Feature while knowing the BA is aware of the progress.

How long will it take to setup?

45 Minutes for the initial configuration. Each additional Project or Set you'd like to synchronize would only take about 5-10 minutes.

How customizable is the synchronization?

Very. The diagram below provides an example of a single synchronization definition. As you can see individual fields on a Contour item are mapped to individual fields in a JIRA Item Type. For each field you can define which direction to synchronize. For more details on the mapping rules see the [field mapping section](#).



2.2 System Setup

In order for the synchronization to work there are some important pre-configuration steps.

This document assumes the following versions or greater are installed.

Supported Versions

- Contour 2.7 and above
- JIRA version v3.1 and above

2.2.1 Contour Pre-Configuration

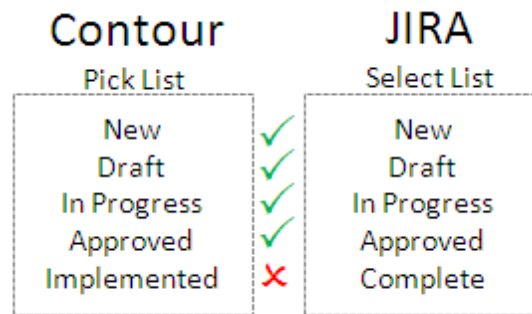
This section will help guide you through the necessary pre-configurations.

License

The JIRA Connector requires an additional license to be activated. Please contact sales@jamasoftware.com to request a trial license. The JIRA Connector is already activated for evaluations.

Pick Lists

"Pick Lists" in Contour and "Select Lists" in JIRA are synchronized based on string equality. In the diagram below a Contour Pick List and a JIRA Select List contains the same values except for Implemented vs Complete. During synchronization these values will not update in either direction. The synchronization job will log a warning message in the log file when it fails to match a value.



Field Mapping recommendations

There are several fields in JIRA that are useful to track in Contour. In order to synchronize with these fields they need to exist in Contour. Here are our recommended fields.

Components: JIRA uses Components as a multi-select Pick List. In Contour, create a custom field multi select Pick List with values matching the components in JIRA.

JIRA Status: The JIRA status field is specific to JIRA and is used as part of JIRA's workflow process. The status values cannot be updated from Contour and probably shouldn't. However, it is useful to have the status of the JIRA item reflected in Contour for information purposes.

In Contour, add a new custom multi-select field called "JIRA Status" with a Pick List whose values match the status values in Contour. (

Assigned to: This is another example where it makes sense to have each system track its own field. For this we recommend creating a "JIRA Assigned To" field in Contour that is of type String (or can be a user type if user names are the same in both Contour and JIRA). Then in JIRA create a "Contour Assigned To".

Release: Releases in Contour and Versions in JIRA can also be synchronized. As long as the names match exactly they can be synchronized. The values can be modified in either system.

2.2.2 JIRA Pre-Configuration

Before the JIRA Connector can be configured in Contour or activated it will be necessary to do some pre-configuration in JIRA.

Enable JIRA SOAP

The JIRA Soap services must be enabled to enable the JIRA Connector in Contour to communicate with JIRA. By default, the JIRA SOAP services are disabled.

1. From within JIRA navigate to administration - General Configuration.
2. Then enable the "Accept remote API calls" module.

Enable Wiki Render Macro

Contour uses rich text (HTML) for comments and item descriptions. In order for this information to render correctly in JIRA the Wiki Renderer needs to be enabled.

1. From within JIRA navigate to Administration - Plugins.
2. Select "Wiki Renderer Macros Plugin".
3. Enable Plugin.

Enable HTML Macro

Now that the Wiki plugin has been enabled the HTML Macro should be also be applied to fields that will be synchronized with rich text fields in Contour. Typically this is description and comments.

1. From within JIRA navigate to Administration - Custom Fields - Default field configuration.
2. Select "Renderers" on the JIRA field, such as Description.
3. Set the "Active Renderer" to "Wiki Style Renderer".
4. Click update

Field Mapping recommendations

There are several fields in Contour that are useful to track in JIRA. In order to synchronize with these fields they need to exist in JIRA. Here are our recommended fields.

