# How to Sync Versions in Jira Cloud

This article shows how to sync fix versions between Jira instances.

Jira version is an object that includes the following elements:

- version name
- version start date
- version release date
- version description

Basic versions synchronization involves receiving versions from a remote Jira instance. Usually, these versions don't exist on your local Jira. Exalate provides a way to create versions from the scripts to handle this situation. To create a new version on your system when necessary use nodeHelper.createVersion. The example below shows how you can set up such behavior.

## Source Side

### Outgoing sync

send fix versions

```
//send the fix versions set on a synced issue
replica.fixVersions = issue.fixVersions
replica.affectedVersions = issue.affectedVersions
```

## Destination Side

### Incoming sync

Create the versions that do not exist on your side.

```
// for the create processor, be sure that the project is set to the issue variable before running the following code
issue.projectKey = "Foo" //Included only on create processor
...

// assign fix versions from JIRA A to JIRA B
issue.fixVersions = replica
  .fixVersions
  // ensure that all the fixVersions are available on B
  .collect { v -> nodeHelper.createVersion(issue, v.name, v.description) }
// assign affected versions from JIRA A to JIRA B
issue.affectedVersions = replica
  .affectedVersions
  .collect { v -> nodeHelper.createVersion(issue, v.name, v.description) }
```

If you do not want exalate to create new versions but just use existing ones that match the other side versions:

```
// for the create processor, be sure that the project is set to the issue variable before running the following code
issue.projectKey = "Foo" //Included only on create processor
...

// assign fix versions from JIRA A to JIRA B
def project = nodeHelper.getProject(issue.projectKey)
issue.fixVersions = replica
  .fixVersions
  // ensure that all the fixVersions are available on B
  .collect { v -> nodeHelper.getVersion(v.name, project) }
  .findAll{it != null}
// assign affected versions from JIRA A to JIRA B
issue.affectedVersions = replica
  .affectedVersions
  .collect { v -> nodeHelper.getVersion(v.name, project) }
  .findAll{it != null}
```

If you want to synchronize version start date, release date and description you can use the external script versions.groovy, which has been developed specifically for such cases.