

TopTeam JIRA Connector

Technical Reference



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Introduction

TopTeam JIRA Connector enables you to integrate advanced visual Requirements Definition and Management capability of *TopTeam Analyst* with the popular issue tracking tool *Jira*.

This document describes the technical architecture of *TopTeam JIRA Connector*. It explains the various components of *TopTeam JIRA Connector*: what they do and how they connect and interact with each other. It also lists tips and considerations for deploying *TopTeam JIRA Connector*.

Audience

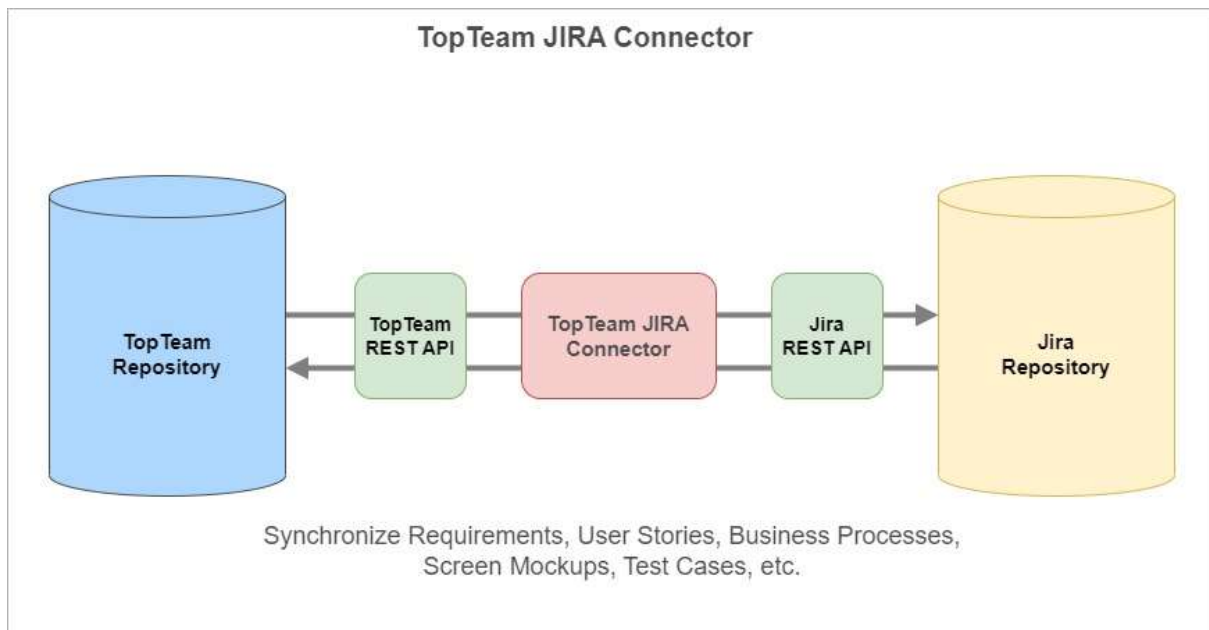
Persons involved in using *TopTeam*, integrating *TopTeam* with *Jira*, and deploying *TopTeam JIRA Connector* in their organizations:

- **TopTeam Users**
- **TopTeam Administrators**
- **JIRA Administrators**
- **JIRA Users**

Overview

TopTeam JIRA Connector enables you to synchronize *TopTeam* records from *TopTeam* repository to *Jira*. After the initial synchronization, *TopTeam JIRA Connector* automatically detects new and updated records in *TopTeam* repository and *Jira* repository. It then synchronizes the changes across the repositories.

TopTeam JIRA Connector uses *TopTeam Rest API* to connect to *TopTeam* repository. It uses *Jira Rest API* to connect to *Jira* repository.



Benefits

Communicate Requirements from TopTeam to Jira

Requirements defined in *TopTeam* and their updates are automatically communicated to developers and other team members using *Jira*. This eliminates the need to repeatedly exchange long *Requirements Documents* which frequently go stale, with the entire team.

Get Status Updates from Jira

Synchronize issue types status updates from *Jira* to *TopTeam* repository to track your team/project's development and implementation progress.

Synchronize Fields as Attachments

Synchronize custom and special fields from *Use Case Flow-of-Events*, *Flow Diagrams*, *Screen Mockups*, *User Stories*, etc., along with their full rich text descriptions as attachments.

Synchronize Attachments

Synchronize attachments from *TopTeam* to *Jira* repository.

