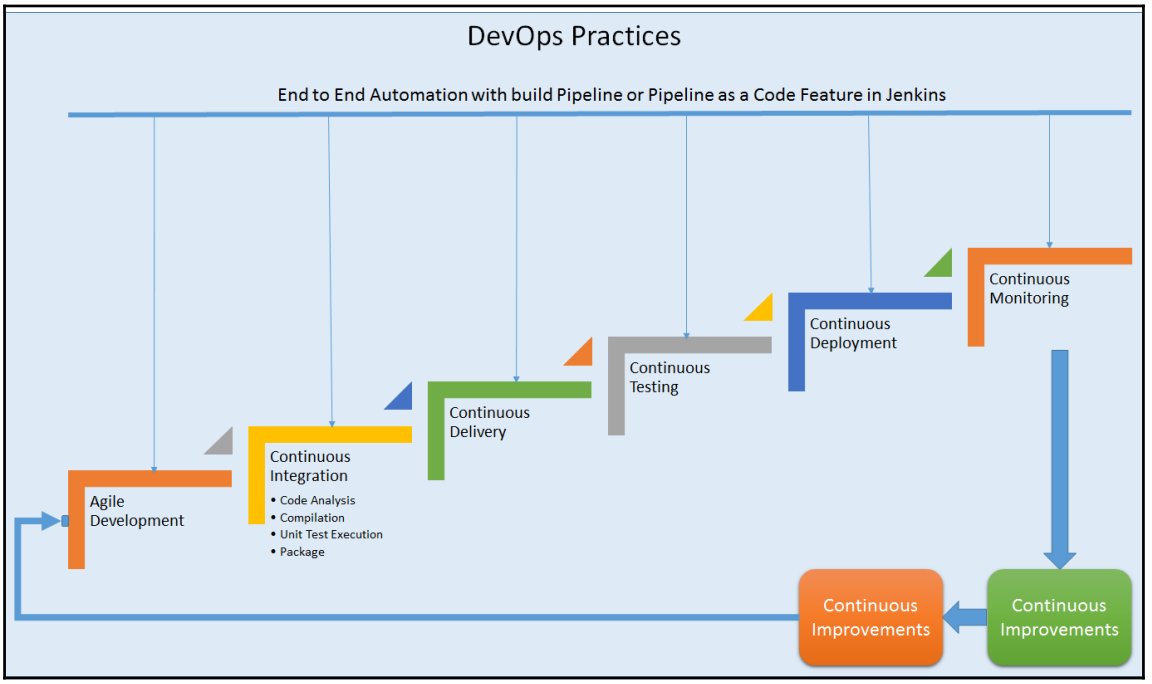
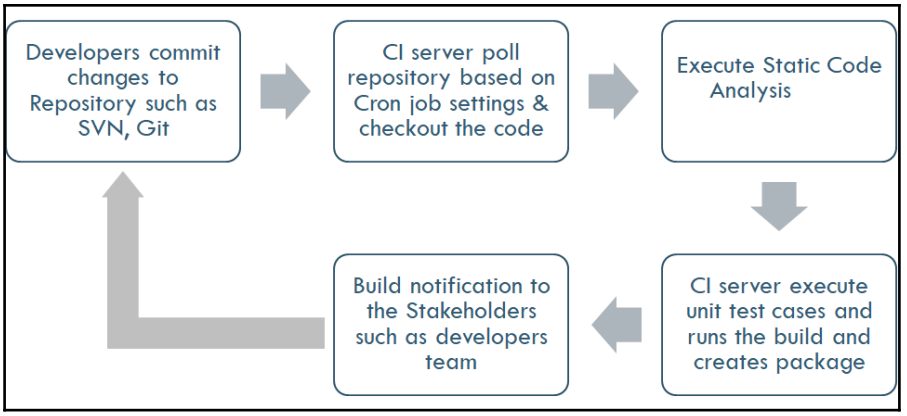
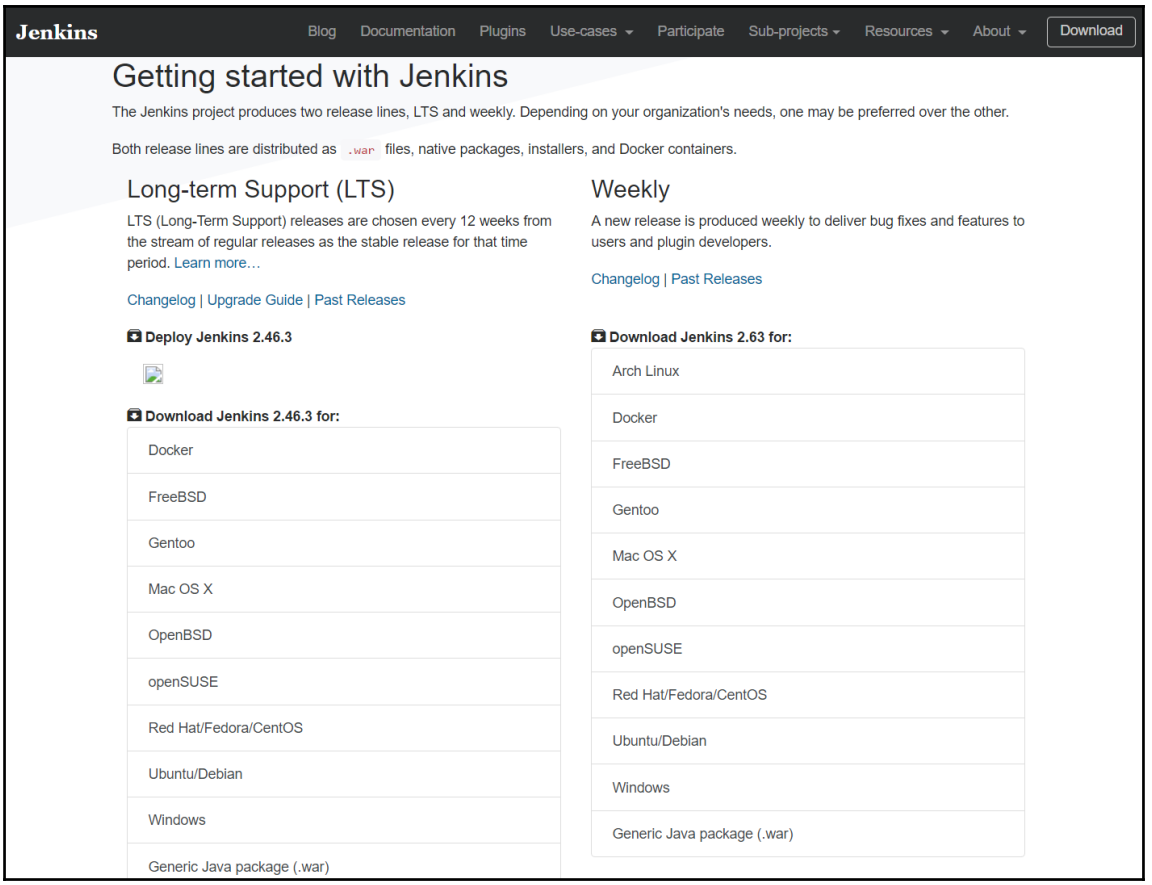
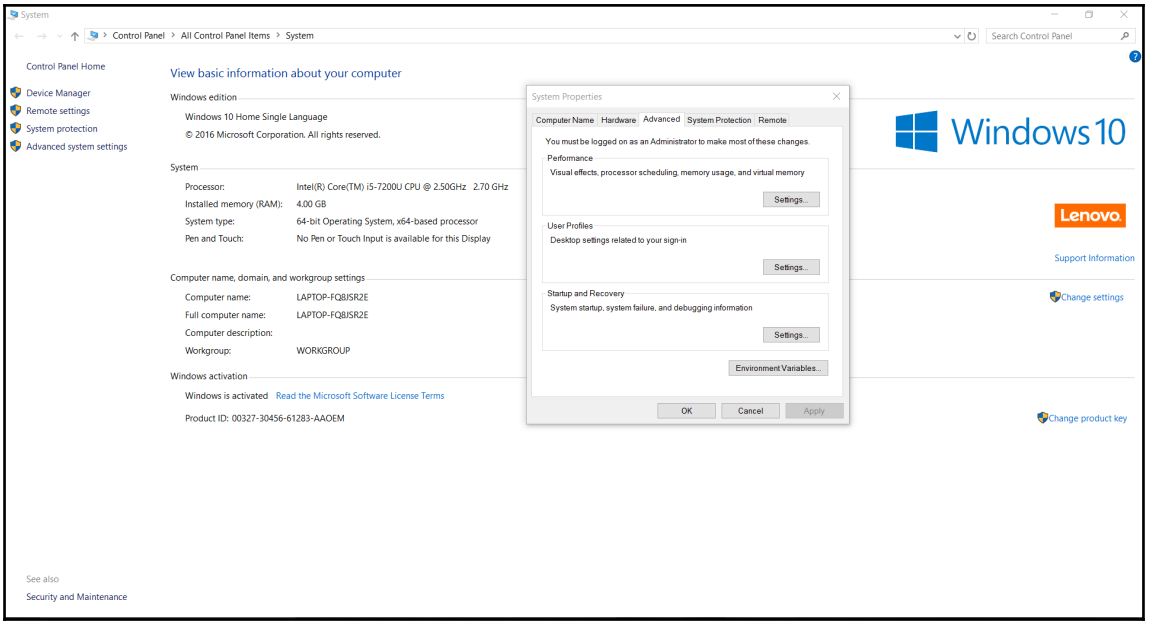
Chapter 01: Exploring Jenkins

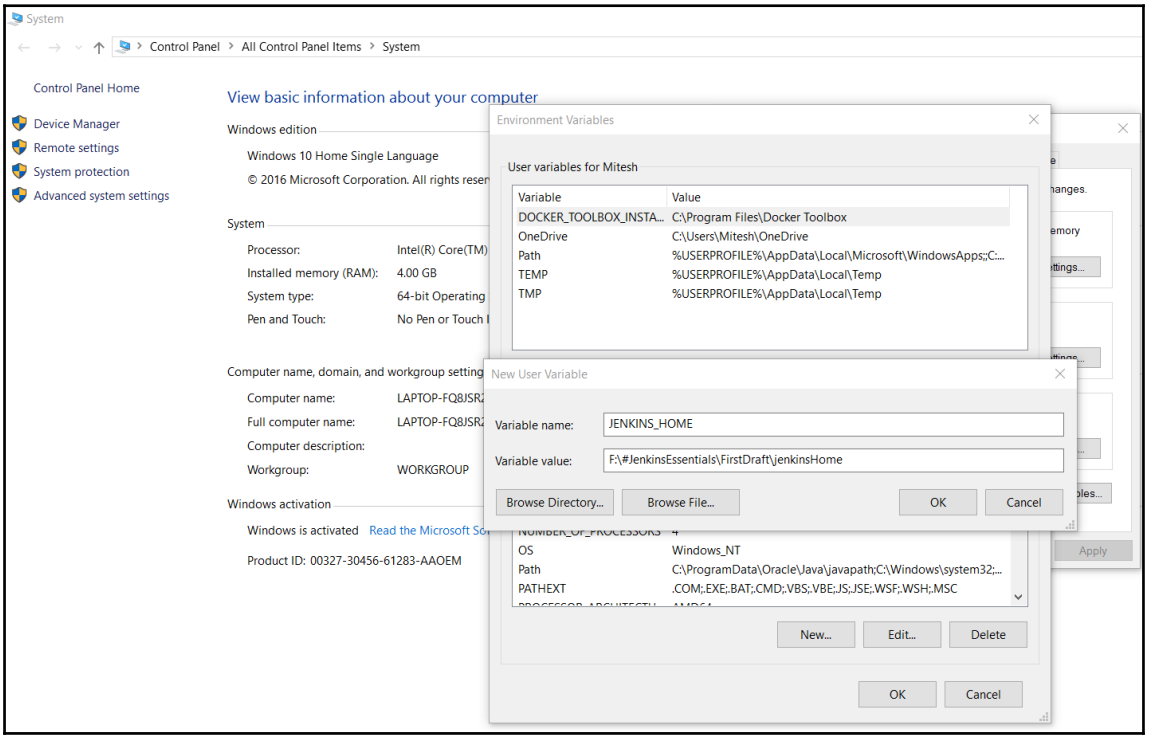


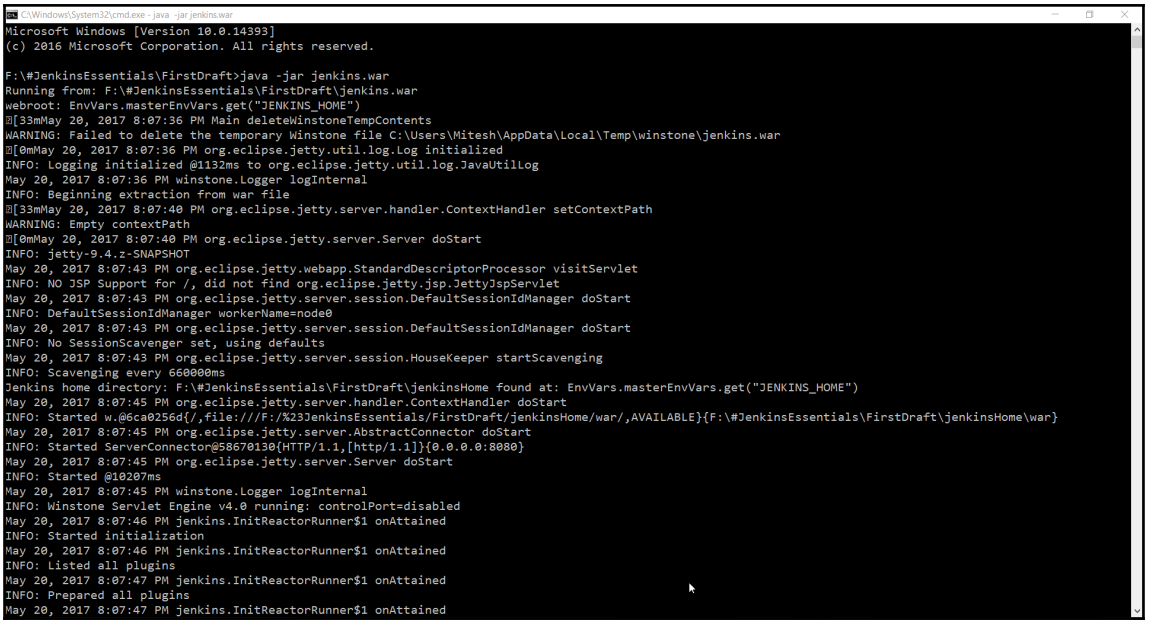


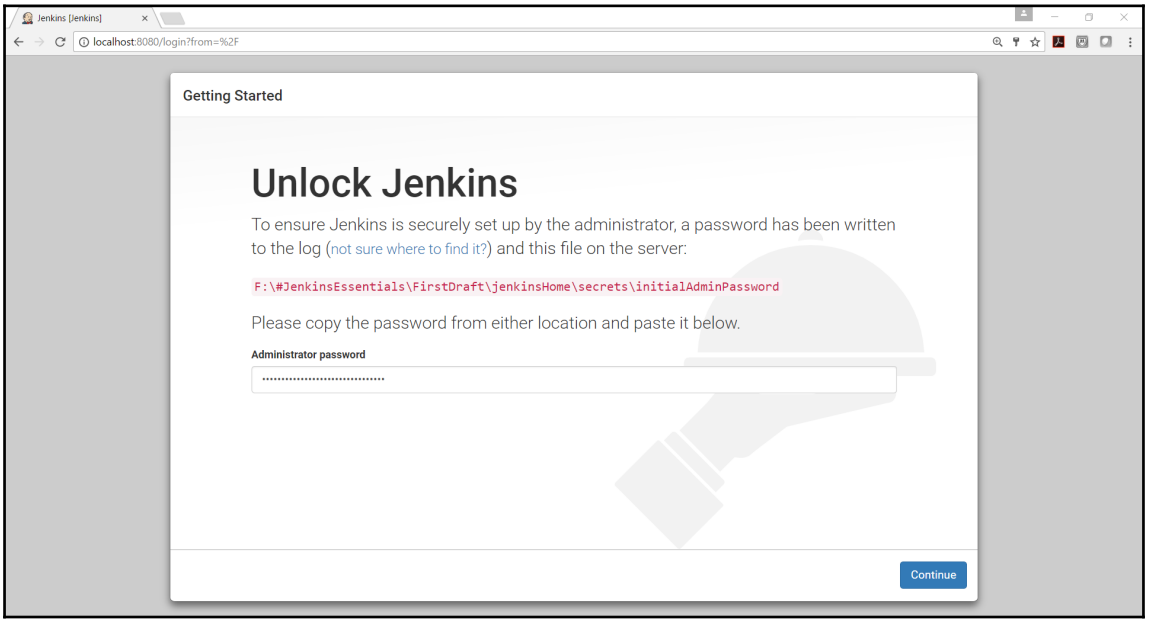
Secure | https://jenkins.io
Jenkins
Blog
Documentation
Plugins
Use-cases
Participate
Sub-projects
Resources
About
Download
Jenkins
Build great things at any scale
The leading open source automation server, Jenkins provides hundreds of plugins to support building, deploying and automating any project.
Documentation
Download
Register for Jenkins World 2017
Jenkins World is the largest gathering of Jenkins users in the world, including Jenkins experts, continuous delivery practitioneers, and companies offering complementary technologies to Jenkins. Join us in San Francisco, CA, from August 28-31.
THE Event for Everything Jenkins & DevOps

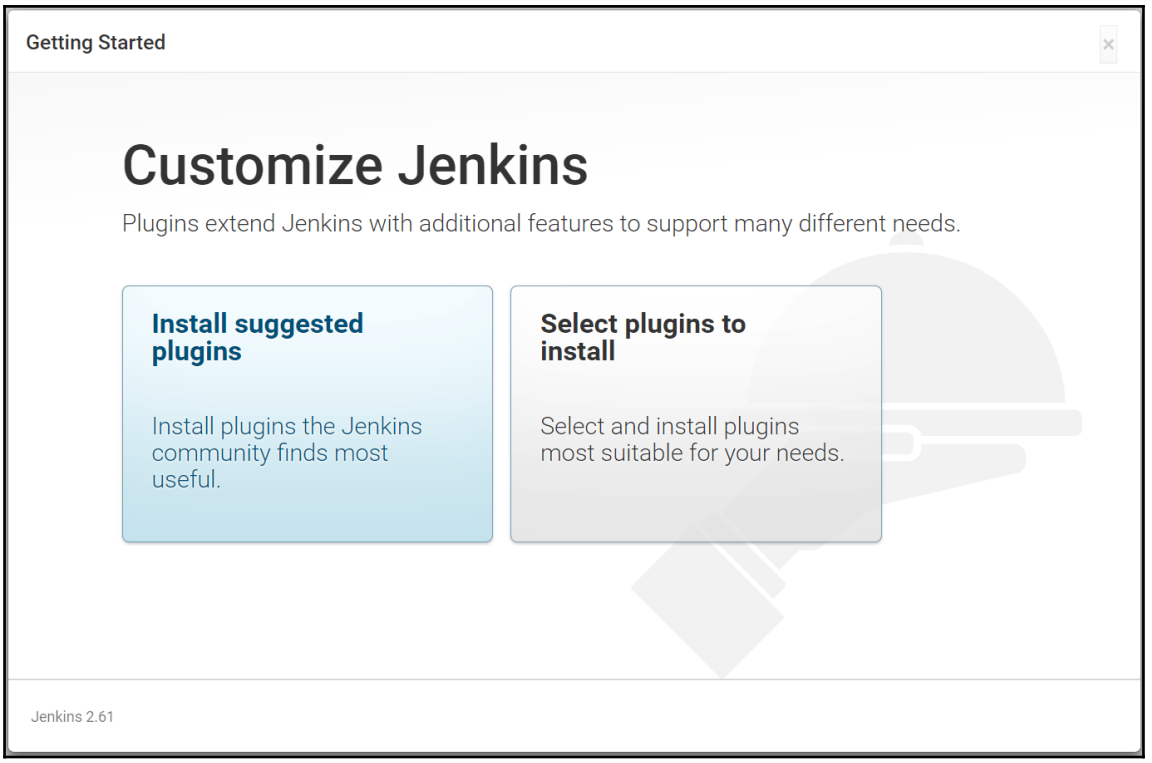

Jenkins
Blog
Documentation
Plugins
Use-cases
Participate
Sub-projects
Resources
About
Download
Getting started with Jenkins
The Jenkins project produces two release lines, LTS and weekly. Depending on your organization's needs, one may be preferred over the other.
Both release lines are distributed as .war files, native packages, installers, and Docker containers.
Long-term Support (LTS)
LTS (Long-Term Support) releases are chosen every 12 weeks from the stream of regular releases as the stable release for that time period. Learn more…
Changelog | Upgrade Guide | Past Releases
Deploy Jenkins 2.46.3
Download Jenkins 2.46.3 for:
Docker
FreeBSD
Gentoo
Mac OS X
OpenBSD
openSUSE
Red Hat/Fedora/CentOS
Ubuntu/Debian
Windows
Generic Java package (.war)
Weekly
A new release is produced weekly to deliver bug fixes and features to users and plugin developers.
Changelog | Past Releases
Download Jenkins 2.63 for:
Arch Linux
Docker
FreeBSD
Gentoo
Mac OS X
OpenBSD
openSUSE
Red Hat/Fedora/CentOS
Ubuntu/Debian
Windows
Generic Java package (.war)

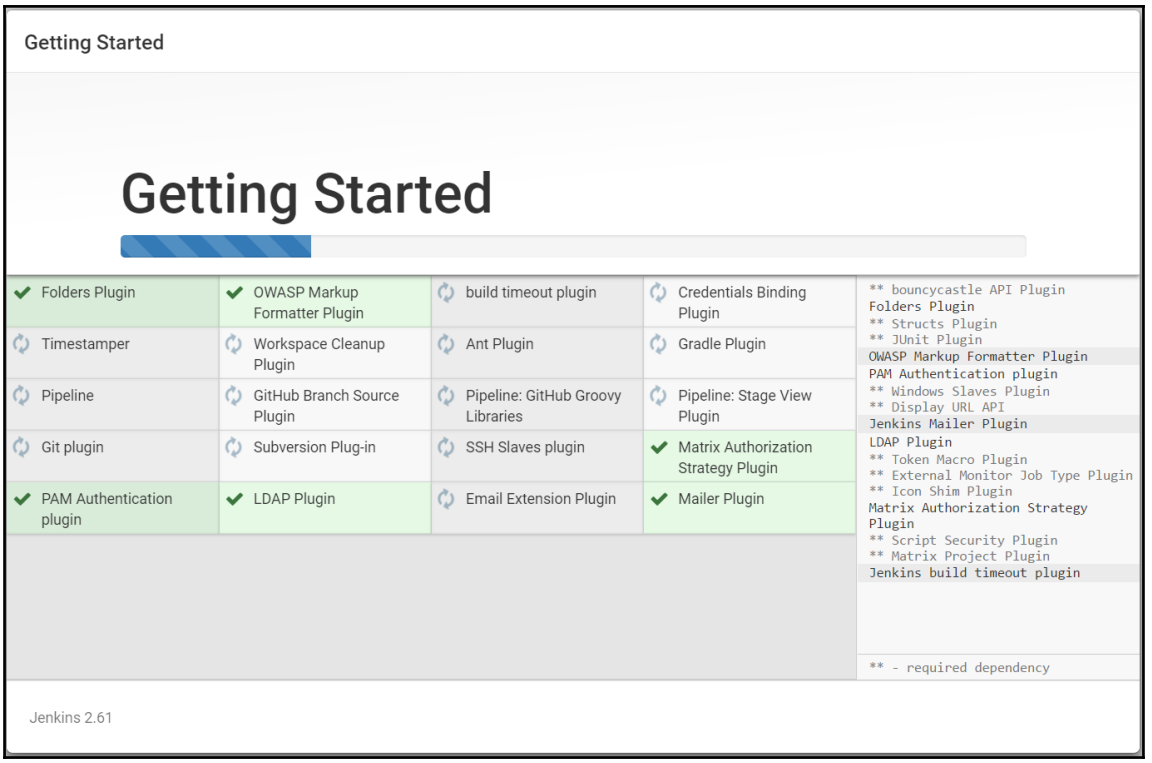

System
Control Panel > All Control Panel Items > System
Search Control Panel
Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
View basic information about your computer
Windows edition
Windows 10 Home Single Language
© 2016 Microsoft Corporation. All rights reserved.
System
Processor: Intel(R) Core(TM) i5-7200U CPU @ 2.50GHz 2.70 GHz
Installed memory (RAM): 4.00 GB
System type: 64-bit Operating System, x64-based processor
Pen and Touch: No Pen or Touch Input is available for this Display
Computer name, domain, and workgroup settings
Computer name: LAPTOP-FQ8JSR2E
Full computer name: LAPTOP-FQ8JSR2E
Computer description:
Workgroup: WORKGROUP
Windows activation
Windows is activated Read the Microsoft Software License Terms
Product ID: 00327-30456-61283-AAOEM
Windows 10
Lenovo
Support Information
Change settings
Change product key
See also
Security and Maintenance
System Properties
Computer Name Hardware Advanced System Protection Remote
You must be logged on as an Administrator to make most of these changes.
Performance
Visual effects, processor scheduling, memory usage, and virtual memory
Settings...
User Profiles
Desktop settings related to your sign-in
Settings...
Startup and Recovery
System startup, system failure, and debugging information
Settings...
Environment Variables...
OK
Cancel
Apply

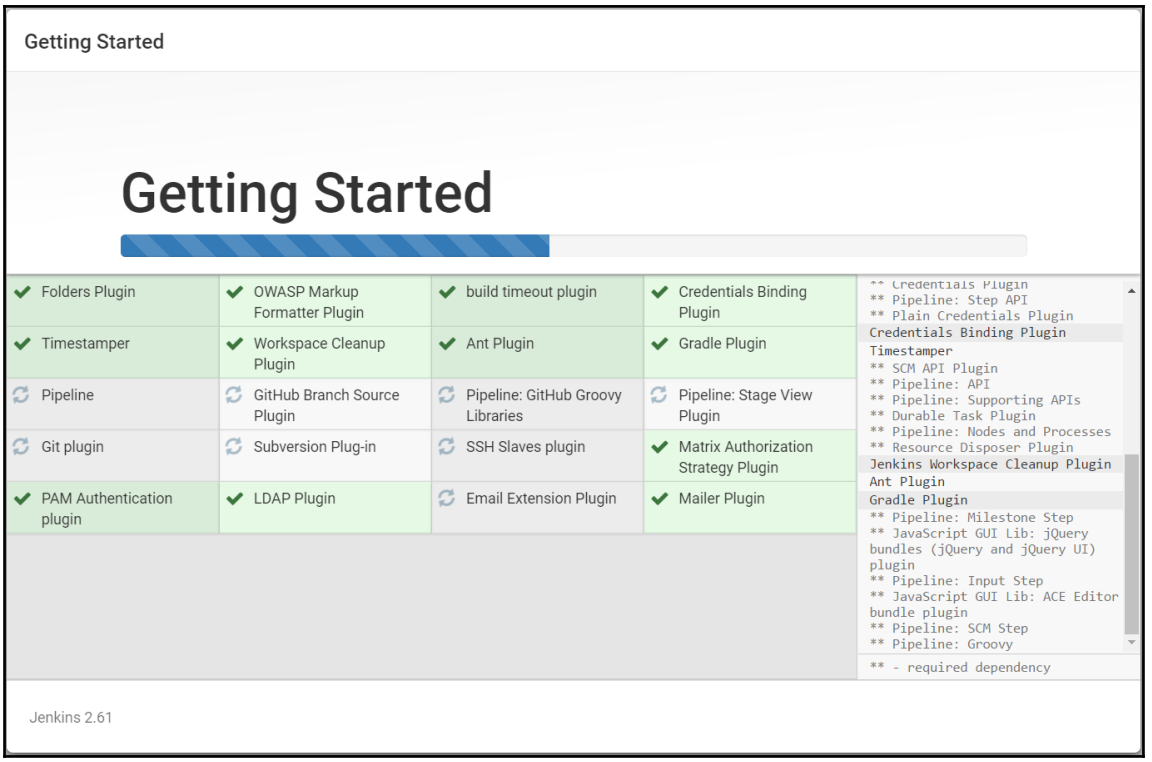

System
Control Panel > All Control Panel Items > System
Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
View basic information about your computer
Windows edition
Windows 10 Home Single Language
System
Processor: Intel(R) Core(TM)
Installed memory (RAM): 4.00 GB
System type: 64-bit Operating
Pen and Touch: No Pen or Touch
Computer name, domain, and workgroup setting
Computer name: LAPTOP-FQ8JSR
Full computer name: LAPTOP-FQ8JSR
Computer description:
Workgroup: WORKGROUP
Windows activation
Windows is activated Read the Microsoft So
Product ID: 00327-30456-61283-AAOEM
Environment Variables
User variables for Mitesh
Variable Value
DOCKER_TOOLBOX_INSTA... C:\Program Files\Docker Toolbox
OneDrive C:\Users\Mitesh\OneDrive
Path %USERPROFILE%\AppData\Local\Microsoft\WindowsApps;C:...
TEMP %USERPROFILE%\AppData\Local\Temp
TMP %USERPROFILE%\AppData\Local\Temp
New User Variable
Variable name: JENKINS_HOME
Variable value: F:\#JenkinsEssentials\FirstDraft\jenkinsHome
Browse Directory...
Browse File...
OK
Cancel
OS Windows_NT
Path C:\ProgramData\Oracle\Java\javapath;C:\Windows\system32;...
PATHEXT .COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
New...
Edit...
Delete
OK
Cancel
Apply

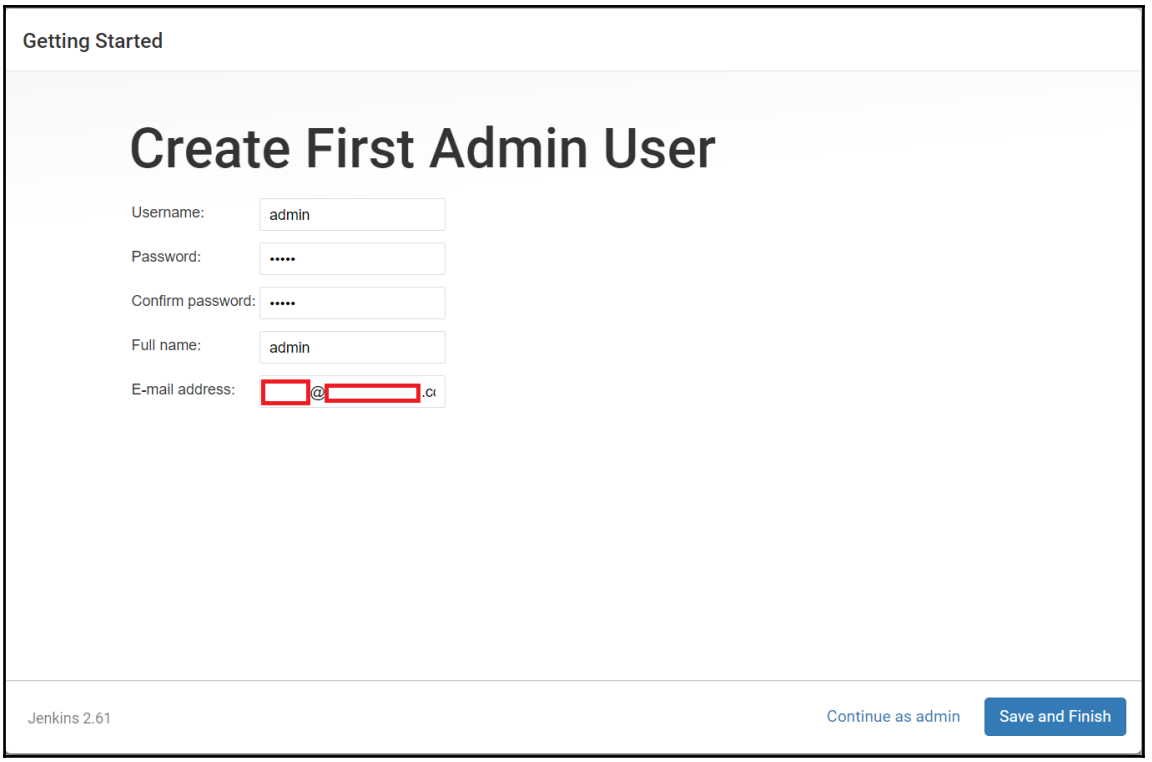

C:\Windows\System32\cmd.exe - java -jar jenkins.war
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.
F:\#JenkinsEssentials\FirstDraft>java -jar jenkins.war
Running from: F:\#JenkinsEssentials\FirstDraft\jenkins.war
webroot: EnvVars.masterEnvVars.get("JENKINS_HOME")
[33mMay 20, 2017 8:07:36 PM Main deleteWinstoneTempContents
WARNING: Failed to delete the temporary Winstone file C:\Users\Mitesh\AppData\Local\Temp\winstone\jenkins.war
[0mMay 20, 2017 8:07:36 PM org.eclipse.jetty.util.log.Log initialized
INFO: Logging initialized @1132ms to org.eclipse.jetty.util.log.JavaUtilLog
May 20, 2017 8:07:36 PM winstone.Logger logInternal
INFO: Beginning extraction from war file
[33mMay 20, 2017 8:07:40 PM org.eclipse.jetty.server.handler.ContextHandler setContextPath
WARNING: Empty contextPath
[0mMay 20, 2017 8:07:40 PM org.eclipse.jetty.server.Server doStart
INFO: jetty-9.4.z-SNAPSHOT
May 20, 2017 8:07:43 PM org.eclipse.jetty.webapp.StandardDescriptorProcessor visitServlet
INFO: NO JSP Support for /, did not find org.eclipse.jetty.jsp.JettyJspServlet
May 20, 2017 8:07:43 PM org.eclipse.jetty.server.session.DefaultSessionIdManager doStart
INFO: DefaultSessionIdManager workerName=node0
May 20, 2017 8:07:43 PM org.eclipse.jetty.server.session.DefaultSessionIdManager doStart
INFO: No SessionScavenger set, using defaults
May 20, 2017 8:07:43 PM org.eclipse.jetty.server.session.HouseKeeper startScavenging
INFO: Scavenging every 660000ms
Jenkins home directory: F:\#JenkinsEssentials\FirstDraft\jenkinsHome found at: EnvVars.masterEnvVars.get("JENKINS_HOME")
May 20, 2017 8:07:45 PM org.eclipse.jetty.server.handler.ContextHandler doStart
INFO: Started w.@6ca0256d{/,file:///F:/%23JenkinsEssentials/FirstDraft/jenkinsHome/war/,AVAILABLE}{F:\#JenkinsEssentials\FirstDraft\jenkinsHome\war}
May 20, 2017 8:07:45 PM org.eclipse.jetty.server.AbstractConnector doStart
INFO: Started ServerConnector@58670130{HTTP/1.1,[http/1.1]}{0.0.0.0:8080}
May 20, 2017 8:07:45 PM org.eclipse.jetty.server.Server doStart
INFO: Started @10207ms
May 20, 2017 8:07:45 PM winstone.Logger logInternal
INFO: Winstone Servlet Engine v4.0 running: controlPort=disabled
May 20, 2017 8:07:46 PM jenkins.InitReactorRunner$1 onAttained
INFO: Started initialization
May 20, 2017 8:07:46 PM jenkins.InitReactorRunner$1 onAttained
INFO: Listed all plugins
May 20, 2017 8:07:47 PM jenkins.InitReactorRunner$1 onAttained
INFO: Prepared all plugins
May 20, 2017 8:07:47 PM jenkins.InitReactorRunner$1 onAttained


Jenkins [Jenkins]
localhost:8080/login?from=%2F
Getting Started
Unlock Jenkins
To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:
F:\#JenkinsEssentials\FirstDraft\jenkinsHome\secrets\initialAdminPassword
Please copy the password from either location and paste it below.
Administrator password
Continue


Getting Started
Customize Jenkins
Plugins extend Jenkins with additional features to support many different needs.
Install suggested plugins
Install plugins the Jenkins community finds most useful.
Select plugins to install
Select and install plugins most suitable for your needs.
Jenkins 2.61


Getting Started
Getting Started
Folders Plugin
OWASP Markup Formatter Plugin
build timeout plugin
Credentials Binding Plugin
Timestamper
Workspace Cleanup Plugin
Ant Plugin
Gradle Plugin
Pipeline
GitHub Branch Source Plugin
Pipeline: GitHub Groovy Libraries
Pipeline: Stage View Plugin
Git plugin
Subversion Plug-in
SSH Slaves plugin
Matrix Authorization Strategy Plugin
PAM Authentication plugin
LDAP Plugin
Email Extension Plugin
Mailer Plugin
** bouncycastle API Plugin
Folders Plugin
** Structs Plugin
** JUnit Plugin
OWASP Markup Formatter Plugin
PAM Authentication plugin
** Windows Slaves Plugin
** Display URL API
Jenkins Mailer Plugin
LDAP Plugin
** Token Macro Plugin
** External Monitor Job Type Plugin
** Icon Shim Plugin
Matrix Authorization Strategy Plugin
** Script Security Plugin
** Matrix Project Plugin
Jenkins build timeout plugin
** - required dependency
Jenkins 2.61


Getting Started
Getting Started
Folders Plugin
OWASP Markup Formatter Plugin
build timeout plugin
Credentials Binding Plugin
Timestamper
Workspace Cleanup Plugin
Ant Plugin
Gradle Plugin
Pipeline
GitHub Branch Source Plugin
Pipeline: GitHub Groovy Libraries
Pipeline: Stage View Plugin
Git plugin
Subversion Plug-in
SSH Slaves plugin
Matrix Authorization Strategy Plugin
PAM Authentication plugin
LDAP Plugin
Email Extension Plugin
Mailer Plugin
** Credentials Plugin
** Pipeline: Step API
** Plain Credentials Plugin
Credentials Binding Plugin
Timestamper
** SCM API Plugin
** Pipeline: API
** Pipeline: Supporting APIs
** Durable Task Plugin
** Pipeline: Nodes and Processes
** Resource Disposer Plugin
Jenkins Workspace Cleanup Plugin
Ant Plugin
Gradle Plugin
** Pipeline: Milestone Step
** JavaScript GUI Lib: jQuery bundles (jQuery and jQuery UI) plugin
** Pipeline: Input Step
** JavaScript GUI Lib: ACE Editor bundle plugin
** Pipeline: SCM Step
** Pipeline: Groovy
** - required dependency
Jenkins 2.61


Getting Started
Create First Admin User
Username:
admin
Password:
Confirm password:
Full name:
admin
E-mail address:
Jenkins 2.61
Continue as admin
Save and Finish

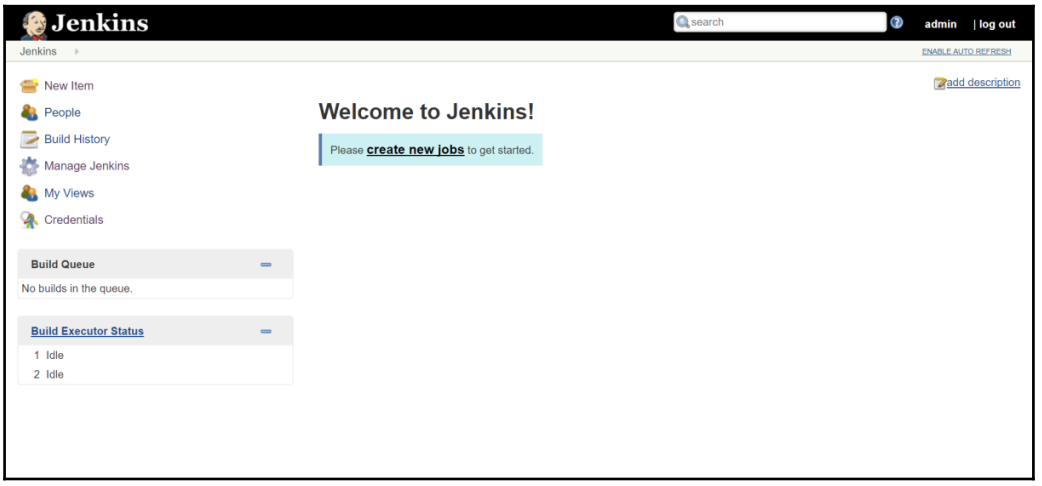
Getting Started

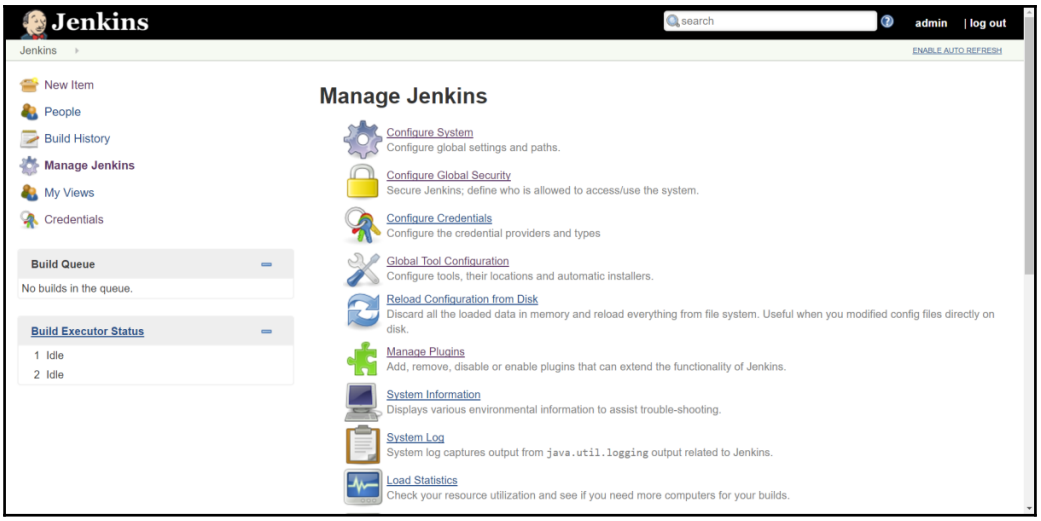
Jenkins is ready!

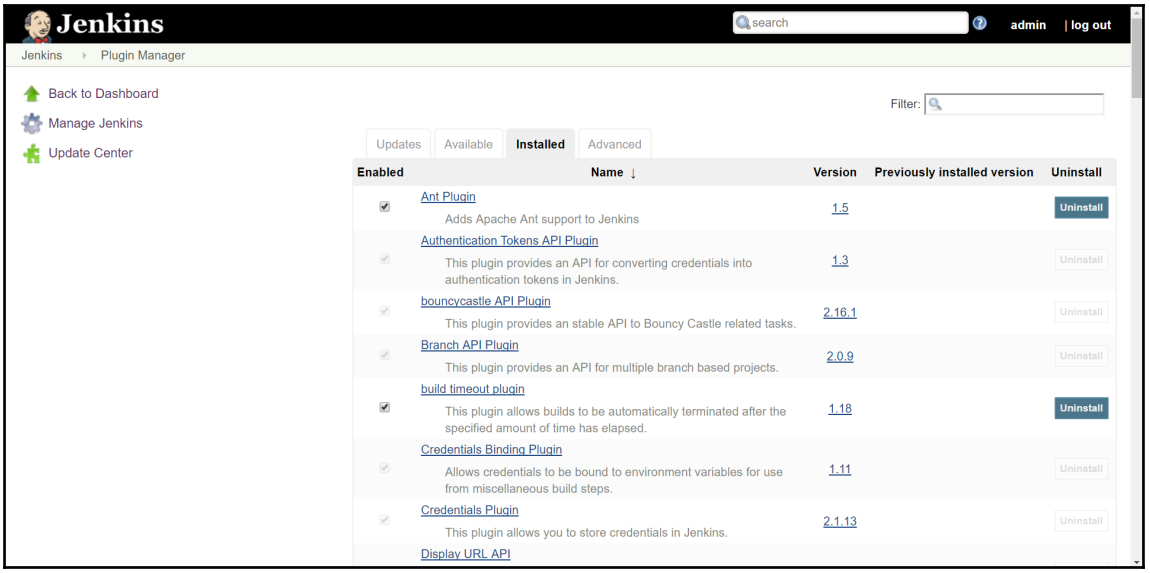
Your Jenkins setup is complete.

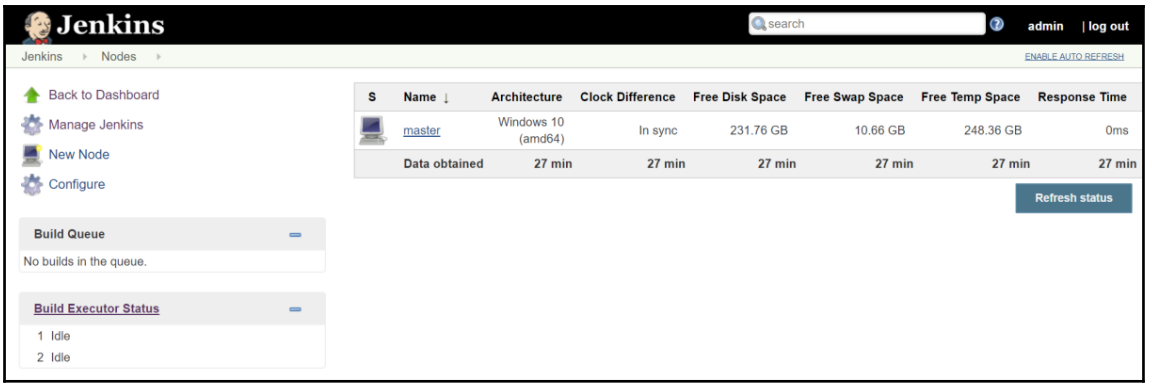
Start using Jenkins

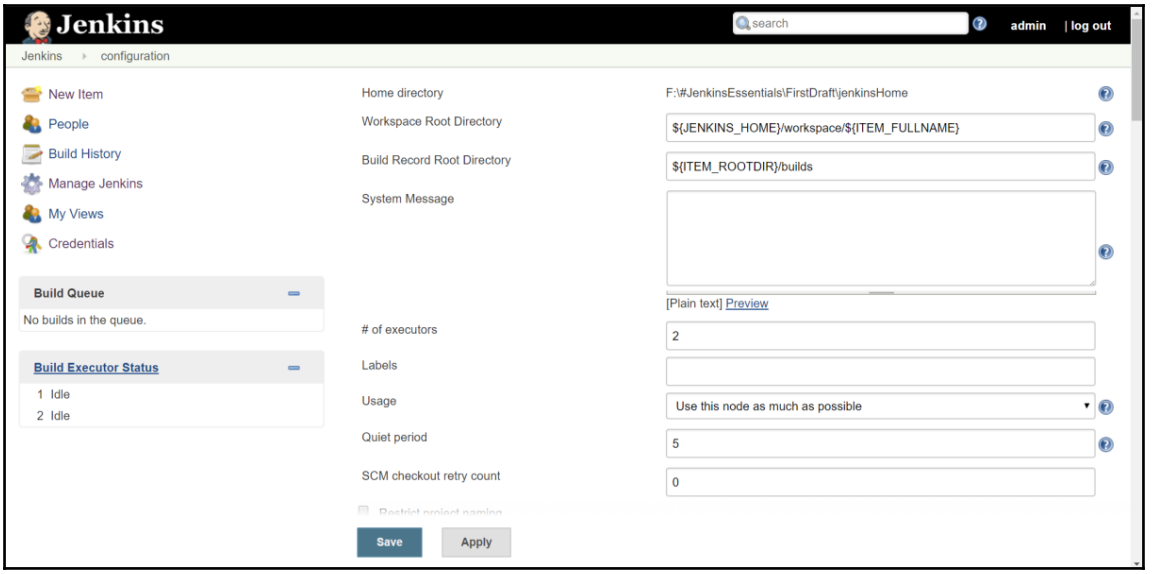
Jenkins 2.61

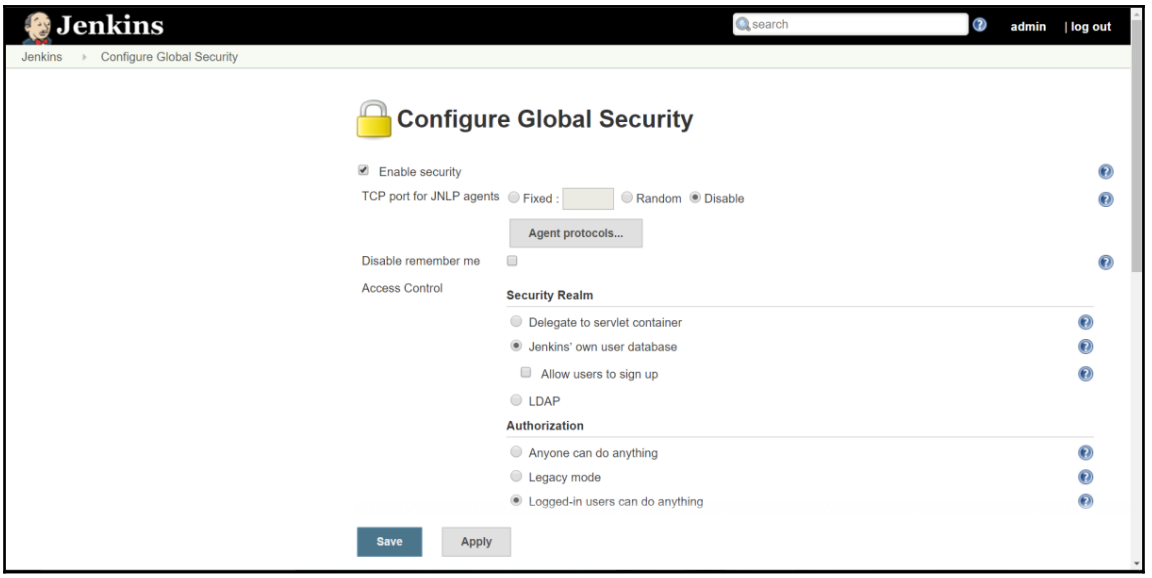


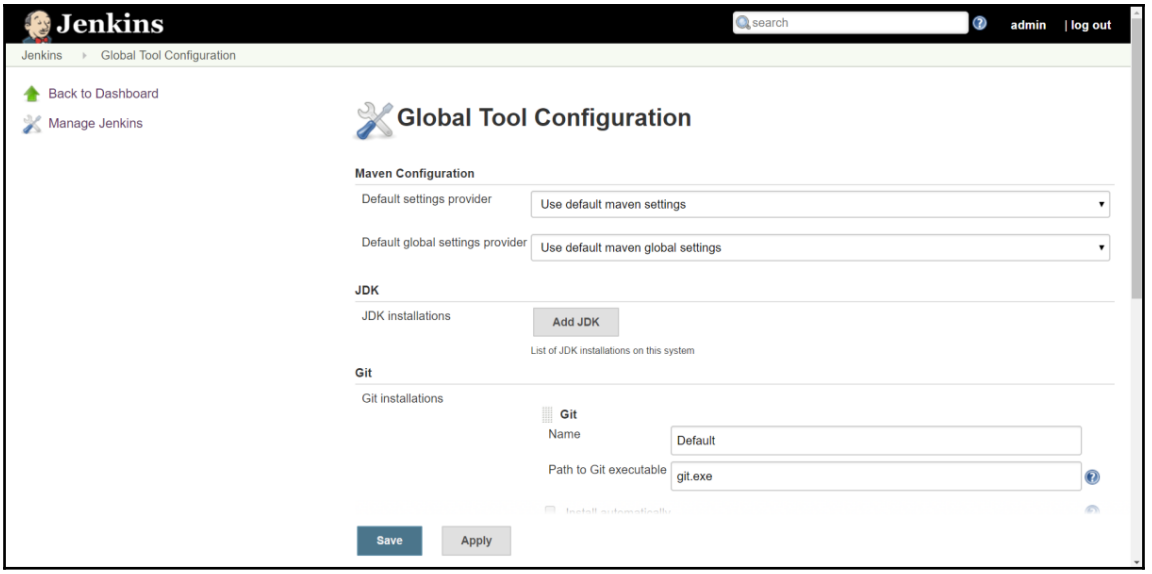

Jenkins
search
admin
| log out
Jenkins
ENABLE AUTO REFRESH
New Item
People
Build History
Manage Jenkins
My Views
Credentials
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
Manage Jenkins
Configure System
Configure global settings and paths.
Configure Global Security
Secure Jenkins; define who is allowed to access/use the system.
Configure Credentials
Configure the credential providers and types
Global Tool Configuration
Configure tools, their locations and automatic installers.
Reload Configuration from Disk
Discard all the loaded data in memory and reload everything from file system. Useful when you modified config files directly on disk.
Manage Plugins
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.
System Information
Displays various environmental information to assist trouble-shooting.
System Log
System log captures output from java.util.logging output related to Jenkins.
Load Statistics
Check your resource utilization and see if you need more computers for your builds.

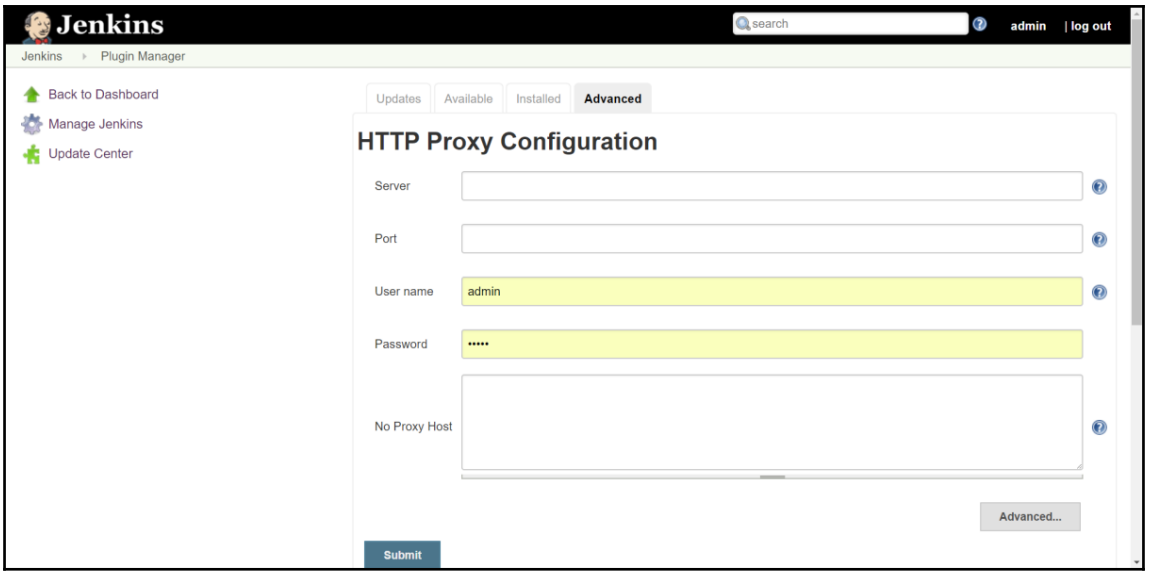

Jenkins
search
admin
| log out
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Update Center
Filter:
Updates
Available
Installed
Advanced
Enabled
Name ↓
Version
Previously installed version
Uninstall
Ant Plugin
Adds Apache Ant support to Jenkins
1.5
Uninstall
Authentication Tokens API Plugin
This plugin provides an API for converting credentials into authentication tokens in Jenkins.
1.3
Uninstall
bouncycastle API Plugin
This plugin provides an stable API to Bouncy Castle related tasks.
2.16.1
Uninstall
Branch API Plugin
This plugin provides an API for multiple branch based projects.
2.0.9
Uninstall
build timeout plugin
This plugin allows builds to be automatically terminated after the specified amount of time has elapsed.
1.18
Uninstall
Credentials Binding Plugin
Allows credentials to be bound to environment variables for use from miscellaneous build steps.
1.11
Uninstall
Credentials Plugin
This plugin allows you to store credentials in Jenkins.
2.1.13
Uninstall
Display URL API

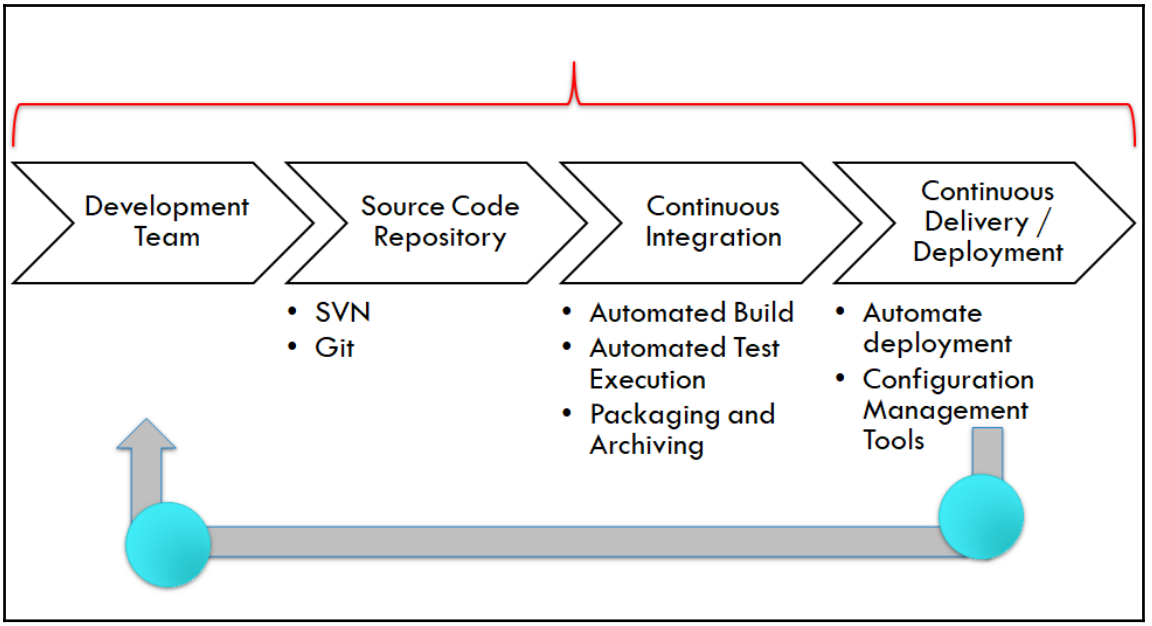

Jenkins
search
admin
| log out
Jenkins
Nodes
ENABLE AUTO REFRESH
Back to Dashboard
Manage Jenkins
New Node
Configure
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
S
Name ↓
Architecture
Clock Difference
Free Disk Space
Free Swap Space
Free Temp Space
Response Time
master
Windows 10 (amd64)
In sync
231.76 GB
10.66 GB
248.36 GB
0ms
Data obtained
27 min
Refresh status

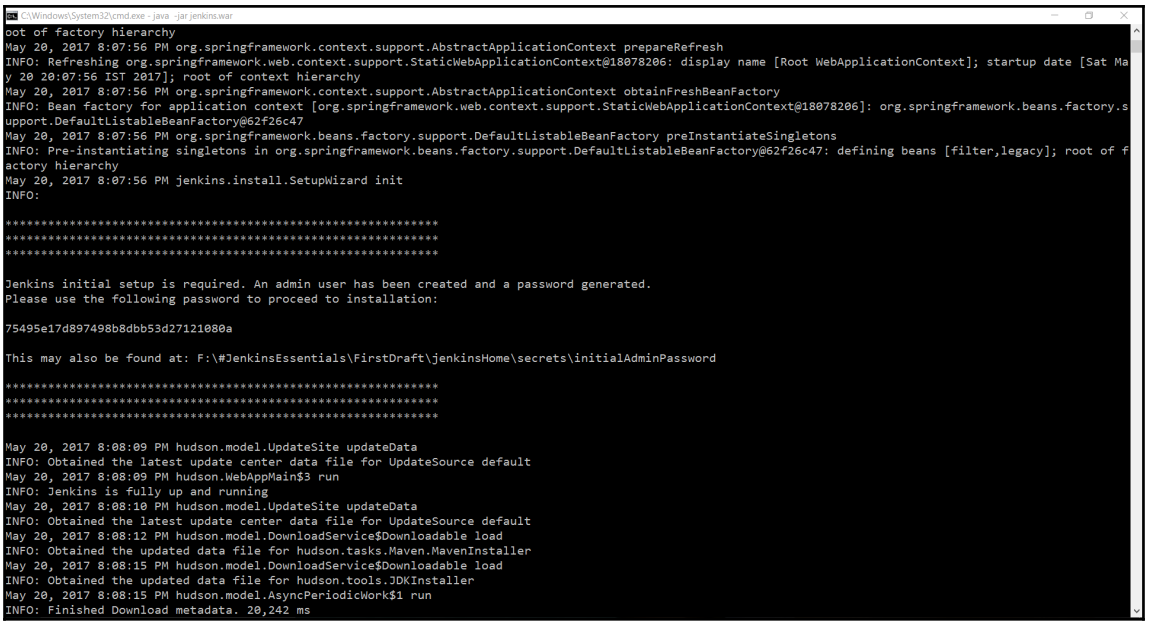

Jenkins
search
admin
| log out
Jenkins
configuration
New Item
People
Build History
Manage Jenkins
My Views
Credentials
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
Home directory
F:\#JenkinsEssentials\FirstDraft\jenkinsHome
Workspace Root Directory
${JENKINS_HOME}/workspace/${ITEM_FULLNAME}
Build Record Root Directory
${ITEM_ROOTDIR}/builds
System Message
[Plain text] Preview
# of executors
2
Labels
Usage
Use this node as much as possible
Quiet period
5
SCM checkout retry count
0
Save
Apply


Jenkins
search
admin
| log out
Jenkins
Configure Global Security
Configure Global Security
Enable security
TCP port for JNLP agents
Fixed :
Random
Disable
Agent protocols...
Disable remember me
Access Control
Security Realm
Delegate to servlet container
Jenkins' own user database
Allow users to sign up
LDAP
Authorization
Anyone can do anything
Legacy mode
Logged-in users can do anything
Save
Apply

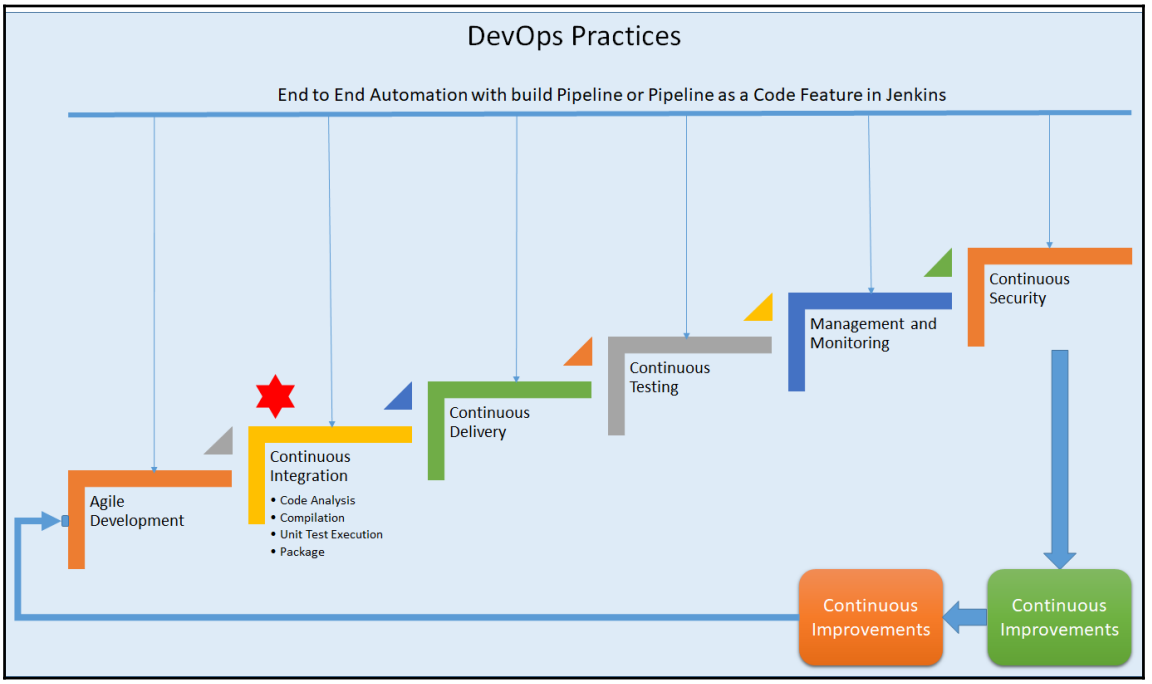

Jenkins
search
admin
| log out
Jenkins
Global Tool Configuration
Back to Dashboard
Manage Jenkins
Global Tool Configuration
Maven Configuration
Default settings provider
Use default maven settings
Default global settings provider
Use default maven global settings
JDK
JDK installations
Add JDK
List of JDK installations on this system
Git
Git installations
Git
Name
Default
Path to Git executable
git.exe
Save
Apply

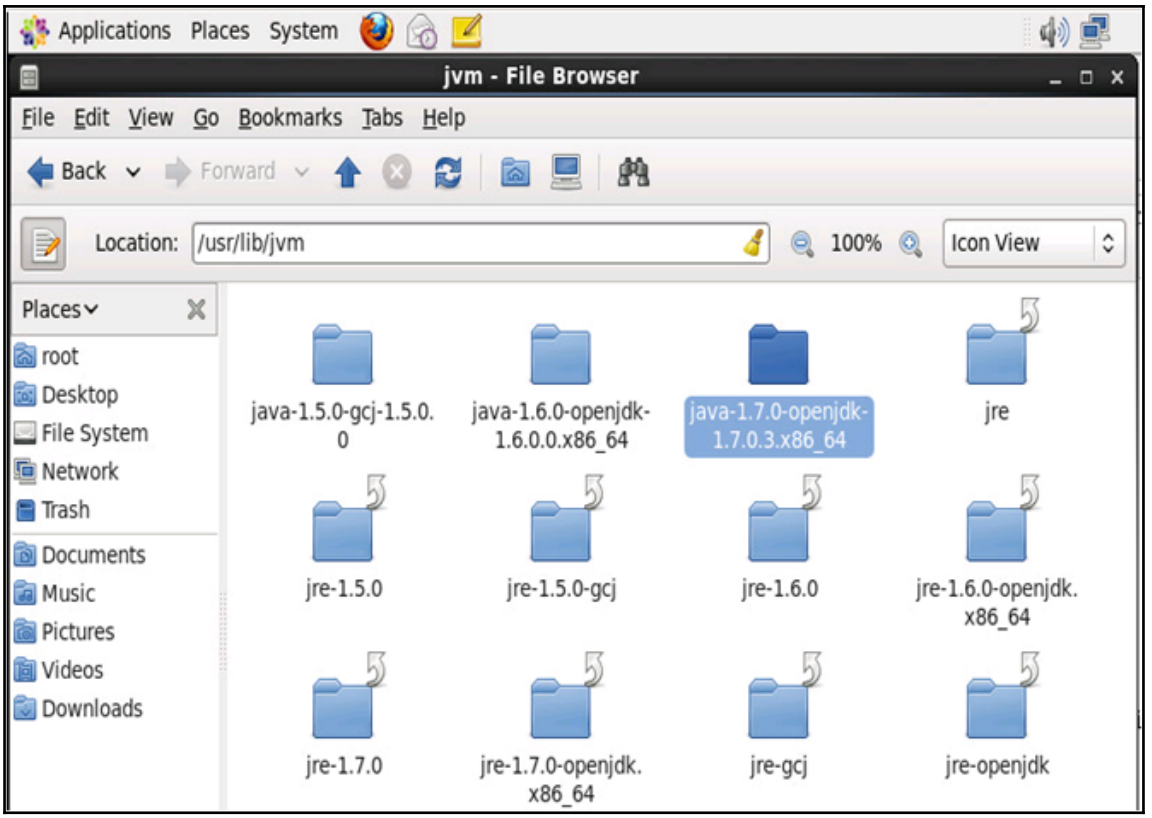

Jenkins
search
admin
| log out
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Update Center
Updates
Available
Installed
Advanced
HTTP Proxy Configuration
Server
Port
User name
admin
Password
No Proxy Host
Advanced...
Submit

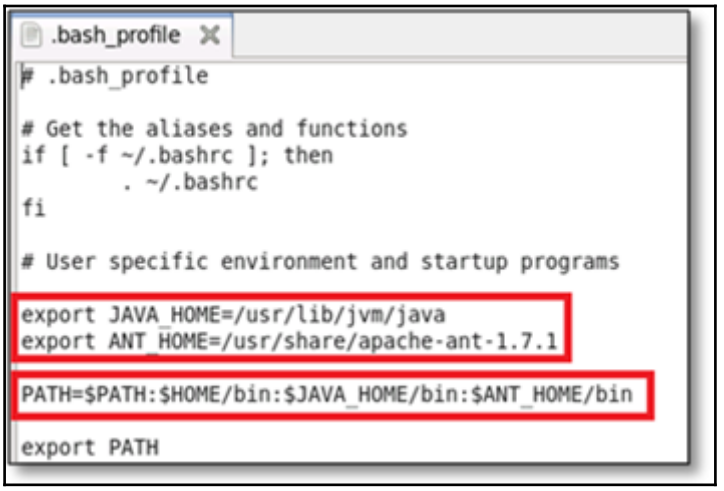

Development Team
Source Code Repository
Continuous Integration
Continuous Delivery / Deployment
• SVN
• Git
• Automated Build
• Automated Test Execution
• Packaging and Archiving
• Automate deployment
• Configuration Management Tools


C:\Windows\System32\cmd.exe - java -jar jenkins.war
oot of factory hierarchy
May 20, 2017 8:07:56 PM org.springframework.context.support.AbstractApplicationContext prepareRefresh
INFO: Refreshing org.springframework.web.context.support.StaticWebApplicationContext@18078206: display name [Root WebApplicationContext]; startup date [Sat May 20 20:07:56 IST 2017]; root of context hierarchy
May 20, 2017 8:07:56 PM org.springframework.context.support.AbstractApplicationContext obtainFreshBeanFactory
INFO: Bean factory for application context [org.springframework.web.context.support.StaticWebApplicationContext@18078206]: org.springframework.beans.factory.support.DefaultListableBeanFactory@62f26c47
May 20, 2017 8:07:56 PM org.springframework.beans.factory.support.DefaultListableBeanFactory preInstantiateSingletons
INFO: Pre-instantiating singletons in org.springframework.beans.factory.support.DefaultListableBeanFactory@62f26c47: defining beans [filter,legacy]; root of factory hierarchy
May 20, 2017 8:07:56 PM jenkins.install.SetupWizard init
INFO:
Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:
75495e17d897498b8dbb53d27121080a
This may also be found at: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\secrets\initialAdminPassword
May 20, 2017 8:08:09 PM hudson.model.UpdateSite updateData
INFO: Obtained the latest update center data file for UpdateSource default
May 20, 2017 8:08:09 PM hudson.WebAppMain$3 run
INFO: Jenkins is fully up and running
May 20, 2017 8:08:10 PM hudson.model.UpdateSite updateData
INFO: Obtained the latest update center data file for UpdateSource default
May 20, 2017 8:08:12 PM hudson.model.DownloadService$Downloadable load
INFO: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
May 20, 2017 8:08:15 PM hudson.model.DownloadService$Downloadable load
INFO: Obtained the updated data file for hudson.tools.JDKInstaller
May 20, 2017 8:08:15 PM hudson.model.AsyncPeriodicWork$1 run
INFO: Finished Download metadata. 20,242 ms

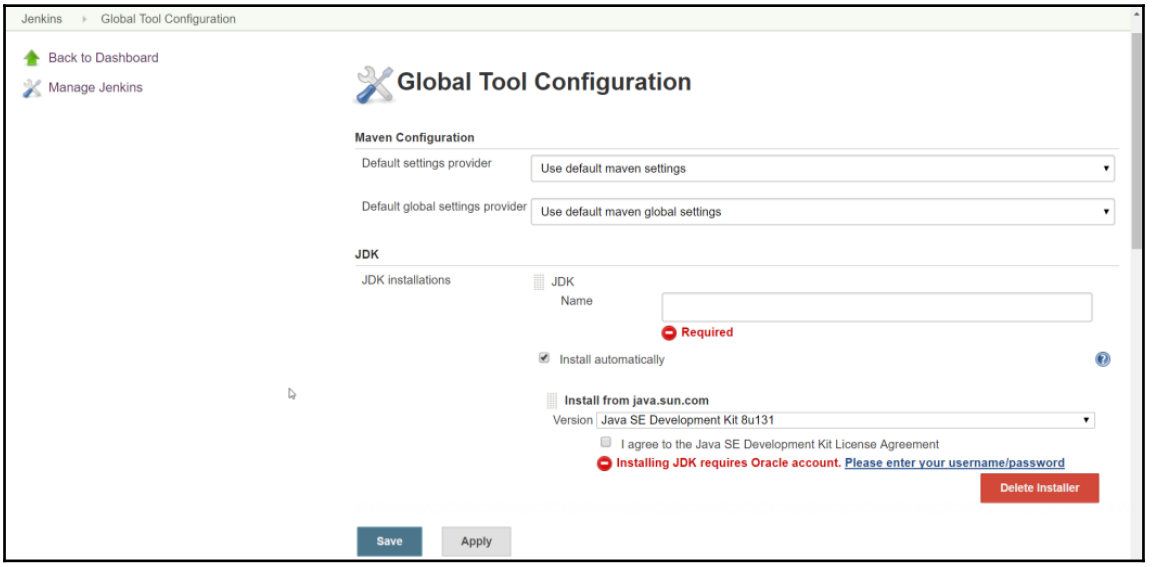
Chapter 02: Installation and Configuration of Code Repository and Build Tools

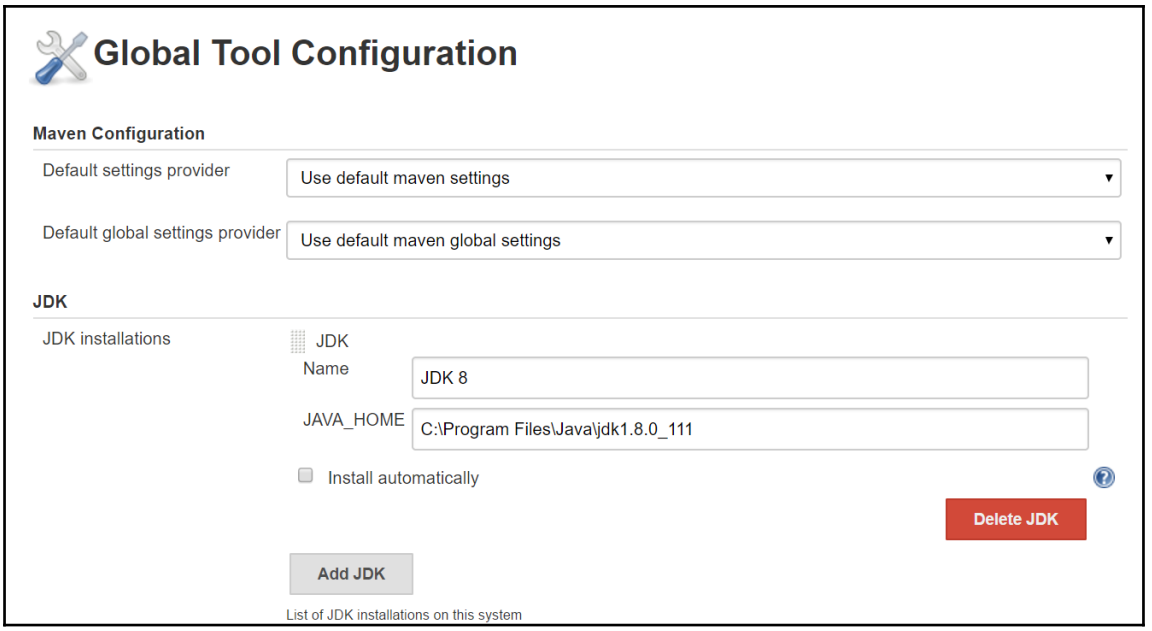


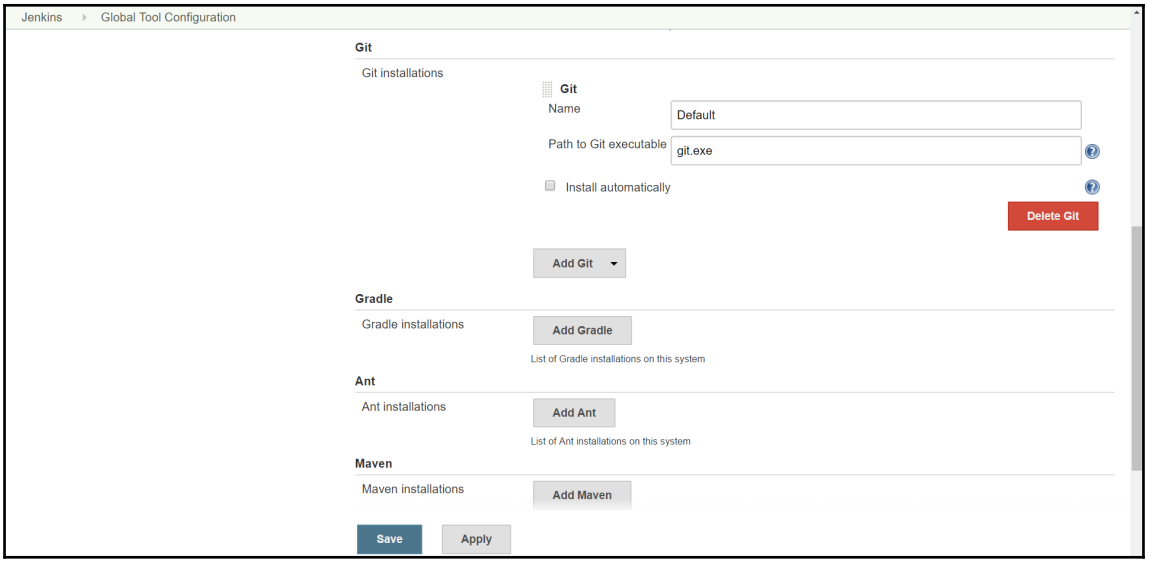

Applications Places System
jvm - File Browser
File Edit View Go Bookmarks Tabs Help
Back Forward
Location: /usr/lib/jvm
100%
Icon View
Places
root
Desktop
File System
Network
Trash
Documents
Music
Pictures
Videos
Downloads
java-1.5.0-gcj-1.5.0.0
java-1.6.0-openjdk-1.6.0.0.x86_64
java-1.7.0-openjdk-1.7.0.3.x86_64
jre
jre-1.5.0
jre-1.5.0-gcj
jre-1.6.0
jre-1.6.0-openjdk.x86_64
jre-1.7.0
jre-1.7.0-openjdk.x86_64
jre-gcj
jre-openjdk

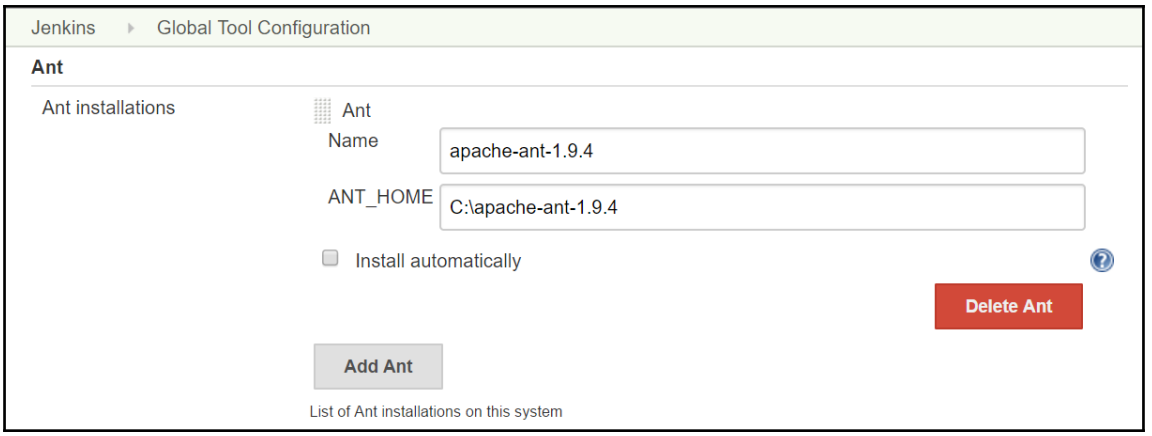

.bash_profile
# .bash_profile
# Get the aliases and functions
if [-f ~/.bashrc]; then
. ~/.bashrc
fi
User specific environment and startup programs
export JAVA_HOME=/usr/lib/jvm/java
export ANT_HOME=/usr/share/apache-ant-1.7.1
PATH=$PATH:$HOME/bin:$JAVA_HOME/bin:$ANT_HOME/bin
export PATH

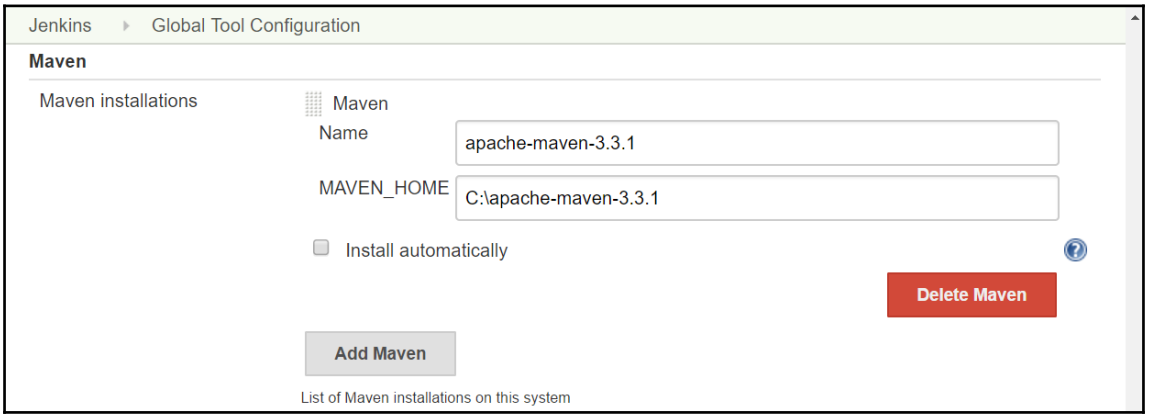
https://maven.apache.org/download.cgi
Search
MAIN
Welcome
GET MAVEN
Download
Releases History
Release Notes (3.3.3)
Release Notes (3.2.5)
Release Notes (3.1.1)
Release Notes (3.0.5)
All Release Notes
License
Security
IDE INTEGRATION
Eclipse
NetBeans
ABOUT MAVEN
What is Maven?
Features
FAQ
Support and Training
DOCUMENTATION
Maven Plugins
Index (category)
Download Apache Maven 3.3.3
Maven is distributed in several formats for your convenience. Use a source archive if you intend to build Maven yourself. Otherwise, simply pick a ready-made binary distribution and follow the installation instructions given at the end of this document.
You will be prompted for a mirror - if the file is not found on yours, please be patient, as it may take 24 hours to reach all mirrors.
In order to guard against corrupted downloads/installations, it is highly recommended to verify the signature of the release bundles against the public KEYS used by the Apache Maven developers.
Maven is distributed under the Apache License, version 2.0.
We strongly encourage our users to configure a Maven repository mirror closer to their location, please read How to Use Mirrors for Repositories.
If you're upgrading from Maven 2.x, be sure to check the Maven 3.x compatibility notes before using this version to avoid surprises: while Maven 3 aims to be backward-compatible with Maven 2.x to the extent possible, there are still a few significant changes.
Mirror
The currently selected mirror is http://mirror.cogentco.com/pub/apache/. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are backup mirrors (at the end of the mirrors list) that should be available.
Other mirrors:
http://mirror.cogentco.com/pu
Change
You may also consult the complete list of mirrors.
Maven 3.3.3
This is the current stable version of Maven.
Link
Checksum
Signature
Maven 3.3.3 (Binary tar.gz)
apache-maven-3.3.3-bin.tar.gz
apache-maven-3.3.3-bin.tar.gz.md5
apache-maven-3.3.3-bin.tar.gz.asc
Maven 3.3.3 (Binary zip)
apache-maven-3.3.3-bin.zip
apache-maven-3.3.3-bin.zip.md5
apache-maven-3.3.3-bin.zip.asc

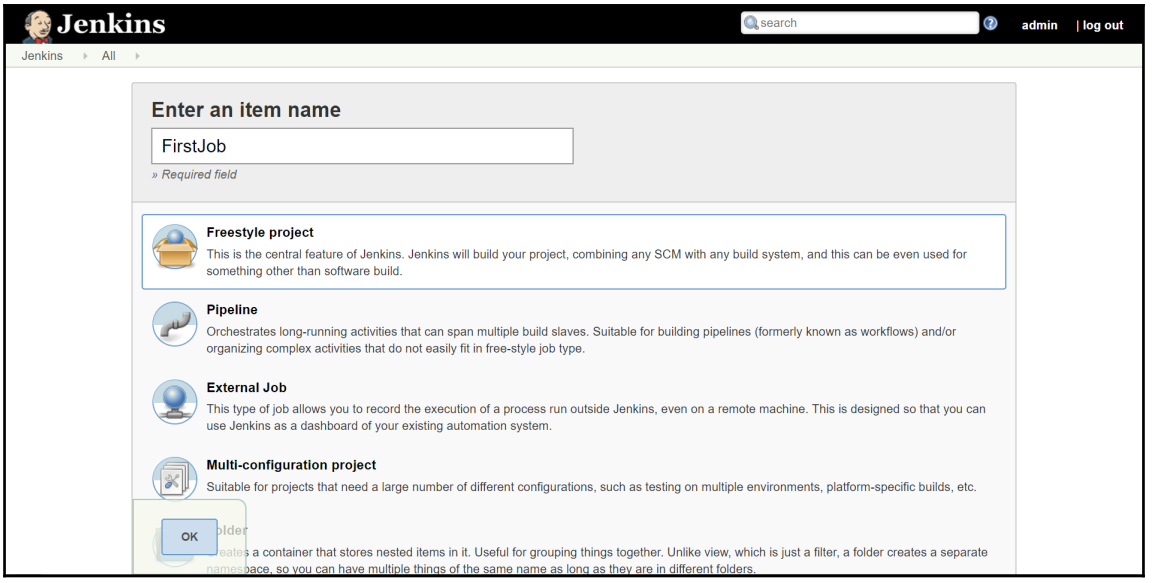

Jenkins
Global Tool Configuration
Back to Dashboard
Manage Jenkins
Global Tool Configuration
Maven Configuration
Default settings provider
Use default maven settings
Default global settings provider
Use default maven global settings
JDK
JDK installations
JDK
Name
Required
Install automatically
Install from java.sun.com
Version
Java SE Development Kit 8u131
I agree to the Java SE Development Kit License Agreement
Installing JDK requires Oracle account. Please enter your username/password
Delete Installer
Save
Apply

