

Setup

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Overview

UseTFS associates Microsoft Team Foundation Server source control changesets with JIRA issues by analyzing both comments and check-in notes fields in changesets looking for valid Jira Issue keys (e.g. "[JIRA-1234](#)").

By using client side software user can get to native Team Foundation controls provided by Microsoft Visual Studio Team Explorer like 'Changeset details', 'File history' along with diff viewer of your choice (based on same configuration that is used by Visual Studio).

It comes with bundled check-in policy that displays user interface with list of user filters (defined in JIRA) to make the association easy.

Also each changeset indexed by Jira can be associated with custom work item type of 'Jira Issue'. This work item contains by default Summary field and web browser control that displays JIRA issue web view directly in Visual Studio.

Feel free to ask questions directly via email pigsty@pigsty.com.pl

Prerequisites

This guide assumes you have the following components already installed and configured

- Visual Studio 2010
- [Microsoft Visual Studio Team Explorer](#)
- [Team Foundation Server Power Tools](#)

Recommended setup

There are several ways to achive same goal - the recomended setup is described below.

1. Download and install UseTFS plugin for JIRA from Atlassian Marketplace

 Do not configure repositories yet.

2. Go to `http://your-jira-server:8080/secure/admin/ViewUsetfsRepositories.jspa` (From Administration panel Plugins -> TFS Repositories)
3. If you haven't done it yet click on License Details and provide valid license.
4. Download and install UseTFS client

 Please close all Visual Studio instances before installing UseTFS client.

5. Launch the UseTFS
 6. Set the base url to `http://your-jira-server:8080` and enter your username and password
 7. In the Workspace folder under the Client tab enter a local folder that is mapped to any project from `http://your-tfs-server:8080/tfs`
 8. Save settings
 9. It's recommended to close UseTFS app by right click on it's icon  in system tray and launch it again
 10. (Optional) If you wish to have 'Jira Issue' work items created and connected with changesets create TFS Team Project for Jira
 - a. Create Team Project called Jira
 - b. Make sure that every developer in your team can read source control and work items in this project
 - c. Make sure that user who will be used by JIRA plugin to read source control has rights to create work items in this project
 - d. Go to `http://your-jira-server:8080/secure/admin/ViewUsetfsRepositories.jspa` (From Administration panel Plugins -> TFS Repositories)
 - e. Download Jira Issue work item schema
 - f. Edit the file and update the following line with correct JIRA UrlRoot
- ```
<Link UrlRoot="http://your-jira-server:8080" UrlPath="browse/{0}">
```
- g. Import Jira Issue work item type to your Jira team project (e.g. from Visual Studio 2010 go to Tools -> Process Editor -> Work Item Types -> Import WIT)
11. (Optional) If you wish to allow developers to connect JIRA issues with changesets using GUI setup check-in policy
  - a. Right click on the project node in Team Explorer
  - b. Select Team Project Settings -> Source Control
  - c. Go to Check-in Policy tab
  - d. Remove or disable Work Items policy
  - e. Add checkin policy UseTFS - Associate JIRA issues
12. [Add repository](#) in UseTFS JIRA plugin
13. Make sure that all users who should have access to TFS changesets from JIRA issues have [View Version Control permission set in JIRA](#).
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## Alternative manual setup

