Jira Connector Option - v18

The optional module "Jira Connector" allows to import projects from Atlassian's Jira into "ONEPOINT Projects Enterprise Server"-edition to automatically synchronize changes entered on Jira-side.

New tools or tool-groups which get enabled by this module:

- The tool "External Apps" will appear inside the System Settings in the tool group "ADMINISTRATE" to allow establishing the connection to the Jira-server (Can only be accessed by users with the access level "System")

Contents

1. Prerequirements

1.1. For "Enterprise Server"-installations

- Both, the "ONEPOINT Projects" and Atlassian's "Jira" web-applications must be hosted by separate Tomcat-installations (Libraries required by Jira for Tomcat are known to lead to conflicts)
- If you need to connect to Jira using a secure "HTTPS"-connection or using an additional web-server in front of "Tomcat", you might need to alter the configuration like described in the last chapter at the end of this document
- Make sure that the port the "ONEPOINT Projects" web-application will use to access your Jira-installation does not get blocked by a firewall or similar

1.2. For your Jira-server

- Your local Jira installation must be upgraded to version 6.0 or later

- The user-account in Jira which will be used for the connection of ONEPOINT Projects and Jira will need to be part of the following groups to gain the required permissions:
    1. "jira-administrators": Required to be allowed to retrieve system-configuration parameters
    2. "jira-developers": Simplifies getting Jira users from Jira projects.
    3. "jira-users": Your user-account will most likely already be part of this group

1.3. Make sure that Jira will accept remote API calls

To allow the "ONEPOINT Projects"-server to connect, Jira must be configured to listen to "remote API calls":

1. Sign on to your Jira-server with a user-account that owns administrative permissions
2. Click "Administration" in the upper right corner
3. From the pull-down menu "System", select the first item "General Configuration"
4. In the section "Options", you will find the setting "Accept remote API calls"

Please make sure that this setting is enabled. To alter the setting, click the button "Edit Configuration" below

1.4. Plugin Installation

To allow real-time synchronization of changes made in Jira, a plugin must be installed on Jira-side.

1.4.1. Installation through Atlassian's Marketplace

The easiest way to install our "Jira Connector"-plugin is to access Atlassian's Marketplace for Jira and installing the "Project & Portfolio Management for Jira"-add-on.

1.4.2. Manual Upload of the Jira-plugin

1. Sign on to your Jira-server with a user-account that owns administrative permissions
2. Navigate to the "Plugin/Add-on"-administration
3. If you do not yet see a button labeled "Upload Plugin" or "Upload add-on" you might need to select the tab "Install" or click "Manage Add-ons"
4. Now click the button labeled "Upload Plugin" or "Upload add-on"
5. Click the "Browse"-button and select the file "Onepoint-Project-Connector-3.0.1.jar" which can be found in the folder "ira_plugin" of our software-distributions

1.5. Enable the connection in "External Apps"

1. Sign on using your "Administrator" user-account to your "Enterprise Server"-installation
2. Click the tool-shaped button in the upper right corner to open the system settings of ONEPOINT Projects
3. Select the tool "External Apps" inside the tool-group "ADMINISTRATE"
4. Click the "Enable Jira"-checkbox

> **No tool "External Apps"?**
> If the tool "External Apps" is not visible then the "Jira Connector Option" is not activated for your server or your account.

Afterwards all fields in the tool "External Apps" will allow you to enter the connection-parameters:

Instance	Since release 16.0 it is possible to connect ONEPOINT Projects to multiple Jira instances. Each Jira instance is configurable separately inside "External Apps" and can be select in the drop-down menu "Instance" afterwards. When linking a ONEPOINT project to a Jira project, all projects from both instance are selectable afterwards.
Description	A description of the Jira instance can be entered inside the corresponding field.
Jira URL	The URL to your Jira-server, for example "https://my.jira.server/jira", without "/secure/Dashboard.jspa" or similar.
Jira Username	The Jira-account's user-name that will be used to retrieve data from Jira.
Jira Password	The password for the user-account entered above.
Synchronize Jira worklogs (timetracking)	This checkbox enables the automatic creation of work records according to logged work in Jira for all linked Jira on ONEPOINT-side.
Enable Jira two-way synchronization	This checkbox is enabled by default. In case you only want to create projects with kind "Jira", it is possible to deactivate the two-way-synchronization by disabling this checkbox.