Contour Status - The Status field in JIRA is managed by the default workflow steps and cannot be modified by the status in Contour. If you'd like to display the status of the Contour item in JIRA it is necessary to create a custom field in JIRA that matches the values of the Status' in Contour. This will enable you to map the Status Pick List in Contour to the Contour Status Select List in JIRA.

Contour Assigned To - In the Contour Pre-Configuration if we wanted to track who each item was assigned to we created a "JIRA Assigned To" in Contour. Now in JIRA we create a "Contour Assigned To". With these custom fields in place we can now define a mapping structure that will display on both system who the associated item is assigned to without disrupting each systems workflow.

Note: It is recommended to create Components and Releases for the target project in JIRA that are named exactly the same as in Contour for synchronizing release and component fields between Contour and JIRA.

2.3 Synchronization Configuration

This section will walk you through configuring the JIRA Connect in Contour.

The basic steps are:

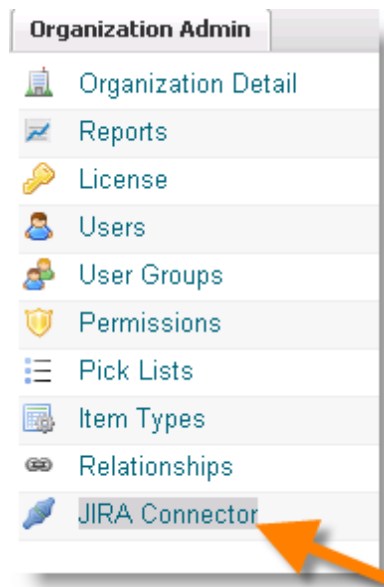
1. [Creating a Connection](#) - This is the connection between JIRA and Contour.
2. [Synchronizing a Project](#) - Multiple projects can be synchronized.
3. [Synchronizing a Set](#) - For each Project multiple Set's can be synchronized.
4. [Mapping Set Fields](#) - For each Set the individual fields can be mapped with rules defined for each.

2.3.1 Creating a Connection

The connection points Contour to the JIRA Soap so the synchronization job can communicate with JIRA.

1. Select JIRA Connector

Note: If you don't see this link you will need to install the JIRA Connector license. Contact sales@jamasoftware.com for a trial.



2. Click on the Add JIRA Connection button.

JIRA URL	This is the URL used to access your JIRA instance.
JIRA User	The JIRA user is any user in JIRA that belongs to the "jira-administrator" group.
JIRA Password	The password for the specified JIRA user
Contour User	This is the user in Contour that runs the synchronization job. The user must have organization admin permissions or the job will not run and will be removed from the schedule with appropriate message in log file.
Synchronization schedule	<p>There are two options for defining the schedule.</p> <ol style="list-style-type: none"> Simple Scheduling is an interval defined in minutes. We recommend timing to be as infrequent as seems feasible. <ul style="list-style-type: none"> 60 - 1 hour is good if you need frequent updates. 720 - This is a 12 hour interval which ensures the synchronization happens at least daily. (The advanced options below allow for more control on the timing) Advanced Scheduling for more advanced scheduling techniques you can use a Cron string to specify complex scheduling.

