

# Protection from Synchronizer Cycles

It is possible to accidentally create a pair of synchronizers that would contradict each other. For example, a [sub-tasks synchronizer](#) can be configured to put a sub-task under an issue, while a [links synchronizer](#) with the "links primacy" option would have to move it to the top level of the structure.

If both such synchronizers are enabled (i.e. perform automatic synchronization), they will end up in an endless cycle, processing and overriding one another's changes, forever. These situations are undesirable, because they put unnecessary load on the server and quickly fill up issue and structure histories with meaningless change records.

Structure is designed to detect and stop such infinite cycles. In the background, Structure keeps track of how many times each of the enabled synchronizers has been invoked to process the changes generated by another synchronizer. If this number passes a certain threshold (10 by default), and there were no user-generated changes between the invocations, Structure will flag this as a probable conflict, and perform one or more of the following actions, depending on the configuration:

- Prevent one of the synchronizers from running this particular time, but keep both synchronizers enabled.
- Disable both of the synchronizers involved in the cycle.
- Send e-mail notifications to the user (or users) who created the conflicting synchronizers.
- If the synchronizers are not automatically disabled and keep cycling, send e-mail notification to the JIRA administrators (all users having the "System Administrator" global permission).

The default behavior is to disable the conflicting synchronizers and send e-mail notifications to the users who installed them.



## How do I respond to a cycle warning?

If you've installed a Structure synchronizer and then receive a cycle warning e-mail from Structure, please take appropriate measures to reconcile the synchronizers – disable or reconfigure one or both of them. If the second synchronizer was created by a different user, you may need to cooperate with them to solve the problem. If you're not sure what to do, contact your JIRA administrators or ALM Works support team.

JIRA administrators can configure the cycle guard as described in the [Administrator's Guide](#).