

PaaSLane Estimate Plugin

Provides a post build action for submitting artifacts to PaaSLane for scanning.

Plugin Information
View PaaSLane Estimate on the plugin site for more information.

Goal

The PaaSLane Estimate plugin for Jenkins provides a secure submission capability for users of PaaSLane, a static code analysis platform, and Jenkins. PaaSLane is a static code analyzer for modernizing and optimizing applications. When modernizing existing code, PaaSLane can help to make your application be more performant, more secure, and easier to maintain. When developing new cloud applications, [PaaSLane](#) helps ensure optimal performance and scalability in the most popular public and private cloud platforms. PaaSLane automatically spots hundreds of potential issues and optimizations in your source code, giving you detailed examples and suggesting remediations to enhance developer productivity. For a free trial [click here](#).

The PaaSLane Estimate plugin is implemented as a *Post Build Action* and is intended to sweep a directory structure looking for files that match the specified patterns and securely upload them to PaaSLane for verification. Once the files are uploaded, they are profiled and then an estimation report is generated. This report will include overall conformance with the rules defined, a list of instances of the violations with their recommended remediation, as well as an estimate for the remediation.

Getting started

Install the plugin using the Plugin Manager via the Available tab, and restart Jenkins

Job Setup

The PaaSLane Estimate plugin is implemented as a Post Build Action Plugin as shown below

The screenshot shows the Jenkins configuration interface for the PaaSLane Estimate plugin. It is titled "Post Steps" and includes several sections for configuration:

- Run Options:** Three radio buttons are present: "Run only if build succeeds" (unselected), "Run only if build succeeds or is unstable" (selected), and "Run regardless of build result" (unselected). Below them is a note: "Should the post-build steps run only for successful builds, etc."
- PaaSLane Estimation Request:** A section with a red "1" indicating the first step. It contains a text field for "Application Name" with the value "Sample Application".
- Server Configuration:** A section with a red "2" indicating the second step. It contains four text fields:
 - "Authentication Token" with value "BJUU41mFM0669L6irSMx9rTiiHTUDv"
 - "PaaSLane SaaS URL" with value "https://app.paaslane.com/paaslane"
 - "PaaSLane Agent URL" with value "https://agent.paaslane.com/paaslaneagentserver"
- Build Configuration:** A section with a red "5" indicating the fifth step. It contains five text fields:
 - "Path to Artifact" (empty)
 - "Regular Expression for Selecting Modules" with value "**/*.*.jar"
 - "Exclude Regular Expressions" with value "(.*)WEB-INF(.*)/(.*)test-classes/(.*)/(.*)system/lib/(.*)/(.*)lib/(.*)"
 - "Language" with a dropdown menu set to "Java"
 - "Test, but don't send files" with an unchecked checkbox
- Success Configuration:** A section with a red "10" indicating the tenth step. It contains six checkboxes for failure conditions:
 - 10 Fail when Total Alert Count greater than... (with a question mark icon)
 - 11 Fail when Blocker Alert Count greater than... (with a question mark icon)
 - 12 (with a question mark icon)
 - 13 Fail when Important Alert Count greater than... (with a question mark icon)
 - 14 (with a question mark icon)
 - 15 Fail when Warning Alert Count greater than... (with a question mark icon)
 - 16 Fail when Optimization Alert Count greater than... (with a question mark icon)

A "Delete" button is located at the bottom right of the configuration area.

Options:

1. Name - The name field is used to specify the PaaSLane application that the artifacts mapped later will be associated with. For example, if the name of this field is "My Application" and you match 3 artifacts, there will be an application "My Application" with 3 modules that get profiled.

2. Authentication Token - The "Authentication Token" field contains the PaaSLane token associated with a specific user in a specific tenant. This token can be gotten by logging into PaaSLane, clicking the username dropdown and selecting to "Get Token". Once you have this option you should be presented with the time sensitive token.
3. PaaSLane SaaS URL - The "PaaSLane Agent URL" field specifies the root url, including the host, port and context that define the location of the PaaSLane profiling environment to use. For most SaaS customers, this will be <https://app.paastrane.com/paastrane>.
4. PaaSLane Agent URL - The "PaaSLane Agent URL" field specifies the root url, including the host, port and context that define the location of the PaaSLane profiling environment to use. For most SaaS customers, this will be <https://agent.paastrane.com/paastraneagentserver>. However, customers utilizing distributed profiling, will want to get their URL from their administrator.
5. Path to Artifact(s) - This optional value specifies the additional path from the workspace directory that should be scanned for artifacts to be included in the application. This, paired with "Regular Expression for Selecting Modules" and "Exclude Regular Expressions" help to specify included artifacts.
6. Regular Expression for Selecting Modules - This value specifies the Ant style regular expression used to search for artifacts residing under "Path to Artifact(s)". For examples of Ant Style regular expressions, please see [examples](#).
7. Excluded Regular Expressions - The "Exclude Regular Expressions" field contains a comma separated list of regular expression patterns that will be applied to every matched artifact. If any of the patterns match the path of the artifact being reviewed, then artifact will not be sent to PaaSLane. Examples of these regular expressions can be found [here](#).
8. Report Config - Name of the Report Config to use when generating the Report. If you leave this field blank, PaaSLane will use the Default Report Config. To see your existing Report Configs, go to the PaaSLane UI, click "Applications", and click "New Report" next to an existing application. Under the "Create Report" button, you will see a dropdown that contains a list of existing Report Configs. You can click "Advanced" to see details and further configure your report.
9. Language - The "Language" selection specifies which language rules should be applied to the artifacts that are uploaded and profiled.
10. Test, but don't send files - The "Test, but don't send files" field, when checked, will only display the files that would have been sent, based on the parameters. Use this field to get the parameters correct.
11. Fail when Total Alert Count greater than - Forces the plugin to query the total number of alerts found and if that number exceeds the threshold provided below, the build will fail.
12. Fail when Blocker Alert Count greater than - Forces the plugin to query the total number of blocker alerts found and if that number exceeds the threshold provided below, the build will fail.
13. - The threshold for acceptable number of blocker alerts allowed.
14. Fail when Important Alert Count greater than - Forces the plugin to query the total number of important alerts found and if that number exceeds the threshold provided below, the build will fail.
15. - The threshold for acceptable number of important alerts allowed.
16. Fail when Warning Alert Count greater than - Forces the plugin to query the total number of warning alerts found and if that number exceeds the threshold provided below, the build will fail.
17. Fail when Optimization Alert Count greater than - Forces the plugin to query the total number of optimization alerts found and if that number exceeds the threshold provided below, the build will fail.