Specify Filters

Specify filter criteria for *TopTeam* records to be synchronized with *Jira* repository.

Traceability Synchronization

All trace links defined in *TopTeam* using advanced visual tools such as *Traceability Network Diagram*, *Trace Derivation Matrix*, etc., are synchronized with issues in *Jira* repository.

Customize New Line Characters

Customize new line characters according to user styling in *Jira* repository for multiple *TopTeam* fields mapped to a single *Jira* field.

Create Web URLs

Web links are created from *Jira* issues to *TopTeam* records.

Automatically Run Connector

TopTeam JIRA Connector can be scheduled to run automatically in the background. You can also automatically receive a synchronization activity log via email upon synchronization completion.

Features

Bi-Directional Synchronization

- Communicate *TopTeam* records with the entire team by synchronizing these records with *Jira* repository.
- Keep the team informed of development progress by synchronizing issue types from *Jira* repository to *TopTeam* repository.

TopTeam Repository to Jira Repository

- Synchronize records from *TopTeam* repository to *Jira* repository, such as:
 - Requirements
 - User Stories
 - Use Cases
 - Screen Mockups
 - Business Process Models
 - Issues, Change Requests, Defects, etc.
 - Test Cases
 - Custom Record Types
- Synchronize traceability links from *TopTeam* repository with *Jira*.
 - *TopTeam* traceability links as web links in *Jira* Issues.
- Establish a cross-reference between *TopTeam* records and *Jira* Issues by mapping *Jira Issue Key* with a *TopTeam Record* field.
- Automatically create a Web URL to *TopTeam* records from *Jira* Issues.
- Synchronize attachments.

Jira to TopTeam Repository

- Synchronize *Jira Issues* and status updates from *Jira* repository to *TopTeam*, such as:
 - User Stories
 - Issues
 - Change Requests
 - Defects
 - Custom Record Types
 - etc.
- Establish a cross-reference between *Jira* issues and *TopTeam* records by mapping *TopTeam Record ID* with *Jira Issue field*.

Flexible Mapping of Record Types with Issue Types

- Map multiple *TopTeam* record types and their fields, including custom fields, to corresponding *Jira* issue types.
- Map multiple *TopTeam* fields to a single *Jira* issue field.
- Map multiple *TopTeam* requirements types to a common *Jira* issue type and vice-versa if necessary.
- Map custom *TopTeam* record types to *Jira* issue types.
- Perform bi-directional synchronization of fields between the *TopTeam* and *Jira* repositories, including:
 - String fields such as Title and Reason
 - Status field
 - Priority and other List of Value fields
 - Estimation fields and other numeric fields
 - Is Suspect and other flag fields
 - Custom fields
 - etc.
- Synchronize special fields such as *User Stories*, *Use Case Flow-of-Events*, *Flow Diagrams*, *Screen Mockups*, and *Requirements* with full rich text descriptions as attachments.

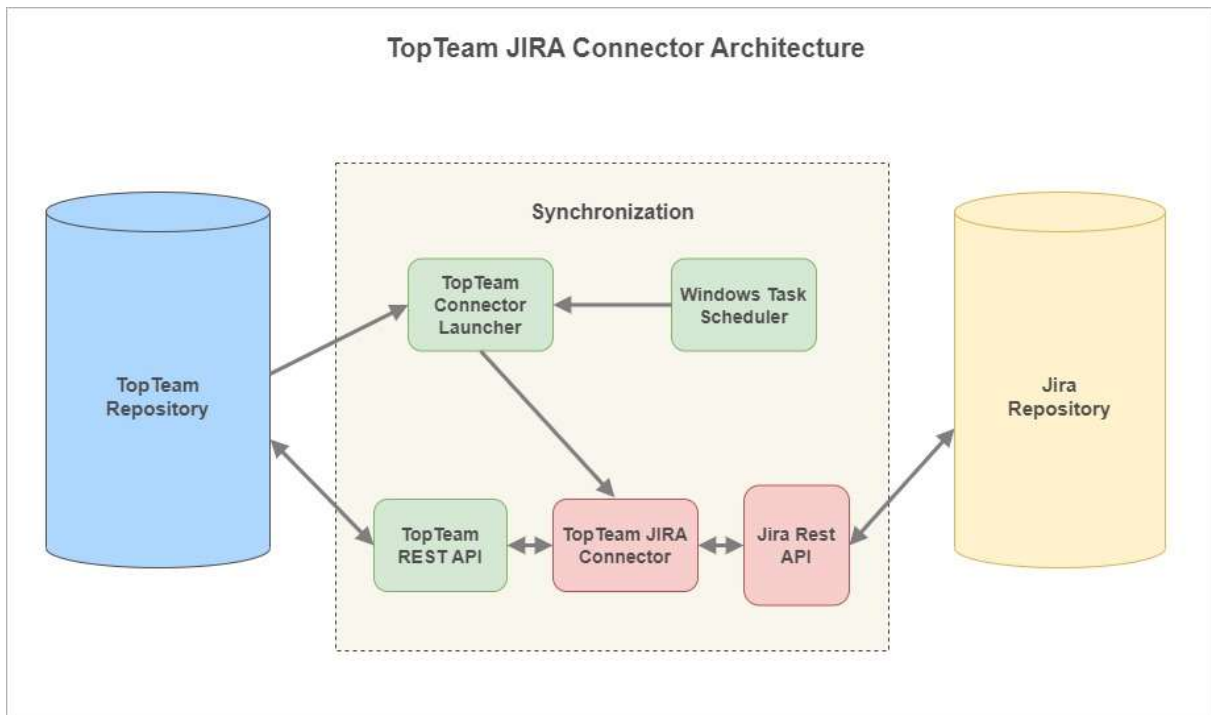
Flexible Mapping of TopTeam Projects with *Jira* Projects