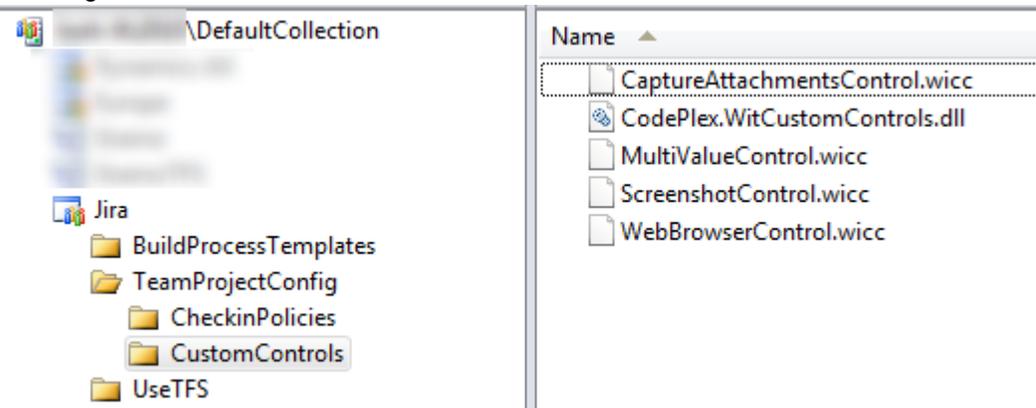
### TFS Team Project for Jira

The outcome of steps below is that:

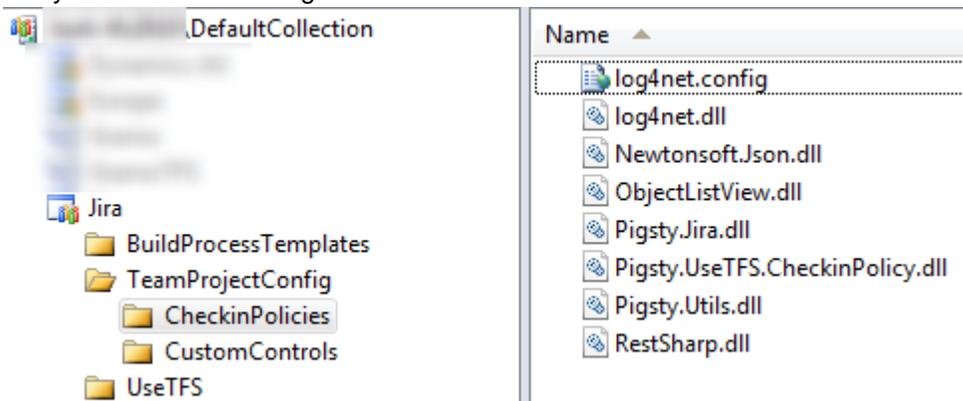
- Jira project is created
  - Jira Issue work item type is created holding the issue summary, JIRA issue key and web browser control to display the actual issue

- work items of this type will be automatically created by JIRA plugin
- they'll be connected to respective changesets
- this allows to view Jira issue directly from changeset without leaving visual studio
- work item controls and check-in policy can be easily distributed on developers workstations using the Team Foundation Server Power Tools features

1. Create Team Project called `Jira`
2. Make sure that every developer in your team can read source control and work items in this project
3. Make sure that user who will be used by JIRA plugin to read source control has rights to create work items in this project.
4. Download WIT Custom controls from <http://witcustomcontrols.codeplex.com/>
5. Upload work item controls under `$/Jira/TeamProjectConfig/CustomControls` so that you have the following structure



6. Download UseTFS check-in policy and put it under `$/Jira/TeamProjectConfig/CheckinPolicies` so that you have the following structure



7. Download [JiraIssueTfsSchema.xml](#)
8. Edit the file and update the following line with correct JIRA UrlRoot

```
<Link UrlRoot="http://your-jira-server:8080" UrlPath="browse/{0}">
```

9. Import Jira Issue work item type to your Jira team project (e.g. from Visual Studio 2010 go to Tools -> Process Editor -> Work Item Types -> Import WIT)
10. Install UseTFS client as described in [Recommended setup](#)
11. Grab the contents of installed client folder ( by default it should be under `c:\Program Files (x86)\UseTFS\` ) and put all files in TFS under `$/Jira/UseTFS`
12. Make sure to check-in all your changes
13. Setup your workstation as described in [Developer work station setup](#)

## TFS Team Projects

For all the Team Projects that you want to use with Jira take the following steps

1. Right click on the project node in Team Explorer
2. Select Team Project Settings -> Source Control
3. Go to Check-in Policy tab
4. Remove or disable Work Items policy
5. Add checkin policy UseTFS - Associate JIRA issues

## Developer work station setup

### UseTFS client

UseTFS client allows you to open changesets, files, diff viewer, etc. directly from JIRA web interface using Team Foundation controls.

