

# Backup Strategy

Structure data is stored separately from JIRA data and is not included in the general System Backup. To ensure that your Structure information is safe, it is recommended to make Structure backup a part of your overall backup strategy.

## Option 1. Automatic XML Backup + Export Directory Backup

This strategy involves two processes:

- [Automatic Structure Maintenance](#) lets you automatically create full hot backups of the Structure data once a day. The backups are stored in the `export` directory under JIRA home.
- Periodic file-level backup of the `export` directory (or the whole JIRA home) to a different storage device increases the safety of the backups. This part should be configured manually by the server administrator.

This is the recommended strategy because it does not require stopping JIRA and can be integrated with already existing overall backup strategy.



When you install Structure, automatic daily backups are enabled by default. You only need to make sure that backup files that will appear in the `export` directory are stored safely.

## Option 2. File-Based Backup

Structure stores all its data in `structure/` sub-directory of the JIRA home directory – see [Structure Files Location](#). You can use your operating system tools to back up the whole `structure` directory.

So if you already have backup strategy for the whole JIRA home directory, then you are also backing up Structure.

### Hot File-Based Backup

Hot backup can be used only as a complimentary backup strategy to the more reliable automatic XML backup.



Hot backup (while JIRA and Structure are running) is **unsafe**! There's a probability that a database file will be copied while it's being written, making the copy of the database corrupt. (But you can verify that the copied database is correct by opening it with Derby tools and reading all tables.)



When running JIRA on Windows, you won't be able to do hot backup by normal file copying, because the files in `structure` directory will be open. You can use **volume shadow copy** tools from Microsoft to copy a snapshot of the files.

### Cold File-Based Backup

Cold backup is safe and sufficient, but it can be done only by disabling Structure plugin, making a backup and enabling Structure again. (There's no need to stop JIRA.)

## Option 3. Manual / API-Triggered XML Backup

You can manually back up structure through [Structure Backup](#) menu.

If automatic Structure maintenance does not suit you and you have resources to develop your own mini-plugin for backup strategy, you can automatically back up Structure data through the [Structure API](#) (use `StructureBackupManager` interface).

## Restoring from File Backup

In case of failure, you can restore Structure data from file backup by disabling Structure plugin, copying the whole contents of `structure/` directory back in place, and enabling Structure again.

Watch the logs - if you see a message that the database is corrupt, it is likely that you are restoring from a hot file-based backup. In that case, you'll need to find a cold file-based backup or an XML backup.

## Restoring from XML Backup

Restoring from XML backup is error-proof but requires a bit more time. See [Restoring Structure from Backup](#) for instructions.

## Incremental and Differential Backups

As Structure database is typically not large, full backup is recommended.

Structure XML backup/restore does not support incremental backup, but you can use your operating system tools for incremental or differential backup of the files in `structure` directory.