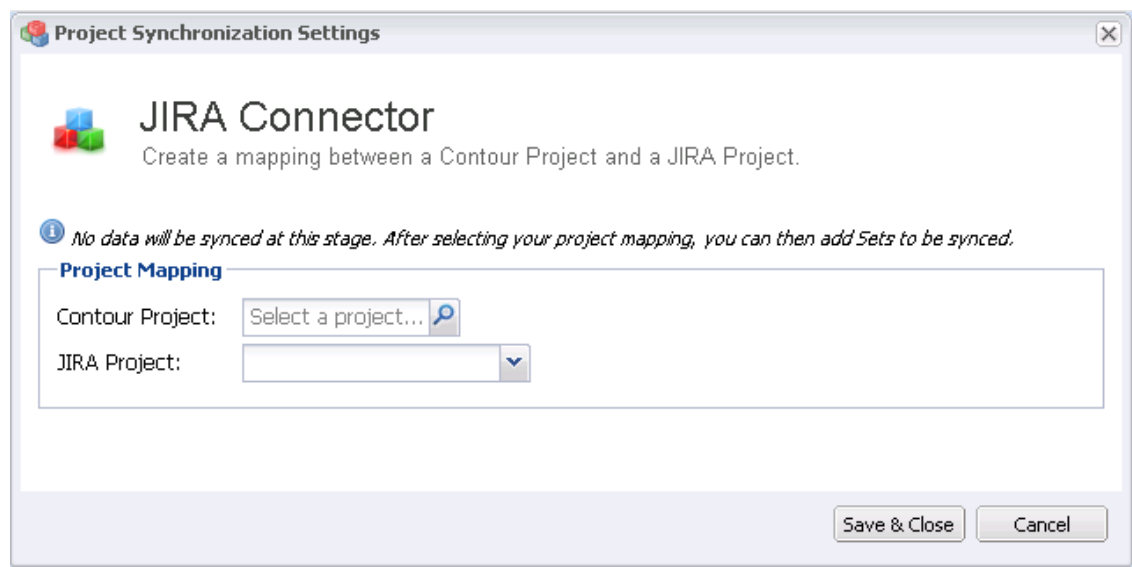
	<p>Example Cron Strings</p> <ul style="list-style-type: none">• "0 0 12 * * ?" Fire at 12pm (noon) every day• "0 0/5 14 * * ?" Fire every 5 minutes starting at 2pm and ending at 2:55pm, every day• "0 15 10 ? * 6L" Fire at 10:15am on the last Friday of every month
Enable synchronization	Be sure this is checked for the synchronization job to be activated.
Test Connection	Click this to test your connections settings

3. Ensure that the Synchronization enabled for this organization is selected. This provides the ability to turn the connector on and off.

2.3.2 Synchronizing a Project

Once a connection has been established the option to synchronize a project will be available.

1. Click on the Add Project button.



2. Select the Contour Project and the corresponding JIRA Project.
3. Click the Save & Close button.

Synchronized Projects			
			Add Project
Contour Project	JIRA Project	Sync	Actions
Enterprise Requirements	Demo		Stop Sync Delete

2.3.3 Synchronizing a Set

Once the projects have been selected, the groups to be synchronized must be setup. In Contour this is a Set, in JIRA a Type.

1. Click on the row that contains the target project.

Synchronized Projects			
			Add Project
Contour Project	JIRA Project	Sync	Actions
Enterprise Requirements	Demo		Stop Sync Delete

2. Click on the Add Set button. If the Synchronized Sets exist then click on the Edit Set link available in the target row.

Synchronized Sets for: <i>Enterprise Requirements</i>			
			Add Set
JIRA Name	Contour Name	Sync	Actions
New Feature	Idea		Edit Set Edit Field Mappings Remove Set

3. Complete Set Synchronization Settings.

Set Synchronization Settings

JIRA Connector
Create a mapping between a Contour Set and a JIRA Type.

Map Contour Set to JIRA Type

Contour Set: Defect

JIRA Type: Bug

Synchronize Comments: Bi-directional

Items Synchronized from Contour

Do not synchronize items from Contour to JIRA

Synchronize all items from this Contour Set

Synchronize only items that match this query: [?](#)

Items Synchronized from JIRA

Do not synchronize items from JIRA to Contour

Synchronize items that match this JIRA filter:

Bugs

Synchronization enabled for this set

Save & Close Cancel

4. Map Contour Set to JIRA Type.
5. Configure the Comment Synchronization. The comments in Contour and JIRA for the item being synchronized can be included.
 - **None** - Comments will not be synchronized.
 - **One Way: From Contour** - Only comments added in Contour will be sent and logged in JIRA.
 - **One Way: Into Contour** - Only comments added in JIRA will be sent and logged in Contour.
 - **Bi-directional** - Comments added to either Contour or JIRA will be sent and logged in both systems.
6. Configure the Items Synchronized from Contour. Use these settings to instruct Contour to

push items initial created in Contour to JIRA.