- Map a single *TopTeam* project to multiple *Jira* projects.
- Map multiple *TopTeam* projects to a single *Jira* project.
- Decide the direction of synchronization.

Fine-grained Control on What Gets Synchronized

- Specify filter criteria for records to be synchronized with *Jira* repository.
- Automatically detect and propagate only those records that have been added or modified since the last synchronization.
- Customize new line characters according to user styling in *Jira* repository when multiple *TopTeam* fields are mapped to a single *Jira* field.
- Schedule *TopTeam JIRA Connector* to run automatically in the background.
- Receive synchronization activity logs via email automatically.

Architecture



1. Configuration

Project Mappings are added to *TopTeam* repository using *TopTeam*.

2. Identifying Configured Project Mapping & Launching

Task Scheduler triggers the connector launcher to search for the project mapping in *TopTeam* repository. If project mapping is found, the connector launcher launches *TopTeam JIRA Connector*.

3. Synchronization

TopTeam JIRA Connector processes synchronization between *TopTeam* and *Jira* for the available project mappings.

Configure Project Mappings

In a *Project Mapping*, you have to specify the following:

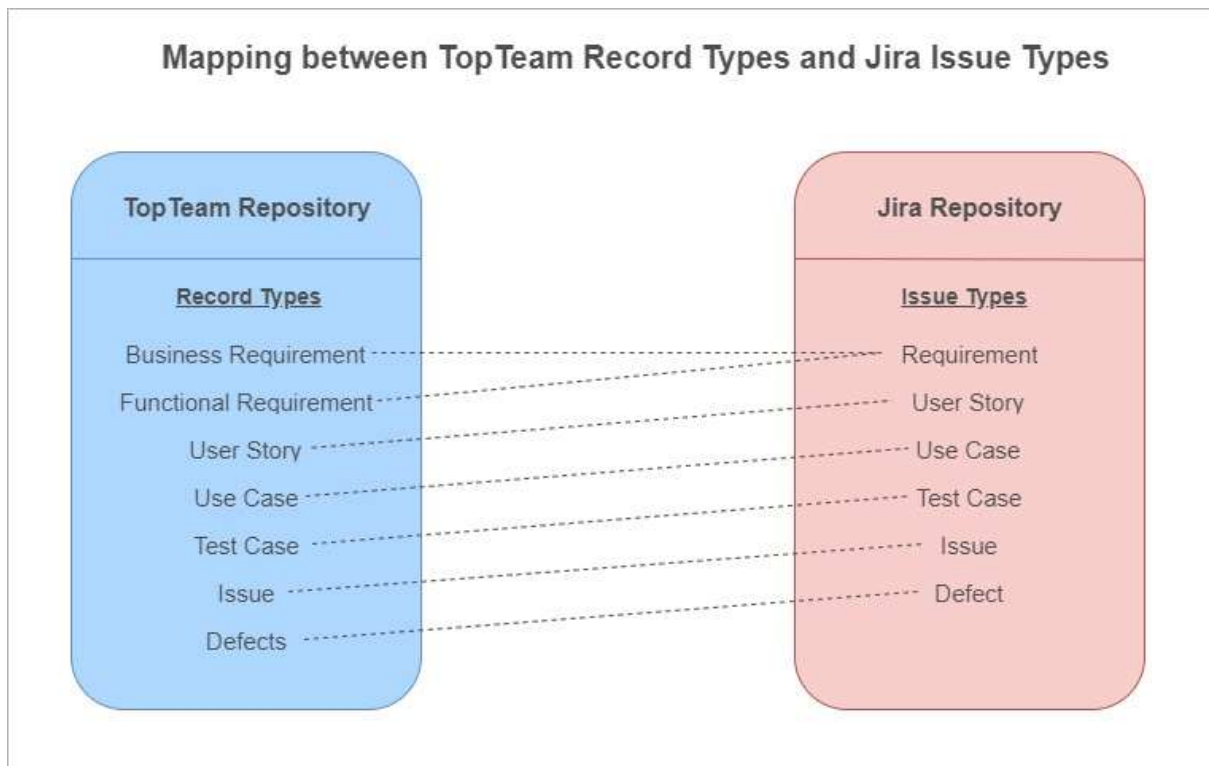
- *TopTeam* and *Jira* projects.
- URL of *Jira* server (Rest API).
- *TopTeam* and *Jira* user credentials .
- Synchronization Scheme, which includes Record Type, Field, and Link Type Mappings.
- Synchronization Profile, which includes synchronization direction, synchronization location, filter condition, operation (new or modified records synchronization), and synchronization of comments and attachments.
- Email address for receiving synchronization reports (optional).
- Synchronization interval schedule.