Show issue number in activity lists	If you would like that the Jira keys are visible inside the activity lists in ONEPOINT Projects, enable this checkbox. Afterwards the corresponding Jira key of the issue is visible inside the tab "Planning/Activity List" and the issue can be accessed through this key.
Only import tasks into planning	If enabled, this makes the import-process only import Jira's issues-types "Task", "Sub-Task" or "Technical Task" into a project of kind "Jira" on ONEPOINT-side.
Public Activity Levels for Jira	Depending on the entered outline level, the synchronized work packages of projects with kind "Jira" are public by default. The outline level can be set to "None", "All" or to a specific level (1st Level etc.).
Synchronization must not delete objects in Jira	If this checkbox is enabled, deleting work packages of projects which are linked to Jira, does not have any impact of the issue on Jira side.
Use Wiki Renderer for Jira fields	The formatting of the following default fields can now also be synchronized to ONEPOINT or Jira: "Issue: Description", "Issue: Comment", "Log Work: Description" and "Project: Description". More details can be found in chapter 2.1.4.1.
Jira event poll interval (seconds)	This is the interval which ONEPOINT Projects uses to ask Jira for changes. 30 seconds is the recommended value from ONEPOINT Projects.
Instance full sync schedule (UTC)	This field can be used for configuring the daily sync. If this field is left empty, the "<jira-trigger>" from the configuration file or the default setting at 8am every day is used.
Last full sync start / finish	These fields display the duration of the last full sync.

Establishing the connection between onepoint PROJECTS and JIRA
If the parameters are fine and the connection can be established, the "Status Mappings"-, "Issue Type Mappings"- and "Priority Mappings"-tables will get filled automatically with the values of your corresponding Jira-instance. Afterwards you can choose the corresponding values on ONEPOINT-side.

If the connection does not get updated although it should be possible, please check the logfiles "atlassian-jira.log" of your Jira-server for errors or contact our support-team.

JIRA Worklog-synchronization
If you need your tracked efforts to be synchronized from Jira to "ONEPOINT Projects", please enable the checkbox "Synchronize Jira worklogs (timetracking)" now.

2. "Jira linked projects"

First of all, we would like to provide an overview of how the integration works. There are two different types of Jira linked projects, aggegrated (kind Jira) and executed (kind Traditional) projects. In the following comparison chart you will find a details about these two projects:

	Kind Jira Project (Aggregated)	Kind Traditional Project (Executed)
Properties	• one-way-synchronization from Jira to ONEPOINT • planning and execution in Jira, controlling in ONEPOINT	• two-way-synchronization • controlling in ONEPOINT and execution in Jira, planning on both sides depending on the department (project manager will most likely work in ONEPOINT whereas the IT and technical deparments will work in Jira)
Creation	Create a ONEPOINT project with kind "Jira" and link it to a corresponding Jira project or fix version.	Create a ONEPOINT project with kind "Traditional" and link it to a corresponding Jira project or fix version.
Workflow	The issues will be created with or without fix versions in Jira. When the ONEPOINT project gets linked to the Jira project, all issues will be synchronized immediately to the planning in ONEPOINT Projects. The issues are sorted below their fix versions and all issues without fix version appear at the end of the planning. Tasks, like tracking work, creating comments and attachments have to be done in Jira and will be synchronized to the "Planning"- and "Controlling"-tabs afterwards. In the tab "Controlling" the resources and costs can be controlled afterwards. Additionally the tab "RESOURCES/Utilization" is available which provides a more detailed overview regarding the resources.	In this type of project issues can either be created on ONEPOINT or Jira side. Usually these projects are planned and controlled in ONEPOINT by the corresponding project manager, but other departments or users work in Jira, therefore the execution happens on Jira side. When creating issues in Jira, they will be synchronized into the "Controlling"-tab in ONEPOINT Projects. Afterwards they can be converted into the "Planning"-tab with the button "Add ad-hoc-task to plan" which is visible in the button row below the planning when the project is edited. You are able to add work packages to the planning which will be synchronized to Jira after the next check-in. In conclusion, the planning of work packages is possible on both sides, so you can plan with whichever system you prefer. Creating comments and attachments is also possible on both sides, but please note that tracking work for issues is only possible on Jira side. These work logs will then be synchronized to the tab "MY WORK/Time and Costs" and into the properties of the corresponding issue. Again the project will be controlled on ONEPOINT side, the resources and costs can be controlled in the tab "Controlling" and "RESOURCES/Utilization".

