

# Periodic Reincarnation Plugin

## Plugin Information

View Periodic Reincarnation [on the plugin site](#) for more information.

This plugin makes it possible to periodically restart failed jobs according to a number of conditions. Its main purpose is to fix infrastructure failures.

## Cron Restart

Using a cron time format the user can specify at which exact time(s) the plugin should schedule failed jobs for a new build. In addition to that he/she can also specify a list of regular expressions in order to restrict which failed jobs exactly should be picked up for restart. There is a global cron tab and also every regular expression has its own such that can be individually configured. The global one is used when the cron tab for a certain regular expression is empty or cannot be compiled.

## Unchanged Restart

There is also the option to restart a job (independently from the regular expressions) if the following conditions hold:

1. The last build has failed.
2. The second last was a success.
3. There were no SCM or configuration changes between these two builds.

Basically if these conditions hold it means that it is very possible that the code or the configuration of the job are not responsible for the failure of the last build. This leaves a infrastructure problem and PeriodicReincarnation will automatically try to build the project again.

In order to check if there was a configuration change PeriodicReincarnation uses [jobConfigHistory](#) plugin. It is an optional dependency so the plugin will continue to work if jobConfigHistory is not installed, but won't be able to tell if there was a configuration change and will always assume there wasn't one.

## Afterbuild Restart

This feature was introduced in 1.2 and allows the immediate restart after a build failure occurs. It can be enabled globally for all projects or configured locally for every project alone. In order to prevent endless restarting there is a maximal restart depth that can also be set locally or globally. For projects where "Configure PeriodicReincarnation locally" has not been enabled restart happens like in the cron restart option - there must be a regex hit or an unchanged project that fails for the first time. For projects which have this option enabled (it can be found in the configuration page of every project, should be in the top) the restart will happen also if there is no regular expression that covers this project.

## Usage

This plugin can be useful when something temporary may be causing a build to fail. its main purpose is to fix infrastructure problems preventing jobs to build successfully. For instance

- there was not enough space on the hard disk - (here a disk-cleanup script can be automatically executed before the job is scheduled for restart)
- there was a communication problem with a slave - (here a script that disconnects such agent can be executed before the job is scheduled for restart)
- there was some incompatibility of some kind

It is easy to periodically restart all jobs that have failed because of some arbitrary "error\_failing\_the\_build". Just activate the plugin, set the cron time ("\* \* \* \* \*" for every minute or "\* \* \* \* \*/5" for every 5 minutes) and add this "error\_failing\_the\_build" as regular expression.

If you want jobs failing because of this "error\_failing\_the\_build" to be scheduled for restart right away then use the afterbuild restart option. Just enabled it and leave the regular expression in the list.

If you want different regular expressions to be triggered at different times, just configure the cron time in the regular expression itself. It is very easy, just go to the global configuration page.

## Configuration

The configuration for this plugin can be found in the global configuration page of Jenkins under "Periodic Reincarnation of failed builds". Each option there has a help page, so it is easier to understand and use every feature presented in the configuration of this plugin.

For individual jobs: the local configuration reveals after clicking the box "Configure PeriodicReincarnation locally" and contains just the parameters for the afterbuild restart - whether it is enabled or not and the maximal restart depth.

## Scripts execution

This feature was introduced in 1.2 and allows binding regular expressions with groovy scripts. Each time a regex hit occurs and a failed job is about to be restarted because of it these Groovy scripts will be executed before the restart. This can be very useful in correcting infrastructure errors like full disk or slave problems.

## Open issues

type key summary assignee reporter priority status resolution created updated due



Jira project doesn't exist or you don't have permission to view it.

[View these issues in Jira](#)

## Change log

### Version 1.13 - (April 5 2019)

- Do not retrigger MavenModules ([PR #28](#))

### Version 1.12.1 - (October 2 2017)

- Fixed loop in afterbuild reincarnation.
- Fixed ClassCastException in case non-AbstractProject items are in Folders. ([Issue #22](#))

### Version 1.12 - (September 22 2017)

- Fixed ClassCastException in case non-AbstractProject items are in Folders. ([Issue #22](#))

### Version 1.11 - (August 18 2017)

- [JENKINS-42797] Fixed issue.
- Upgraded parent pom version.
- Fixed some findbugs issues.

### Version 1.10 - (April 19 2017)

- Use Build Failure Analyser to search for failure causes.

### Version 1.9 - (July 18 2014)

- Spam entries from log file removed ([JENKINS-22132](#))
- Possibility to disable global reincarnation for single job via job configuration

### Version 1.8.1 - (03.02.2014)

- HOTFIX: Pluin now handles MultiModuleProjects.

### Version 1.8 - (04.12.2013)

- Issue <https://issues.jenkins-ci.org/browse/JENKINS-20205> now fixed and local job configuration enabled again.
- Fixed a NPE occuring when no regular expressions are configured.
- Removed spam Warning and Info messages from the console. Using Fine logging instead.
- Improved unchanged restart. See above.
- Afterbuild restart now has a delay period of 5 minutes. This prevents unnecessary overloading of Jenkins and improves the chances that a build will be a success.

### Version 1.7 - (15.11.2013)

- temporary workaround for <https://issues.jenkins-ci.org/browse/JENKINS-20205>. Local configuration is temporarily disabled. If you are using version before 1.34 you can still use the old version without problems.

### Version 1.6 - failed release

### Version 1.5 - (21.10.2013)

- fixed bugs with regex validation: <https://issues.jenkins-ci.org/browse/JENKINS-19687>
- fixed a problem where too much log information is printed every minute
- improved log information
- fixed bug with global cron time validation: <https://issues.jenkins-ci.org/browse/JENKINS-19688>

### **Version 1.4 - (20.09.2013)**

- added a missing help page(see <https://issues.jenkins-ci.org/browse/JENKINS-19599>)
- small code improvements and better use explanations in the help pages

### **Version 1.3 - (18.07.2013)**

- cron time can also be defined for every regular expression separately
- added description to every regular expression that is also stated in the cause for the restart
- internal changes, allowing a better restart summary in log

### **Version 1.2 - (25.03.2013)**

- added afterbuild trigger that automatically schedules a restart after a build failure
- added the possibility to execute scripts when restarting jobs with regular expressions

### **Version 1.1 - (19.11.2012)**

- removed git as dependency
- added a missing help page

### **Version 1.0 - (29.10.2012)**

- First release.

## **About**

The plugin is open source. Feel free to make suggestions, requests and contributions!