

Job and Stage Monitoring Plugin

Plugin Information

View Job and Stage monitoring [on the plugin site](#) for more information.

Note: breaking change in version 3.0

Version 3.0 is listed as a breaking change in the Jenkins plugin update center. This is because the optional user/password for notifying influxDB now uses the credentials store instead of separate strings.

This is more secure, because otherwise the credentials are stored in plain text on the Jenkins master.

If you are using the influxDB feature (and using user/password) to will need to reconfigure the plugin to get them from a Jenkins credential after upgrading. If this does not apply to you, you don't need to do anything after upgrading.

Overview

This plugin automatically sends status notification for all stages in any pipeline job. You can configure the plugin to send status information to:

- Github, to see per-stage build status from the PR page
- InfluxDb or StatsD (for automatic monitoring of build health) for any pipeline job

For example:

```
pipeline {
  agent any
  stages {
    stage('Stage 1') {
      ...
    }
    stage('Stage 2') {
      ...
    }
  }
}
```

The github page for the commit will initially show pending for each stage:

Some checks haven't completed yet Hide all checks
3 pending checks

- continuous-integration/jenkins/pr-merge** Pending — This commit is being ... Details
- stage 1** Pending — Building stage Details
- stage 2** Pending — Building stage Details

This branch has no conflicts with the base branch
Merging can be performed automatically.

Merge pull request You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

As each step is completed, the status will change to completed or error, depending on the outcome of the stage. At the end of a successful build, the PR page will show the following:

All checks have passed Hide all checks
3 successful checks

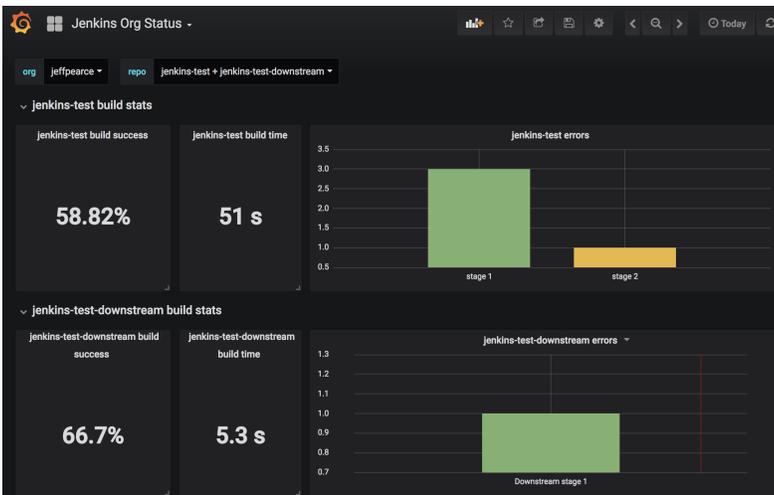
- continuous-integration/jenkins/pr-merge** — This commit looks good Details
- stage 1** — Stage built successfully Details
- stage 2** — Stage built successfully Details

This branch has no conflicts with the base branch
Merging can be performed automatically.

Merge pull request You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

Showing build health in Grafana

The plugin can optionally be configured to send job and stage status to an influxdb instance. This can be used to build dashboards in Grafana - you can use the provided sample dashboards as-is, or as a starting point for you own dashboards. The sample dashboard shows overall build pass rate, average build time, and error counts for each stage.



The dashboard can be configured to show all jobs, or you can select the jobs you want to show.

Configuring the plugin to send stats to Grafana

By default, the plugin only provides status to Github. To enable reporting stats to influxdb for the Grafana dashboards:

1. Open the system settings page in Jenkins (Manage Jenkins > Configure System)
2. Find the **Autostatus Config** section
3. Click the **Send to influxdb** option
4. Enter information for influxdb installation. You must provide the influxdb URL and database - all other information is optional.

Autostatus Config

Send to github

Send to influxdb

Optional influxdb url ?

influxdb database ?

influxdb user ?

influxdb password ?

retention policy ?

Configuring the plugin to send stats to StatsD

As noted above, by default the plugin only provides status to Github. To enable reporting metrics to StatsD (introduced in 3.5.0):

1. Open the system settings page in Jenkins (Manage Jenkins > Configure System)
2. Find the **Autostatus Config** section
3. Click the **Send to statsd** option
4. Enter the relevant information for your StatsD collector. You can provide:
 - a. StatsD Hostname
 - b. StatsD Port
 - c. StatsD Bucket
 - d. Maximum packet size (optional, defaults to 1400)

Autostatus Config

Send to github

Send to influxdb

Send to statsd

StatsD Hostname ?

StatsD Port ?

StatsD Bucket ?

Maximum packet size ?

Importing the sample dashboard

A sample dashboard is available from grafana.com. The sample dashboard provides a dropdown for all of the orgs with stats, and a second dropdown for all of the repos within an org.

To import the sample dashboard (instructions current as of Grafana 5.0):

1. Log into your grafana installation with a login that has permissions to create dashboards.
2. Click the dashboard dropdown in the upper left of the page
3. Click the **Import dashboard** link
4. Enter the id **5786** in the **Grafana.com Dashboard** field
5. Click the **Load** button
6. Select the influxdb source that matches the database configured in Jenkins
7. Click **Import**

Once you've imported the dashboard, just select the org you want to monitor, then select the repos you want to provide stats for.

The sample dashboard is just a starting point to demonstrate how the influxdb stats can be used to build dashboards. You can create dashboards that show more detailed information, such as graphs of build health over time. I'll continue to publish additional samples to grafana.com as time permits.

Version History

Version 3.5.0 (20-June-2019)

- Added new feature to send metrics to StatsD collectors

Version 3.2 (13-Sept-2018)

- don't include time spent blocked in total job time sent to influxdb (blocked time sent as a separate field).

Version 3.1.1 (05-Sept-2018)

- update README, update center description, and wiki link

Version 3.1 (04-Sept-2018)

- provide job name information for non-github jobs ([Github issue #16](#))

Version 3.0.1 (02-Sept-2018)

- java.lang.NoClassDefFoundError in version 3.0, Jenkins 2.121.3 ([Github issue #12](#))
- Influx notifier needs to escape "=" and "," ([Github issue #13](#))

Version 3.0 (02-Aug-2018)

- Move influxdb user/password to credentials ([Github issue #9](#))
- Support secret text credentials in github status notification ([Github issue #7](#))

Version 2.1 (23-Apr-2018)

- Add support for all pipelines (previously only supported declarative pipeline jobs).
- Added support to send stats to an influxdb server for build monitoring

Version 2.0 (06-Feb-2018)

- Removed unnecessary serialization of GHRepository

Version 1.0.1 (18-Oct-2017)

- Minor updates

Version 1.0 (16-Oct-2017)

- Initial release, supporting sending stage status to github for declarative pipeline branches only