A detailed description of both project types can be found in the next chapters.

2.1. Jira Mappings

2.1.1. Status Mappings

A customizable status mapping is available since release 15.0 in "External Apps". The default Jira statuses can be mapped to an ONEPOINT status and will be set for all synchronized work packages according to the mapping. Custom statuses can be mapped and synchronized as well.

The "Status"-field of your Jira-issue does not affect the planning itself, but if needed, it can always be monitored inside the tab "Controlling/Activity List" in the column "Status" or additionally inside the "Edit Ad Hoc Activity"-dialog for ad hoc work packages.

2.1.2. Issue Type Mappings

The first part of the functionality "Issue Type Mapping" has been implemented within release 15.0. Now, it is possible to map each of the issue types in Jira to either "Ad-hoc Task" or "Issue" in ONEPOINT's system settings in "ADMINISTRATE/External Apps". Synchronized issues will then be created as Tasks or Issues according to the mapping and their type in Jira. Please note that the issue type in Jira won't be affected by this behavior.

The functionality "Issue Type Mapping" has been extended within release 16.0. Now, the four issue types "Task", "Issue", "New Feature" and "Improvement" are available and all issues get synchronized from ONEPOINT to Jira and vice versa with the corresponding mapped issue type in the system settings. Each issue type has an own icon and is additionally visible inside the "Edit Activity"-dialog in the field "Type". Changes which have been made to the issue type in Jira will only be synchronized for ad hoc work packages to ONEPOINT Projects whereas changing the issue type in ONEPOINT is not possible at all. Issue Types are reportable as well by using the field "Activity.Sub Type".

2.1.3. Priority Mappings

A "Priority"-mapping has been implemented which allows to map the priorities from Jira ("Blocker","Major", etc.) with the ONEPOINT priorities inside the System Settings in "External Apps". Issues will be synchronized with the corresponding priority which has been set inside the System Settings afterwards, e.g. an issue with "Blocker" in Jira will be synchronized with the corresponding priority icon to ONEPOINT and vice versa. If Jira priorities match more than one ONEPOINT priority the highest priority inside the list in the System Settings will be used for the synchronization. If a priority in ONEPOINT is not set, the mapped value before or afterwards depending on the order inside the list will be used for the synchronization.

Priority Mappings

Jira Priority	Jira Description	ONEPOINT Priority
Blocker	Blocks development and/or testing work, production could not run.	☰ Critical
Critical	Crashes, loss of data, severe memory leak.	☰ High
Major	Major loss of function.	☰ Medium
Minor	Minor loss of function, or other problem where easy workaround is present.	☰ Low
Trivial	Cosmetic problem like misspelt words or misaligned text.	☰ Trivial

↑ ↓

2.1.4. Custom Field Mappings

A "Custom Field"-mapping has been implemented which allows to map ONEPOINT custom fields to JIRA custom fields in the System Settings in "External Apps". Additionally some default fields of ONEPOINT Projects can also be mapped to custom fields in Jira. The mapping table contains five columns:

- ONEPOINT Activity Field: This column shows the name of the custom field or the default field in ONEPOINT Projects.
- Sync Direction: In this column you are able to define if the fields should be synchronized in both direction, from ONEPOINT to Jira or from Jira to ONEPOINT. For some of the default fields the sync direction is pre-defined, that means these fields can only be synchronized from ONEPOINT to Jira.
- Active: By enabling or disabling this checkbox you can define which fields should be synchronized.
- JIRA Issue Field (JIRA Internal Field Name): This column shows the name of the custom field in Jira.
- JIRA Wiki Markdown: We also support the synchronization of wiki formats in both directions now. This point will be further described in chapter 2.1.4.1.

Currently the custom field types "Checkbox", "Choice", "Date", "Decimal", "Memo", "Number" and "Text" are supported. These fields must be mapped to the same field types in Jira, e.g. a "Date"-custom field needs to be mapped to a "Date"-field in Jira, otherwise the synchronization won't work. For some of these fields more constraints need to be considered:

- Custom fields with the type "Checkbox" in ONEPOINT needs to be mapped to a JIRA custom field with the type "Single Choice". Afterwards the values "Yes" and "No" must be defined as possible choices for this field in Jira.
- Custom fields with the type "Choice" in ONEPOINT needs to be mapped to a JIRA custom field with the type "Single Choice". It is required to define the same choice options as in ONEPOINT so that a successful synchronization is possible. If a choice option is available in ONEPOINT, but not in JIRA, the corresponding issue won't be synchronized.

