

Plot Plugin

Plugin Information

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



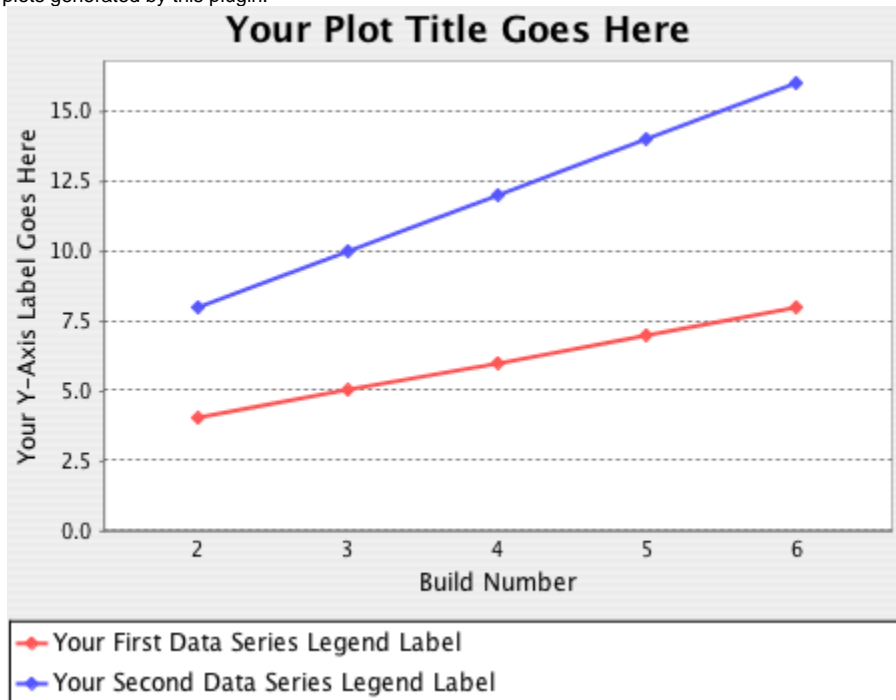
2.0.0 version of the plugin brings Jenkins Pipeline support. It might break compatibility if you update from 1.X versions, as it contains some API changes. Please test in non-production environment before update.

This plugin provides generic plotting (or graphing) capabilities in Jenkins.

This plugin will **plot** one or more **single values variations across builds** in one or more plots. Plots for a particular job (or project) are configured in the job configuration screen, where each field has additional **help information**. Each plot can have one or more lines (called data series). After each build completes the plots' data series latest values are pulled from **Java properties file(s), CSV file(s), or XML file(s)** via an XPath (which you should have generated during the build) somewhere below your workspace. Data for each plot is stored in a CSV file within the job's root project directory.

It can generate various kind of plots, including **Area, Bar, Line, Stacked Bar, Waterfall...**

Here is an example of the plots generated by this plugin:



Configuration

Currently supported parameters

The currently supported parameters are:

- **width** (int, default: 750) The width of the plot in pixels.
- **height** (int, default: 750) The height of the plot in pixels.
- **rightBuildNum** (int, default: $2^{38} - 1$) The right-most build number on the plot.
- **hasLegend** (boolean, default: true) Whether or not the plot has a legend.
- **urlNumBuilds** (string, default: $2^{38} - 1$) Number of builds back to show on this plot from URL.
- **urlTitle** (string, default: "") Title of plot from URL.
- **urlStyle** (string, default: "") Style of plot from URL.
- **urlUseDescr** (boolean, default: false) Use description flag from URL.
- **title** (string, default: "") Title of plot.
- **yaxis** (string, default: "") Y-axis label.
- **series** (list) List of data series.
- **group** (string) Group name that this plot belongs to.
- **numBuilds** (string, default: "") Number of builds back to show on this plot. An empty string means all builds. Must not be "0".

- `csvFileName` (string, default: "\$ROOT_DIR/plot-XXXX.csv") The name of the CSV file that persists the plots data. The CSV file is stored in the projects root directory. This is different from the source CSVle that can be used as a source for the plot.
- `csvLastModification` (long, default: "last modified date") The date of the last change to the CSV file.
- `style` (string, default: "line") Style of plot: line, line3d, stackedArea, stackedBar, etc.
- `useDescr` (boolean, default: false) Whether or not to use build descriptions as X-axis labels.
- `keepRecords` (boolean, default: false) Keep records for builds that were deleted.
- `exclZero` (boolean, default: false) Whether or not to exclude zero as default Y-axis value.
- `logarithmic` (boolean, default: false) Use a logarithmic Y-axis.
- `yaxisMinimum` (string, default: "") Minimum y-axis value.
- `yaxisMaximum` (string, default: "") Maximum y-axis value.

