

# How JIRA Client Synchronization Works

There are several types of synchronization running in JIRA Client:

1. **Quick Synchronization.** In this case JIRA Client downloads details for several issues selected based on some query in one request to the server. This download includes most of the fields, comments, worklogs, links, lists of attachments.
2. **Details Synchronization.** JIRA Client sends several requests to the server for a single issue. It downloads remaining fields (voters, watchers), meta data related to editing, applicable workflow actions.
3. **Small Attachments Download.** JIRA Client downloads smaller attachment files - up to 100Kb by default. This size can be modified through `auto.download.maxsize` parameter in the settings.
4. **Large Attachments Download.** Download of the files larger than the specified limit.

When can each of these synchronizations happen:

## Quick Synchronization:

- When a user runs a query which is not synchronized. At this moment all issues matching the query are downloaded (even those, which might have been downloaded as part of the other query). After the download is finished, the query becomes synchronized and JIRA Client just checks for updates.
- When a users runs Reload Query From Server - all issues matching the query are downloaded.
- If the **automatic synchronization** is turned on. JIRA Client periodically checks and downloads issues that were changed since the last check. To understand if there were any changes, JIRA Client compares last updated issue from JIRA with the last updated issue in the local database. If they match, no further actions are taken, if not - JIRA Client downloads all issues which were updated since the previous check. The check runs every 150 seconds and this period can be changed via `quick.sync.period` parameter.

## Details Synchronization:

- Starts when a user keeps Issue Details open for more than 3 seconds. Once the full details are downloaded, JIRA Client won't download them again unless the issue is changed.
- On request - Download All Details. Can be run for several issues at once.
- On upload.

## Small Attachments:

- When a user keeps Issue Details open for more than 3 seconds. JIRA Client does not download attachments, which have already been downloaded.
- On Download Attachments for selected issues.

## Large Attachments:

- On request to download specific file(s).
- On Download Attachments for selected issues.