Additionally, the following default fields from ONEPOINT Projects are supported and can be mapped to JIRA custom fields. Please note, that these fields can only be synchronized from ONEPOINT to Jira:

- Assigned Resources
- Created
- Expanded Assigned Resources
- Modified
- Plan Costs: All activated cost types of your ONEPOINT instance can be mapped to JIRA custom fields.
- Responsible Resource
- Start (start date of work packages)

If you make changes on custom fields in JIRA which are linked to work packages in ONEPOINT which are part of the planning, a blue icon gets shown in the properties of the work packages in ONEPOINT. Similar to the "Active Assignment"- and "Active Title/Description"-features you can take over the new value from JIRA to planning in ONEPOINT or you can reset the custom fields to the original planned values. After checking-in the project plan, JIRA as well as ONEPOINT Projects should contain the same values.

2.1.4.1. Synchronization of markdown formatting

The formatting of the following default fields can now also be synchronized to ONEPOINT or Jira: "Issue: Description", "Issue: Comment", "Log Work: Description" and "Project: Description". That means if these fields are formatted with bold, italic etc. in JIRA or ONEPOINT, they will also be displayed with these formats in the second system. Additionally, it is also possible to enable the checkbox "JIRA Wiki Format" in the "Custom Field Mappings"-section for custom types with the type "Memo". Afterwards also the format of these fields will be synchronized depending on the sync direction. Please note, that currently only the supported ONEPOINT formats (headings, bold, italic, ordered list, unordered list, link and quote) are supported to be synchronized correctly.

2.2. Projects of kind "Jira"

Projects with kind "Jira" are read-only in ONEPOINT Projects. The planning-hierarchy of projects of kind "Jira" only consists of the activity types "Sprint" and "Task". Such projects do not allow changes inside the planning on "ONEPOINT Projects"-side and get directly imported from your Jira-server.

The transferred data gets translated in the following way:

Jira	ONEPOINT Projects
Fix Version	**Sprint** (Jira's release-date gets translated to Sprint's "Finish"-date)
Issue (For example Bug, New Feature, Task, Subtask Improvement, Epic, Story)	**Task** (At least 2nd outline-level, always has a parent-sprint which gets chosen according to the latest fix version entered for the issue in Jira)
Original Estimate/Estimated	**"Base"-effort**
Remaining Estimate/Remaining	**"Open"-effort** (Requires Jira-worklog synchronization and "Allow contributor estimations" both enabled)
Time Spent/Logged	**"Actual"-effort** (Requires Jira-worklog synchronization enabled)

2.2.1. To create a project of kind "Jira"

1. Select the tool-group "PROJECTS" and select a portfolio for which your user-account owns at least "Manager"-permissions
2. Click the button "New Project" (Will open the "Properties"-form of the new project)
3. Select "Jira" for the chooser "Kind"
4. Enter a name for your project
5. Click the button on the right side of the "Link to Jira Project"-chooser. This will open a subdialog allowing to choose a remote Jira-project or version from which tasks and versions should get imported
6. After the project or version on Jira-side was chosen, confirm the subdialog "Jira Project or Version" with "OK"
7. Next scroll down a bit inside the "Properties"-form to the section "Constraints" and enable or disable "Allow contributor estimations" as required

8. After confirming the project-creation with the button "Save" on the upper right side of the form the planning will get retrieved from Jira

> **Setting "Allow Contributor Estimations" for step 7 above**
> If you are using Jira-worklog-synchronization, having "Synchronize Jira worklogs (time-tracking)" enabled in the tool "External Apps" and you would like to monitor the tracked values in ONEPOINT Projects, please make sure to enable the setting "Allow contributor estimations" for the project, otherwise you are not able to monitor the actual and completed values in ONEPOINT Projects.

2.2.2. Sort-order of "Sprints" and "Tasks"

These are the rules for the sort-order of Sprints and Tasks in the planning and controlling shown inside the tool "PROJECTS":

- Tasks will always first be sorted according their "Importance", starting with highest importance and then descending. All tasks with the same priority will be sorted alphabetically by their names afterwards.
- Sprints will always be shown in the same order like you would see them in Jira or Greenhopper's planning-views, except versions without a release-date - These will always be shown at the end of the "Activity List" of the tool "Planning".

