

Team Foundation Version Control (TFVC) Integration With JIRA and Jenkins

The integration of Team Foundation Version Control (TFVC) with JIRA and Jenkins gives the project management team complete control over the codes being committed in the source code repository. It also creates complete traceability for all workitems in JIRA. With complete traceability for each workitem in the ecosystem, it is easier for enterprises to fulfil compliance requirements.

Integration overview

In an Application Lifecycle Management (ALM) ecosystem, the choice of systems and the collaboration between the cross-functional teams play a great role. While the choice of systems impacts the productivity of a team, the cross-functional collaboration helps the teams get complete context of the business requirements.

Best-of-breed systems such as JIRA, Jenkins, and TFVC bring rich functionalities to the ecosystem. When TFVC is integrated with JIRA and Jenkins, all stakeholders have real-time visibility into the commits made by the development team. It is also easier to enforce authentic commits against each work item and access the changes/edits made to the commit files from JIRA itself.

How TFVC - JIRA - Jenkins integration is beneficial for an enterprise

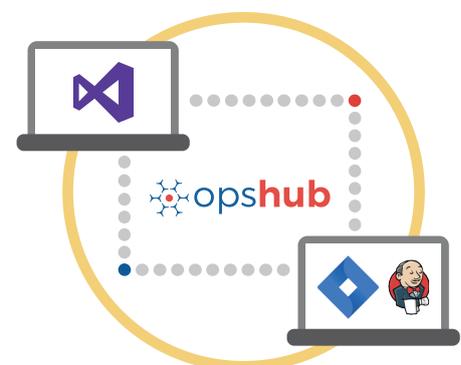
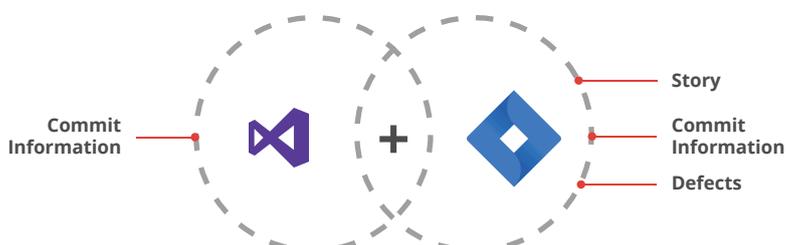
- Track commit volume, track commit trends and edits/changes to commit files in real time
- Enforce authentic commits to make sure each commit is happening against a scheduled and open workitem
- Eliminate manual effort to close JIRA workitem by automating the state transition on TFVC commit

With TFVC + JIRA + Jenkins integration, enterprises can:

- Make better and faster decisions
- Ensure complete traceability of a 'requirement'
- Meet all compliance requirements
- Ensure quality delivery in stipulated time
- Leverage the best of functionality and collaboration in the delivery ecosystem

How OpsHub Integration Manager integrates TFVC, JIRA, and Jenkins

OpsHub Integration Manager integrates TFVC, JIRA, and Jenkins bi-directionally. It ensures that all historical and current data is available to each user, in that user's preferred system, with full context, in real-time. All the details related to a commit made against a work-item in JIRA can be tracked from JIRA itself. For example, for each commit that development team makes in TFVC, TFVC synchronizes a 'commit entity' linked to the specific requirement id back to JIRA.



Entities that can be synchronized between TFVC and JIRA

The popularly synchronized entities between TFVC and JIRA are on the left:

Benefits of integration for TFVC and JIRA

TFVC users	JIRA users
Each commit can be traced back to its respective workitem at any given point in time from TFVC itself	Traceability for business requirements throughout the ALM tool chain
Enforced checkpoints ensure that no mandatory steps/checks are missed while making a commit – this leads to high success rate for commits	Direct visibility into customer issues and their priorities
	Visibility into the volume, quality of commits, and commit trends in real-time

Features of OpsHub Integration Manager



Unidirectional as well as bi-directional synchronization



Full history and audit trail for integrated systems



Complete traceability of work items as well as non-work items



Robust failure management and recovery mechanism

Pre-requisites to run OpsHub Integration Manager

Supported Operating Systems

Windows

- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2 (64 bit)

Linux

- RHEL 5.2 + (64 bit)
- RHEL includes Cent OS and Fedora

Tested on the following versions:

- CentOS release 5.5 (Final)
- CentOS release 5.6 (Final)
- CentOS Linux release 7.1.1503 (Core)
- Fedora 20

Database Prerequisites

The underlying database should be installed to install and run OpsHub Integration Manager. The database user created for OpsHub Integration Manager should have schema level and read write privileges.

- MySQL Server
- MS SQL
- Oracle
- HSQLDB