Module 3- Installing & Configuring Jenkins

Installing Jenkins

- > Jenkins is typically run as a standalone application in its own process with the built-in Java servlet container/application server (Jetty).
- > Jenkins can also be run as a servlet in different Java servlet containers such as Apache Tomcat or GlassFish.

Prerequisites:

- ➤ Minimum hardware requirements:
- > 256 MB of RAM
- \succ 1 GB of drive space (although 10 GB is a recommended minimum if running Jenkins as a <u>Docker</u> container)
- > Recommended hardware configuration for a small team:
- ➤ 1 GB+ of RAM
- ➤ 50 GB+ of drive space

Jenkins Releases

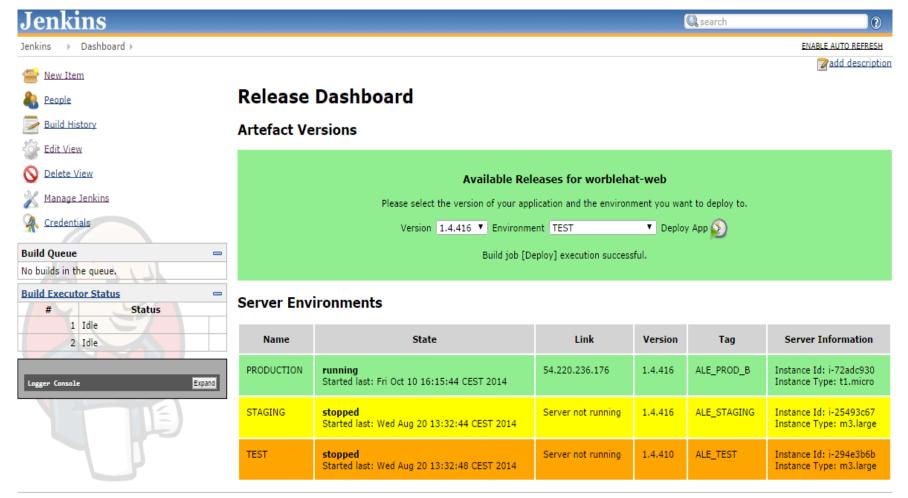
- The Jenkins project produces two release lines, LTS and weekly. Depending on your organization's needs, one may be preferred over the other.
- ➤ Both release lines are distributed as .war files, native packages, installers, and Docker containers.
- ➤LTS (Long-Term Support) releases are chosen every 12 weeks from the stream of regular releases as the stable release for that time period.
- > Weekly -A new release is produced to deliver bug fixes and features to users and plugin developers.

Platforms Supported

Jenkins could be installed and configured on the below platforms:

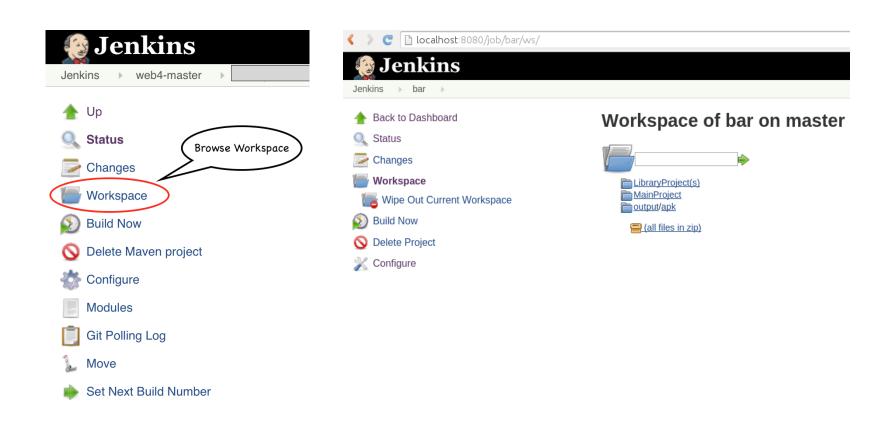
- > Docker Platform
- ➤ Linux OS Debian, Centos and Fedora
- ➤ Windows OS
- ➤ Mac OS
- ➤ Solaris, OmniOS, SmartOS, and other siblings