2.2.3. Start- and finish-dates of "Sprints"

The activity-type "Sprint" that is used to describe Jira's versions will always have a start- and finish-date. Since neither ONEPOINT's nor Jira's projects will always have a release-date, some rules are needed:

- The first start-date:
    1. Will be the taken from the project's tab "Properties" in the tool "PROJECTS"
    2. If this start-date cannot be applied (If Jira's release-date is earlier than the project's start-date in the tab "Properties"), then use a fictive ten-day duration until the start-date was corrected.

- All other start-dates:
    1. if a new Sprint's finish-date is not identical to the previous Sprint's one, then use the previous Sprint's finish-date as start-date for the new one
    2. If the previous Sprint's finish-date is identical, then make both Sprints run parallel (Apply identical start- and finish-dates)

- If a Jira-version does not have a release-date:
    1. Inherit the project's finish-date from the project's tab "Properties" in the tool "PROJECTS"
    2. Inherit the finish-date of the parent Sprint (For child-versions, when using Greenhopper)

- If a child-version's release-date was defined to be later that the parent's, then this date will override the parent-Sprint's finish-date

- If no finish-date was created for the project in the tab "Properties", then always use the start-date of the project as finish-date if no other is available (Will result in a one-day duration for all sprints if no finish- or release date was entered, neither on ONEPOINT- nor on Jira-side

> **Limited real-time synchronization for changes on JIRA's versions**
> Please note that changes on Jira's versions can in most situations not be synchronized in real-time because of technical limitations. Instead these changes will only be applied during the next daily synchronization-cycle. If needed, you can always force a full synchronization-cycle to update all changes by clicking the button "Synchronize" in the tool "External Apps", using the "Administrator"-login.

2.2.4. Public levels when using projects of kind "Jira", combined with the "Program Management Option"

The optional module "Program Management" allows to include projects of kind "Jira" as sub-projects in other plannings. If tasks or sprints of subprojects shall be shown in the master-planning, they will have to be marked as "Public". For projects of kind "Jira" we included a setting which allows to apply this setting automatically:

- Depending on the entered outline level, the synchronized work packages of projects with kind "Jira" are public by default when the chooser "Public Activity Levels for Jira" is activated in "External Apps" (Can only be accessed after signing on with the "Administrator"-account). The outline level can be set to "None", "All" or to a specific level (1st Level etc.).

2.3. Projects of kind "Traditional"

This latest way to connect ONEPOINT Projects to Jira is similar to a project of kind "Jira", but here any existing project of kind "Traditional" can be linked to a project or version stored in your Jira-server, allowing to maintain a planning in ONEPOINT while executing the project on Jira-side.

1. Select the tool-group "PROJECTS" and select a project of kind "Traditional" in the navigator for which your user-account owns at least "Manager"-permissions
2. Click the button on the right side of the "Link to Jira Project"-chooser. This will open a subdialog allowing to choose a remote Jira-project or version
3. After the project or version on Jira-side was chosen, confirm the subdialog "Jira Project or Version" with "OK"

When linking an existing project plan to a Jira project, all issues get immediately synchronized to Jira. If you are currently editing the planning, the last submitted plan version will be synchronized to Jira. All new changes will be synchronized to Jira after checking-in a new version of the project plan.

> Please note that after checking in a new version, all tasks or work packages in your planning will be mirrored to your Jira project and all existing issues in Jira will appear on ONEPOINT-side as "Issues" or "Tasks" depending on the entered values inside the "Issue Type Mapping", inside the tab "Controlling", too.

Further information on the "Jira Executed" project can be found in the following document:

http://www.onepoint-projects.com/resources/documents/onepoint-wp-jira-integration-en.pdf

2.3.1. Active Assignments

Since release 15.0 the new functionality "Active Assignments" is available. An active assignment is now shown when the assignee in Jira differs from ONEPOINT's planning, but it will not replace the planned assignment automatically. The described functionality works as follows:

An active assignment is auto-generated when a synchronized issue is reassigned in Jira. In this case an icon appears beside the "Resource"-column in the tab "Planning/Activity List". By clicking on this icon when the planning is in edit-mode a new dialog will be available in which you are able to accept the assignment from Jira or to reset it to the planned assignment. Due to this functionality, reassignments do not get lost in the re-planning cycle, but it is still easily possible to reset the assignment to the previously planned value.