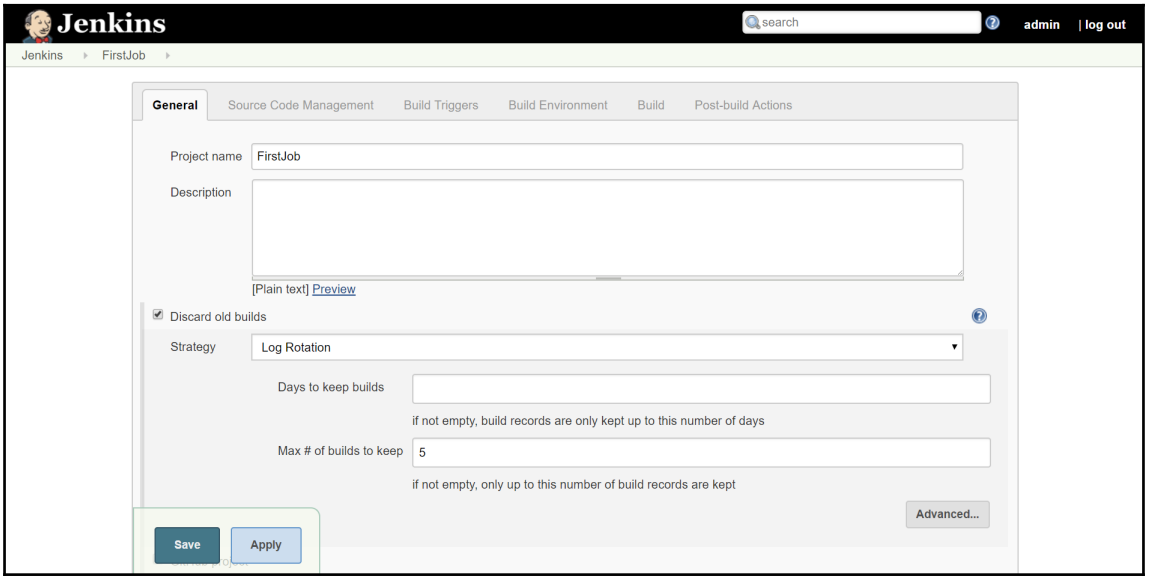

Global Tool Configuration
Maven Configuration
Default settings provider
Use default maven settings
Default global settings provider
Use default maven global settings
JDK
JDK installations
JDK
Name
JDK 8
JAVA_HOME
C:\Program Files\Java\jdk1.8.0_111
Install automatically
Delete JDK
Add JDK
List of JDK installations on this system

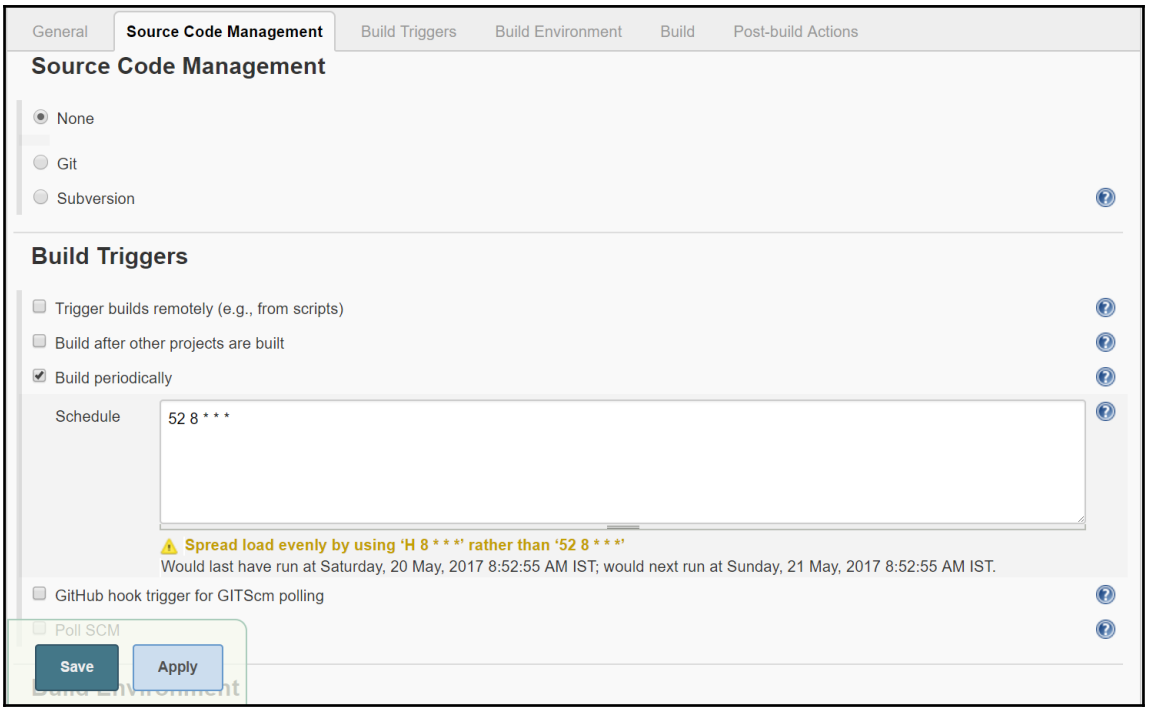

Jenkins
Global Tool Configuration
Git
Git installations
Git
Name
Default
Path to Git executable
git.exe
Install automatically
Delete Git
Add Git
Gradle
Gradle installations
Add Gradle
List of Gradle installations on this system
Ant
Ant installations
Add Ant
List of Ant installations on this system
Maven
Maven installations
Add Maven
Save
Apply

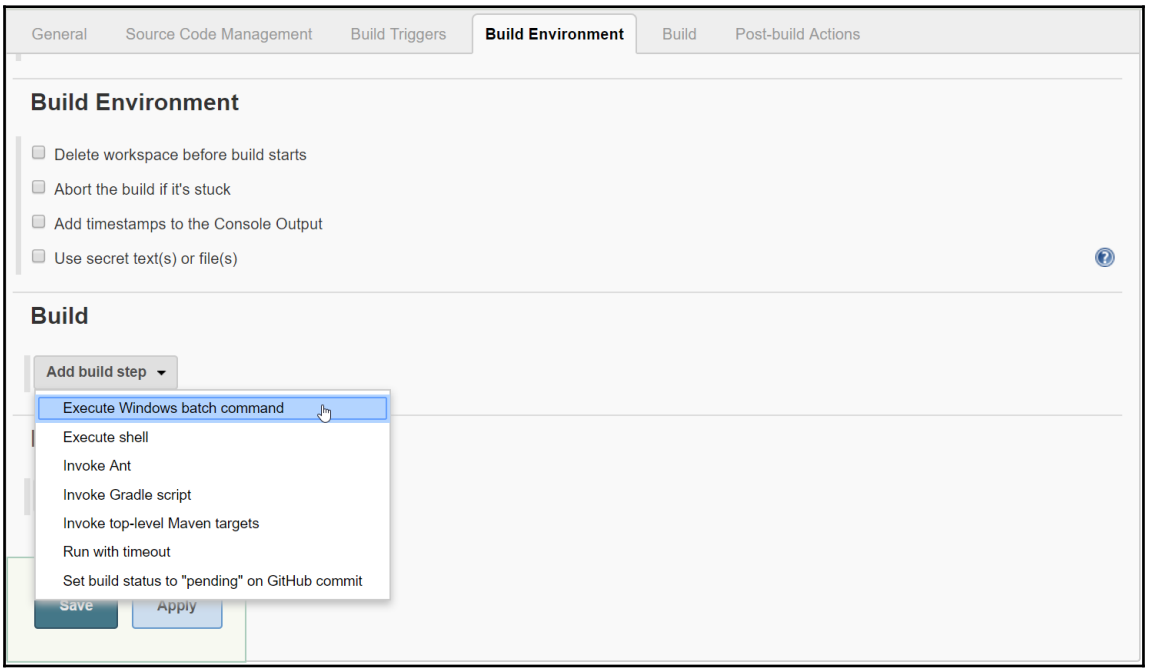

Jenkins
Global Tool Configuration
Ant
Ant installations
Ant
Name
apache-ant-1.9.4
ANT_HOME
C:\apache-ant-1.9.4
Install automatically
Delete Ant
Add Ant
List of Ant installations on this system

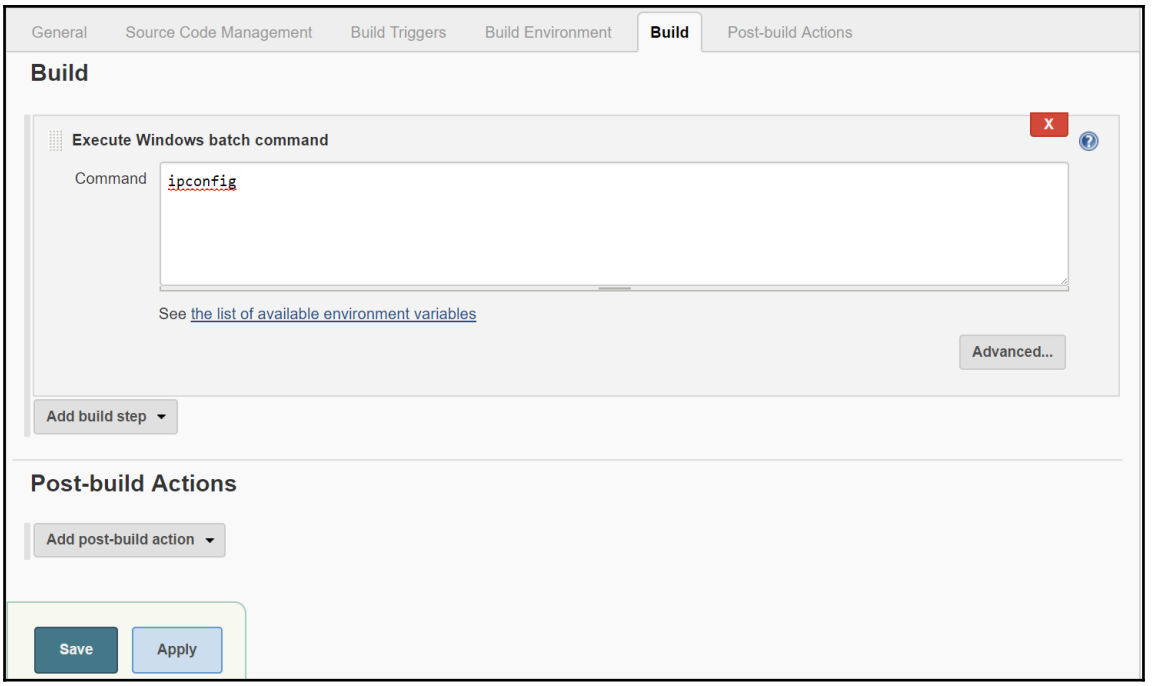

Jenkins
Global Tool Configuration
Maven
Maven installations
Maven
Name
apache-maven-3.3.1
MAVEN_HOME
C:\apache-maven-3.3.1
Install automatically
Delete Maven
Add Maven
List of Maven installations on this system


Jenkins
search
admin
| log out
Jenkins
All
Enter an item name
FirstJob
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.
OK
a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

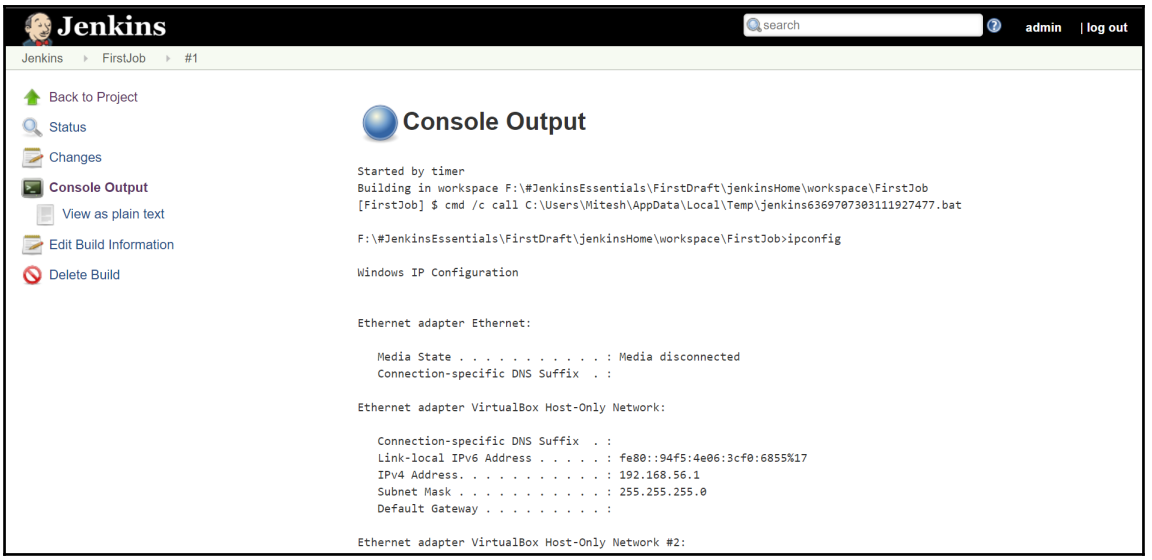

Jenkins
search
admin
| log out
Jenkins
FirstJob
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Project name
FirstJob
Description
[Plain text] Preview
Discard old builds
Strategy
Log Rotation
Days to keep builds
if not empty, build records are only kept up to this number of days
Max # of builds to keep
5
if not empty, only up to this number of build records are kept
Advanced...
Save
Apply

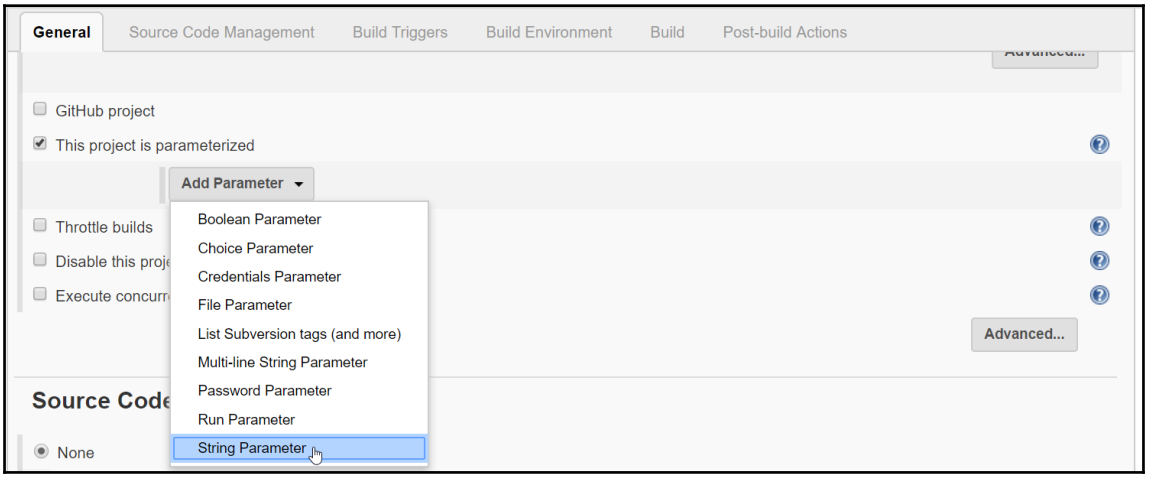

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Source Code Management
None
Git
Subversion
Build Triggers
Trigger builds remotely (e.g., from scripts)
Build after other projects are built
Build periodically
Schedule
52 8 * * *
Spread load evenly by using 'H 8 * * *' rather than '52 8 * * *'
Would last have run at Saturday, 20 May, 2017 8:52:55 AM IST; would next run at Sunday, 21 May, 2017 8:52:55 AM IST.
GitHub hook trigger for GITScm polling
Poll SCM
Save
Apply

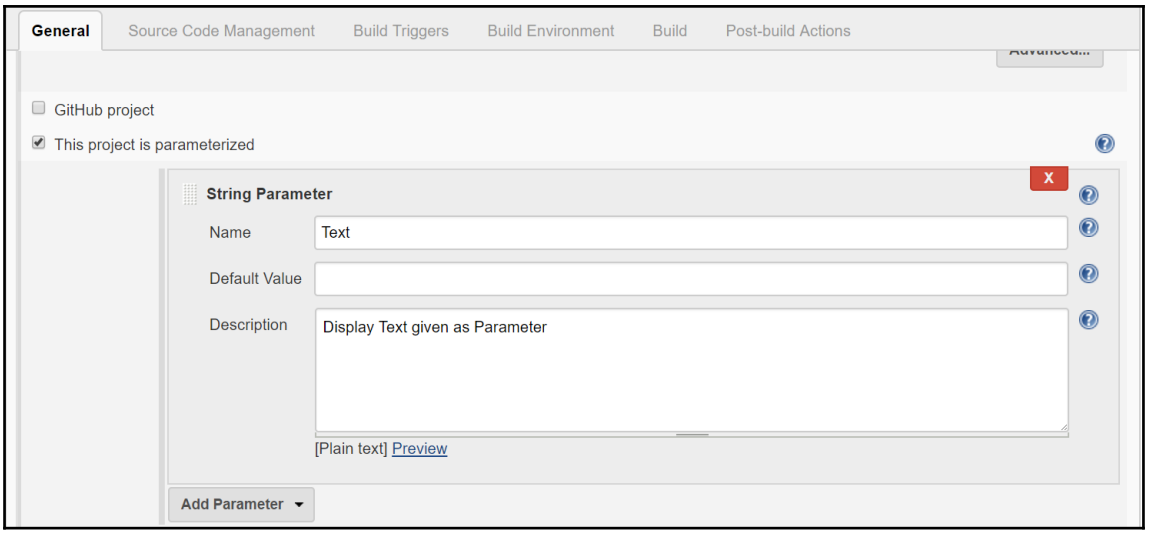

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Build Environment
Delete workspace before build starts
Abort the build if it's stuck
Add timestamps to the Console Output
Use secret text(s) or file(s)
Build
Add build step
Execute Windows batch command
Execute shell
Invoke Ant
Invoke Gradle script
Invoke top-level Maven targets
Run with timeout
Set build status to "pending" on GitHub commit
Save
Apply

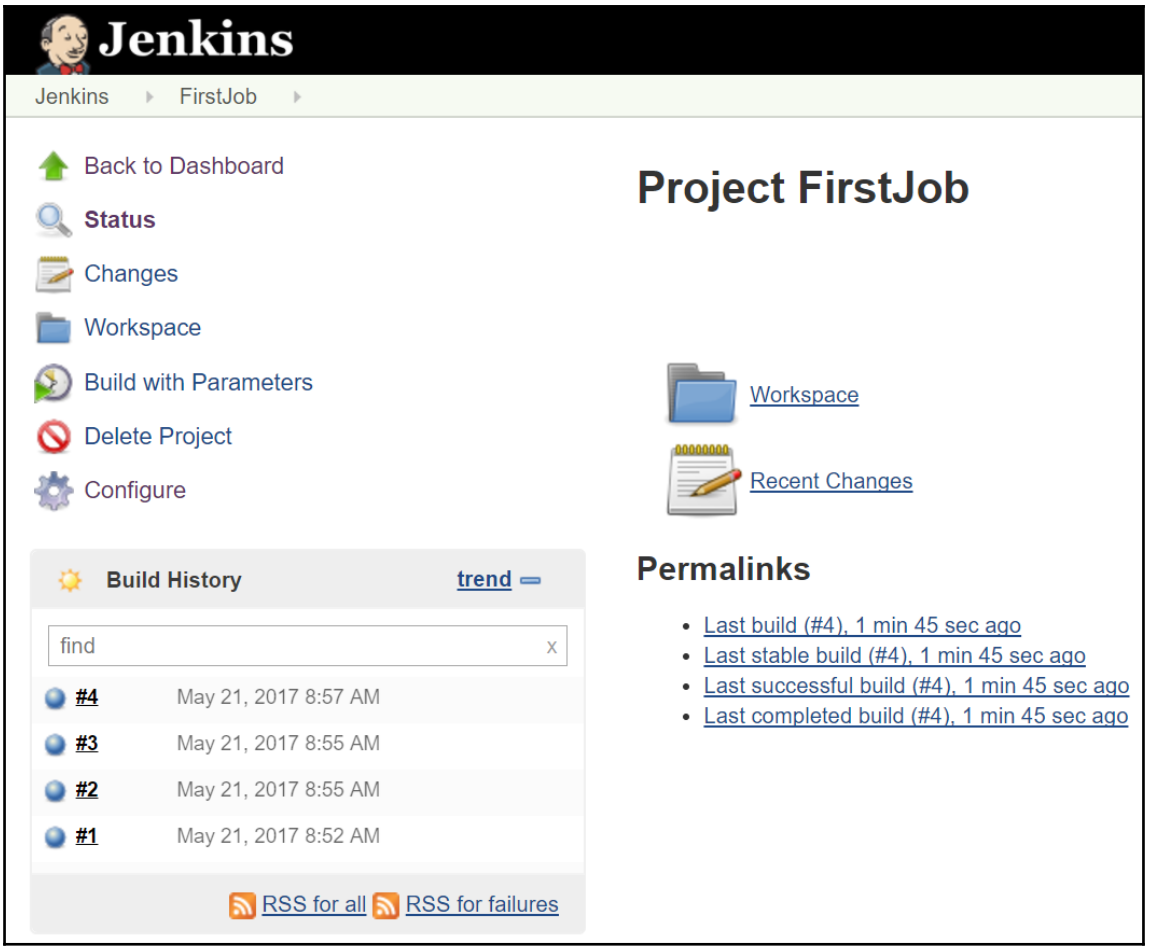

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Build
Execute Windows batch command
X
Command
ipconfig
See the list of available environment variables
Advanced...
Add build step
Post-build Actions
Add post-build action
Save
Apply

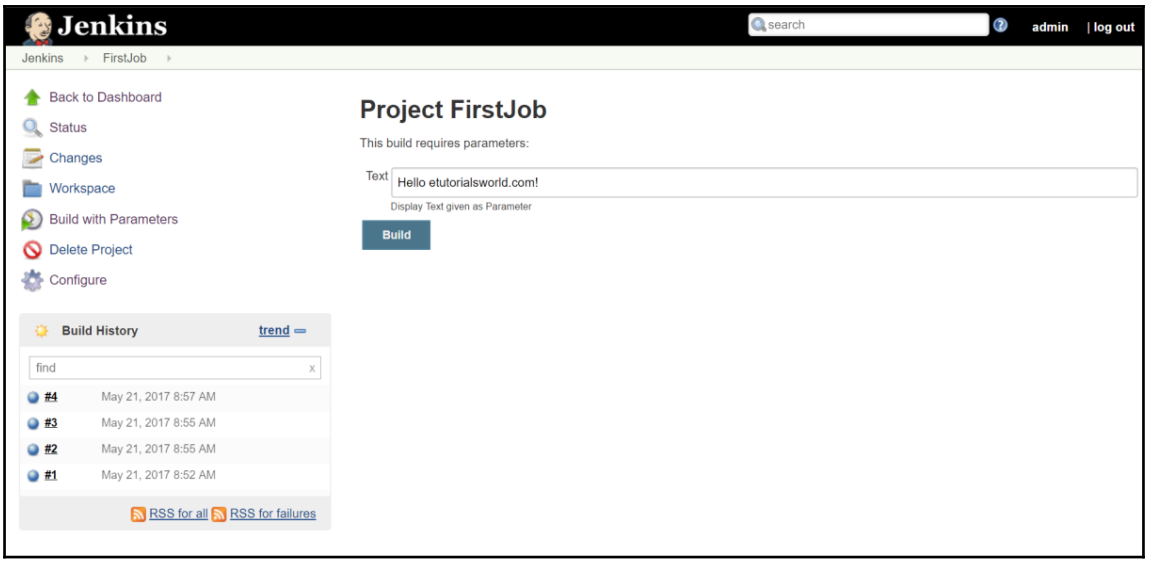
Jenkins
Jenkins
FirstJob
Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Project
Configure
Project FirstJob
Workspace
Recent Changes
Permalinks
Build History
trend
find
x
#1
May 21, 2017 8:52 AM
RSS for all
RSS for failures


Jenkins
search
admin
| log out
Jenkins
FirstJob
#1
Back to Project
Status
Changes
Console Output
View as plain text
Edit Build Information
Delete Build
Console Output
Started by timer
Building in workspace F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstJob
[FirstJob] $ cmd /c call C:\Users\Mitesh\AppData\Local\Temp\jenkins6369707303111927477.bat
F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstJob>ipconfig
Windows IP Configuration
Ethernet adapter Ethernet:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Ethernet adapter VirtualBox Host-Only Network:
Connection-specific DNS Suffix . :
Link-local IPv6 Address . . . . . : fe80::94f5:4e06:3cf0:6855%17
IPv4 Address. . . . . : 192.168.56.1
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :
Ethernet adapter VirtualBox Host-Only Network #2:


General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
GitHub project
This project is parameterized
Add Parameter
Boolean Parameter
Choice Parameter
Credentials Parameter
File Parameter
List Subversion tags (and more)
Multi-line String Parameter
Password Parameter
Run Parameter
String Parameter
Throttle builds
Disable this proj
Execute concurr
Advanced...
Source Code
None

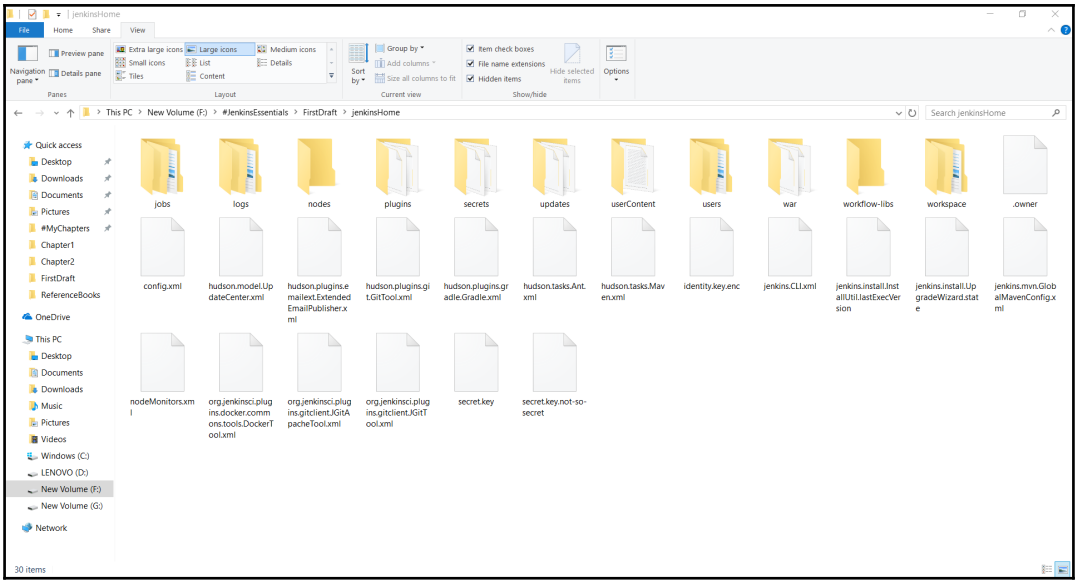

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
GitHub project
This project is parameterized
String Parameter
Name
Text
Default Value
Description
Display Text given as Parameter
[Plain text] Preview
Add Parameter

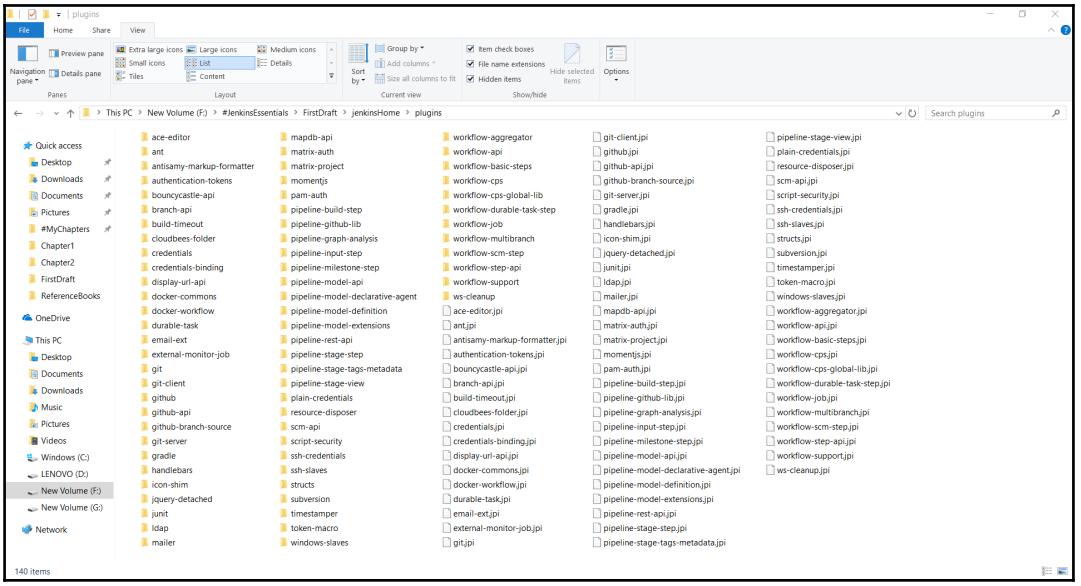

Jenkins
Jenkins
FirstJob
Back to Dashboard
Status
Changes
Workspace
Build with Parameters
Delete Project
Configure
Build History
trend
find
x
#4 May 21, 2017 8:57 AM
#3 May 21, 2017 8:55 AM
#2 May 21, 2017 8:55 AM
#1 May 21, 2017 8:52 AM
RSS for all
RSS for failures
Project FirstJob
Workspace
Recent Changes
Permalinks
Last build (#4), 1 min 45 sec ago
Last stable build (#4), 1 min 45 sec ago
Last successful build (#4), 1 min 45 sec ago
Last completed build (#4), 1 min 45 sec ago

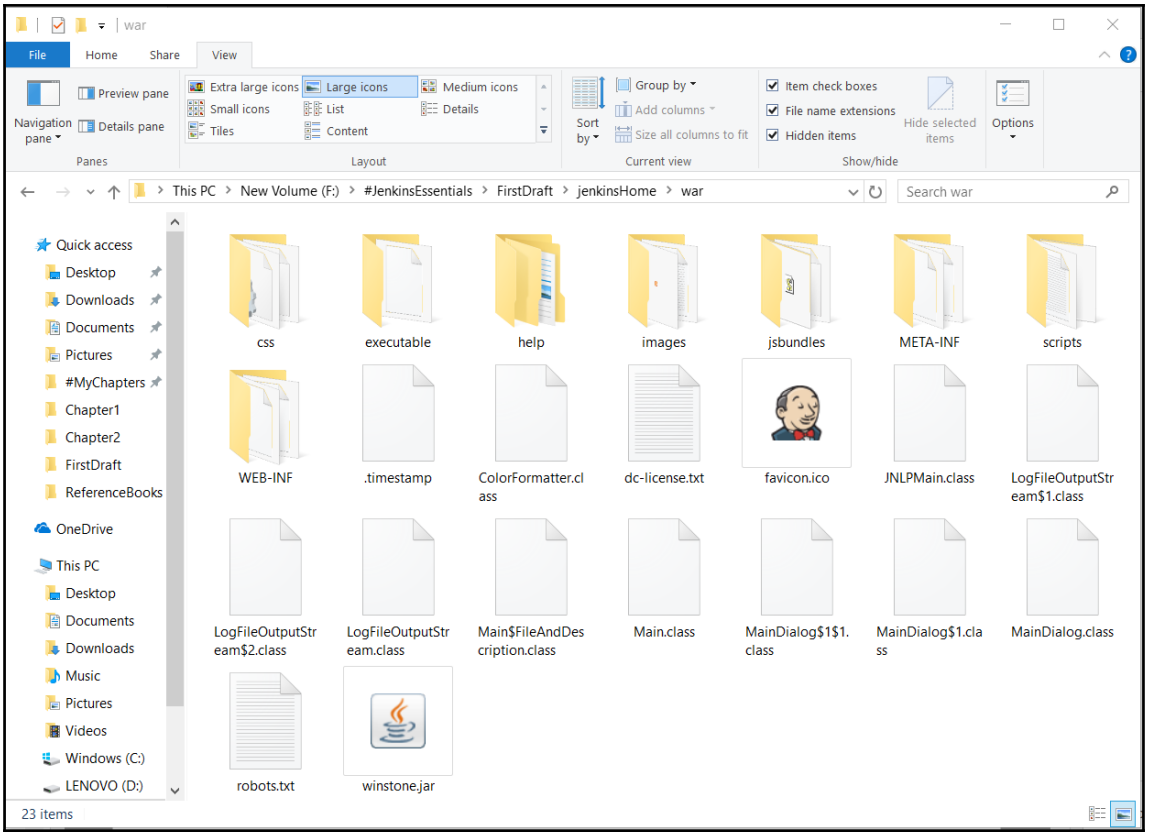


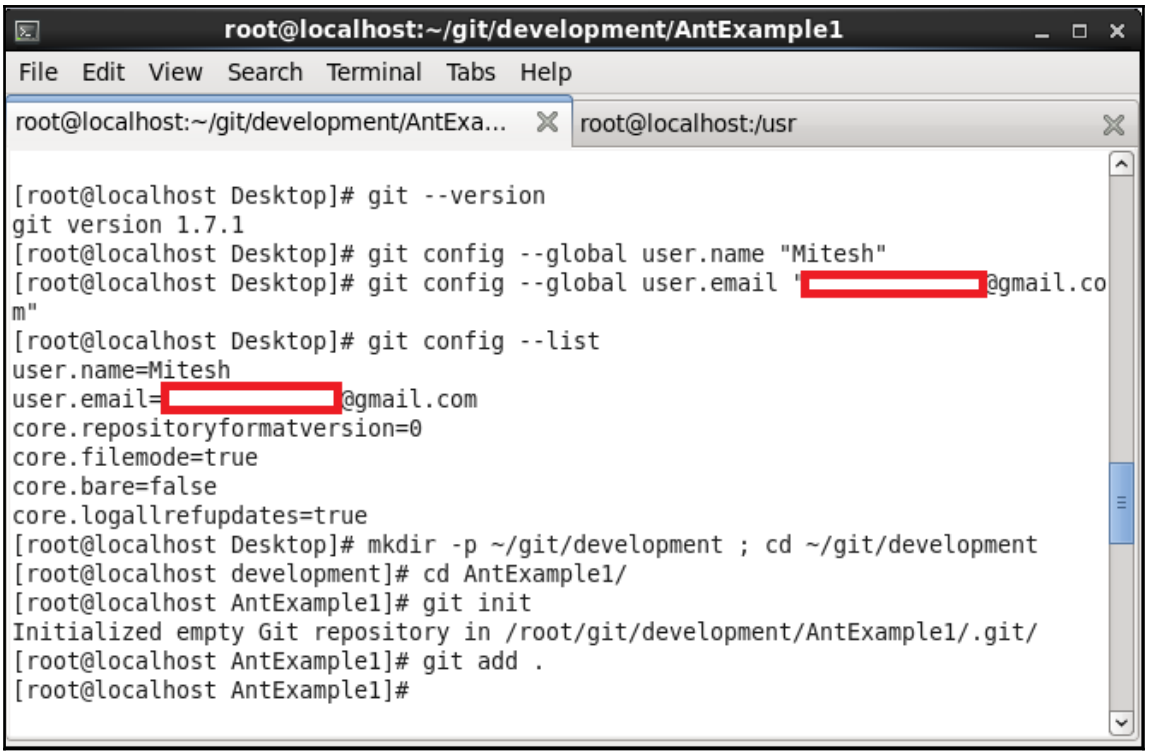
Console Output

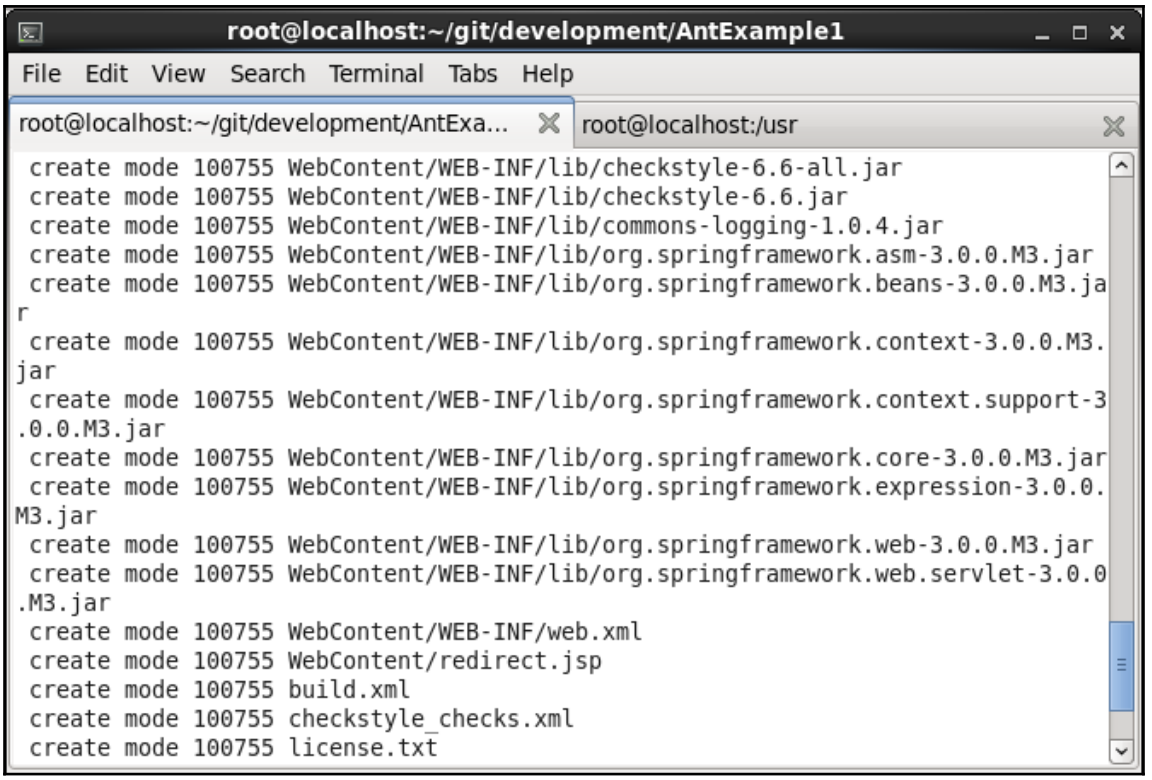
```
Started by user admin
Building in workspace F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstJob
[FirstJob] $ cmd /c call C:\Users\Mitesh\AppData\Local\Temp\jenkins3630239299526944525.bat

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstJob>echo FirstJob
FirstJob

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstJob>echo Hello etutorialsworld.com!
Hello etutorialsworld.com!

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstJob>exit 0
Finished: SUCCESS
```

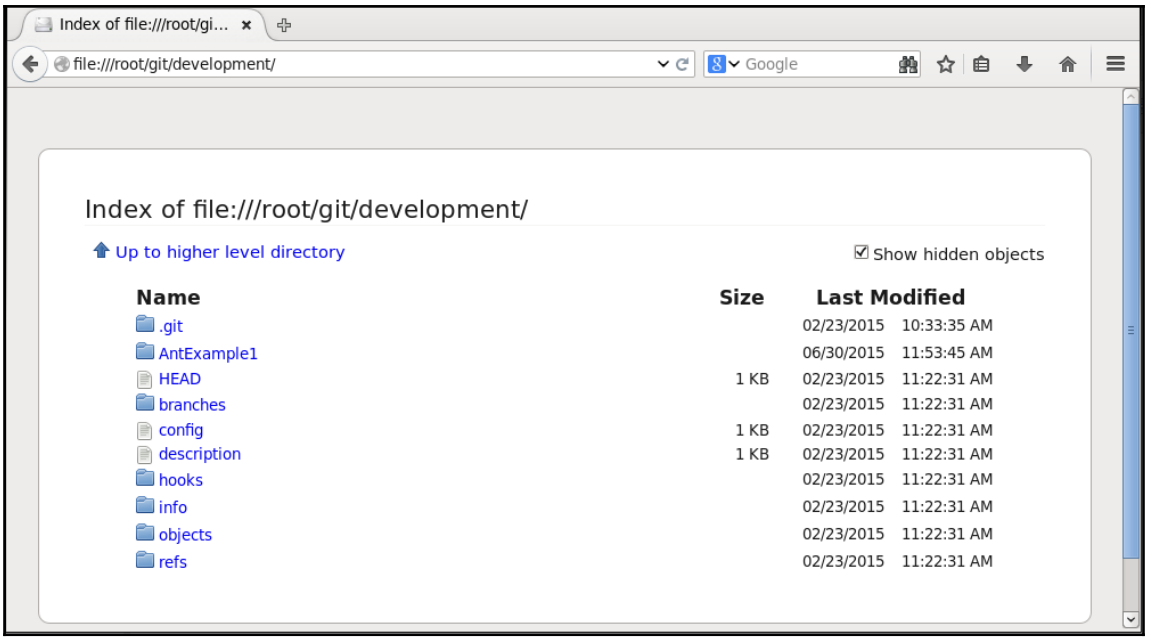

jenkinsHome
This PC › New Volume (F:) › #JenkinsEssentials › FirstDraft › jenkinsHome
Search jenkinsHome
jobs
logs
nodes
plugins
secrets
updates
userContent
users
war
workflow-libs
workspace
.owner
config.xml
hudson.model.UpdateCenter.xml
hudson.plugins.emailext.ExtendedEmailPublisher.xml
hudson.plugins.git.GitTool.xml
hudson.plugins.gradle.Gradle.xml
hudson.tasks.Ant.xml
hudson.tasks.Maven.xml
identity.key.enc
jenkins.CLI.xml
jenkins.install.InstallUtil.lastExecVersion
jenkins.install.UpgradeWizard.state
jenkins.mvn.GlobalMavenConfig.xml
nodeMonitors.xml
org.jenkinsci.plugins.docker.commons.tools.DockerTool.xml
org.jenkinsci.plugins.gitclient.JGitApacheTool.xml
org.jenkinsci.plugins.gitclient.JGitTool.xml
secret.key
secret.key.not-so-secret
30 items

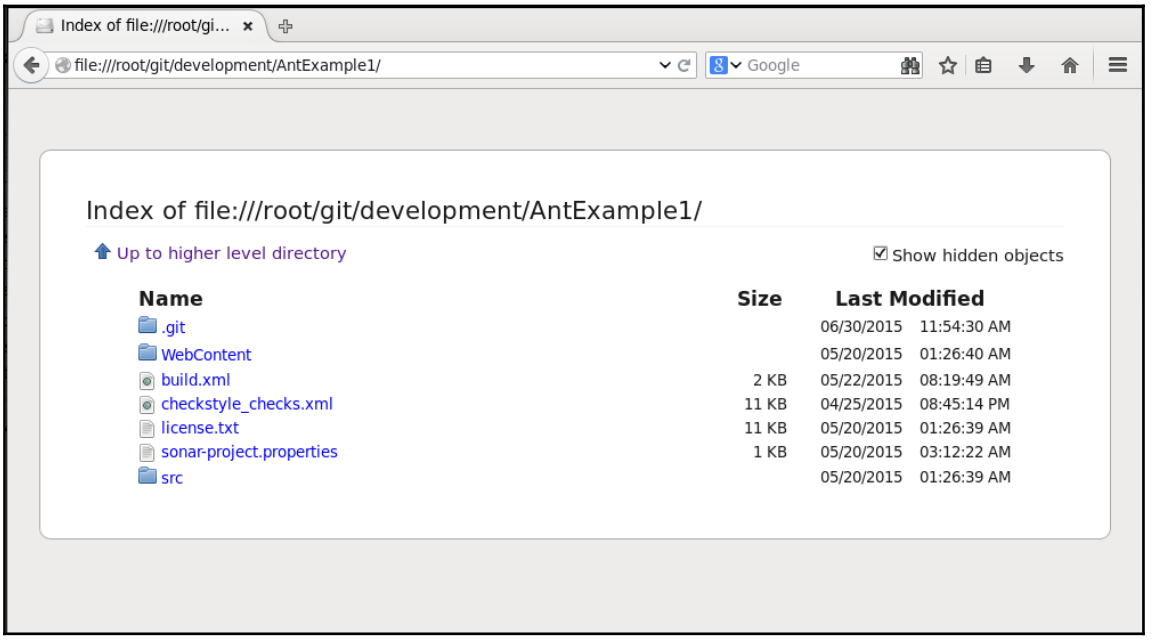

plugins
This PC › New Volume (F:) › #JenkinsEssentials › FirstDraft › jenkinsHome › plugins
Search plugins
ace-editor
ant
antisamy-markup-formatter
authentication-tokens
bouncycastle-api
branch-api
build-timeout
cloudbees-folder
credentials
credentials-binding
display-url-api
docker-commons
docker-workflow
durable-task
email-ext
external-monitor-job
git
git-client
github
github-api
github-branch-source
git-server
gradle
handlebars
icon-shim
jquery-detached
junit
ldap
mailer
mapdb-api
matrix-auth
matrix-project
momentjs
pam-auth
pipeline-build-step
pipeline-github-lib
pipeline-graph-analysis
pipeline-input-step
pipeline-milestone-step
pipeline-model-api
pipeline-model-declarative-agent
pipeline-model-definition
pipeline-model-extensions
pipeline-rest-api
pipeline-stage-step
pipeline-stage-tags-metadata
pipeline-stage-view
plain-credentials
resource-disposer
scm-api
script-security
ssh-credentials
ssh-slaves
structs
subversion
timestamper
token-macro
windows-slaves
workflow-aggregator
workflow-api
workflow-basic-steps
workflow-cps
workflow-cps-global-lib
workflow-durable-task-step
workflow-job
workflow-multibranch
workflow-scm-step
workflow-step-api
workflow-support
ws-cleanup
ace-editor.jpi
ant.jpi
antisamy-markup-formatter.jpi
authentication-tokens.jpi
bouncycastle-api.jpi
branch-api.jpi
build-timeout.jpi
cloudbees-folder.jpi
credentials.jpi
credentials-binding.jpi
display-url-api.jpi
docker-commons.jpi
docker-workflow.jpi
durable-task.jpi
email-ext.jpi
external-monitor-job.jpi
git.jpi
git-client.jpi
github.jpi
github-api.jpi
github-branch-source.jpi
git-server.jpi
gradle.jpi
handlebars.jpi
icon-shim.jpi
jquery-detached.jpi
junit.jpi
ldap.jpi
mailer.jpi
mapdb-api.jpi
matrix-auth.jpi
matrix-project.jpi
momentjs.jpi
pam-auth.jpi
pipeline-build-step.jpi
pipeline-github-lib.jpi
pipeline-graph-analysis.jpi
pipeline-input-step.jpi
pipeline-milestone-step.jpi
pipeline-model-api.jpi
pipeline-model-declarative-agent.jpi
pipeline-model-definition.jpi
pipeline-model-extensions.jpi
pipeline-rest-api.jpi
pipeline-stage-step.jpi
pipeline-stage-tags-metadata.jpi
pipeline-stage-view.jpi
plain-credentials.jpi
resource-disposer.jpi
scm-api.jpi
script-security.jpi
ssh-credentials.jpi
ssh-slaves.jpi
structs.jpi
subversion.jpi
timestamper.jpi
token-macro.jpi
windows-slaves.jpi
workflow-aggregator.jpi
workflow-api.jpi
workflow-basic-steps.jpi
workflow-cps.jpi
workflow-cps-global-lib.jpi
workflow-durable-task-step.jpi
workflow-job.jpi
workflow-multibranch.jpi
workflow-scm-step.jpi
workflow-step-api.jpi
workflow-support.jpi
ws-cleanup.jpi
140 items

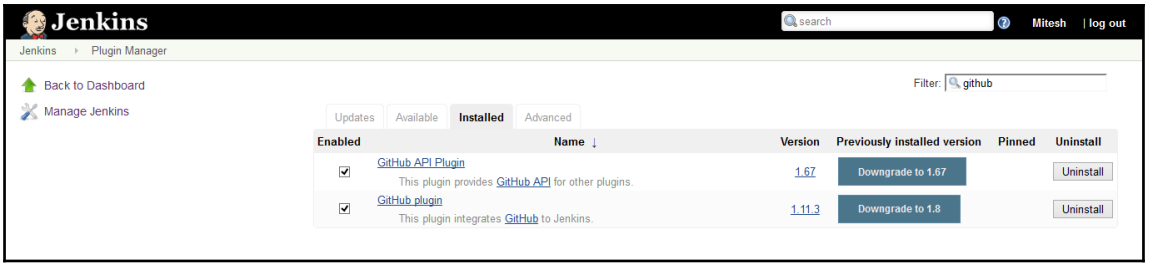

war
File
Home
Share
View
Navigation pane
Preview pane
Details pane
Panes
Extra large icons
Large icons
Medium icons
Small icons
List
Details
Tiles
Content
Layout
Sort by
Group by
Add columns
Size all columns to fit
Current view
Item check boxes
File name extensions
Hidden items
Hide selected items
Show/hide
Options
This PC
New Volume (F:)
#JenkinsEssentials
FirstDraft
jenkinsHome
war
Search war
Quick access
Desktop
Downloads
Documents
Pictures
#MyChapters
Chapter1
Chapter2
FirstDraft
ReferenceBooks
OneDrive
This PC
Desktop
Documents
Downloads
Music
Pictures
Videos
Windows (C:)
LENOVO (D:)
css
executable
help
images
jsbundles
META-INF
scripts
WEB-INF
.timestamp
ColorFormatter.class
dc-license.txt
favicon.ico
JNLPMain.class
LogFileOutputStream$1.class
LogFileOutputStream$2.class
LogFileOutputStream.class
Main$FileAndDescription.class
Main.class
MainDialog$1$1.class
MainDialog$1.class
MainDialog.class
robots.txt
winstone.jar
23 items

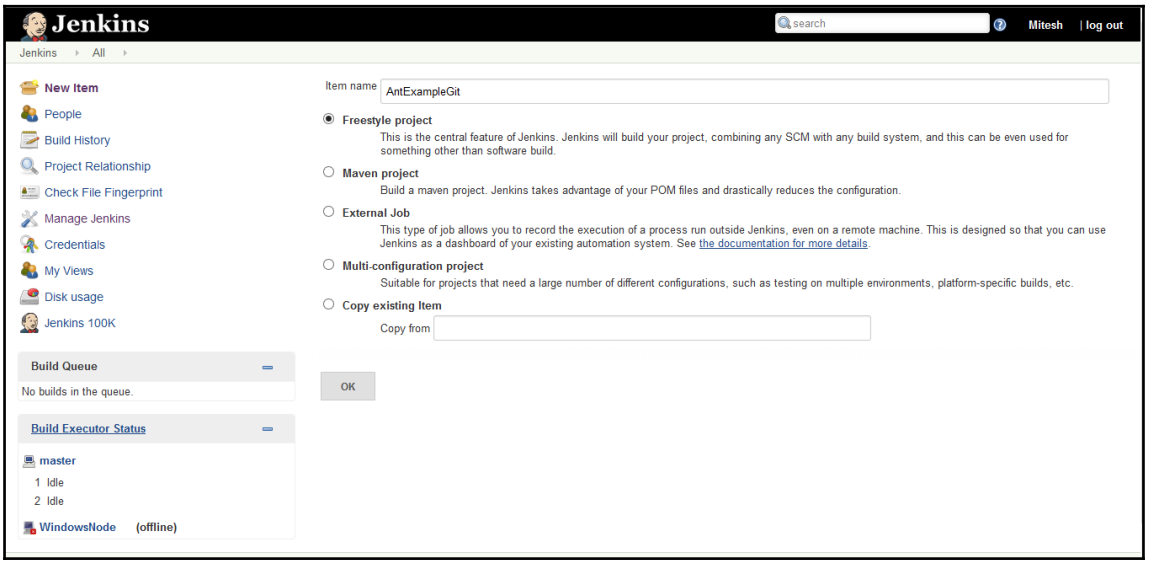

root@localhost:~/git/development/AntExample1
File Edit View Search Terminal Tabs Help
root@localhost:~/git/development/AntExa...
root@localhost:/usr
[root@localhost Desktop]# git --version
git version 1.7.1
[root@localhost Desktop]# git config --global user.name "Mitesh"
[root@localhost Desktop]# git config --global user.email "[redacted]@gmail.com"
[root@localhost Desktop]# git config --list
user.name=Mitesh
user.email=[redacted]@gmail.com
core.repositoryformatversion=0
core.filemode=true
core.bare=false
core.logallrefupdates=true
[root@localhost Desktop]# mkdir -p ~/git/development ; cd ~/git/development
[root@localhost development]# cd AntExample1/
[root@localhost AntExample1]# git init
Initialized empty Git repository in /root/git/development/AntExample1/.git/
[root@localhost AntExample1]# git add .
[root@localhost AntExample1]#

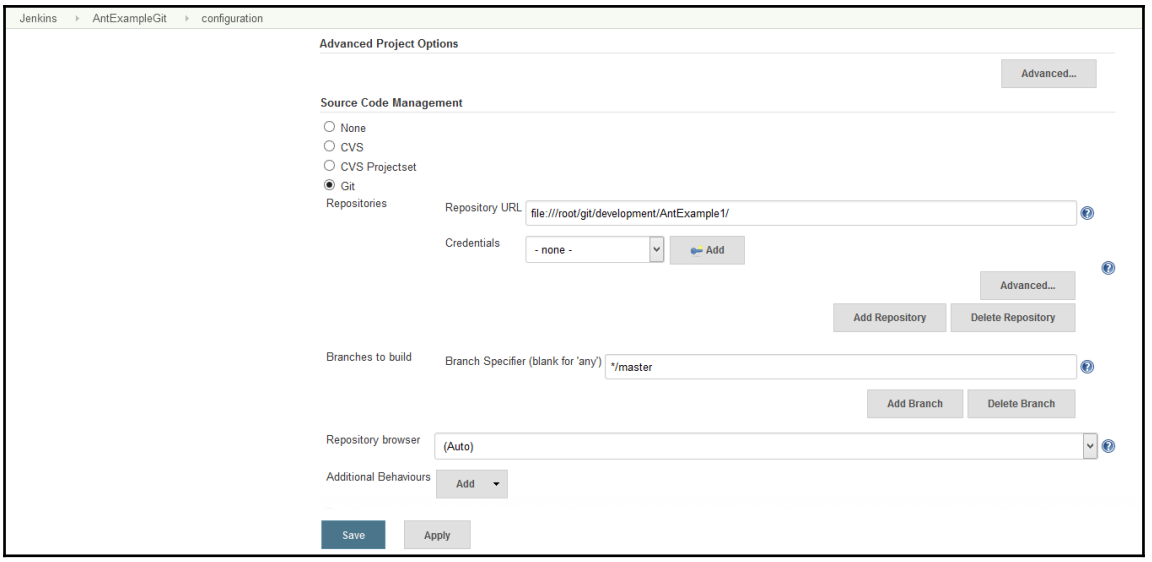

root@localhost:~/git/development/AntExample1
File Edit View Search Terminal Tabs Help
root@localhost:~/git/development/AntExa...
root@localhost:/usr
create mode 100755 WebContent/WEB-INF/lib/checkstyle-6.6-all.jar
create mode 100755 WebContent/WEB-INF/lib/checkstyle-6.6.jar
create mode 100755 WebContent/WEB-INF/lib/commons-logging-1.0.4.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.asm-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.beans-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.context-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.context.support-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.core-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.expression-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.web-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/lib/org.springframework.web.servlet-3.0.0.M3.jar
create mode 100755 WebContent/WEB-INF/web.xml
create mode 100755 WebContent/redirect.jsp
create mode 100755 build.xml
create mode 100755 checkstyle_checks.xml
create mode 100755 license.txt


Index of file:///root/gi...
file:///root/git/development/
Google
Index of file:///root/git/development/
Up to higher level directory
Show hidden objects
Name
Size
Last Modified
.git
02/23/2015 10:33:35 AM
AntExample1
06/30/2015 11:53:45 AM
HEAD
1 KB
02/23/2015 11:22:31 AM
branches
02/23/2015 11:22:31 AM
config
1 KB
02/23/2015 11:22:31 AM
description
1 KB
02/23/2015 11:22:31 AM
hooks
02/23/2015 11:22:31 AM
info
02/23/2015 11:22:31 AM
objects
02/23/2015 11:22:31 AM
refs
02/23/2015 11:22:31 AM

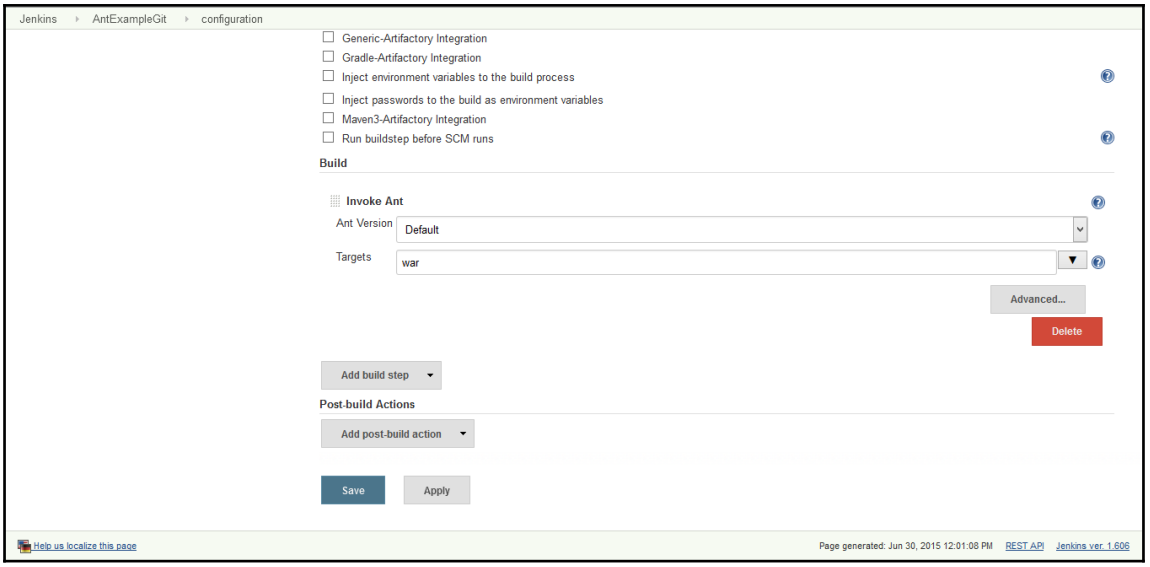

Index of file:///root/gi...
file:///root/git/development/AntExample1/
Google
Index of file:///root/git/development/AntExample1/
Up to higher level directory
Show hidden objects
Name
Size
Last Modified
.git
06/30/2015 11:54:30 AM
WebContent
05/20/2015 01:26:40 AM
build.xml
2 KB
05/22/2015 08:19:49 AM
checkstyle_checks.xml
11 KB
04/25/2015 08:45:14 PM
license.txt
11 KB
05/20/2015 01:26:39 AM
sonar-project.properties
1 KB
05/20/2015 03:12:22 AM
src
05/20/2015 01:26:39 AM

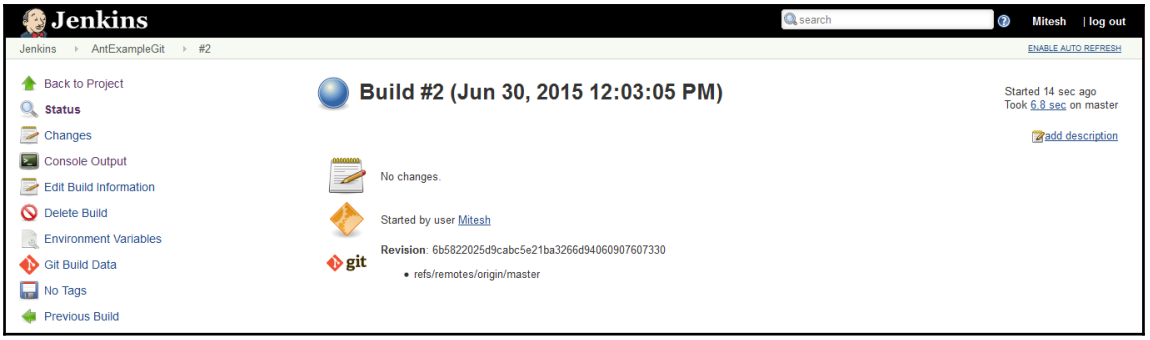

Jenkins
search
Mitesh
| log out
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Filter: github
Updates
Available
Installed
Advanced
Enabled
Name ↓
Version
Previously installed version
Pinned
Uninstall
GitHub API Plugin
This plugin provides GitHub API for other plugins.
1.67
Downgrade to 1.67
Uninstall
GitHub plugin
This plugin integrates GitHub to Jenkins.
1.11.3
Downgrade to 1.8
Uninstall

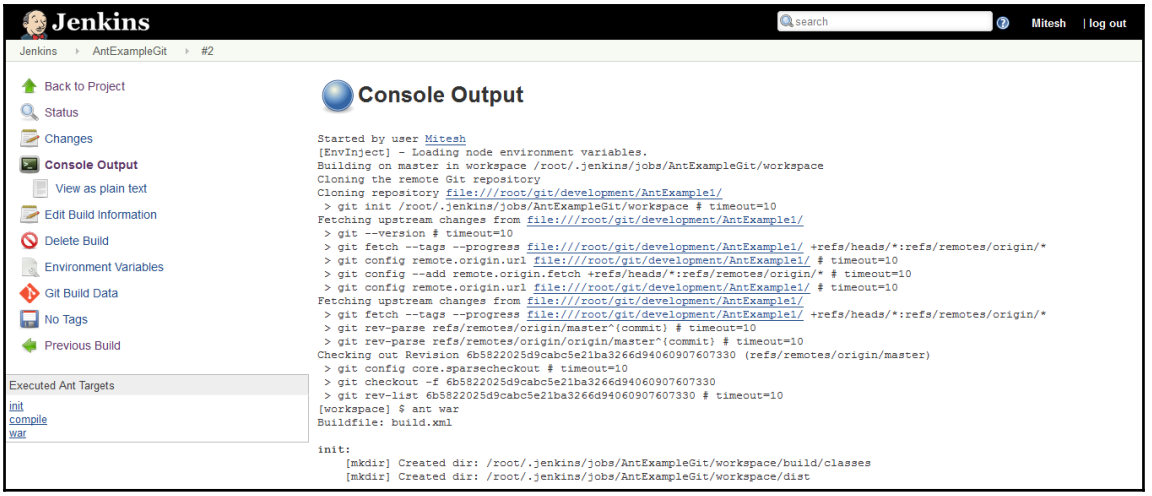

Jenkins
search
Mitesh
| log out
Jenkins
All
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
Credentials
My Views
Disk usage
Jenkins 100K
Build Queue
No builds in the queue.
Build Executor Status
master
1 Idle
2 Idle
WindowsNode (offline)
Item name
AntExampleGit
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system. See the documentation for more details.
Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.
Copy existing Item
Copy from
OK

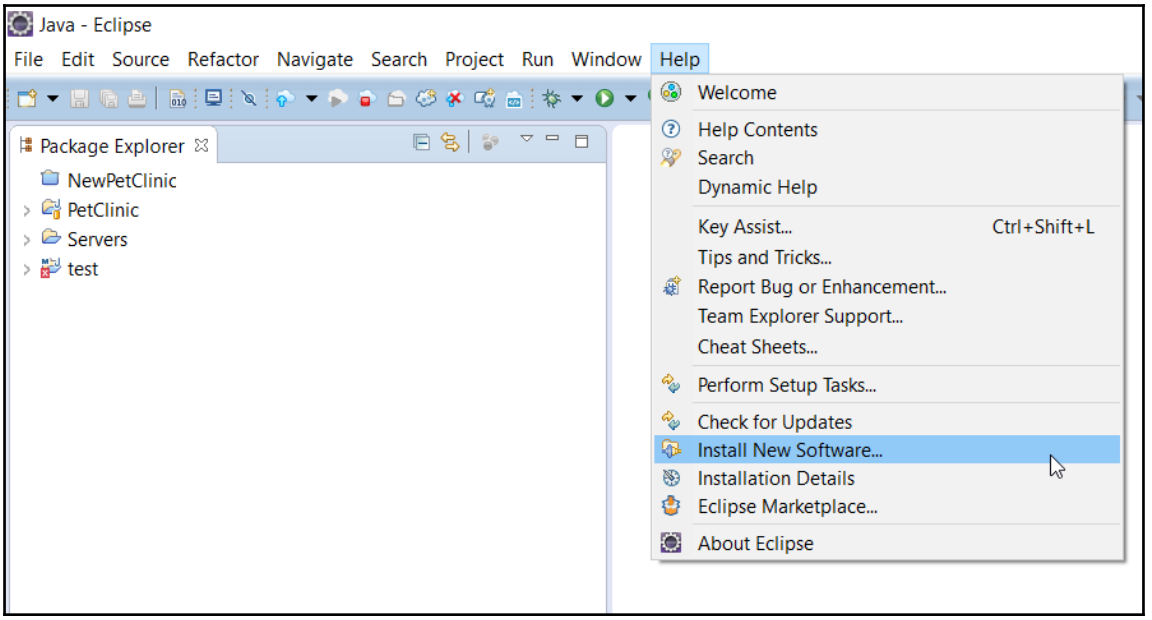

Jenkins
AntExampleGit
configuration
Advanced Project Options
Advanced...
Source Code Management
None
CVS
CVS Projectset
Git
Repositories
Repository URL
file:///root/git/development/AntExample1/
Credentials
- none -
Add
Advanced...
Add Repository
Delete Repository
Branches to build
Branch Specifier (blank for 'any')
*/master
Add Branch
Delete Branch
Repository browser
(Auto)
Additional Behaviours
Add
Save
Apply

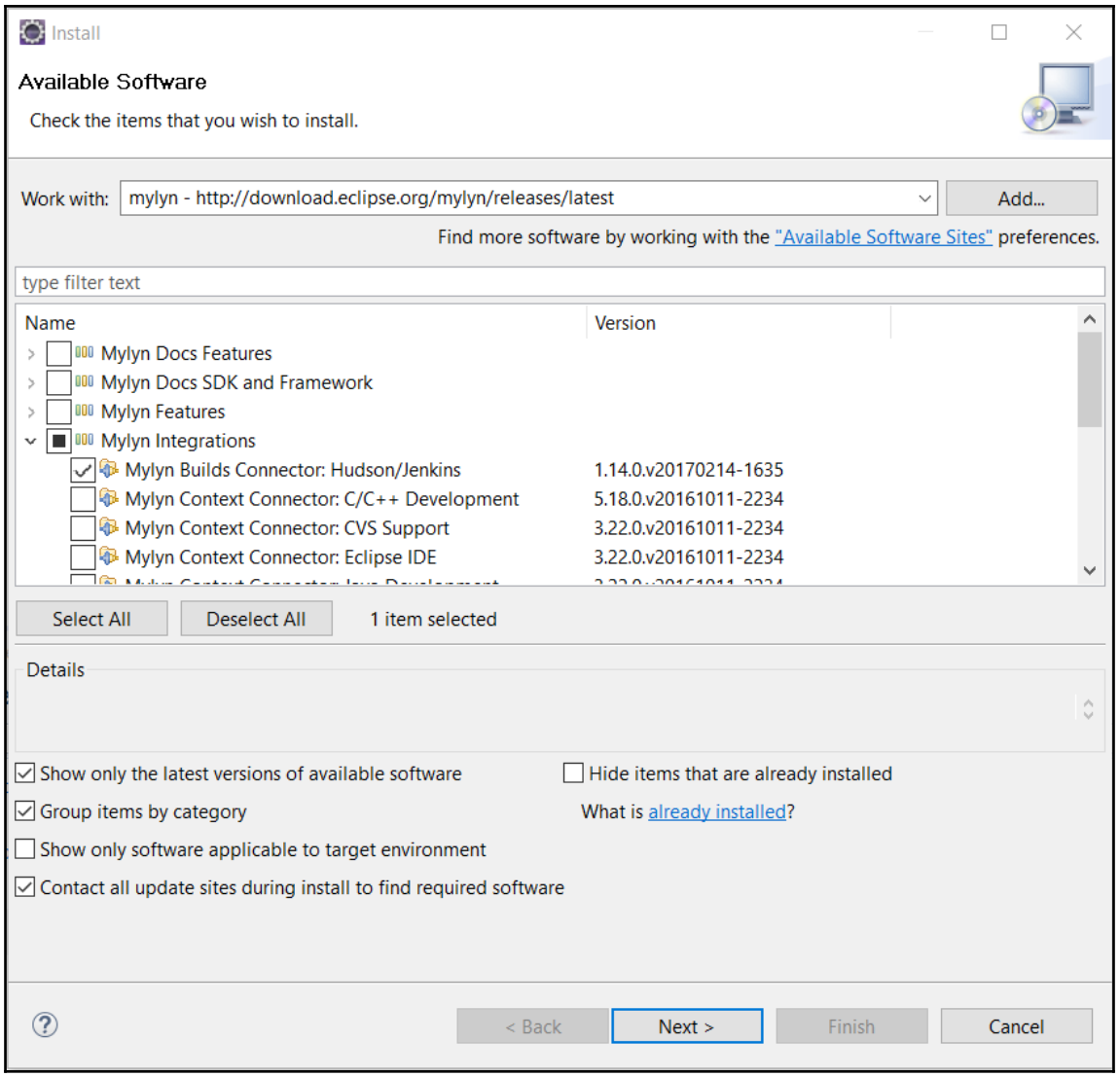
Source Code Management
None
File System
Git
Repositories
Repository URL
https://github.com/mitesh51/AntExample.git
Credentials
- none -
Add
Advanced...
Add Repository
Branches to build
X
Branch Specifier (blank for 'any')
*/master
Add Branch

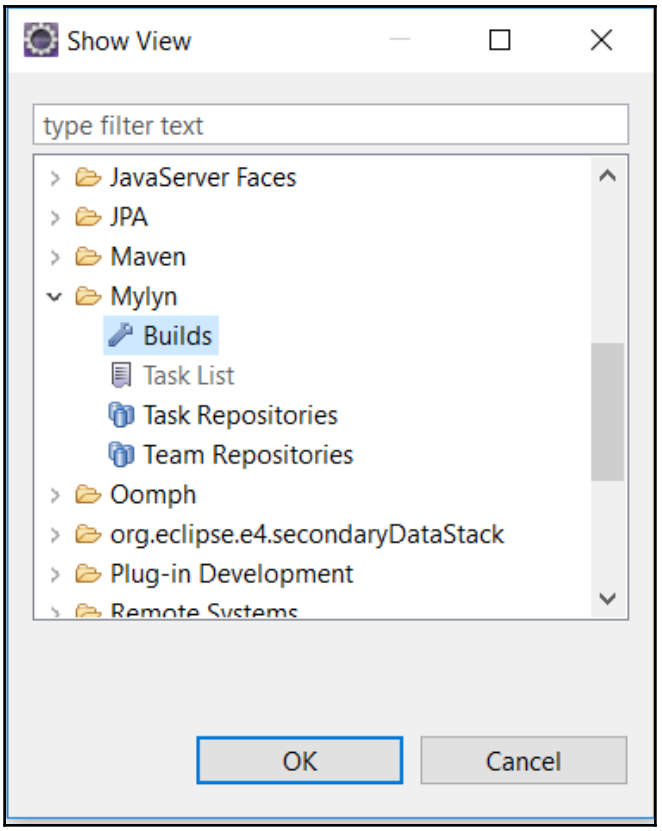

Jenkins ▸ AntExampleGit ▸ configuration
Generic-Artifactory Integration
Gradle-Artifactory Integration
Inject environment variables to the build process
Inject passwords to the build as environment variables
Maven3-Artifactory Integration
Run buildstep before SCM runs
Build
Invoke Ant
Ant Version
Default
Targets
war
Advanced...
Delete
Add build step
Post-build Actions
Add post-build action
Save
Apply
Help us localize this page
Page generated: Jun 30, 2015 12:01:08 PM
REST API
Jenkins ver. 1.606

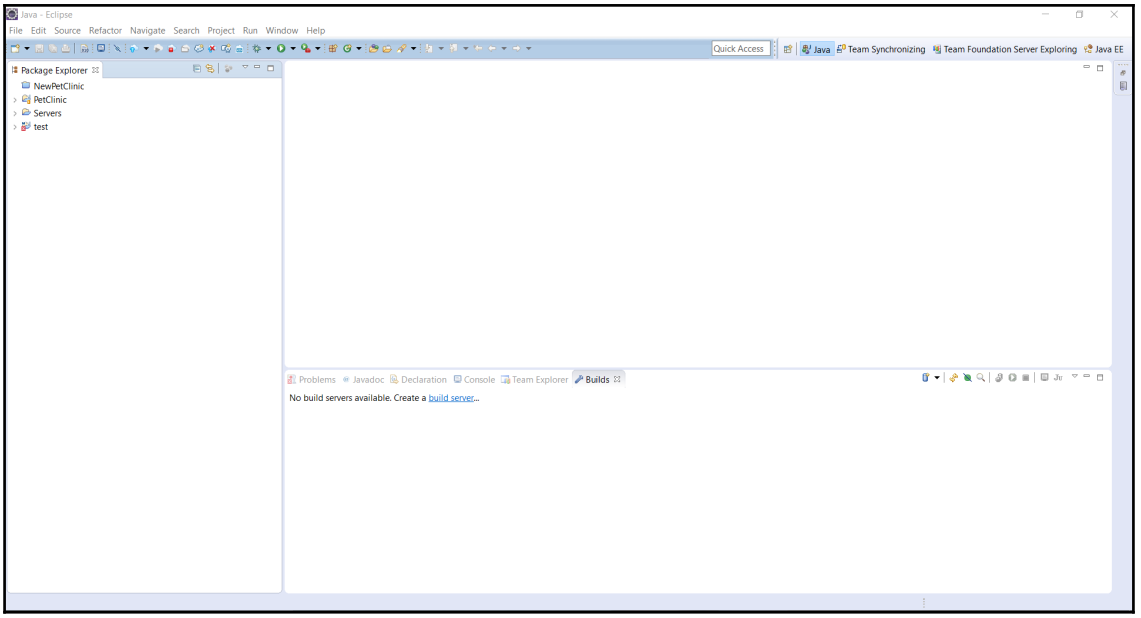

Jenkins
search
Mitesh
| log out
Jenkins ▸ AntExampleGit ▸ #2
ENABLE AUTO REFRESH
Back to Project
Status
Changes
Console Output
Edit Build Information
Delete Build
Environment Variables
Git Build Data
No Tags
Previous Build
Build #2 (Jun 30, 2015 12:03:05 PM)
Started 14 sec ago
Took 6.8 sec on master
add description
No changes.
Started by user Mitesh
Revision: 6b5822025d9cabc5e21ba3266d94060907607330
refs/remotes/origin/master

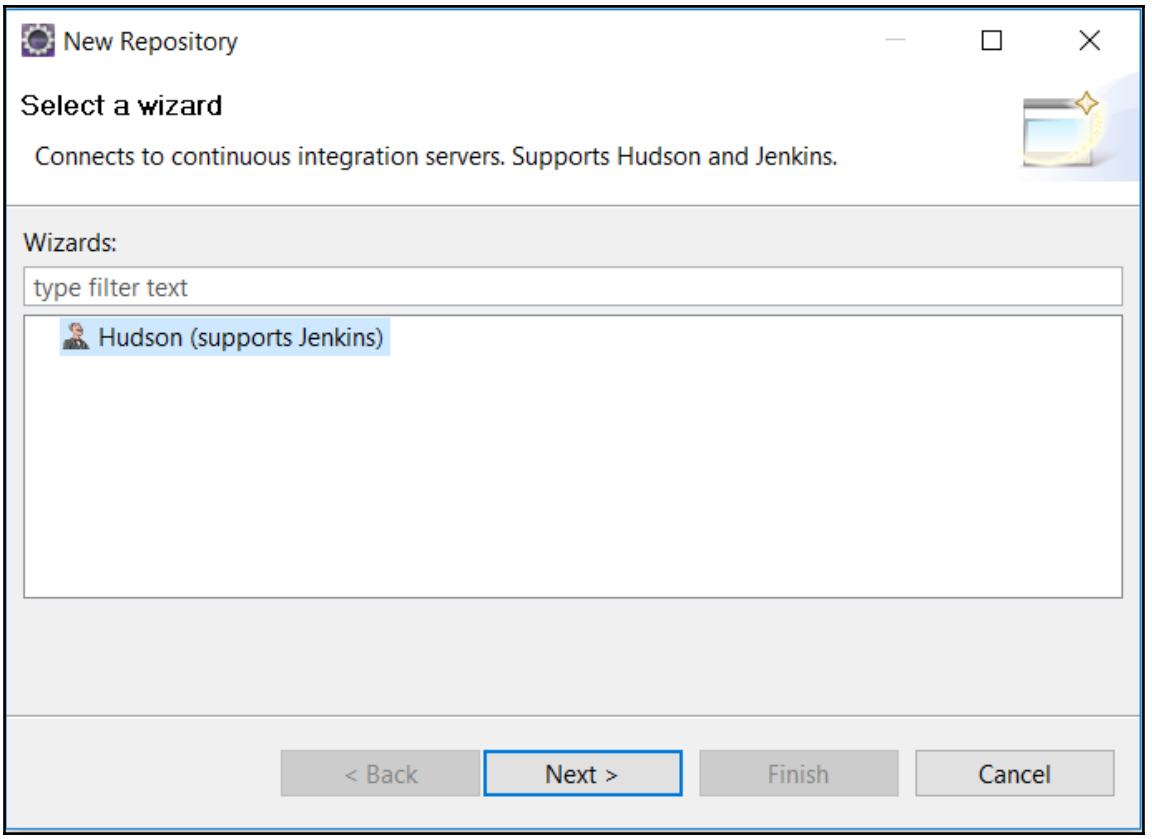

Jenkins
search
Mitesh | log out
Jenkins › AntExampleGit › #2
Back to Project
Status
Changes
Console Output
View as plain text
Edit Build Information
Delete Build
Environment Variables
Git Build Data
No Tags
Previous Build
Executed Ant Targets
init
compile
war
Console Output
Started by user Mitesh
[EnvInject] - Loading node environment variables.
Building on master in workspace /root/.jenkins/jobs/AntExampleGit/workspace
Cloning the remote Git repository
Cloning repository file:///root/git/development/AntExample1/
> git init /root/.jenkins/jobs/AntExampleGit/workspace # timeout=10
Fetching upstream changes from file:///root/git/development/AntExample1/
> git --version # timeout=10
> git fetch --tags --progress file:///root/git/development/AntExample1/ +refs/heads/*:refs/remotes/origin/*
> git config remote.origin.url file:///root/git/development/AntExample1/ # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url file:///root/git/development/AntExample1/ # timeout=10
Fetching upstream changes from file:///root/git/development/AntExample1/
> git fetch --tags --progress file:///root/git/development/AntExample1/ +refs/heads/*:refs/remotes/origin/*
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision 6b5822025d9cabc5e21ba3266d94060907607330 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 6b5822025d9cabc5e21ba3266d94060907607330
> git rev-list 6b5822025d9cabc5e21ba3266d94060907607330 # timeout=10
[workspace] $ ant war
Buildfile: build.xml
init:
[mkdir] Created dir: /root/.jenkins/jobs/AntExampleGit/workspace/build/classes
[mkdir] Created dir: /root/.jenkins/jobs/AntExampleGit/workspace/dist

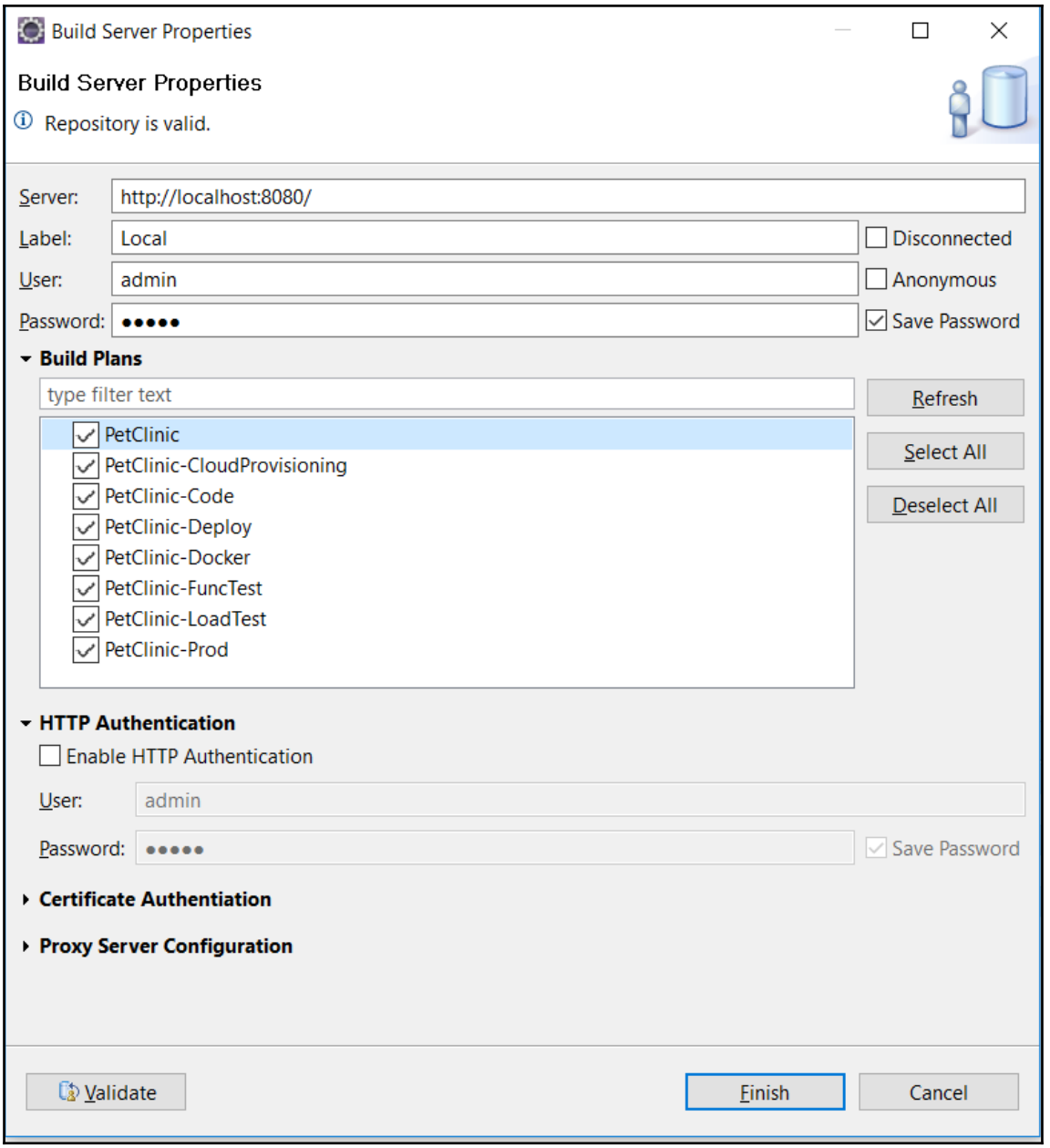

Java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer
NewPetClinic
PetClinic
Servers
test
Welcome
Help Contents
Search
Dynamic Help
Key Assist... Ctrl+Shift+L
Tips and Tricks...
Report Bug or Enhancement...
Team Explorer Support...
Cheat Sheets...
Perform Setup Tasks...
Check for Updates
Install New Software...
Installation Details
Eclipse Marketplace...
About Eclipse

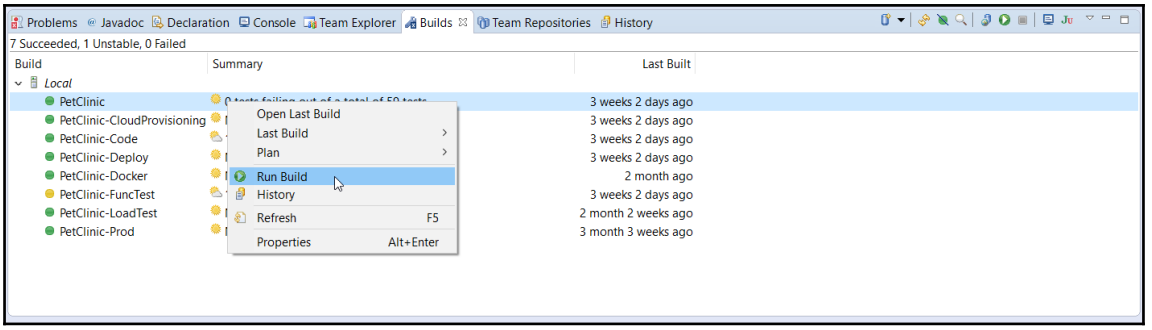

Install
Available Software
Check the items that you wish to install.
Work with:
mylyn - http://download.eclipse.org/mylyn/releases/latest
Add...
Find more software by working with the "Available Software Sites" preferences.
type filter text
Name
Version
Mylyn Docs Features
Mylyn Docs SDK and Framework
Mylyn Features
Mylyn Integrations
Mylyn Builds Connector: Hudson/Jenkins
1.14.0.v20170214-1635
Mylyn Context Connector: C/C++ Development
5.18.0.v20161011-2234
Mylyn Context Connector: CVS Support
3.22.0.v20161011-2234
Mylyn Context Connector: Eclipse IDE
3.22.0.v20161011-2234
Select All
Deselect All
1 item selected
Details
Show only the latest versions of available software
Hide items that are already installed
Group items by category
What is already installed?
Show only software applicable to target environment
Contact all update sites during install to find required software
< Back
Next >
Finish
Cancel


Show View
type filter text
JavaServer Faces
JPA
Maven
Mylyn
Builds
Task List
Task Repositories
Team Repositories
Oomph
org.eclipse.e4.secondaryDataStack
Plug-in Development
Remote Systems
OK
Cancel

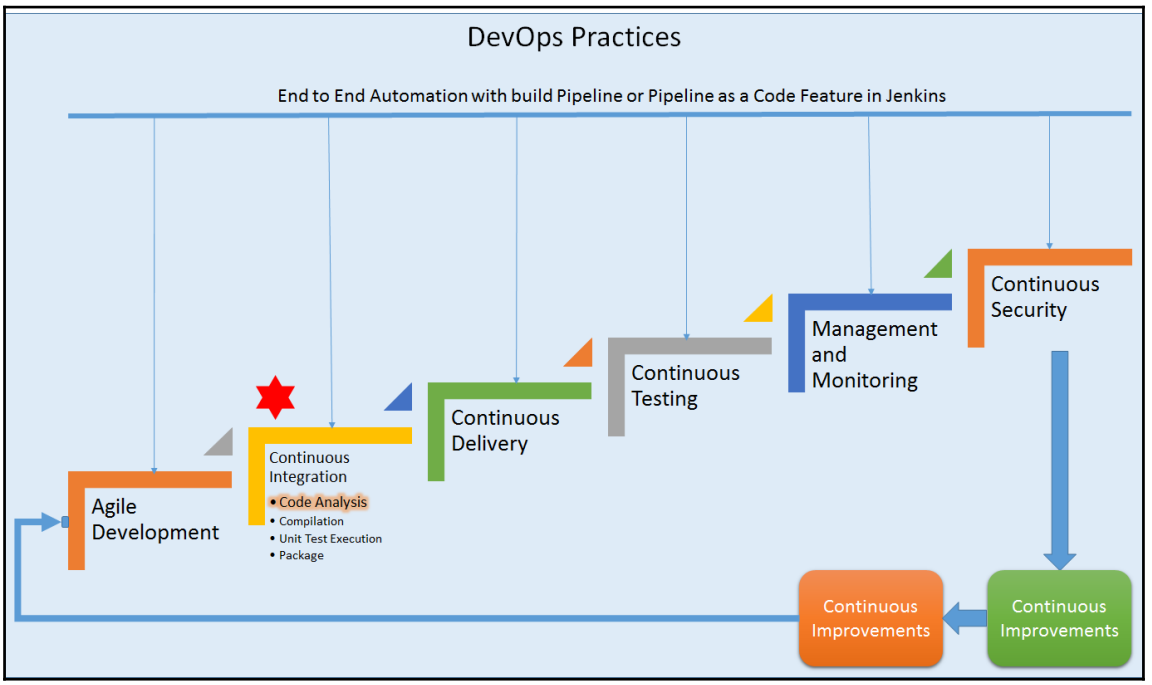

Java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Java
Team Synchronizing
Team Foundation Server Exploring
Java EE
Package Explorer
NewPetClinic
PetClinic
Servers
test
Problems
Javadoc
Declaration
Console
Team Explorer
Builds
No build servers available. Create a build server...