Define Synchronization Schemes

In a *Synchronization Scheme*, you can specify *Record Type Mappings*, *Field Mappings* for each mapped record type, and *Link Type Mappings*.

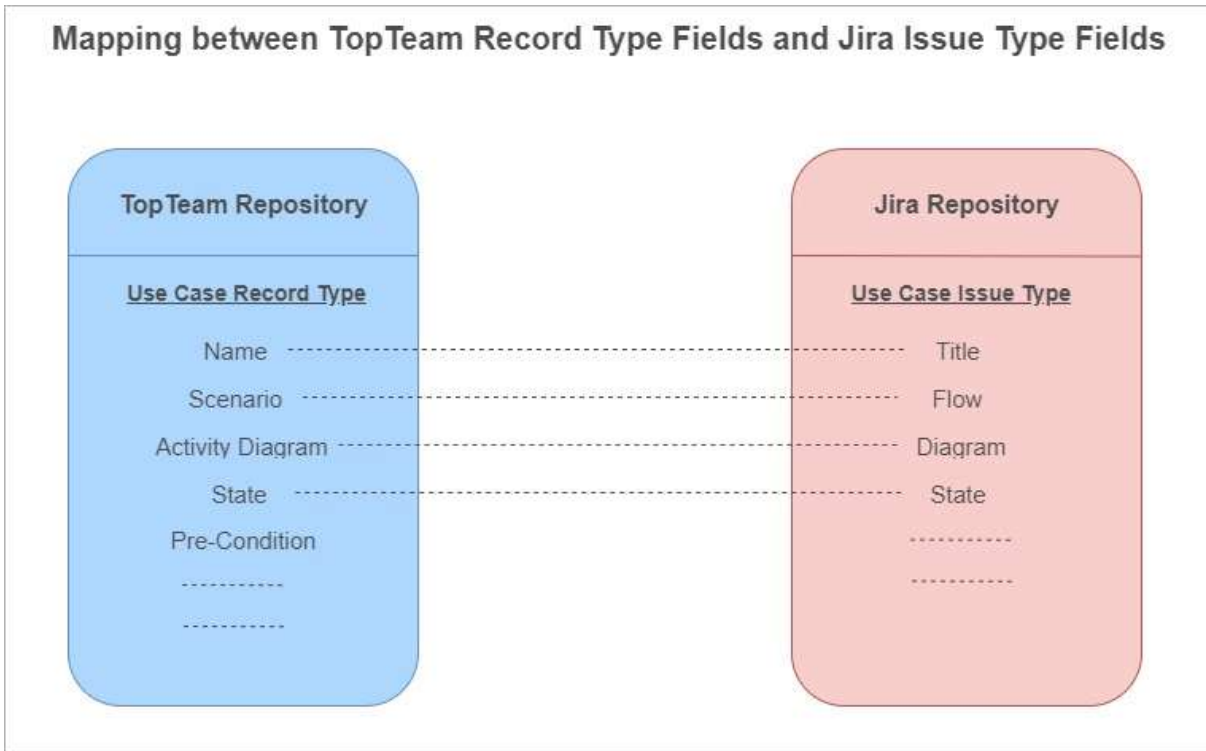
Record Type Mapping

You can map various *TopTeam* record types to *Jira* issue types, such as *User Stories*, *Use Cases*, *Business Requirements*, etc. You can create new matching issue types in *Jira* using *Jira Administration* to map with *TopTeam* record types.