Jenkins Dashboard



Jenkins Workspace

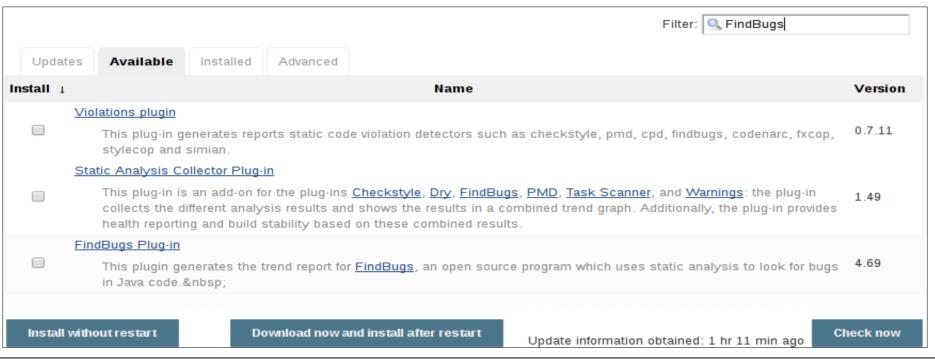
- The workspace directory is where Jenkins builds your project
- It contains the source code **Jenkins** checks out, plus any files generated by the build itself.

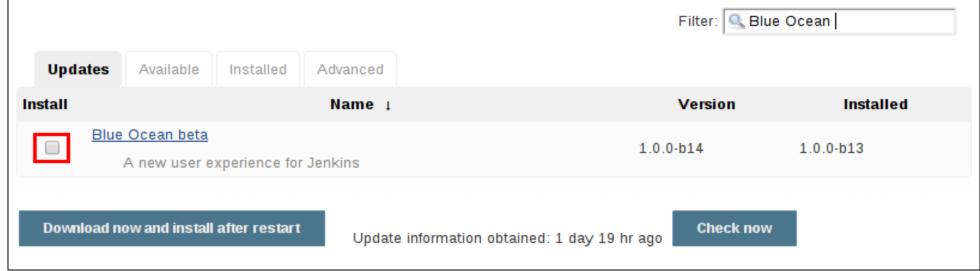


Managing Plugins

- ➤ Plugins are the primary means of enhancing the functionality of a Jenkins environment to suit organization- or user-specific needs. There are over a thousand different plugins which can be installed on a Jenkins master and to integrate various build tools, cloud providers, analysis tools, and much more.
- ➤ Plugins can be automatically downloaded, with their dependencies, from the Update Center. The Update Center is a service operated by the Jenkins project which provides an inventory of open source plugins which have been developed and maintained by various members of the Jenkins community.
- This section will cover everything from the basics of managing plugins within the Jenkins web UI, to making changes on the master's file system.

Installing & Updating Plugins





Uninstalling & Disabling Plugin

Updates	s Available Installed Advanced				
Enabled	Name 1	Version	Previously installed version	Pinned	Uninstall
•	Ant Plugin This plugin adds Apache Ant support to Jenkins.	1.4			Uninstall
€	bouncycastle API Plugin Provides an stable API to Bouncy Castle related tasks. Plugins using Bouncy Castle should depend on this plugin and not directly on Bouncy Castle	2.16.0			Uninstall
Ø	Structs Plugin Library plugin for DSL plugins that need names for Jenkins objects.	1.5			Uninstall

Update	s Available Installed Advanced				
Enabled	Name 1	Version	Previously installed version	Pinned	Uninstall
•	Ant Plugin This plugin adds Apache Ant support to Jenkins.	1.4			Uninstall
₽	bouncycastle API Plugin Provides an stable API to Bouncy Castle related tasks. Plugins using Bouncy Castle should depend on this plugin and not directly on Bouncy Castle	2.16.0			Uninstall
Ø	Structs Plugin Library plugin for DSL plugins that need names for Jenkins objects.	<u>1.5</u>			Uninstall

THANKS