



DevOps World

Jenkins World



Plugin Installation CLI Tool/Library

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Plugin Installation
CLI Tool/Library



Overview

About The Project

- Google Summer of Code Project for Jenkins
- A CLI tool and library that will unify plugin management
- Download plugins before Jenkins starts
- Offer better plugin tooling

Benefits to the Community

- Plugins = key to extensibility
- Plugin management has been somewhat of a pain point
- Project will streamline plugin management across components
- Offer additional features such as security information and available updates

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Project Details

CLI and Library

- Two main pieces of project: CLI and Library
- Can be run independently or incorporated into other areas of Jenkins
- Project starting point was converting the install-plugins.sh bash script to Java

CLI Options

- List of plugins or a file containing a list of plugins to install
 - .txt or .yml files currently supported
- Specify plugin install directory
 - Supports Docker compatible defaults for *nix and Windows
- Path to Jenkins war file
- Set custom update center
- List currently installed and plugins that will be installed (before installation)
- View security warnings for specified plugins/dependencies
- View available updates for specified plugins/dependencies

Library

- Finds all recursive dependencies for each plugin, replacing the same plugin with the highest requested version
- Determines plugin dependencies and security warnings from update center metadata
- Finds all currently installed/bundled plugins
- Downloads plugins, ignoring installed/bundled version, taking highest required version

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Demo

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Future Directions

Future Plans for Tool/Library

- Incorporation into official Jenkins Docker image
- Compatibility with JasC
 - Ability to inject library to install plugins before JasC runs
- Incorporation into Custom War Packager

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Links and More
Information

Links and More Information

- <https://github.com/jenkinsci/plugin-installation-manager-tool>
- <https://gitter.im/jenkinsci/plugin-installation-manager-cli-tool>
- <https://jenkins.io/projects/gsoc/2019/plugin-installation-manager-tool-cli/>

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Thank you!