A few special cases need to be considered when using this functionality:

• In case that the assigned resource from Jira does not exist on ONEPOINT side, the planned resource will be marked with an asterisk in ONEPOINT, but it won't be synchronized to Jira.

• Resources which were not part of the project team in ONEPOINT so far, will be automatically added to the project team as soon as an assignment is available for them on Jira side.

• If multiple resources are assigned to a work package in ONEPOINT, the issue in Jira remains unassigned. If a user, who is not part of the planned resources in ONEPOINT, is assigned to the task in Jira afterwards, that user will be shown as an active assignment in ONEPOINT.

2.3.2. Active Work Package Title and Description

Similiar to the functionality "Active Assignments", this functionality has been implemented for the title and the description of work packages as well. If the title or description of an issue in JIRA gets changed and the corresponding linked work package is planned in ONEPOINT, a blue icon appears in the activity list and in the properties of the work packages. When editing the project plan, you can either take the new value over into the planning or reset it to the original planned value. After checking-in the project plan, JIRA as well as ONEPOINT should have the same value.

Please note, that there is one restriction when using this functionality: If the description of an issue is empty and adding a description in Jira, resetting it to an empty description in ONEPOINT does not work anymore. The description remains in Jira although the field is empty in ONEPOINT.

2.3.3. Asynchronous check-in

An asynchronous check-in for projects with kind "Traditional" (Jira Executed Projects) has been implemented within release 15.0. This functionality improves the waiting time for check-in operations and works as follows: When checking-in a project plan, users will not have to wait for the following Jira sync to finish anymore and instead a "Lock"-icon will appear beside the project name which says "Project plan is currently being locked by Jira System". As soon as this icon is shown, the user is able to switch to another project or tab and can continue his work, while the usual Jira sync runs in the background.

2.3.4. Draft work packages

It is possible to exclude work packages from the synchronization to JIRA by enabling the checkbox "Draft" in the properties of the corresponding work package. When enabling this checkbox, the work package won't be synchronized to Jira. If the corresponding issue already exists in JIRA and enabling the "Draft"-checkbox later in ONEPOINT, the issue in JIRA gets deleted when checking-in the project plan. Please note, that draft work packages do not have a WBS code.

3. Resource-Assignments for Jira-Projects

3.1. Automatic Resource-Assignments

Resources will be automatically assigned if an automatic synchronization of changes takes place (Either during a daily synchronization-cycle or if changes were applied to issues in Jira). Our web-application always retrieves the field "Username" from Jira and compares it with ONEPOINT's resources and user-accounts, following these rules:

• First of all, the user in Jira can only be automatically assigned to issues in ONEPOINT Projects if it is member of the group "jira-developers" of the corresponding Jira project.

- If the first point is true and the resource name in ONEPOINT Projects is identical to the username on Jira side, the resources will be assigned automatically to the corresponding task on ONEPOINT side.
- If no "Name"-field can be matched to the given "Username", then check if the "Login"-field of one of your "ONEPOINT Projects" user-accounts is identical. If the "Login" field does match a "Username" in Jira, check if the user is linked to more than one resource:

1. If the user is only linked to a single resource, assign this one.
2. If the user is linked to more than one resources, compare the local part of the User's mail address entered in its "E-mail" field on ONEPOINT-side (The left part of the mail-address, without "@" and the domain-name) with the resource's name. If one matching resource can be found, assign this one.

Asterisk beside Resource Name
In the following cases an asterisk is shown beside the resource name in ONEPOINT:

- Inactive assignments are shown if multiple resources are planned in ONEPOINT, but only one is active - the one that is assigned in Jira. All others are inactive and are shown with an asterisk.
- Inactive assignments are shown with an asterisk in case that the resources are not planned in ONEPOINT, but tracked work in Jira.
- Inactive assignment are shown with an asterisk if they were assigned to work packages and tracked work in the past, but have been deleted from the work package. The work logs must still be shown, therefore the resource gets also shown, but with an asterisk.

Handling of multiple resource assignments
In ONEPOINT Projects it is possible to assign multiple resources to work packages. Please note that these multiple assignments can not be automatically assigned to Jira issues, because in Jira there is always only one assignee.