Field Mapping

You can map multiple fields with issue type fields for each mapped record type. You can create new matching fields in *Jira* using *Jira Administration* to map with *TopTeam* record type fields.



IMPORTANT

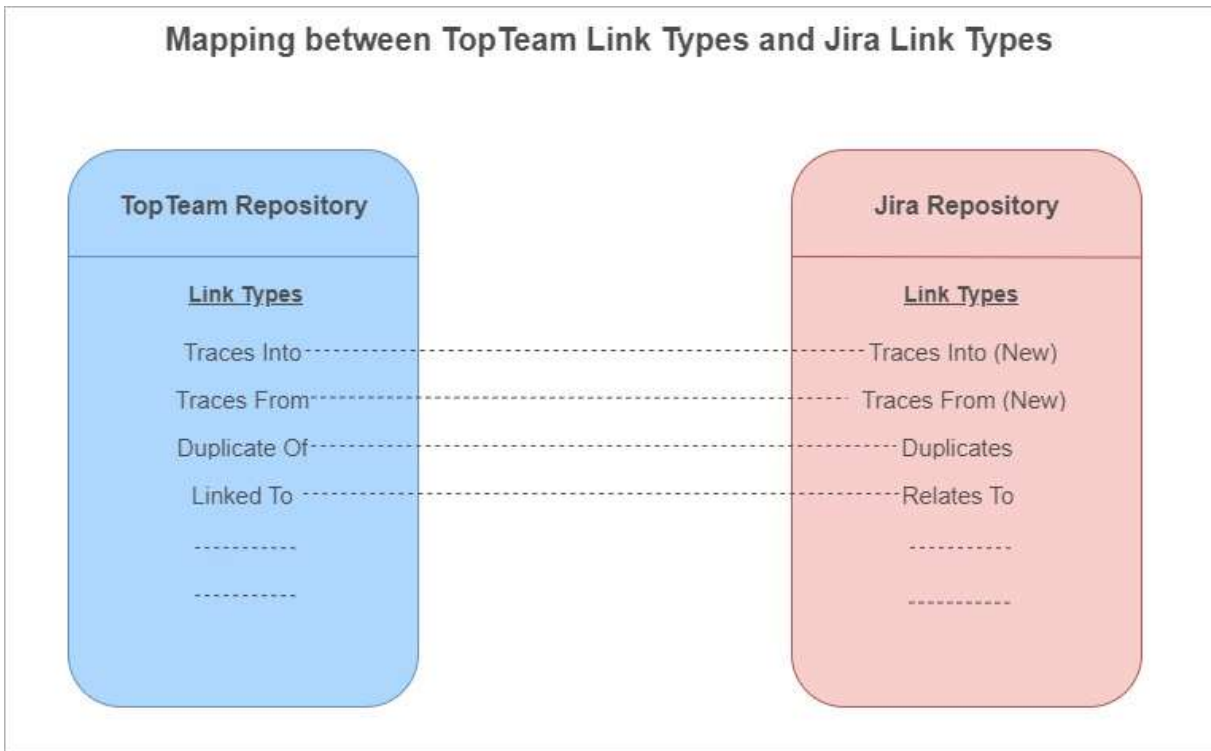


You can choose whether to allow mapping of a single *TopTeam* record type to multiple *Jira* issue types for a given project. By default, only one-to-one mapping is allowed.

When mapping fields of the "List of Values" type (or drop-down lists), the values in *TopTeam* repository field and the corresponding *Jira* repository field must match, and vice versa.