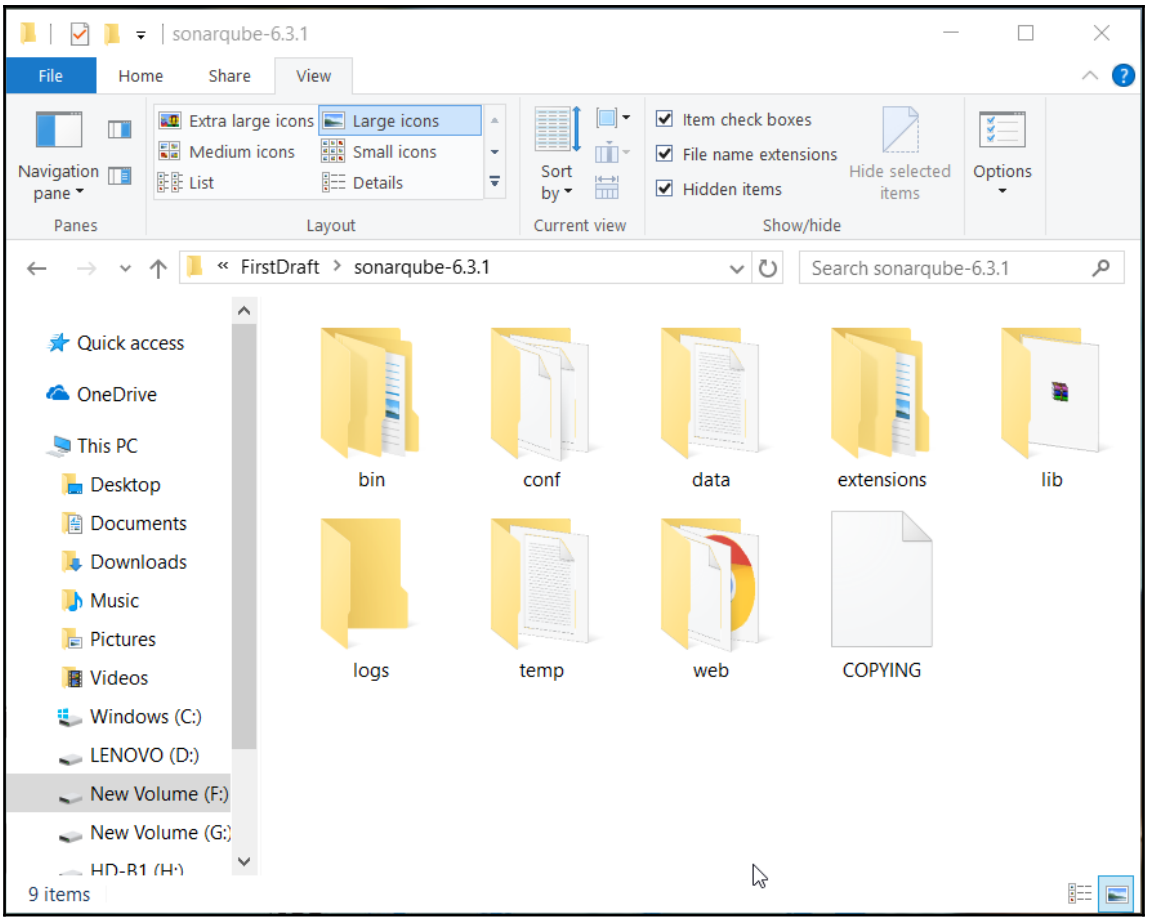

New Repository
Select a wizard
Connects to continuous integration servers. Supports Hudson and Jenkins.
Wizards:
type filter text
Hudson (supports Jenkins)
< Back
Next >
Finish
Cancel

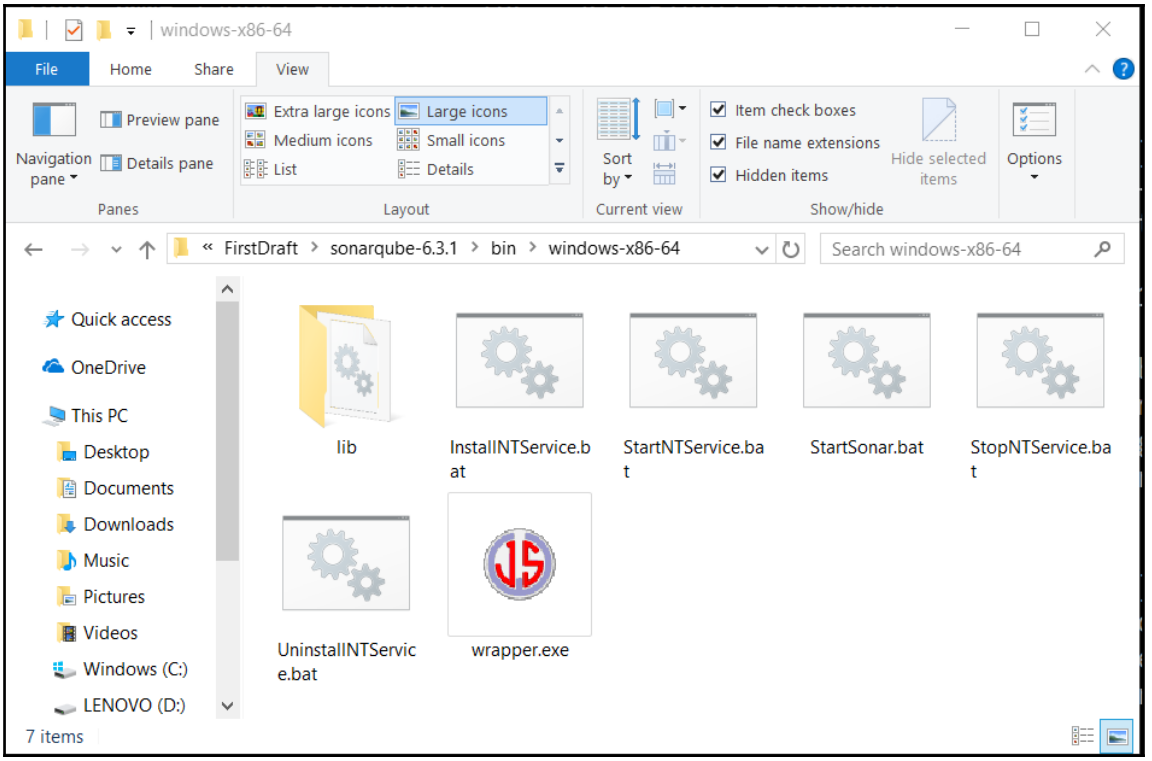

Build Server Properties
Build Server Properties
Repository is valid.
Server: http://localhost:8080/
Label: Local
Disconnected
User: admin
Anonymous
Password: •••••
Save Password
Build Plans
type filter text
Refresh
PetClinic
PetClinic-CloudProvisioning
PetClinic-Code
PetClinic-Deploy
PetClinic-Docker
PetClinic-FuncTest
PetClinic-LoadTest
PetClinic-Prod
Select All
Deselect All
HTTP Authentication
Enable HTTP Authentication
User: admin
Password: •••••
Save Password
Certificate Authentiation
Proxy Server Configuration
Validate
Finish
Cancel

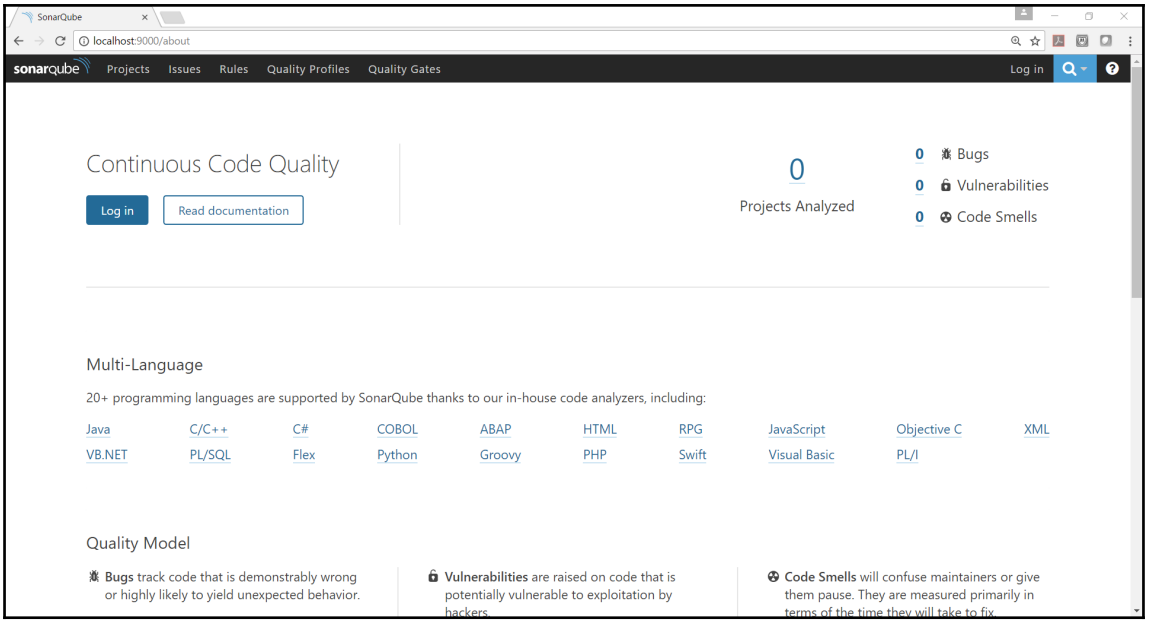

Problems
Javadoc
Declaration
Console
Team Explorer
Builds
Team Repositories
History
7 Succeeded, 1 Unstable, 0 Failed
Build
Summary
Last Built
Local
PetClinic
PetClinic-CloudProvisioning
PetClinic-Code
PetClinic-Deploy
PetClinic-Docker
PetClinic-FuncTest
PetClinic-LoadTest
PetClinic-Prod
3 weeks 2 days ago
3 weeks 2 days ago
3 weeks 2 days ago
3 weeks 2 days ago
2 month ago
3 weeks 2 days ago
2 month 2 weeks ago
3 month 3 weeks ago
Open Last Build
Last Build
Plan
Run Build
History
Refresh
F5
Properties
Alt+Enter

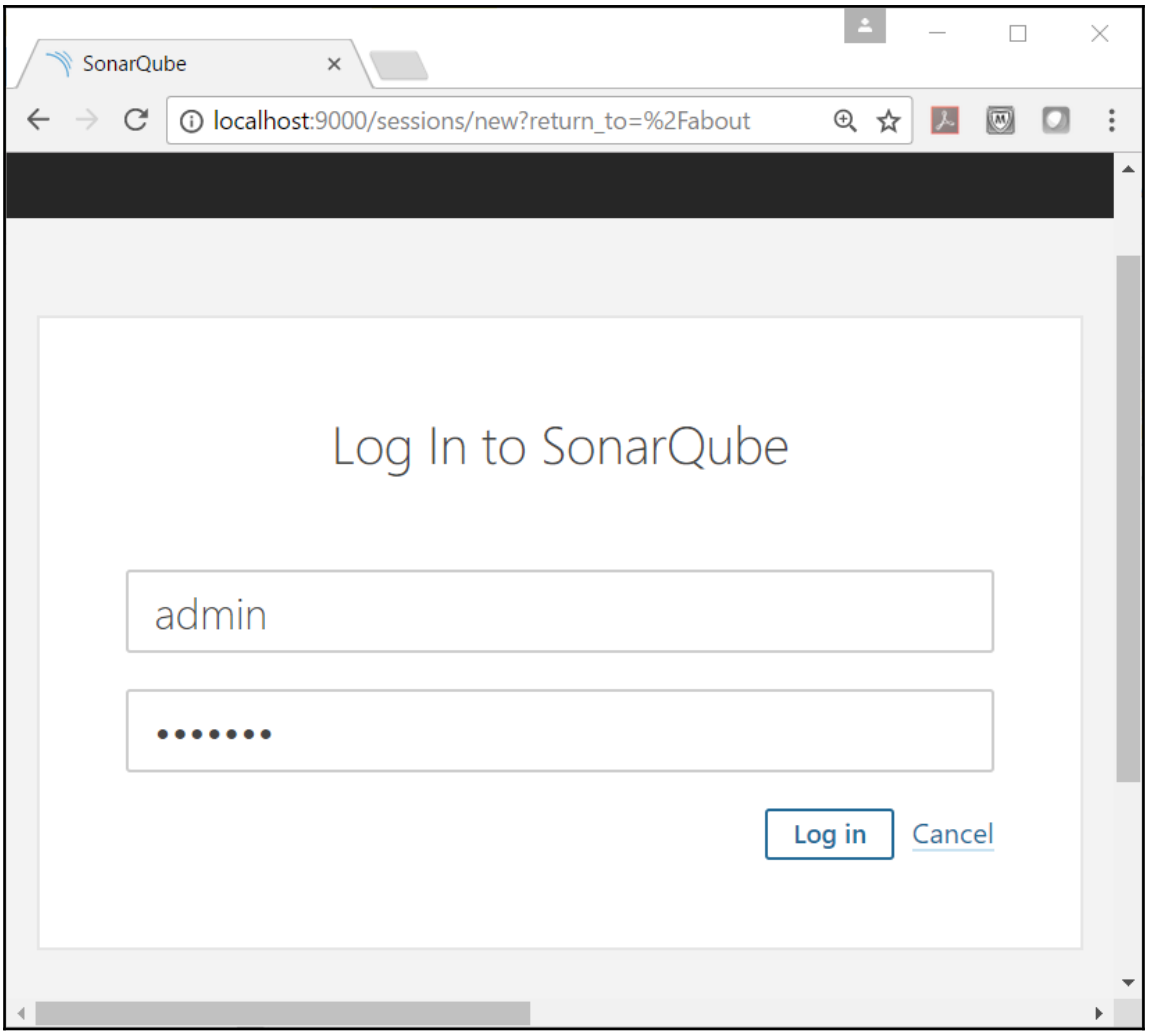
Chapter 03: Managing Code Quality and Notifications

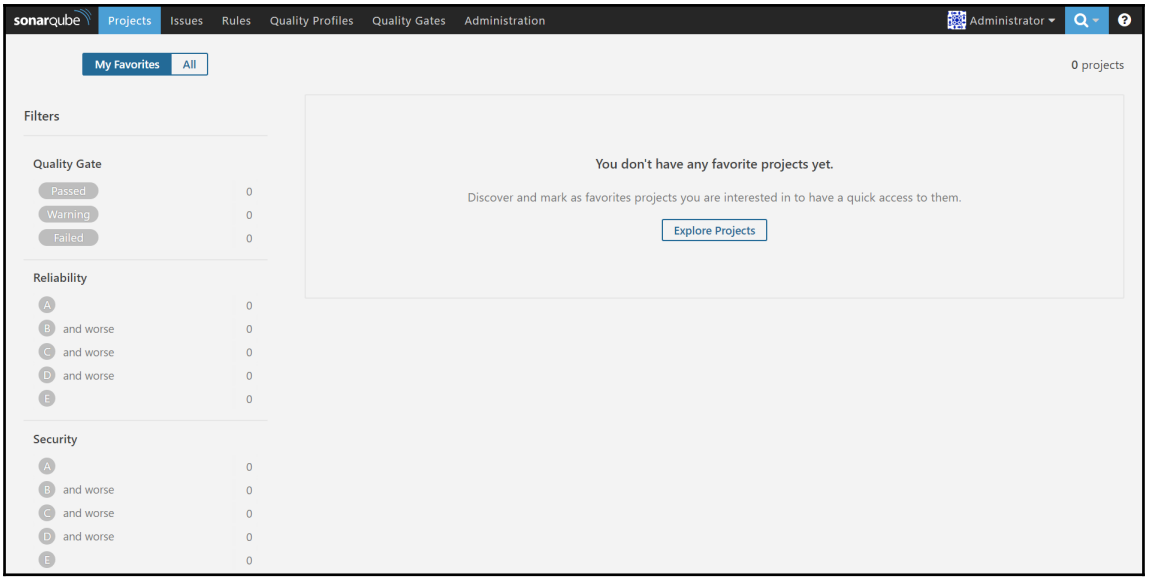


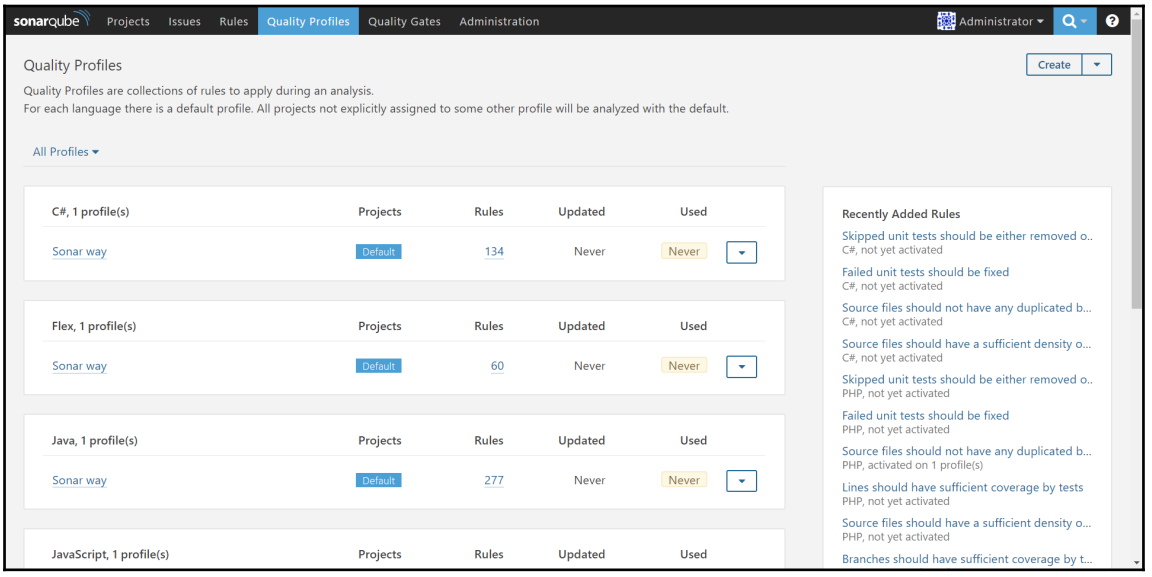

sonarqube-6.3.1
File
Home
Share
View
Navigation pane
Panes
Extra large icons
Large icons
Medium icons
Small icons
List
Details
Layout
Sort by
Current view
Item check boxes
File name extensions
Hidden items
Hide selected items
Show/hide
Options
FirstDraft
sonarqube-6.3.1
Search sonarqube-6.3.1
Quick access
OneDrive
This PC
Desktop
Documents
Downloads
Music
Pictures
Videos
Windows (C:)
LENOVO (D:)
New Volume (F:)
New Volume (G:)
bin
conf
data
extensions
lib
logs
temp
web
COPYING
9 items

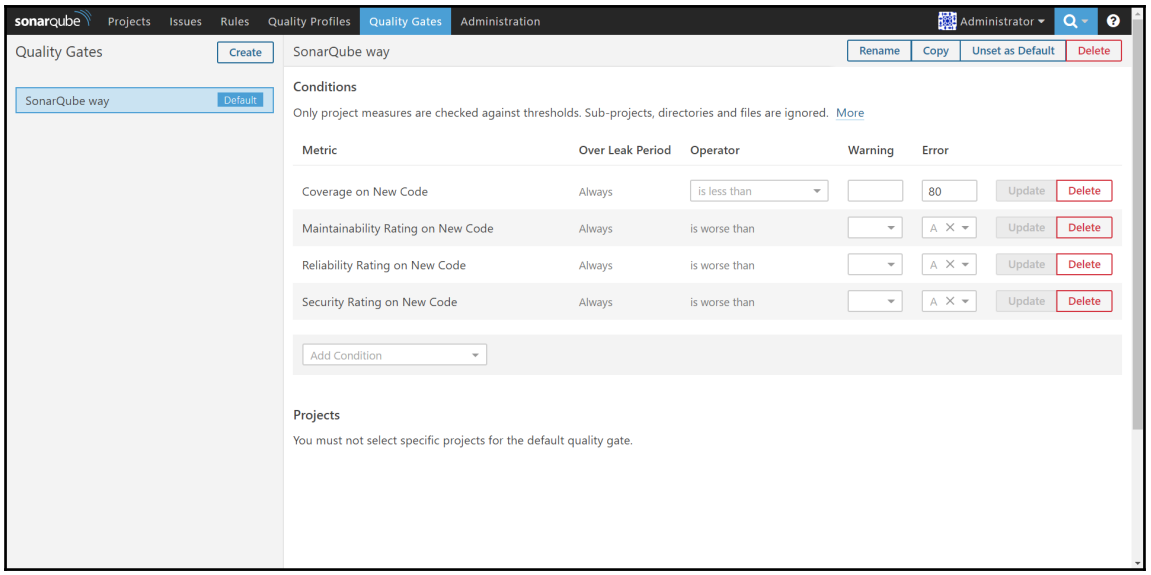

windows-x86-64
File
Home
Share
View
Navigation pane
Preview pane
Details pane
Panes
Extra large icons
Large icons
Medium icons
Small icons
List
Details
Layout
Sort by
Current view
Item check boxes
File name extensions
Hidden items
Hide selected items
Show/hide
Options
« FirstDraft › sonarqube-6.3.1 › bin › windows-x86-64
Search windows-x86-64
Quick access
OneDrive
This PC
Desktop
Documents
Downloads
Music
Pictures
Videos
Windows (C:)
LENOVO (D:)
lib
InstallNTService.bat
StartNTService.bat
StartSonar.bat
StopNTService.bat
UninstallNTService.bat
wrapper.exe
7 items

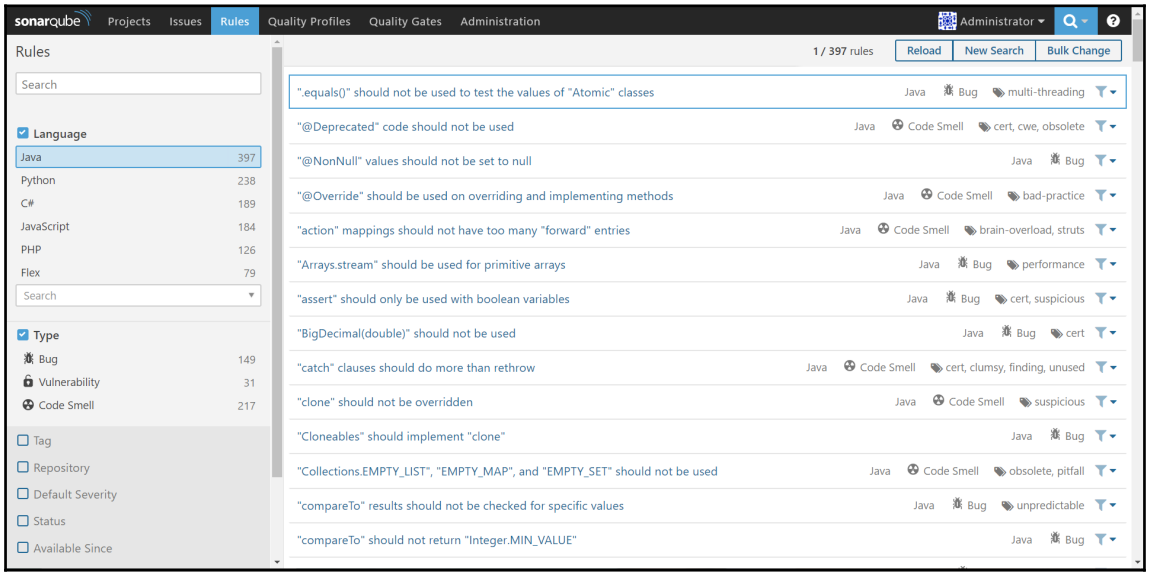

SonarQube
localhost:9000/about
sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Log in
Continuous Code Quality
Log in
Read documentation
0
Projects Analyzed
0 Bugs
0 Vulnerabilities
0 Code Smells
Multi-Language
20+ programming languages are supported by SonarQube thanks to our in-house code analyzers, including:
Java
C/C++
C#
COBOL
ABAP
HTML
RPG
JavaScript
Objective C
XML
VB.NET
PL/SQL
Flex
Python
Groovy
PHP
Swift
Visual Basic
PL/I
Quality Model
Bugs track code that is demonstrably wrong or highly likely to yield unexpected behavior.
Vulnerabilities are raised on code that is potentially vulnerable to exploitation by hackers.
Code Smells will confuse maintainers or give them pause. They are measured primarily in terms of the time they will take to fix.

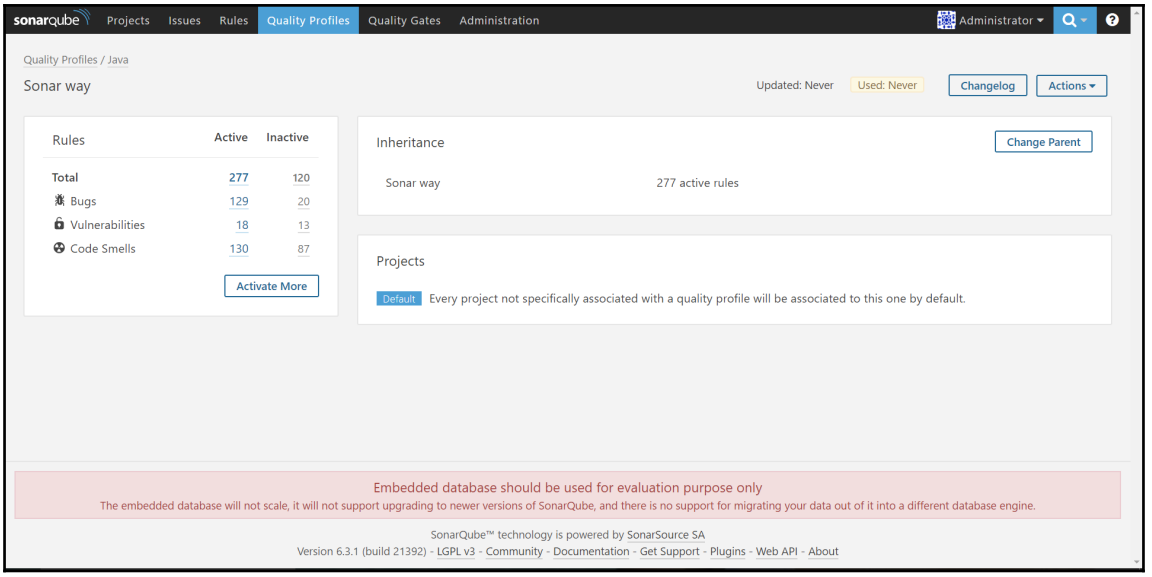

SonarQube
localhost:9000/sessions/new?return_to=%2Fabout
Log In to SonarQube
admin
Log in
Cancel

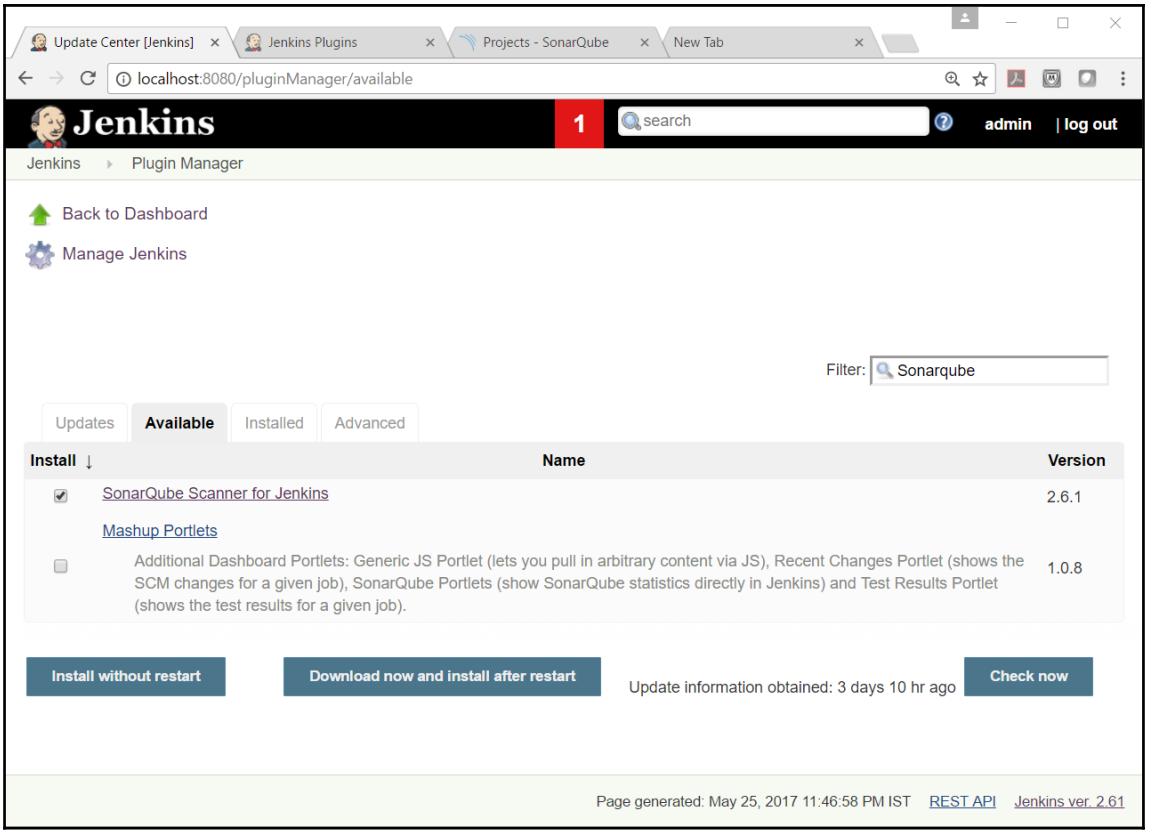

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
My Favorites
All
0 projects
Filters
Quality Gate
Passed 0
Warning 0
Failed 0
Reliability
A 0
B and worse 0
C and worse 0
D and worse 0
E 0
Security
A 0
B and worse 0
C and worse 0
D and worse 0
E 0
You don't have any favorite projects yet.
Discover and mark as favorites projects you are interested in to have a quick access to them.
Explore Projects


sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Quality Profiles
Create
Quality Profiles are collections of rules to apply during an analysis.
For each language there is a default profile. All projects not explicitly assigned to some other profile will be analyzed with the default.
All Profiles
C#, 1 profile(s) Projects Rules Updated Used
Sonar way Default 134 Never Never
Flex, 1 profile(s) Projects Rules Updated Used
Sonar way Default 60 Never Never
Java, 1 profile(s) Projects Rules Updated Used
Sonar way Default 277 Never Never
JavaScript, 1 profile(s) Projects Rules Updated Used
Recently Added Rules
Skipped unit tests should be either removed o..
C#, not yet activated
Failed unit tests should be fixed
C#, not yet activated
Source files should not have any duplicated b...
C#, not yet activated
Source files should have a sufficient density o...
C#, not yet activated
Skipped unit tests should be either removed o..
PHP, not yet activated
Failed unit tests should be fixed
PHP, not yet activated
Source files should not have any duplicated b...
PHP, activated on 1 profile(s)
Lines should have sufficient coverage by tests
PHP, not yet activated
Source files should have a sufficient density o...
PHP, not yet activated
Branches should have sufficient coverage by t...


sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Quality Gates
Create
SonarQube way
Default
SonarQube way
Rename
Copy
Unset as Default
Delete
Conditions
Only project measures are checked against thresholds. Sub-projects, directories and files are ignored. More
Metric
Over Leak Period
Operator
Warning
Error
Coverage on New Code
Always
is less than
80
Update
Delete
Maintainability Rating on New Code
Always
is worse than
Reliability Rating on New Code
Always
is worse than
Security Rating on New Code
Always
is worse than
Add Condition
Projects
You must not select specific projects for the default quality gate.


sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Rules
Search
Language
Java 397
Python 238
C# 189
JavaScript 184
PHP 126
Flex 79
Search
Type
Bug 149
Vulnerability 31
Code Smell 217
Tag
Repository
Default Severity
Status
Available Since
1 / 397 rules
Reload
New Search
Bulk Change
".equals()" should not be used to test the values of "Atomic" classes
Java Bug multi-threading
"@Deprecated" code should not be used
Java Code Smell cert, cwe, obsolete
"@NonNull" values should not be set to null
Java Bug
"@Override" should be used on overriding and implementing methods
Java Code Smell bad-practice
"action" mappings should not have too many "forward" entries
Java Code Smell brain-overload, struts
"Arrays.stream" should be used for primitive arrays
Java Bug performance
"assert" should only be used with boolean variables
Java Bug cert, suspicious
"BigDecimal(double)" should not be used
Java Bug cert
"catch" clauses should do more than rethrow
Java Code Smell cert, clumsy, finding, unused
"clone" should not be overridden
Java Code Smell suspicious
"Cloneables" should implement "clone"
Java Bug
"Collections.EMPTY_LIST", "EMPTY_MAP", and "EMPTY_SET" should not be used
Java Code Smell obsolete, pitfall
"compareTo" results should not be checked for specific values
Java Bug unpredictable
"compareTo" should not return "Integer.MIN_VALUE"
Java Bug


sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Quality Profiles / Java
Sonar way
Updated: Never
Used: Never
Changelog
Actions
Rules
Active
Inactive
Total
277
120
Bugs
129
20
Vulnerabilities
18
13
Code Smells
130
87
Activate More
Inheritance
Change Parent
Sonar way
277 active rules
Projects
Default
Every project not specifically associated with a quality profile will be associated to this one by default.
Embedded database should be used for evaluation purpose only
The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.
SonarQube™ technology is powered by SonarSource SA
Version 6.3.1 (build 21392) - LGPL v3 - Community - Documentation - Get Support - Plugins - Web API - About


Update Center [Jenkins]
Jenkins Plugins
Projects - SonarQube
New Tab
localhost:8080/pluginManager/available
Jenkins
1
search
admin
| log out
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Filter: Sonarqube
Updates
Available
Installed
Advanced
Install ↓
Name
Version
SonarQube Scanner for Jenkins
2.6.1
Mashup Portlets
Additional Dashboard Portlets: Generic JS Portlet (lets you pull in arbitrary content via JS), Recent Changes Portlet (shows the SCM changes for a given job), SonarQube Portlets (show SonarQube statistics directly in Jenkins) and Test Results Portlet (shows the test results for a given job).
1.0.8
Install without restart
Download now and install after restart
Update information obtained: 3 days 10 hr ago
Check now
Page generated: May 25, 2017 11:46:58 PM IST
REST API
Jenkins ver. 2.61

Installing Plugins/Upgrades

Preparation

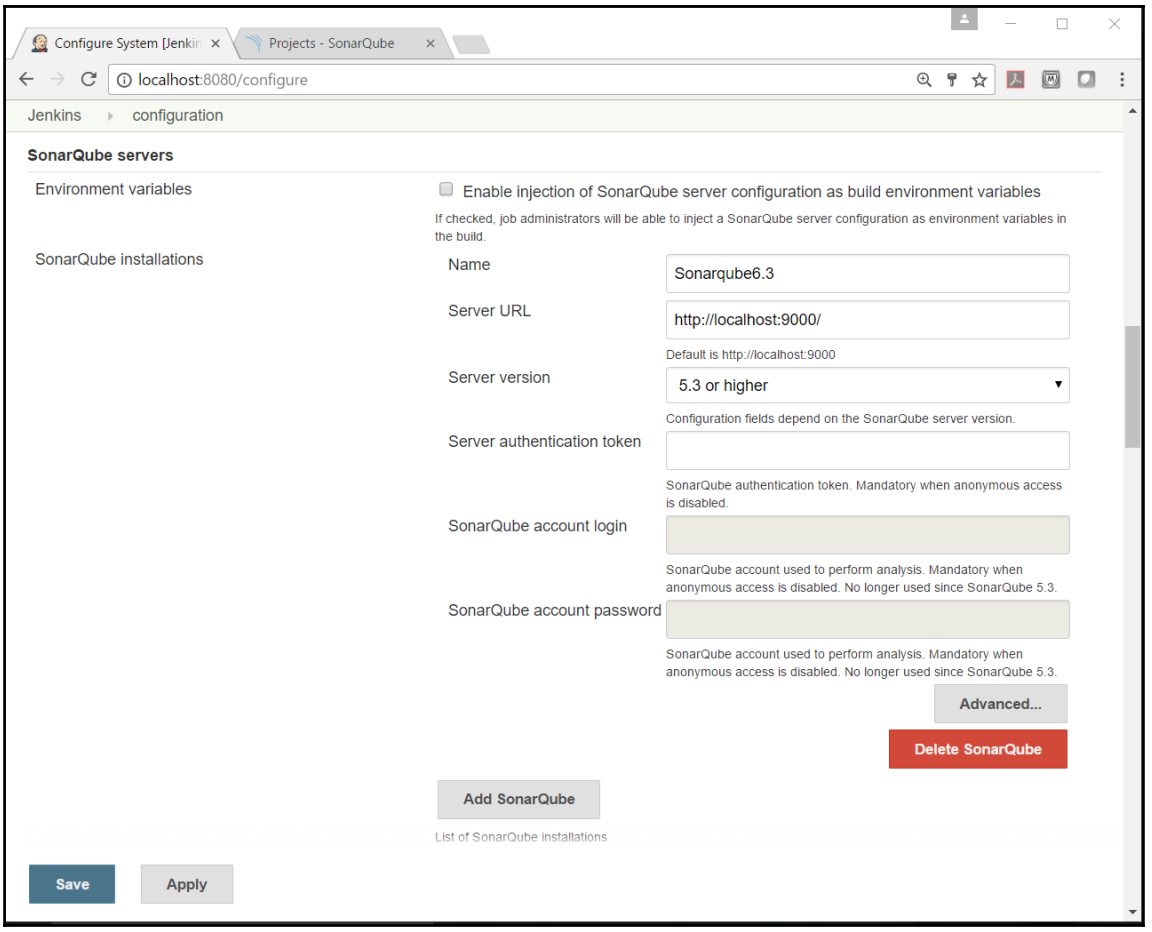
- Checking internet connectivity
- Checking update center connectivity
- Success

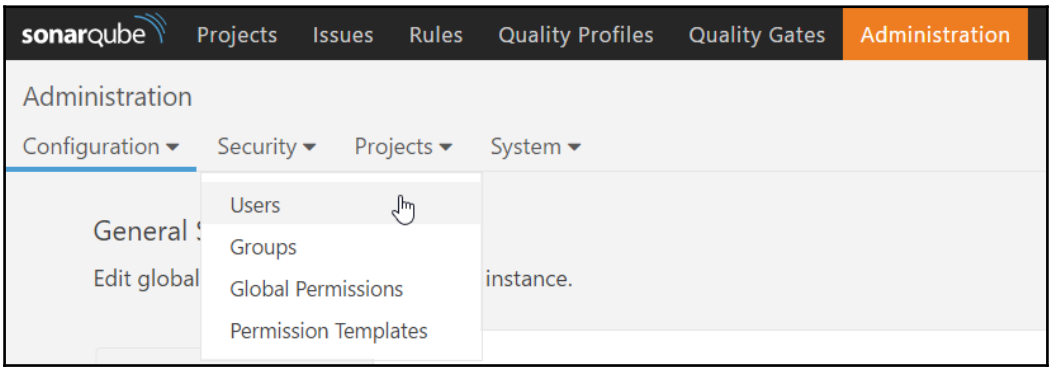
jQuery plugin — Success

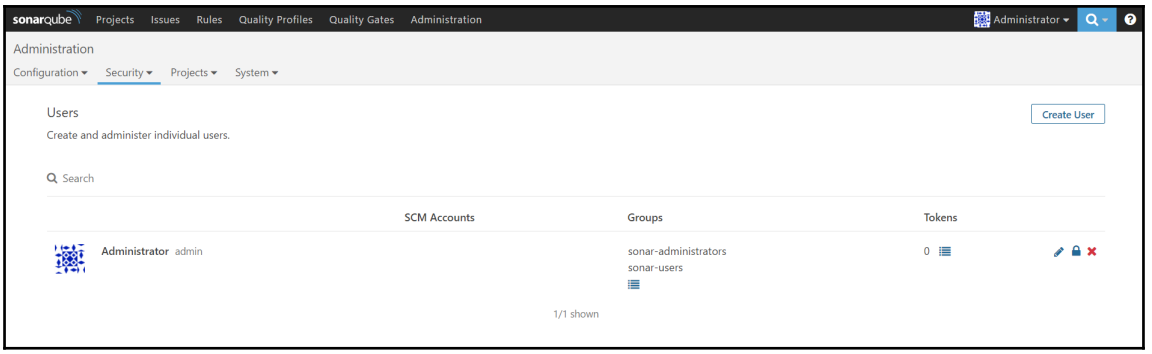
SonarQube Scanner for Jenkins — Success

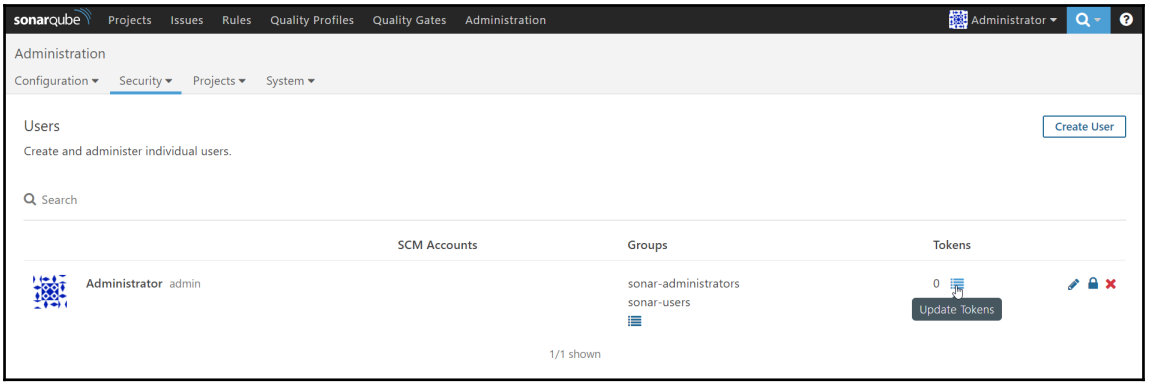
Go back to the top page
(you can start using the installed plugins right away)

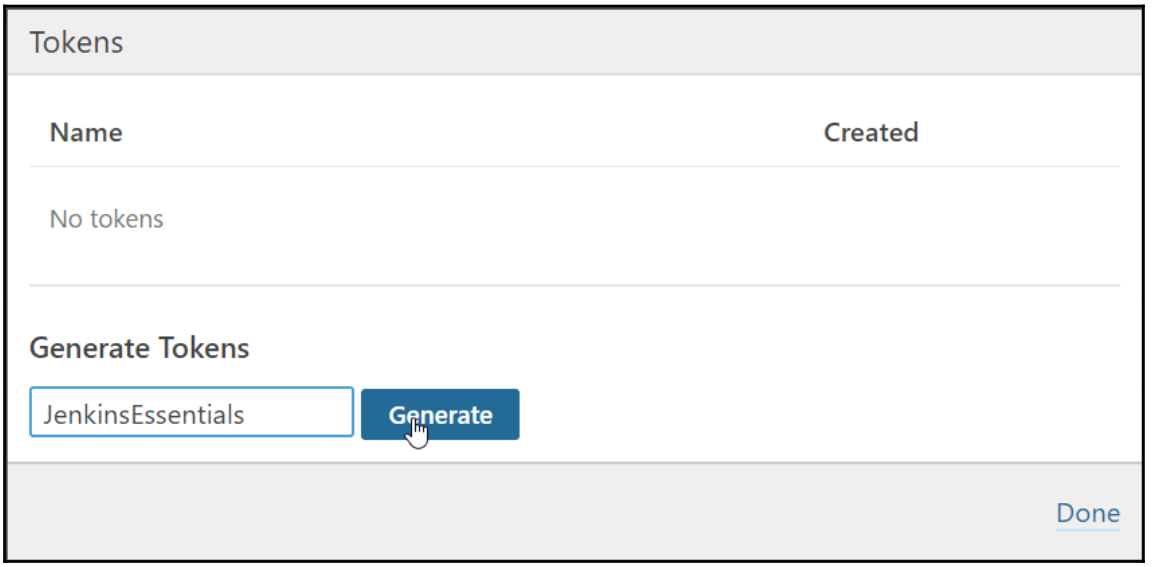
Restart Jenkins when installation is complete and no jobs are running

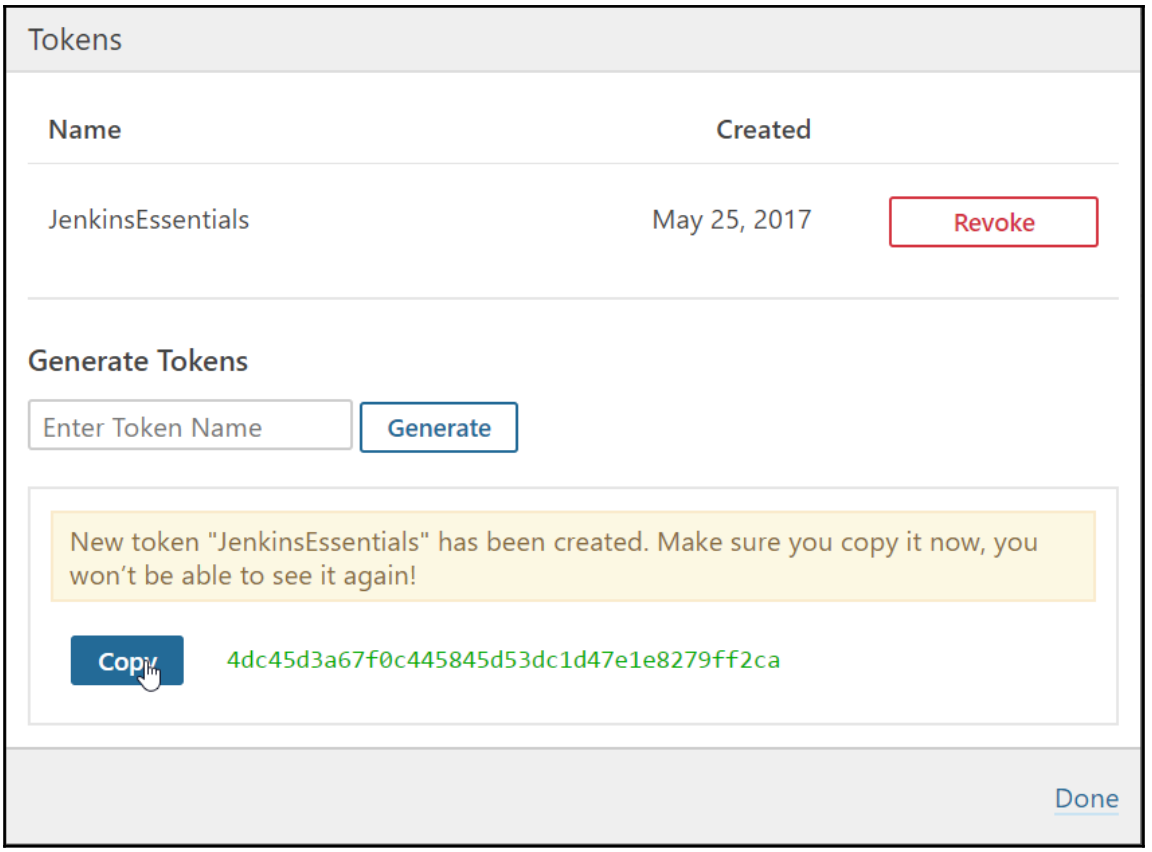

Configure System [Jenkin
Projects - SonarQube
localhost:8080/configure
Jenkins
configuration
SonarQube servers
Environment variables
Enable injection of SonarQube server configuration as build environment variables
If checked, job administrators will be able to inject a SonarQube server configuration as environment variables in the build.
SonarQube installations
Name
Sonarqube6.3
Server URL
http://localhost:9000/
Default is http://localhost:9000
Server version
5.3 or higher
Configuration fields depend on the SonarQube server version.
Server authentication token
SonarQube authentication token. Mandatory when anonymous access is disabled.
SonarQube account login
SonarQube account used to perform analysis. Mandatory when anonymous access is disabled. No longer used since SonarQube 5.3.
SonarQube account password
SonarQube account used to perform analysis. Mandatory when anonymous access is disabled. No longer used since SonarQube 5.3.
Advanced...
Delete SonarQube
Add SonarQube
List of SonarQube installations
Save
Apply

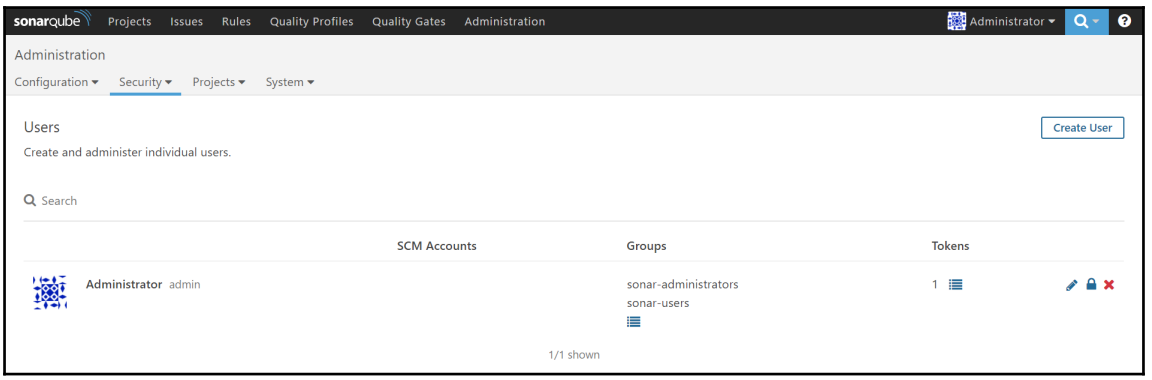

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administration
Configuration
Security
Projects
System
Users
Groups
Global Permissions
Permission Templates
General
Edit global
instance.

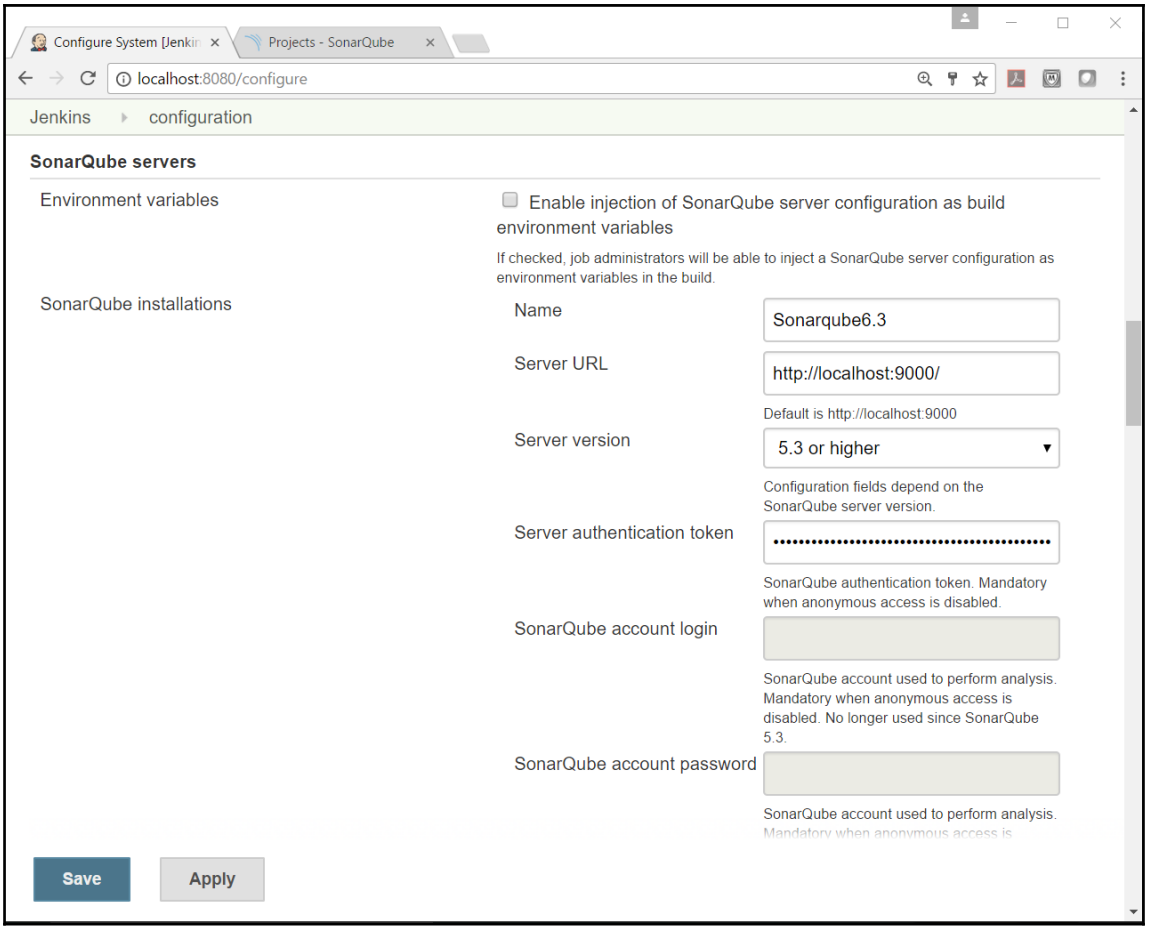

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Administration
Configuration
Security
Projects
System
Users
Create and administer individual users.
Create User
Search
SCM Accounts
Groups
Tokens
Administrator admin
sonar-administrators
sonar-users
0
1/1 shown

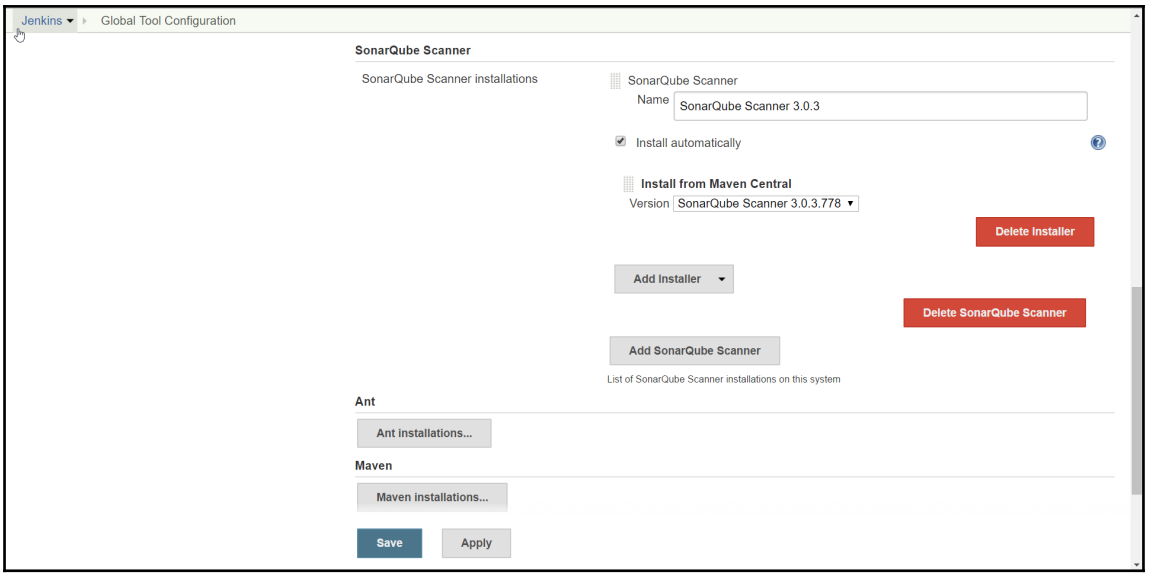

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Administration
Configuration
Security
Projects
System
Users
Create and administer individual users.
Create User
Search
SCM Accounts
Groups
Tokens
Administrator admin
sonar-administrators
sonar-users
0
Update Tokens
1/1 shown

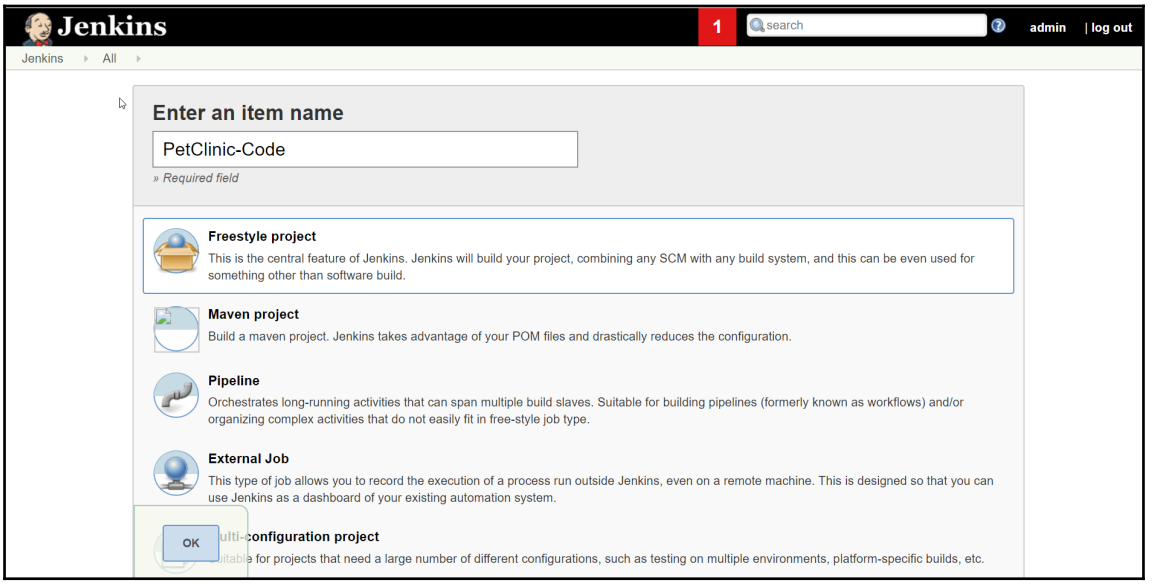

Tokens
Name
Created
No tokens
Generate Tokens
JenkinsEssentials
Generate
Done

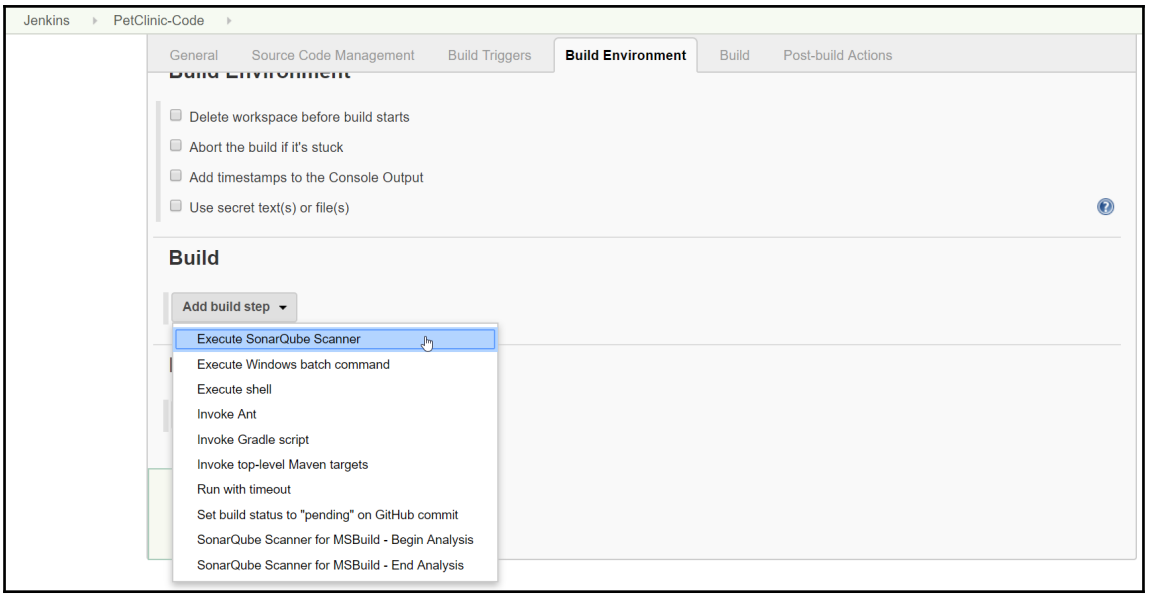

Tokens
Name
Created
JenkinsEssentials
May 25, 2017
Revoke
Generate Tokens
Enter Token Name
Generate
New token "JenkinsEssentials" has been created. Make sure you copy it now, you won't be able to see it again!
Copy
4dc45d3a67f0c445845d53dc1d47e1e8279ff2ca
Done

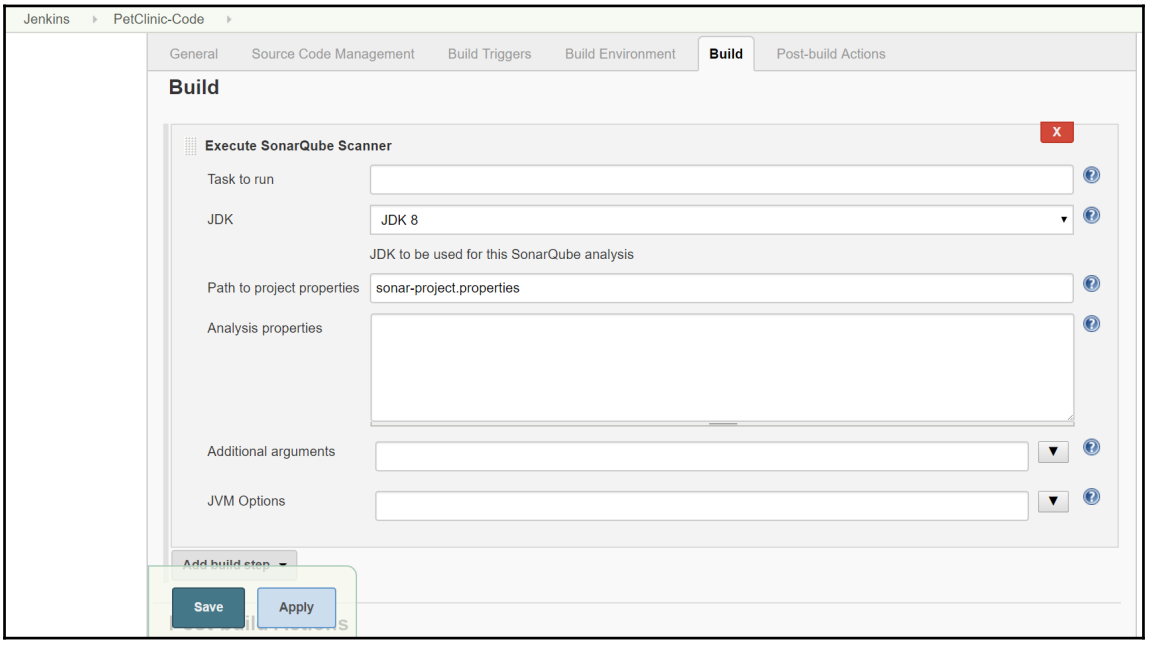

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Administration
Configuration
Security
Projects
System
Users
Create and administer individual users.
Create User
Search
SCM Accounts
Groups
Tokens
Administrator admin
sonar-administrators
sonar-users
1
1/1 shown


Configure System [Jenkin
Projects - SonarQube
localhost:8080/configure
Jenkins
configuration
SonarQube servers
Environment variables
Enable injection of SonarQube server configuration as build environment variables
If checked, job administrators will be able to inject a SonarQube server configuration as environment variables in the build.
SonarQube installations
Name
Sonarqube6.3
Server URL
http://localhost:9000/
Default is http://localhost:9000
Server version
5.3 or higher
Configuration fields depend on the SonarQube server version.
Server authentication token
SonarQube authentication token. Mandatory when anonymous access is disabled.
SonarQube account login
SonarQube account used to perform analysis. Mandatory when anonymous access is disabled. No longer used since SonarQube 5.3.
SonarQube account password
SonarQube account used to perform analysis.
Save
Apply

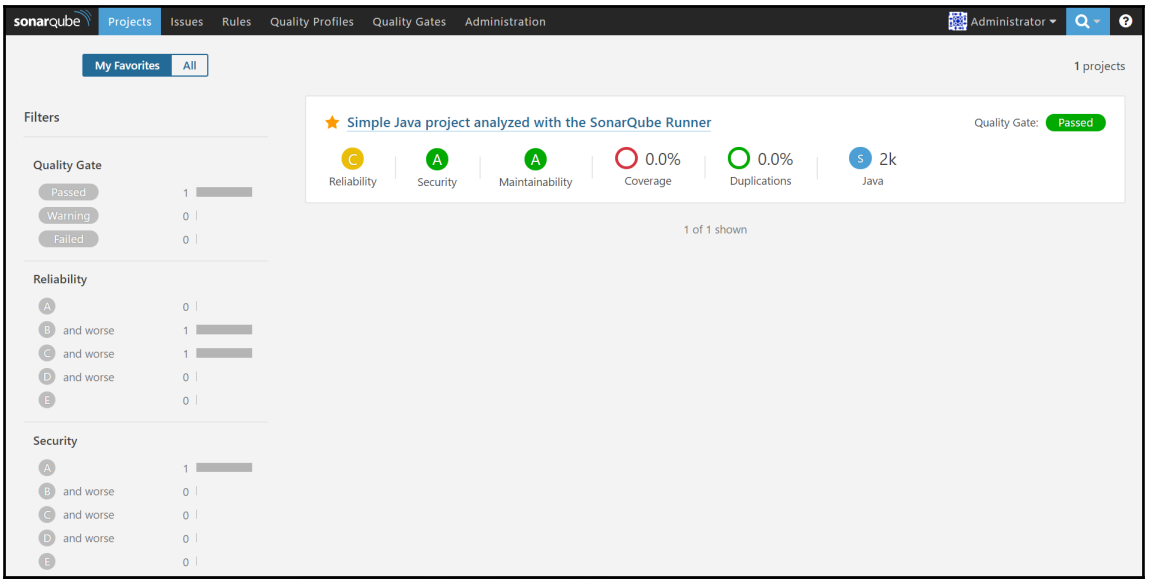

Jenkins
Global Tool Configuration
SonarQube Scanner
SonarQube Scanner installations
SonarQube Scanner
Name
SonarQube Scanner 3.0.3
Install automatically
Install from Maven Central
Version
SonarQube Scanner 3.0.3.778
Delete Installer
Add Installer
Delete SonarQube Scanner
Add SonarQube Scanner
List of SonarQube Scanner installations on this system
Ant
Ant installations...
Maven
Maven installations...
Save
Apply

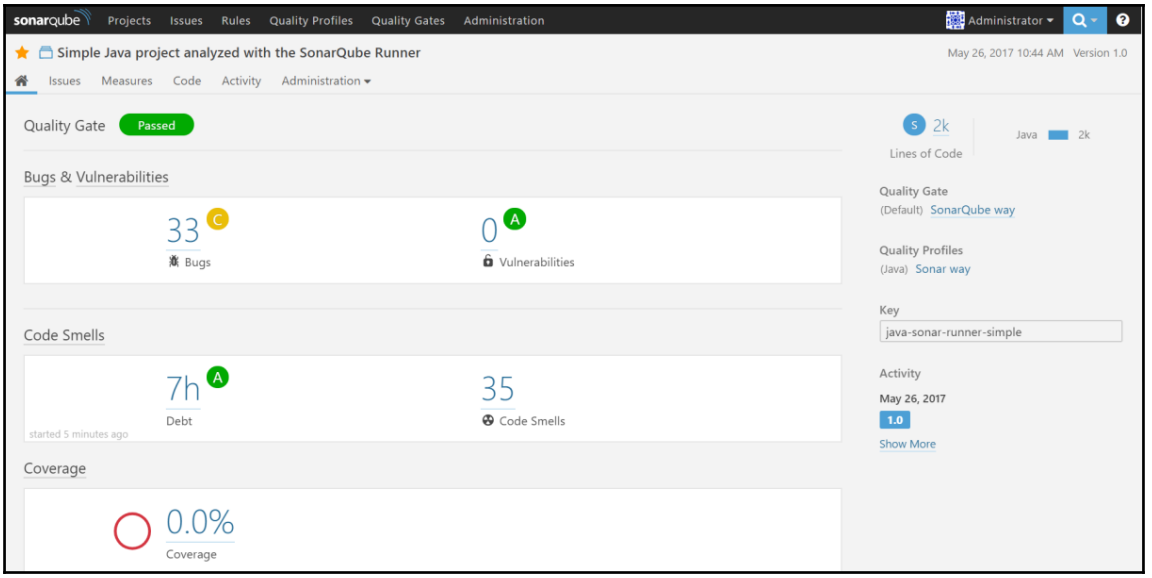

Jenkins
1
search
admin
log out
Jenkins
All
Enter an item name
PetClinic-Code
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK
for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

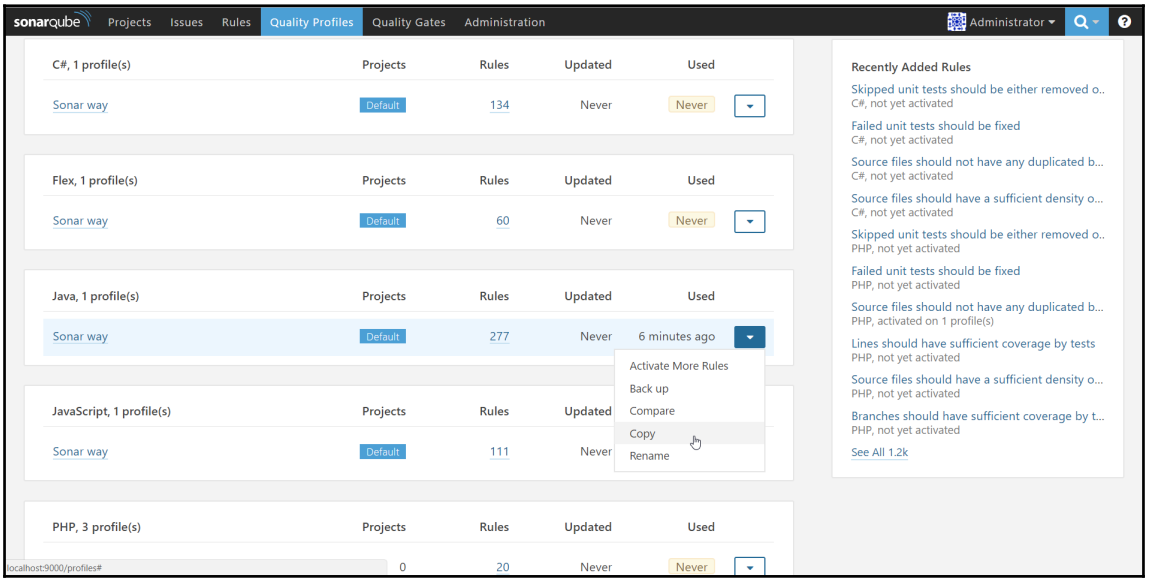

Jenkins
PetClinic-Code
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Delete workspace before build starts
Abort the build if it's stuck
Add timestamps to the Console Output
Use secret text(s) or file(s)
Build
Add build step
Execute SonarQube Scanner
Execute Windows batch command
Execute shell
Invoke Ant
Invoke Gradle script
Invoke top-level Maven targets
Run with timeout
Set build status to "pending" on GitHub commit
SonarQube Scanner for MSBuild - Begin Analysis
SonarQube Scanner for MSBuild - End Analysis

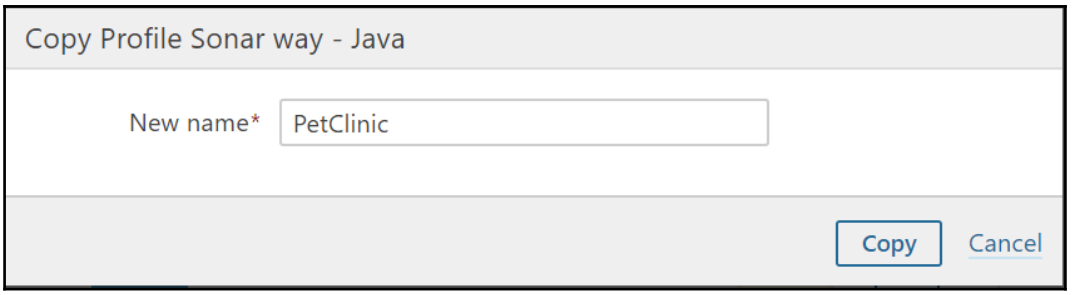

Jenkins
PetClinic-Code
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Build
Execute SonarQube Scanner
Task to run
JDK
JDK 8
JDK to be used for this SonarQube analysis
Path to project properties
sonar-project.properties
Analysis properties
Additional arguments
JVM Options
Add build step
Save
Apply

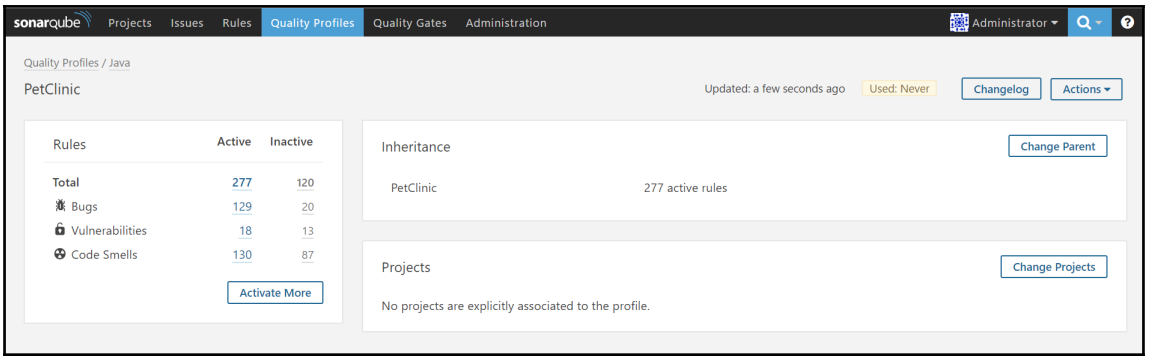
```
# Required metadata
sonar.projectKey=java-sonar-runner-simple
sonar.projectName=Simple Java project analyzed with the SonarQube Runner
sonar.projectVersion=1.0

# Comma-separated paths to directories with sources (required)
sonar.sources=src

# Language
sonar.language=java

# Encoding of the source files
sonar.sourceEncoding=UTF-8
```

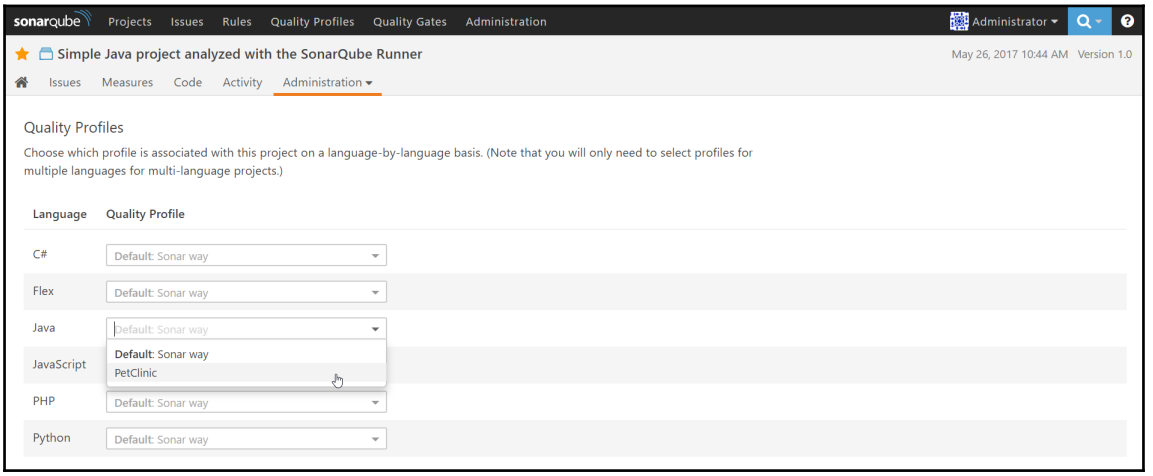


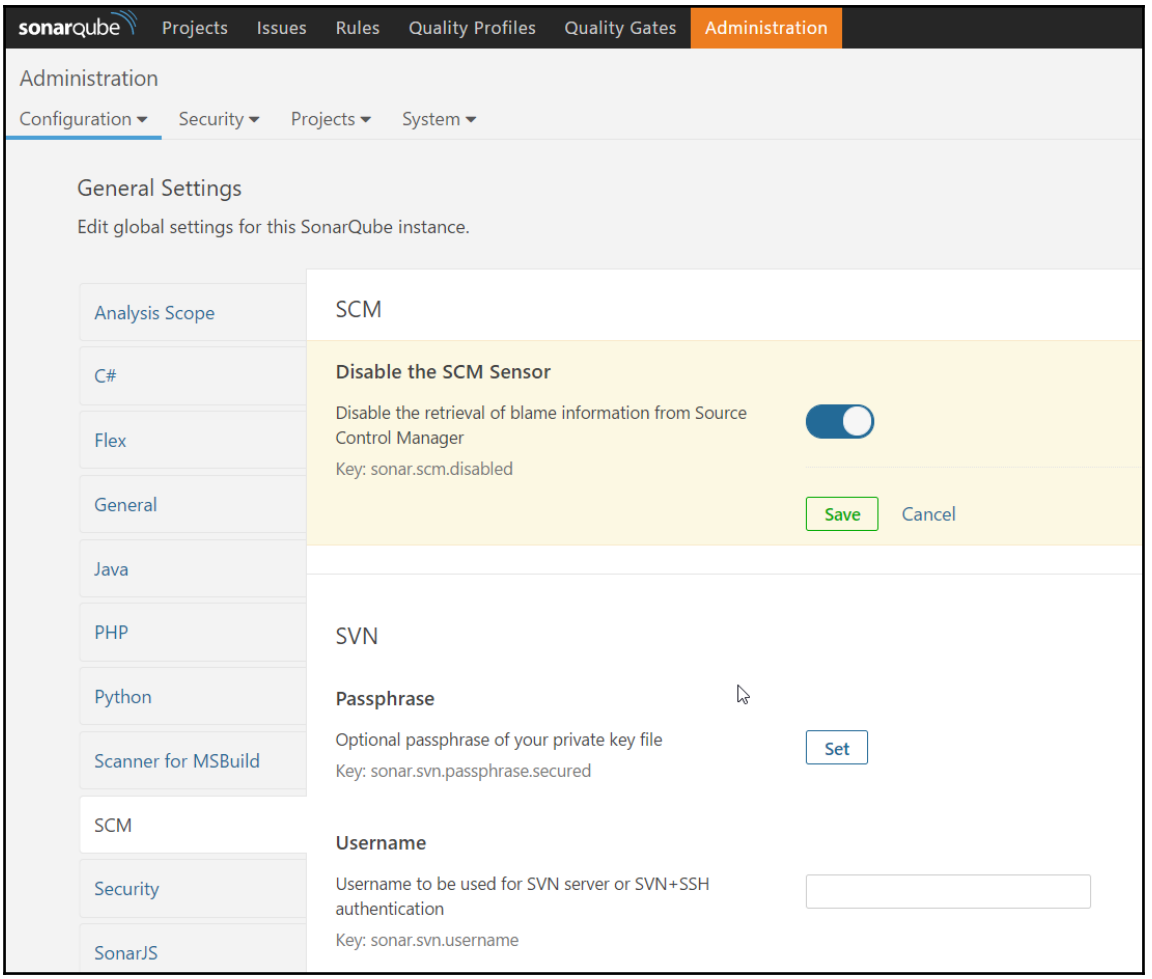

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Simple Java project analyzed with the SonarQube Runner
May 26, 2017 10:44 AM Version 1.0
Issues
Measures
Code
Activity
Administration
Quality Gate
Passed
Bugs & Vulnerabilities
33
Bugs
0
Vulnerabilities
Code Smells
7h
Debt
35
Code Smells
started 5 minutes ago
Coverage
0.0%
Coverage
2k
Lines of Code
Java
2k
Quality Gate
(Default) SonarQube way
Quality Profiles
(Java) Sonar way
Key
java-sonar-runner-simple
Activity
May 26, 2017
1.0
Show More

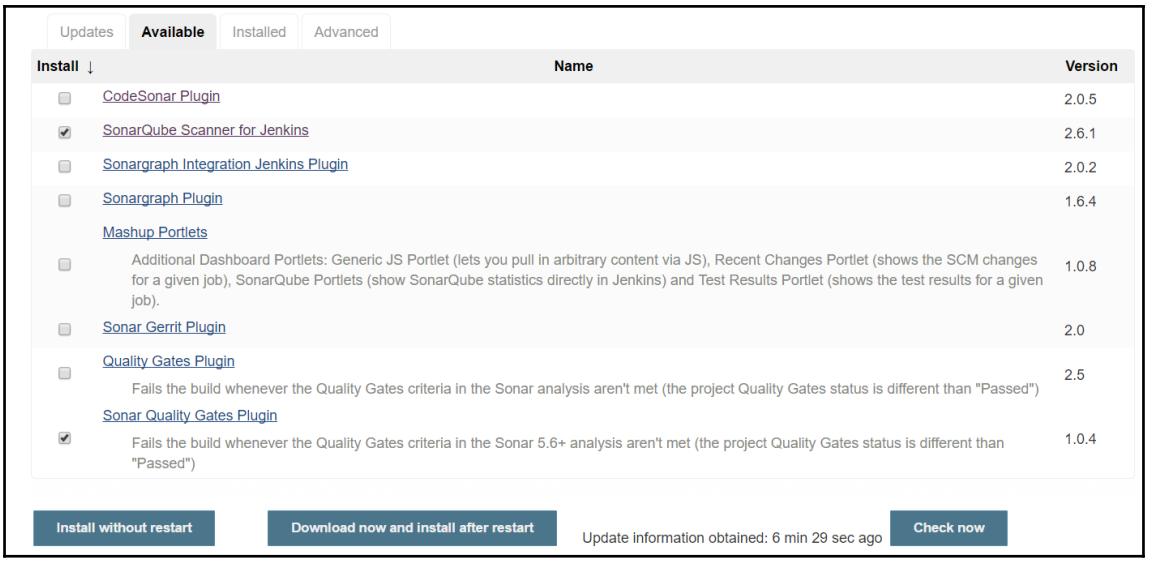

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
C#, 1 profile(s)
Projects
Rules
Updated
Used
Sonar way
Default
134
Never
Never
Flex, 1 profile(s)
Sonar way
Default
60
Never
Never
Java, 1 profile(s)
Sonar way
Default
277
Never
6 minutes ago
Activate More Rules
Back up
Compare
Copy
Rename
JavaScript, 1 profile(s)
Sonar way
Default
111
Never
PHP, 3 profile(s)
0
20
Never
Never
Recently Added Rules
Skipped unit tests should be either removed o..
C#, not yet activated
Failed unit tests should be fixed
C#, not yet activated
Source files should not have any duplicated b...
C#, not yet activated
Source files should have a sufficient density o...
C#, not yet activated
Skipped unit tests should be either removed o..
PHP, not yet activated
Failed unit tests should be fixed
PHP, not yet activated
Source files should not have any duplicated b...
PHP, activated on 1 profile(s)
Lines should have sufficient coverage by tests
PHP, not yet activated
Source files should have a sufficient density o...
PHP, not yet activated
Branches should have sufficient coverage by t...
PHP, not yet activated
See All 1.2k
localhost:9000/profiles#

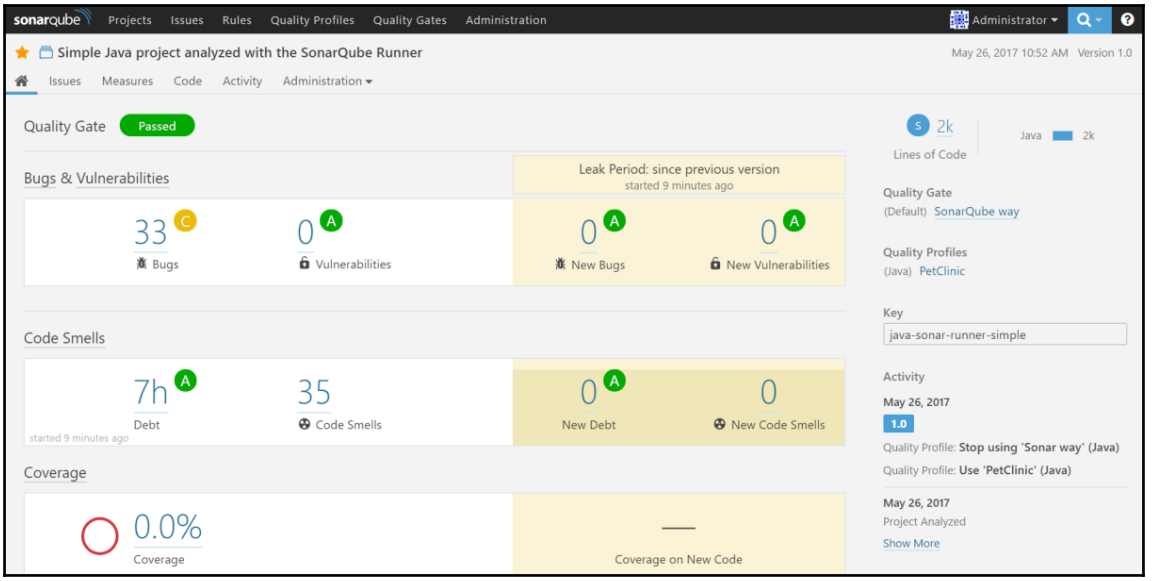

Copy Profile Sonar way - Java
New name*
PetClinic
Copy
Cancel

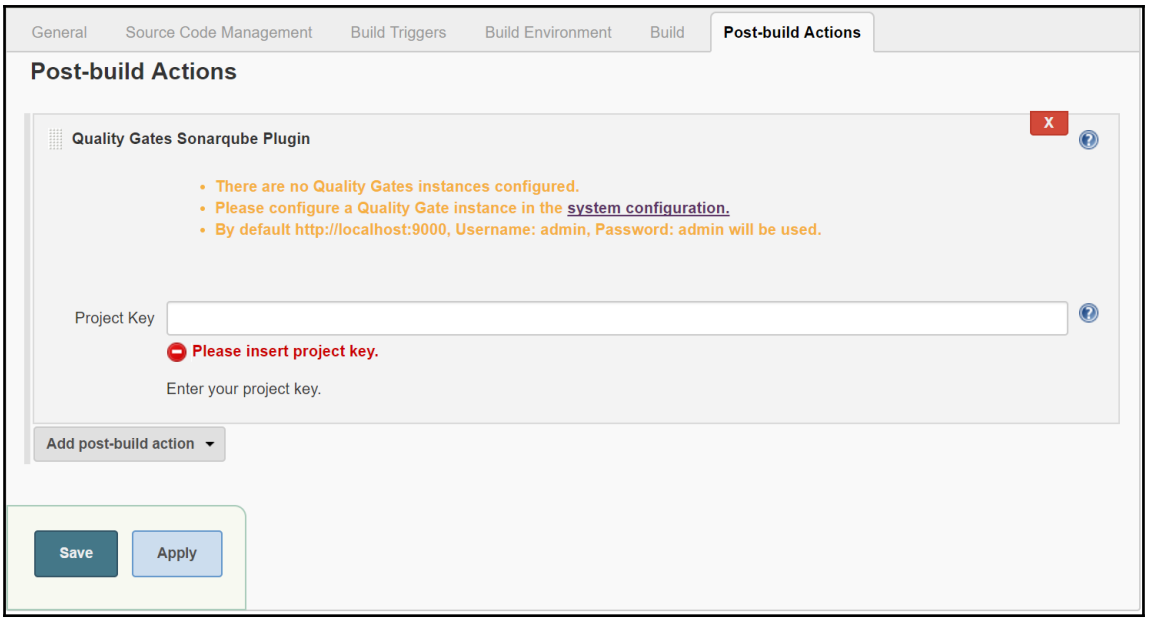

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Quality Profiles / Java
PetClinic
Updated: a few seconds ago
Used: Never
Changelog
Actions
Rules
Active
Inactive
Total
277
120
Bugs
129
20
Vulnerabilities
18
13
Code Smells
130
87
Activate More
Inheritance
Change Parent
PetClinic
277 active rules
Projects
Change Projects
No projects are explicitly associated to the profile.