For a full list of parameters the best place to view is [Plot.java](#) class.

Example Usage to generate detailed PMD reports

Attached is a [Perl script](#) which generates more detailed "summaries" out of PMD report files. We use this for several *code analysis* projects, all named `trunk.codeanalysis.prefix`.

To have all resulting plots on one page, give all Plots the same *plot group*. Because each code quality has its very own range, define each on a separate plot, not as an additional data series.

Pipeline job configuration

You can generate the required [Scripted Pipeline](#) syntax via the [Snippet Generator](#) by choosing the "plot: Plot build data" step.

Below you can find sample configuration which is auto-generated using [Snippet Generator](#).

```
plot csvFileName: 'plot-8e54e334-ab7b-4c9f-94f7-b9d8965723df.csv',
    csvSeries: [[
        file: 'data.csv',
        exclusionValues: '',
        displayTableFlag: false,
        inclusionFlag: 'OFF',
        url: '' ]],
    group: 'Plot Group',
    title: 'Plot Title',
    style: 'line',
    exclZero: false,
    keepRecords: false,
    logarithmic: false,
    numBuilds: '',
    useDescr: false,
    yaxis: '',
    yaxisMaximum: '',
    yaxisMinimum: ''
```

- `csvFileName` - autogenerated value, but you might want to change it to something more descriptive for your case.
- `file` - source file for plot generation (relative to workspace)

JIRA issues

If you have any proposals/bug reports, please create an issue on Jenkins JIRA.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
JENKIN S-59237	Add possibility to define height, width and hasLegend with plot command	+	Sep 05, 2019	Sep 05, 2019		Veaceslav Gaidarji	Christian Treczoks	✓	OPEN	Unresolved
JENKIN S-58433	Plot plugin doesn't display data points from previous builds in case of multiple .properties files	•	Jul 10, 2019	Jul 10, 2019		Veaceslav Gaidarji	Jatin Mehta	⬆	OPEN	Unresolved
JENKIN S-58410	Plot plugin csv file not getting created in project root directory	•	Jul 09, 2019	Jul 09, 2019		Veaceslav Gaidarji	Jatin Mehta	⬆	OPEN	Unresolved
JENKIN	Plot Plugin + Jenkinsfile:		Feb 26,	Feb 27,		Veaceslav	Bharath R			Unresolved

S-56291	New plots will not be displayed in Plot section until the build succeeds		2019	2019	Gaidarji			OPEN	
JENKIN S-56086	Tabs missing in configuration page after adding plot to freestyle job		Feb 11, 2019	Mar 08, 2019	Veaceslav Gaidarji	Micha Marcinkowski		OPEN	Unresolved
JENKIN S-54745	Specify font size, or automatically scale it as plot size grows		Nov 21, 2018	Nov 21, 2018	Veaceslav Gaidarji	Alberto Mardegan		OPEN	Unresolved
JENKIN S-54714	Allow downloading raw CSV data for external processing		Nov 20, 2018	Jul 09, 2019	Veaceslav Gaidarji	Alberto Mardegan		OPEN	Unresolved
JENKIN S-54307	Plot plugin is not working for zero values on logarithmic scale		Oct 29, 2018	Oct 30, 2018	Veaceslav Gaidarji	david gomez		OPEN	Unresolved
JENKIN S-54017	Plot for Color blind		Oct 11, 2018	Oct 11, 2018	Veaceslav Gaidarji	Tim Schlüter		OPEN	Unresolved
JENKIN S-54016	Independent plot data table option		Oct 11, 2018	Oct 11, 2018	Veaceslav Gaidarji	Tim Schlüter		OPEN	Unresolved
JENKIN S-53992	Multiple use of xml file in plots		Oct 10, 2018	Oct 10, 2018	Veaceslav Gaidarji	Tim Schlüter		OPEN	Unresolved
JENKIN S-53939	Plot plugin configuration in pipeline script - run job on remote node - graph not shown		Oct 08, 2018	Dec 26, 2018	Veaceslav Gaidarji	Lubov Shilin		OPEN	Unresolved
JENKIN S-52249	Parallel build led to AIOOBE in Plot. savePlotData		Jun 28, 2018	Jan 17, 2019	Veaceslav Gaidarji	Reinhold Füreder		OPEN	Unresolved
JENKIN S-52128	NullPointerException in Plot plugin (pipeline)		Jun 21, 2018	Jul 08, 2018	Veaceslav Gaidarji	Torben Thellefsen		OPEN	Unresolved
JENKIN S-51547	Plot Plugin fails with number in title of jmx step		May 25, 2018	May 25, 2018	Veaceslav Gaidarji	Rich Peters		OPEN	Unresolved
JENKIN S-51532	Plot plugin extreme memory leak with matrix jobs		May 24, 2018	May 24, 2018	Veaceslav Gaidarji	Cameron		OPEN	Unresolved
JENKIN S-51200	Plot plugin loses historical data on configuration change (Multi-configuration project)		May 08, 2018	May 08, 2018	Kohsuke Kawaguchi	Lachie Murray		OPEN	Unresolved
JENKIN S-50363	Failed to parse Double value from String. Not a problem, result already set		Mar 23, 2018	Aug 17, 2018	Veaceslav Gaidarji	John V		REOPENED	Unresolved
JENKIN S-50215	Jenkins Plot Plugin is not plotting data.		Mar 16, 2018	Mar 16, 2018	Veaceslav Gaidarji	gulshan kumar		OPEN	Unresolved
JENKIN S-49672	Jenkins plot-plugin issue, graph not getting updated after every build.		Feb 21, 2018	Feb 21, 2018	Veaceslav Gaidarji	gulshan kumar		OPEN	Unresolved