- **Do not synchronize items from Contour to JIRA** - No Items in Contour will be created in JIRA or synchronized.
- **Synchronize all items from this Contour Set** - This will ensure that all items contained within the Set are synchronized with JIRA.
- **Synchronize only items that match this query** - When only certain items need to be synchronized then the Lucene search syntax can be used to create a query that only synchronizes certain items. More information on how to use Lucene syntax in Contour can be found in the User Guide under Search.

Example queries:

- status:"Approved"
 - flag1:true
 - status:"Approved" AND flag1:true
7. Configure Items Synchronized from JIRA for pulling items initially created in JIRA into Contour.
 - Do not synchronize items from JIRA to Contour -
 - Synchronize items that match this JIRA filter - Select the appropriate JIRA filter.

Note: Filters in JIRA must marked as a favorite by the JIRA user entered in connector setup. When JIRA items of multiple issue types match the filter criteria Contour will only import the issue type as defined in set mapping.

8. Check Enable synchronization for this Set to turn on/off the sync.
9. Click the Save & Close button.

Note: At this point even though the Set is synchronized, only the basic default field mappings have been applied.

2.3.4 Mapping Set Fields

Once the Contour Set and JIRA Type have been configured the individual field mapping between the two must be configured.

1. Click on the Edit Field Mappings link within the target Set to Type mapping row. If the list is not available then click on the target Contour to Jira project row in the Synchronized Projects section.

Contour Field	JIRA Field	Sync Mode	Conflict Resolution	Clear Mapping
ID				Clear
Title	Summary	Bi-directional	Use Contour	Clear
Description	Description	Bi-directional	Use JIRA	Clear
Processed By				Clear
Status	Contour Status	One Way: From		Clear
JIRA Key	Key	One Way: Into c		Clear
JIRA Url	Jira URL	One Way: Into c		Clear
Last Updated in JIRA	Updated	One Way: Into c		Clear
Contour Item URL	Contour Item Uf	One Way: From		Clear

Save & Close Cancel

2. Select the appropriate JIRA Field from the JIRA Fields pick list to map to the Contour Field listed on the far left.

Note: Contour does not distinguish or validate between types of fields. It's important to know when mapping the fields what type of field is being mapped.

3. Select the Sync Mode for the mapped fields.
 - **None** - Selecting "None" or not selecting anything at all (clear) will result in this field being skipped during the synchronization.
 - **One Way: From Contour** - Selecting this option will only push changes made in Contour to the field in JIRA. Any changes to the corresponding JIRA field will result in the value being changed back to reflect what's in Contour.
 - **One Way: Into Contour** - Selecting this option will only pull changes made in JIRA into the corresponding item in Contour. Any changes made to the item in Contour will be changed back to reflect what's in JIRA.

Note: If this option is selected we recommend making the Contour field read-only to avoid confusion.

- **Bi-directional** - Selecting this option will synchronize changes made in either system with the other. If a change is made to both systems the Job will rely on the Conflict Resolution to determine what change to make.

4. Select the Conflict Resolution for each of the mapped fields that have a Sync Mode of Bi-directional. This option it is necessary to specify which system's data will be used when an Item has been updated in both systems between syncs.
 - **Use Contour** - Contour's data will always be used when changes have been made in both systems between syncs.
 - **Use JIRA** - JIRA's data will always be used when changes have been made in both systems between syncs.
5. Click the Save & Close button.

Default Mapped Fields

When a Set is synchronized, Contour creates several system fields that are necessary for the synchronization. Because these fields are necessary and are predefined they appear in the form as read only.