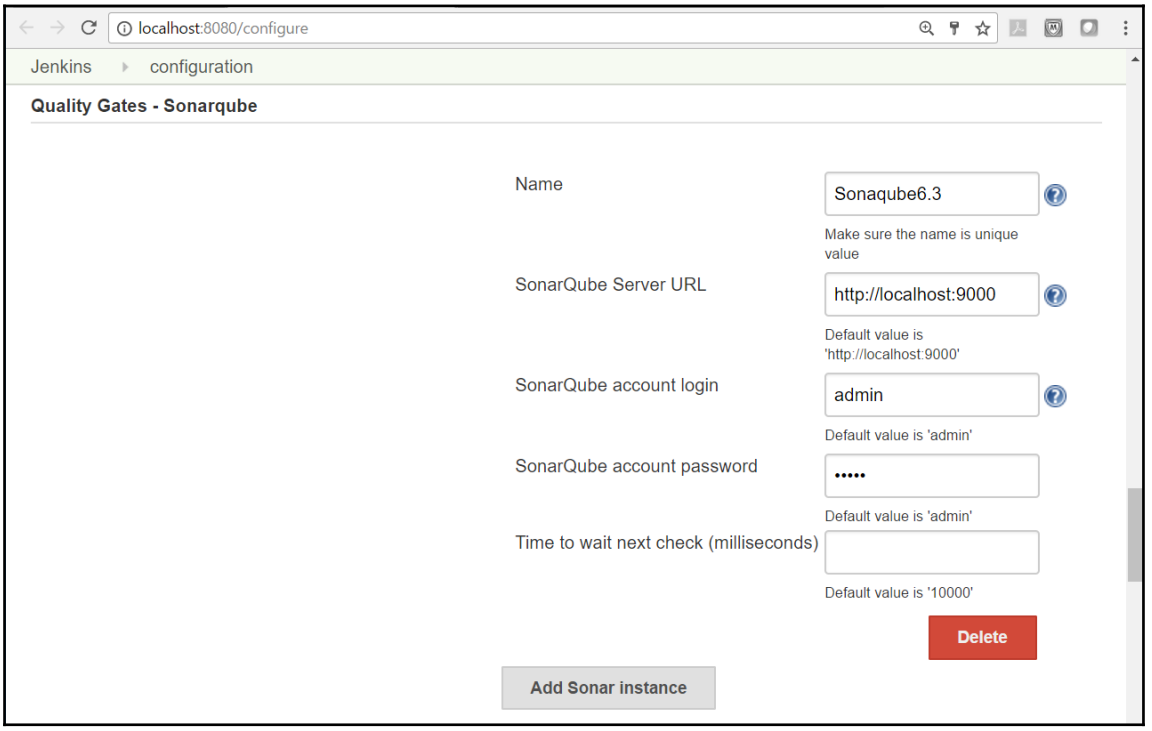

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Simple Java project analyzed with the SonarQube Runner
May 26, 2017 10:44 AM
Version 1.0
Issues
Measures
Code
Activity
Administration
Quality Profiles
Choose which profile is associated with this project on a language-by-language basis. (Note that you will only need to select profiles for multiple languages for multi-language projects.)
Language
Quality Profile
C#
Default: Sonar way
Flex
Default: Sonar way
Java
Default: Sonar way
Default: Sonar way
PetClinic
JavaScript
PHP
Default: Sonar way
Python
Default: Sonar way


sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administration
Configuration
Security
Projects
System
General Settings
Edit global settings for this SonarQube instance.
Analysis Scope
C#
Flex
General
Java
PHP
Python
Scanner for MSBuild
SCM
Security
SonarJS
SCM
Disable the SCM Sensor
Disable the retrieval of blame information from Source Control Manager
Key: sonar.scm.disabled
Save
Cancel
SVN
Passphrase
Optional passphrase of your private key file
Key: sonar.svn.passphrase.secured
Set
Username
Username to be used for SVN server or SVN+SSH authentication
Key: sonar.svn.username


Updates
Available
Installed
Advanced
Install ↓
Name
Version
CodeSonar Plugin
2.0.5
SonarQube Scanner for Jenkins
2.6.1
Sonargraph Integration Jenkins Plugin
2.0.2
Sonargraph Plugin
1.6.4
Mashup Portlets
Additional Dashboard Portlets: Generic JS Portlet (lets you pull in arbitrary content via JS), Recent Changes Portlet (shows the SCM changes for a given job), SonarQube Portlets (show SonarQube statistics directly in Jenkins) and Test Results Portlet (shows the test results for a given job).
1.0.8
Sonar Gerrit Plugin
2.0
Quality Gates Plugin
Fails the build whenever the Quality Gates criteria in the Sonar analysis aren't met (the project Quality Gates status is different than "Passed")
2.5
Sonar Quality Gates Plugin
Fails the build whenever the Quality Gates criteria in the Sonar 5.6+ analysis aren't met (the project Quality Gates status is different than "Passed")
1.0.4
Install without restart
Download now and install after restart
Update information obtained: 6 min 29 sec ago
Check now

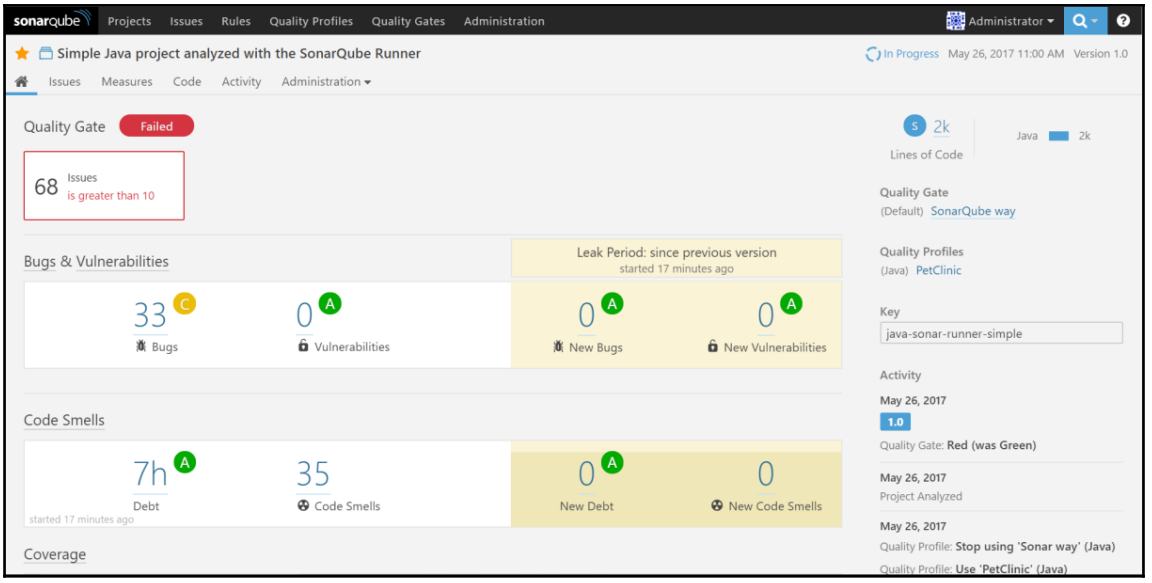

sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Simple Java project analyzed with the SonarQube Runner
May 26, 2017 10:52 AM Version 1.0
Issues
Measures
Code
Activity
Administration
Quality Gate
Passed
Bugs & Vulnerabilities
Leak Period: since previous version
started 9 minutes ago
33
Bugs
0
Vulnerabilities
0
New Bugs
0
New Vulnerabilities
Code Smells
7h
Debt
35
Code Smells
0
New Debt
0
New Code Smells
started 9 minutes ago
Coverage
0.0%
Coverage
Coverage on New Code
2k
Lines of Code
Java
2k
Quality Gate
(Default) SonarQube way
Quality Profiles
(Java) PetClinic
Key
java-sonar-runner-simple
Activity
May 26, 2017
1.0
Quality Profile: Stop using 'Sonar way' (Java)
Quality Profile: Use 'PetClinic' (Java)
May 26, 2017
Project Analyzed
Show More

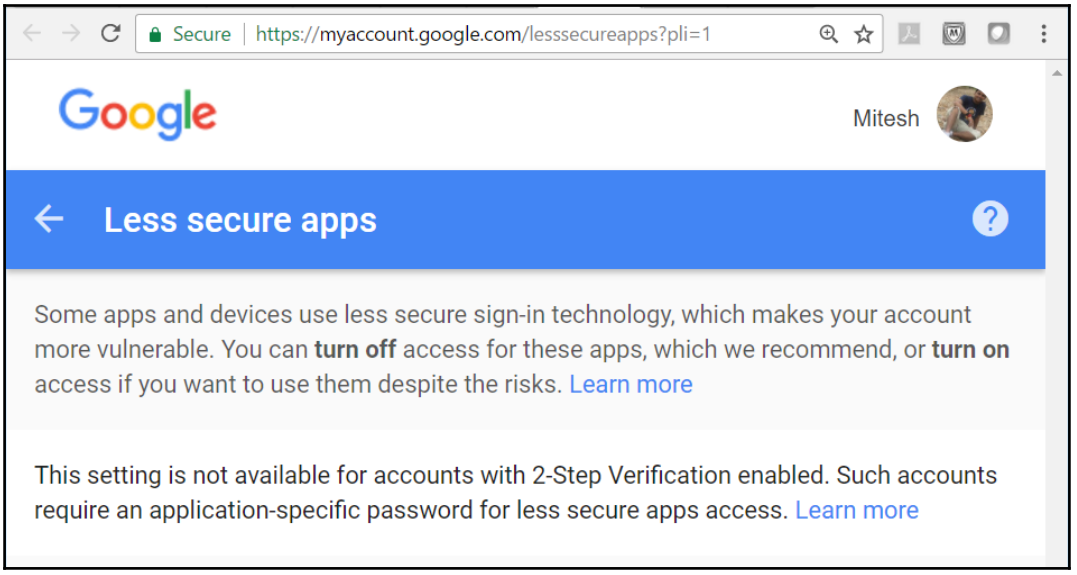

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Post-build Actions
Quality Gates Sonarqube Plugin
X
There are no Quality Gates instances configured.
Please configure a Quality Gate instance in the system configuration.
By default http://localhost:9000, Username: admin, Password: admin will be used.
Project Key
Please insert project key.
Enter your project key.
Add post-build action
Save
Apply

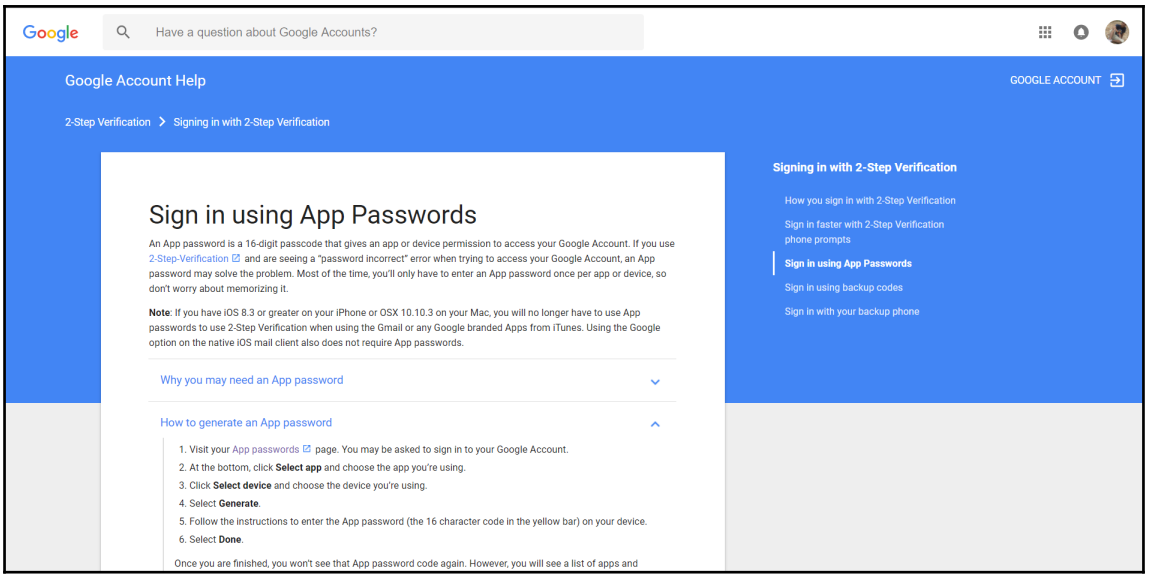

localhost:8080/configure
Jenkins
configuration
Quality Gates - Sonarqube
Name
Sonaqube6.3
Make sure the name is unique value
SonarQube Server URL
http://localhost:9000
Default value is 'http://localhost:9000'
SonarQube account login
admin
Default value is 'admin'
SonarQube account password
Default value is 'admin'
Time to wait next check (milliseconds)
Default value is '10000'
Delete
Add Sonar instance

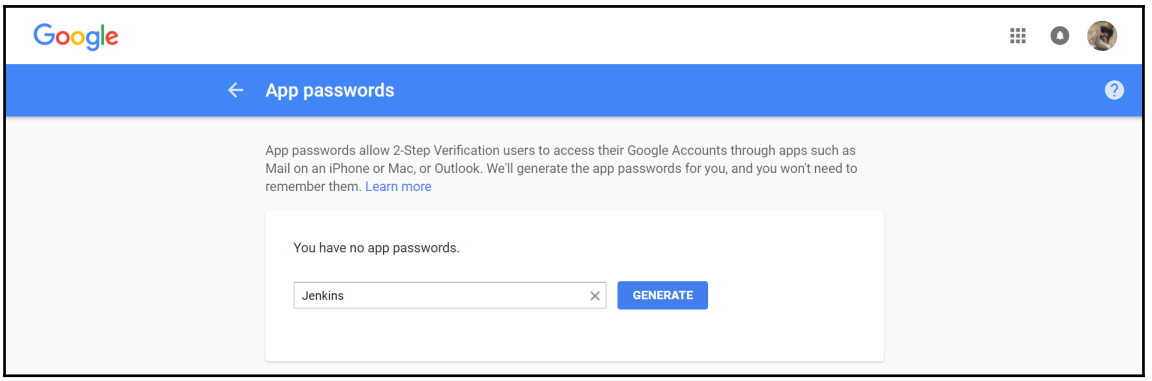
```
# Required metadata
sonar.projectKey=java-sonar-runner-simple
sonar.projectName=Simple Java project analyzed with the SonarQube Runner
sonar.projectVersion=1.0

# Comma-separated paths to directories with sources (required)
sonar.sources=src

# Language
sonar.language=java

# Encoding of the source files
sonar.sourceEncoding=UTF-8
```

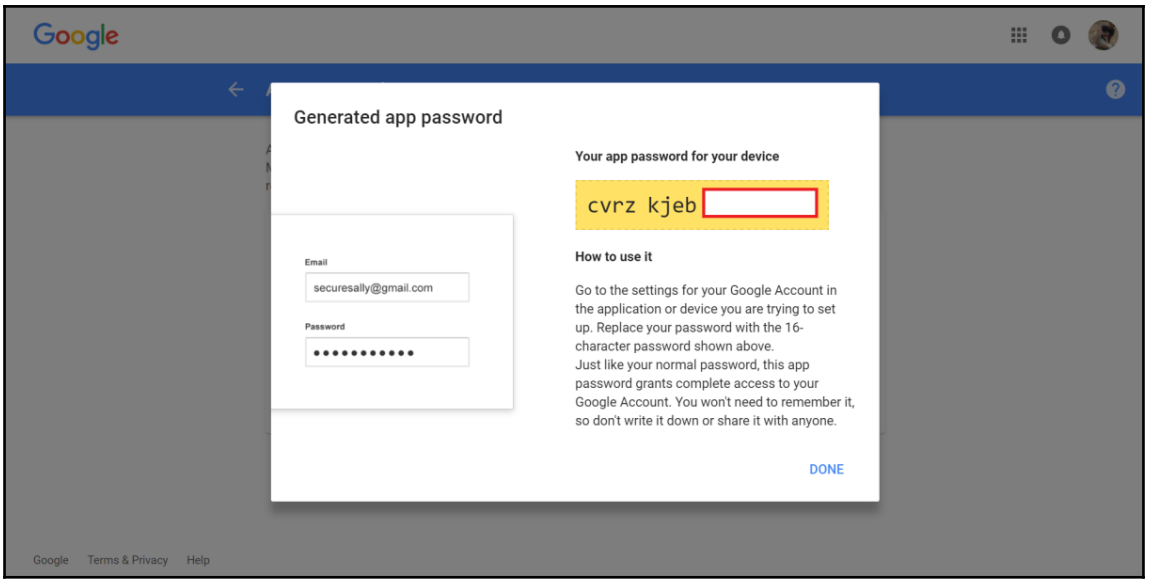
```
INFO: ANALYSIS SUCCESSFUL, you can browse http://localhost:9000/dashboard/index/java-sonar-runner-simple
INFO: Note that you will be able to access the updated dashboard once the server has processed the submitted
analysis report
INFO: More about the report processing at http://localhost:9000/api/ce/task?id=AVxDQYIS-pm0HP4Vl8aO
INFO: Task total time: 43.474 s
INFO: ------------------------------------------------------------------------
INFO: EXECUTION SUCCESS
INFO: ------------------------------------------------------------------------
INFO: Total time: 1:01.431s
INFO: Final Memory: 46M/134M
INFO: ------------------------------------------------------------------------
Has build IN_PROGRESS with id: AVxDQYIS-pm0HP4Vl8aO - waiting 10000 to execute next check.
Has build IN_PROGRESS with id: AVxDQYIS-pm0HP4Vl8aO - waiting 10000 to execute next check.
Has build IN_PROGRESS with id: AVxDQYIS-pm0HP4Vl8aO - waiting 10000 to execute next check.
ERROR: Build step failed with exception
org.quality.gates.sonar.api.MaxExecutionTimeException: Max time to wait sonar job!
        at
org.quality.gates.sonar.api.QualityGatesProvider.getAPIResultsForQualityGates(QualityGatesProvider.java:82)
        at org.quality.gates.jenkins.plugin.BuildDecision.getStatus(BuildDecision.java:22)
        at org.quality.gates.jenkins.plugin.QGPublisher.perform(QGPublisher.java:84)
        at hudson.tasks.BuildStepMonitor$1.perform(BuildStepMonitor.java:20)
        at hudson.model.AbstractBuild$AbstractBuildExecution.perform(AbstractBuild.java:735)
        at hudson.model.AbstractBuild$AbstractBuildExecution.performAllBuildSteps(AbstractBuild.java:676)
        at hudson.model.Build$BuildExecution.post2(Build.java:186)
        at hudson.model.AbstractBuild$AbstractBuildExecution.post(AbstractBuild.java:621)
        at hudson.model.Run.execute(Run.java:1760)
        at hudson.model.FreeStyleBuild.run(FreeStyleBuild.java:43)
        at hudson.model.ResourceController.execute(ResourceController.java:97)
        at hudson.model.Executor.run(Executor.java:405)
Build step 'Quality Gates Sonarqube Plugin' marked build as failure
Finished: FAILURE
```


sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
Administrator
Simple Java project analyzed with the SonarQube Runner
In Progress
May 26, 2017 11:00 AM
Version 1.0
Issues
Measures
Code
Activity
Administration
Quality Gate
Failed
68 Issues
is greater than 10
2k
Lines of Code
Java
2k
Quality Gate
(Default) SonarQube way
Quality Profiles
(Java) PetClinic
Key
java-sonar-runner-simple
Activity
May 26, 2017
1.0
Quality Gate: Red (was Green)
May 26, 2017
Project Analyzed
May 26, 2017
Quality Profile: Stop using 'Sonar way' (Java)
Quality Profile: Use 'PetClinic' (Java)
Bugs & Vulnerabilities
Leak Period: since previous version
started 17 minutes ago
33 C
Bugs
0 A
Vulnerabilities
0 A
New Bugs
0 A
New Vulnerabilities
Code Smells
7h A
Debt
started 17 minutes ago
35
Code Smells
0 A
New Debt
0
New Code Smells
Coverage


Secure
https://myaccount.google.com/lesssecureapps?pli=1
Google
Mitesh
Less secure apps
Some apps and devices use less secure sign-in technology, which makes your account more vulnerable. You can turn off access for these apps, which we recommend, or turn on access if you want to use them despite the risks. Learn more
This setting is not available for accounts with 2-Step Verification enabled. Such accounts require an application-specific password for less secure apps access. Learn more


Google
Have a question about Google Accounts?
Google Account Help
GOOGLE ACCOUNT
2-Step Verification > Signing in with 2-Step Verification
Sign in using App Passwords
An App password is a 16-digit passcode that gives an app or device permission to access your Google Account. If you use 2-Step-Verification and are seeing a "password incorrect" error when trying to access your Google Account, an App password may solve the problem. Most of the time, you'll only have to enter an App password once per app or device, so don't worry about memorizing it.
Note: If you have iOS 8.3 or greater on your iPhone or OSX 10.10.3 on your Mac, you will no longer have to use App passwords to use 2-Step Verification when using the Gmail or any Google branded Apps from iTunes. Using the Google option on the native iOS mail client also does not require App passwords.
Why you may need an App password
How to generate an App password
1. Visit your App passwords page. You may be asked to sign in to your Google Account.
2. At the bottom, click Select app and choose the app you're using.
3. Click Select device and choose the device you're using.
4. Select Generate.
5. Follow the instructions to enter the App password (the 16 character code in the yellow bar) on your device.
6. Select Done.
Once you are finished, you won't see that App password code again. However, you will see a list of apps and
Signing in with 2-Step Verification
How you sign in with 2-Step Verification
Sign in faster with 2-Step Verification phone prompts
Sign in using App Passwords
Sign in using backup codes
Sign in with your backup phone


Google
App passwords
App passwords allow 2-Step Verification users to access their Google Accounts through apps such as Mail on an iPhone or Mac, or Outlook. We'll generate the app passwords for you, and you won't need to remember them. Learn more
You have no app passwords.
Jenkins
GENERATE



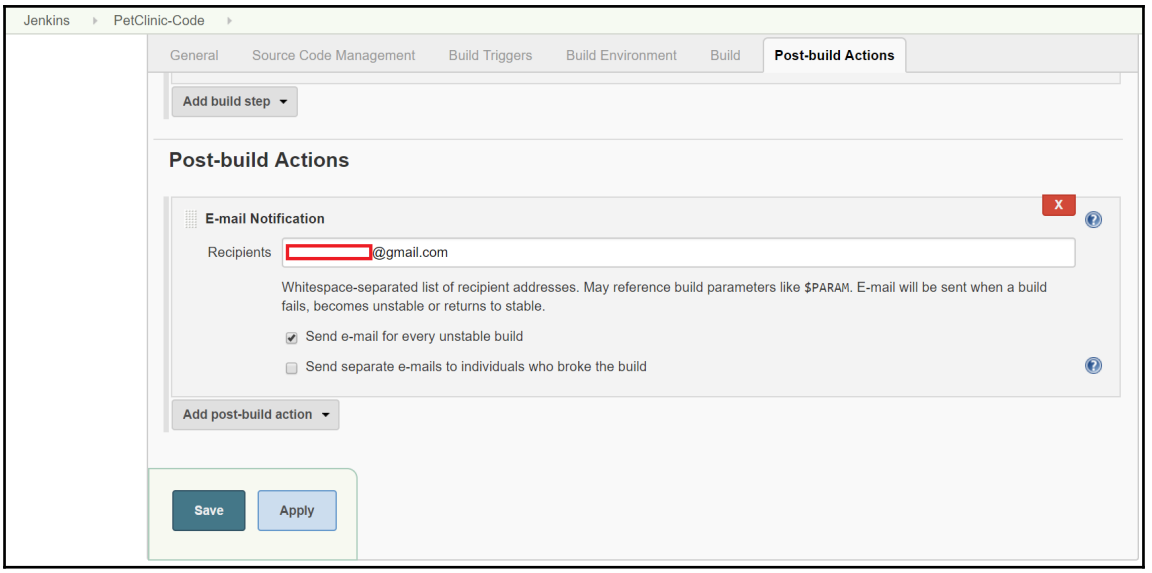
E-mail Notification

SMTP server	smtp.gmail.com
Default user e-mail suffix	
Use SMTP Authentication	☑
User Name	[redacted]@gmail.com
Password	••••••••••••••••
Use SSL	☑
SMTP Port	465
Reply-To Address	[redacted]@gmail.com
Charset	UTF-8
Test configuration by sending test e-mail	☑
Test e-mail recipient	[redacted]@gmail.com

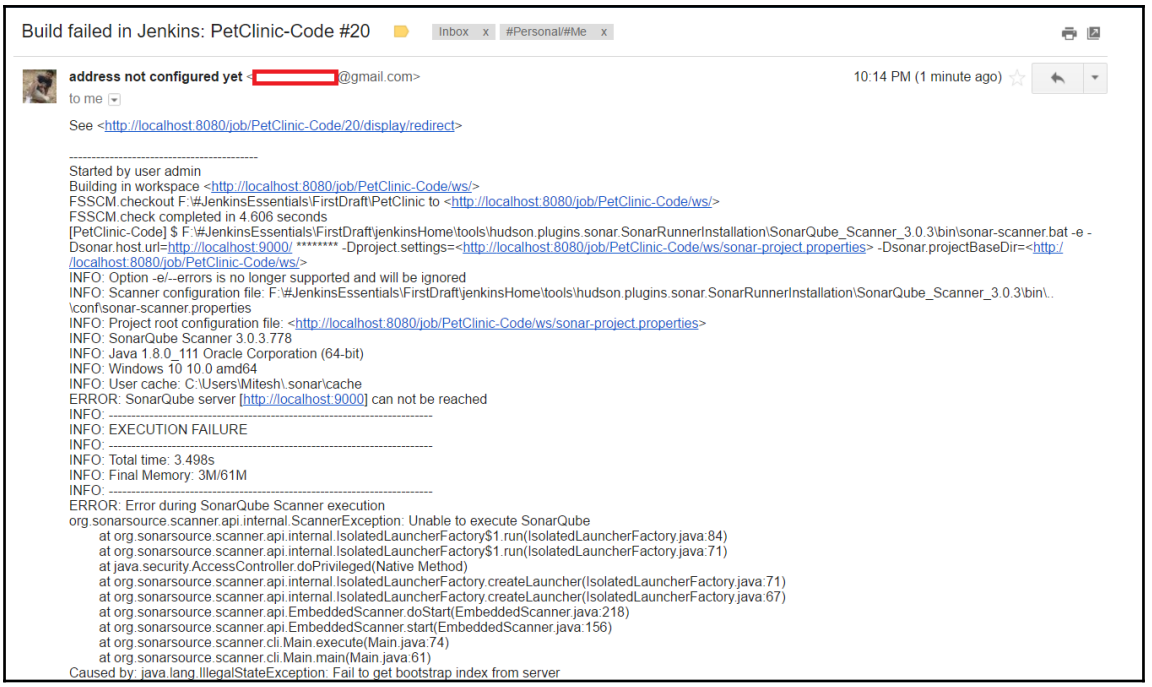
Email was successfully sent

Test configuration

Save Apply




```
ERROR:
ERROR: Re-run SonarQube Scanner using the -X switch to enable full debug logging.
ERROR: SonarQube scanner exited with non-zero code: 1
Sending e-mails to: [redacted]@gmail.com
Finished: FAILURE
```



Build failed in Jenkins: PetClinic-Code #20 Inbox x #Personal/#Me x

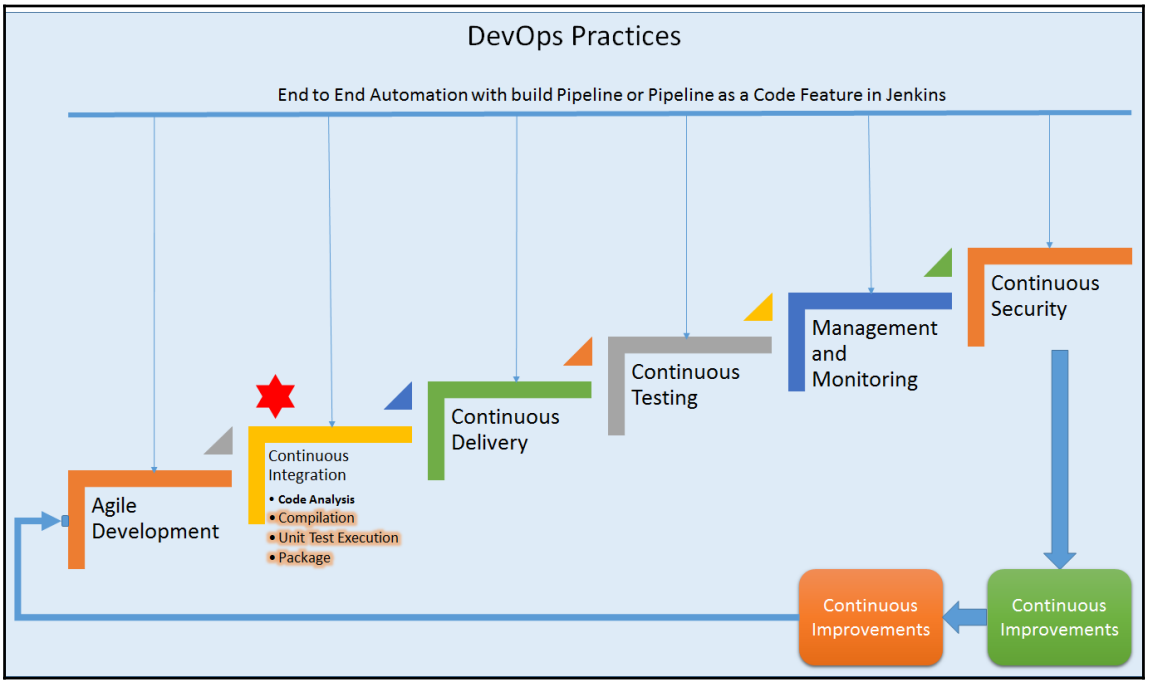
address not configured yet <[redacted]@gmail.com> 10:14 PM (1 minute ago)

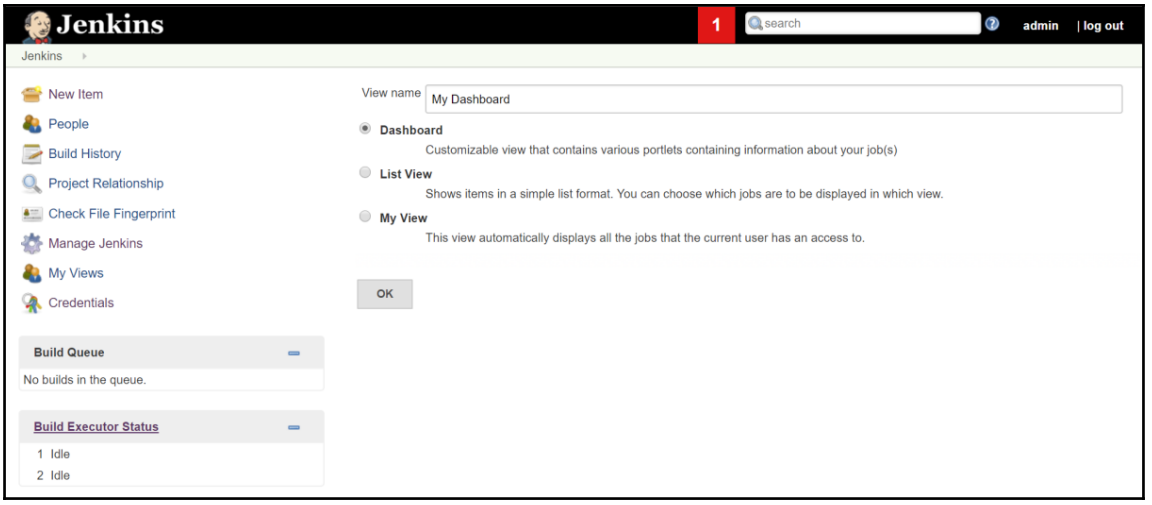
to me

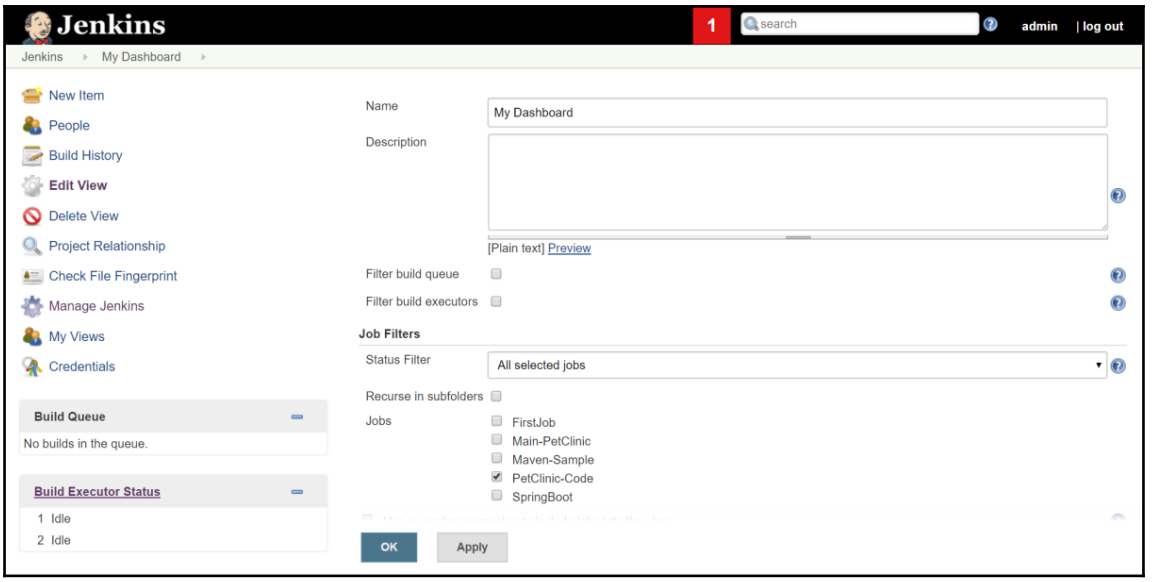
See <http://localhost:8080/job/PetClinic-Code/20/display/redirect>

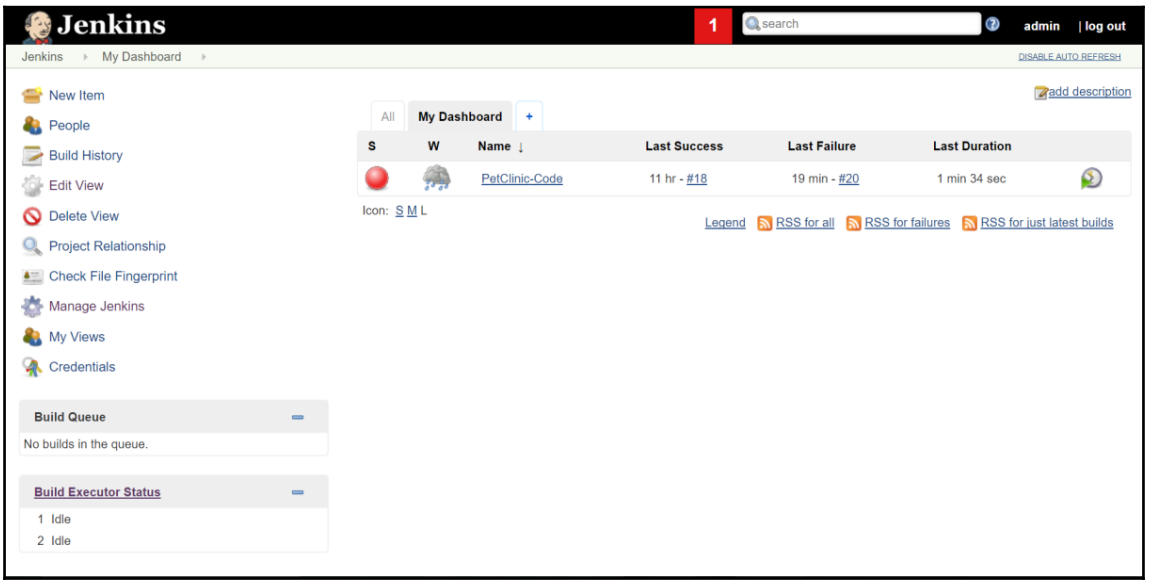
Started by user admin
Building in workspace <http://localhost:8080/job/PetClinic-Code/ws/>
FSSCM.checkout F:\#JenkinsEssentials\FirstDraft\PetClinic to <http://localhost:8080/job/PetClinic-Code/ws/>
FSSCM.check completed in 4.606 seconds
[PetClinic-Code] $ F:\#JenkinsEssentials\FirstDraft\jenkinsHome\tools\hudson.plugins.sonar.SonarRunnerInstallation\SonarQube_Scanner_3.0.3\bin\sonar-scanner.bat -e -Dsonar.host.url=http://localhost:9000/ ******** -Dproject.settings=<http://localhost:8080/job/PetClinic-Code/ws/sonar-project.properties> -Dsonar.projectBaseDir=<http://localhost:8080/job/PetClinic-Code/ws/>
INFO: Option -e/--errors is no longer supported and will be ignored
INFO: Scanner configuration file: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\tools\hudson.plugins.sonar.SonarRunnerInstallation\SonarQube_Scanner_3.0.3\bin\..\conf\sonar-scanner.properties
INFO: Project root configuration file: <http://localhost:8080/job/PetClinic-Code/ws/sonar-project.properties>
INFO: SonarQube Scanner 3.0.3.778
INFO: Java 1.8.0_111 Oracle Corporation (64-bit)
INFO: Windows 10 10.0 amd64
INFO: User cache: C:\Users\Mitesh\.sonar\cache
ERROR: SonarQube server [http://localhost:9000] can not be reached
INFO: --
INFO: EXECUTION FAILURE
INFO: --
INFO: Total time: 3.498s
INFO: Final Memory: 3M/61M
INFO: --
ERROR: Error during SonarQube Scanner execution
org.sonarsource.scanner.api.internal.ScannerException: Unable to execute SonarQube
    at org.sonarsource.scanner.api.internal.IsolatedLauncherFactory$1.run(IsolatedLauncherFactory.java:84)
    at org.sonarsource.scanner.api.internal.IsolatedLauncherFactory$1.run(IsolatedLauncherFactory.java:71)
    at java.security.AccessController.doPrivileged(Native Method)
    at org.sonarsource.scanner.api.internal.IsolatedLauncherFactory.createLauncher(IsolatedLauncherFactory.java:71)
    at org.sonarsource.scanner.api.internal.IsolatedLauncherFactory.createLauncher(IsolatedLauncherFactory.java:67)
    at org.sonarsource.scanner.api.EmbeddedScanner.doStart(EmbeddedScanner.java:218)
    at org.sonarsource.scanner.api.EmbeddedScanner.start(EmbeddedScanner.java:156)
    at org.sonarsource.scanner.cli.Main.execute(Main.java:74)
    at org.sonarsource.scanner.cli.Main.main(Main.java:61)
Caused by: java.lang.IllegalStateException: Fail to get bootstrap index from server

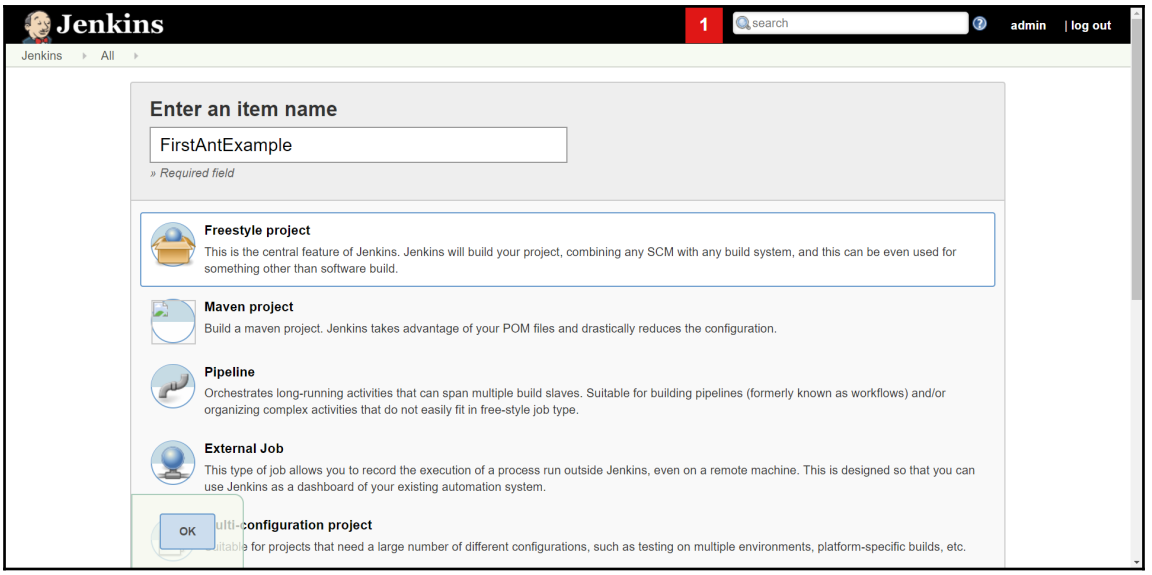
Chapter 04: Continuous Integration with Jenkins

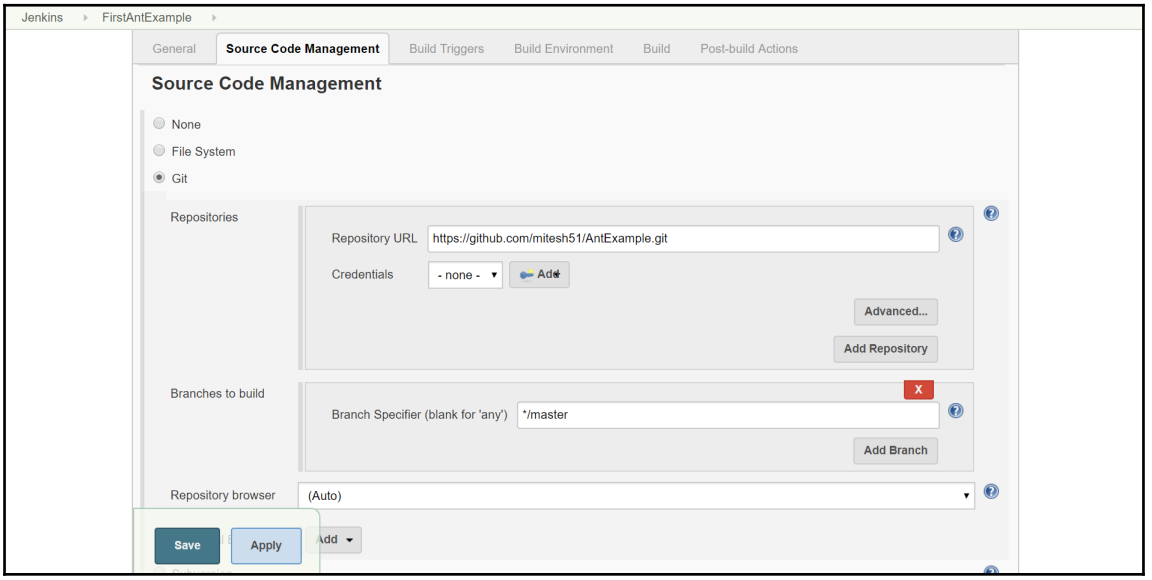


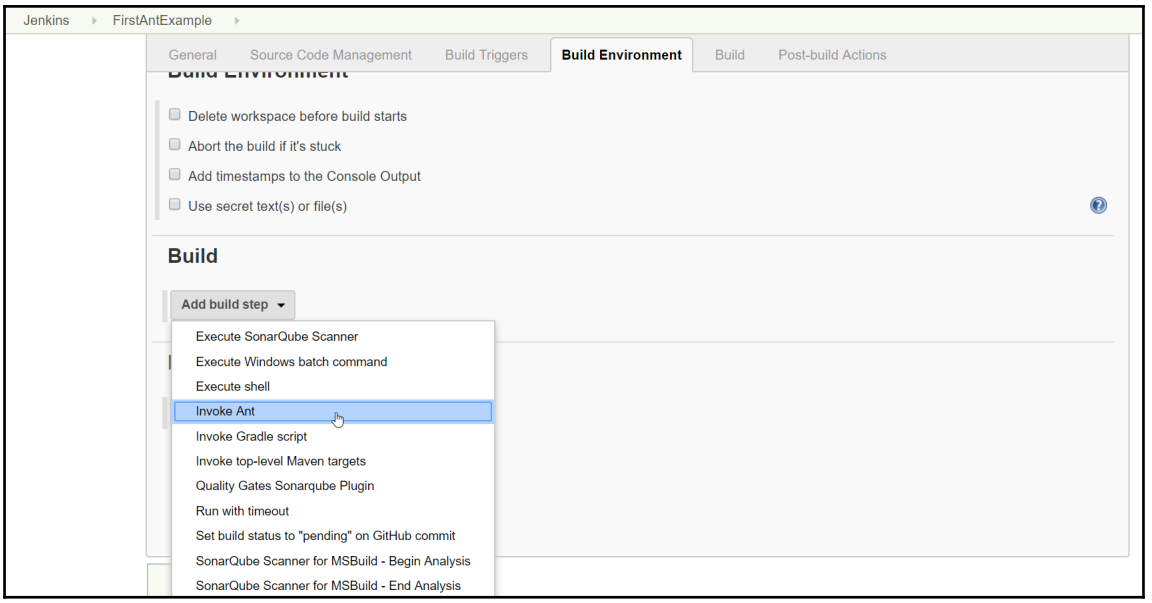


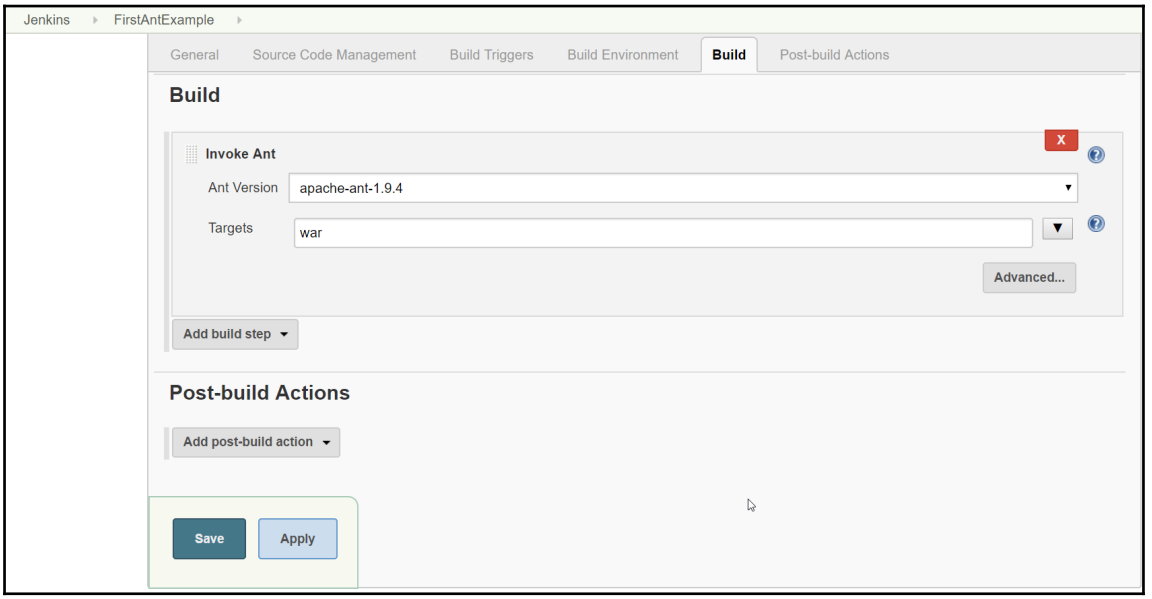

Jenkins
1
search
admin
| log out
Jenkins
My Dashboard
New Item
People
Build History
Edit View
Delete View
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Credentials
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
Name
My Dashboard
Description
[Plain text] Preview
Filter build queue
Filter build executors
Job Filters
Status Filter
All selected jobs
Recurse in subfolders
Jobs
FirstJob
Main-PetClinic
Maven-Sample
PetClinic-Code
SpringBoot
OK
Apply


Jenkins
1
search
admin
| log out
Jenkins
My Dashboard
DISABLE AUTO REFRESH
New Item
People
Build History
Edit View
Delete View
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Credentials
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
add description
All
My Dashboard
+
S
W
Name ↓
Last Success
Last Failure
Last Duration
PetClinic-Code
11 hr - #18
19 min - #20
1 min 34 sec
Icon: S M L
Legend
RSS for all
RSS for failures
RSS for just latest builds

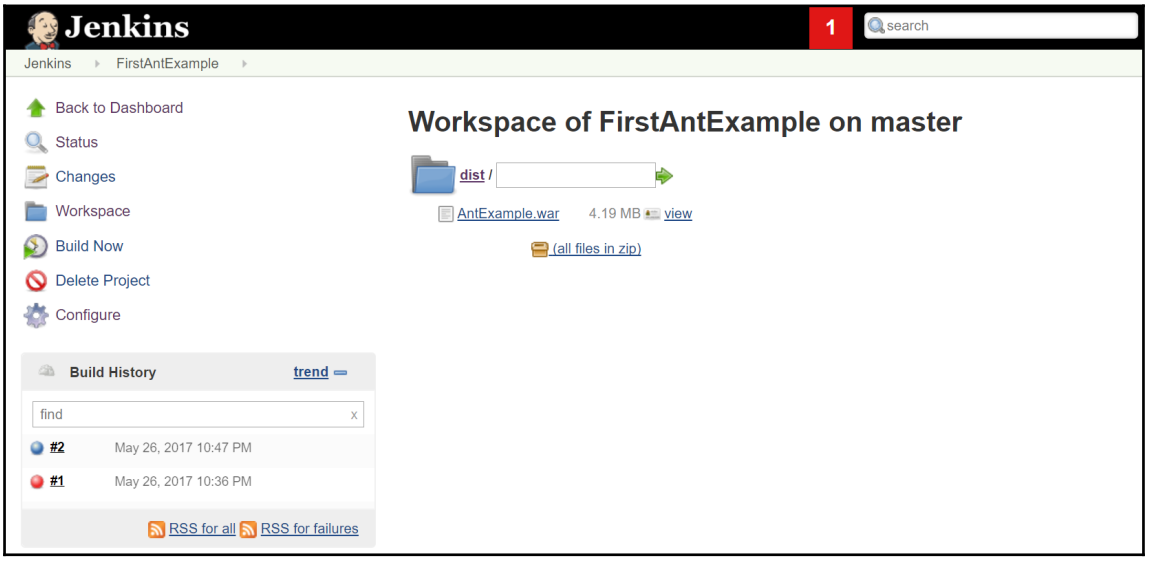

Jenkins
1
search
admin
| log out
Jenkins
All
Enter an item name
FirstAntExample
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK

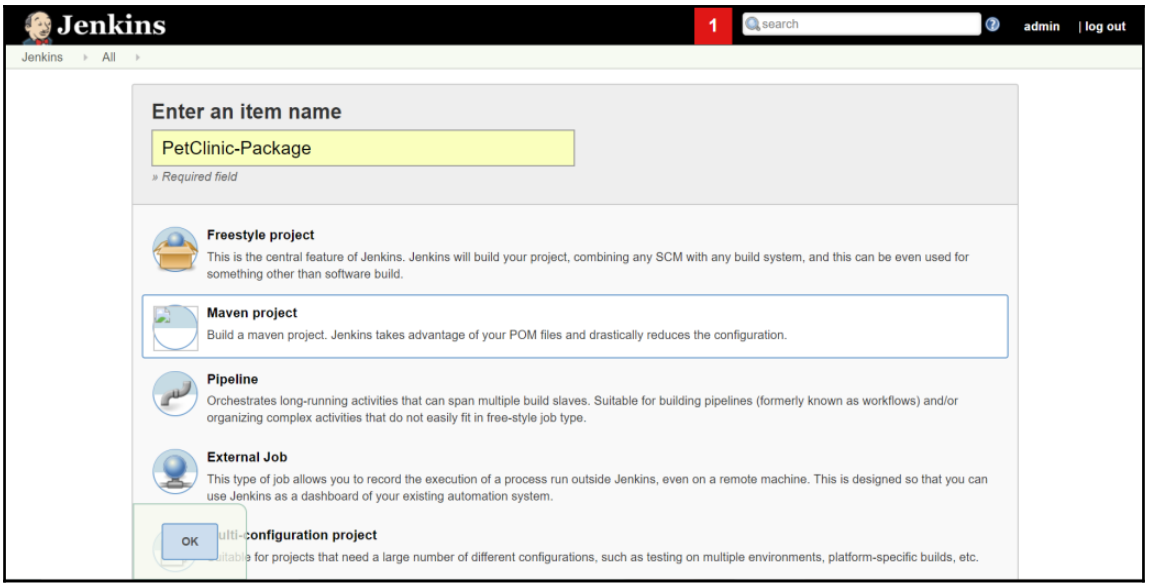

Jenkins
FirstAntExample
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Source Code Management
None
File System
Git
Repositories
Repository URL
https://github.com/mitesh51/AntExample.git
Credentials
- none -
Add
Advanced...
Add Repository
Branches to build
Branch Specifier (blank for 'any')
*/master
Add Branch
Repository browser
(Auto)
Save
Apply

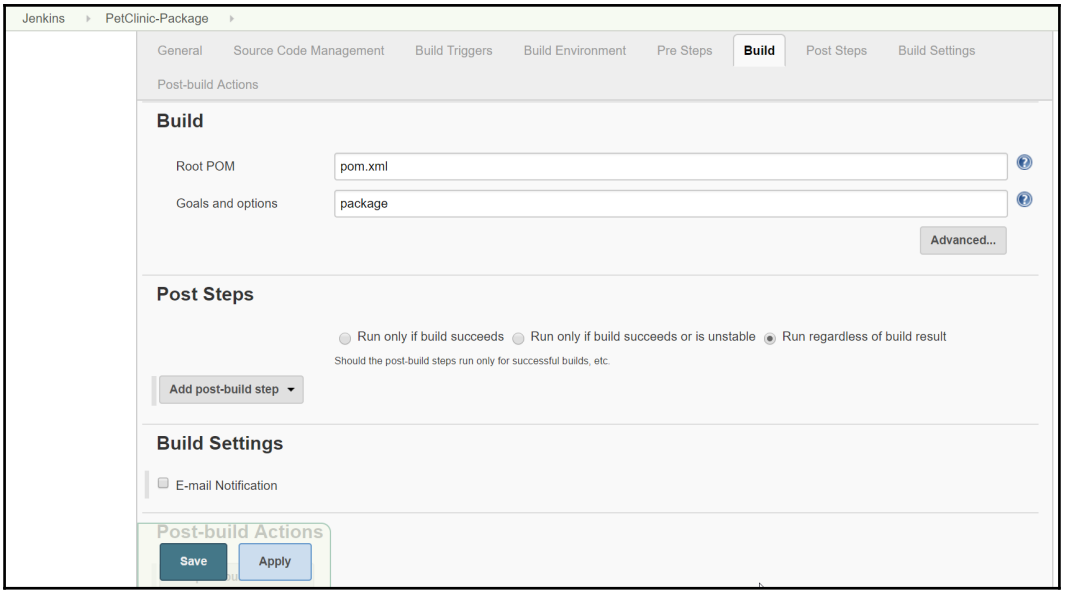

Jenkins
FirstAntExample
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Delete workspace before build starts
Abort the build if it's stuck
Add timestamps to the Console Output
Use secret text(s) or file(s)
Build
Add build step
Execute SonarQube Scanner
Execute Windows batch command
Execute shell
Invoke Ant
Invoke Gradle script
Invoke top-level Maven targets
Quality Gates Sonarqube Plugin
Run with timeout
Set build status to "pending" on GitHub commit
SonarQube Scanner for MSBuild - Begin Analysis
SonarQube Scanner for MSBuild - End Analysis


Jenkins
FirstAntExample
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Build
Invoke Ant
Ant Version
apache-ant-1.9.4
Targets
war
Advanced...
Add build step
Post-build Actions
Add post-build action
Save
Apply

Jenkins ▸ FirstAntExample ▸ #2
Edit Build Information
Git Build Data
No Tags
Previous Build
Executed Ant Targets
init
compile
war
> git.exe config remote.origin.url https://github.com/mitesh51/AntExample.git # timeout=10
Fetching upstream changes from https://github.com/mitesh51/AntExample.git
> git.exe --version # timeout=10
> git.exe fetch --tags --progress https://github.com/mitesh51/AntExample.git +refs/heads/*:refs/remotes/origin/*
> git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
> git.exe rev-parse "refs/remotes/origin/origin/master^{commit}" # timeout=10
Checking out Revision b88fd734baee7a009d404e478171871629e7ec84 (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f b88fd734baee7a009d404e478171871629e7ec84
> git.exe rev-list b88fd734baee7a009d404e478171871629e7ec84 # timeout=10
[FirstAntExample] $ cmd.exe /C "C:\apache-ant-1.9.4\bin\ant.bat war && exit %%ERRORLEVEL%%"
Buildfile: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\build.xml
init:
[mkdir] Created dir: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\build\classes
[mkdir] Created dir: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\dist
compile:
[javac] F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\build.xml:17: warning: 'includeantruntime' was not set, defaulting to build.sysclasspath=last; set to false for repeatable builds
[javac] Compiling 4 source files to F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\build\classes
[javac] Note: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\src\com\vaannila\web\UserController.java uses or overrides a deprecated API.
[javac] Note: Recompile with -Xlint:deprecation for details.
war:
[war] Building war: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstAntExample\dist\AntExample.war
BUILD SUCCESSFUL
Total time: 6 seconds
Finished: SUCCESS

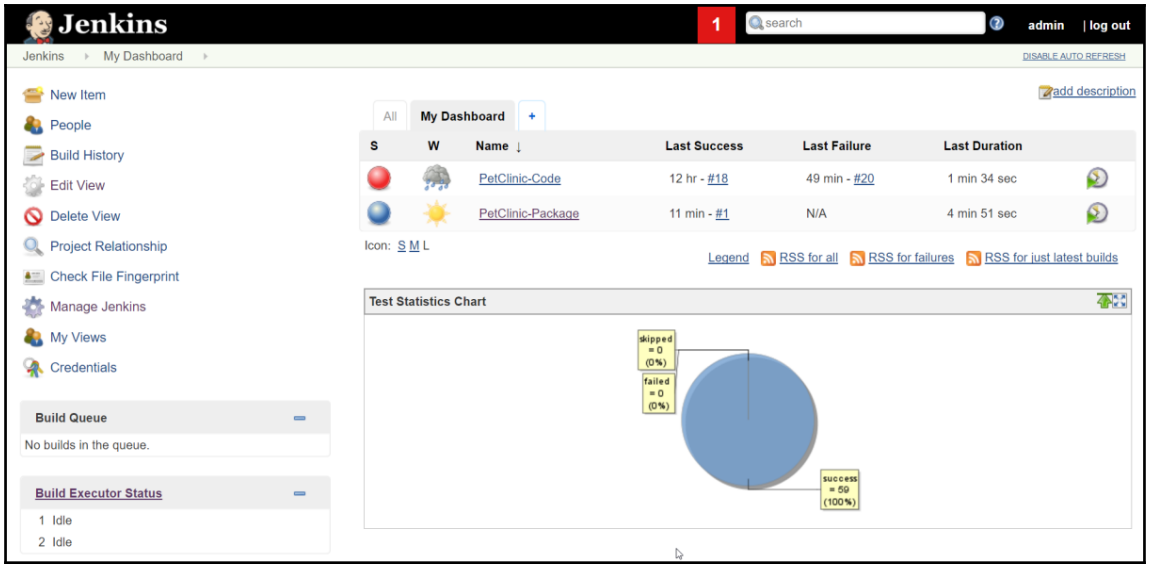

Jenkins
1
search
Jenkins ▸ FirstAntExample ▸
Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Project
Configure
Workspace of FirstAntExample on master
dist /
AntExample.war 4.19 MB view
(all files in zip)
Build History trend
find
#2 May 26, 2017 10:47 PM
#1 May 26, 2017 10:36 PM
RSS for all RSS for failures

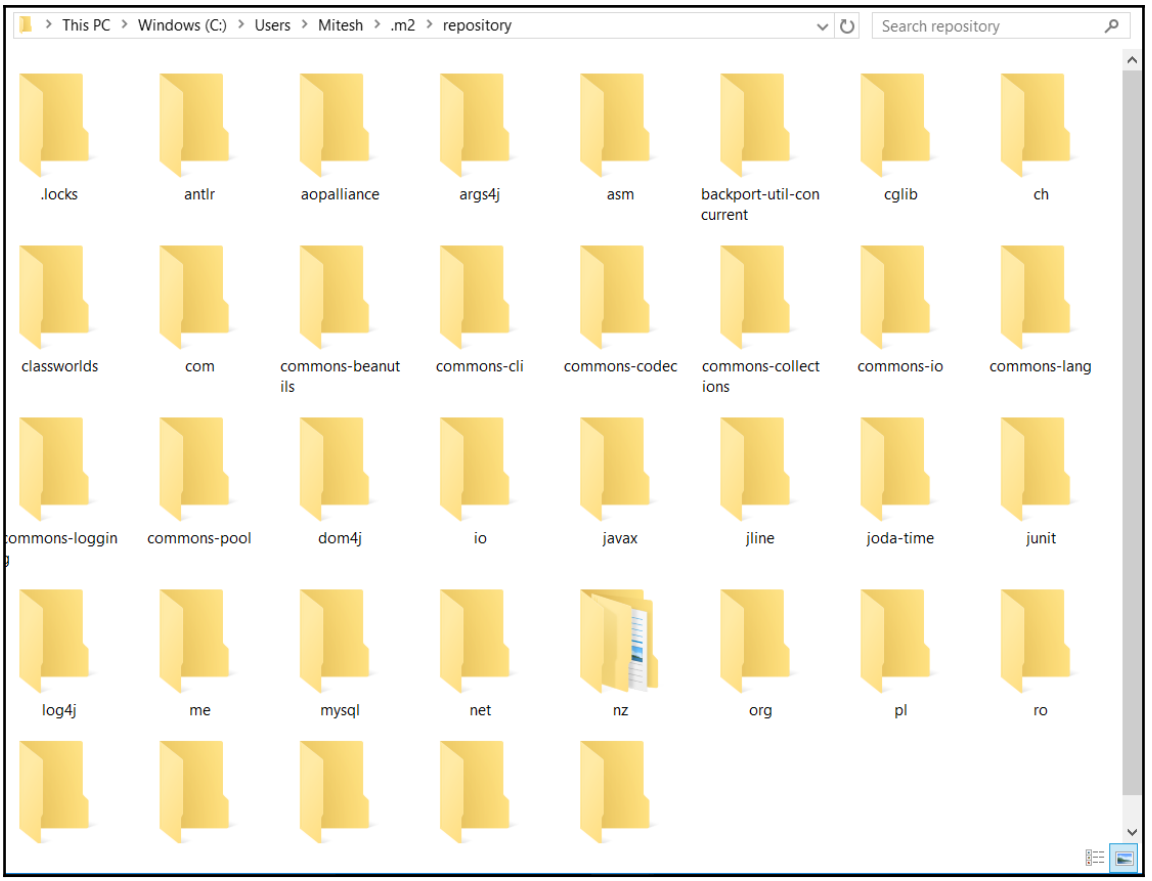

Jenkins
1
search
admin
| log out
Jenkins
All
Enter an item name
PetClinic-Package
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK
for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.


Jenkins
PetClinic-Package
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Build
Root POM
pom.xml
Goals and options
package
Advanced...
Post Steps
Run only if build succeeds
Run only if build succeeds or is unstable
Run regardless of build result
Should the post-build steps run only for successful builds, etc.
Add post-build step
Build Settings
E-mail Notification
Post-build Actions
Save
Apply

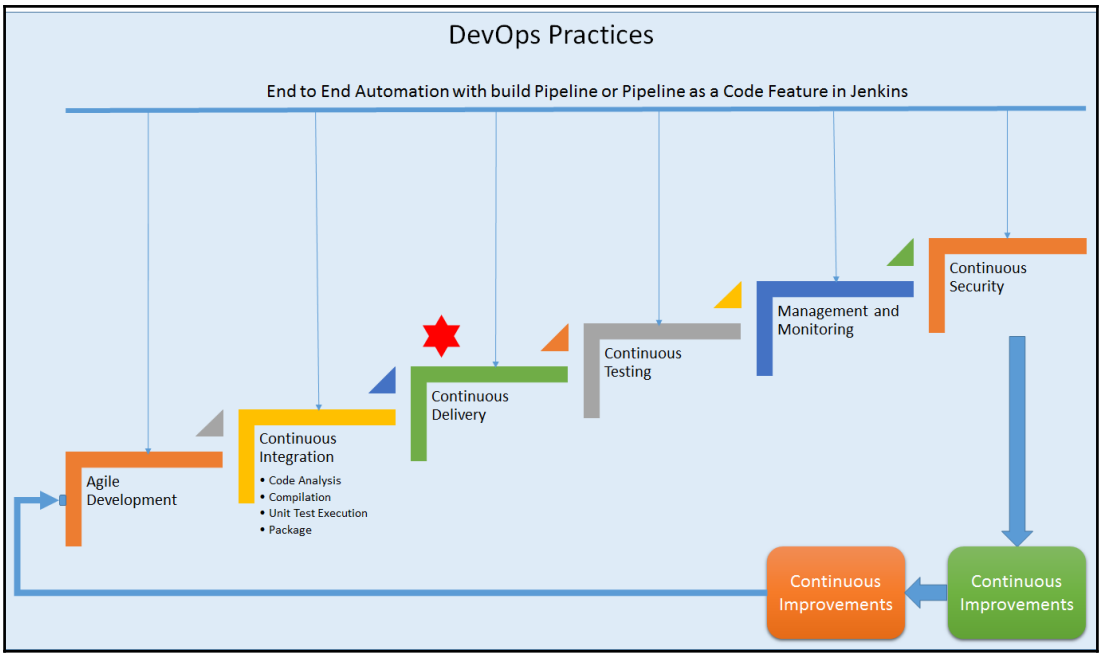
Jenkins ▸ PetClinic-Package ▸ #1

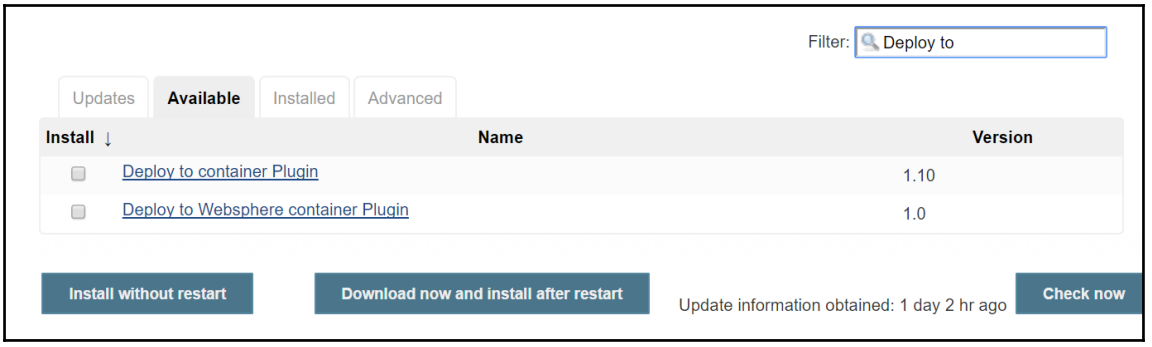
```
Results :

Tests run: 59, Failures: 0, Errors: 0, Skipped: 0

[JENKINS] Recording test results
[INFO]
[INFO] --- maven-war-plugin:2.3:war (default-war) @ spring-petclinic ---
[INFO] Packaging webapp
[INFO] Assembling webapp [spring-petclinic] in [F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-
Package\target\spring-petclinic-4.2.5-SNAPSHOT]
[INFO] Processing war project
[INFO] Copying webapp resources [F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-
Package\src\main\webapp]
[INFO] Webapp assembled in [5618 msecs]
[INFO] Building war: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-Package\target\petclinic.war
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 02:19 min
[INFO] Finished at: 2017-05-26T22:56:23+05:30
[INFO] Final Memory: 30M/102M
[INFO] ------------------------------------------------------------------------
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-Package\pom.xml to
org.springframework.samples/spring-petclinic/4.2.5-SNAPSHOT/spring-petclinic-4.2.5-SNAPSHOT.pom
[JENKINS] Archiving F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-Package\target\petclinic.war
to org.springframework.samples/spring-petclinic/4.2.5-SNAPSHOT/spring-petclinic-4.2.5-SNAPSHOT.war
channel stopped
Finished: SUCCESS
```

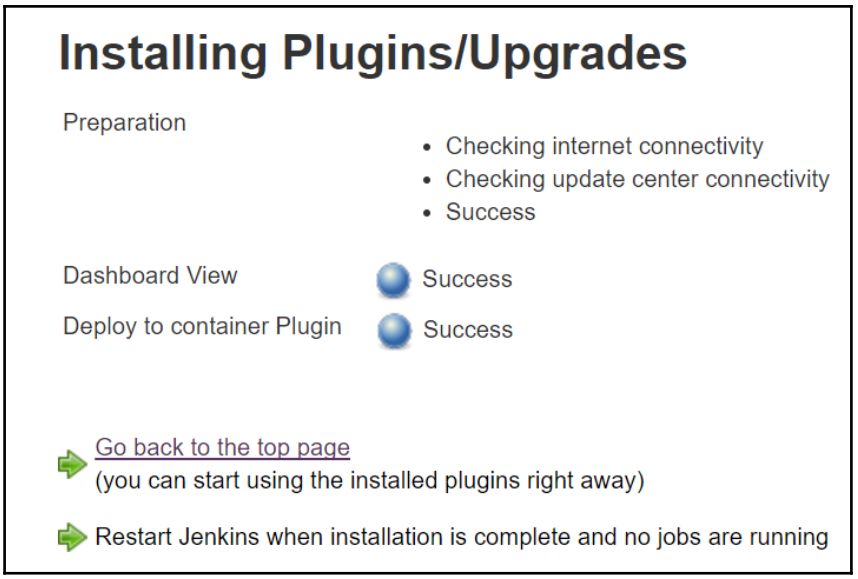




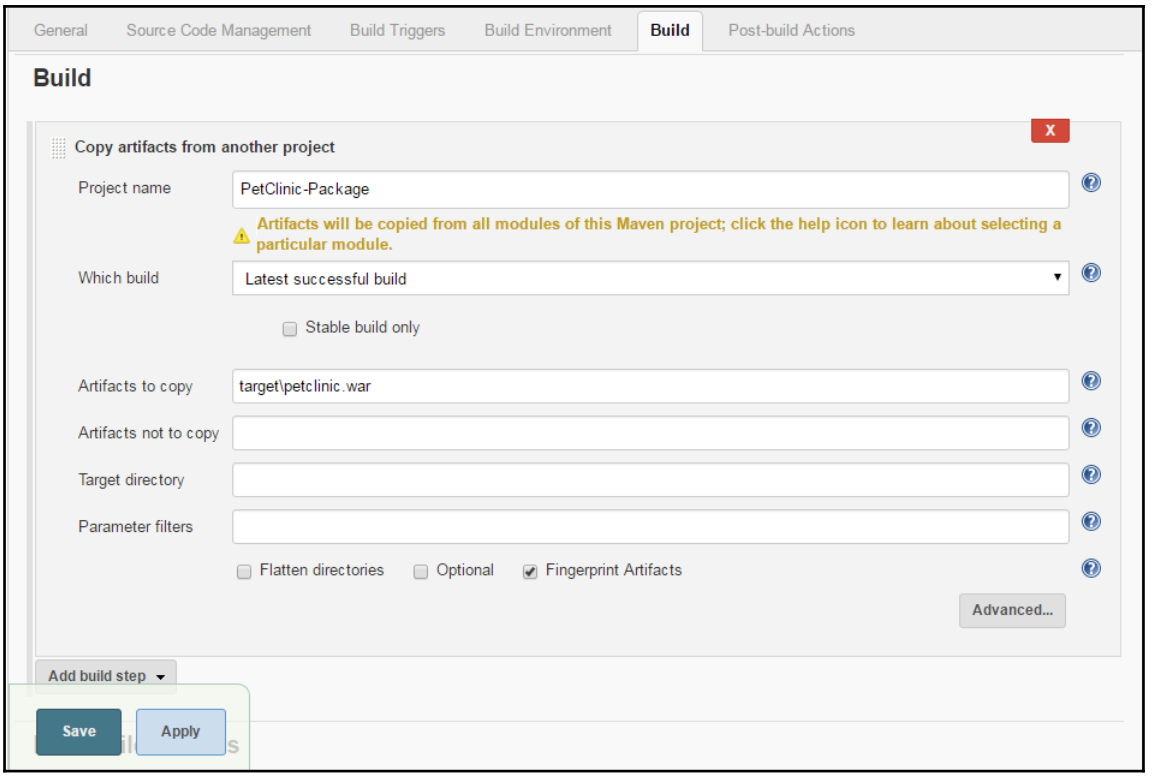
Chapter 05: Continuous Delivery - Implementing Automated Deployment

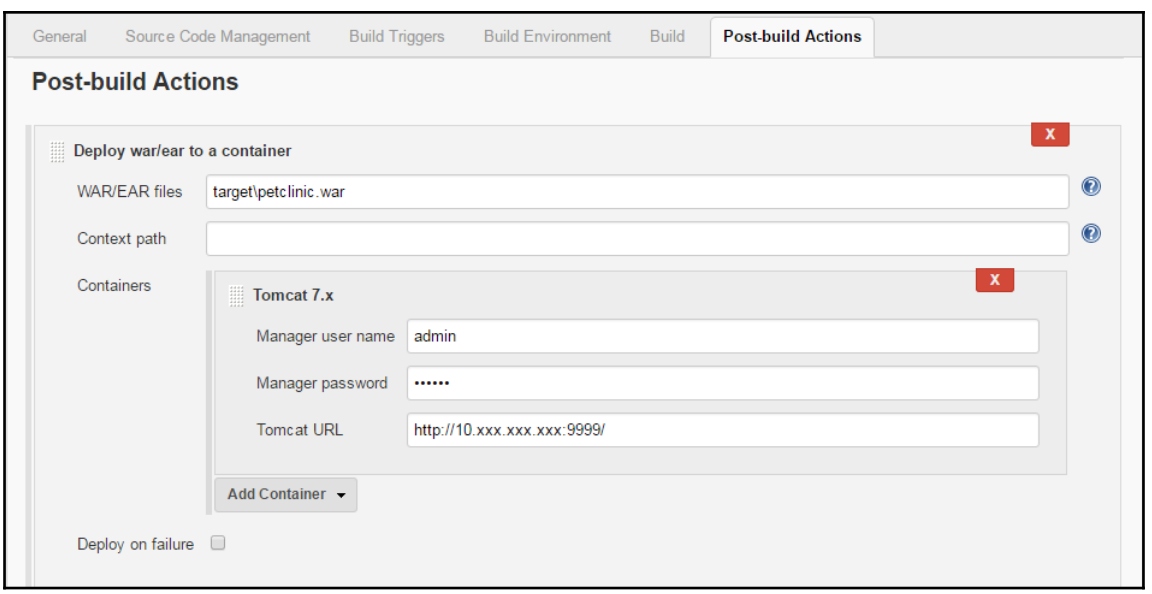

DevOps Practices
End to End Automation with build Pipeline or Pipeline as a Code Feature in Jenkins
Agile Development
Continuous Integration
• Code Analysis
• Compilation
• Unit Test Execution
• Package
Continuous Delivery
Continuous Testing
Management and Monitoring
Continuous Security
Continuous Improvements
Continuous Improvements


Filter: Deploy to
Updates
Available
Installed
Advanced
Install
Name
Version
Deploy to container Plugin
1.10
Deploy to Websphere container Plugin
1.0
Install without restart
Download now and install after restart
Update information obtained: 1 day 2 hr ago
Check now

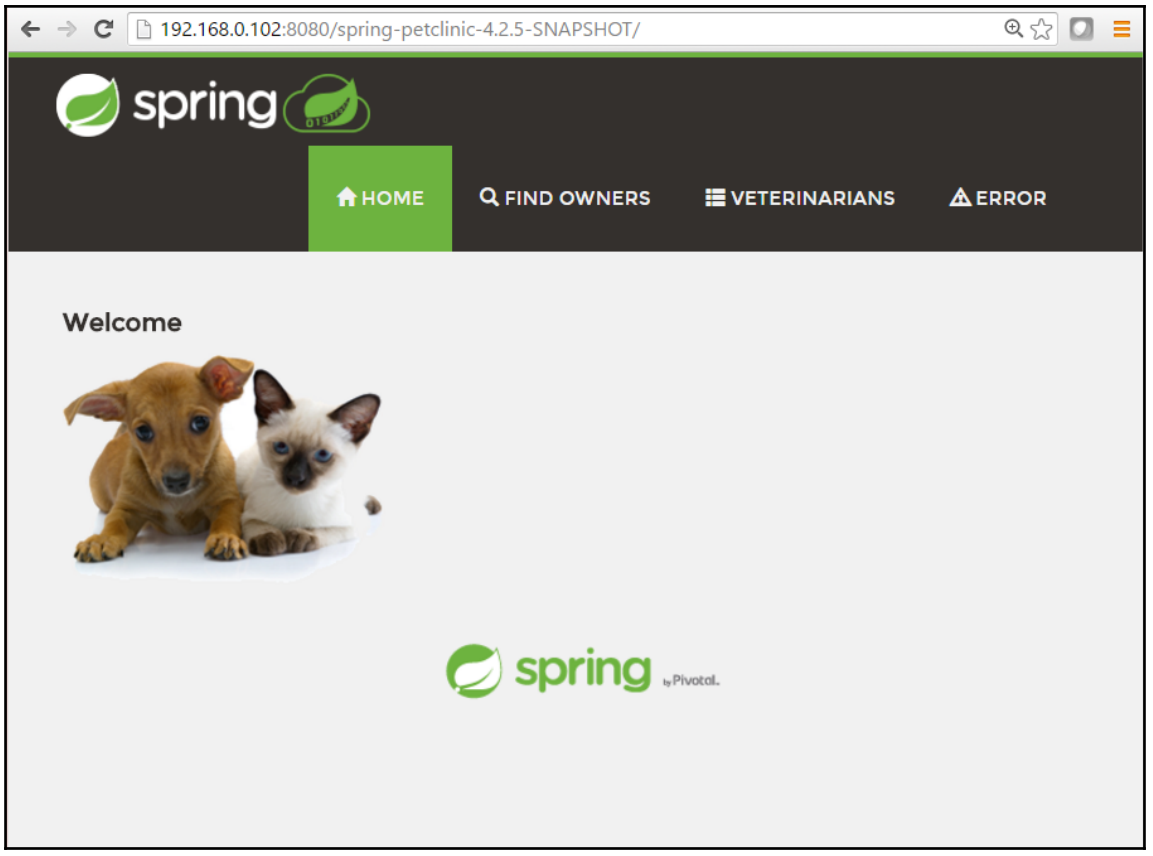


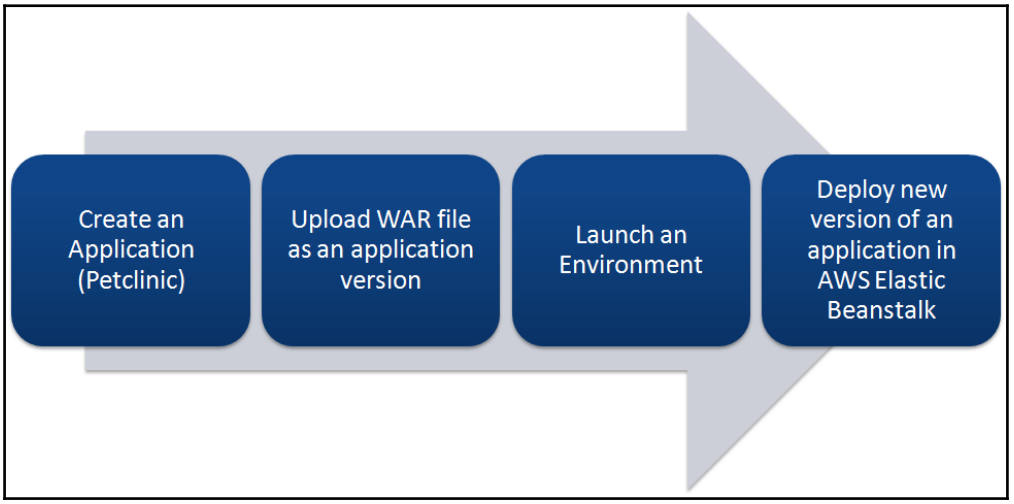

```
<?xml version='1.0' encoding='utf-8'?>
<!--
<tomcat-users>
<!--
<!--
  NOTE:  The sample user and role entries below are intended for use with the
  examples web application. They are wrapped in a comment and thus are ignored
  when reading this file. If you wish to configure these users for use with the
  examples web application, do not forget to remove the <!.. ..> that surrounds
  them. You will also need to set the passwords to something appropriate.
-->
  <role rolename="manager-script"/>
  <user username="admin" password="admin@123" roles="manager-script"/>
</tomcat-users>
```

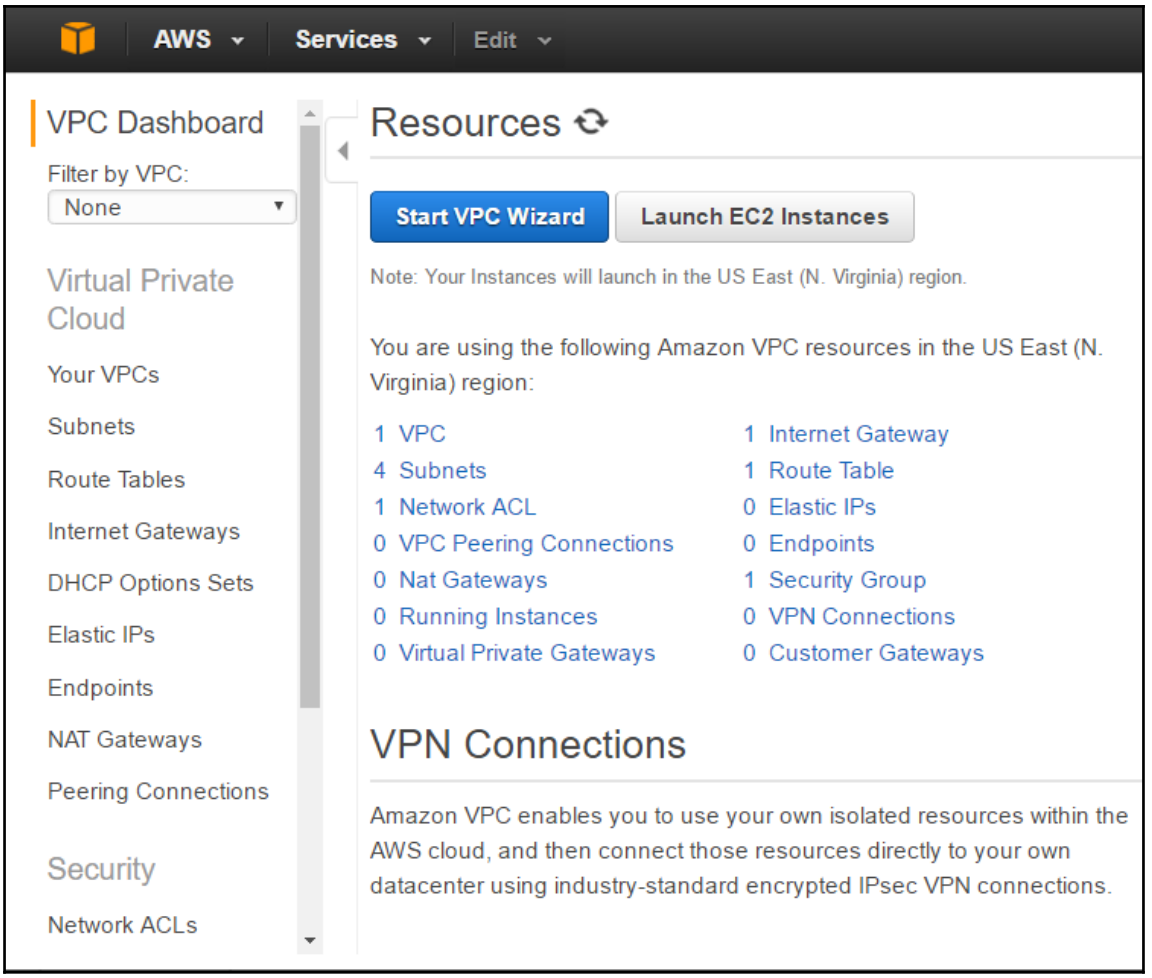

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Build
Copy artifacts from another project
Project name
PetClinic-Package
Artifacts will be copied from all modules of this Maven project; click the help icon to learn about selecting a particular module.
Which build
Latest successful build
Stable build only
Artifacts to copy
target\petclinic.war
Artifacts not to copy
Target directory
Parameter filters
Flatten directories
Optional
Fingerprint Artifacts
Advanced...
Add build step
Save
Apply

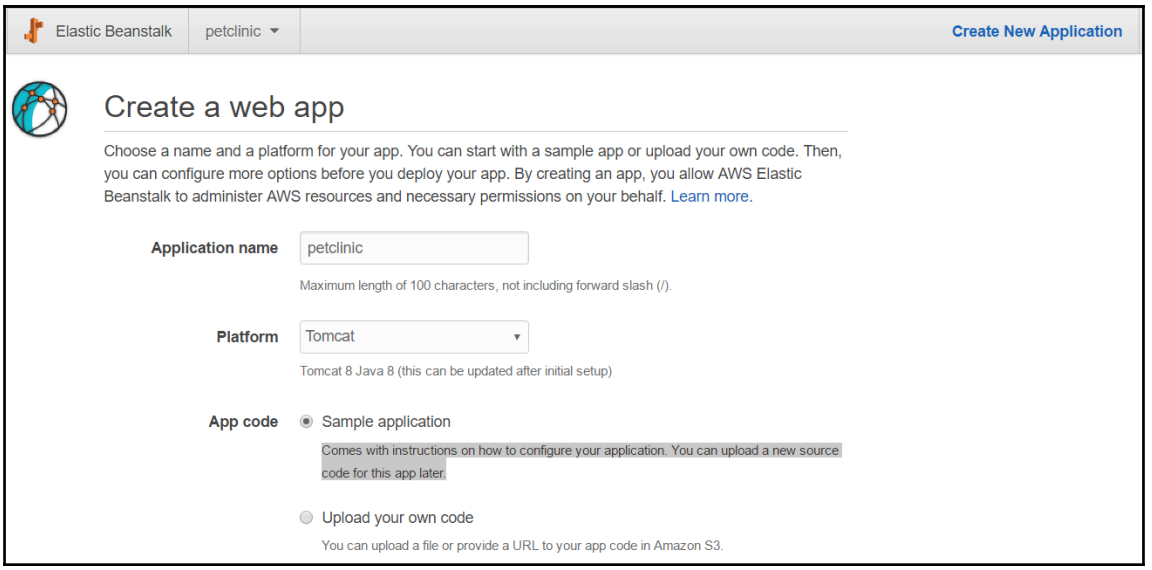

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Post-build Actions
Deploy war/ear to a container
WAR/EAR files
target\petclinic.war
Context path
Containers
Tomcat 7.x
Manager user name
admin
Manager password
Tomcat URL
http://10.xxx.xxx.xxx:9999/
Add Container
Deploy on failure

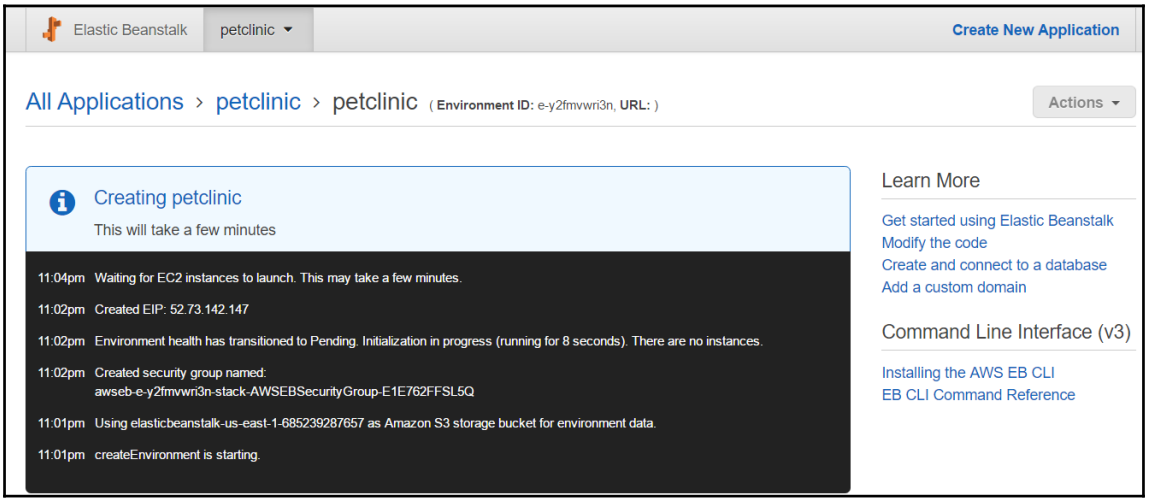
```
Results :

Tests run: 59, Failures: 0, Errors: 0, Skipped: 0

[INFO]
[INFO] --- maven-war-plugin:2.3:war (default-war) @ spring-petclinic ---
[INFO] Packaging webapp
[INFO] Assembling webapp [spring-petclinic] in [d:\jenkins\workspace\PetClinic-Test\target\spring-
petclinic-4.2.5-SNAPSHOT]
[INFO] Processing war project
[INFO] Copying webapp resources [d:\jenkins\workspace\PetClinic-Test\src\main\webapp]
[INFO] Webapp assembled in [1669 msecs]
[INFO] Building war: d:\jenkins\workspace\PetClinic-Test\target\spring-petclinic-4.2.5-SNAPSHOT.war
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 28.772 s
[INFO] Finished at: 2016-07-06T22:59:37+05:30
[INFO] Final Memory: 29M/261M
[INFO] ------------------------------------------------------------------------
Deploying d:\jenkins\workspace\PetClinic-Test\target\spring-petclinic-4.2.5-SNAPSHOT.war to container
Tomcat 7.x Remote
  [d:\jenkins\workspace\PetClinic-Test\target\spring-petclinic-4.2.5-SNAPSHOT.war] is not deployed.
Doing a fresh deployment.
  Deploying [d:\jenkins\workspace\PetClinic-Test\target\spring-petclinic-4.2.5-SNAPSHOT.war]
Finished: SUCCESS
```


192.168.0.102:8080/spring-petclinic-4.2.5-SNAPSHOT/
spring
HOME
FIND OWNERS
VETERINARIANS
ERROR
Welcome
spring by Pivotal.

