


# Automatic Structure Maintenance


## Automatic Structure Maintenance

Automatic Structure maintenance runs daily and performs Structure backup and database optimization. The optimization removes stale data from the database and may improve general JIRA responsiveness.

To configure automatic Structure maintenance:

1. Navigate to **Administration | Structure | Maintenance**
2. Click **Configure Scheduled Maintenance**
3. If scheduled maintenance is disabled, click **Enable scheduled maintenance**
4. Select schedule at which maintenance should run
5. Select tasks that scheduled maintenance should run
6. Configure additional task parameters, if any
7. Click **Apply**


 By default, scheduled maintenance is enabled and set to run daily at 3 AM.

 Automatic maintenance can be run only when the Structure license is valid.

## Maintenance Schedule


You have several options to specify a maintenance schedule:



1. Run every day at given time

 The time is specified in the server's time zone, displayed near the time fields.

2. Run based on crontab schedule  
Your schedule should follow standard crontab formatting. Schedule is a list of five, single-space-separated fields, representing: minute, hour, day, month, weekday. Each field can be a value, list of values or range. Month and weekday names can be given as the first three letters of the English names. Among numbers and month/weekday names, the following symbols can be used:
  - Asterisk ( `*` ) is used to set a range that includes every value.
  - Question mark ( `?` ) is used instead of `''` for leaving either day-of-month or day-of-week blank.
  - Comma ( `,` ) is used to separate items of a list. For example, using `"MON,WED,FRI"` in the 5th field (day of week) means Mondays, Wednesdays and Fridays.
  - Hyphen ( `-` ) defines range. For example, `2000–2010` indicates every year between 2000 and 2010, inclusive.
  - Slash ( `/` ) can be combined with range to specify step values. For example, `*5` in the minutes field indicates every 5 minutes.Schedule examples:
  - `0 * * * *` = the top of every hour of every day.
  - `* / 10 * * * *` = every ten minutes.
  - `0 8-10 * * * *` = 8, 9 and 10 o'clock of every day.
  - `0 6,19 * * * *` = 6:00 AM and 7:00 PM every day.
  - `0 / 30 8-10 * * * *` = 8:00, 8:30, 9:00, 9:30, 10:00 and 10:30 every day.
  - `0 9-17 * * MON-FRI` = on the hour nine-to-five weekdays.
  - `0 0 25 12 ?` = every Christmas Day at midnight.

## Maintenance Tasks

<b>Backup Structure data</b>	<p>Creates a backup of the Structure database in the <code>export</code> sub-directory under JIRA home.</p> <p>Parameters:</p> <ul style="list-style-type: none"><li>• Include history – if checked, full structure change history will be included in the backup. If you have a lot of changes in structures, this setting may cause the backup to take some time, and the backup file to be large. If you don't need a history of structure changes, it is advised to turn this option off.</li></ul> <div> It is advised to have separate Structure backups, even though Structure data is backed up with JIRA's normal backup, because you will be able to Restore from that data without rolling back changes in JIRA.</div>
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<b>Delete old backups</b>	<p>A backup is considered old if it is not among <i>X</i> latest backups (<i>X</i> is specified by the first parameter of this task) <b>and</b> it was made earlier than <i>Y</i> days ago (<i>Y</i> is specified by the second parameter). This task removes all such backups made by the Backup task.</p> <p>Parameters:</p> <ul style="list-style-type: none"> <li>• Always keep <i>X</i> latest backups</li> <li>• Always keep backups made during last <i>Y</i> days</li> </ul>
<b>Optimize favorites</b>	<p>If a user marks a structure as their <a href="#">favorite</a>, Structure plugin will keep this mark, even if the user is later deleted from JIRA. <a href="#">Popularity number of the structure</a> will also account for this user. This task removes marks made by users no longer in JIRA and recounts structure popularity.</p>
<b>Optimize structures</b>	<p>If an issue is added to a structure and then deleted from JIRA, that structure will still contain a reference to this issue (although it will not display it). This task removes references to deleted issues and other items that have become permanently unavailable.</p>
<b>Optimize view settings</b>	<p>If a <a href="#">view</a> is deleted, some <a href="#">structure view settings</a> may still reference it, and a blank view named ? (<b>Unknown View</b>) will be shown in its place. This task removes references to deleted views.</p>
<b>Optimize synchronizers</b>	<p>Sometimes Structure add-on may keep data related to synchronizers of a deleted structure. This task removes such data.</p>
<b>Delete old synchronizer audit log records</b>	<p>This removes old records from <a href="#">Synchronizer Audit Log</a>, clearing up space in the database.</p> <p>Parameters:</p> <ul style="list-style-type: none"> <li>• Keep records for the last <i>X</i> days.</li> </ul> <div>  If you set X to 0, maintenance procedure will remove all records.         </div>
<b>Reindex change history</b>	<p>Currently does nothing.</p> <div>  This task has remained as an option since Structure 2. Its purpose will be restored later when Structure 3 gets more maintenance options for structure histories.         </div>
<b>Optimize structure perspectives</b>	<p>Removes old <a href="#">perspectives</a> that haven't been used by anyone for a certain amount of time.</p> <p>Parameters:</p> <ul style="list-style-type: none"> <li>• Delete perspectives that were not used during the last <i>X</i> days</li> </ul>
<b>Reindex structures</b>	<p>Clears and recalculates issue-to-structure index, used to define which structures contain a specific issue. (Issues added with <a href="#">Automation</a> are not counted.)</p>
<b>Delete old change history</b>	<p>The task removes old records from change history. A history record is considered old if the change was made earlier than <i>X</i> days ago (<i>X</i> is specified by the first parameter) <b>and</b> it is not among <i>Y</i> latest history records for the structure where the change was made (<i>Y</i> is specified by the second parameter).</p> <p>Parameters:</p> <ul style="list-style-type: none"> <li>• Always keep change history for the last <i>X</i> days</li> <li>• Always keep <i>Y</i> latest changes per structure</li> </ul>

## Running Maintenance Tasks Manually

You can run specific maintenance tasks at any time.

To run maintenance manually:

1. Navigate to **Administration | Structure | Maintenance**
2. Navigate to **Run Maintenance Now** section
3. Select tasks to run
4. Configure additional task parameters, if any
5. Click **Run Maintenance Now**



Running maintenance manually does not affect automatic maintenance settings or schedule.