JIRA Key	When the synchronization first runs or an item is added or included as part of the query, the job in Contour will create a new item in JIRA. In order to continually synchronize with the same item in JIRA the corresponding JIRA key is stored and displayed for reference in the Contour item.
JIRA URL	Contour will generate a JIRA URL to provide users in Contour a direct link to the corresponding JIRA item.
Last Updated in JIRA	The synchronization uses the last updated date to determine possible conflicts and necessary changes. This is also useful from the user perspective to know when the last synchronization took place.

2.4 Working with Synchronized Items

Congratulations! At this point you have configured both Contour and JIRA and the synchronization mappings are all in place....now what?

At this point users can create and edit items in Contour an watch them magically appear in JIRA. Users in JIRA can now work on the JIRA item adding comments with the confidence that the users in Contour will see the changes.

If you do run into any issues check our FAQ's or contact us directly.

www.jamasoftware.com/support

2.5 FAQ

❑ I don't even see the "JIRA Connector" in the Administration view?

Q: I don't see the JIRA Connector.

A: The JIRA Connector is only available in Contour 2.7 and above and requires an additional license to be activated. Please contact sales@jamasoftware.com to request a trial or to purchase.

❑ I added items in JIRA/Contour why are they not in Contour/JIRA?

Q: I went to check the other system and my new Items were not there.

A: Check the JIRA Connector Set settings to see that both synchronization directions are configured and that your new Items conform to either the search query or filter that may have been applied. Next check that the sync is enabled. Finally look to the sync schedule, there is a chance that the sync has not run since your new Items were entered. If you need them immediately you can click on the Synchronize now button from the main JIRA Connector tab.

❑ What happens if I modify my field mappings?

Q: I don't like my field mappings, can I change them?

A: Once a synchronization has been configured and is running there are some considerations when modifying the settings especially around field mappings. There are three scenarios where field mappings could be modified. Changing any mappings will trigger a complete resynchronization to ensure changes are reflected.

- **Remove or clear a mapping:** If you later alter a mapping from any field in Contour to point to a different field in JIRA the next synchronization will update based on the new settings.
- **Modify a direction of a mapping:** The new settings will be used for the next synchronization. Because the fields had been mapped before, they should be synchronized. If a changes happens the synchronization engine will synch them based on the new settings.
- **Modify which fields a mapping points to:** This is the most drastic change as it is mostly likely to result in a situation where the fields don't match. The synchronization engine during its next run will now synchronize the fields based on its current configuration ignoring the previous configuration. When finished, all fields will be synchronized based on the new configuration.

❑ What happens if I deactivate a synchronization?

Q: What if I stop the sync?

A: Nothing will change in the normal process of working with items in either system. Contour will maintain the synchronization values for each item and its associated item in JIRA. This is useful if the synchronization is reactivated as it will simply pick up where it left off.

❑ How do I remove a Set or Project synchronization completely?

Q: How do I remove a sync?

A: Removing the Set or Project synchronization completely is similar to simply deactivating the synchronization except that in order to reactivate it will be necessary to recreate the configuration.

▣ **What happens if the item in Contour is removed that is being synchronized?**

Q: What happens when Contour Items are deleted?

A: Nothing. Because the synchronization is initiated from Contour, an item removed in Contour will no longer be included. The JIRA Item is now simply disconnected from the synchronization but will not be removed.

▣ **What happens if the item in JIRA is removed that is being synchronized?**

Q: What happens when JIRA Items are deleted?

A: During the synchronization Contour will attempt to find the associated item in Contour based on the information stored in the Contour item. If no associated item is found the information will be logged and the synchronization will skip that item.

▣ **How do I troubleshoot an issue?**

Q: Something is wrong how do I troubleshoot the problem?

A: Check the connection

1. Log in as a user with Administration rights
2. Click on the JIRA Connector link
3. Edit the connection settings
4. Run the "Test Connection"
5. If this works run the synchronization and then check the log file.

Check the Log File

Events that occur during JIRA Connector synchronization job executions are written to a separate log file. The log file is named contour-jirasync.log and can be found under the <TOMCAT_HOME>/logs/contour directory.

Contact support

support@jamasoftware.com