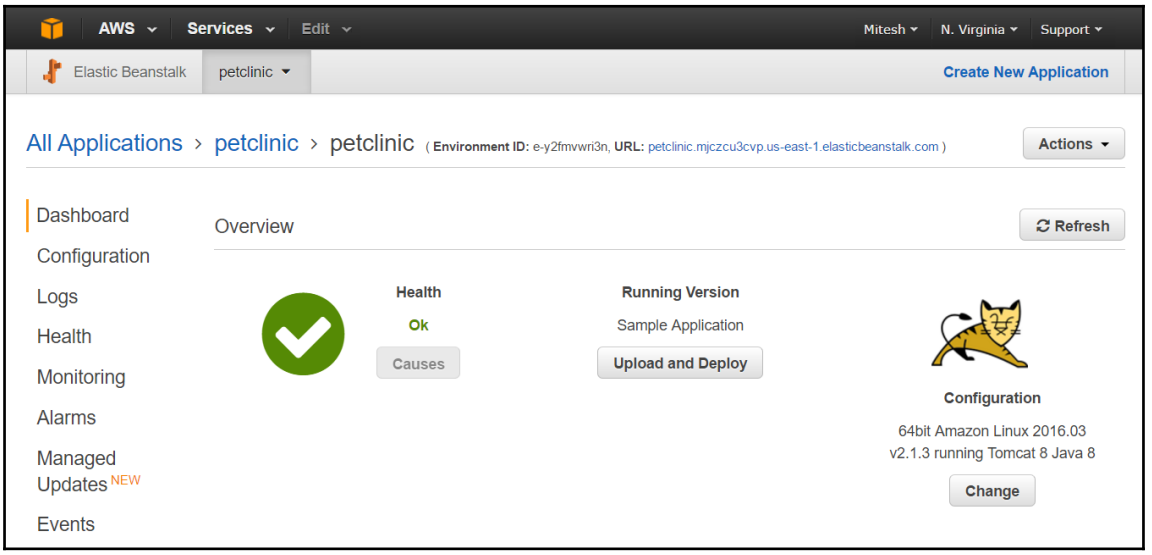

Create an Application (Petclinic)
Upload WAR file as an application version
Launch an Environment
Deploy new version of an application in AWS Elastic Beanstalk

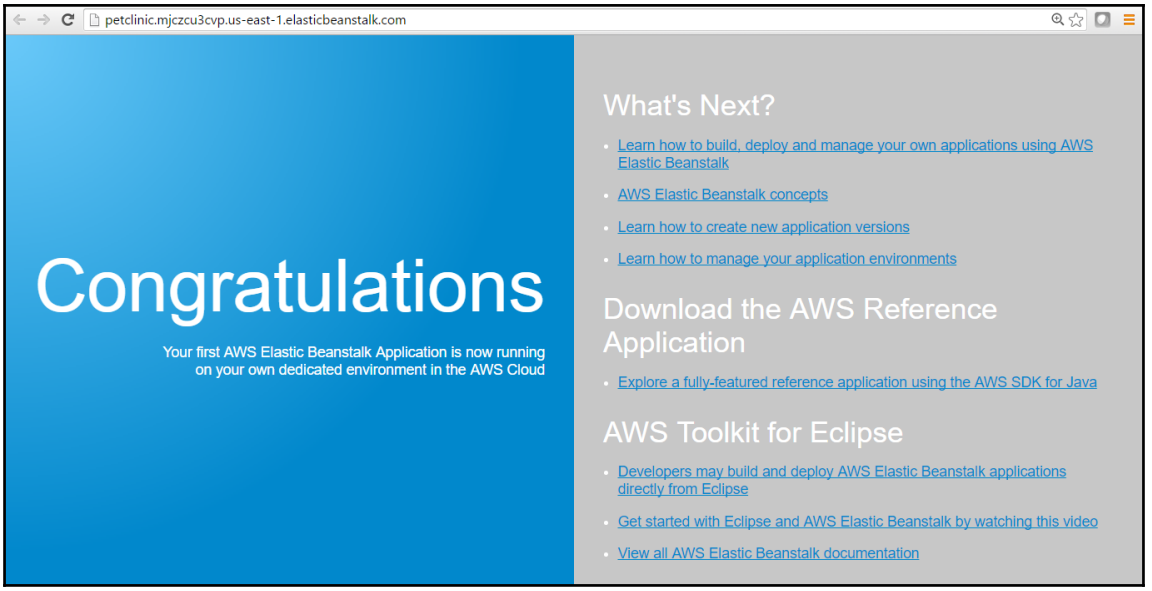

AWS
Services
Edit
VPC Dashboard
Filter by VPC:
None
Virtual Private Cloud
Your VPCs
Subnets
Route Tables
Internet Gateways
DHCP Options Sets
Elastic IPs
Endpoints
NAT Gateways
Peering Connections
Security
Network ACLs
Resources
Start VPC Wizard
Launch EC2 Instances
Note: Your Instances will launch in the US East (N. Virginia) region.
You are using the following Amazon VPC resources in the US East (N. Virginia) region:
1 VPC
4 Subnets
1 Network ACL
0 VPC Peering Connections
0 Nat Gateways
0 Running Instances
0 Virtual Private Gateways
1 Internet Gateway
1 Route Table
0 Elastic IPs
0 Endpoints
1 Security Group
0 VPN Connections
0 Customer Gateways
VPN Connections
Amazon VPC enables you to use your own isolated resources within the AWS cloud, and then connect those resources directly to your own datacenter using industry-standard encrypted IPsec VPN connections.

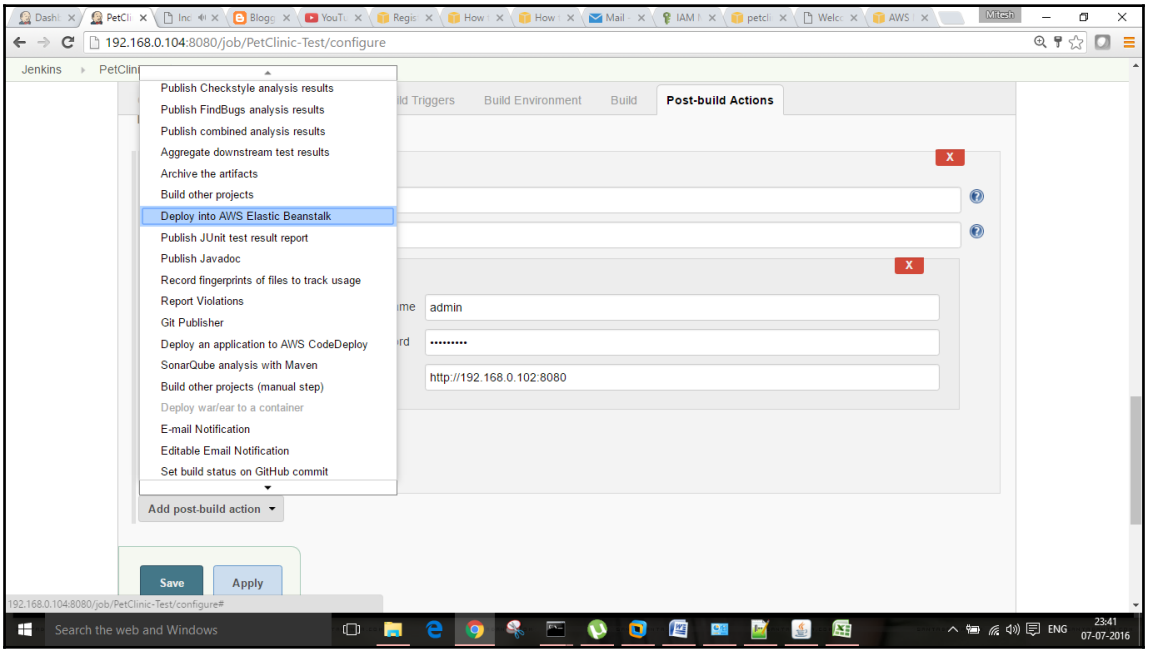

Elastic Beanstalk
petclinic
Create New Application
Create a web app
Choose a name and a platform for your app. You can start with a sample app or upload your own code. Then, you can configure more options before you deploy your app. By creating an app, you allow AWS Elastic Beanstalk to administer AWS resources and necessary permissions on your behalf. Learn more.
Application name
petclinic
Maximum length of 100 characters, not including forward slash (/).
Platform
Tomcat
Tomcat 8 Java 8 (this can be updated after initial setup)
App code
Sample application
Comes with instructions on how to configure your application. You can upload a new source code for this app later.
Upload your own code
You can upload a file or provide a URL to your app code in Amazon S3.

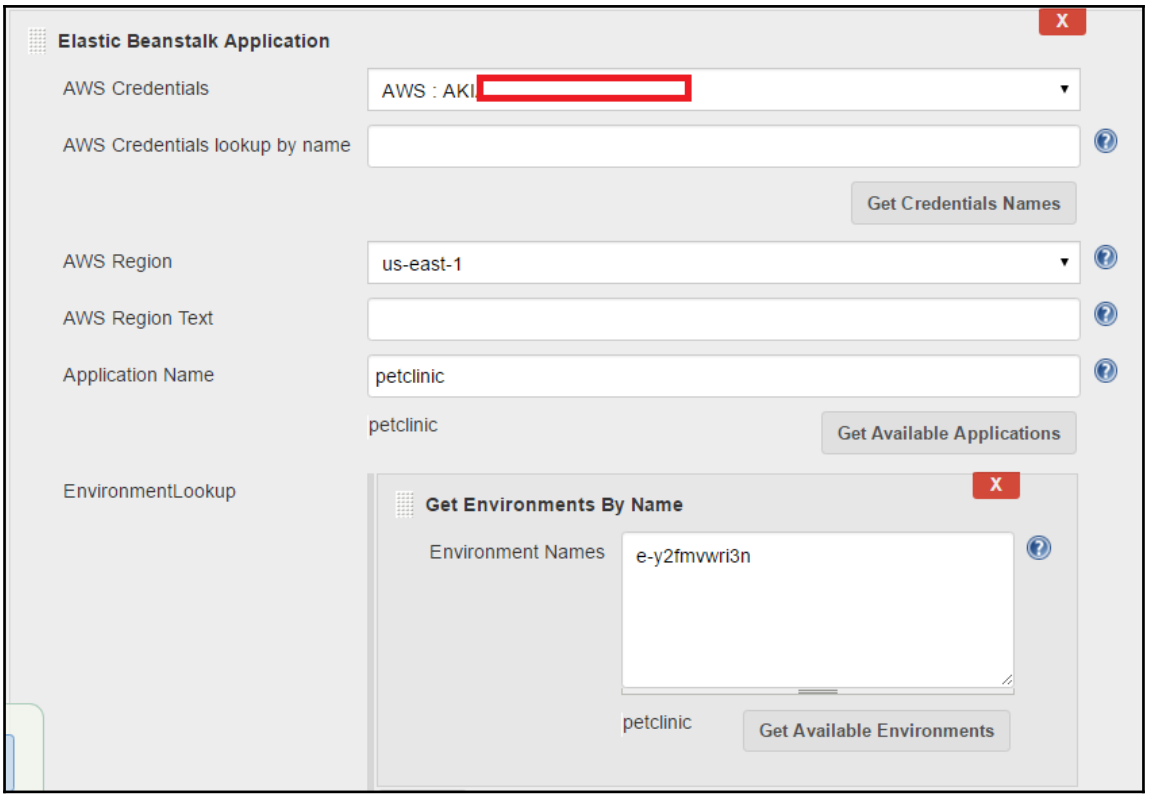

Elastic Beanstalk
petclinic
Create New Application
All Applications › petclinic › petclinic (Environment ID: e-y2fmvwri3n, URL:)
Actions
Creating petclinic
This will take a few minutes
11:04pm Waiting for EC2 instances to launch. This may take a few minutes.
11:02pm Created EIP: 52.73.142.147
11:02pm Environment health has transitioned to Pending. Initialization in progress (running for 8 seconds). There are no instances.
11:02pm Created security group named: awseb-e-y2fmvwri3n-stack-AWSEBSecurityGroup-E1E762FFSL5Q
11:01pm Using elasticbeanstalk-us-east-1-685239287657 as Amazon S3 storage bucket for environment data.
11:01pm createEnvironment is starting.
Learn More
Get started using Elastic Beanstalk
Modify the code
Create and connect to a database
Add a custom domain
Command Line Interface (v3)
Installing the AWS EB CLI
EB CLI Command Reference

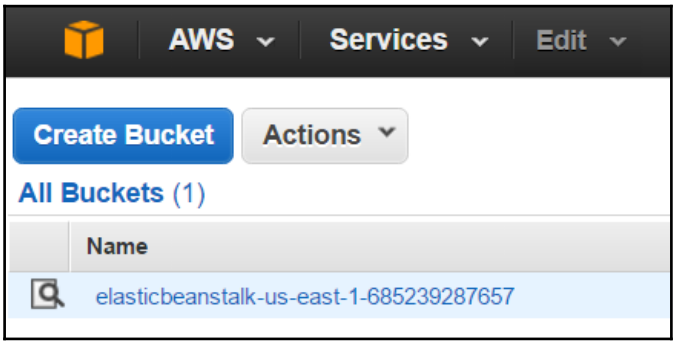
AWS
Services
Edit
Mitesh
N. Virginia
Support
Elastic Beanstalk
petclinic
Create New Application
All Applications › petclinic
Actions
Environments
Application Versions
Saved Configurations
petclinic
Environment tier: Web Server
Running versions: Sample Application
Last modified: 2016-07-07 23:05:19 UTC+0530
URL: petclinic.mjczcu3cvp.us-east-1.elasticbe...

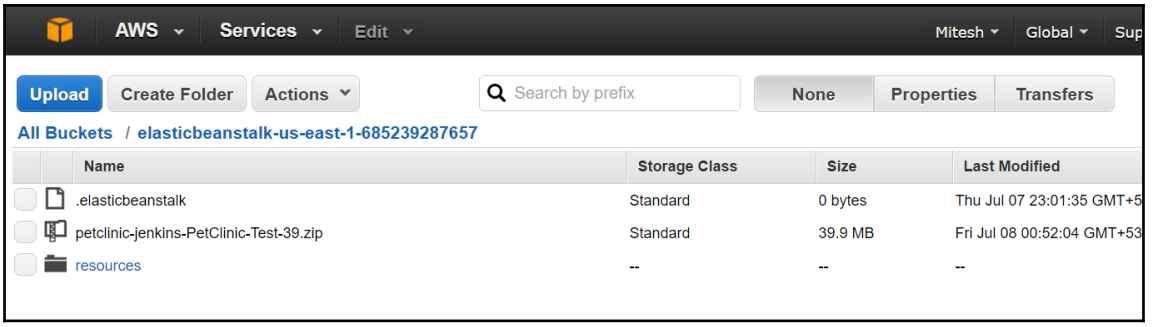

AWS
Services
Edit
Mitesh
N. Virginia
Support
Elastic Beanstalk
petclinic
Create New Application
All Applications › petclinic › petclinic (Environment ID: e-y2fmvwri3n, URL: petclinic.mjczcu3cvp.us-east-1.elasticbeanstalk.com)
Actions
Dashboard
Configuration
Logs
Health
Monitoring
Alarms
Managed Updates NEW
Events
Overview
Refresh
Health
Ok
Causes
Running Version
Sample Application
Upload and Deploy
Configuration
64bit Amazon Linux 2016.03
v2.1.3 running Tomcat 8 Java 8
Change

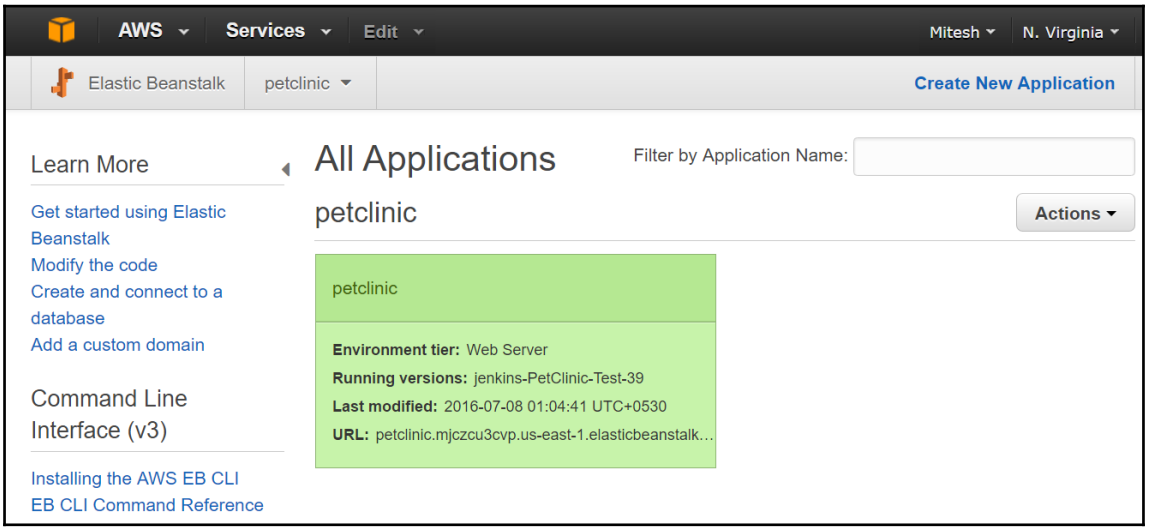

petclinic.mjczcu3cvp.us-east-1.elasticbeanstalk.com
Congratulations
Your first AWS Elastic Beanstalk Application is now running on your own dedicated environment in the AWS Cloud
What's Next?
Learn how to build, deploy and manage your own applications using AWS Elastic Beanstalk
AWS Elastic Beanstalk concepts
Learn how to create new application versions
Learn how to manage your application environments
Download the AWS Reference Application
Explore a fully-featured reference application using the AWS SDK for Java
AWS Toolkit for Eclipse
Developers may build and deploy AWS Elastic Beanstalk applications directly from Eclipse
Get started with Eclipse and AWS Elastic Beanstalk by watching this video
View all AWS Elastic Beanstalk documentation

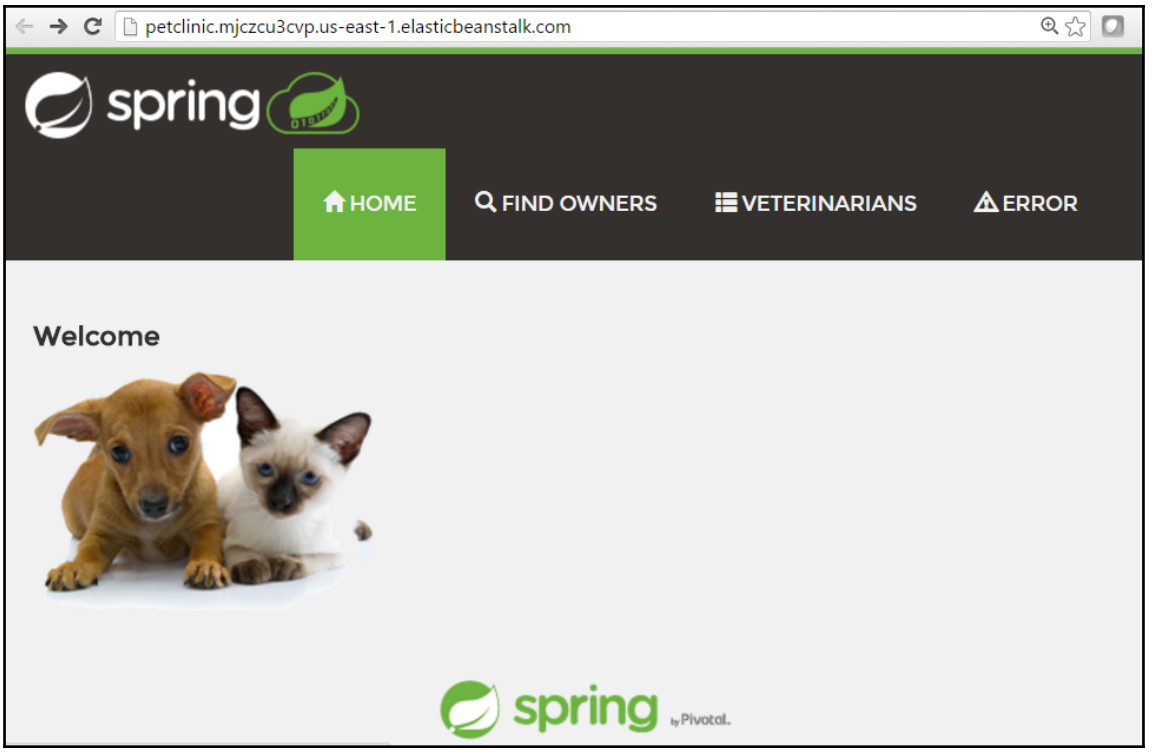

192.168.0.104:8080/job/PetClinic-Test/configure
Jenkins
Publish Checkstyle analysis results
Publish FindBugs analysis results
Publish combined analysis results
Aggregate downstream test results
Archive the artifacts
Build other projects
Deploy into AWS Elastic Beanstalk
Publish JUnit test result report
Publish Javadoc
Record fingerprints of files to track usage
Report Violations
Git Publisher
Deploy an application to AWS CodeDeploy
SonarQube analysis with Maven
Build other projects (manual step)
Deploy war/ear to a container
E-mail Notification
Editable Email Notification
Set build status on GitHub commit
Build Triggers
Build Environment
Build
Post-build Actions
admin
http://192.168.0.102:8080
Add post-build action
Save
Apply
Search the web and Windows
ENG
23:41
07-07-2016

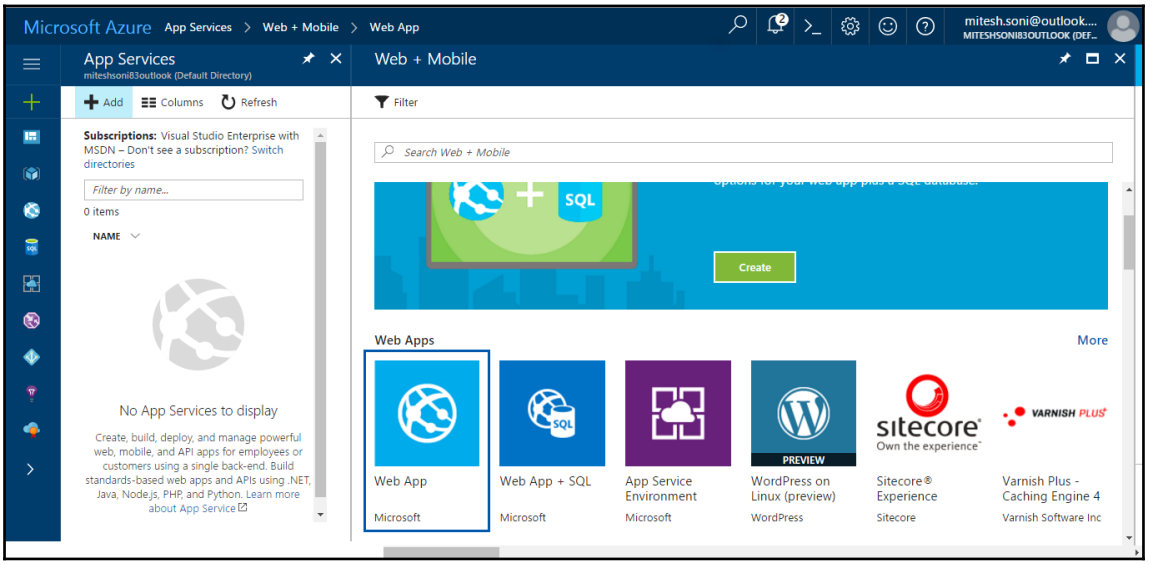

Elastic Beanstalk Application
AWS Credentials
AWS : AKI
AWS Credentials lookup by name
Get Credentials Names
AWS Region
us-east-1
AWS Region Text
Application Name
petclinic
petclinic
Get Available Applications
EnvironmentLookup
Get Environments By Name
Environment Names
e-y2fmvwri3n
petclinic
Get Available Environments

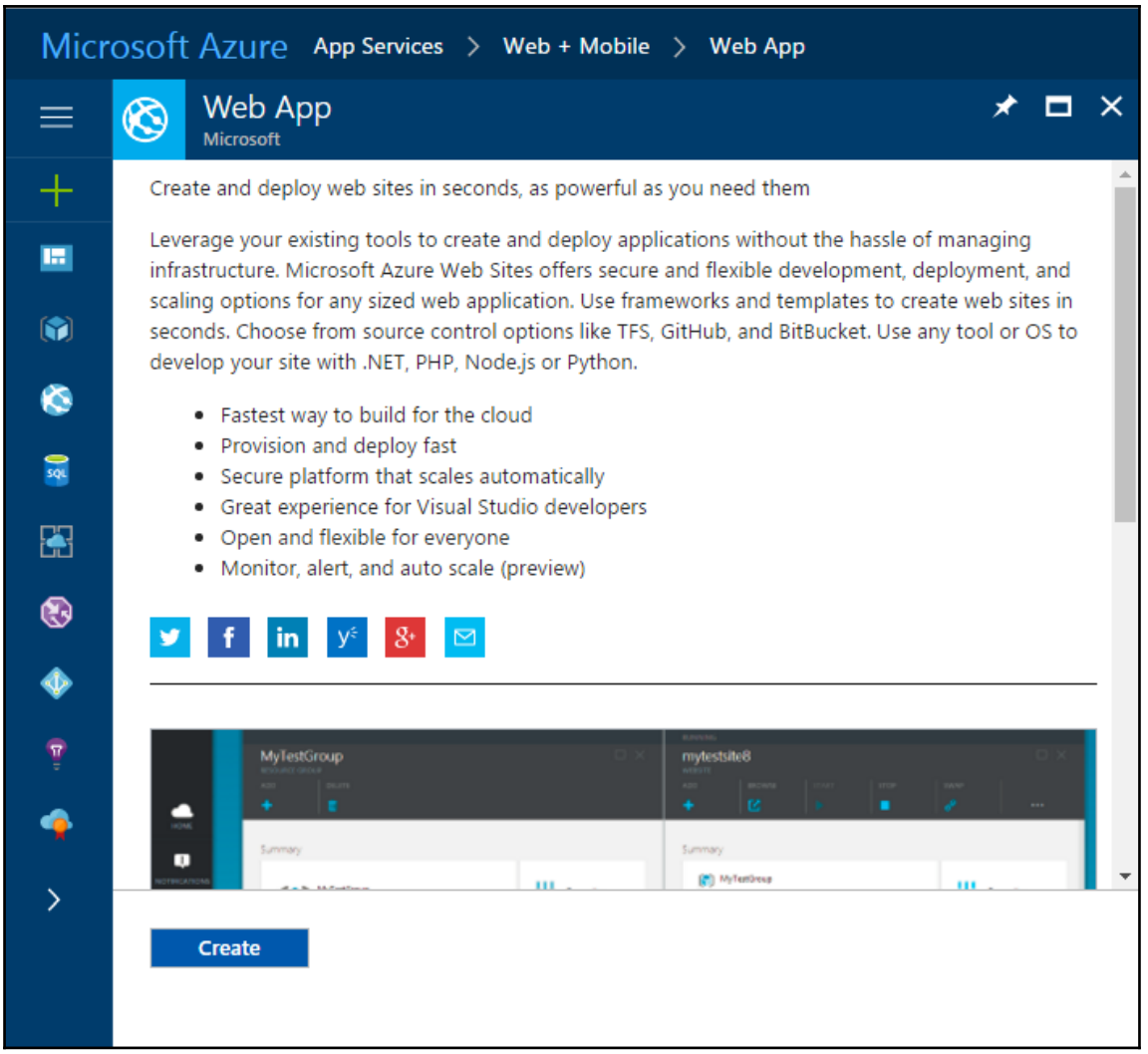

AWS
Services
Edit
Create Bucket
Actions
All Buckets (1)
Name
elasticbeanstalk-us-east-1-685239287657

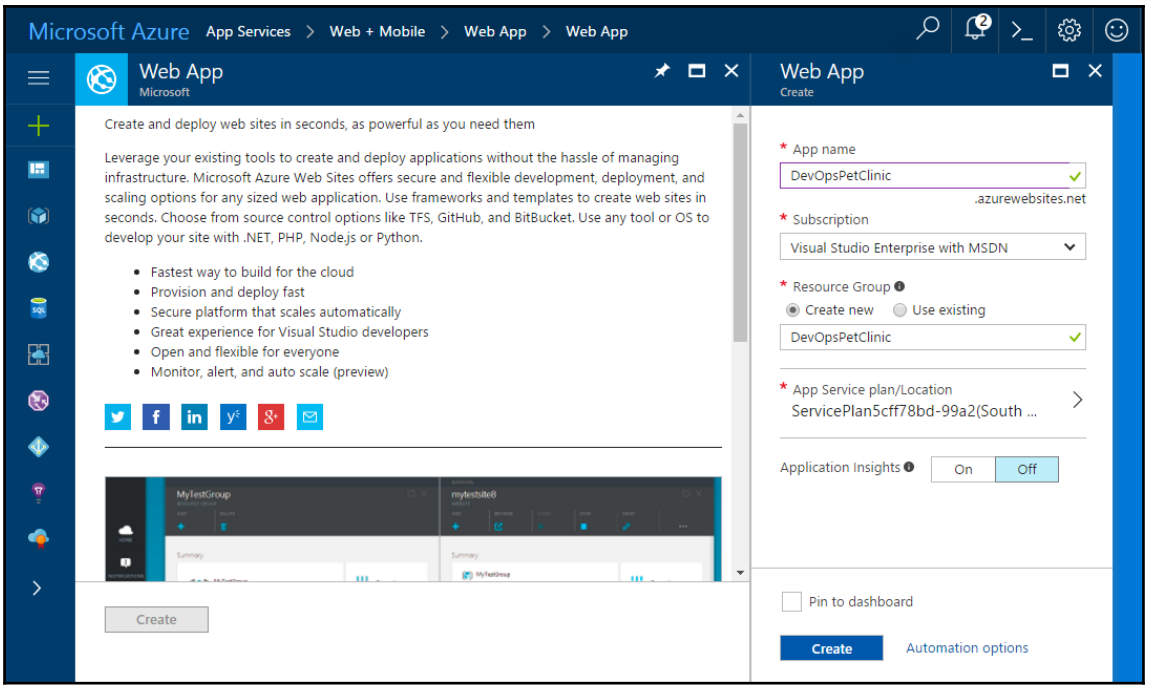

AWS
Services
Edit
Mitesh
Global
Upload
Create Folder
Actions
Search by prefix
None
Properties
Transfers
All Buckets / elasticbeanstalk-us-east-1-685239287657
Name
Storage Class
Size
Last Modified
.elasticbeanstalk
Standard
0 bytes
Thu Jul 07 23:01:35 GMT+5
petclinic-jenkins-PetClinic-Test-39.zip
Standard
39.9 MB
Fri Jul 08 00:52:04 GMT+53
resources
--
--
--

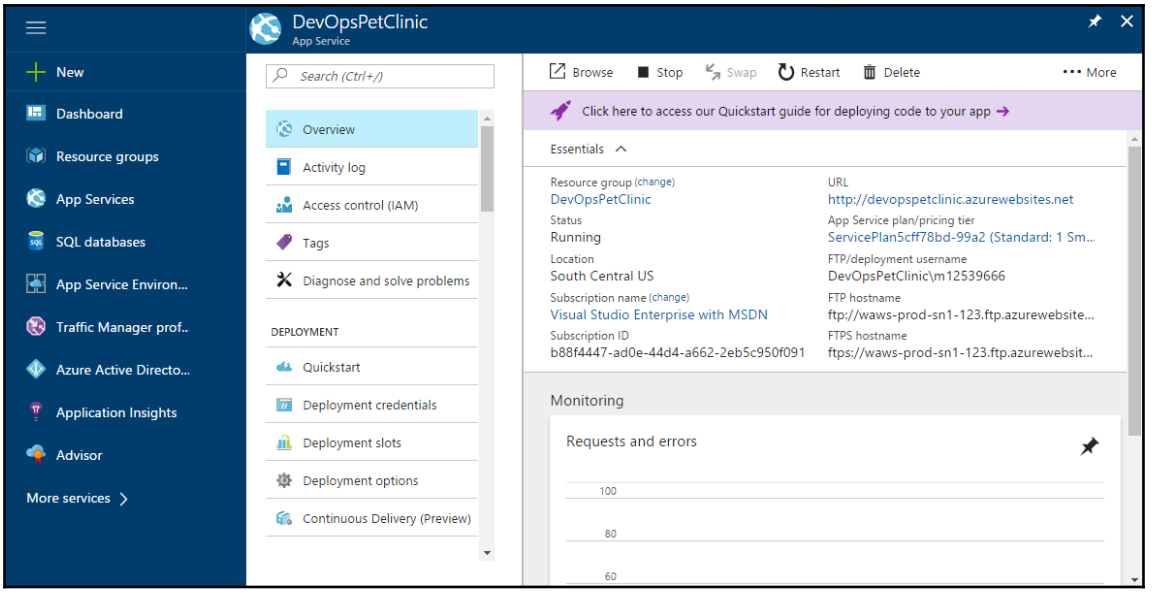

AWS
Services
Edit
Mitesh
N. Virginia
Elastic Beanstalk
petclinic
Create New Application
Learn More
Get started using Elastic Beanstalk
Modify the code
Create and connect to a database
Add a custom domain
Command Line Interface (v3)
Installing the AWS EB CLI
EB CLI Command Reference
All Applications
Filter by Application Name:
petclinic
Actions
petclinic
Environment tier: Web Server
Running versions: jenkins-PetClinic-Test-39
Last modified: 2016-07-08 01:04:41 UTC+0530
URL: petclinic.mjczcu3cvp.us-east-1.elasticbeanstalk…

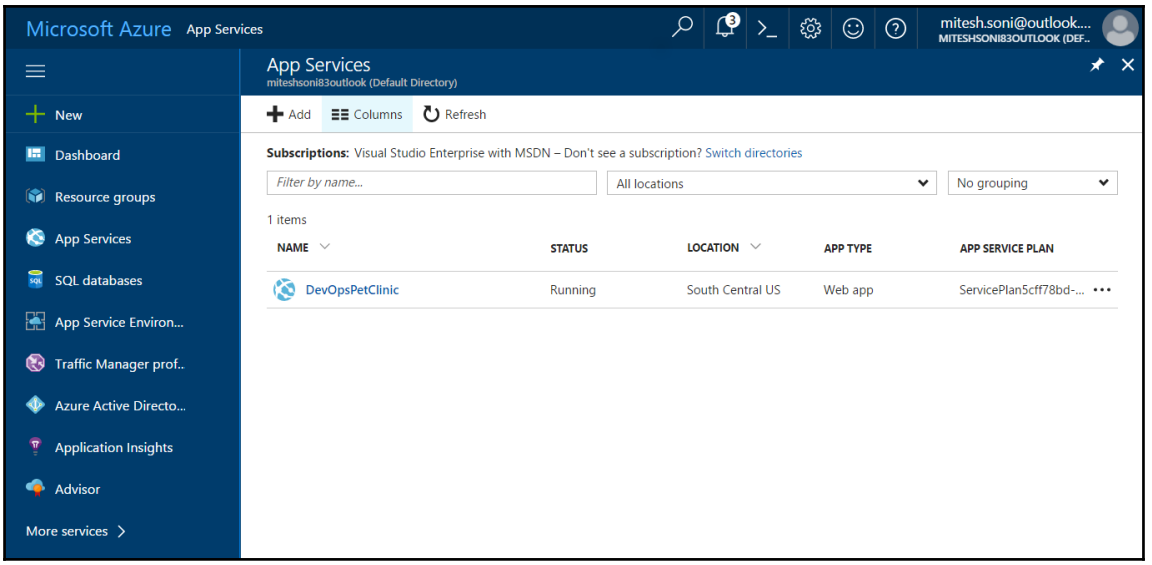

petclinic.mjczcu3cvp.us-east-1.elasticbeanstalk.com
spring
HOME
FIND OWNERS
VETERINARIANS
ERROR
Welcome
spring by Pivotal.

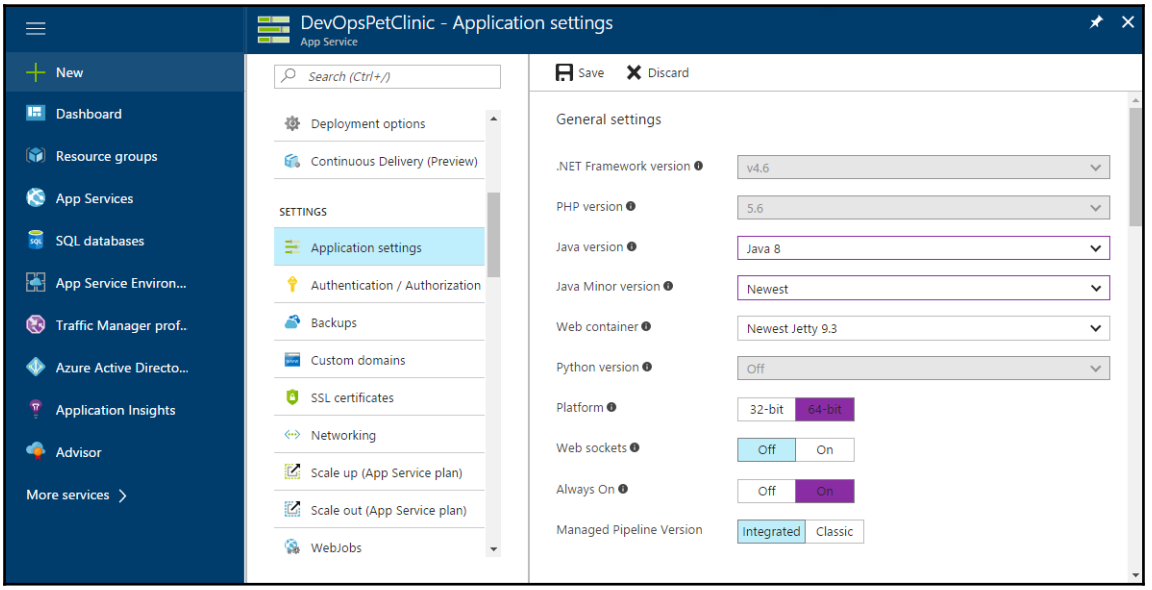

Microsoft Azure
App Services > Web + Mobile > Web App
mitesh.soni@outlook....
App Services
miteshsoni83outlook (Default Directory)
Add
Columns
Refresh
Subscriptions: Visual Studio Enterprise with MSDN – Don't see a subscription? Switch directories
Filter by name...
0 items
NAME
No App Services to display
Create, build, deploy, and manage powerful web, mobile, and API apps for employees or customers using a single back-end. Build standards-based web apps and APIs using .NET, Java, Node.js, PHP, and Python. Learn more about App Service
Web + Mobile
Filter
Search Web + Mobile
SQL
Create
Web Apps
More
Web App
Microsoft
Web App + SQL
Microsoft
App Service Environment
Microsoft
PREVIEW
WordPress on Linux (preview)
WordPress
sitecore
Own the experience
Sitecore® Experience
Sitecore
VARNISH PLUS
Varnish Plus - Caching Engine 4
Varnish Software Inc

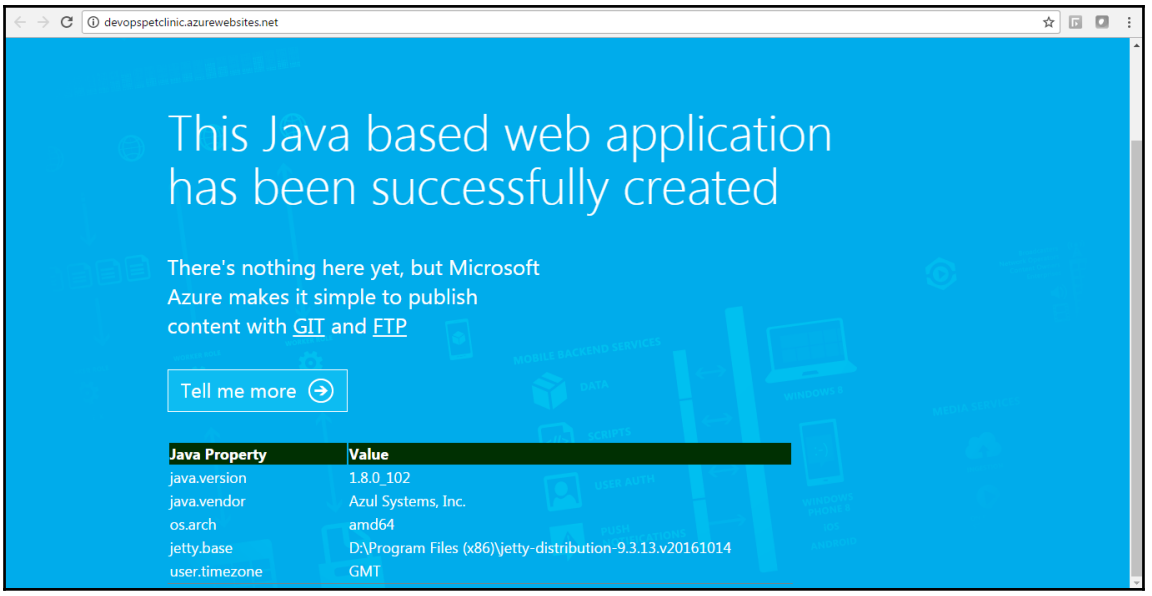

Microsoft Azure
App Services
Web + Mobile
Web App
Web App
Microsoft
Create and deploy web sites in seconds, as powerful as you need them
Leverage your existing tools to create and deploy applications without the hassle of managing infrastructure. Microsoft Azure Web Sites offers secure and flexible development, deployment, and scaling options for any sized web application. Use frameworks and templates to create web sites in seconds. Choose from source control options like TFS, GitHub, and BitBucket. Use any tool or OS to develop your site with .NET, PHP, Node.js or Python.
Fastest way to build for the cloud
Provision and deploy fast
Secure platform that scales automatically
Great experience for Visual Studio developers
Open and flexible for everyone
Monitor, alert, and auto scale (preview)
MyTestGroup
mytestsite8
Summary
Summary
Create

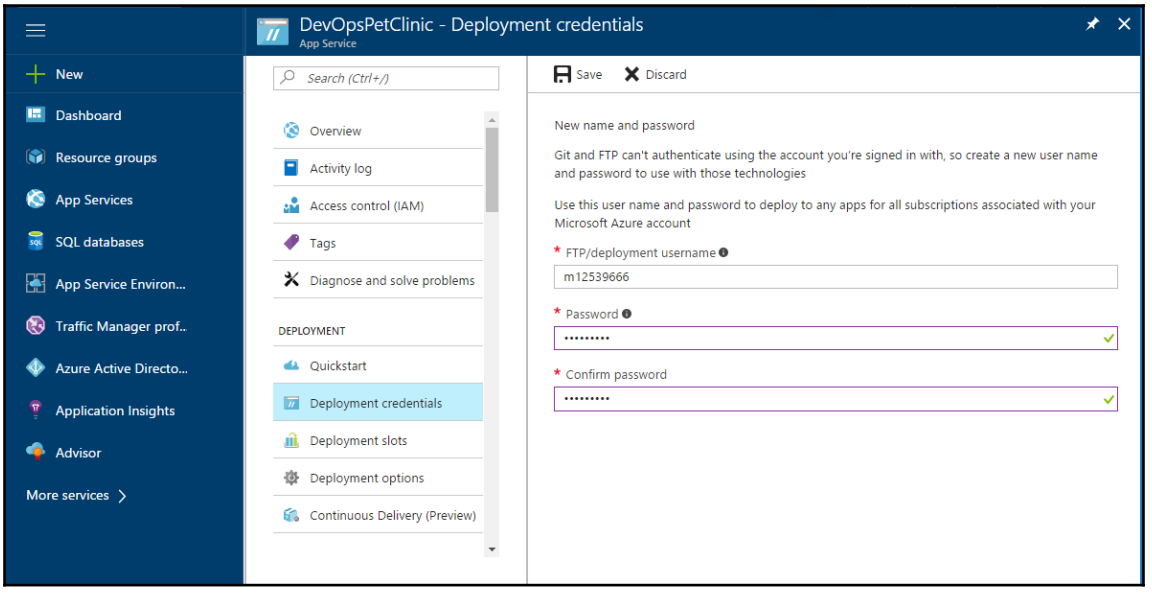

Microsoft Azure
App Services > Web + Mobile > Web App > Web App
Web App
Microsoft
Create and deploy web sites in seconds, as powerful as you need them
Leverage your existing tools to create and deploy applications without the hassle of managing infrastructure. Microsoft Azure Web Sites offers secure and flexible development, deployment, and scaling options for any sized web application. Use frameworks and templates to create web sites in seconds. Choose from source control options like TFS, GitHub, and BitBucket. Use any tool or OS to develop your site with .NET, PHP, Node.js or Python.
Fastest way to build for the cloud
Provision and deploy fast
Secure platform that scales automatically
Great experience for Visual Studio developers
Open and flexible for everyone
Monitor, alert, and auto scale (preview)
Create
Web App
Create
App name
DevOpsPetClinic
.azurewebsites.net
Subscription
Visual Studio Enterprise with MSDN
Resource Group
Create new
Use existing
DevOpsPetClinic
App Service plan/Location
ServicePlan5cff78bd-99a2(South ...
Application Insights
On
Off
Pin to dashboard
Create
Automation options

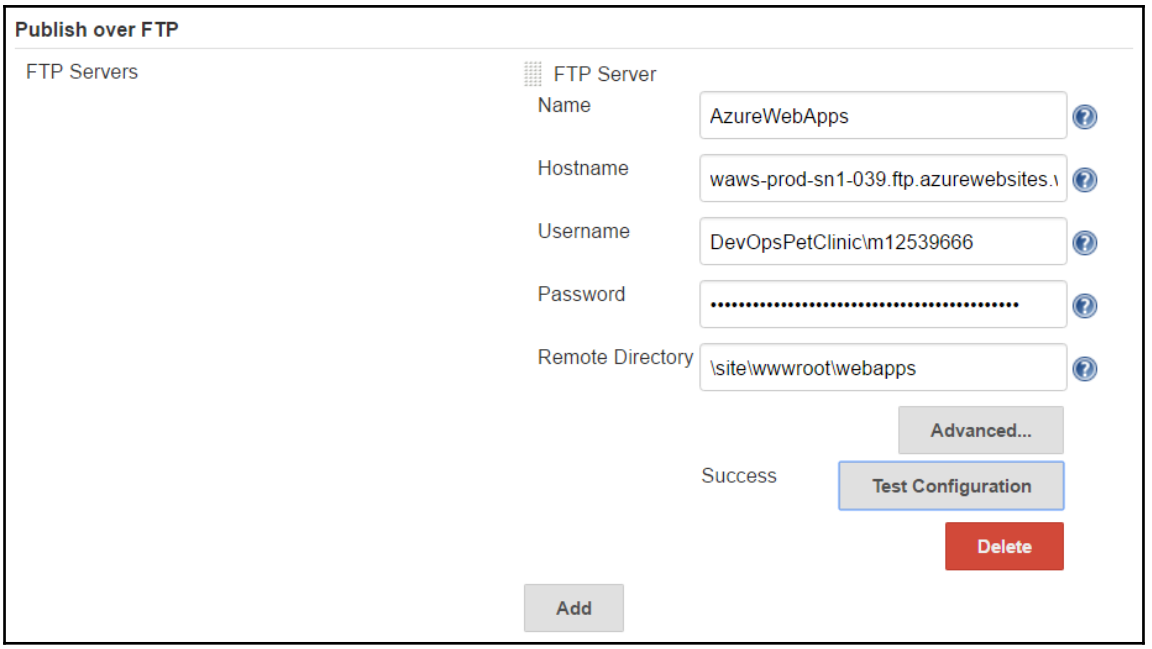

New
Dashboard
Resource groups
App Services
SQL databases
App Service Environ...
Traffic Manager prof..
Azure Active Directo...
Application Insights
Advisor
More services
DevOpsPetClinic
App Service
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
DEPLOYMENT
Quickstart
Deployment credentials
Deployment slots
Deployment options
Continuous Delivery (Preview)
Browse
Stop
Swap
Restart
Delete
More
Click here to access our Quickstart guide for deploying code to your app
Essentials
Resource group (change)
DevOpsPetClinic
Status
Running
Location
South Central US
Subscription name (change)
Visual Studio Enterprise with MSDN
Subscription ID
b88f4447-ad0e-44d4-a662-2eb5c950f091
URL
http://devopspetclinic.azurewebsites.net
App Service plan/pricing tier
ServicePlan5cff78bd-99a2 (Standard: 1 Sm...
FTP/deployment username
DevOpsPetClinic\m12539666
FTP hostname
ftp://waws-prod-sn1-123.ftp.azurewebsite...
FTPS hostname
ftps://waws-prod-sn1-123.ftp.azurewebsit...
Monitoring
Requests and errors
100
80
60

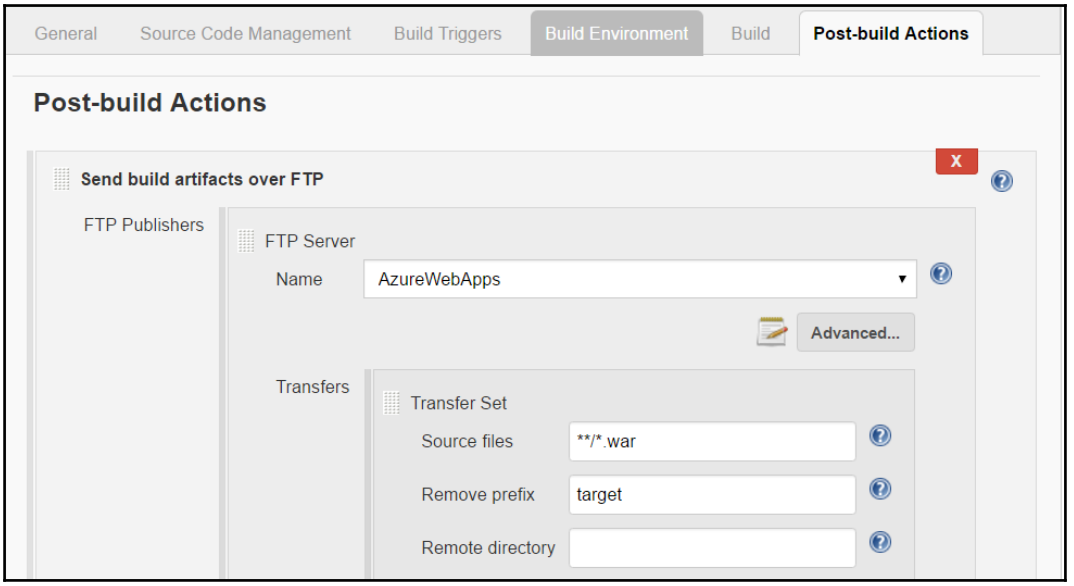

Microsoft Azure
App Services
mitesh.soni@outlook....
MITESHSONI83OUTLOOK (DEF..
App Services
miteshsoni83outlook (Default Directory)
New
Dashboard
Resource groups
App Services
SQL databases
App Service Environ...
Traffic Manager prof..
Azure Active Directo...
Application Insights
Advisor
More services
Add
Columns
Refresh
Subscriptions: Visual Studio Enterprise with MSDN – Don't see a subscription? Switch directories
Filter by name...
All locations
No grouping
1 items
NAME
STATUS
LOCATION
APP TYPE
APP SERVICE PLAN
DevOpsPetClinic
Running
South Central US
Web app
ServicePlan5cff78bd-...

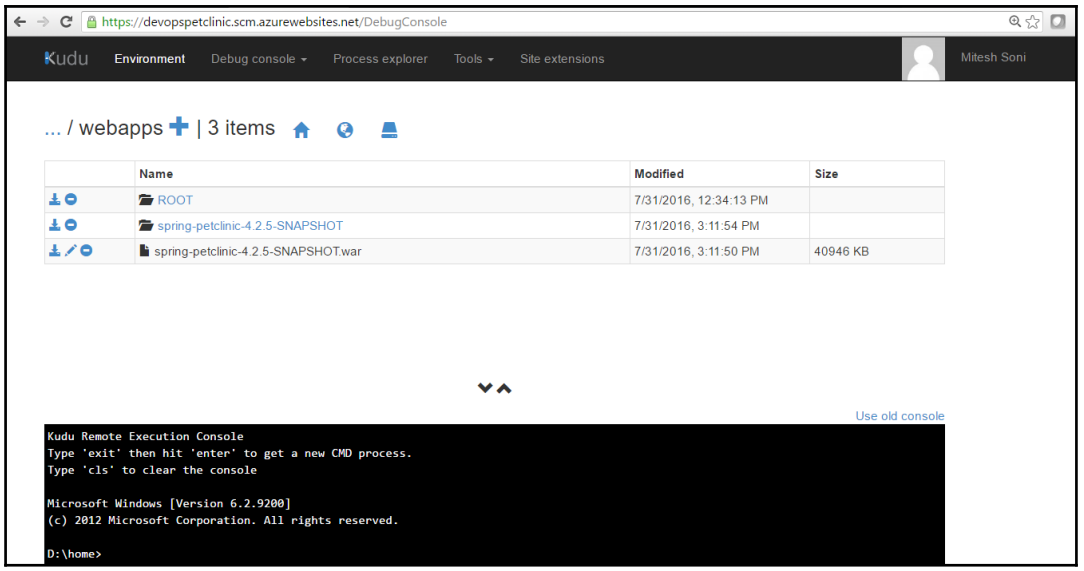

DevOpsPetClinic - Application settings
App Service
New
Dashboard
Resource groups
App Services
SQL databases
App Service Environ...
Traffic Manager prof..
Azure Active Directo...
Application Insights
Advisor
More services
Search (Ctrl+/)
Deployment options
Continuous Delivery (Preview)
SETTINGS
Application settings
Authentication / Authorization
Backups
Custom domains
SSL certificates
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Save
Discard
General settings
.NET Framework version
v4.6
PHP version
5.6
Java version
Java 8
Java Minor version
Newest
Web container
Newest Jetty 9.3
Python version
Off
Platform
32-bit
64-bit
Web sockets
Off
On
Always On
Off
On
Managed Pipeline Version
Integrated
Classic


devopspetclinic.azurewebsites.net
This Java based web application has been successfully created
There's nothing here yet, but Microsoft Azure makes it simple to publish content with GIT and FTP
Tell me more
Java Property
Value
java.version
1.8.0_102
java.vendor
Azul Systems, Inc.
os.arch
amd64
jetty.base
D:\Program Files (x86)\jetty-distribution-9.3.13.v20161014
user.timezone
GMT

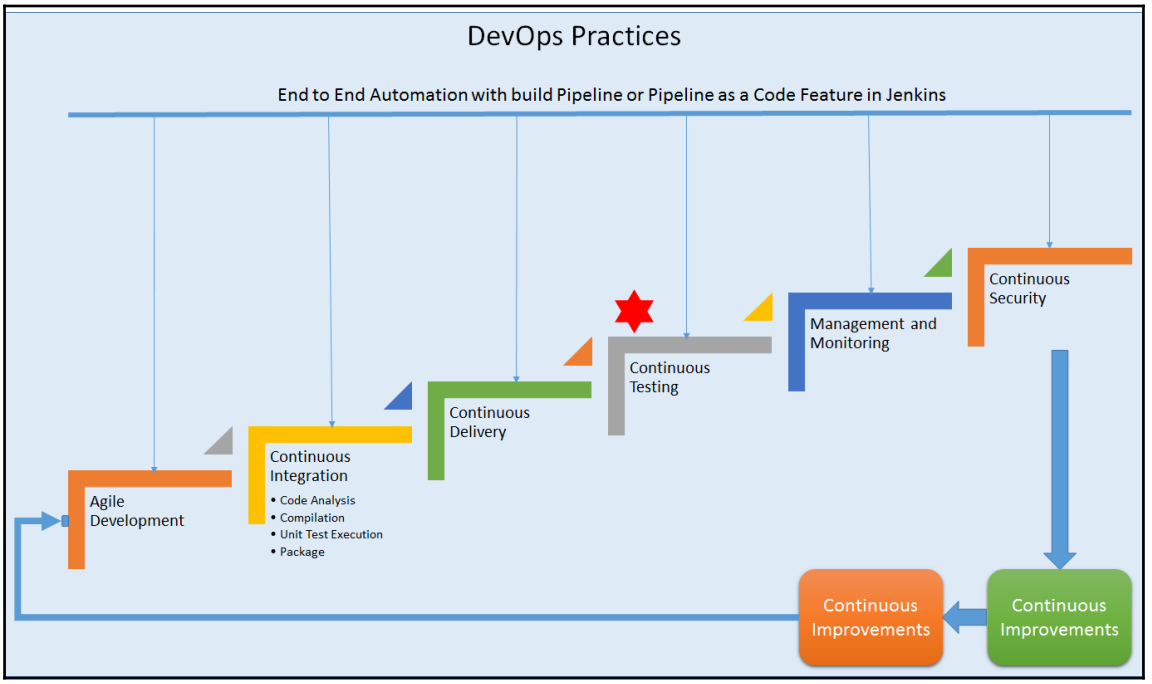

DevOpsPetClinic - Deployment credentials
App Service
New
Dashboard
Resource groups
App Services
SQL databases
App Service Environ...
Traffic Manager prof...
Azure Active Directo...
Application Insights
Advisor
More services
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
DEPLOYMENT
Quickstart
Deployment credentials
Deployment slots
Deployment options
Continuous Delivery (Preview)
Save
Discard
New name and password
Git and FTP can't authenticate using the account you're signed in with, so create a new user name and password to use with those technologies
Use this user name and password to deploy to any apps for all subscriptions associated with your Microsoft Azure account
* FTP/deployment username
m12539666
* Password
* Confirm password

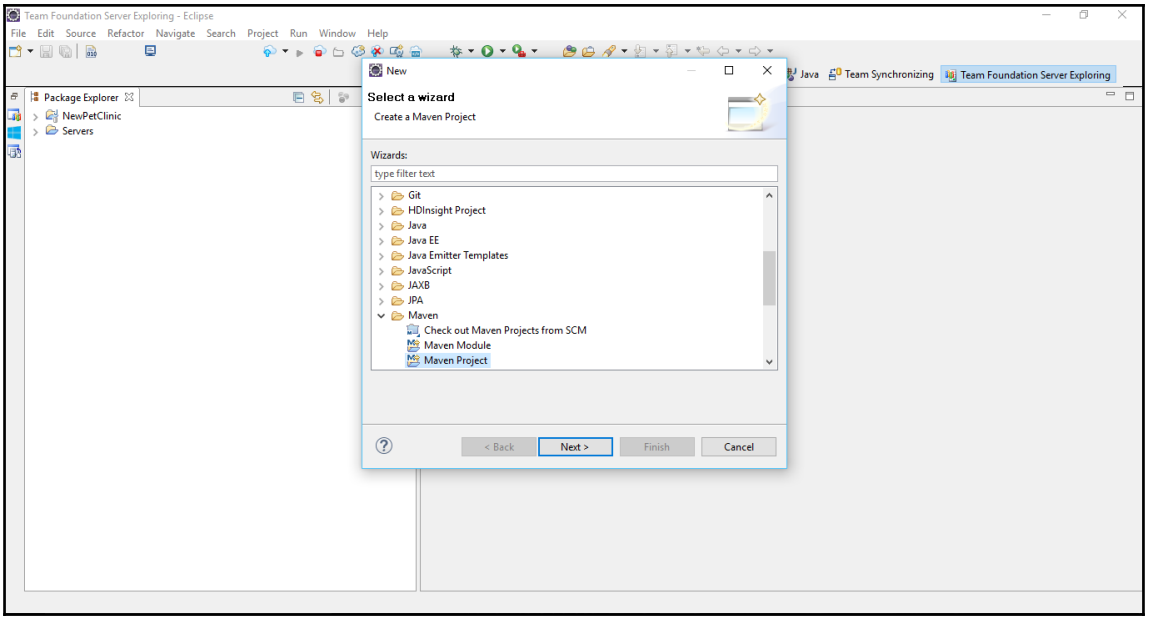

Publish over FTP
FTP Servers
FTP Server
Name
AzureWebApps
Hostname
waws-prod-sn1-039.ftp.azurewebsites.\
Username
DevOpsPetClinic\m12539666
Password
Remote Directory
\site\wwwroot\webapps
Advanced...
Success
Test Configuration
Delete
Add

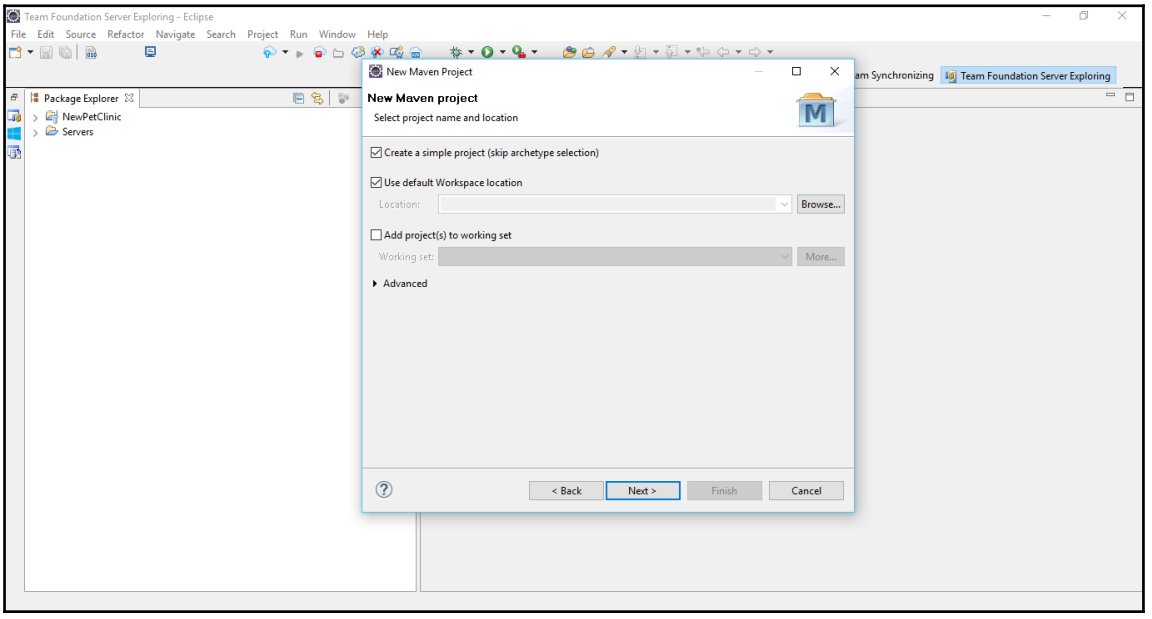

General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Post-build Actions
Send build artifacts over FTP
X
FTP Publishers
FTP Server
Name
AzureWebApps
Advanced...
Transfers
Transfer Set
Source files
**/*.war
Remove prefix
target
Remote directory

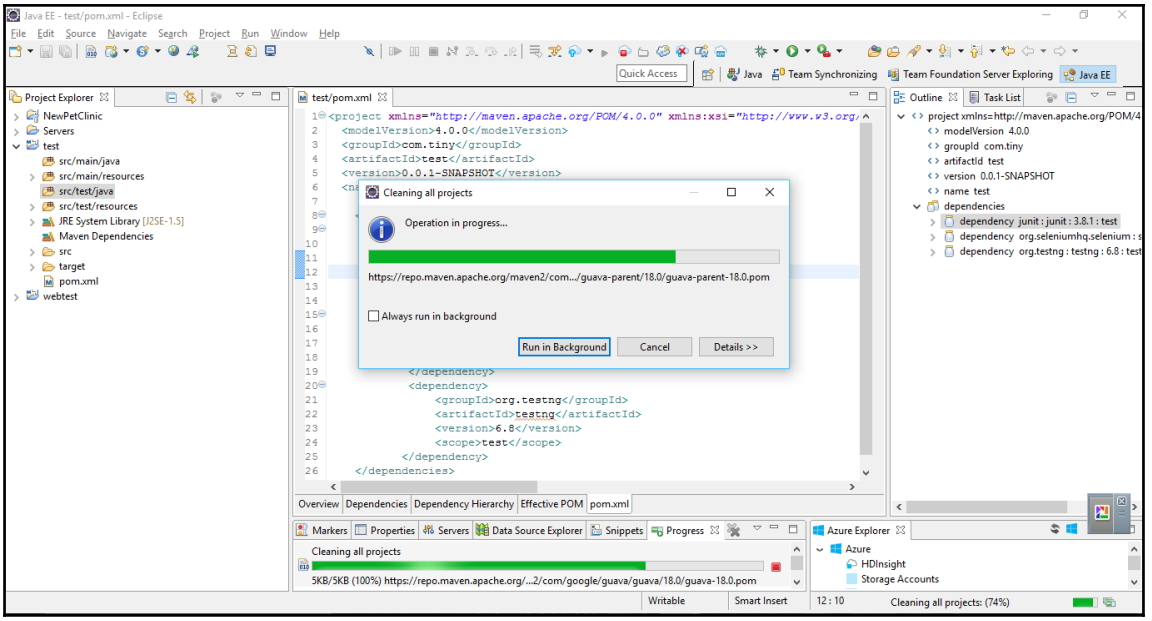

https://devopspetclinic.scm.azurewebsites.net/DebugConsole
Kudu
Environment
Debug console
Process explorer
Tools
Site extensions
Mitesh Soni
... / webapps | 3 items
Name
Modified
Size
ROOT
7/31/2016, 12:34:13 PM
spring-petclinic-4.2.5-SNAPSHOT
7/31/2016, 3:11:54 PM
spring-petclinic-4.2.5-SNAPSHOT.war
7/31/2016, 3:11:50 PM
40946 KB
Use old console
Kudu Remote Execution Console
Type 'exit' then hit 'enter' to get a new CMD process.
Type 'cls' to clear the console
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.
D:\home>

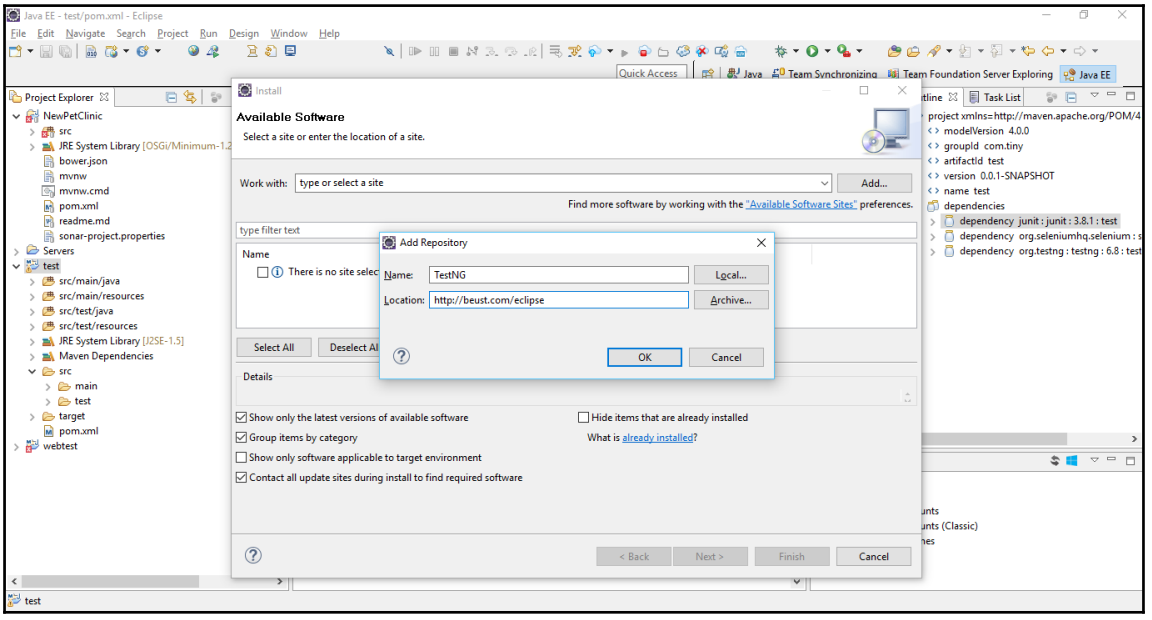
Chapter 06: Continuous Testing - Functional and Load Testing with Jenkins

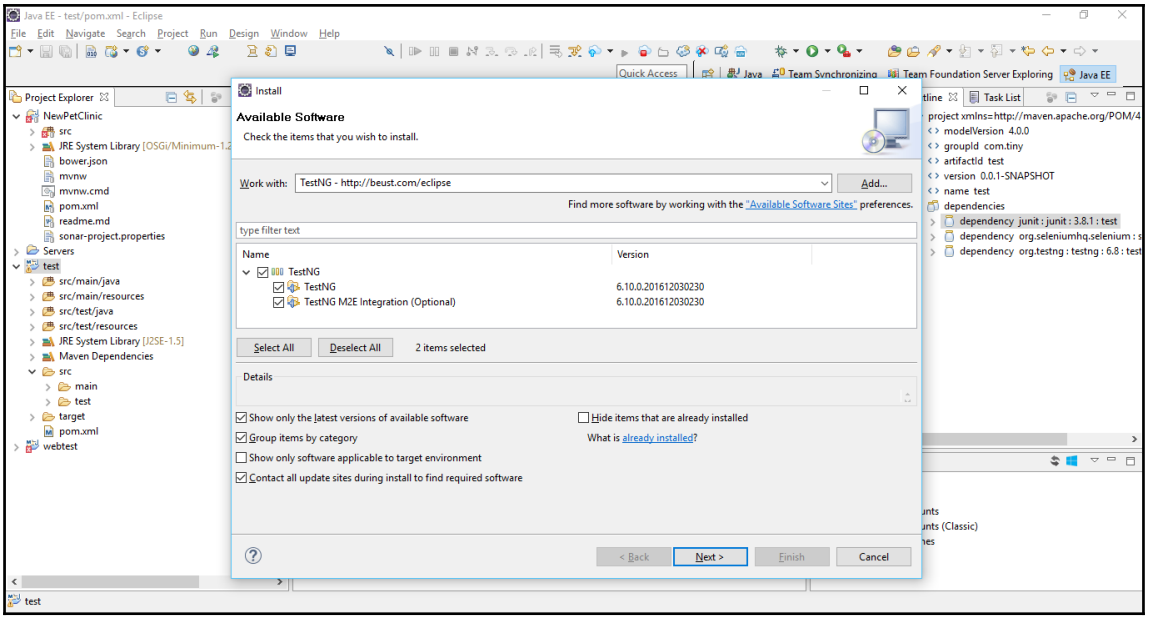


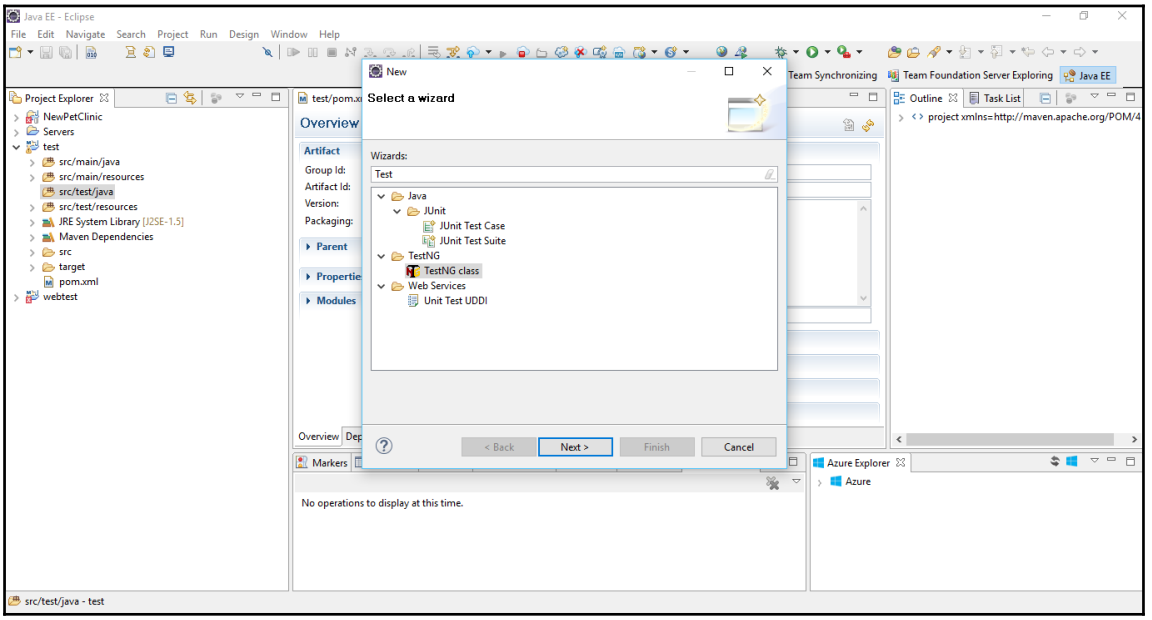

Team Foundation Server Exploring - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Java
Team Synchronizing
Team Foundation Server Exploring
Package Explorer
NewPetClinic
Servers
New
Select a wizard
Create a Maven Project
Wizards:
type filter text
Git
HDInsight Project
Java
Java EE
Java Emitter Templates
JavaScript
JAXB
JPA
Maven
Check out Maven Projects from SCM
Maven Module
Maven Project
< Back
Next >
Finish
Cancel

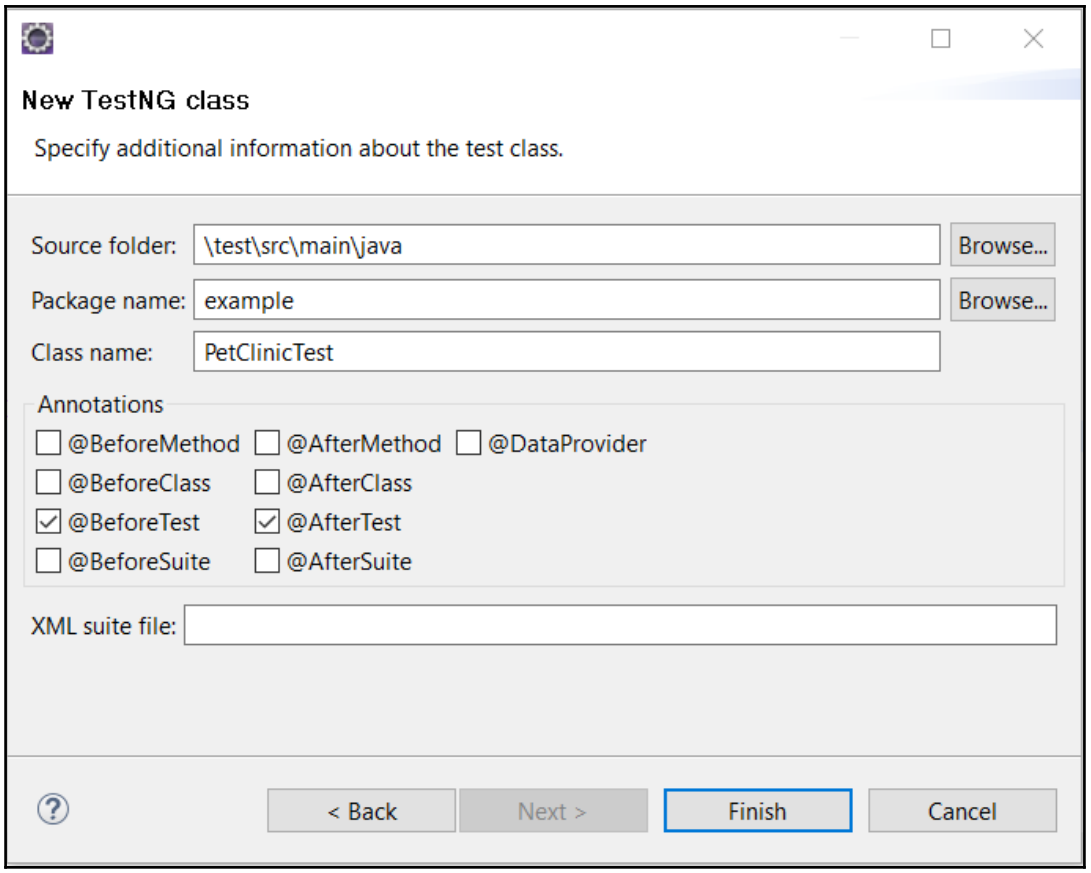

Team Foundation Server Exploring - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Team Synchronizing
Team Foundation Server Exploring
Package Explorer
NewPetClinic
Servers
New Maven Project
New Maven project
Select project name and location
Create a simple project (skip archetype selection)
Use default Workspace location
Location:
Browse...
Add project(s) to working set
Working set:
More...
Advanced
< Back
Next >
Finish
Cancel

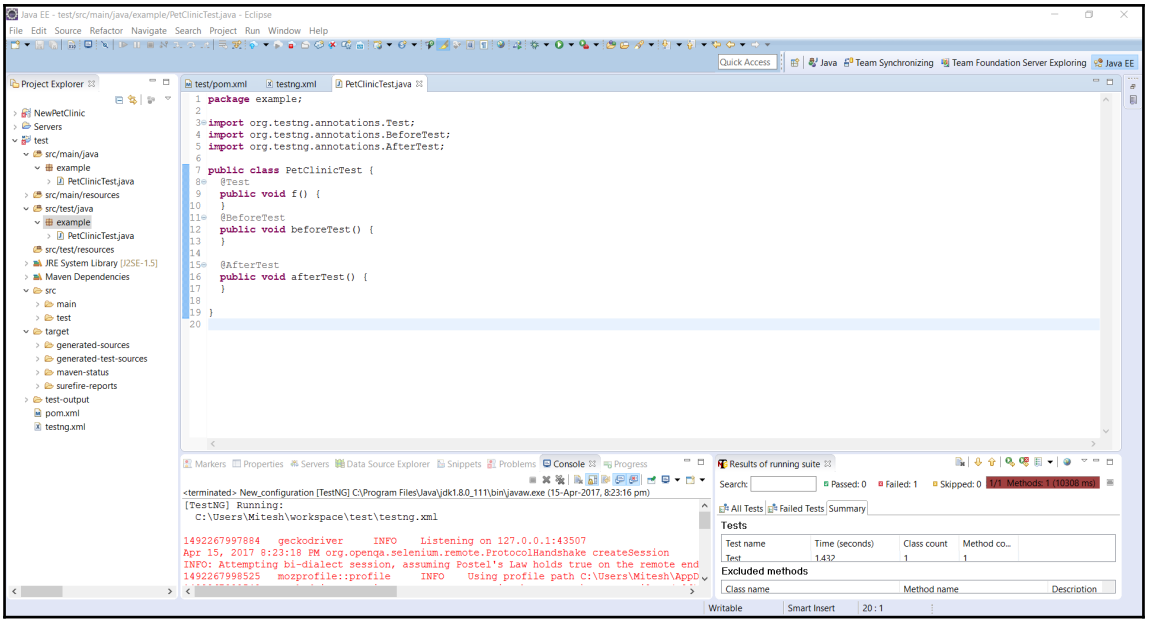

Java EE - test/pom.xml - Eclipse
File Edit Source Navigate Search Project Run Window Help
Project Explorer
NewPetClinic
Servers
test
src/main/java
src/main/resources
src/test/java
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
target
pom.xml
webtest
test/pom.xml
Cleaning all projects
Operation in progress...
https://repo.maven.apache.org/maven2/com.../guava-parent/18.0/guava-parent-18.0.pom
Always run in background
Run in Background
Cancel
Details >>
Outline
Task List
Overview
Dependencies
Dependency Hierarchy
Effective POM
pom.xml
Markers
Properties
Servers
Data Source Explorer
Snippets
Progress
Azure Explorer
Azure
HDInsight
Storage Accounts
Cleaning all projects
5KB/5KB (100%) https://repo.maven.apache.org/...2/com/google/guava/guava/18.0/guava-18.0.pom
Writable
Smart Insert
12 : 10
Cleaning all projects: (74%)