1. Go to source control and get latest version of `$/Jira/UseTFS`
2. Launch the `UseTFS.exe` file from the mapped folder.  
 It's important to use Run as administrator when you launch it for the first time.
3. Set the base url to `http://your-jira-server:8080` and enter your username and password
4. In the Workspace folder under the Client tab enter a local folder that is mapped to any project from `http://your-tfs-server:8080/tfs`. It defaults to UseTFS.exe location and you can leave it as is.
5. Save settings
6. Close UseTFS app by right click on it's icon in system tray and launch it again.

### Check-in policy

1. In Visual Studio go to Team -> Connect to Team Foundation Server and connect to your TFS server e.g. `http://your-tfs-server:8080/tfs`
2. Choose DefaultCollection and select Jira in Team Project list (*you can have other projects selected as well*). Click Connect
3. In Team Explorer window expand Jira project node. Right click on Team Members and select Personal Settings
4. In Personal Settings dialog choose Install downloaded custom components and click Download Now

 There's one annoying issue with check-in policy. The window get's displayed not only during checkins.



### Atlassian VS connector

As an optional tool you can download and install [Atlassian Connector for Visual Studio](#)

 Changesets connected to JIRA issues won't be accessible from Atlassian Connector for Visual Studio.

## Configuring JIRA plugin

### Installation

The simplest way to install JIRA plugin is by using Atlassian Universal Plugin Manager (UPM). Just log in to your JIRA instance as administrator, go to plugins and search for UseTFS.

Alternatively you can use download it from [Atlassian Marketplace](#)

After the plugin is installed you need to provide a valid license. For JIRA 5.0.2 or newer this can be done directly from UPM. For previous releases you might need to go to `http://your-jira-server:8080/plugins/servlet/usetfslICENSEServlet` (accessible from Plugins -> TFS Repositories -> License Details).

### Adding repository

1. Go to Plugins -> TFS Repositories -> Add
2. Fill in the form as follows

<b>Name</b>	Descriptive name of your repository
<b>enabled</b>	Should UseTFS index changesets and display their contents on linked issues Default setting: <b>Disabled</b> <div data-bbox="865 1297 1442 1472" style="border: 1px solid orange; padding: 5px; margin-top: 10px;"> Remember to check <b>enabled</b> checkbox which is not checked by default - otherwise repository wont be indexed.</div>
<b>Base URL</b>	Base URL of your TFS repository without trailing slash (e.g. <code>http://your-tfs-server:8080/tfs</code> )
<b>Team Project Collection</b>	Team Project Collection Default setting: <b>DefaultCollection</b>
<b>Source control folder</b>	You can narrow the indexing to specific project or folder. Leaving the default <code>\$/</code> will index every changeset on given team project collection Default setting: <b>\$/</b>

<b>Start at changeset</b>	Set this if you want to start indexing from specific changeset Default setting: <b>0</b>
<b>Scan size</b>	Maximum number of changesets that will be indexed on a single run Default setting: <b>100</b>
<b>Max scanned files</b>	It's good idea to limit the number of indexed files due to performance reasons specially if you have large changesets (e.g. merge) for hundreds or thousands of files. UseTFS should still work correctly for those however performance might be affected. Default setting: <b>-1</b> (unlimited)
<b>Username</b>	Name of user with proper access rights
<b>Domain</b>	Domain for given user
<b>Password</b>	Password for given user
<b>Create Jira Issue workitems</b>	Enabling this setting will make the UseTFS plugin to create a work item of 'Jira Issue' type in TFS for each JIRA issue that has associated changesets Note that you need to configure TFS as stated in documentation above to use this feature Default setting: <b>Disabled</b>
<b>Project for workitems</b>	Work items of 'Jira Issue' type will be created under given project

## Configuring scheduled job

1. Go to System -> Advanced -> Services
2. Locate service named **com.pigsty.jira.plugins.usetfs.revision.RevisionIndexer:job**
3. You can modify the delay between runs. By default new changesets are picked up from TFS every minute.  
Note: The scheduled job will skip if there's a previous job still running. This can be the case if you try to index many changesets with huge amount of changes at same time - if it takes more than one minute then next execution will be skipped until job finishes.