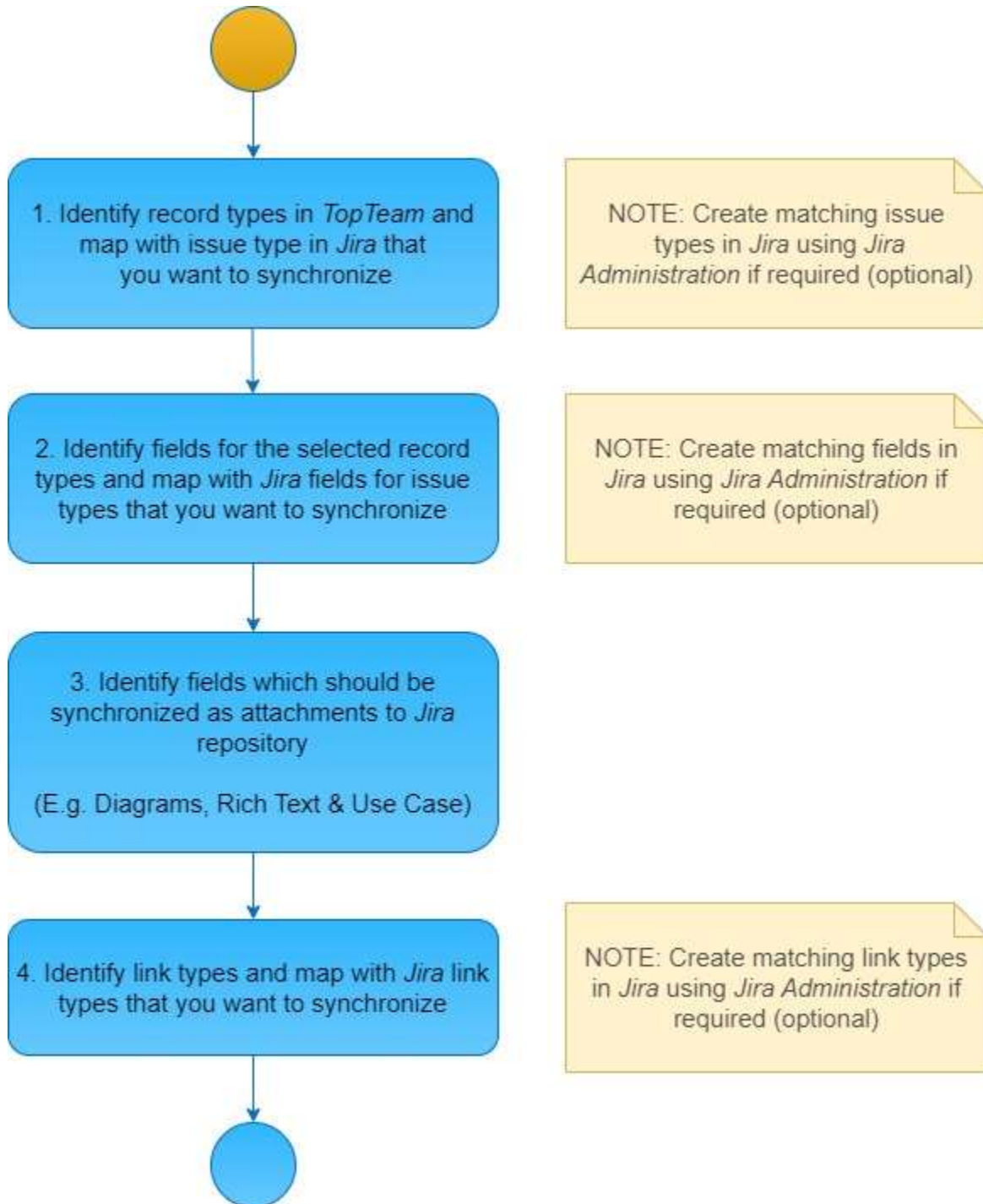
Link Type Mapping

You can map various *TopTeam* link types to *Jira* link types such as *Traces Into*, *Traces From*, *Linked to*, etc. You can create new matching link types in *Jira* using *Jira Administration* to map with *TopTeam* link types.



Configuring Synchronization Scheme for TopTeam Jira Connector

Steps 1 to 4 are one-time configuration steps.



IMPORTANT



- You must create the required issue types, fields and link types in *Jira* using its *Administration* interface.
- The computer running *TopTeam JIRA Connector* must have access to *TopTeam Web*.
- *Jira Server* must have its *Rest API* enabled and be accessible from the computer running *TopTeam JIRA Connector (TopTeam Web Server)*

Define Synchronization Profiles

In a *Synchronization Profile*, you can specify the following:

- Synchronization direction
- Synchronization location
- Filter condition
- Synchronization of new, modified, or deleted records
- Synchronization of comments and attachments
- Conflict resolution