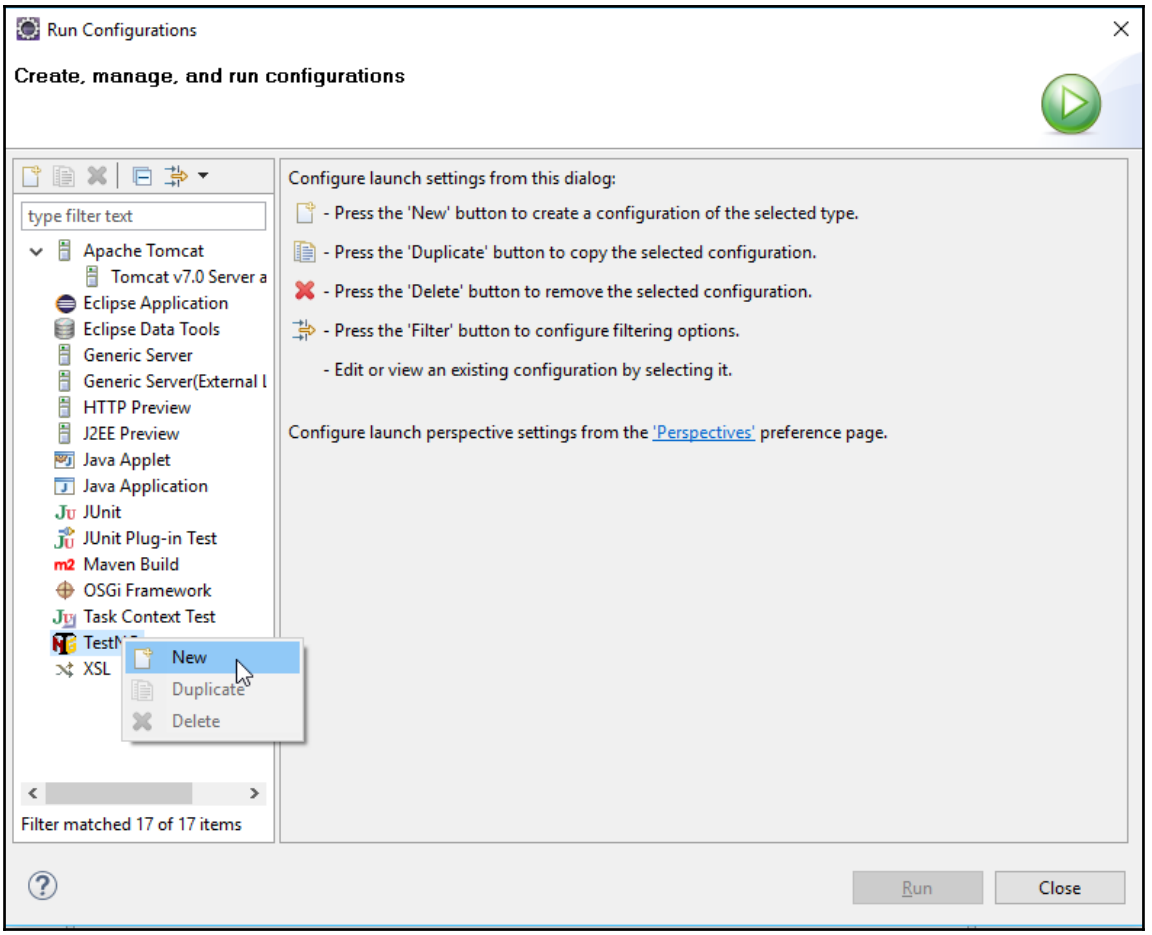

Java EE - test/pom.xml - Eclipse
Install
Available Software
Select a site or enter the location of a site.
Work with:
type or select a site
Add...
Find more software by working with the "Available Software Sites" preferences.
Add Repository
Name:
TestNG
Location:
http://beust.com/eclipse
Local...
Archive...
OK
Cancel
Select All
Deselect All
Details
Show only the latest versions of available software
Group items by category
Show only software applicable to target environment
Contact all update sites during install to find required software
Hide items that are already installed
What is already installed?
< Back
Next >
Finish
Cancel

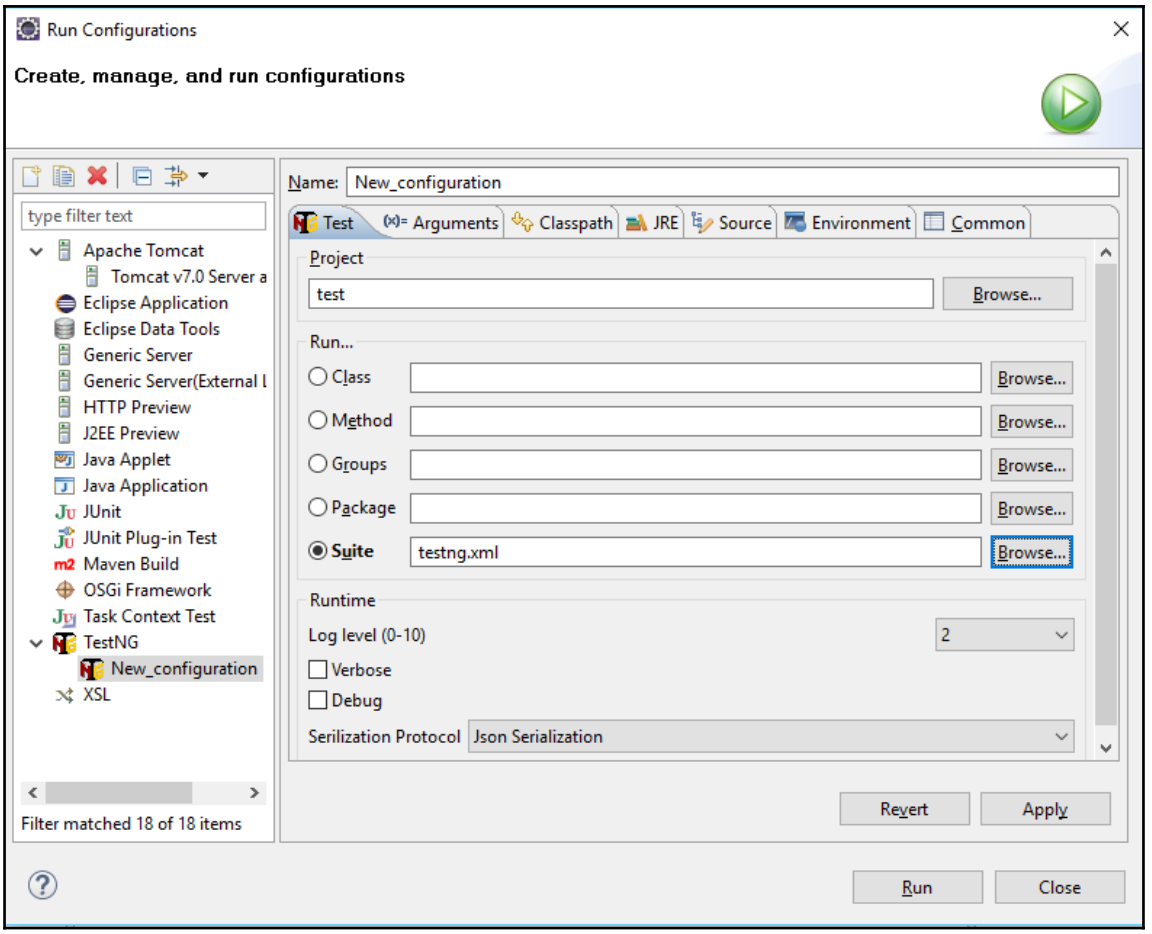

Java EE - test/pom.xml - Eclipse
File Edit Navigate Search Project Run Design Window Help
Project Explorer
NewPetClinic
src
JRE System Library [OSGi/Minimum-1.2
bower.json
mvnw
mvnw.cmd
pom.xml
readme.md
sonar-project.properties
Servers
test
src/main/java
src/main/resources
src/test/java
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
main
test
target
pom.xml
webtest
Install
Available Software
Check the items that you wish to install.
Work with: TestNG - http://beust.com/eclipse
Add...
Find more software by working with the "Available Software Sites" preferences.
type filter text
Name
Version
TestNG
TestNG 6.10.0.201612030230
TestNG M2E Integration (Optional) 6.10.0.201612030230
Select All
Deselect All
2 items selected
Details
Show only the latest versions of available software
Hide items that are already installed
Group items by category
What is already installed?
Show only software applicable to target environment
Contact all update sites during install to find required software
< Back
Next >
Finish
Cancel
Quick Access
Java
Team Synchronizing
Team Foundation Server Exploring
Java EE
Outline
Task List
project xmlns=http://maven.apache.org/POM/4
modelVersion 4.0.0
groupId com.tiny
artifactId test
version 0.0.1-SNAPSHOT
name test
dependencies
dependency junit : junit : 3.8.1 : test
dependency org.seleniumhq.selenium : s
dependency org.testng : testng : 6.8 : test
test

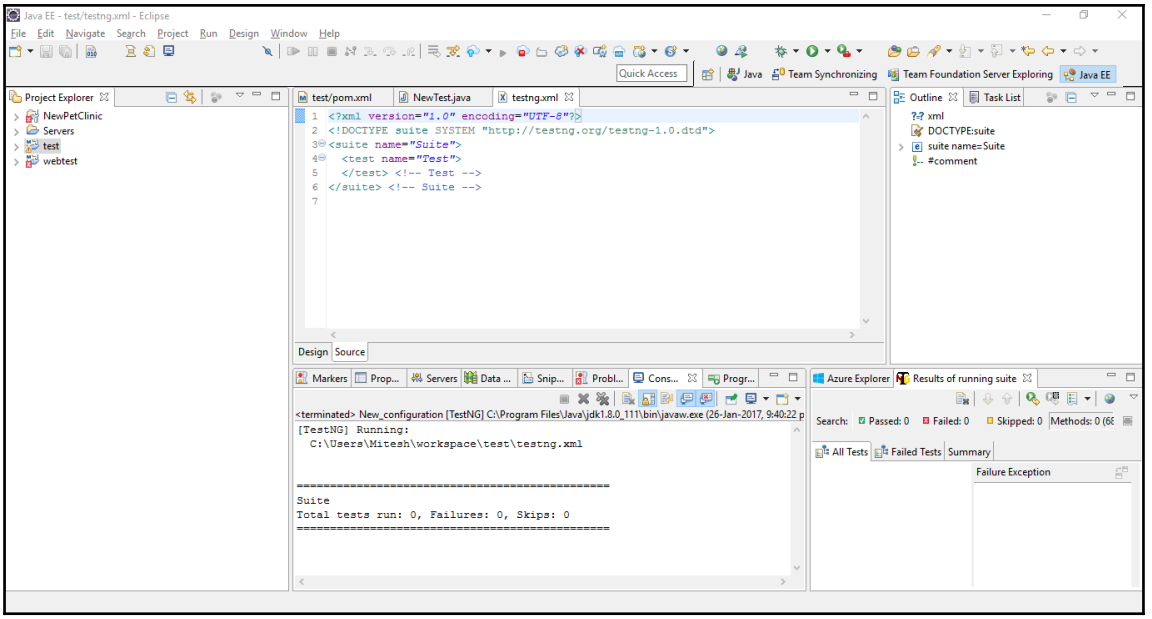

Java EE - Eclipse
File Edit Navigate Search Project Run Design Window Help
Project Explorer
NewPetClinic
Servers
test
src/main/java
src/main/resources
src/test/java
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
target
pom.xml
webtest
New
Select a wizard
Wizards:
Test
Java
JUnit
JUnit Test Case
JUnit Test Suite
TestNG
TestNG class
Web Services
Unit Test UDDI
< Back
Next >
Finish
Cancel
Overview
Artifact
Group Id:
Artifact Id:
Version:
Packaging:
Parent
Modules
Markers
No operations to display at this time.
Azure Explorer
Azure
Outline
Task List
project xmlns=http://maven.apache.org/POM/4
src/test/java - test

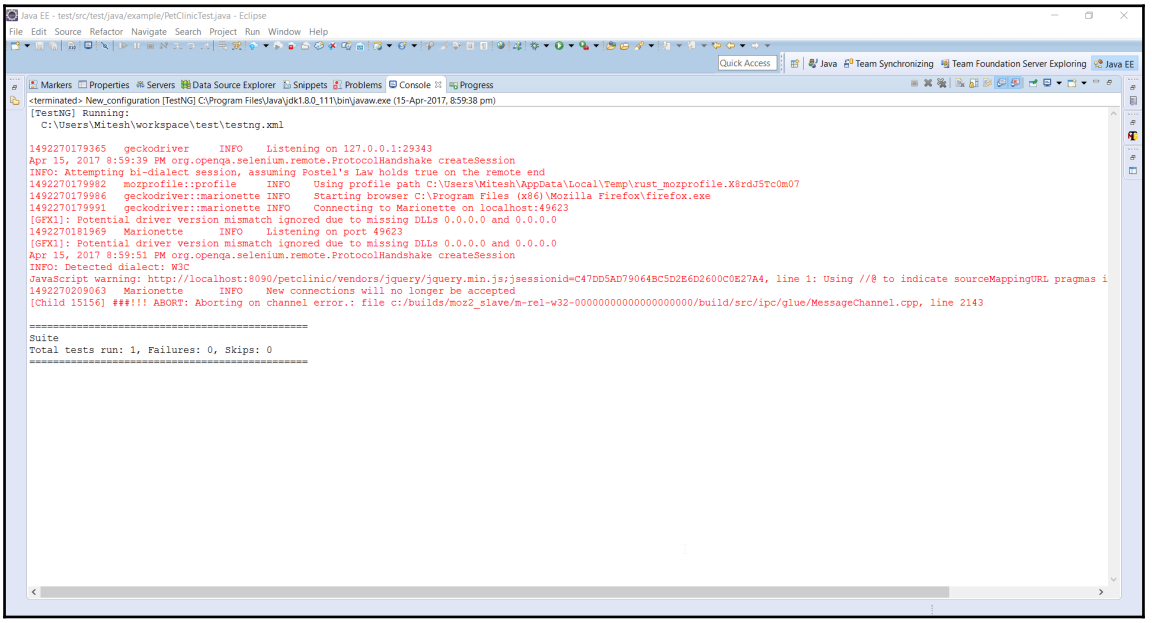

New TestNG class
Specify additional information about the test class.
Source folder:
\test\src\main\java
Browse...
Package name:
example
Browse...
Class name:
PetClinicTest
Annotations
@BeforeMethod
@AfterMethod
@DataProvider
@BeforeClass
@AfterClass
@BeforeTest
@AfterTest
@BeforeSuite
@AfterSuite
XML suite file:
< Back
Next >
Finish
Cancel

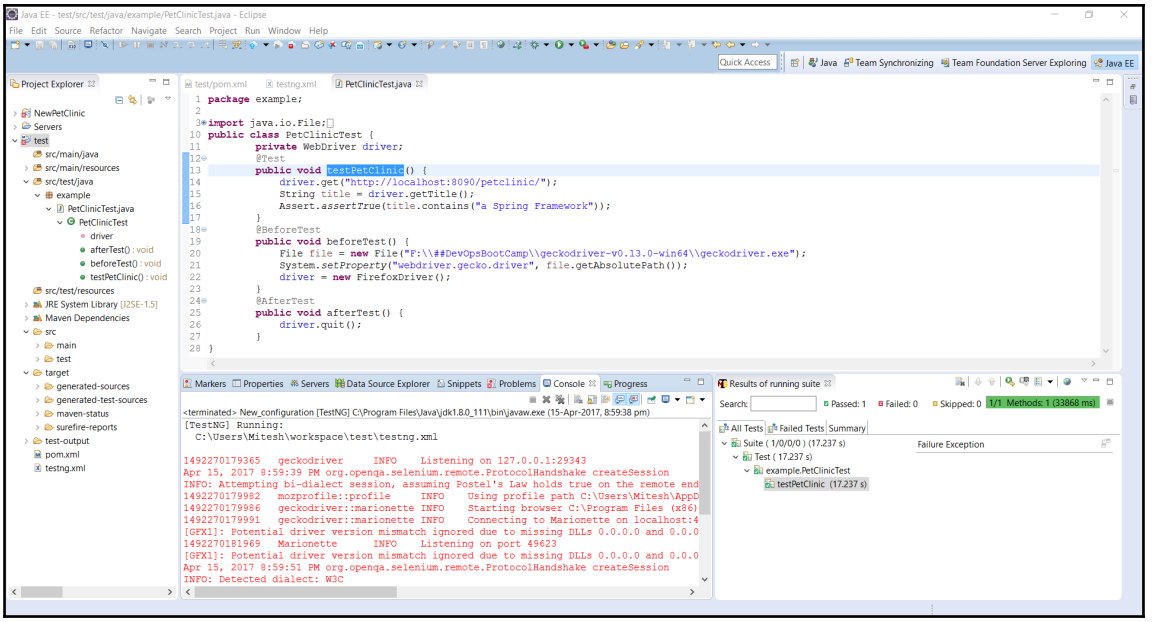

Java EE - test/src/main/java/example/PetClinicTest.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Java
Team Synchronizing
Team Foundation Server Exploring
Java EE
Project Explorer
NewPetClinic
Servers
test
src/main/java
example
PetClinicTest.java
src/main/resources
src/test/java
example
PetClinicTest.java
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
main
test
target
generated-sources
generated-test-sources
maven-status
surefire-reports
test-output
pom.xml
testng.xml
test/pom.xml
testng.xml
PetClinicTest.java
1 package example;
2
3 import org.testng.annotations.Test;
4 import org.testng.annotations.BeforeTest;
5 import org.testng.annotations.AfterTest;
6
7 public class PetClinicTest {
8 @Test
9 public void f() {
10 }
11 @BeforeTest
12 public void beforeTest() {
13 }
14
15 @AfterTest
16 public void afterTest() {
17 }
18
19 }
20
Markers
Properties
Servers
Data Source Explorer
Snippets
Problems
Console
Progress
<terminated> New_configuration [TestNG] C:\Program Files\Java\jdk1.8.0_111\bin\javaw.exe (15-Apr-2017, 8:23:16 pm)
[TestNG] Running:
C:\Users\Mitesh\workspace\test\testng.xml
1492267997884 geckodriver INFO Listening on 127.0.0.1:43507
Apr 15, 2017 8:23:18 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
1492267998525 mozprofile::profile INFO Using profile path C:\Users\Mitesh\AppD
Results of running suite
Search:
Passed: 0
Failed: 1
Skipped: 0
1/1 Methods: 1 (10308 ms)
All Tests
Failed Tests
Summary
Tests
Test name
Time (seconds)
Class count
Method co...
Test
1.432
1
1
Excluded methods
Class name
Method name
Description
Writable
Smart Insert
20 : 1

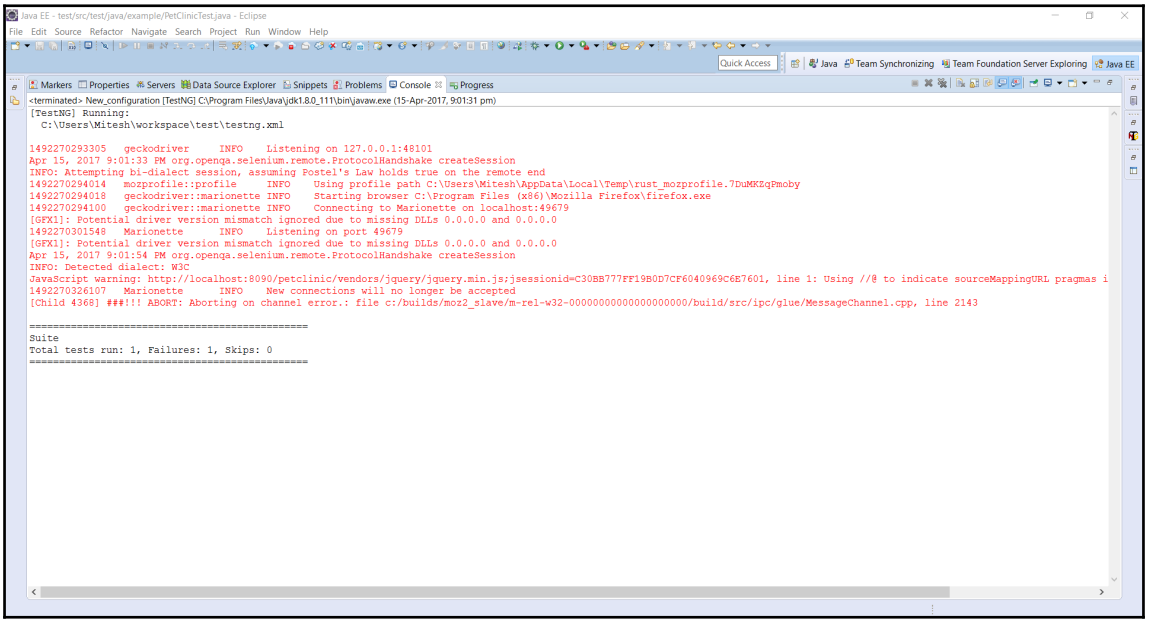

Run Configurations
Create, manage, and run configurations
type filter text
Apache Tomcat
Tomcat v7.0 Server a
Eclipse Application
Eclipse Data Tools
Generic Server
Generic Server(External l
HTTP Preview
J2EE Preview
Java Applet
Java Application
JUnit
JUnit Plug-in Test
Maven Build
OSGi Framework
Task Context Test
XSL
New
Duplicate
Delete
Filter matched 17 of 17 items
Configure launch settings from this dialog:
- Press the 'New' button to create a configuration of the selected type.
- Press the 'Duplicate' button to copy the selected configuration.
- Press the 'Delete' button to remove the selected configuration.
- Press the 'Filter' button to configure filtering options.
- Edit or view an existing configuration by selecting it.
Configure launch perspective settings from the 'Perspectives' preference page.
Run
Close

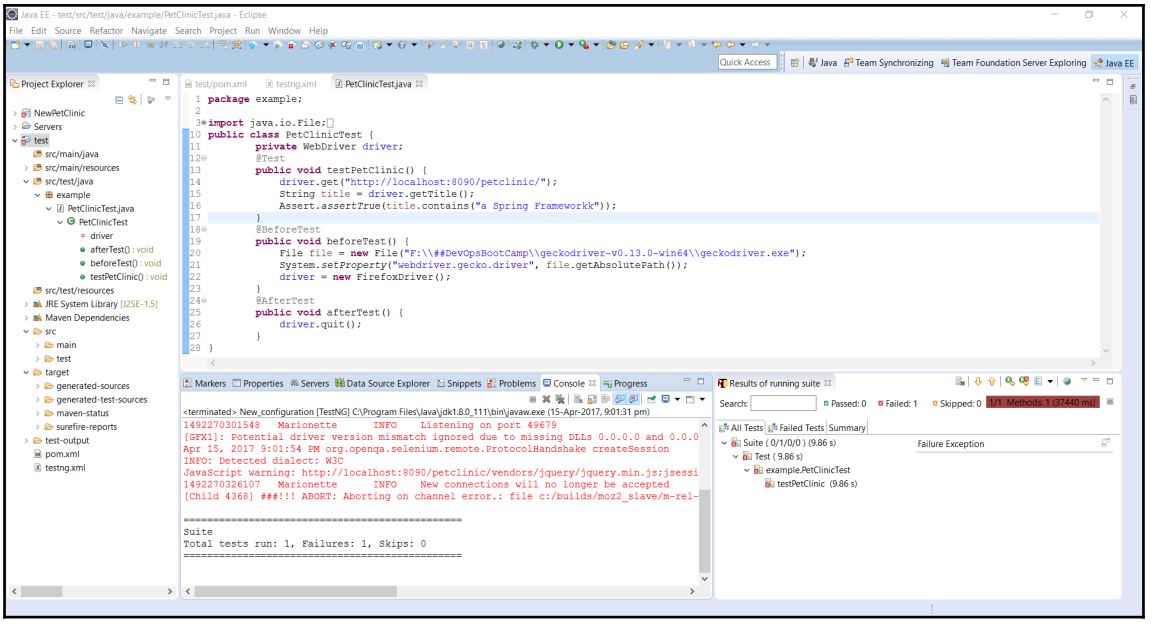

Run Configurations
Create, manage, and run configurations
type filter text
Apache Tomcat
Tomcat v7.0 Server a
Eclipse Application
Eclipse Data Tools
Generic Server
Generic Server(External l
HTTP Preview
J2EE Preview
Java Applet
Java Application
JUnit
JUnit Plug-in Test
Maven Build
OSGi Framework
Task Context Test
TestNG
New_configuration
XSL
Filter matched 18 of 18 items
Name: New_configuration
Test
Arguments
Classpath
JRE
Source
Environment
Common
Project
test
Browse...
Run...
Class
Method
Groups
Package
Suite
testng.xml
Runtime
Log level (0-10)
2
Verbose
Debug
Serilization Protocol
Json Serialization
Revert
Apply
Run
Close

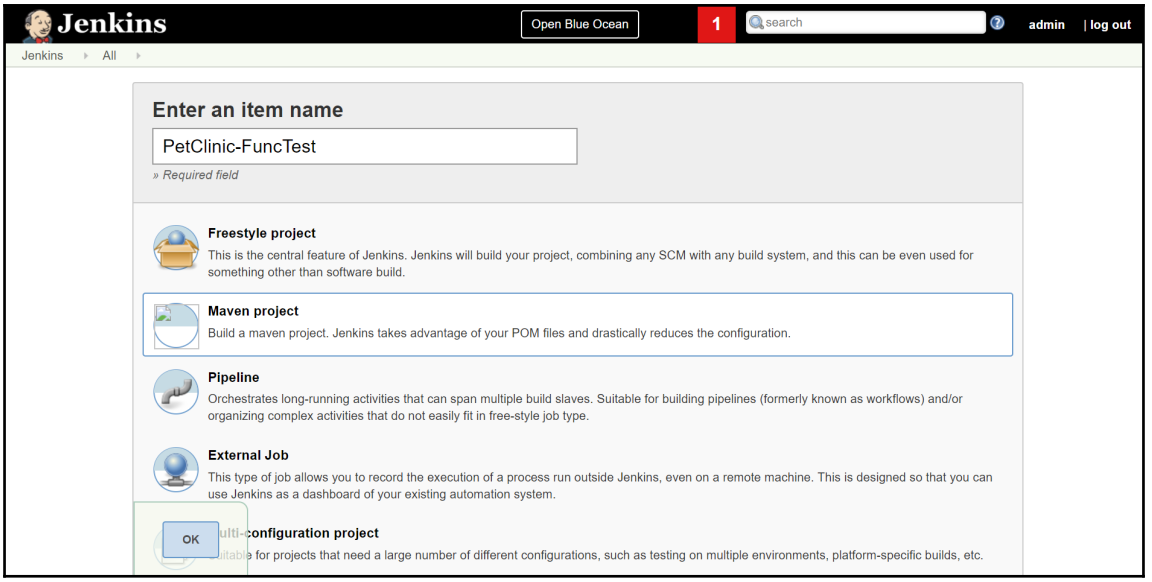

Java EE - test/testng.xml - Eclipse
File Edit Navigate Search Project Run Design Window Help
Quick Access
Java
Team Synchronizing
Team Foundation Server Exploring
Java EE
Project Explorer
NewPetClinic
Servers
test
webtest
test/pom.xml
NewTest.java
testng.xml
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
3 <suite name="Suite">
4 <test name="Test">
5 </test> <!-- Test -->
6 </suite> <!-- Suite -->
7
Design
Source
Outline
Task List
xml
DOCTYPE:suite
suite name=Suite
#comment
Markers
Prop...
Servers
Data ...
Snip...
Probl...
Cons...
Progr...
<terminated> New_configuration [TestNG] C:\Program Files\Java\jdk1.8.0_111\bin\javaw.exe (26-Jan-2017, 9:40:22 p
[TestNG] Running:
C:\Users\Mitesh\workspace\test\testng.xml
Suite
Total tests run: 0, Failures: 0, Skips: 0
Azure Explorer
Results of running suite
Search:
Passed: 0
Failed: 0
Skipped: 0
Methods: 0 (6
All Tests
Failed Tests
Summary
Failure Exception

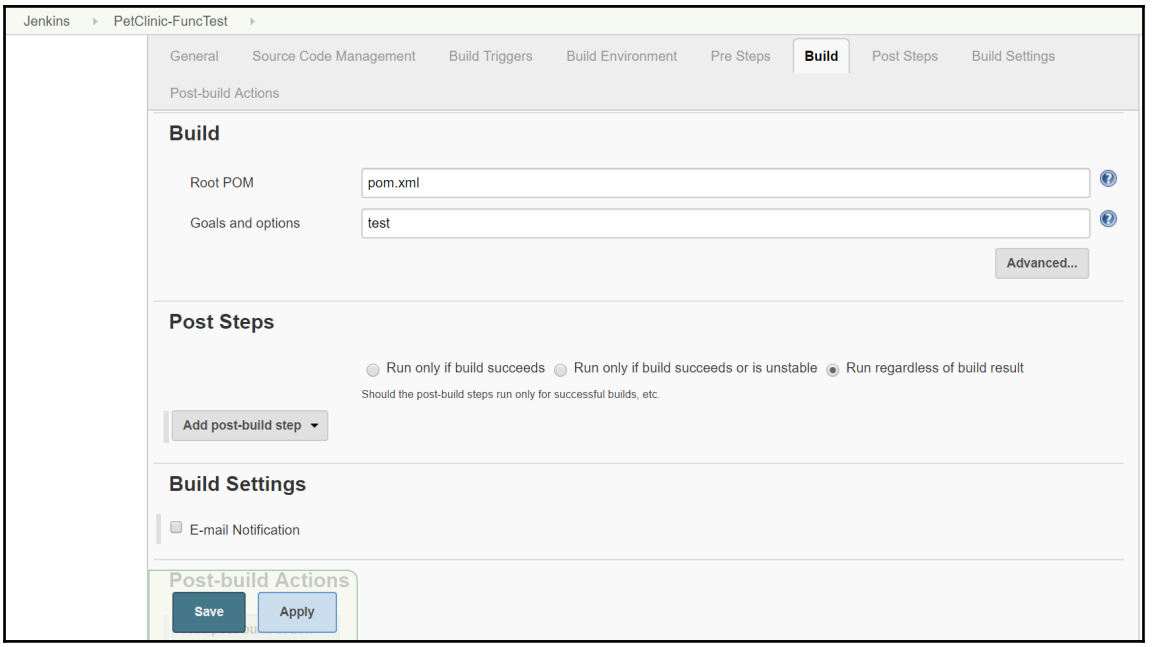

Java EE - test/src/test/java/example/PetClinicTest.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Java
Team Synchronizing
Team Foundation Server Exploring
Java EE
Markers
Properties
Servers
Data Source Explorer
Snippets
Problems
Console
Progress
<terminated> New_configuration [TestNG] C:\Program Files\Java\jdk1.8.0_111\bin\javaw.exe (15-Apr-2017, 8:59:38 pm)
[TestNG] Running:
C:\Users\Mitesh\workspace\test\testng.xml
1492270179365 geckodriver INFO Listening on 127.0.0.1:29343
Apr 15, 2017 8:59:39 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
1492270179982 mozprofile::profile INFO Using profile path C:\Users\Mitesh\AppData\Local\Temp\rust_mozprofile.X8rdJ5Tc0m07
1492270179986 geckodriver::marionette INFO Starting browser C:\Program Files (x86)\Mozilla Firefox\firefox.exe
1492270179991 geckodriver::marionette INFO Connecting to Marionette on localhost:49623
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0.0
1492270181969 Marionette INFO Listening on port 49623
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0.0
Apr 15, 2017 8:59:51 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
JavaScript warning: http://localhost:8090/petclinic/vendors/jquery/jquery.min.js;jsessionid=C47DD5AD79064BC5D2E6D2600C0E27A4, line 1: Using //@ to indicate sourceMappingURL pragmas i
1492270209063 Marionette INFO New connections will no longer be accepted
[Child 15156] ###!!! ABORT: Aborting on channel error.: file c:/builds/moz2_slave/m-rel-w32-0000000000000000000/build/src/ipc/glue/MessageChannel.cpp, line 2143
Suite
Total tests run: 1, Failures: 0, Skips: 0


Java EE - test/src/test/java/example/PetClinicTest.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
NewPetClinic
Servers
test
src/main/java
src/main/resources
src/test/java
example
PetClinicTest.java
PetClinicTest
driver
afterTest() : void
beforeTest() : void
testPetClinic() : void
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
main
test
target
generated-sources
generated-test-sources
maven-status
surefire-reports
test-output
pom.xml
testng.xml
test/pom.xml
testng.xml
PetClinicTest.java
package example;
import java.io.File;
public class PetClinicTest {
private WebDriver driver;
@Test
public void testPetClinic() {
driver.get("http://localhost:8090/petclinic/");
String title = driver.getTitle();
Assert.assertTrue(title.contains("a Spring Framework"));
}
@BeforeTest
public void beforeTest() {
File file = new File("F:\\##DevOpsBootCamp\\geckodriver-v0.13.0-win64\\geckodriver.exe");
System.setProperty("webdriver.gecko.driver", file.getAbsolutePath());
driver = new FirefoxDriver();
}
@AfterTest
public void afterTest() {
driver.quit();
}
}
Markers Properties Servers Data Source Explorer Snippets Problems Console Progress
<terminated> New_configuration [TestNG] C:\Program Files\Java\jdk1.8.0_111\bin\javaw.exe (15-Apr-2017, 8:59:38 pm)
[TestNG] Running:
C:\Users\Mitesh\workspace\test\testng.xml
1492270179365 geckodriver INFO Listening on 127.0.0.1:29343
Apr 15, 2017 8:59:39 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
1492270179982 mozprofile::profile INFO Using profile path C:\Users\Mitesh\AppD
1492270179986 geckodriver::marionette INFO Starting browser C:\Program Files (x86)
1492270179991 geckodriver::marionette INFO Connecting to Marionette on localhost:4
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0
1492270181969 Marionette INFO Listening on port 49623
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0
Apr 15, 2017 8:59:51 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
Results of running suite
Search:
Passed: 1
Failed: 0
Skipped: 0
1/1 Methods: 1 (33868 ms)
All Tests
Failed Tests
Summary
Suite (1/0/0/0) (17.237 s)
Test (17.237 s)
example.PetClinicTest
testPetClinic (17.237 s)
Failure Exception

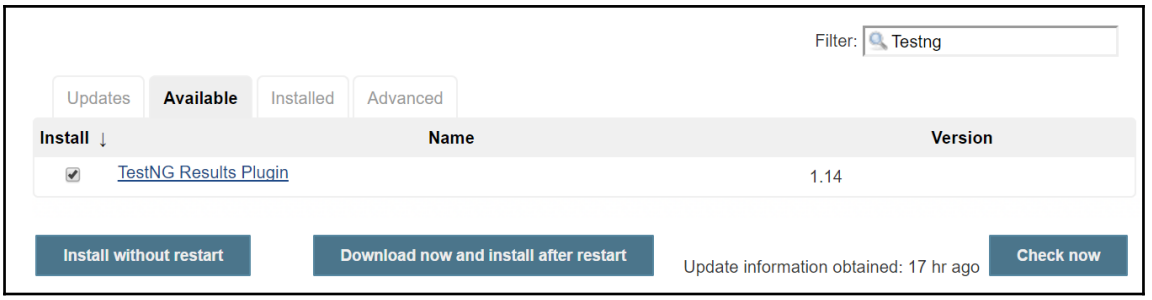

Java EE - test/src/test/java/example/PetClinicTest.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Markers Properties Servers Data Source Explorer Snippets Problems Console Progress
<terminated> New_configuration [TestNG] C:\Program Files\Java\jdk1.8.0_111\bin\javaw.exe (15-Apr-2017, 9:01:31 pm)
[TestNG] Running:
C:\Users\Mitesh\workspace\test\testng.xml
1492270293305 geckodriver INFO Listening on 127.0.0.1:48101
Apr 15, 2017 9:01:33 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
1492270294014 mozprofile::profile INFO Using profile path C:\Users\Mitesh\AppData\Local\Temp\rust_mozprofile.7DuMKZqPmoby
1492270294018 geckodriver::marionette INFO Starting browser C:\Program Files (x86)\Mozilla Firefox\firefox.exe
1492270294100 geckodriver::marionette INFO Connecting to Marionette on localhost:49679
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0.0
1492270301548 Marionette INFO Listening on port 49679
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0.0
Apr 15, 2017 9:01:54 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
JavaScript warning: http://localhost:8090/petclinic/vendors/jquery/jquery.min.js;jsessionid=C30BB777FF19B0D7CF6040969C6E7601, line 1: Using //@ to indicate sourceMappingURL pragmas i
1492270326107 Marionette INFO New connections will no longer be accepted
[Child 4368] ###!!! ABORT: Aborting on channel error.: file c:/builds/moz2_slave/m-rel-w32-0000000000000000000/build/src/ipc/glue/MessageChannel.cpp, line 2143
Suite
Total tests run: 1, Failures: 1, Skips: 0

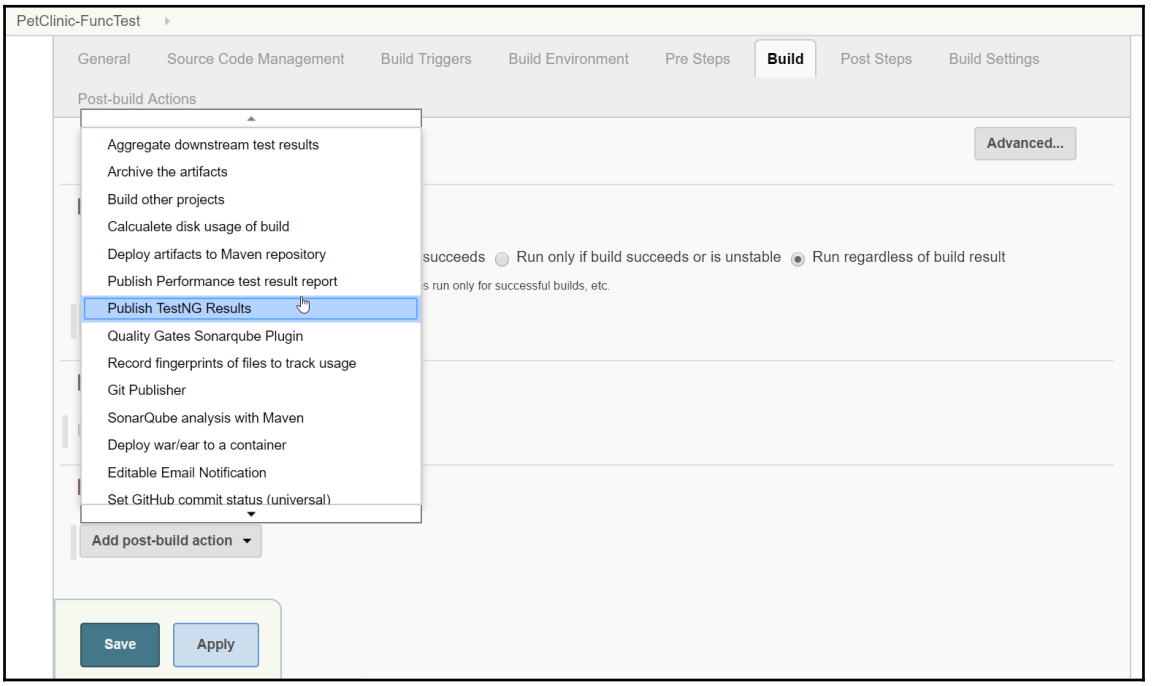

Java EE - test/src/test/java/example/PetClinicTest.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
NewPetClinic
Servers
test
src/main/java
src/main/resources
src/test/java
example
PetClinicTest.java
PetClinicTest
driver
afterTest() : void
beforeTest() : void
testPetClinic() : void
src/test/resources
JRE System Library [J2SE-1.5]
Maven Dependencies
src
main
test
target
generated-sources
generated-test-sources
maven-status
surefire-reports
test-output
pom.xml
testng.xml
test/pom.xml
testng.xml
PetClinicTest.java
1 package example;
3 import java.io.File;
10 public class PetClinicTest {
11 private WebDriver driver;
12 @Test
13 public void testPetClinic() {
14 driver.get("http://localhost:8090/petclinic/");
15 String title = driver.getTitle();
16 Assert.assertTrue(title.contains("a Spring Frameworkk"));
17 }
18 @BeforeTest
19 public void beforeTest() {
20 File file = new File("F:\\##DevOpsBootCamp\\geckodriver-v0.13.0-win64\\geckodriver.exe");
21 System.setProperty("webdriver.gecko.driver", file.getAbsolutePath());
22 driver = new FirefoxDriver();
23 }
24 @AfterTest
25 public void afterTest() {
26 driver.quit();
27 }
28 }
Markers Properties Servers Data Source Explorer Snippets Problems Console Progress
<terminated> New_configuration [TestNG] C:\Program Files\Java\jdk1.8.0_111\bin\javaw.exe (15-Apr-2017, 9:01:31 pm)
1492270301548 Marionette INFO Listening on port 49679
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0
Apr 15, 2017 9:01:54 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
JavaScript warning: http://localhost:8090/petclinic/vendors/jquery/jquery.min.js;jsessi
1492270326107 Marionette INFO New connections will no longer be accepted
[Child 4368] ###!!! ABORT: Aborting on channel error.: file c:/builds/moz2_slave/m-rel-
Suite
Total tests run: 1, Failures: 1, Skips: 0
Results of running suite
Search:
Passed: 0
Failed: 1
Skipped: 0
1/1 Methods: 1 (37440 ms)
All Tests
Failed Tests
Summary
Suite (0/1/0/0) (9.86 s)
Test (9.86 s)
example.PetClinicTest
testPetClinic (9.86 s)
Failure Exception


Jenkins
Open Blue Ocean
1
search
admin
log out
Jenkins
All
Enter an item name
PetClinic-FuncTest
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK
configuration project
for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

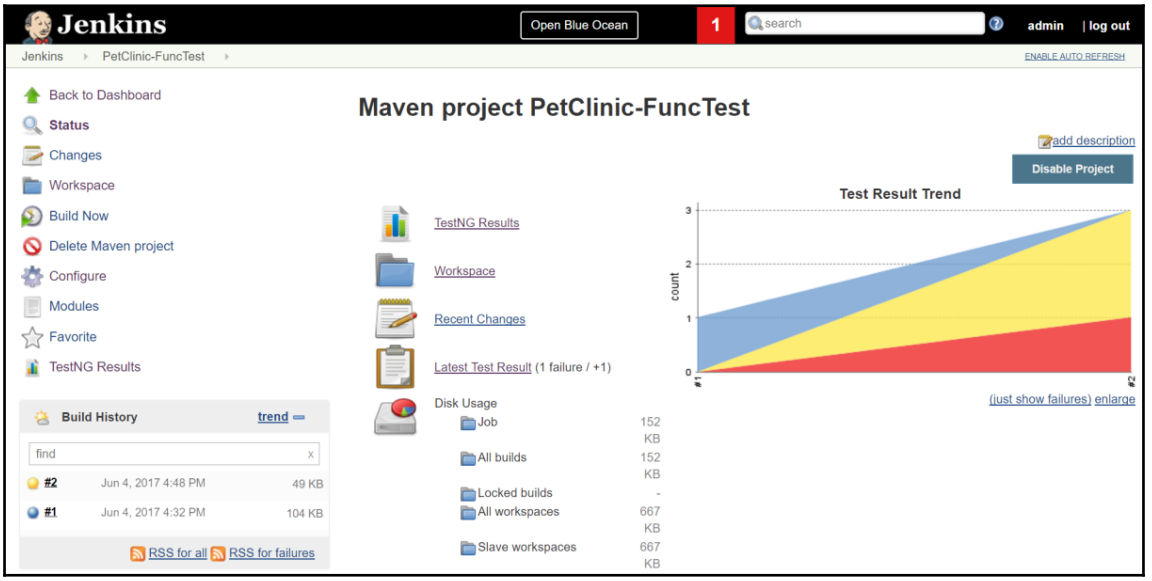



```
-------------------------------------------------------
 T E S T S
-------------------------------------------------------
Running TestSuite
1496574254522   geckodriver     INFO    Listening on 127.0.0.1:6486
Jun 04, 2017 4:34:14 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
1496574255134   mozprofile::profile     INFO    Using profile path
C:\Users\Mitesh\AppData\Local\Temp\rust_mozprofile.t3uOSiy56Onn
1496574255138   geckodriver::marionette INFO    Starting browser C:\Program Files (x86)\Mozilla Firefox\firefox.exe
1496574255175   geckodriver::marionette INFO    Connecting to Marionette on localhost:60430
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0.0
[GFX1]: Potential driver version mismatch ignored due to missing DLLs 0.0.0.0 and 0.0.0.0
1496574288578   Marionette      INFO    Listening on port 60430
Jun 04, 2017 4:34:49 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
JavaScript warning:
http://localhost:8090/petclinic/vendors/jquery/jquery.min.js;jsessionid=884F4251137D820A5723530BAA688915, line 1:
Using //@ to indicate sourceMappingURL pragmas is deprecated. Use //# instead
>>>>>>PetClinic :: a Spring Framework demonstration
1496574305189   Marionette      INFO    New connections will no longer be accepted
Jun 04, 2017 4:35:12 PM org.openqa.selenium.os.UnixProcess destroy
SEVERE: Unable to kill process with PID 10376
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 69.499 sec - in TestSuite
Results :

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
```


Filter: Testng
Updates
Available
Installed
Advanced
Install
Name
Version
TestNG Results Plugin
1.14
Install without restart
Download now and install after restart
Update information obtained: 17 hr ago
Check now


PetClinic-FuncTest
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Aggregate downstream test results
Archive the artifacts
Build other projects
Calculalete disk usage of build
Deploy artifacts to Maven repository
Publish Performance test result report
Publish TestNG Results
Quality Gates Sonarqube Plugin
Record fingerprints of files to track usage
Git Publisher
SonarQube analysis with Maven
Deploy war/ear to a container
Editable Email Notification
Set GitHub commit status (universal)
Advanced...
succeeds
Run only if build succeeds or is unstable
Run regardless of build result
s run only for successful builds, etc.
Add post-build action
Save
Apply

Post-build Actions
Publish TestNG Results
X
TestNG XML report pattern
**/testng-results.xml
Advanced...
Add post-build action
Save
Apply

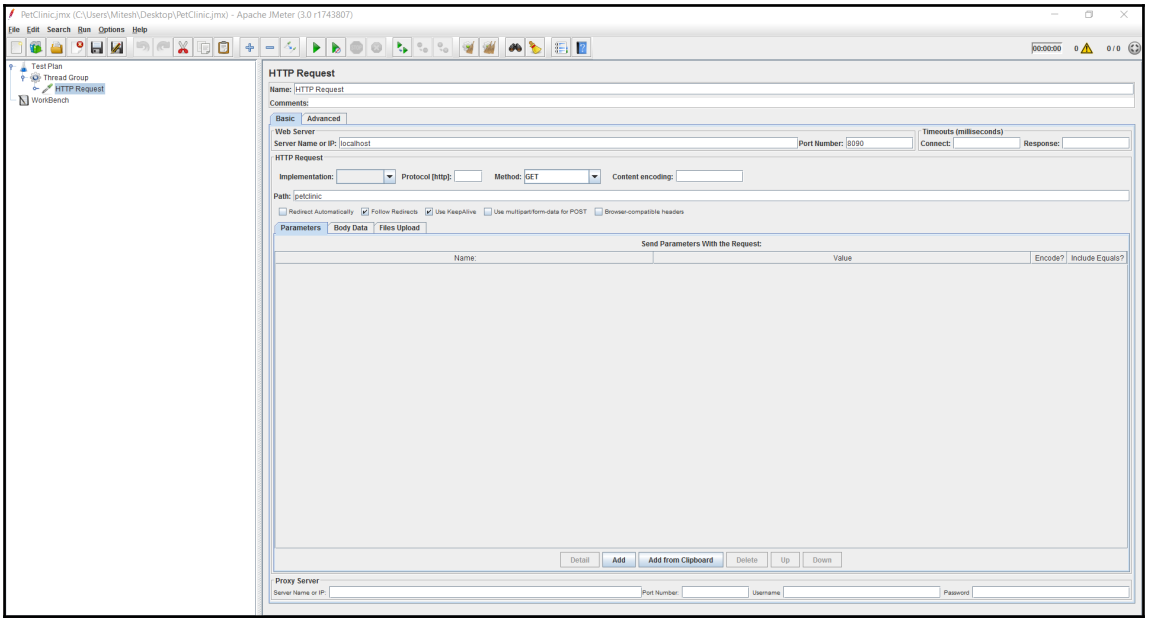

Jenkins
Open Blue Ocean
1
search
admin
log out
Jenkins
PetClinic-FuncTest
ENABLE AUTO REFRESH
Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Maven project
Configure
Modules
Favorite
TestNG Results
Build History
trend
find
#2 Jun 4, 2017 4:48 PM 49 KB
#1 Jun 4, 2017 4:32 PM 104 KB
RSS for all
RSS for failures
Maven project PetClinic-FuncTest
add description
Disable Project
TestNG Results
Workspace
Recent Changes
Latest Test Result (1 failure / +1)
Disk Usage
Job 152 KB
All builds 152 KB
Locked builds -
All workspaces 667 KB
Slave workspaces 667 KB
Test Result Trend
count
(just show failures) enlarge

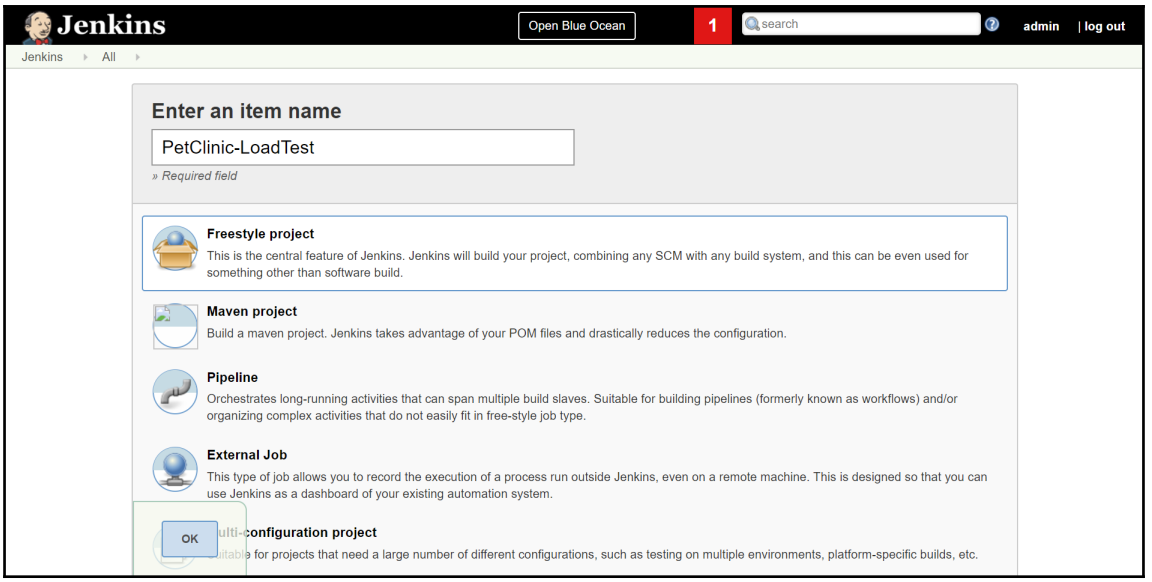
TestNG Results Trends

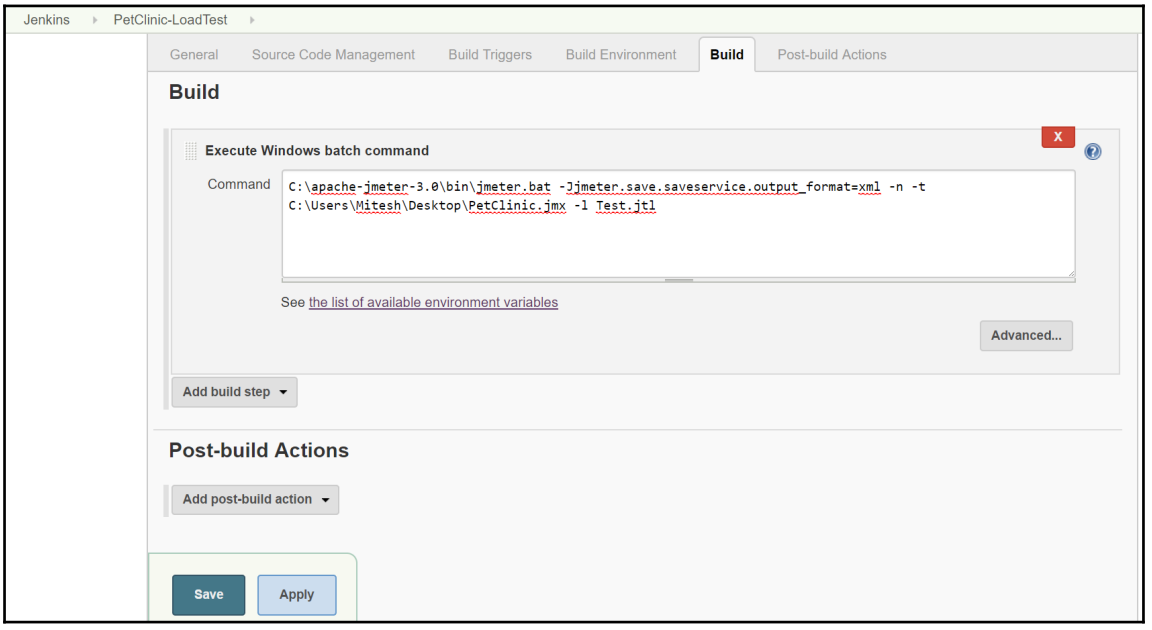
Need at least 2 builds with results to show trend graph

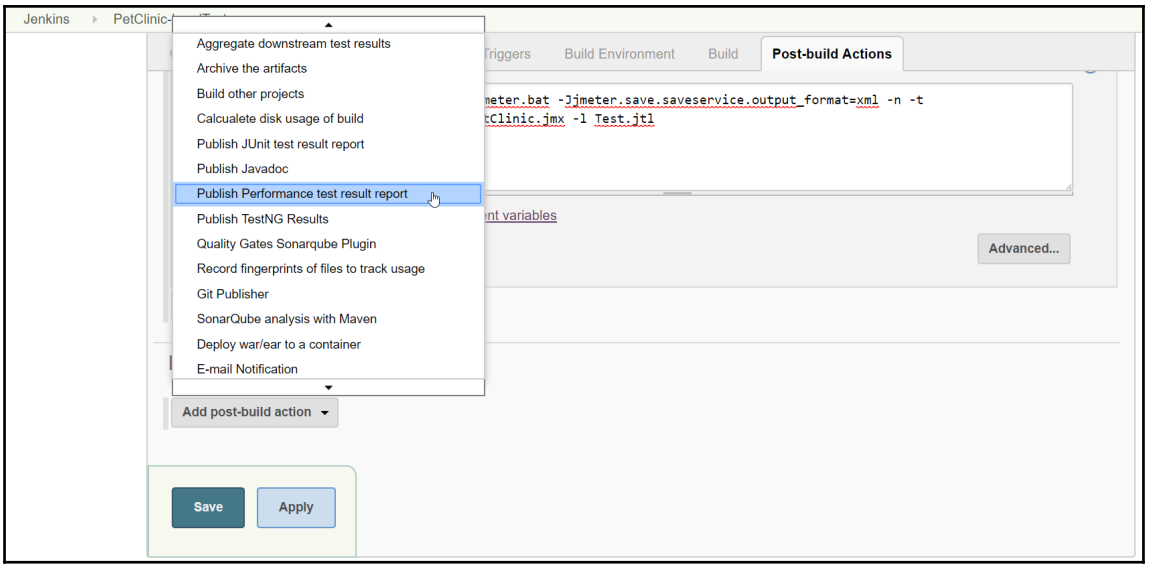
Latest Test Results (build #2)

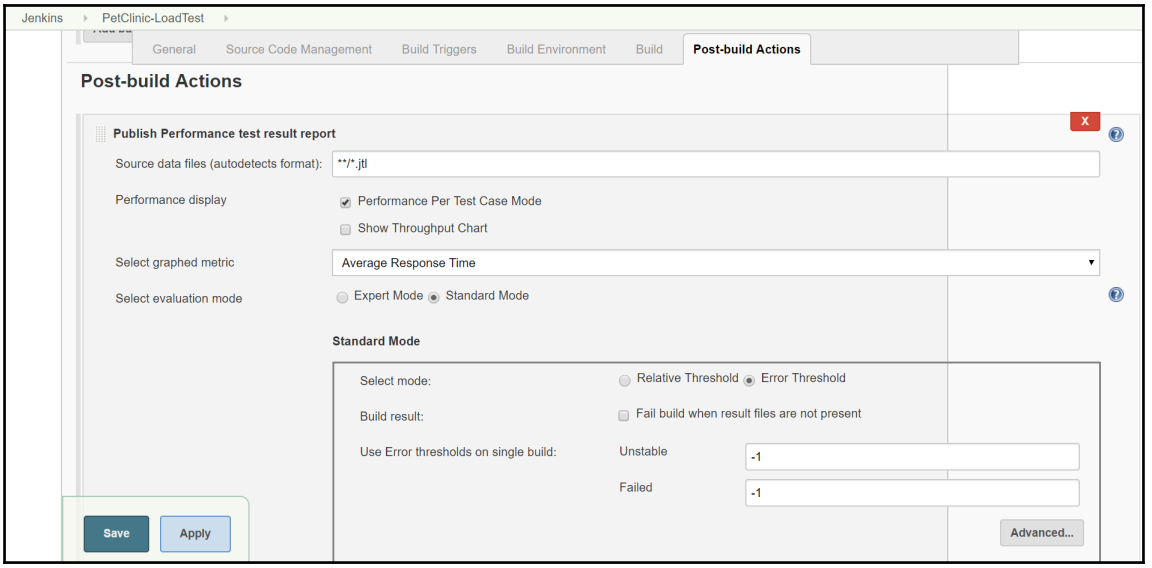
- Total Tests: 1 (+1)
- Failed Tests: 0 (±0)
- Skipped Tests: 1 (+1)
    1. example.PetClinicTest.testPetClinic
- Failed Configurations: 1 (+1)
    1. example.PetClinicTest.beforeTest
- Skipped Configurations: 1 (+1)
    1. example.PetClinicTest.afterTest




Jenkins
Open Blue Ocean
1
search
admin
| log out
Jenkins
All
Enter an item name
PetClinic-LoadTest
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK

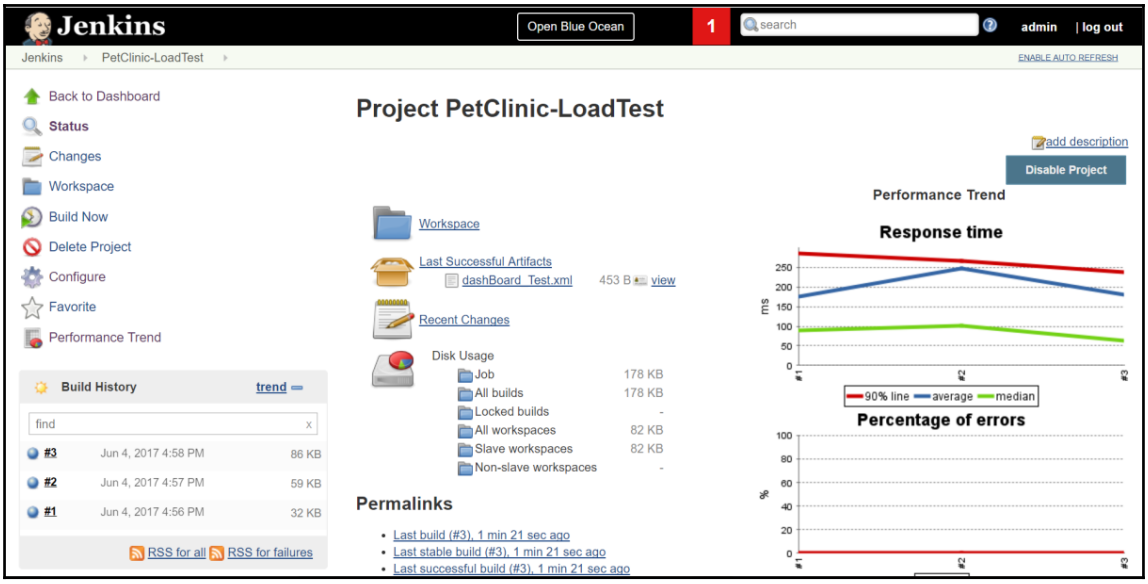

Jenkins
PetClinic-LoadTest
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Build
Execute Windows batch command
Command
C:\apache-jmeter-3.0\bin\jmeter.bat -Jjmeter.save.saveservice.output_format=xml -n -t C:\Users\Mitesh\Desktop\PetClinic.jmx -l Test.jtl
See the list of available environment variables
Advanced...
Add build step
Post-build Actions
Add post-build action
Save
Apply

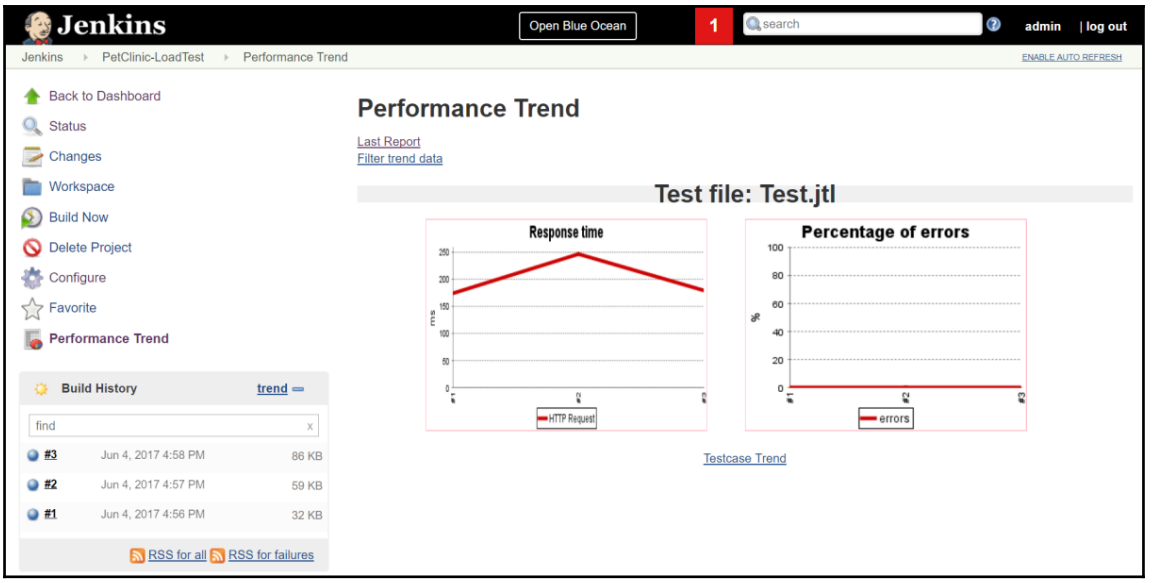

Jenkins
Aggregate downstream test results
Archive the artifacts
Build other projects
Calcualete disk usage of build
Publish JUnit test result report
Publish Javadoc
Publish Performance test result report
Publish TestNG Results
Quality Gates Sonarqube Plugin
Record fingerprints of files to track usage
Git Publisher
SonarQube analysis with Maven
Deploy war/ear to a container
E-mail Notification
Triggers
Build Environment
Build
Post-build Actions
meter.bat -Jjmeter.save.saveservice.output_format=xml -n -t
tClinic.jmx -l Test.jtl
nt variables
Advanced...
Add post-build action
Save
Apply

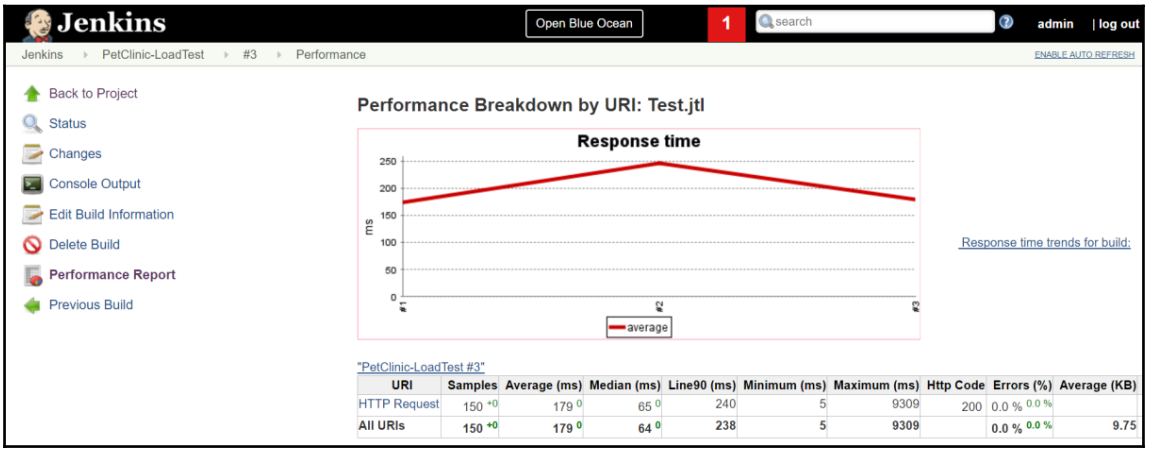

Jenkins
PetClinic-LoadTest
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Post-build Actions
Publish Performance test result report
Source data files (autodetects format):
**/*.jtl
Performance display
Performance Per Test Case Mode
Show Throughput Chart
Select graphed metric
Average Response Time
Select evaluation mode
Expert Mode
Standard Mode
Standard Mode
Select mode:
Relative Threshold
Error Threshold
Build result:
Fail build when result files are not present
Use Error thresholds on single build:
Unstable
-1
Failed
-1
Advanced...
Save
Apply

Console Output

```
Started by user admin
Building in workspace F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-LoadTest
[PetClinic-LoadTest] $ cmd /c call C:\Users\Mitesh\AppData\Local\Temp\jenkins1396957989406107476.bat

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-LoadTest>C:\apache-jmeter-3.0\bin\jmeter.bat -
Jjmeter.save.saveservice.output_format=xml -n -t C:\Users\Mitesh\Desktop\PetClinic.jmx -l Test.jtl
Writing log file to: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-LoadTest\jmeter.log
Creating summariser <summary>
Created the tree successfully using C:\Users\Mitesh\Desktop\PetClinic.jmx
Starting the test @ Sun Jun 04 16:56:19 IST 2017 (1496575579885)
Waiting for possible Shutdown/StopTestNow/Heapdump message on port 4445
summary =     50 in 00:00:09 =    5.4/s Avg:   175 Min:     5 Max:  2724 Err:     0 (0.00%)
Tidying up ...    @ Sun Jun 04 16:56:29 IST 2017 (1496575589522)
... end of run
Java HotSpot(TM) 64-Bit Server VM warning: MaxNewSize (4194304k) is equal to or greater than the entire heap
(4194304k).  A new max generation size of 4193792k will be used.
Performance: Recording JMeter reports '**/*.jtl'
Performance: Parsing JMeter report file 'F:\#JenkinsEssentials\FirstDraft\jenkinsHome\jobs\PetClinic-
LoadTest\builds\1\performance-reports\JMeter\Test.jtl'.
Performance: Percentage of errors greater or equal than 0% sets the build as unstable
Performance: Percentage of errors greater or equal than 0% sets the build as failure
Performance: File Test.jtl reported 0.0% of errors [SUCCESS]. Build status is: SUCCESS
Started calculate disk usage of build
Finished Calculation of disk usage of build in 0 seconds
Started calculate disk usage of workspace
Finished Calculation of disk usage of workspace in 0 seconds
Finished: SUCCESS
```

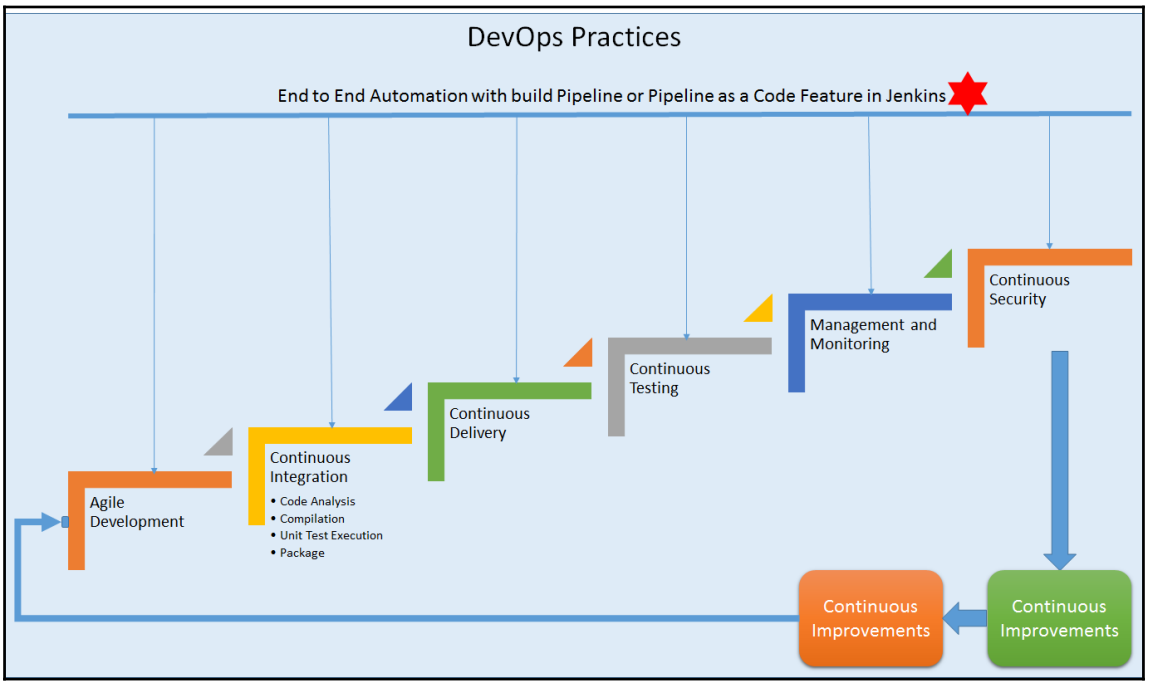


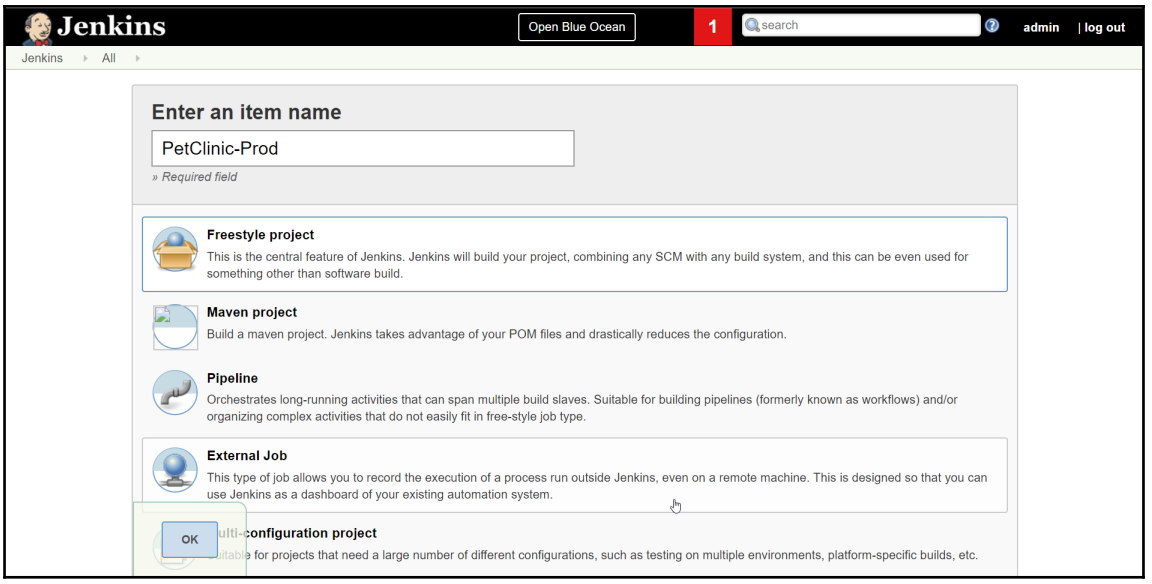


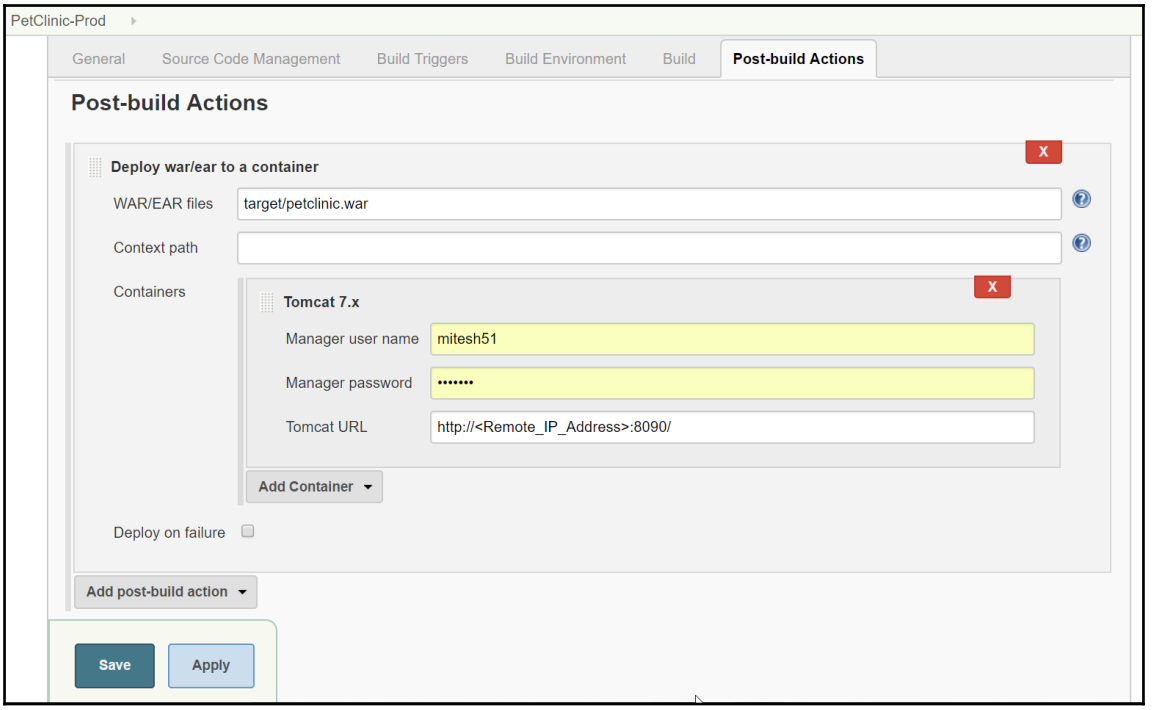


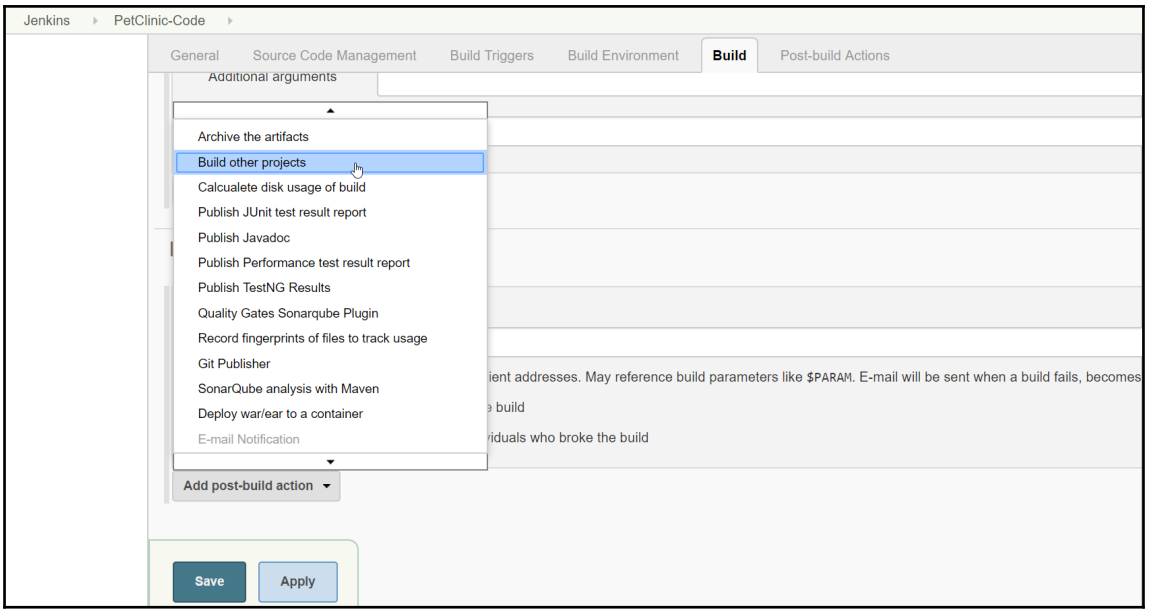
URI	Samples	Average (ms)	Median (ms)	Line90 (ms)	Minimum (ms)	Maximum (ms)	Http Code	Errors (%)	Average (KB)
HTTP Request	150 +0	179 0	65 0	240	5	9309	200	0.0 % 0.0 %	
All URIs	150 +0	179 0	64 0	238	5	9309		0.0 % 0.0 %	9.75

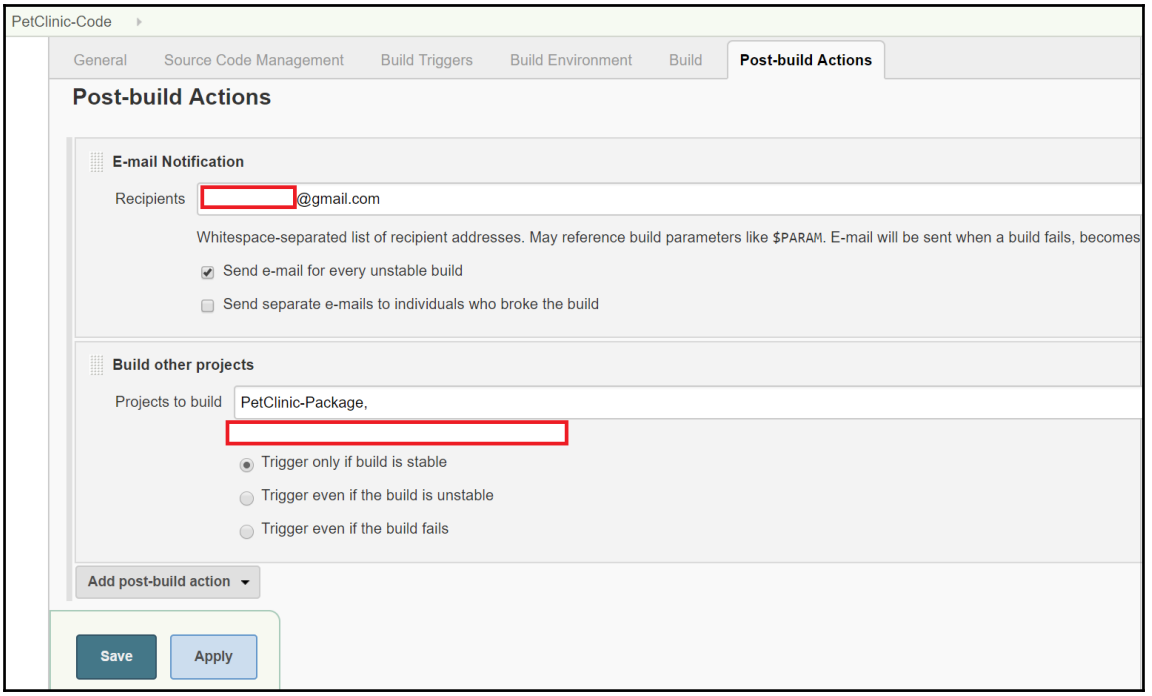
Chapter 07: Build Pipeline and Pipeline as a Code

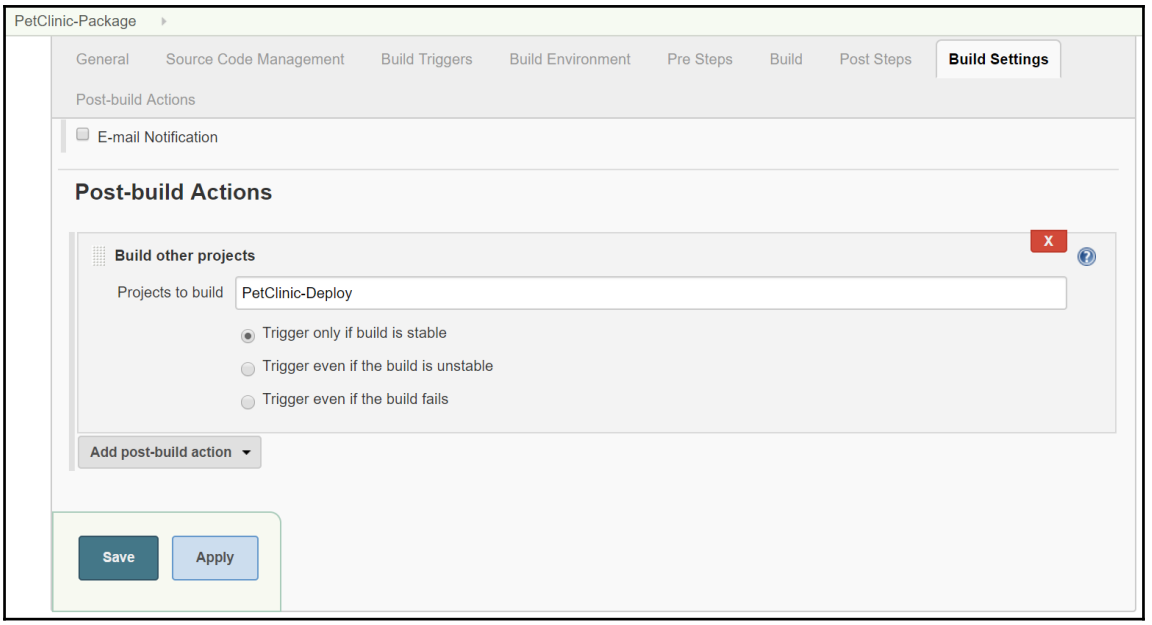


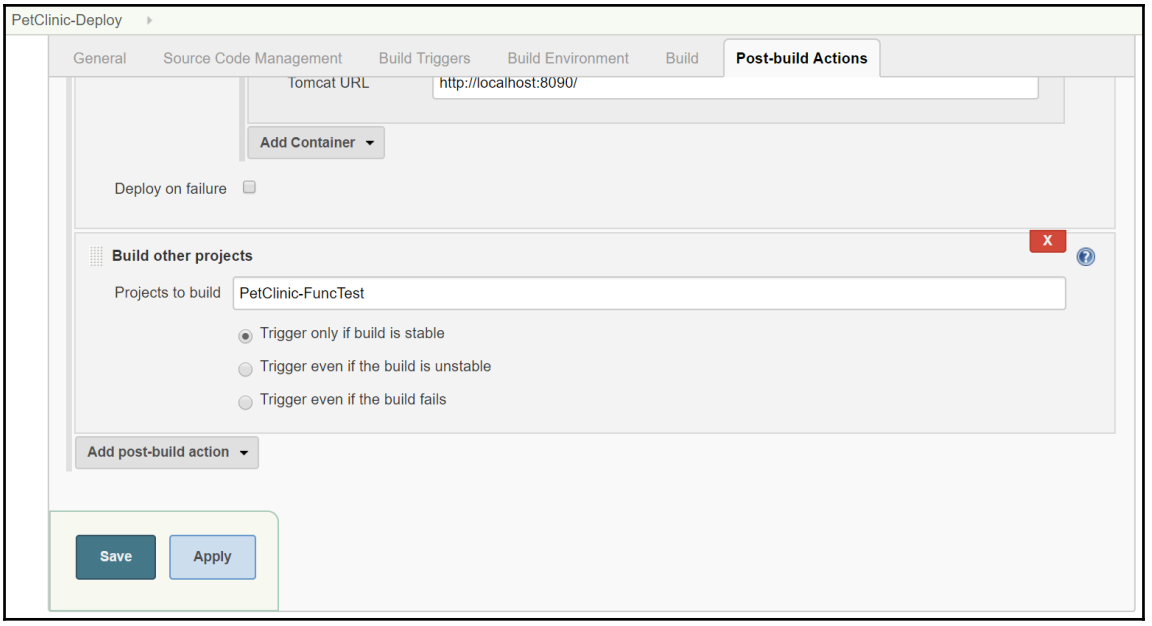

Jenkins
Open Blue Ocean
1
search
admin
| log out
Jenkins
All
Enter an item name
PetClinic-Prod
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK
for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

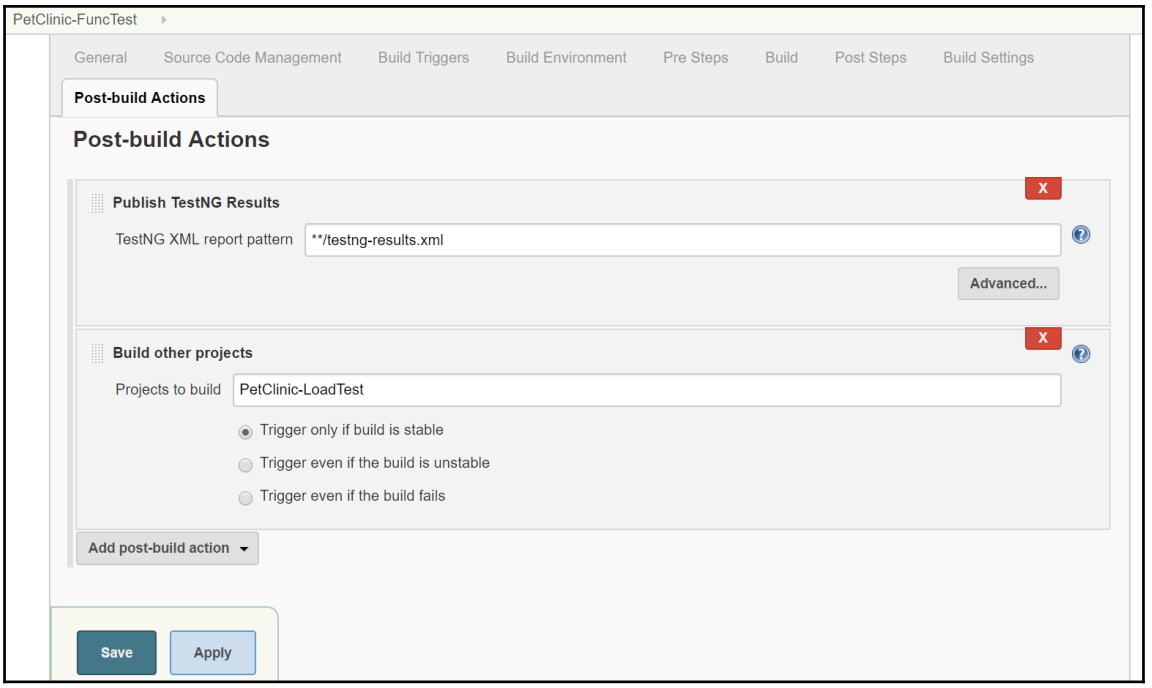

PetClinic-Prod
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Post-build Actions
Deploy war/ear to a container
WAR/EAR files
target/petclinic.war
Context path
Containers
Tomcat 7.x
Manager user name
mitesh51
Manager password
Tomcat URL
http://<Remote_IP_Address>:8090/
Add Container
Deploy on failure
Add post-build action
Save
Apply