4. Advanced Configuration Options

These optional configuration parameters can only be applied to a "Enterprise Server" web-application hosted by your own servers. These configuration parameters will require changes to be made to the file "`configuration.oxc.xml`", which can usually be found in the folder "`Onepoint Project Home/onepoint`". More information about the file "`configuration.oxc.xml`" can be found in the "ONEPOINT Projects" installation manual.

4.1. Configuring the Jira Trigger

All requirements, work records or tasks which have been imported from Jira get by default synchonized with the Jira-server at the same time every day at 8:00 AM GMT.

This can be overridden by the following setting (Here an example for 12'clock, every day - the configuration works the same way like the "Notification Trigger" described in 6.2):

```
<jira-trigger>0 0 12 * * ?</jira-trigger>
```

The full documentation on the format of the "Cron-Expression" string inbetween <jira-trigger> and </jira-trigger> can be found here:
http://www.quartz-scheduler.org/docs/tutorials/crontrigger.html

4.2. Connecting to Jira via HTTPS

> In most situations it is not essentially required to follow these steps to connect to your https-enabled Jira-server, so for trial setups you could usually skip this part. But for HTTPS-enabled production-servers please make sure to configure your "ONEPOINT Projects"-server like shown below.

To configure your "ONEPOINT Projects"-server to allow access to Jira using HTTPS perform the following steps:

1. Download the X.509 certificate of your Jira-server using your favourite browser and save it to a local file (We'll call this file, including its path "path_to_jira_cert" during these steps)
2. Run the command "keytool" in the terminal or command-line (A small tool that was installed along with Java, you'll find it in your Java-installations "bin"-folder) to add the downloaded certificate to a keystore-file (We'll call the filename and its full path "path_to_keystore_file"). Here's an example:

```
keytool -importcert -file path_to_jira_cert -keystore
path_to_keystore_file -storepass keystore_password
```

The given keystore will be created if it does not exist. The "keystore_password" should be a strong password which will be needed to access the keystore-file.

3. Add the path to the keystore and the required password from above to the configuration-file of your ONEPOINT-server's installation (The file "configuration.oxc.xml" in the folder "Onepoint Project Home/onepoint"):

```
....
</database>

<!-- Insert your configuration parameters here -->
    <ssl-trustStore>path_to_keystore_file</ssl-trustStore>

<ssl-trustStorePassword>keystore_password</ssl-trustStorePassword>

</configuration>
```

After applying the changes please make sure to restart the Tomcat application-server.

4.3. Forwarding the URL of your "ONEPOINT Projects"-server to Jira

In some situations the Jira-plugin could fail to connect back to your "ONEPOINT Projects" Server, for example when using an additional webserver connected to the "Tomcat" application-server or due to proxy-issues. If this is the case, the URL of the "ONEPOINT Projects"-server can be forwarded to Jira using the following entry in the configuration-file (The file "configuration.oxc.xml" in the folder "Onepoint Project Home/onepoint"):

```
....
</database>

<!-- Replace HOMEURL with your onepoint-server's full base-URL
    (Including http:// or https://, but without /service or /login) -->

    <connect-url>HOMEURL</connect-url>

</configuration>
```

After applying the changes please make sure to restart the Tomcat application-server.

4.4. Configuring the Jira timeout

The default timeout for the Jira connection is 20 seconds, but for larger Jira installations some queries can take longer, which lead to follow-up-issues. To avoid these situations it is possible to increase the Jira timeout by adding the following parameter to the "configuration.xml"-file which can be found inside the "Onepoint Project Home"-folder.

```
<jira-connection-timeout>50</jira-connection-timeout>
```

5. Appendix

5.1. Enable increased logging for the plugin

To solve communication issues between Jira and the "ONEPOINT Projects"-server it will be required to alter the logging-level of the Jira-server. These are the required steps for Jira 6 and higher:

1. Open the "Administration"-section in Jira
2. Navigate to "System" to the section "Troubleshooting and Support"
3. Select "Logging & Profiling" in the navigator (left side)
4. Scroll down to the section "Default Loggers"
5. Click "Configure logging level for another package"
6. Enter "ONEPOINT" for the field "Package name"
7. Set the "Logging Level" at "DEBUG"

Confirm the changes by clicking the button "Add". The increased logging parameters will only be kept temporarily until the next restart of the Jira-server.