Showing 20 out of 60 issues

Change Log

Version 2.1.1 (Jun 14, 2019)

- Trim labels and y-values ([PR-52](#)).
 - Thanks to [skelliam](#)

Version 2.1.0 (Jun 4, 2018)

- Use `@DataBoundSetter` for optional pipeline parameters ([JENKINS-50636](#), [PR-48](#)).
 - Base Jenkins version was [updated to 2.0](#) version.
 - Thanks to [rmstyrzula](#)

Version 2.0.5 (May 15, 2018)

- Update values table CSS style and number formatting ([PR-47](#)).
 - Thanks to [Radek Doulik](#)

Version 2.0.4 (May 5, 2018)

- Fix chart style value comparison, `STACKED_AREA` in particular ([JENKINS-50924](#)).

Version 2.0.3 (January 24, 2018)

- Pass `PlotBuilder` CTOR params to `Plot` ([JENKINS-48887](#)).
 - `"useDescr"/"keepRecords"/"exclZero"/"logarithmic"` parameters didn't work properly in pipeline.
 - Thanks to [Reinhold Füreder](#)
- Use "regular numeric tick labels" by default for `LogarithmicAxis` ([JENKINS-48888](#))
 - Thanks to [Reinhold Füreder](#)

Version 2.0.2 (January 3, 2018)

- Fixed `ConcurrentModificationException` in `PlotBuildAction.java` ([JENKINS-48465](#))
- Fixed typo's in help files ([JENKINS-48530](#))
- Moved plugin description to wiki ([JENKINS-48537](#))
- Configured Checkstyle and reformatted the project according to the rules

Version 2.0.0 (November 2, 2017)

- Added support for [Pipeline Plugin](#) ([JENKINS-35571](#)).
 - **Note:** Might break compatibility if you update from 1.X version. Update carefully!

Version 1.11 (April 26, 2017)

- Final Release: includes all PRs and fixes up to now

Version 1.9 (Mar 15, 2015)

- Added an option to draw plots using a logarithmic Y-axis.
- Fixed `%name%` and `%index%` replacements in the URL for XML files (<http://stackoverflow.com/q/13271710/2654518>).
- Added `%build%`, build number placeholder.

Version 1.8 (Sep 28, 2014)

- Added option to exclude zero as default Y-axis value.
- Added option to keep records for deleted builds ([JENKINS-22575](#)).
- Fixed matrix project support ([JENKINS-24666](#)).
- Fixed `%name%` and `%index%` replacements in the URL (<http://stackoverflow.com/q/13271710/2654518>).

Version 1.7 (Mar 11, 2014)

- Fixed issues parsing XML files, introduced in version 1.6 ([JENKINS-21493](#)).

Version 1.6 (Jan 16, 2014)

- Fixed plot data being retained for deleted builds ([JENKINS-4934](#)).
- Fixed data out of sync with graph ([JENKINS-15358](#)).
- Plugin is now available for maven2 ([JENKINS-8478](#)) and matrix jobs ([JENKINS-15396](#)).
- Improved XPath support.

Version 1.5 (Jul 10, 2011)

- Thread safety fix ([JENKINS-9662](#)).
- Japanese localization.

Version 1.4 (Nov 21, 2010)

- Use `Uri.rawencode` instead of `URLEncoder.encode` for Plot Group ([JENKINS-7245](#), [JENKINS-8143](#)).

Version 1.3 (Jul 20, 2010)

- Configurable graph style for each plot.
- Read data from XML files ([JENKINS-2796](#)).
- Read data from CSV files ([JENKINS-2899](#)).
- Update code for more recent Hudson.

Version 1.2 (Sep 24, 2008)