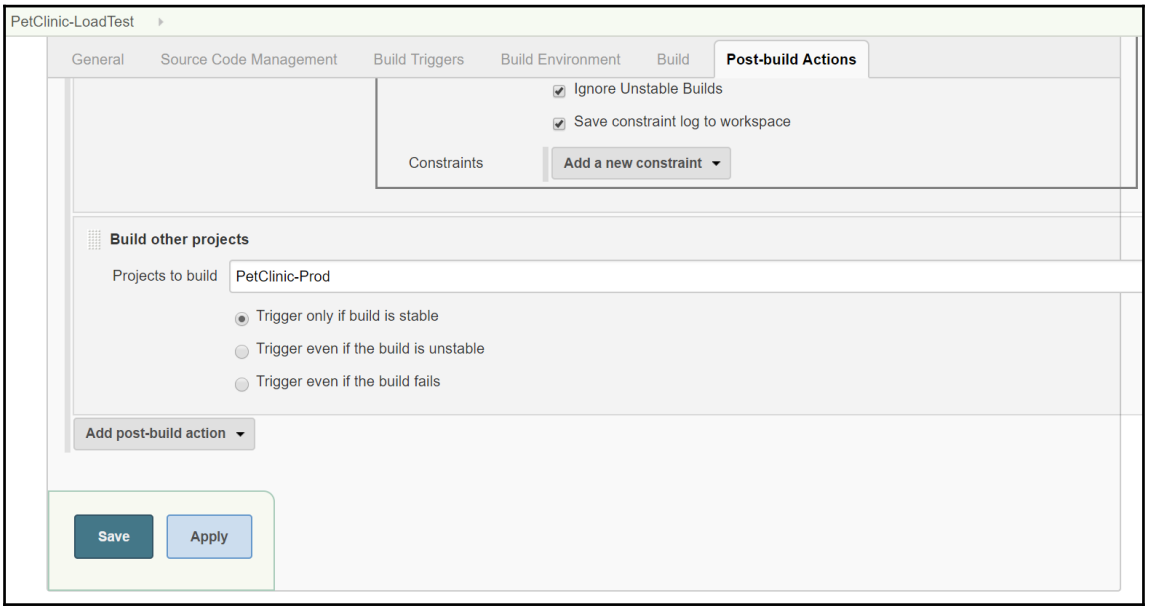

Jenkins
PetClinic-Code
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Additional arguments
Archive the artifacts
Build other projects
Calcualete disk usage of build
Publish JUnit test result report
Publish Javadoc
Publish Performance test result report
Publish TestNG Results
Quality Gates Sonarqube Plugin
Record fingerprints of files to track usage
Git Publisher
SonarQube analysis with Maven
Deploy war/ear to a container
E-mail Notification
ient addresses. May reference build parameters like $PARAM. E-mail will be sent when a build fails, becomes
build
iduals who broke the build
Add post-build action
Save
Apply

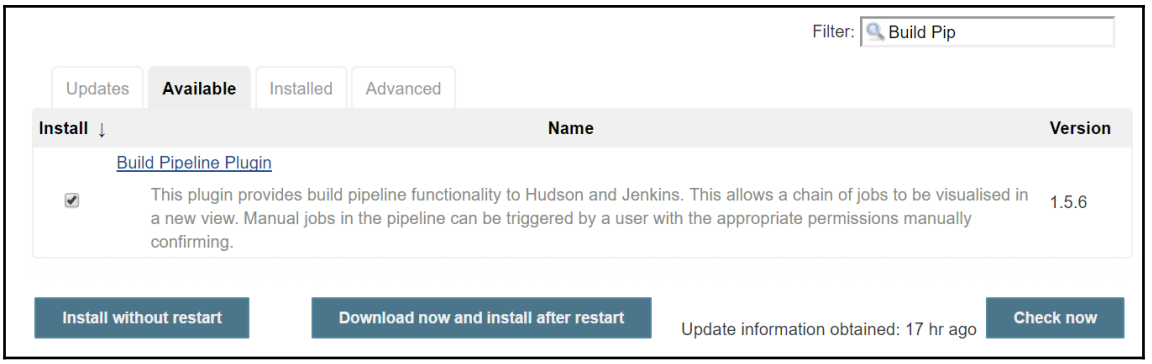

PetClinic-Code
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Post-build Actions
E-mail Notification
Recipients
@gmail.com
Whitespace-separated list of recipient addresses. May reference build parameters like $PARAM. E-mail will be sent when a build fails, becomes
Send e-mail for every unstable build
Send separate e-mails to individuals who broke the build
Build other projects
Projects to build
PetClinic-Package,
Trigger only if build is stable
Trigger even if the build is unstable
Trigger even if the build fails
Add post-build action
Save
Apply

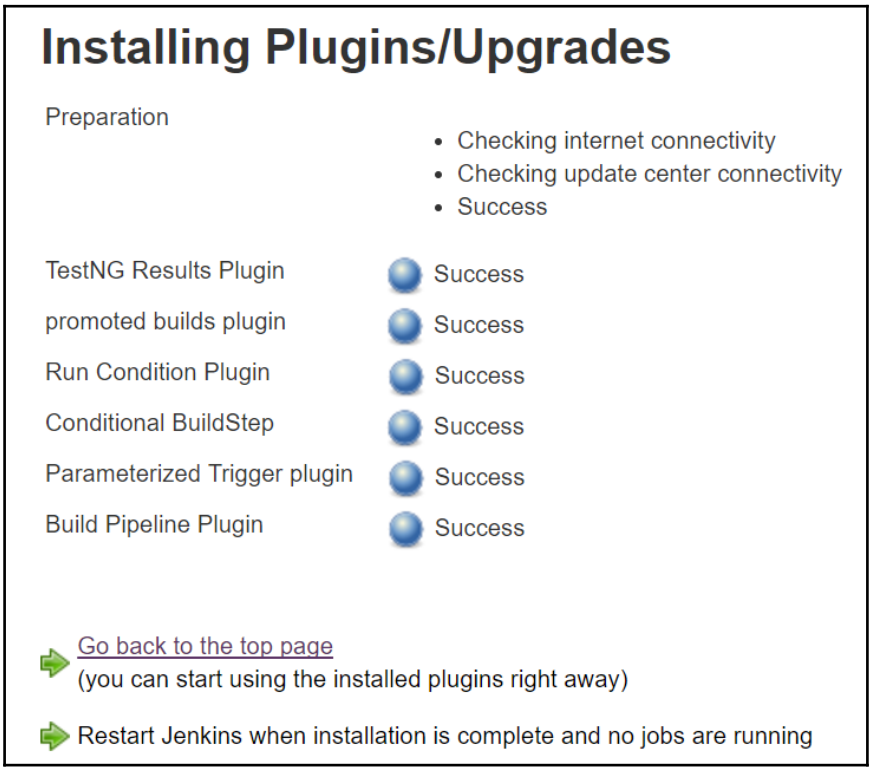

PetClinic-Package
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
E-mail Notification
Post-build Actions
Build other projects
Projects to build
PetClinic-Deploy
Trigger only if build is stable
Trigger even if the build is unstable
Trigger even if the build fails
Add post-build action
Save
Apply

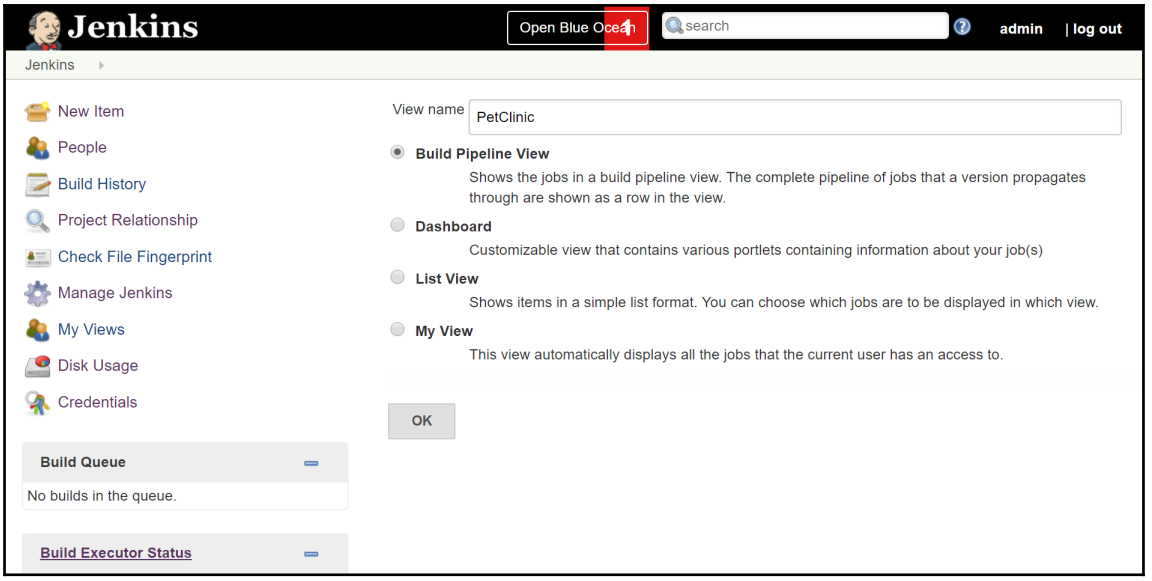

PetClinic-Deploy
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Tomcat URL
http://localhost:8090/
Add Container
Deploy on failure
Build other projects
Projects to build
PetClinic-FuncTest
Trigger only if build is stable
Trigger even if the build is unstable
Trigger even if the build fails
Add post-build action
Save
Apply

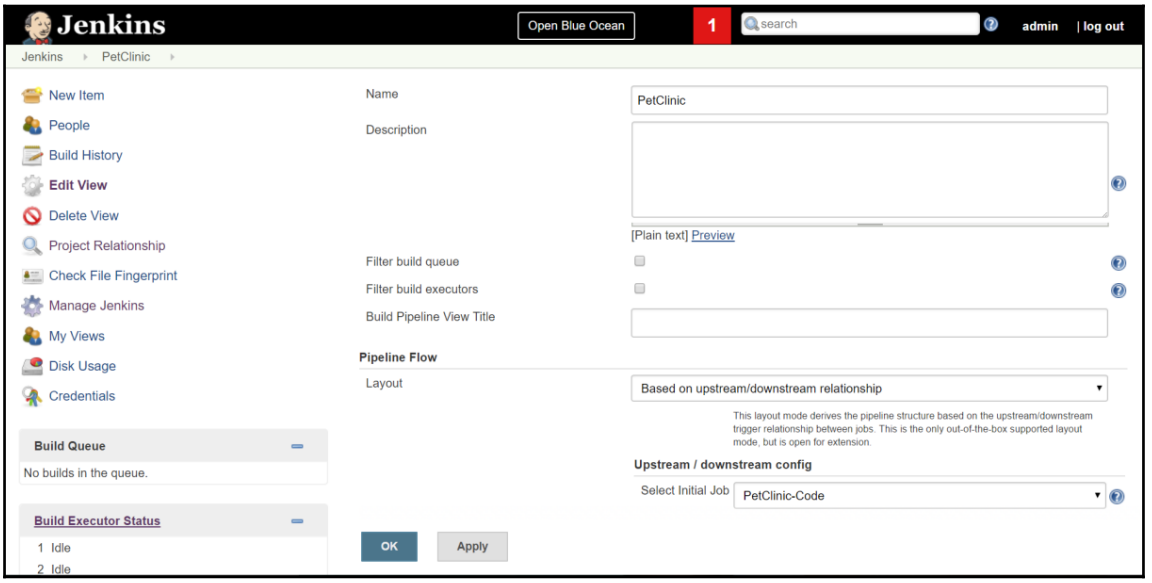

PetClinic-FuncTest
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Post-build Actions
Publish TestNG Results
TestNG XML report pattern
**/testng-results.xml
Advanced...
Build other projects
Projects to build
PetClinic-LoadTest
Trigger only if build is stable
Trigger even if the build is unstable
Trigger even if the build fails
Add post-build action
Save
Apply


PetClinic-LoadTest
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Ignore Unstable Builds
Save constraint log to workspace
Constraints
Add a new constraint
Build other projects
Projects to build
PetClinic-Prod
Trigger only if build is stable
Trigger even if the build is unstable
Trigger even if the build fails
Add post-build action
Save
Apply


Filter: Build Pip
Updates
Available
Installed
Advanced
Install ↓
Name
Version
Build Pipeline Plugin
This plugin provides build pipeline functionality to Hudson and Jenkins. This allows a chain of jobs to be visualised in a new view. Manual jobs in the pipeline can be triggered by a user with the appropriate permissions manually confirming.
1.5.6
Install without restart
Download now and install after restart
Update information obtained: 17 hr ago
Check now


Installing Plugins/Upgrades
Preparation
Checking internet connectivity
Checking update center connectivity
Success
TestNG Results Plugin
Success
promoted builds plugin
Success
Run Condition Plugin
Success
Conditional BuildStep
Success
Parameterized Trigger plugin
Success
Build Pipeline Plugin
Success
Go back to the top page
(you can start using the installed plugins right away)
Restart Jenkins when installation is complete and no jobs are running


Jenkins
Open Blue Ocean
search
admin
| log out
Jenkins
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Disk Usage
Credentials
Build Queue
No builds in the queue.
Build Executor Status
View name
PetClinic
Build Pipeline View
Shows the jobs in a build pipeline view. The complete pipeline of jobs that a version propagates through are shown as a row in the view.
Dashboard
Customizable view that contains various portlets containing information about your job(s)
List View
Shows items in a simple list format. You can choose which jobs are to be displayed in which view.
My View
This view automatically displays all the jobs that the current user has an access to.
OK


Jenkins
Open Blue Ocean
1
search
admin
| log out
Jenkins
PetClinic
New Item
People
Build History
Edit View
Delete View
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Disk Usage
Credentials
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
Name
PetClinic
Description
[Plain text] Preview
Filter build queue
Filter build executors
Build Pipeline View Title
Pipeline Flow
Layout
Based on upstream/downstream relationship
This layout mode derives the pipeline structure based on the upstream/downstream trigger relationship between jobs. This is the only out-of-the-box supported layout mode, but is open for extension.
Upstream / downstream config
Select Initial Job
PetClinic-Code
OK
Apply

Trigger Options

Restrict triggers to most recent successful builds — Yes / No

Always allow manual trigger on pipeline steps — Yes / No

Display Options

No Of Displayed Builds: 3

Row Headers: Just the pipeline number

Show just the build pipeline number

Column Headers: No header

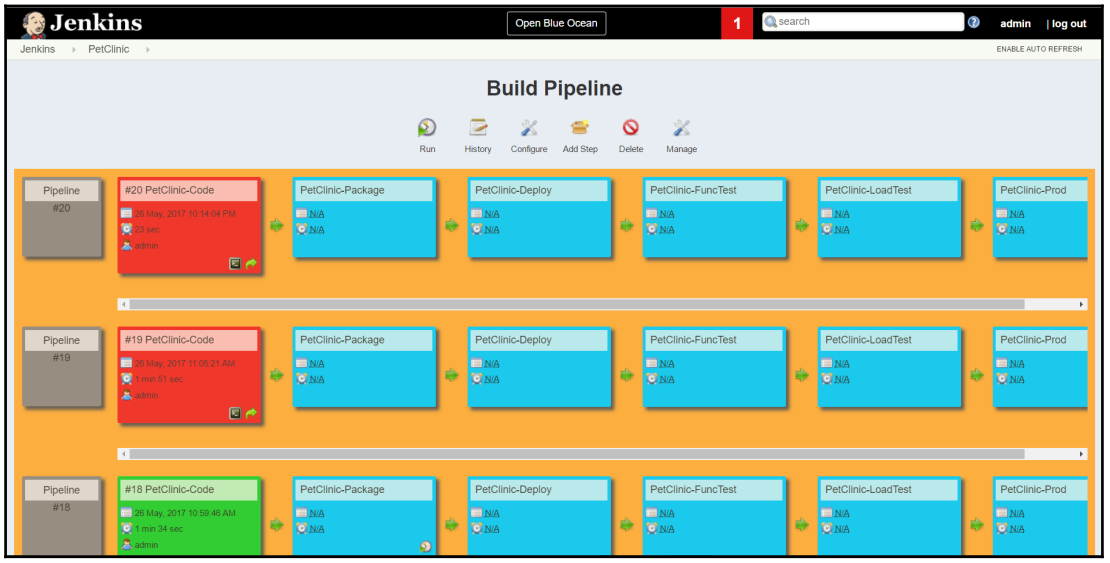
Do not show any column headers

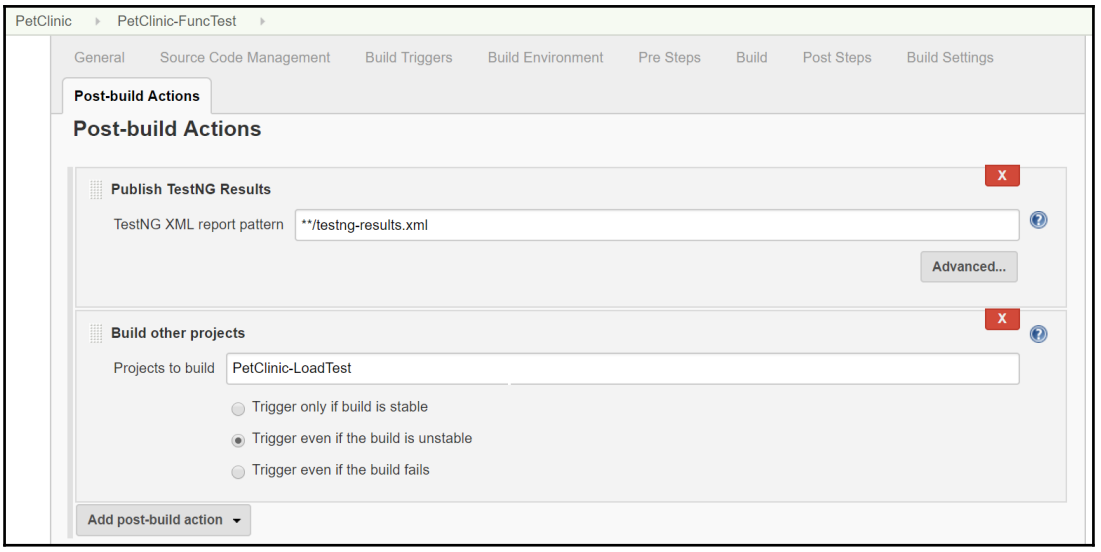
Refresh frequency (in seconds): 3

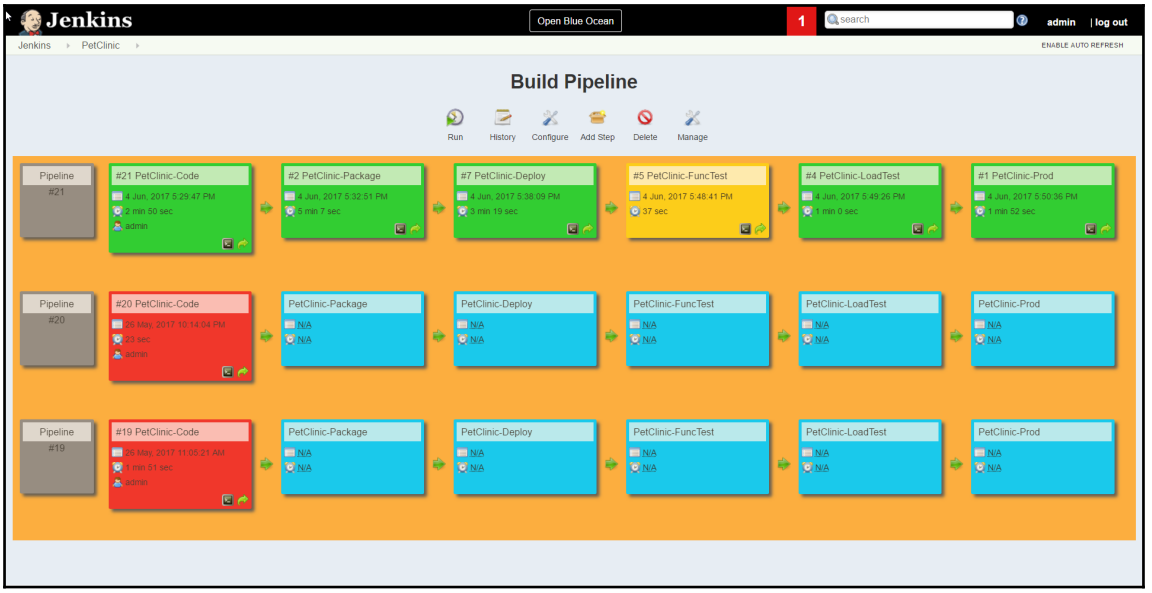
URL for custom CSS files:

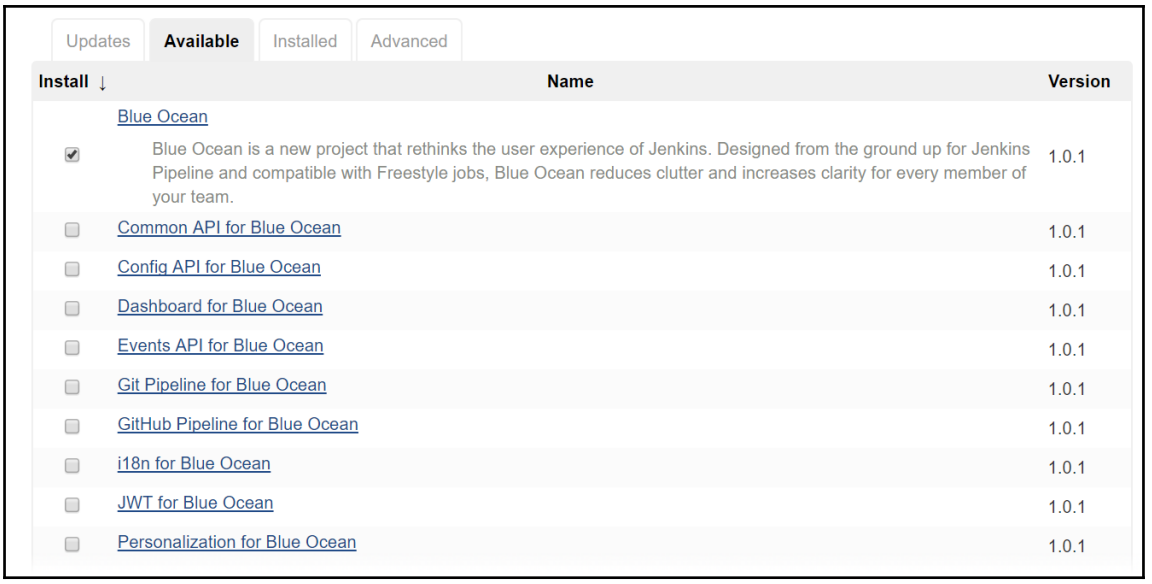
Console Output Link Style: Lightbox

OK | Apply

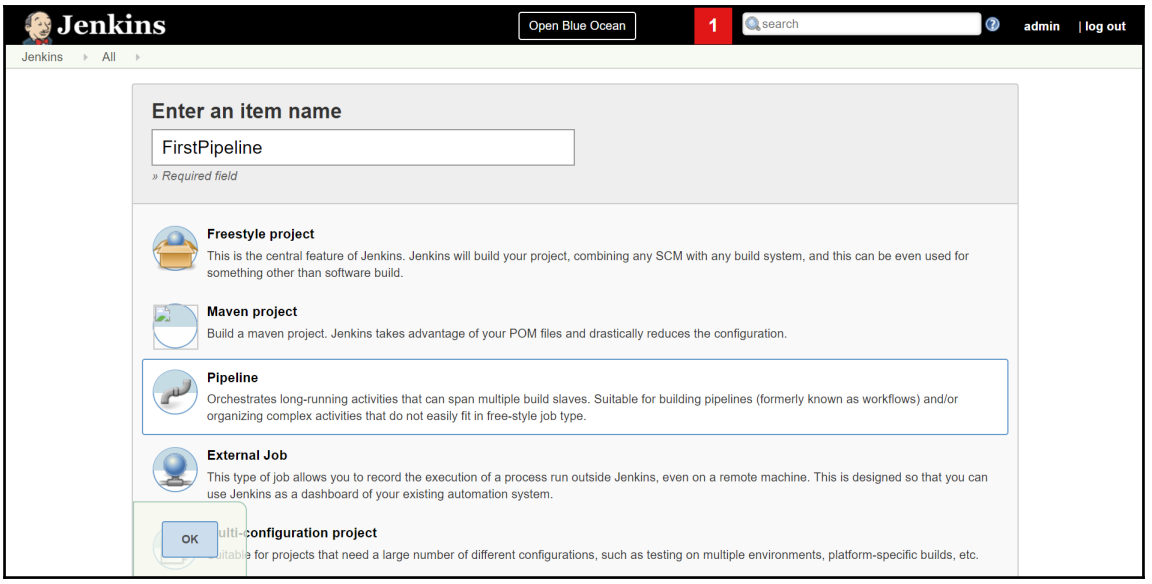


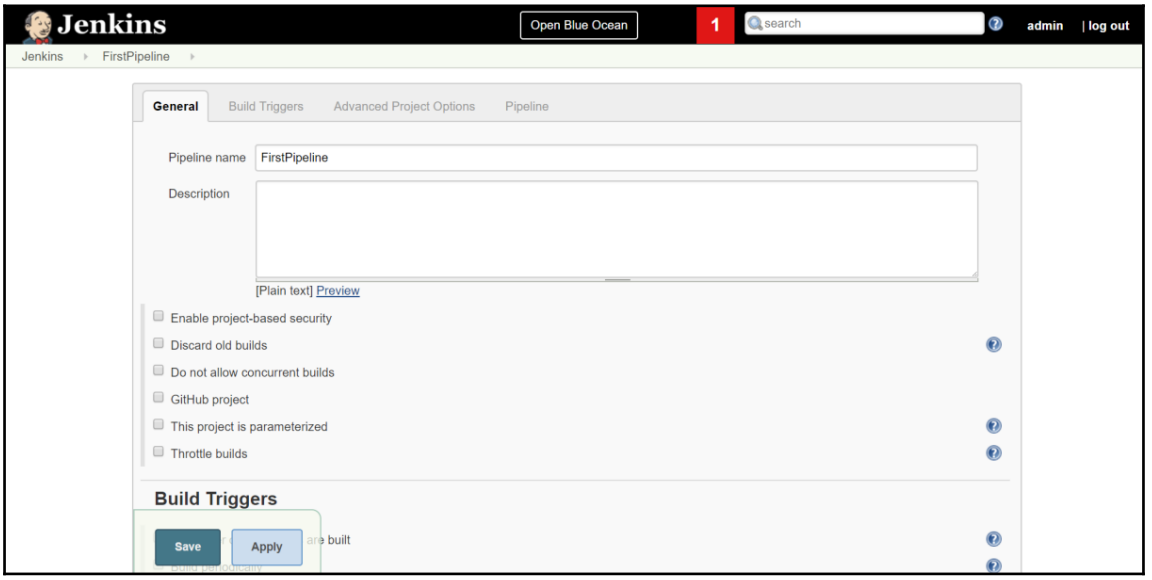

PetClinic
PetClinic-FuncTest
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Post-build Actions
Publish TestNG Results
TestNG XML report pattern
**/testng-results.xml
Advanced...
Build other projects
Projects to build
PetClinic-LoadTest
Trigger only if build is stable
Trigger even if the build is unstable
Trigger even if the build fails
Add post-build action

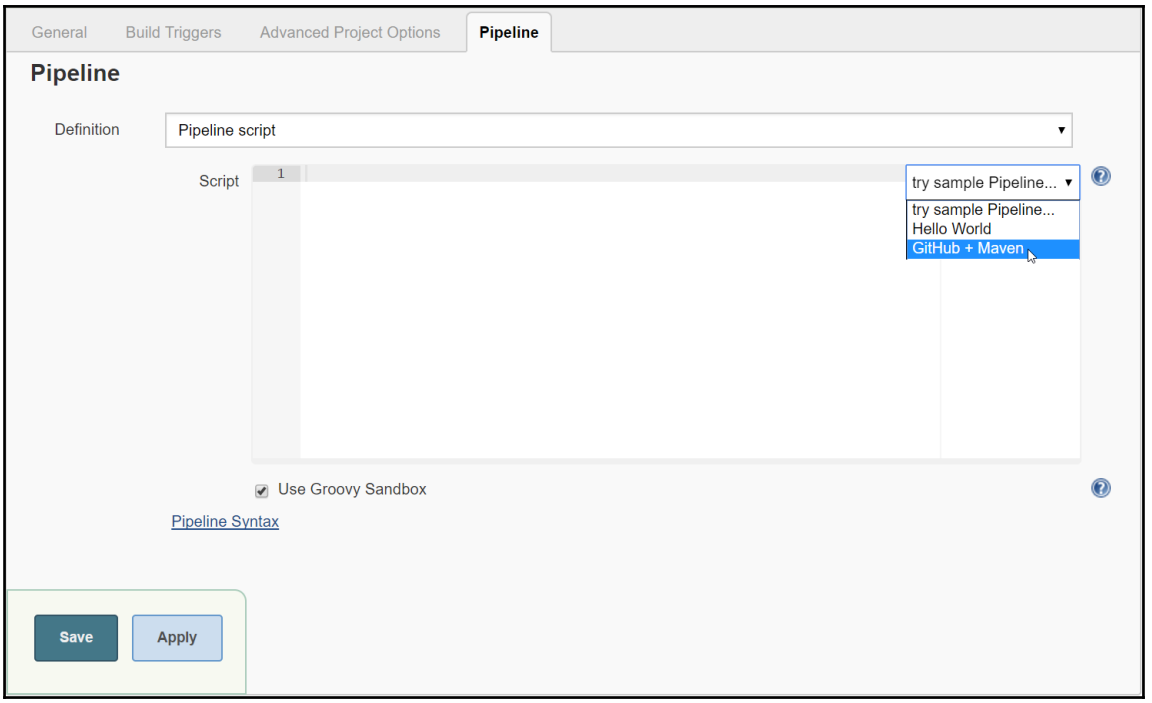

Jenkins
Open Blue Ocean
admin
log out
Jenkins
PetClinic
ENABLE AUTO REFRESH
Build Pipeline
Run
History
Configure
Add Step
Delete
Manage
Pipeline #21
#21 PetClinic-Code
#2 PetClinic-Package
#7 PetClinic-Deploy
#5 PetClinic-FuncTest
#4 PetClinic-LoadTest
#1 PetClinic-Prod
Pipeline #20
#20 PetClinic-Code
PetClinic-Package
PetClinic-Deploy
PetClinic-FuncTest
PetClinic-LoadTest
PetClinic-Prod
Pipeline #19
#19 PetClinic-Code
PetClinic-Package
PetClinic-Deploy
PetClinic-FuncTest
PetClinic-LoadTest
PetClinic-Prod

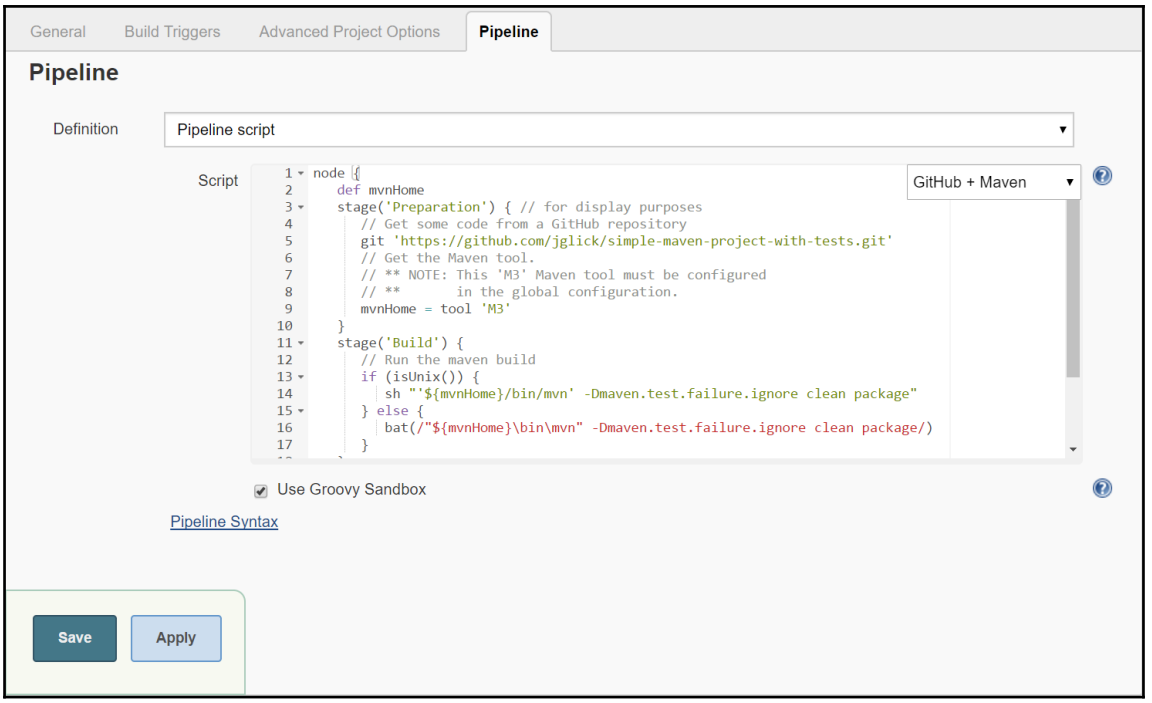

Updates
Available
Installed
Advanced
Install ↓
Name
Version
Blue Ocean
Blue Ocean is a new project that rethinks the user experience of Jenkins. Designed from the ground up for Jenkins Pipeline and compatible with Freestyle jobs, Blue Ocean reduces clutter and increases clarity for every member of your team.
1.0.1
Common API for Blue Ocean
1.0.1
Config API for Blue Ocean
1.0.1
Dashboard for Blue Ocean
1.0.1
Events API for Blue Ocean
1.0.1
Git Pipeline for Blue Ocean
1.0.1
GitHub Pipeline for Blue Ocean
1.0.1
i18n for Blue Ocean
1.0.1
JWT for Blue Ocean
1.0.1
Personalization for Blue Ocean
1.0.1

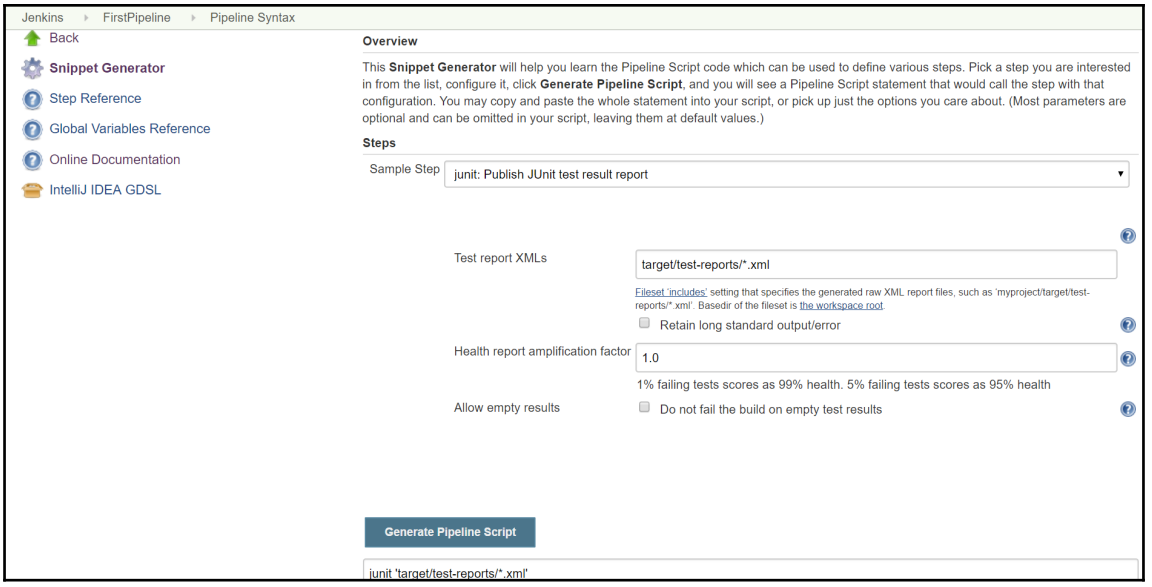
Common API for Blue Ocean	Success
Variant Plugin	Success
Jackson 2 API Plugin	Success
Metrics Plugin	Success
Web for Blue Ocean	Success
REST API for Blue Ocean	Success
JWT for Blue Ocean	Success
Favorite	Success
REST Implementation for Blue Ocean	Success
Pipeline REST API for Blue Ocean	Success
Pub-Sub "light" Bus	Success
GitHub Pipeline for Blue Ocean	Success
Git Pipeline for Blue Ocean	Success
Config API for Blue Ocean	Success
Server Sent Events (SSE) Gateway Plugin	Success
Events API for Blue Ocean	Success
Personalization for Blue Ocean	Success
BlueOcean Display URL plugin	Success
Blue Ocean Pipeline Editor	Success
Autofavorite for Blue Ocean	Success
i18n for Blue Ocean	Success
Dashboard for Blue Ocean	Success
Blue Ocean	Success

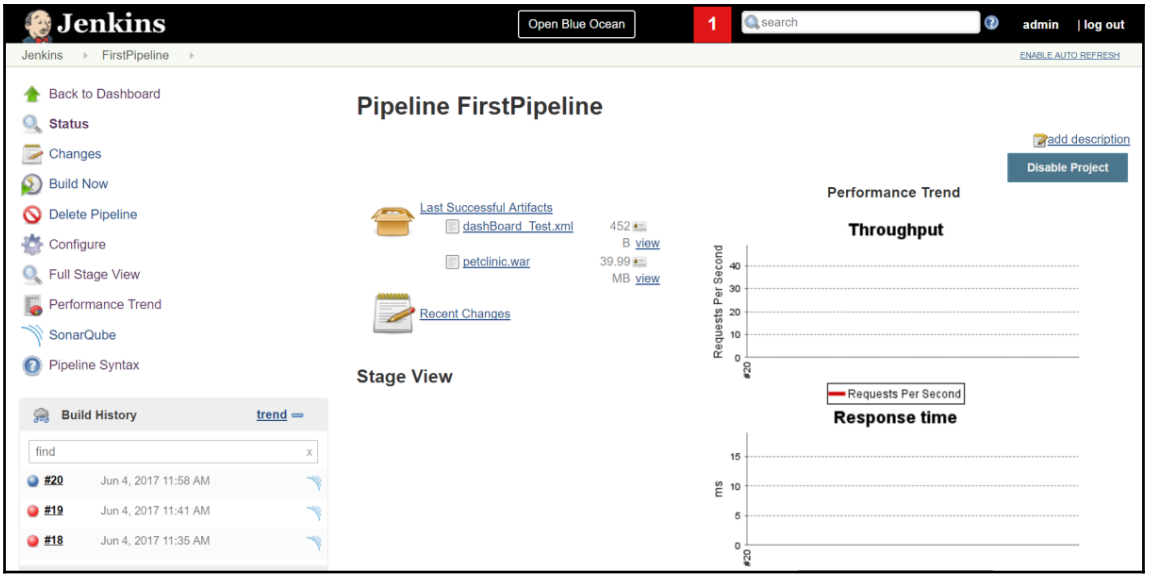

Jenkins
Open Blue Ocean
1
search
admin
| log out
Jenkins
All
Enter an item name
FirstPipeline
» Required field
Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
Pipeline
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.
OK
for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

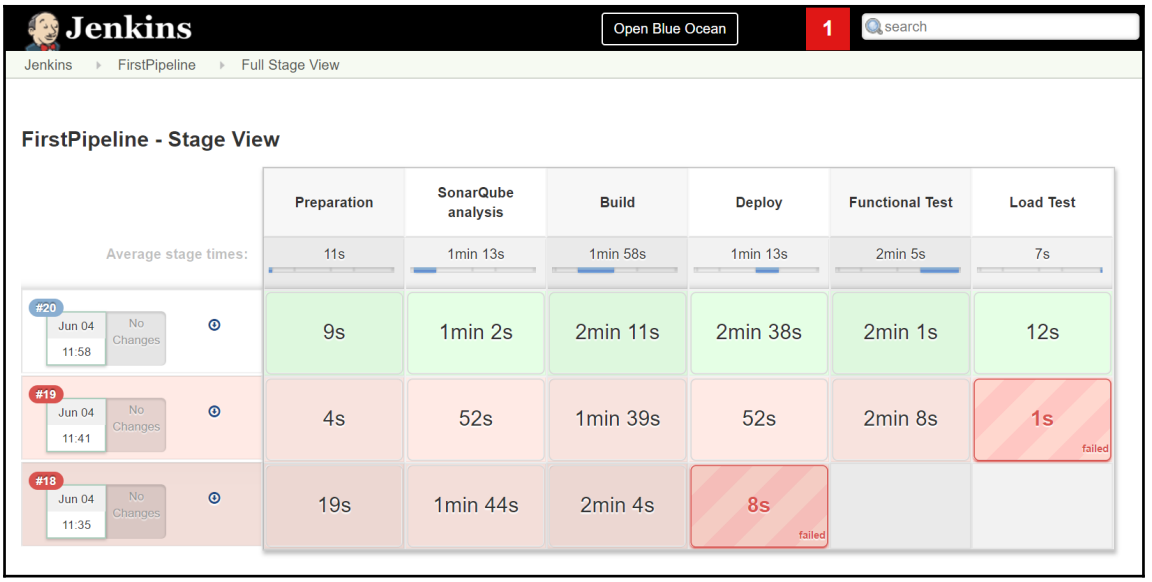

Jenkins
Open Blue Ocean
1
search
admin
| log out
Jenkins
FirstPipeline
General
Build Triggers
Advanced Project Options
Pipeline
Pipeline name
FirstPipeline
Description
[Plain text] Preview
Enable project-based security
Discard old builds
Do not allow concurrent builds
GitHub project
This project is parameterized
Throttle builds
Build Triggers
Save
Apply
built

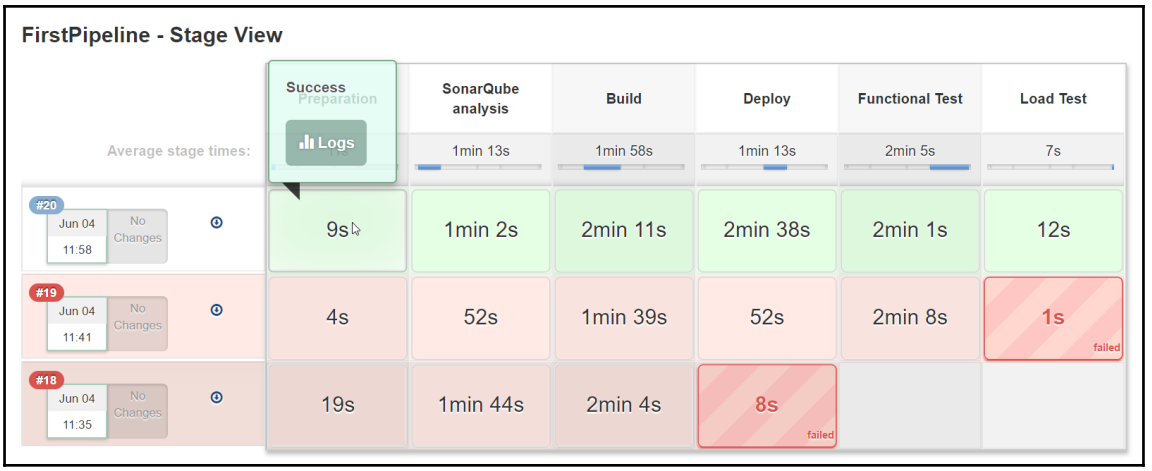

General
Build Triggers
Advanced Project Options
Pipeline
Pipeline
Definition
Pipeline script
Script
1
try sample Pipeline...
try sample Pipeline...
Hello World
GitHub + Maven
Use Groovy Sandbox
Pipeline Syntax
Save
Apply

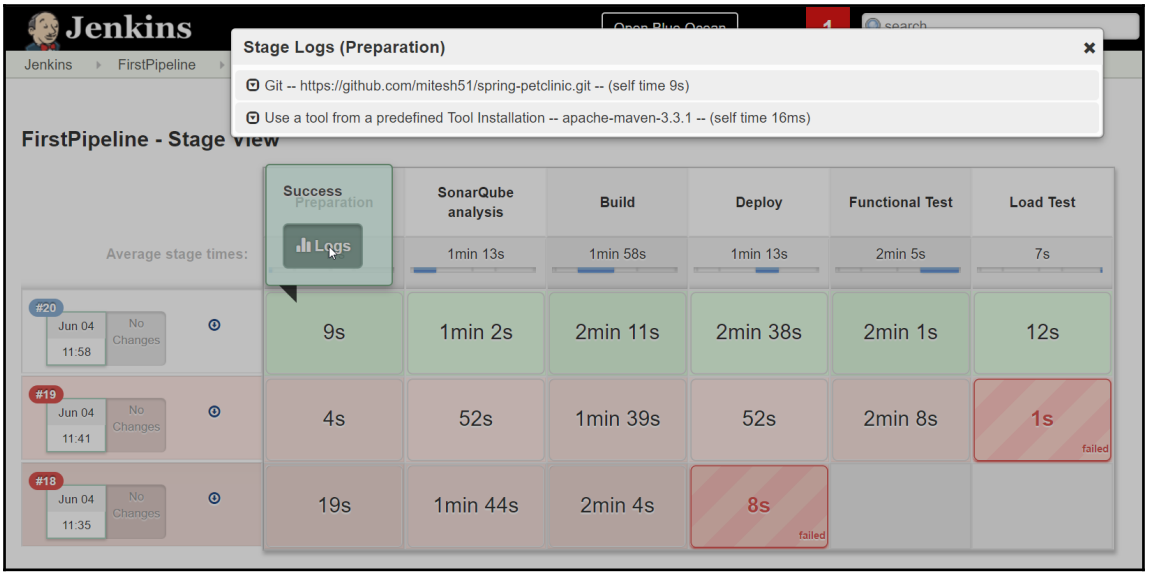

General
Build Triggers
Advanced Project Options
Pipeline
Pipeline
Definition
Pipeline script
Script
GitHub + Maven
node {
def mvnHome
stage('Preparation') { // for display purposes
// Get some code from a GitHub repository
git 'https://github.com/jglick/simple-maven-project-with-tests.git'
// Get the Maven tool.
// ** NOTE: This 'M3' Maven tool must be configured
// ** in the global configuration.
mvnHome = tool 'M3'
}
stage('Build') {
// Run the maven build
if (isUnix()) {
sh "'${mvnHome}/bin/mvn' -Dmaven.test.failure.ignore clean package"
} else {
bat(/"${mvnHome}\bin\mvn" -Dmaven.test.failure.ignore clean package/)
}
Use Groovy Sandbox
Pipeline Syntax
Save
Apply

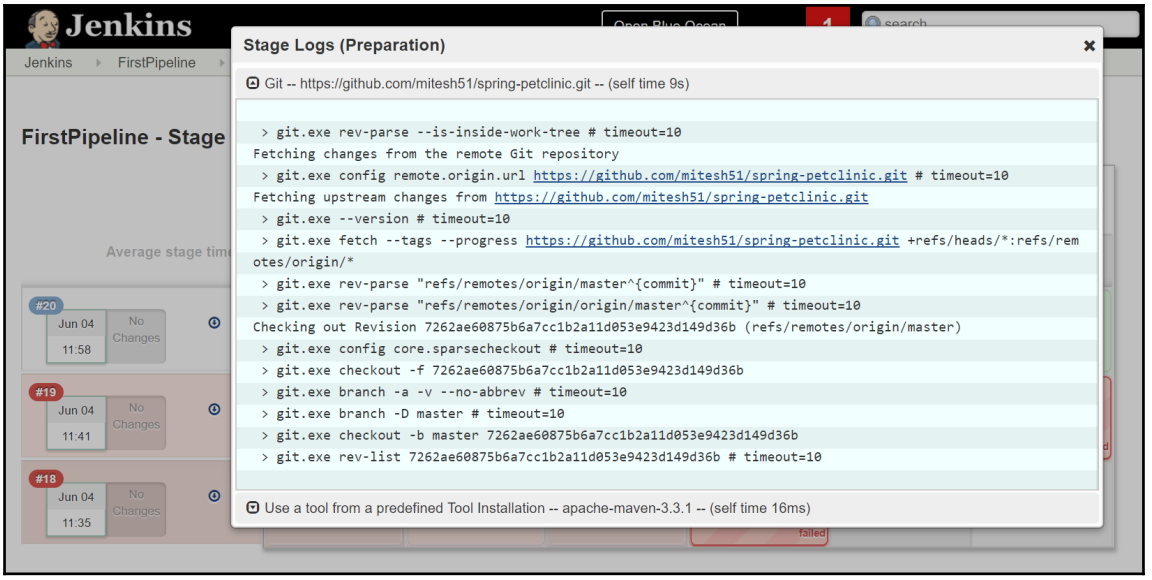

Jenkins
FirstPipeline
Pipeline Syntax
Back
Snippet Generator
Step Reference
Global Variables Reference
Online Documentation
IntelliJ IDEA GDSL
Overview
This Snippet Generator will help you learn the Pipeline Script code which can be used to define various steps. Pick a step you are interested in from the list, configure it, click Generate Pipeline Script, and you will see a Pipeline Script statement that would call the step with that configuration. You may copy and paste the whole statement into your script, or pick up just the options you care about. (Most parameters are optional and can be omitted in your script, leaving them at default values.)
Steps
Sample Step
junit: Publish JUnit test result report
Test report XMLs
target/test-reports/*.xml
Fileset 'includes' setting that specifies the generated raw XML report files, such as 'myproject/target/test-reports/*.xml'. Basedir of the fileset is the workspace root
Retain long standard output/error
Health report amplification factor
1.0
1% failing tests scores as 99% health. 5% failing tests scores as 95% health
Allow empty results
Do not fail the build on empty test results
Generate Pipeline Script
junit 'target/test-reports/*.xml'


Jenkins
Open Blue Ocean
1
search
admin
log out
Jenkins
FirstPipeline
ENABLE AUTO REFRESH
Back to Dashboard
Status
Changes
Build Now
Delete Pipeline
Configure
Full Stage View
Performance Trend
SonarQube
Pipeline Syntax
Build History
trend
find
#20 Jun 4, 2017 11:58 AM
#19 Jun 4, 2017 11:41 AM
#18 Jun 4, 2017 11:35 AM
Pipeline FirstPipeline
add description
Disable Project
Last Successful Artifacts
dashBoard_Test.xml 452 B view
petclinic.war 39.99 MB view
Recent Changes
Stage View
Performance Trend
Throughput
Requests Per Second
Requests Per Second
Response time
ms


Jenkins
Open Blue Ocean
1
search
Jenkins
FirstPipeline
Full Stage View
FirstPipeline - Stage View
Preparation
SonarQube analysis
Build
Deploy
Functional Test
Load Test
Average stage times:
11s
1min 13s
1min 58s
1min 13s
2min 5s
7s
#20 Jun 04 11:58 No Changes
9s
1min 2s
2min 11s
2min 38s
2min 1s
12s
#19 Jun 04 11:41 No Changes
4s
52s
1min 39s
52s
2min 8s
1s
failed
#18 Jun 04 11:35 No Changes
19s
1min 44s
2min 4s
8s
failed


FirstPipeline - Stage View
Success
Preparation
Logs
SonarQube analysis
Build
Deploy
Functional Test
Load Test
Average stage times:
1min 13s
1min 58s
1min 13s
2min 5s
7s
#20
Jun 04
11:58
No Changes
9s
1min 2s
2min 11s
2min 38s
2min 1s
12s
#19
Jun 04
11:41
No Changes
4s
52s
1min 39s
52s
2min 8s
1s
failed
#18
Jun 04
11:35
No Changes
19s
1min 44s
2min 4s
8s
failed


Jenkins
Jenkins
FirstPipeline
Stage Logs (Preparation)
Git -- https://github.com/mitesh51/spring-petclinic.git -- (self time 9s)
Use a tool from a predefined Tool Installation -- apache-maven-3.3.1 -- (self time 16ms)
FirstPipeline - Stage View
Success
Preparation
Logs
SonarQube analysis
Build
Deploy
Functional Test
Load Test
Average stage times:
1min 13s
1min 58s
1min 13s
2min 5s
7s
#20
Jun 04
11:58
No Changes
9s
1min 2s
2min 11s
2min 38s
2min 1s
12s
#19
Jun 04
11:41
No Changes
4s
52s
1min 39s
52s
2min 8s
1s
failed
#18
Jun 04
11:35
No Changes
19s
1min 44s
2min 4s
8s
failed


Jenkins
Jenkins
FirstPipeline
FirstPipeline - Stage
Average stage tim
#20
Jun 04
11:58
No Changes
#19
Jun 04
11:41
No Changes
#18
Jun 04
11:35
No Changes
failed
Stage Logs (Preparation)
Git -- https://github.com/mitesh51/spring-petclinic.git -- (self time 9s)
> git.exe rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/mitesh51/spring-petclinic.git # timeout=10
Fetching upstream changes from https://github.com/mitesh51/spring-petclinic.git
> git.exe --version # timeout=10
> git.exe fetch --tags --progress https://github.com/mitesh51/spring-petclinic.git +refs/heads/*:refs/remotes/origin/*
> git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
> git.exe rev-parse "refs/remotes/origin/origin/master^{commit}" # timeout=10
Checking out Revision 7262ae60875b6a7cc1b2a11d053e9423d149d36b (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f 7262ae60875b6a7cc1b2a11d053e9423d149d36b
> git.exe branch -a -v --no-abbrev # timeout=10
> git.exe branch -D master # timeout=10
> git.exe checkout -b master 7262ae60875b6a7cc1b2a11d053e9423d149d36b
> git.exe rev-list 7262ae60875b6a7cc1b2a11d053e9423d149d36b # timeout=10
Use a tool from a predefined Tool Installation -- apache-maven-3.3.1 -- (self time 16ms)

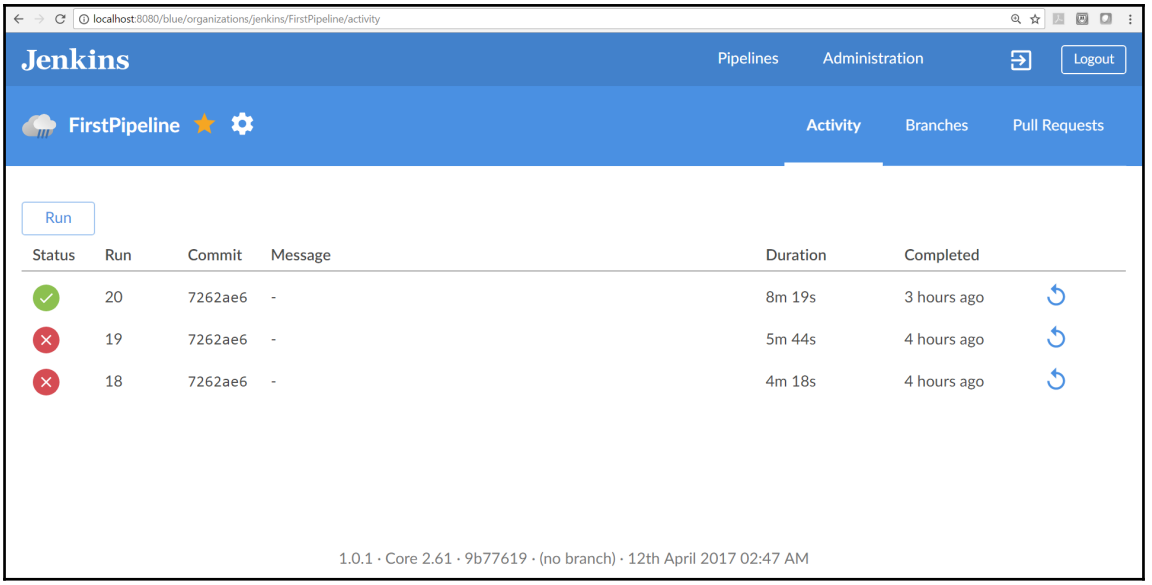
Console Output
Started by user admin
[Pipeline] node
Running on master in F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Preparation)
[Pipeline] git
> git.exe rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/mitesh51/spring-petclinic.git # timeout=10
Fetching upstream changes from https://github.com/mitesh51/spring-petclinic.git
> git.exe --version # timeout=10
> git.exe fetch --tags --progress https://github.com/mitesh51/spring-petclinic.git
+refs/heads/*:refs/remotes/origin/*
> git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
> git.exe rev-parse "refs/remotes/origin/origin/master^{commit}" # timeout=10
Checking out Revision 7262ae60875b6a7cc1b2a11d053e9423d149d36b (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f 7262ae60875b6a7cc1b2a11d053e9423d149d36b
> git.exe branch -a -v --no-abbrev # timeout=10
> git.exe branch -D master # timeout=10
> git.exe checkout -b master 7262ae60875b6a7cc1b2a11d053e9423d149d36b
> git.exe rev-list 7262ae60875b6a7cc1b2a11d053e9423d149d36b # timeout=10
[Pipeline] tool

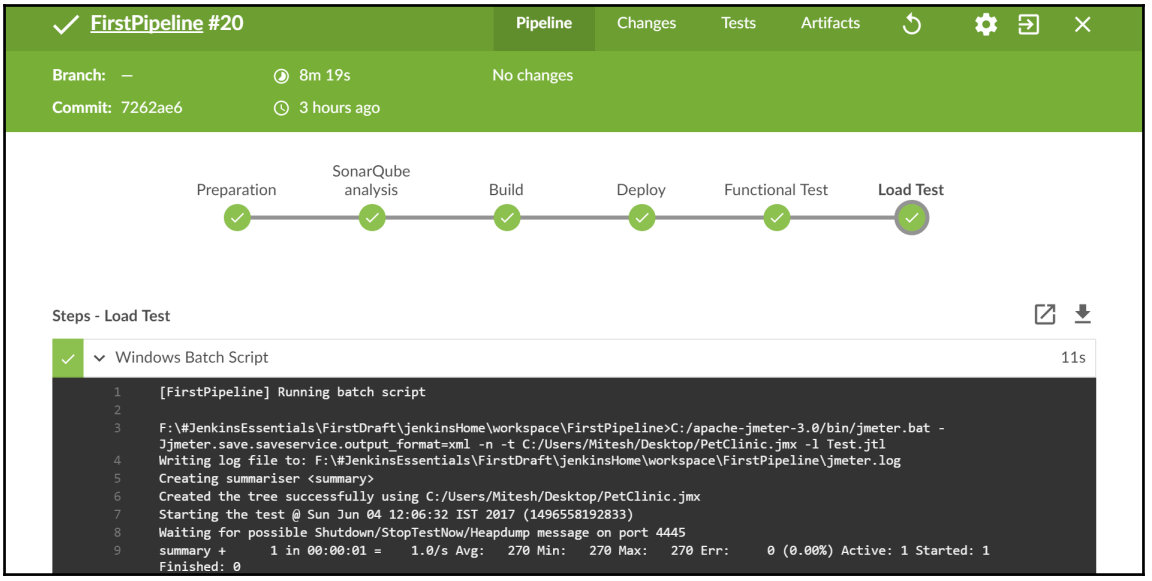
```
[Pipeline] stage
[Pipeline] { (SonarQube analysis)
[Pipeline] tool
[Pipeline] wrap
Injecting SonarQube environment variables using the configuration: Sonarqube6.3
[Pipeline] {
[Pipeline] bat
[FirstPipeline] Running batch script

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline>F:\#JenkinsEssentials\FirstDraft\jenkinsHome\t
ools\hudson.plugins.sonar.SonarRunnerInstallation\SonarQube_Scanner_3.0.3/bin/sonar-scanner -
Dsonar.host.url=http://localhost:9000/ -Dsonar.login=****** -Dsonar.projectVersion=1.0 -
Dsonar.projectKey=petclinicKey -Dsonar.sources=src
INFO: Scanner configuration file:
F:\#JenkinsEssentials\FirstDraft\jenkinsHome\tools\hudson.plugins.sonar.SonarRunnerInstallation\SonarQube_Scanner_3
.0.3\bin\..\conf\sonar-scanner.properties
INFO: Project root configuration file: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\sonar-
project.properties
INFO: SonarQube Scanner 3.0.3.778
INFO: Java 1.8.0_111 Oracle Corporation (64-bit)
INFO: Windows 10 10.0 amd64
INFO: User cache: C:\Users\Mitesh\.sonar\cache
INFO: Load global settings
INFO: Load global settings (done) | time=3968ms
INFO: User cache: C:\Users\Mitesh\.sonar\cache
INFO: Load plugins index
INFO: Load plugins index (done) | time=138ms
INFO: SonarQube server 6.3.1
```

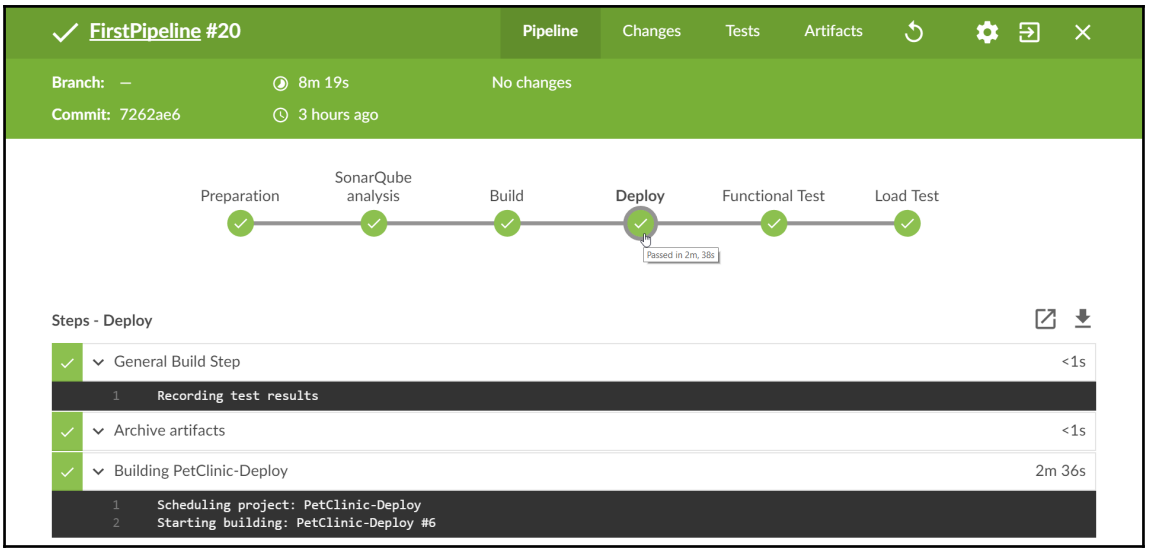
```
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] isUnix
[Pipeline] bat
[FirstPipeline] Running batch script

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline>"C:\apache-maven-3.3.1\bin\mvn" clean package
[INFO] Scanning for projects...
[INFO]
[INFO] ------------------------------------------------------------------------
[INFO] Building petclinic 4.2.5-SNAPSHOT
[INFO] ------------------------------------------------------------------------
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ spring-petclinic ---
[INFO] Deleting F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\target
[INFO]
[INFO] --- cobertura-maven-plugin:2.7:clean (default) @ spring-petclinic ---
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ spring-petclinic ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 18 resources
[INFO]
[INFO] --- maven-compiler-plugin:3.0:compile (default-compile) @ spring-petclinic ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 45 source files to
F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\target\classes
[parsing started
RegularFileObject[F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\src\main\java\org\springfram
ework\samples\petclinic\web\PetValidator.java]]
[parsing completed 219ms]
```

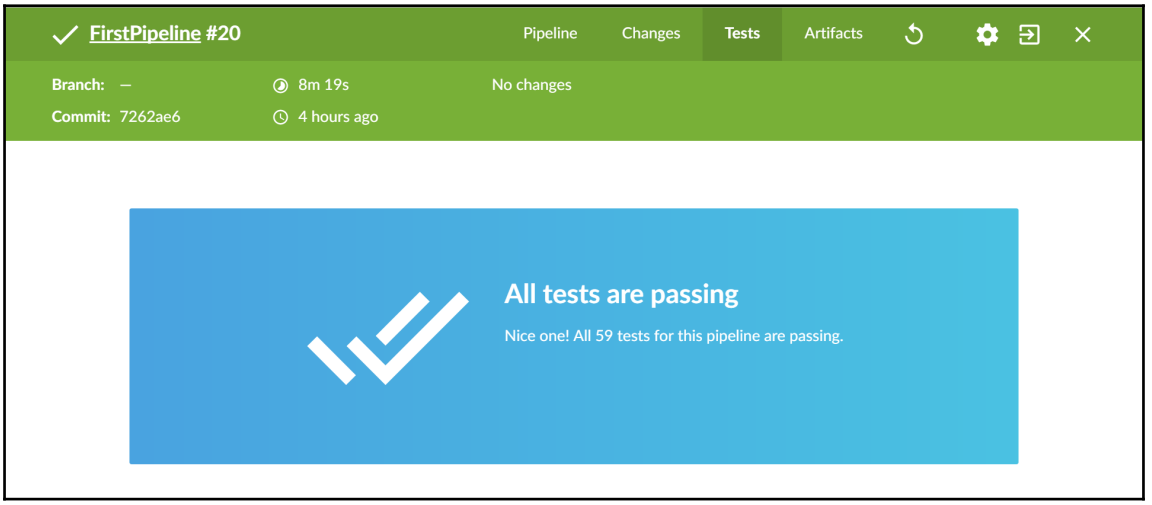
```
[INFO] Building war: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\target\petclinic.war
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 02:03 min
[INFO] Finished at: 2017-06-04T12:01:43+05:30
[INFO] Final Memory: 27M/88M
[INFO] ------------------------------------------------------------------------
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] step
Recording test results
[Pipeline] archive
[Pipeline] build (Building PetClinic-Deploy)
Scheduling project: PetClinic-Deploy
Starting building: PetClinic-Deploy #6
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Functional Test)
[Pipeline] git
 > git.exe rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
 > git.exe config remote.origin.url https://github.com/mitesh51/petclinic-func.git # timeout=10
Fetching upstream changes from https://github.com/mitesh51/petclinic-func.git
 > git.exe --version # timeout=10
 > git.exe fetch --tags --progress https://github.com/mitesh51/petclinic-func.git
+refs/heads/*:refs/remotes/origin/*
```

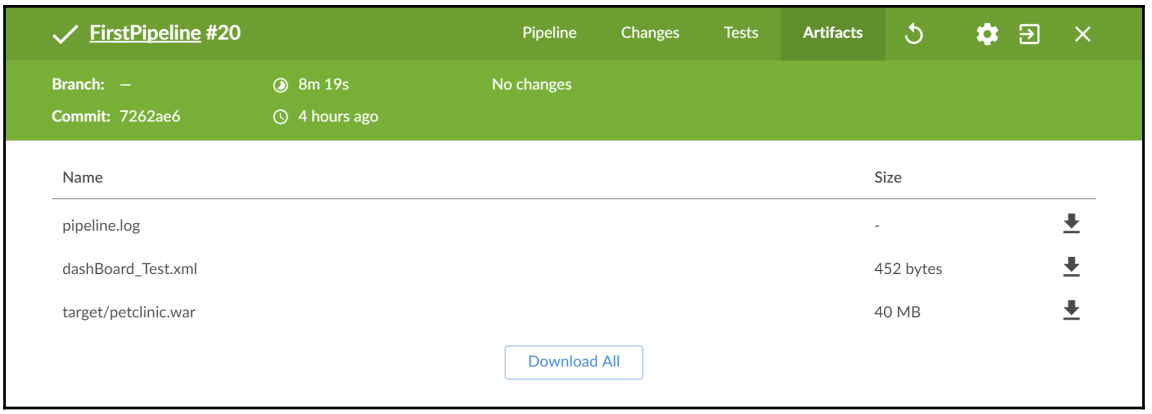
```
Results :

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 01:42 min
[INFO] Finished at: 2017-06-04T12:06:24+05:30
[INFO] Final Memory: 18M/80M
[INFO] ------------------------------------------------------------------------
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Load Test)
[Pipeline] bat
[FirstPipeline] Running batch script

F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline>C:/apache-jmeter-3.0/bin/jmeter.bat -
Jjmeter.save.saveservice.output_format=xml -n -t C:/Users/Mitesh/Desktop/PetClinic.jmx -l Test.jtl
Writing log file to: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\jmeter.log
Creating summariser <summary>
Created the tree successfully using C:/Users/Mitesh/Desktop/PetClinic.jmx
Starting the test @ Sun Jun 04 12:06:32 IST 2017 (1496558192833)
Waiting for possible Shutdown/StopTestNow/Heapdump message on port 4445
summary +      1 in 00:00:01 =    1.0/s Avg:   270 Min:   270 Max:   270 Err:     0 (0.00%) Active: 1 Started: 1
Finished: 0
summary +     49 in 00:00:01 =   61.1/s Avg:    13 Min:     4 Max:   157 Err:     0 (0.00%) Active: 0 Started: 1
Finished: 1
summary =     50 in 00:00:02 =   27.0/s Avg:    18 Min:     4 Max:   270 Err:     0 (0.00%)
```

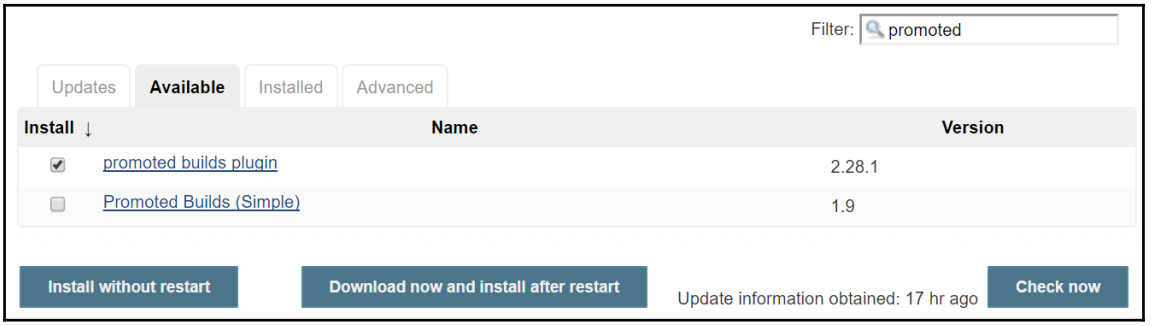

localhost:8080/blue/organizations/jenkins/FirstPipeline/activity
Jenkins
Pipelines
Administration
Logout
FirstPipeline
Activity
Branches
Pull Requests
Run
Status
Run
Commit
Message
Duration
Completed
20
7262ae6
-
8m 19s
3 hours ago
19
7262ae6
-
5m 44s
4 hours ago
18
7262ae6
-
4m 18s
4 hours ago
1.0.1 · Core 2.61 · 9b77619 · (no branch) · 12th April 2017 02:47 AM

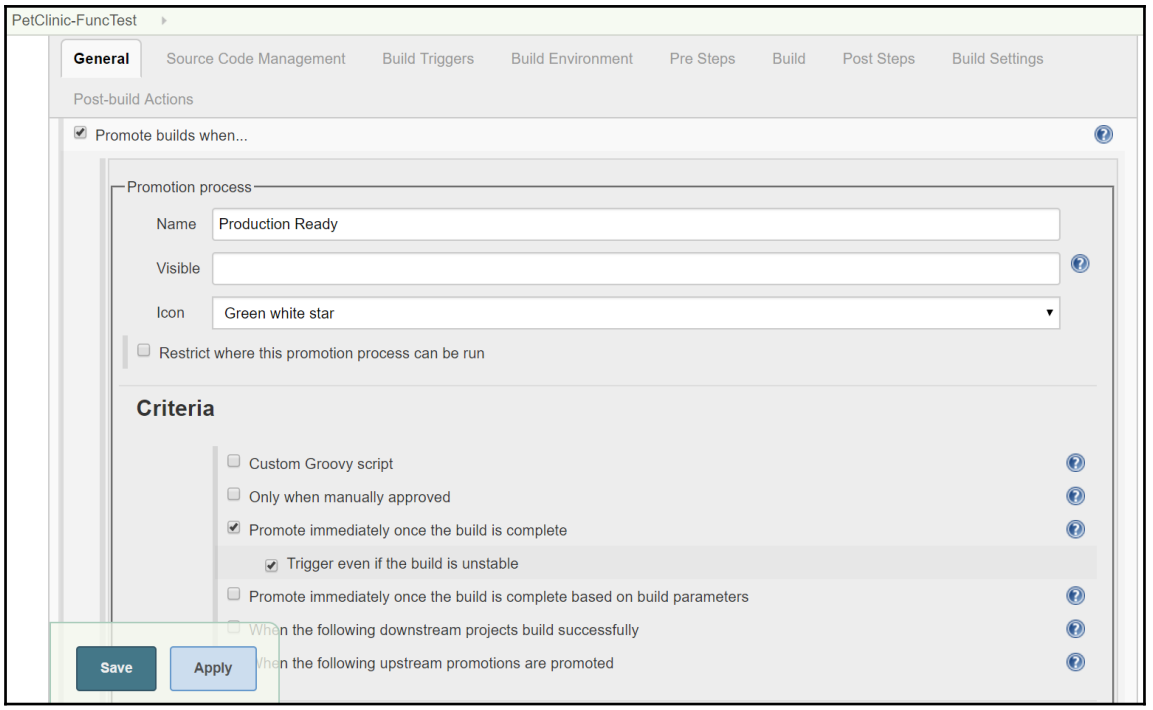

FirstPipeline #20
Pipeline
Changes
Tests
Artifacts
Branch: –
8m 19s
No changes
Commit: 7262ae6
3 hours ago
Preparation
SonarQube analysis
Build
Deploy
Functional Test
Load Test
Steps - Load Test
Windows Batch Script
11s
[FirstPipeline] Running batch script
F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline>C:/apache-jmeter-3.0/bin/jmeter.bat -Jjmeter.save.saveservice.output_format=xml -n -t C:/Users/Mitesh/Desktop/PetClinic.jmx -l Test.jtl
Writing log file to: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\jmeter.log
Creating summariser <summary>
Created the tree successfully using C:/Users/Mitesh/Desktop/PetClinic.jmx
Starting the test @ Sun Jun 04 12:06:32 IST 2017 (1496558192833)
Waiting for possible Shutdown/StopTestNow/Heapdump message on port 4445
summary + 1 in 00:00:01 = 1.0/s Avg: 270 Min: 270 Max: 270 Err: 0 (0.00%) Active: 1 Started: 1 Finished: 0

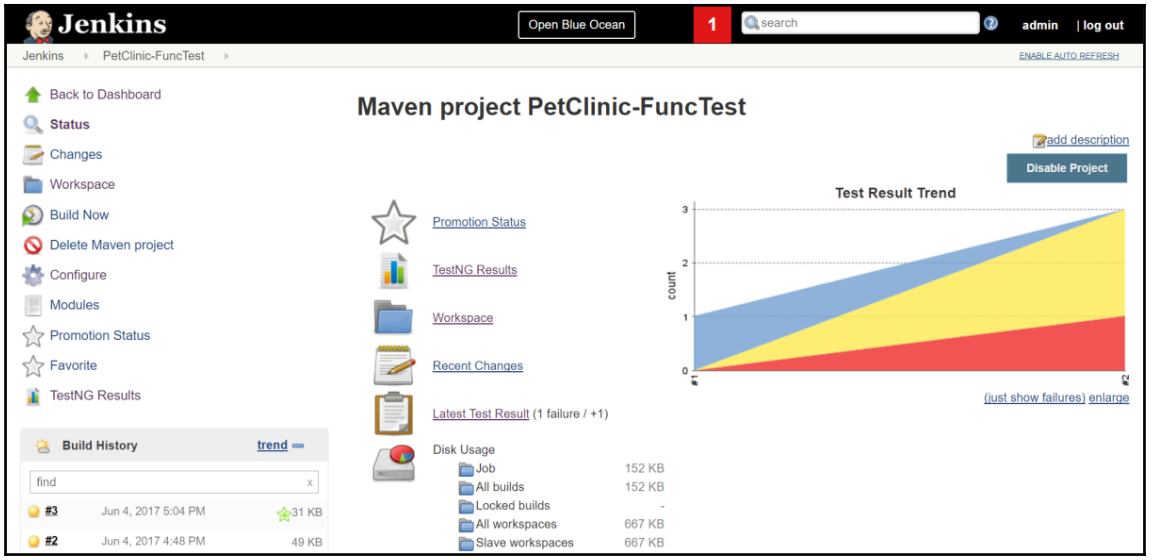

FirstPipeline #20
Pipeline
Changes
Tests
Artifacts
Branch: –
8m 19s
No changes
Commit: 7262ae6
3 hours ago
Preparation
SonarQube analysis
Build
Deploy
Functional Test
Load Test
Passed in 2m, 38s
Steps - Deploy
General Build Step
<1s
1 Recording test results
Archive artifacts
<1s
Building PetClinic-Deploy
2m 36s
1 Scheduling project: PetClinic-Deploy
2 Starting building: PetClinic-Deploy #6


FirstPipeline #20
Pipeline
Changes
Tests
Artifacts
Branch: –
8m 19s
No changes
Commit: 7262ae6
4 hours ago
All tests are passing
Nice one! All 59 tests for this pipeline are passing.

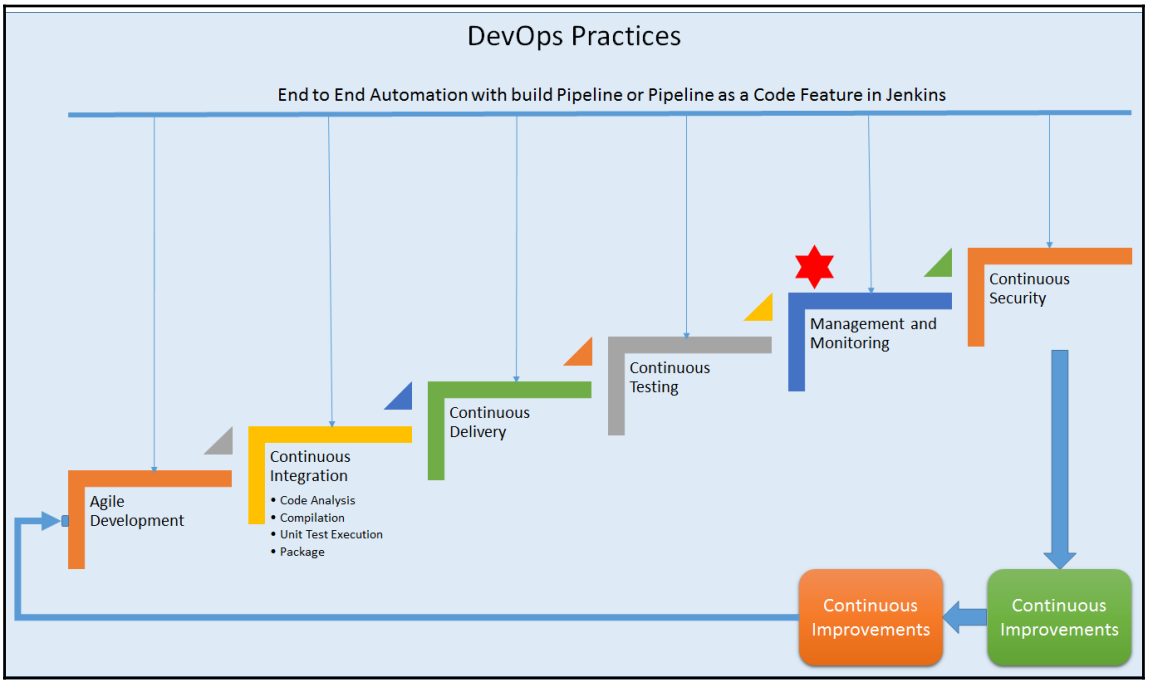

FirstPipeline #20
Pipeline
Changes
Tests
Artifacts
Branch: –
8m 19s
No changes
Commit: 7262ae6
4 hours ago
Name
Size
pipeline.log
-
dashBoard_Test.xml
452 bytes
target/petclinic.war
40 MB
Download All

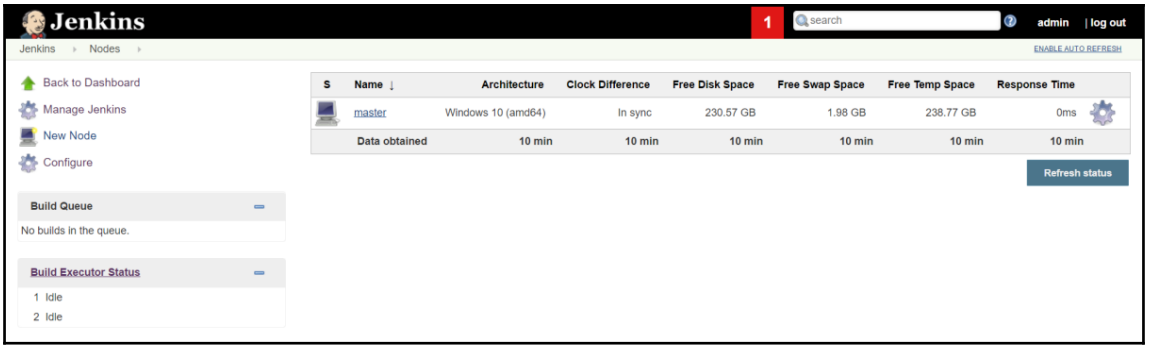

Filter: promoted
Updates
Available
Installed
Advanced
Install
Name
Version
promoted builds plugin
2.28.1
Promoted Builds (Simple)
1.9
Install without restart
Download now and install after restart
Update information obtained: 17 hr ago
Check now

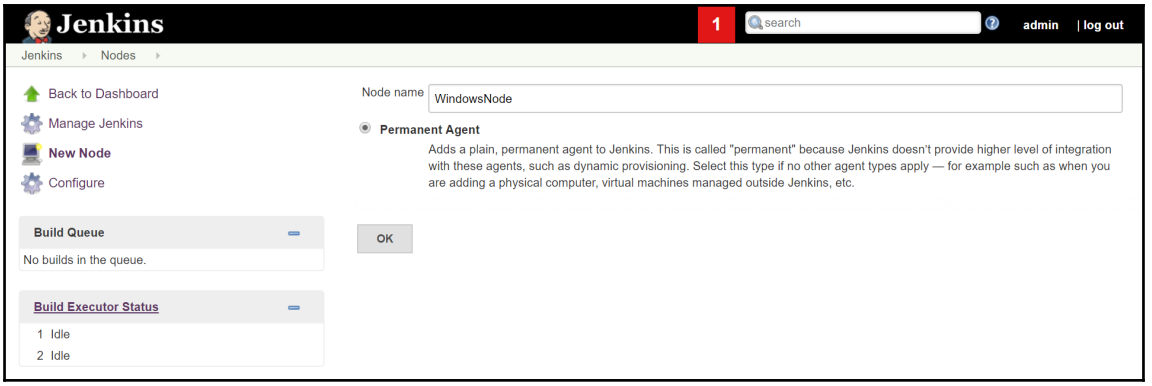

PetClinic-FuncTest
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Promote builds when...
Promotion process
Name
Production Ready
Visible
Icon
Green white star
Restrict where this promotion process can be run
Criteria
Custom Groovy script
Only when manually approved
Promote immediately once the build is complete
Trigger even if the build is unstable
Promote immediately once the build is complete based on build parameters
When the following downstream projects build successfully
When the following upstream promotions are promoted
Save
Apply

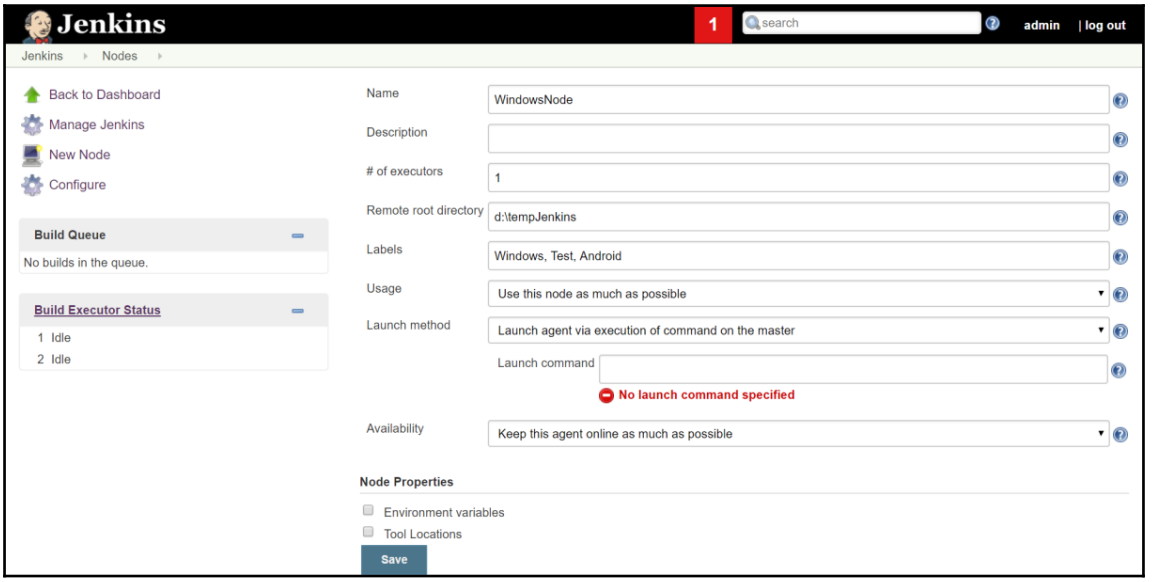

Jenkins
Open Blue Ocean
search
admin
log out
Jenkins
PetClinic-FuncTest
ENABLE AUTO REFRESH
Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Maven project
Configure
Modules
Promotion Status
Favorite
TestNG Results
Build History
trend
find
#3 Jun 4, 2017 5:04 PM 31 KB
#2 Jun 4, 2017 4:48 PM 49 KB
Maven project PetClinic-FuncTest
add description
Disable Project
Promotion Status
TestNG Results
Workspace
Recent Changes
Latest Test Result (1 failure / +1)
Disk Usage
Job 152 KB
All builds 152 KB
Locked builds -
All workspaces 667 KB
Slave workspaces 667 KB
Test Result Trend
count
(just show failures) enlarge

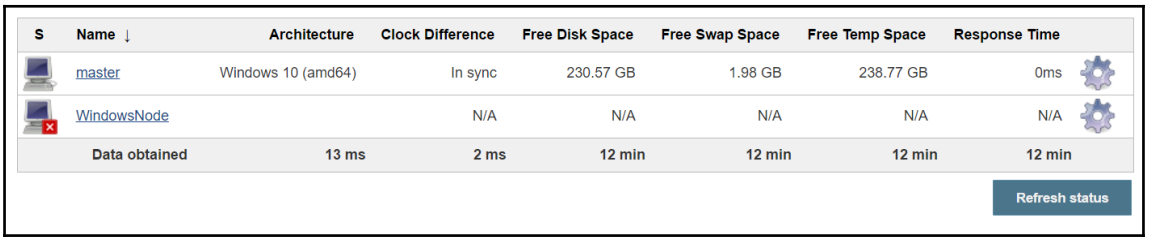
Chapter 08: Managing and Monitoring Jenkins







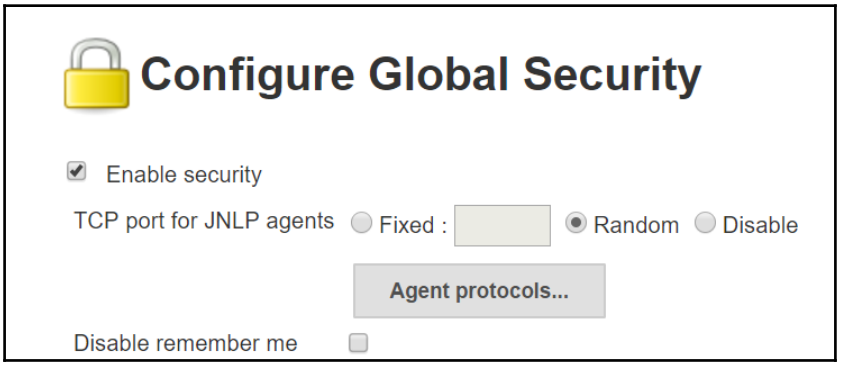


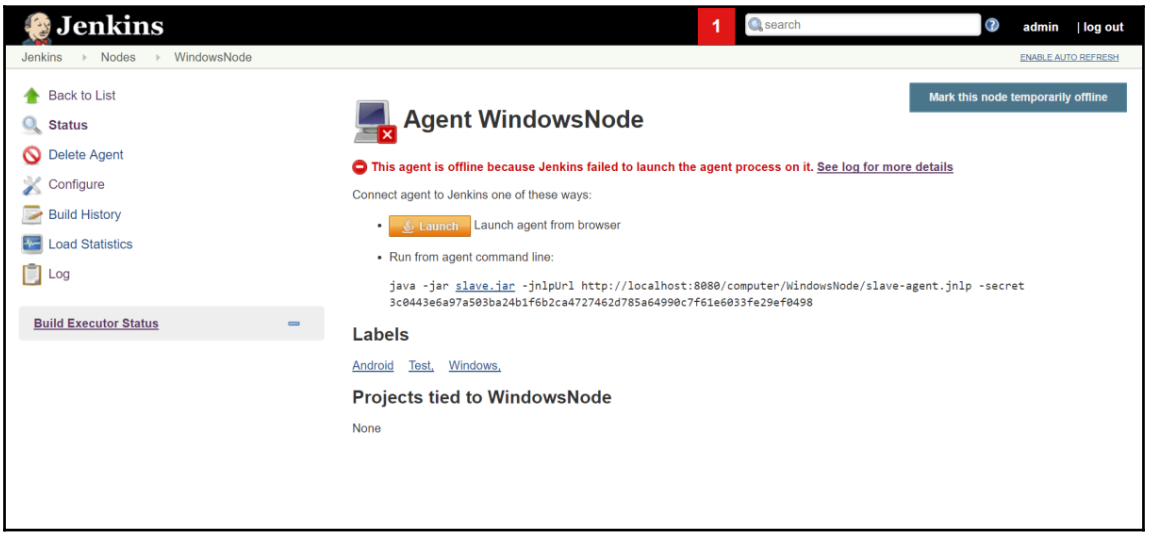


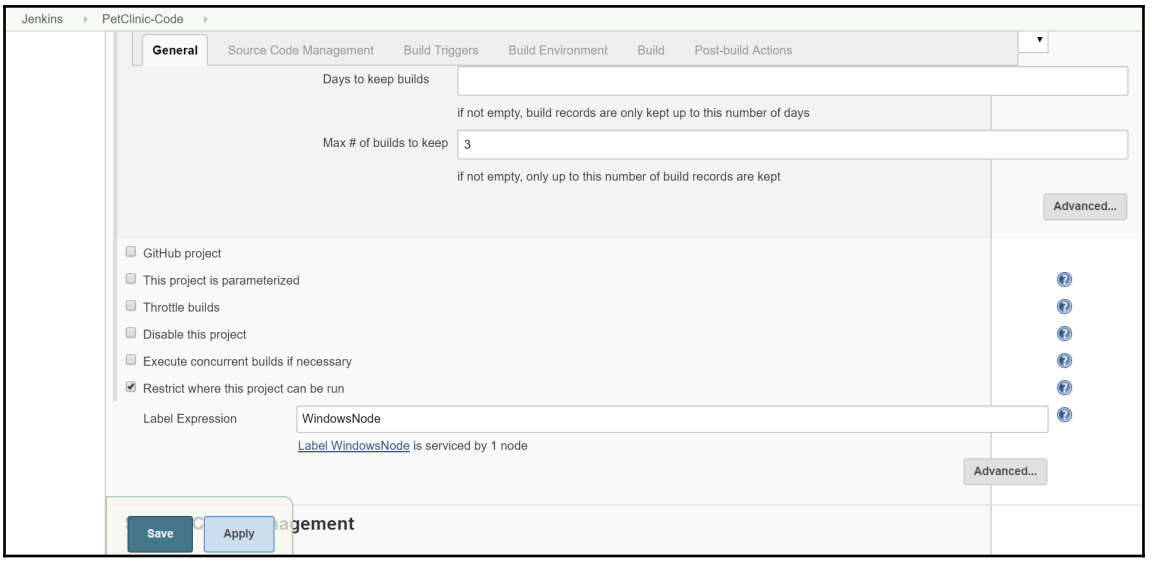
S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	master	Windows 10 (amd64)	In sync	230.57 GB	1.98 GB	238.77 GB	0ms
	WindowsNode		N/A	N/A	N/A	N/A	N/A
	Data obtained	**13 ms**	**2 ms**	**12 min**	**12 min**	**12 min**	**12 min**

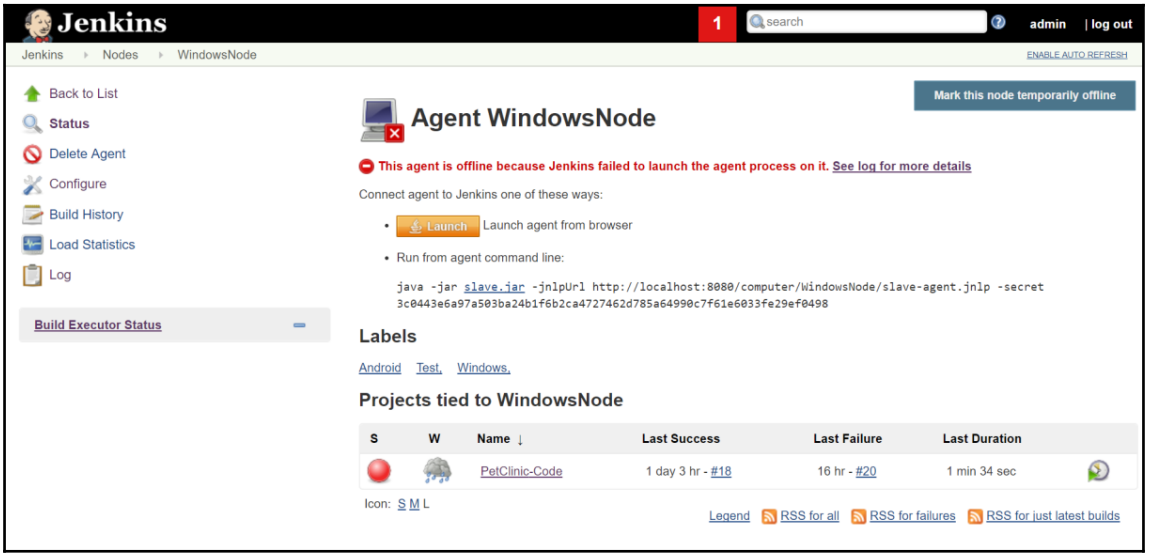
Refresh status

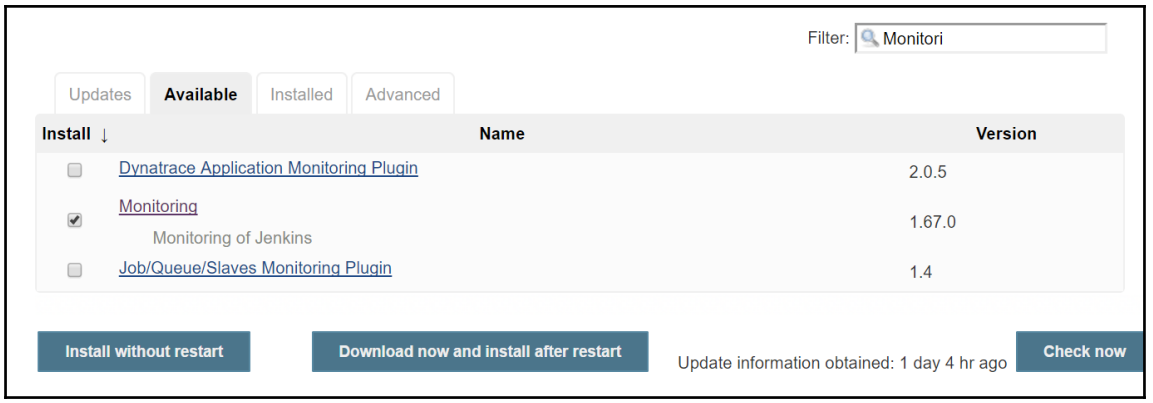
Jenkins
1
search
admin
| log out
Jenkins
Nodes
WindowsNode
ENABLE AUTO REFRESH
Back to List
Status
Delete Agent
Configure
Build History
Load Statistics
Log
Build Executor Status
Mark this node temporarily offline
Agent WindowsNode
This agent is offline because Jenkins failed to launch the agent process on it. See log for more details
Launch agent
Labels
Android
Test,
Windows,
Projects tied to WindowsNode
None

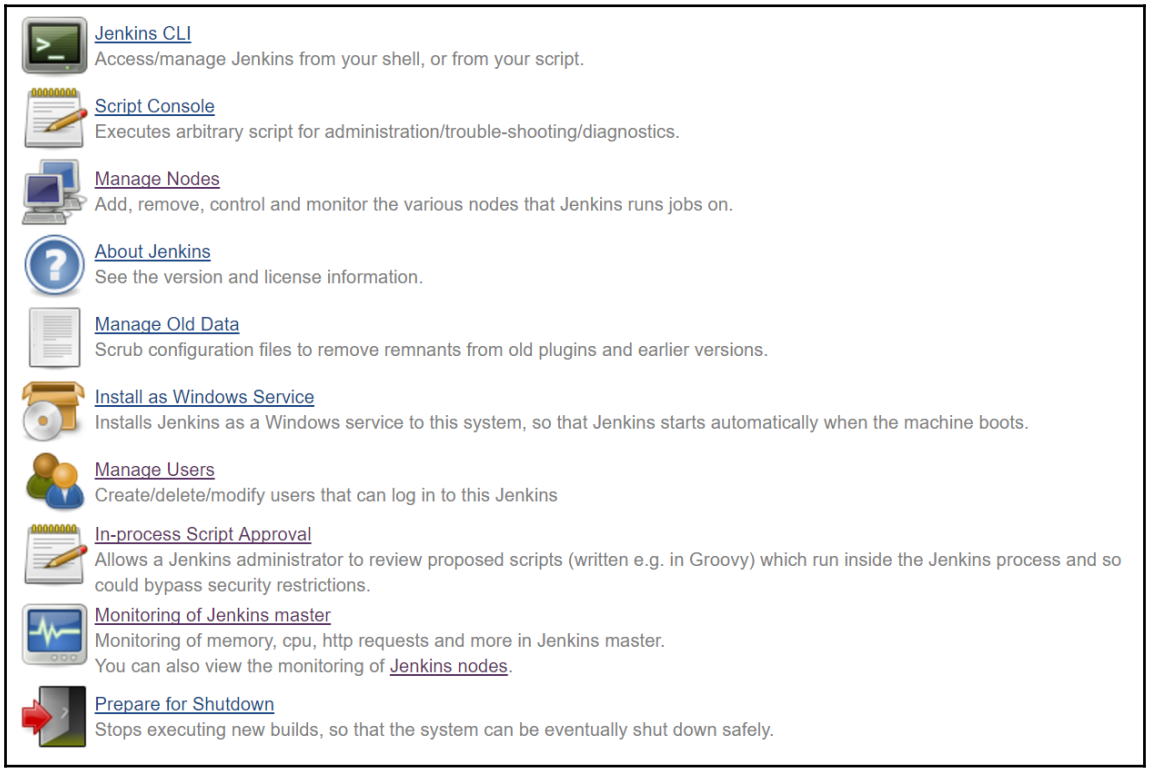

Configure Global Security
Enable security
TCP port for JNLP agents
Fixed :
Random
Disable
Agent protocols...
Disable remember me

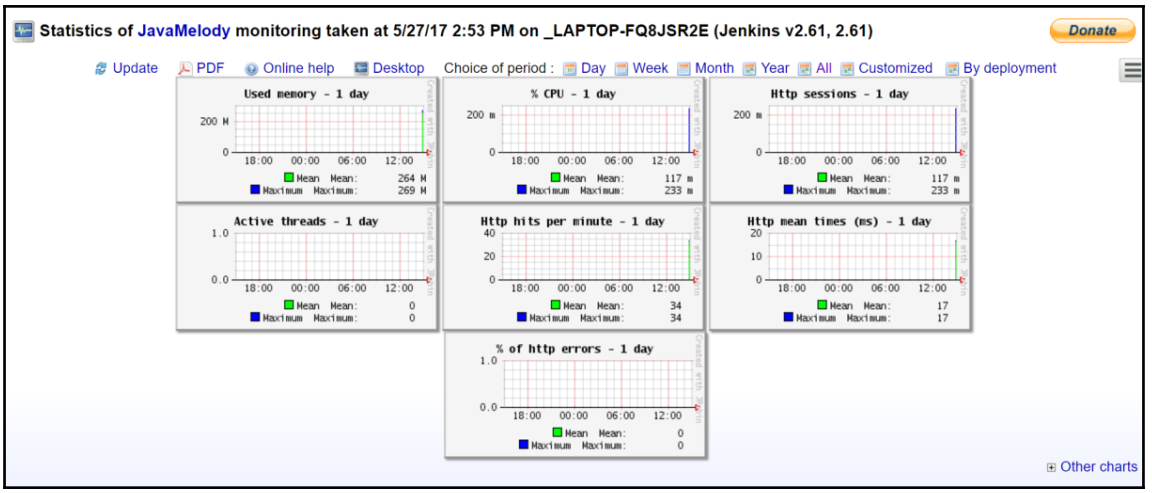

Jenkins
1
search
admin
| log out
Jenkins
Nodes
WindowsNode
ENABLE AUTO REFRESH
Back to List
Status
Delete Agent
Configure
Build History
Load Statistics
Log
Build Executor Status
Mark this node temporarily offline
Agent WindowsNode
This agent is offline because Jenkins failed to launch the agent process on it. See log for more details
Connect agent to Jenkins one of these ways:
Launch
Launch agent from browser
Run from agent command line:
java -jar slave.jar -jnlpUrl http://localhost:8080/computer/WindowsNode/slave-agent.jnlp -secret
3c0443e6a97a503ba24b1f6b2ca4727462d785a64990c7f61e6033fe29ef0498
Labels
Android
Test,
Windows,
Projects tied to WindowsNode
None

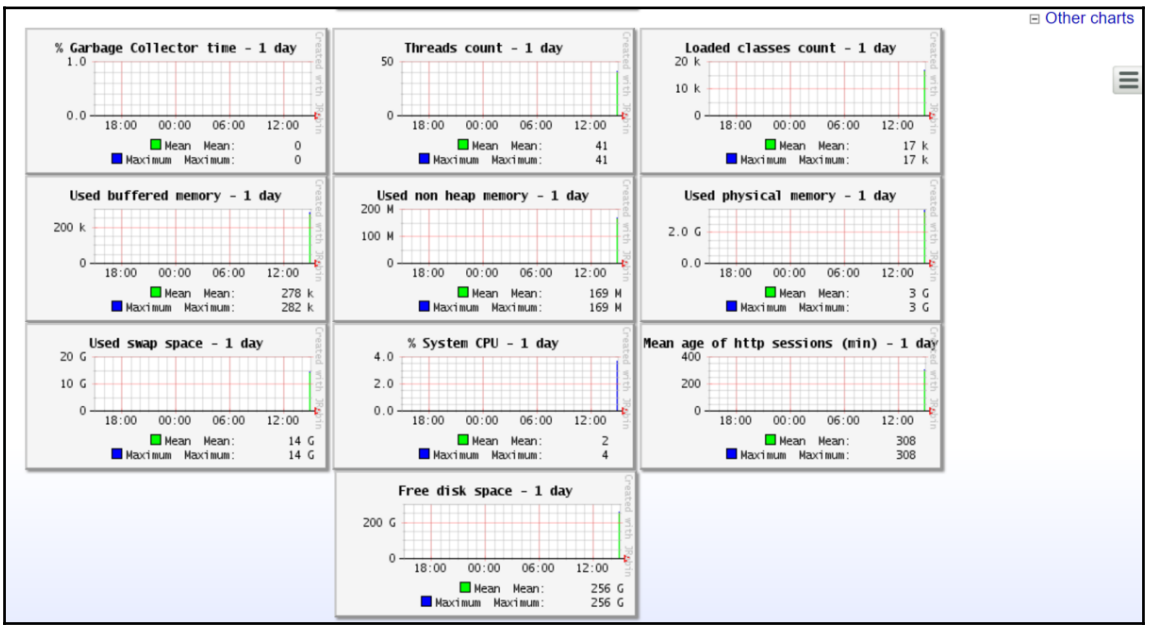

Jenkins
PetClinic-Code
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Days to keep builds
if not empty, build records are only kept up to this number of days
Max # of builds to keep
3
if not empty, only up to this number of build records are kept
Advanced...
GitHub project
This project is parameterized
Throttle builds
Disable this project
Execute concurrent builds if necessary
Restrict where this project can be run
Label Expression
WindowsNode
Label WindowsNode is serviced by 1 node
Advanced...
Save
Apply


Jenkins
search
admin
log out
Jenkins
Nodes
WindowsNode
ENABLE AUTO REFRESH
Back to List
Status
Delete Agent
Configure
Build History
Load Statistics
Log
Build Executor Status
Mark this node temporarily offline
Agent WindowsNode
This agent is offline because Jenkins failed to launch the agent process on it. See log for more details
Connect agent to Jenkins one of these ways:
Launch
Launch agent from browser
Run from agent command line:
java -jar slave.jar -jnlpUrl http://localhost:8080/computer/WindowsNode/slave-agent.jnlp -secret 3c0443e6a97a503ba24b1f6b2ca4727462d785a64990c7f61e6033fe29ef0498
Labels
Android
Test,
Windows,
Projects tied to WindowsNode
S
W
Name
Last Success
Last Failure
Last Duration
PetClinic-Code
1 day 3 hr - #18
16 hr - #20
1 min 34 sec
Icon: S M L
Legend
RSS for all
RSS for failures
RSS for just latest builds


Filter: Monitori
Updates
Available
Installed
Advanced
Install ↓
Name
Version
Dynatrace Application Monitoring Plugin
2.0.5
Monitoring
Monitoring of Jenkins
1.67.0
Job/Queue/Slaves Monitoring Plugin
1.4
Install without restart
Download now and install after restart
Update information obtained: 1 day 4 hr ago
Check now


Jenkins CLI
Access/manage Jenkins from your shell, or from your script.
Script Console
Executes arbitrary script for administration/trouble-shooting/diagnostics.
Manage Nodes
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
About Jenkins
See the version and license information.
Manage Old Data
Scrub configuration files to remove remnants from old plugins and earlier versions.
Install as Windows Service
Installs Jenkins as a Windows service to this system, so that Jenkins starts automatically when the machine boots.
Manage Users
Create/delete/modify users that can log in to this Jenkins
In-process Script Approval
Allows a Jenkins administrator to review proposed scripts (written e.g. in Groovy) which run inside the Jenkins process and so could bypass security restrictions.
Monitoring of Jenkins master
Monitoring of memory, cpu, http requests and more in Jenkins master.
You can also view the monitoring of Jenkins nodes.
Prepare for Shutdown
Stops executing new builds, so that the system can be eventually shut down safely.


Statistics of JavaMelody monitoring taken at 5/27/17 2:53 PM on _LAPTOP-FQ8JSR2E (Jenkins v2.61, 2.61)
Donate
Update
PDF
Online help
Desktop
Choice of period :
Day
Week
Month
Year
All
Customized
By deployment
Used memory - 1 day
200 M
0
18:00 00:00 06:00 12:00
Mean Mean: 264 M
Maximum Maximum: 269 M
% CPU - 1 day
200 m
0
18:00 00:00 06:00 12:00
Mean Mean: 117 m
Maximum Maximum: 233 m
Http sessions - 1 day
200 m
0
18:00 00:00 06:00 12:00
Mean Mean: 117 m
Maximum Maximum: 233 m
Active threads - 1 day
1.0
0.0
18:00 00:00 06:00 12:00
Mean Mean: 0
Maximum Maximum: 0
Http hits per minute - 1 day
40
20
0
18:00 00:00 06:00 12:00
Mean Mean: 34
Maximum Maximum: 34
Http mean times (ms) - 1 day
20
10
0
18:00 00:00 06:00 12:00
Mean Mean: 17
Maximum Maximum: 17
% of http errors - 1 day
1.0
0.0
18:00 00:00 06:00 12:00
Mean Mean: 0
Maximum Maximum: 0
Other charts


Other charts
% Garbage Collector time - 1 day
1.0
0.0
18:00 00:00 06:00 12:00
Mean Mean: 0
Maximum Maximum: 0
Threads count - 1 day
50
0
18:00 00:00 06:00 12:00
Mean Mean: 41
Maximum Maximum: 41
Loaded classes count - 1 day
20 k
10 k
0
18:00 00:00 06:00 12:00
Mean Mean: 17 k
Maximum Maximum: 17 k
Used buffered memory - 1 day
200 k
0
18:00 00:00 06:00 12:00
Mean Mean: 278 k
Maximum Maximum: 282 k
Used non heap memory - 1 day
200 M
100 M
0
18:00 00:00 06:00 12:00
Mean Mean: 169 M
Maximum Maximum: 169 M
Used physical memory - 1 day
2.0 G
0.0
18:00 00:00 06:00 12:00
Mean Mean: 3 G
Maximum Maximum: 3 G
Used swap space - 1 day
20 G
10 G
0
18:00 00:00 06:00 12:00
Mean Mean: 14 G
Maximum Maximum: 14 G
% System CPU - 1 day
4.0
2.0
0.0
18:00 00:00 06:00 12:00
Mean Mean: 2
Maximum Maximum: 4
Mean age of http sessions (min) - 1 day
400
200
0
18:00 00:00 06:00 12:00
Mean Mean: 308
Maximum Maximum: 308
Free disk space - 1 day
200 G
0
18:00 00:00 06:00 12:00
Mean Mean: 256 G
Maximum Maximum: 256 G

Statistics http - 1 day

Request	% of cumulative time	Hits	Mean time (ms)	Max time (ms)	Standard deviation	% of cumulative cpu time	Mean cpu time (ms)	% of system error	Mean size (Kb
http global	100	34	17	128	34	100	5	0.00	2.0
http warning	50	5	60	114	52	24	9	0.00	54
http severe	0	0	-1	0	-1	0	-1	0.00	0

41 hits/min on 18 requests ⊞ Details

Statistics http system errors - 1 day

None

Statistics system errors logs - 1 day

None

Current requests

None

System information

Execute the garbage collector | Generate a heap dump | View memory histogram | Invalidate http sessions | View http sessions
View deployment descriptor | MBeans | View OS processes | JNDI tree

Host:	LAPTOP-FQ8JSR2E@192.168.99.1
Java memory used:	290 Mb / 889 Mb
Nb of http sessions:	1
Nb of active threads (current http requests):	0
% System CPU	16.97

⊞ Details

Threads

Threads on LAPTOP-FQ8JSR2E@192.168.43.209: Number = 44, Maximum = 51, Total started = 71 ⊟ Details

Thread	Daemon ?	Priority	State	Executed method	Cpu time (ms)	User time (ms)	Kill
Attach Listener	yes	5	RUNNABLE		0	0	
Computer.threadPoolForRemoting [#1]	yes	5	TIMED_WAITING	sun.misc.Unsafe.park(Native Method)	187	109	
DestroyJavaVM	no	5	RUNNABLE		1,875	1,328	
FilePath.localPool [#1]	yes	5	TIMED_WAITING	sun.misc.Unsafe.park(Native Method)	78	46	
Finalizer	yes	8	WAITING	java.lang.Object.wait(Native Method)	31	31	
Handling GET /monitoring from 0:0:0:0:0:0:0:1 : RequestHandlerThread[#2]	yes	5	RUNNABLE	java.lang.Thread.dumpThreads(Native Method)	125	109	
Java2D Disposer	yes	10	WAITING	java.lang.Object.wait(Native Method)	0	0	
javamelody	yes	5	TIMED_WAITING	java.lang.Object.wait(Native Method)	187	62	
Jenkins cron thread	no	5	WAITING	java.lang.Object.wait(Native Method)	0	0	
Jenkins UDP 33848 monitoring thread	no	5	RUNNABLE	java.net.TwoStacksPlainDatagramSocketImpl.receive0(Native Method)	0	0	
jenkins.util.Timer [#10]	yes	5	WAITING	sun.misc.Unsafe.park(Native Method)	15	15	
jenkins.util.Timer [#1]	yes	5	WAITING	sun.misc.Unsafe.park(Native Method)	15	15	
jenkins.util.Timer [#2]	yes	5	TIMED_WAITING	sun.misc.Unsafe.park(Native Method)	15	0	
jenkins.util.Timer [#3]	yes	5	WAITING	sun.misc.Unsafe.park(Native Method)	31	15	
jenkins.util.Timer [#4]	yes	5	WAITING	sun.misc.Unsafe.park(Native Method)	0	0	

Installing Plugins/Upgrades

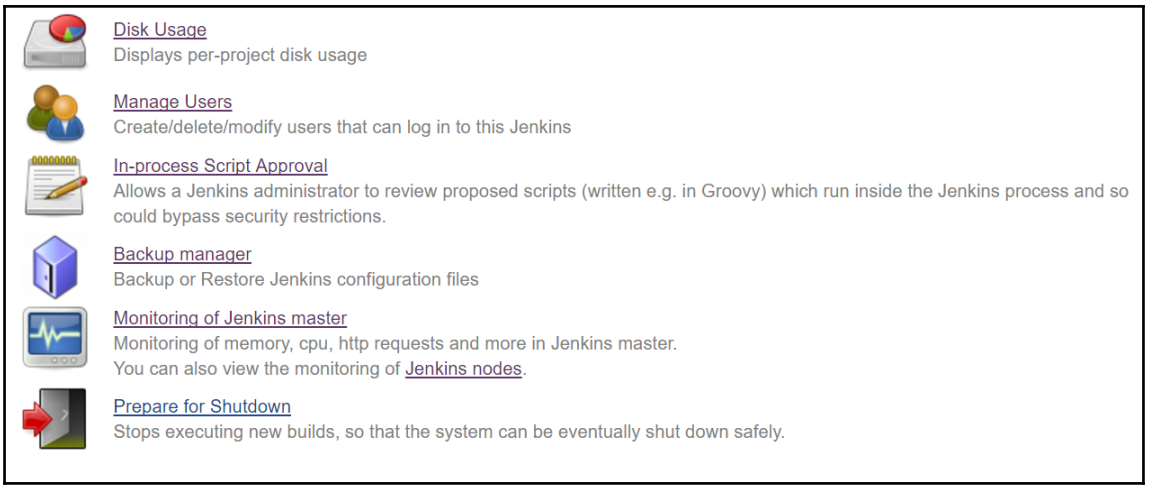
Preparation

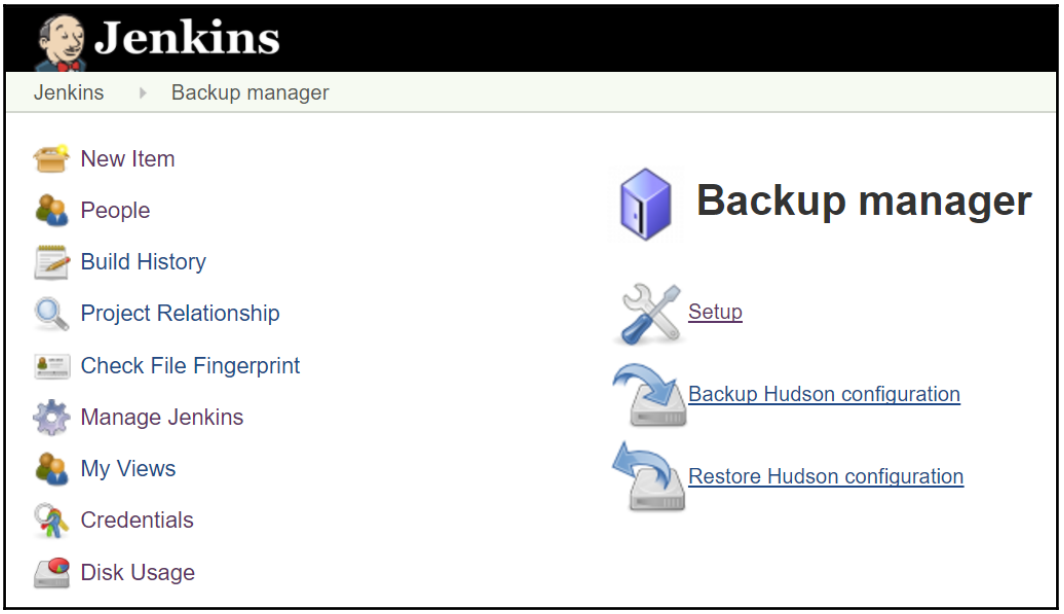
- Checking internet connectivity
- Checking update center connectivity
- Success

Dashboard View	Success
Deploy to container Plugin	Success
Monitoring	Success
Audit Trail	Success
disk-usage plugin	Success
Backup plugin	Success

Go back to the top page
(you can start using the installed plugins right away)

Restart Jenkins when installation is complete and no jobs are running


Disk Usage
Displays per-project disk usage
Manage Users
Create/delete/modify users that can log in to this Jenkins
In-process Script Approval
Allows a Jenkins administrator to review proposed scripts (written e.g. in Groovy) which run inside the Jenkins process and so could bypass security restrictions.
Backup manager
Backup or Restore Jenkins configuration files
Monitoring of Jenkins master
Monitoring of memory, cpu, http requests and more in Jenkins master.
You can also view the monitoring of Jenkins nodes.
Prepare for Shutdown
Stops executing new builds, so that the system can be eventually shut down safely.


Jenkins
Jenkins
Backup manager
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Credentials
Disk Usage
Backup manager
Setup
Backup Hudson configuration
Restore Hudson configuration

Backup config files

Backup configuration

Hudson root directory F:\#JenkinsEssentials\FirstDraft\jenkinsHome

Backup directory: d:\backup

Format: zip

File name template: date

Custom exclusions:

- [ ] Verbose mode
- [ ] Configuration files (.xml) only
- [ ] No shutdown

Backup content

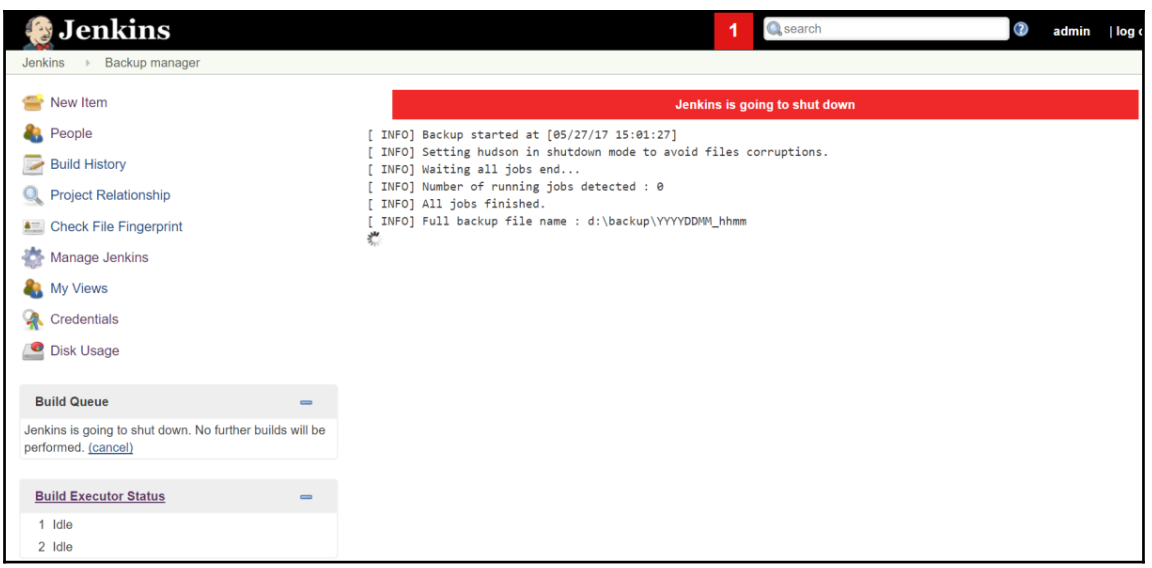
- [x] Backup job workspace

Includes:

Excludes:

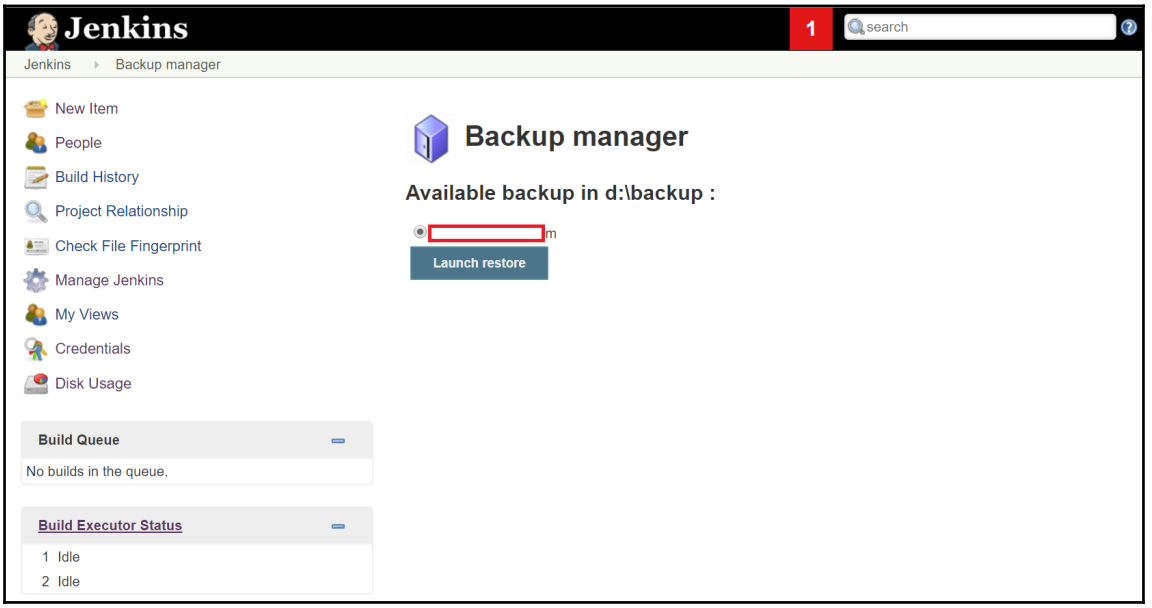
Case-sensitive: [ ]

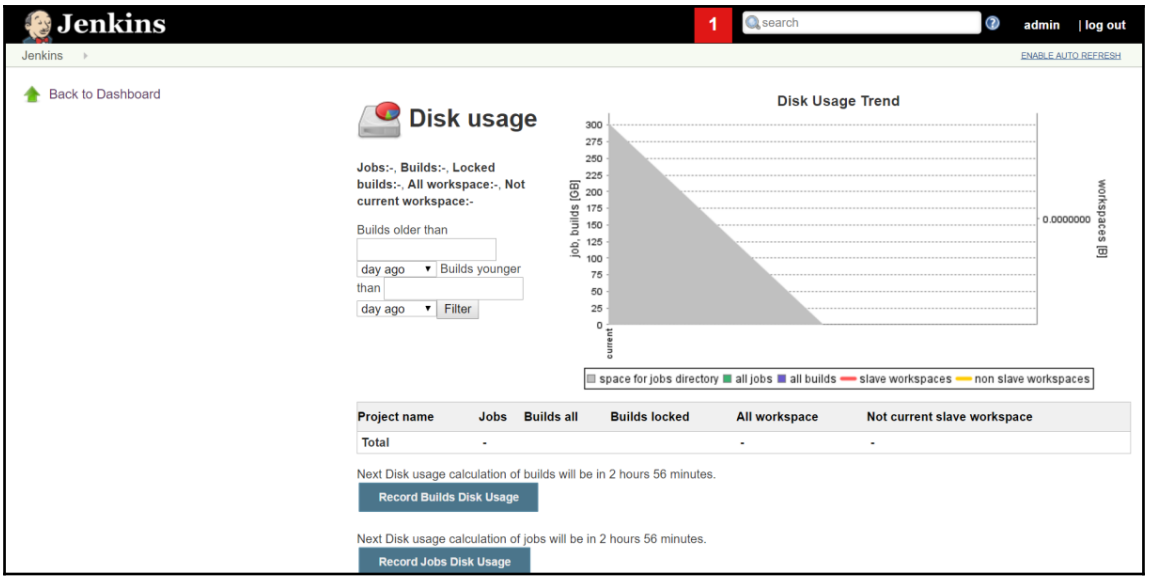
- [ ] Backup builds history
- [ ] Backup maven artifacts archives

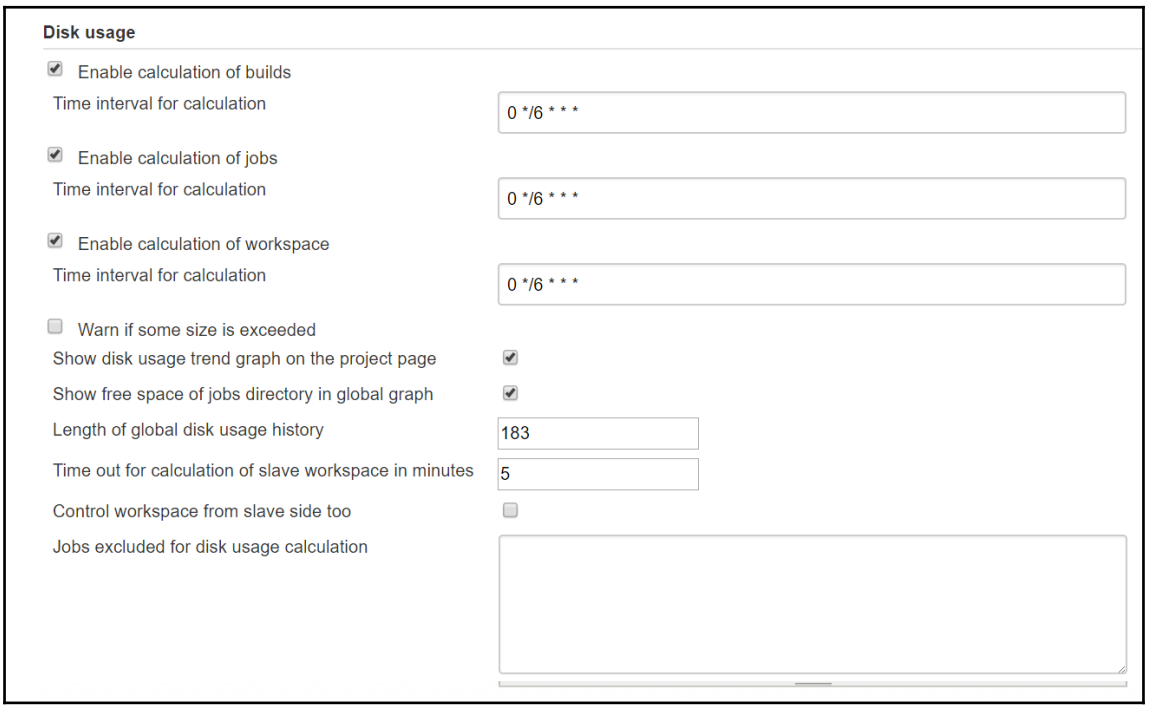


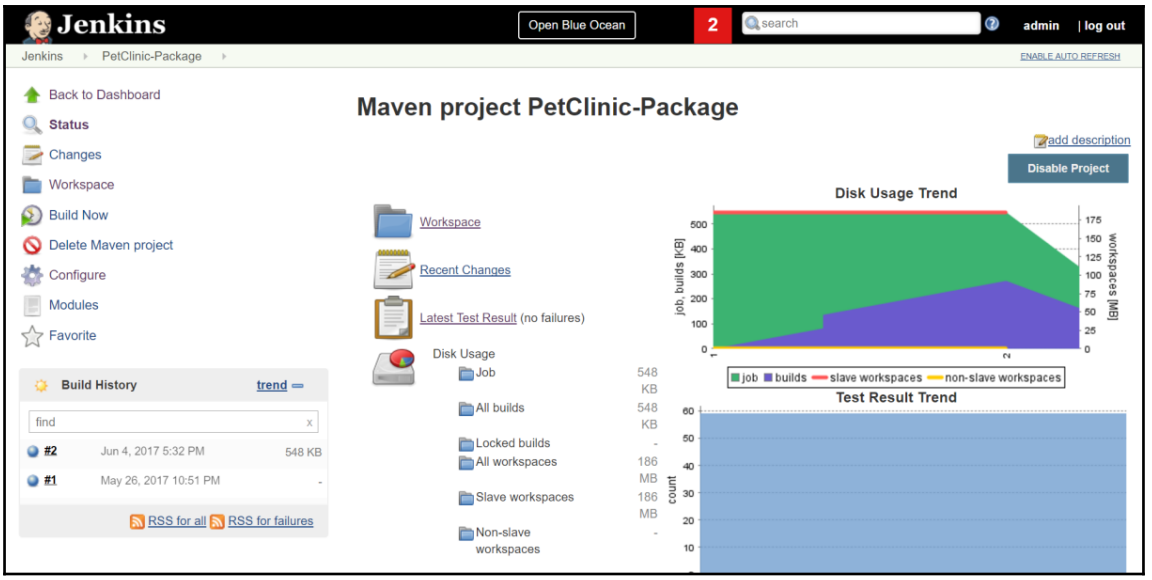
Jenkins is going to shut down

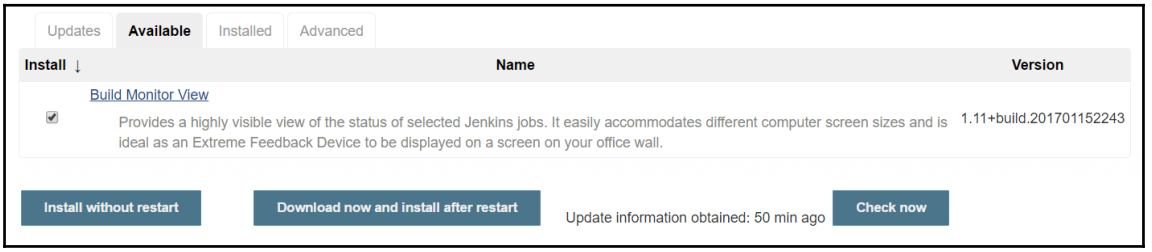
```
[ INFO] Backup started at [05/27/17 15:01:27]
[ INFO] Setting hudson in shutdown mode to avoid files corruptions.
[ INFO] Waiting all jobs end...
[ INFO] Number of running jobs detected : 0
[ INFO] All jobs finished.
[ INFO] Full backup file name : d:\backup\YYYYDDMM_hhmm
[ INFO] Saved files : 12482
[ INFO] Number of errors : 0
[ INFO] Cancel hudson shutdown mode
[ INFO] Backup end at [05/27/17 15:03:51]
[ INFO] [143.935s]
```

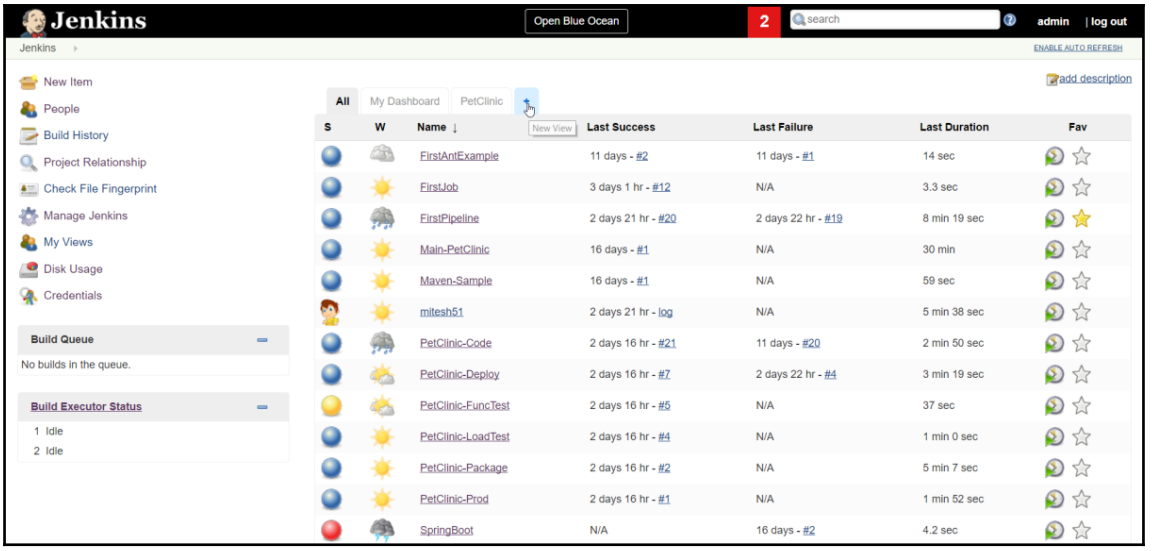


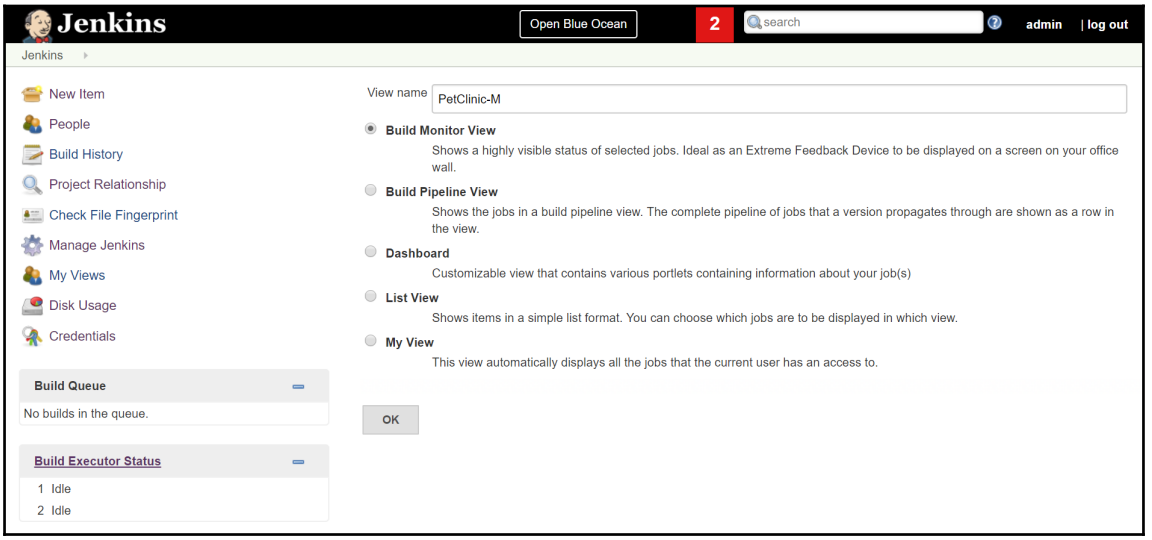

Jenkins
1
search
admin
| log out
Jenkins
ENABLE AUTO REFRESH
Back to Dashboard
Disk usage
Jobs:-, Builds:-, Locked builds:-, All workspace:-, Not current workspace:-
Builds older than
day ago
Builds younger than
day ago
Filter
Disk Usage Trend
job, builds [GB]
workspaces [GB]
0.0000000
current
space for jobs directory
all jobs
all builds
slave workspaces
non slave workspaces
Project name
Jobs
Builds all
Builds locked
All workspace
Not current slave workspace
Total
-
-
-
Next Disk usage calculation of builds will be in 2 hours 56 minutes.
Record Builds Disk Usage
Next Disk usage calculation of jobs will be in 2 hours 56 minutes.
Record Jobs Disk Usage

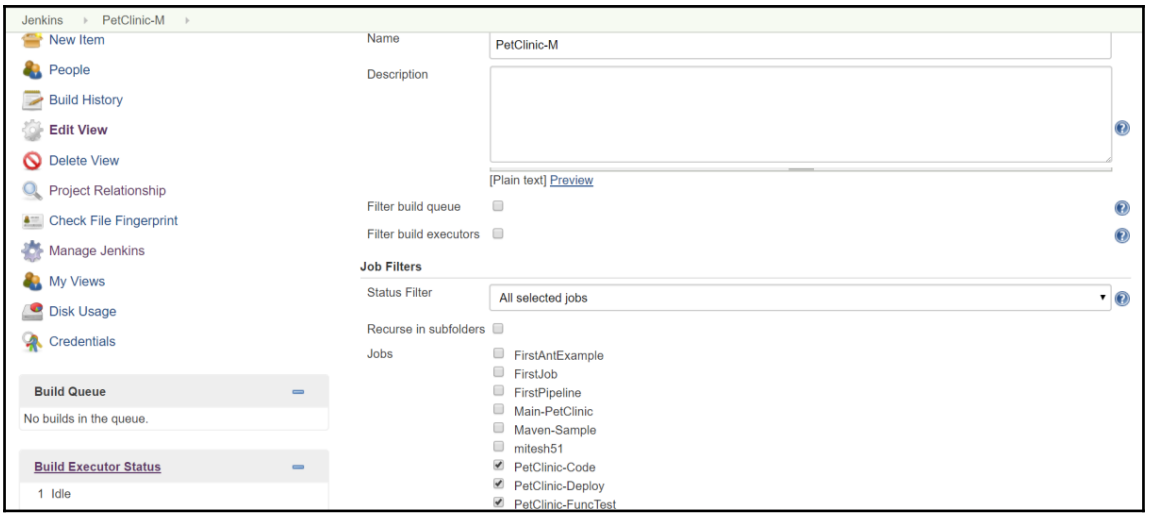

Disk usage
Enable calculation of builds
Time interval for calculation
0 */6 * * *
Enable calculation of jobs
Time interval for calculation
0 */6 * * *
Enable calculation of workspace
Time interval for calculation
0 */6 * * *
Warn if some size is exceeded
Show disk usage trend graph on the project page
Show free space of jobs directory in global graph
Length of global disk usage history
183
Time out for calculation of slave workspace in minutes
5
Control workspace from slave side too
Jobs excluded for disk usage calculation

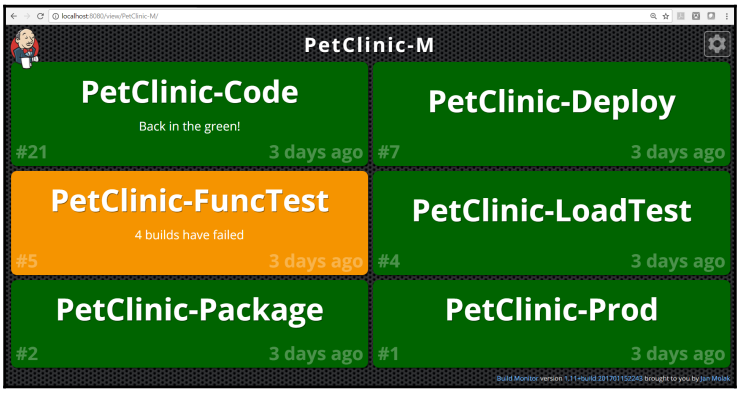

Jenkins
Open Blue Ocean
2
search
admin
| log out
Jenkins
PetClinic-Package
ENABLE AUTO REFRESH
Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Maven project
Configure
Modules
Favorite
Build History
trend
find
#2 Jun 4, 2017 5:32 PM 548 KB
#1 May 26, 2017 10:51 PM -
RSS for all
RSS for failures
Maven project PetClinic-Package
add description
Disable Project
Workspace
Recent Changes
Latest Test Result (no failures)
Disk Usage
Job 548 KB
All builds 548 KB
Locked builds -
All workspaces 186 MB
Slave workspaces 186 MB
Non-slave workspaces -
Disk Usage Trend
job, builds [KB]
workspaces [MB]
job
builds
slave workspaces
non-slave workspaces
Test Result Trend
count

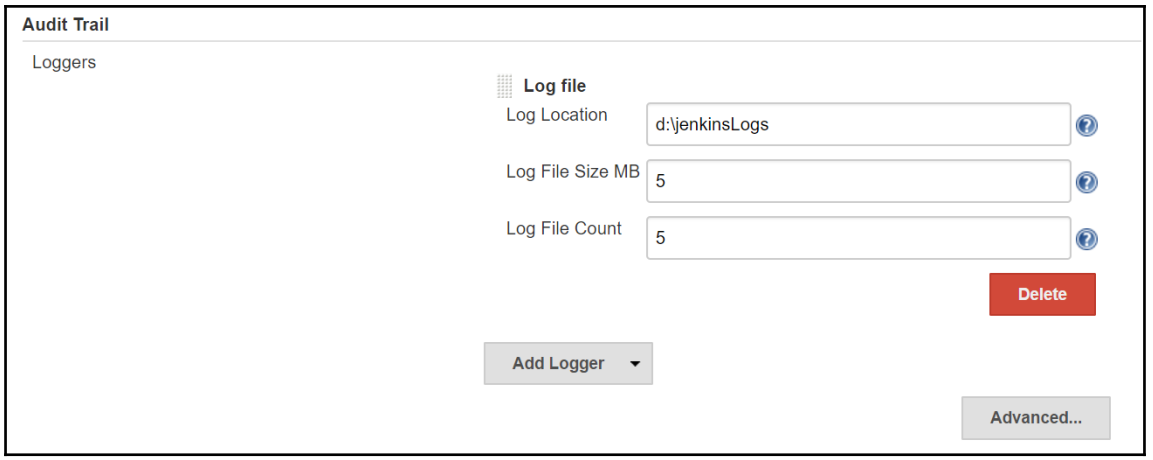

Updates
Available
Installed
Advanced
Install
Name
Version
Build Monitor View
Provides a highly visible view of the status of selected Jenkins jobs. It easily accommodates different computer screen sizes and is ideal as an Extreme Feedback Device to be displayed on a screen on your office wall.
1.11+build.201701152243
Install without restart
Download now and install after restart
Update information obtained: 50 min ago
Check now

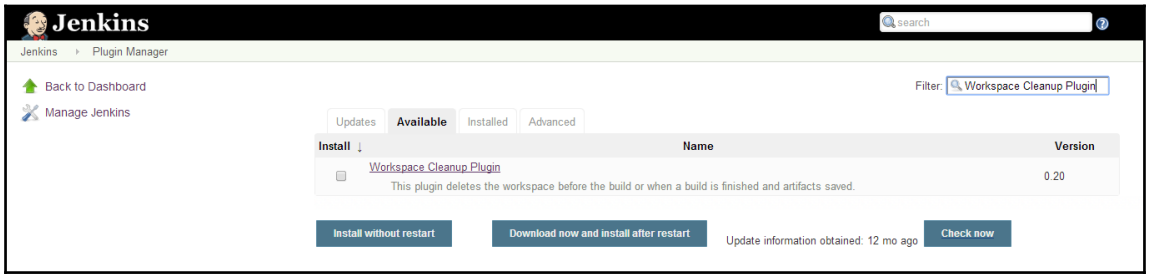

Jenkins
Open Blue Ocean
2
search
admin
| log out
Jenkins
ENABLE AUTO REFRESH
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Disk Usage
Credentials
add description
All
My Dashboard
PetClinic
New View
S
W
Name ↓
Last Success
Last Failure
Last Duration
Fav
FirstAntExample
11 days - #2
11 days - #1
14 sec
FirstJob
3 days 1 hr - #12
N/A
3.3 sec
FirstPipeline
2 days 21 hr - #20
2 days 22 hr - #19
8 min 19 sec
Main-PetClinic
16 days - #1
N/A
30 min
Maven-Sample
16 days - #1
N/A
59 sec
mitesh51
2 days 21 hr - log
N/A
5 min 38 sec
PetClinic-Code
2 days 16 hr - #21
11 days - #20
2 min 50 sec
PetClinic-Deploy
2 days 16 hr - #7
2 days 22 hr - #4
3 min 19 sec
PetClinic-FuncTest
2 days 16 hr - #5
N/A
37 sec
PetClinic-LoadTest
2 days 16 hr - #4
N/A
1 min 0 sec
PetClinic-Package
2 days 16 hr - #2
N/A
5 min 7 sec
PetClinic-Prod
2 days 16 hr - #1
N/A
1 min 52 sec
SpringBoot
N/A
16 days - #2
4.2 sec
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle


Jenkins
Open Blue Ocean
2
search
admin
| log out
Jenkins
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Disk Usage
Credentials
View name
PetClinic-M
Build Monitor View
Shows a highly visible status of selected jobs. Ideal as an Extreme Feedback Device to be displayed on a screen on your office wall.
Build Pipeline View
Shows the jobs in a build pipeline view. The complete pipeline of jobs that a version propagates through are shown as a row in the view.
Dashboard
Customizable view that contains various portlets containing information about your job(s)
List View
Shows items in a simple list format. You can choose which jobs are to be displayed in which view.
My View
This view automatically displays all the jobs that the current user has an access to.
OK
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle

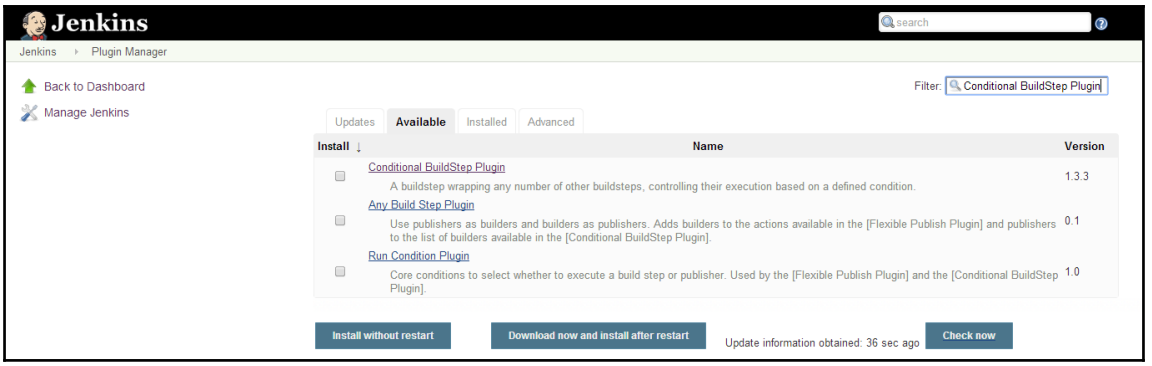

Jenkins
PetClinic-M
New Item
People
Build History
Edit View
Delete View
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Disk Usage
Credentials
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
Name
PetClinic-M
Description
[Plain text] Preview
Filter build queue
Filter build executors
Job Filters
Status Filter
All selected jobs
Recurse in subfolders
Jobs
FirstAntExample
FirstJob
FirstPipeline
Main-PetClinic
Maven-Sample
mitesh51
PetClinic-Code
PetClinic-Deploy
PetClinic-FuncTest

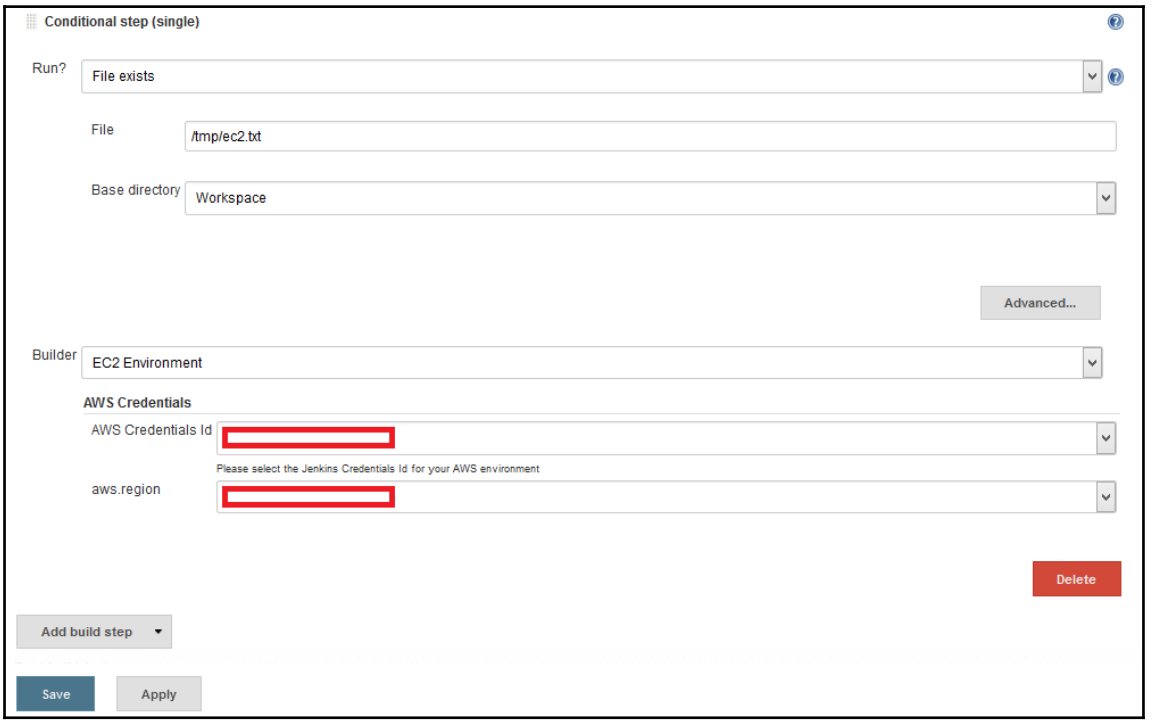

PetClinic-M
PetClinic-Code
Back in the green!
#21
3 days ago
PetClinic-Deploy
#7
3 days ago
PetClinic-FuncTest
4 builds have failed
#5
3 days ago
PetClinic-LoadTest
#4
3 days ago
PetClinic-Package
#2
3 days ago
PetClinic-Prod
#1
3 days ago

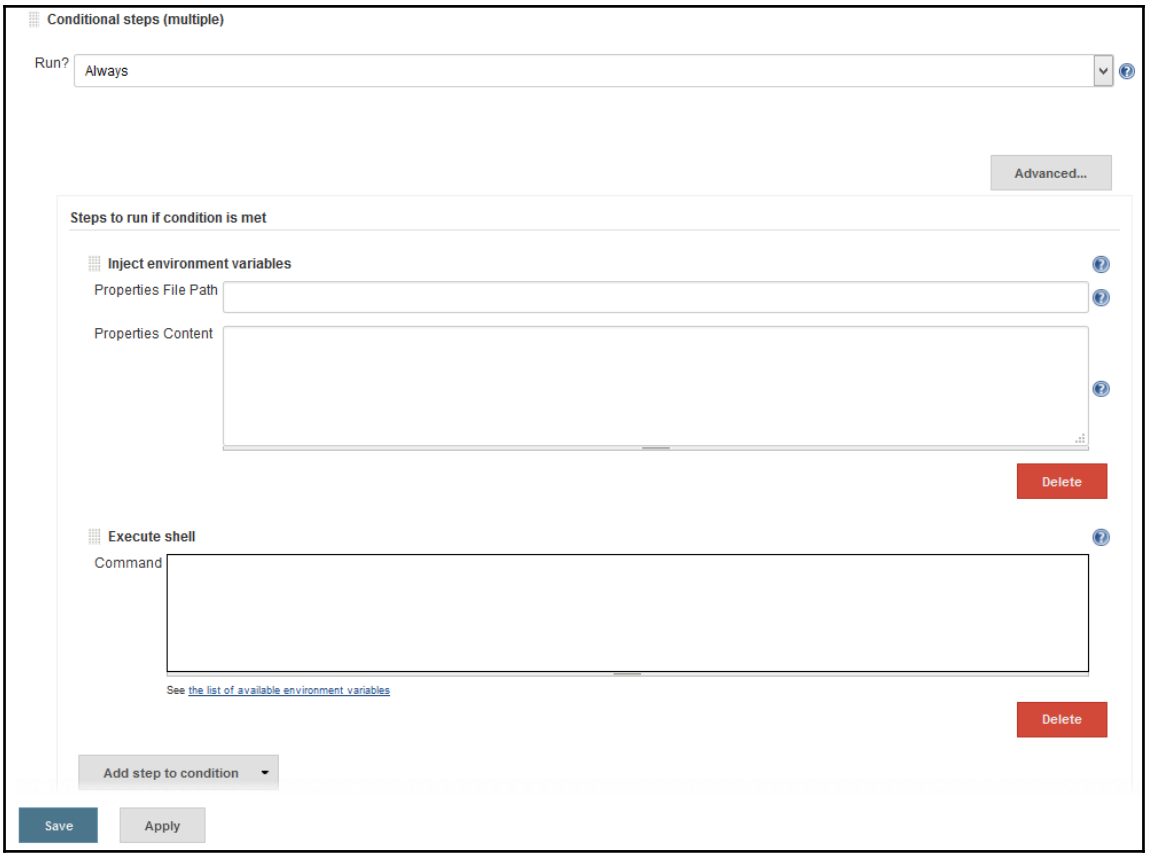

Audit Trail
Loggers
Log file
Log Location
d:\jenkinsLogs
Log File Size MB
5
Log File Count
5
Delete
Add Logger
Advanced...

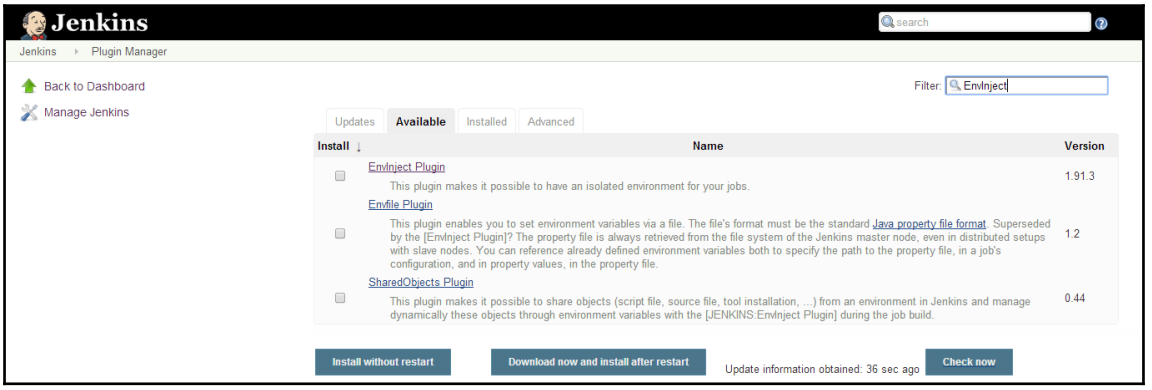

Jenkins
search
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Filter:
Workspace Cleanup Plugin
Updates
Available
Installed
Advanced
Install
Name
Version
Workspace Cleanup Plugin
This plugin deletes the workspace before the build or when a build is finished and artifacts saved.
0.20
Install without restart
Download now and install after restart
Update information obtained: 12 mo ago
Check now

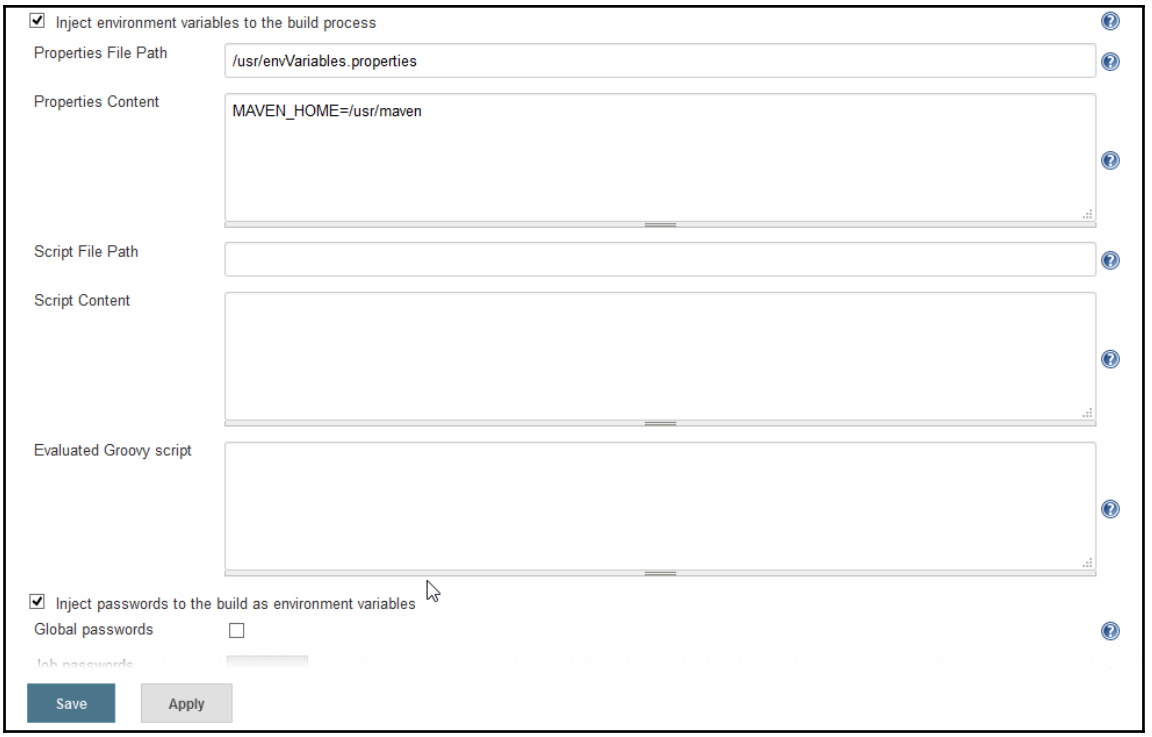
Delete workspace when build is done
Patterns for files to be deleted
Add
Apply pattern also on directories
Clean when status is
Success
Unstable
Failure
Not Built
Aborted
Don't fail the build if cleanup fails
External Deletion Command
Delete
Add post-build action


Jenkins
search
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Filter: Conditional BuildStep Plugin
Updates
Available
Installed
Advanced
Install
Name
Version
Conditional BuildStep Plugin
A buildstep wrapping any number of other buildsteps, controlling their execution based on a defined condition.
1.3.3
Any Build Step Plugin
Use publishers as builders and builders as publishers. Adds builders to the actions available in the [Flexible Publish Plugin] and publishers to the list of builders available in the [Conditional BuildStep Plugin].
0.1
Run Condition Plugin
Core conditions to select whether to execute a build step or publisher. Used by the [Flexible Publish Plugin] and the [Conditional BuildStep Plugin].
1.0
Install without restart
Download now and install after restart
Update information obtained: 36 sec ago
Check now

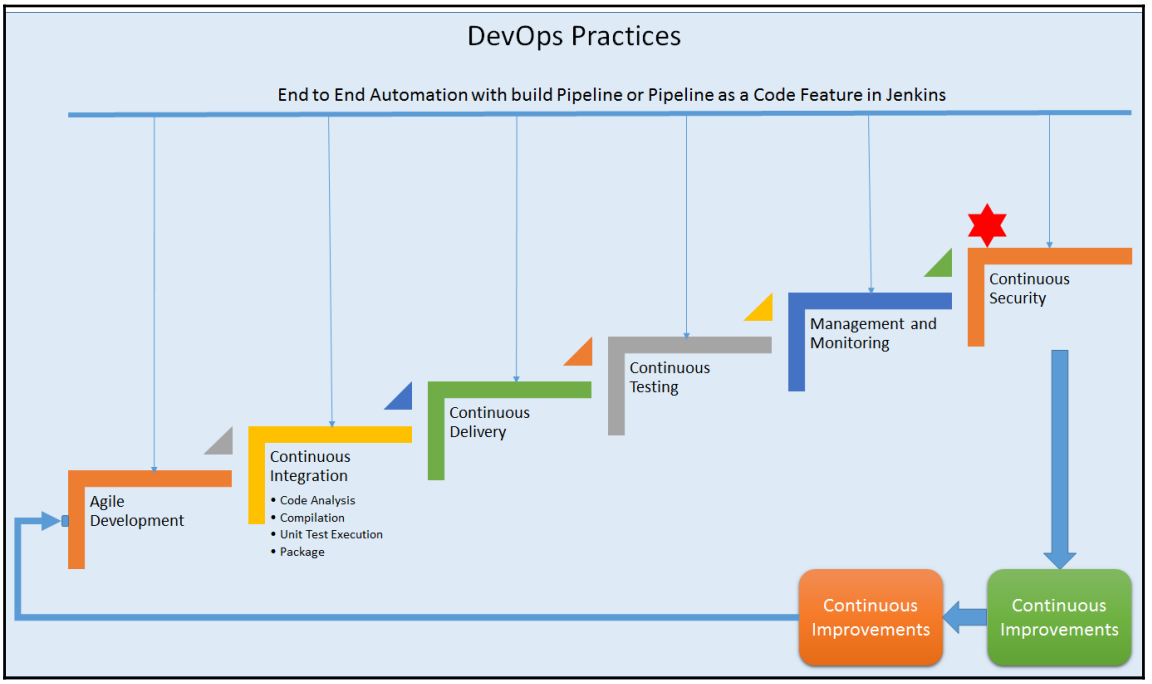

Conditional step (single)
Run?
File exists
File
/tmp/ec2.txt
Base directory
Workspace
Advanced...
Builder
EC2 Environment
AWS Credentials
AWS Credentials Id
Please select the Jenkins Credentials Id for your AWS environment
aws.region
Delete
Add build step
Save
Apply

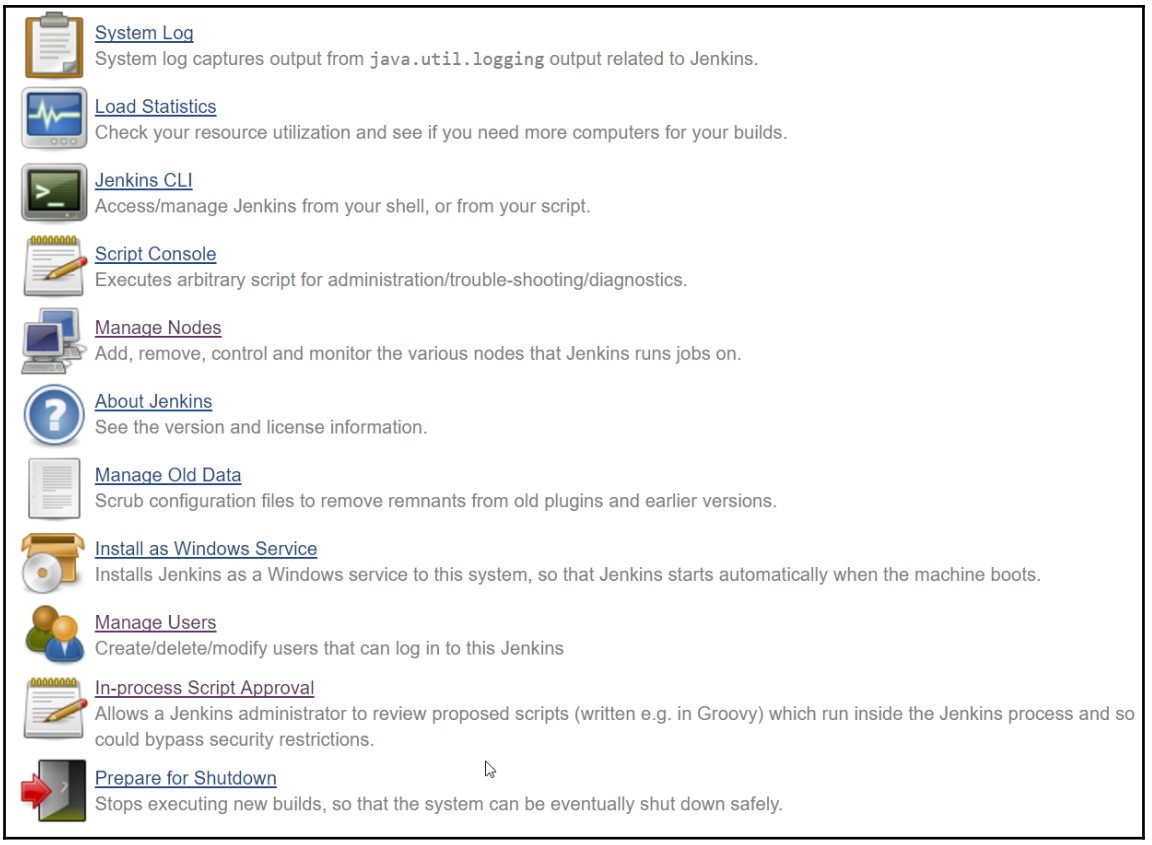

Conditional steps (multiple)
Run?
Always
Advanced...
Steps to run if condition is met
Inject environment variables
Properties File Path
Properties Content
Delete
Execute shell
Command
See the list of available environment variables
Delete
Add step to condition
Save
Apply

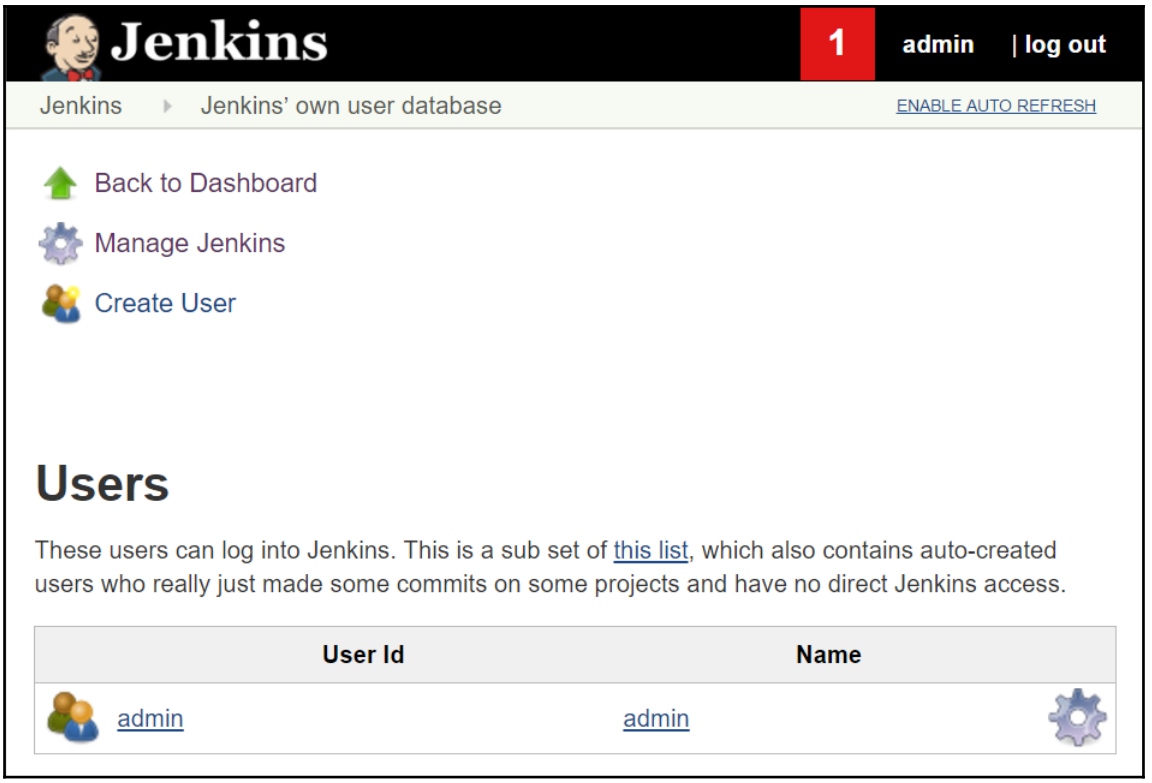

Jenkins
search
Jenkins
Plugin Manager
Back to Dashboard
Manage Jenkins
Filter:
EnvInject
Updates
Available
Installed
Advanced
Install
Name
Version
EnvInject Plugin
This plugin makes it possible to have an isolated environment for your jobs.
1.91.3
Envfile Plugin
This plugin enables you to set environment variables via a file. The file's format must be the standard Java property file format. Superseded by the [EnvInject Plugin]? The property file is always retrieved from the file system of the Jenkins master node, even in distributed setups with slave nodes. You can reference already defined environment variables both to specify the path to the property file, in a job's configuration, and in property values, in the property file.
1.2
SharedObjects Plugin
This plugin makes it possible to share objects (script file, source file, tool installation, ...) from an environment in Jenkins and manage dynamically these objects through environment variables with the [JENKINS:EnvInject Plugin] during the job build.
0.44
Install without restart
Download now and install after restart
Update information obtained: 36 sec ago
Check now

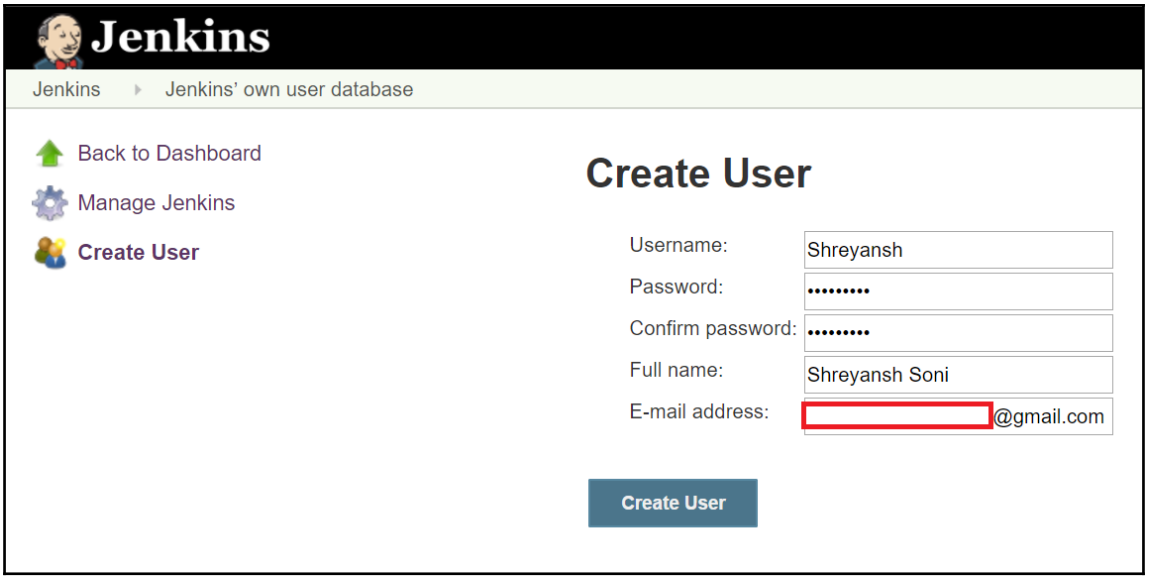

Inject environment variables to the build process
Properties File Path
/usr/envVariables.properties
Properties Content
MAVEN_HOME=/usr/maven
Script File Path
Script Content
Evaluated Groovy script
Inject passwords to the build as environment variables
Global passwords
Save
Apply

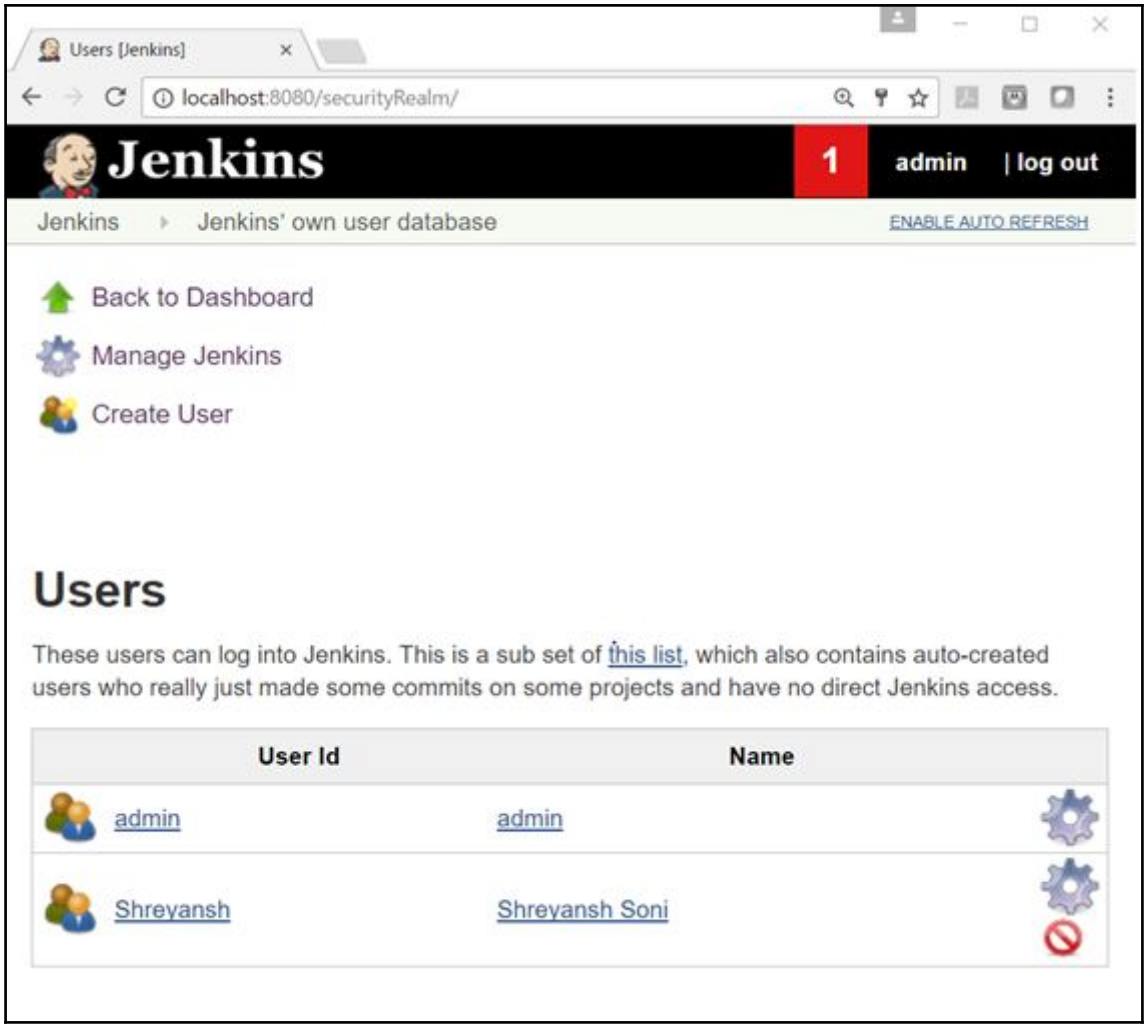
Chapter 09: Security in Jenkins

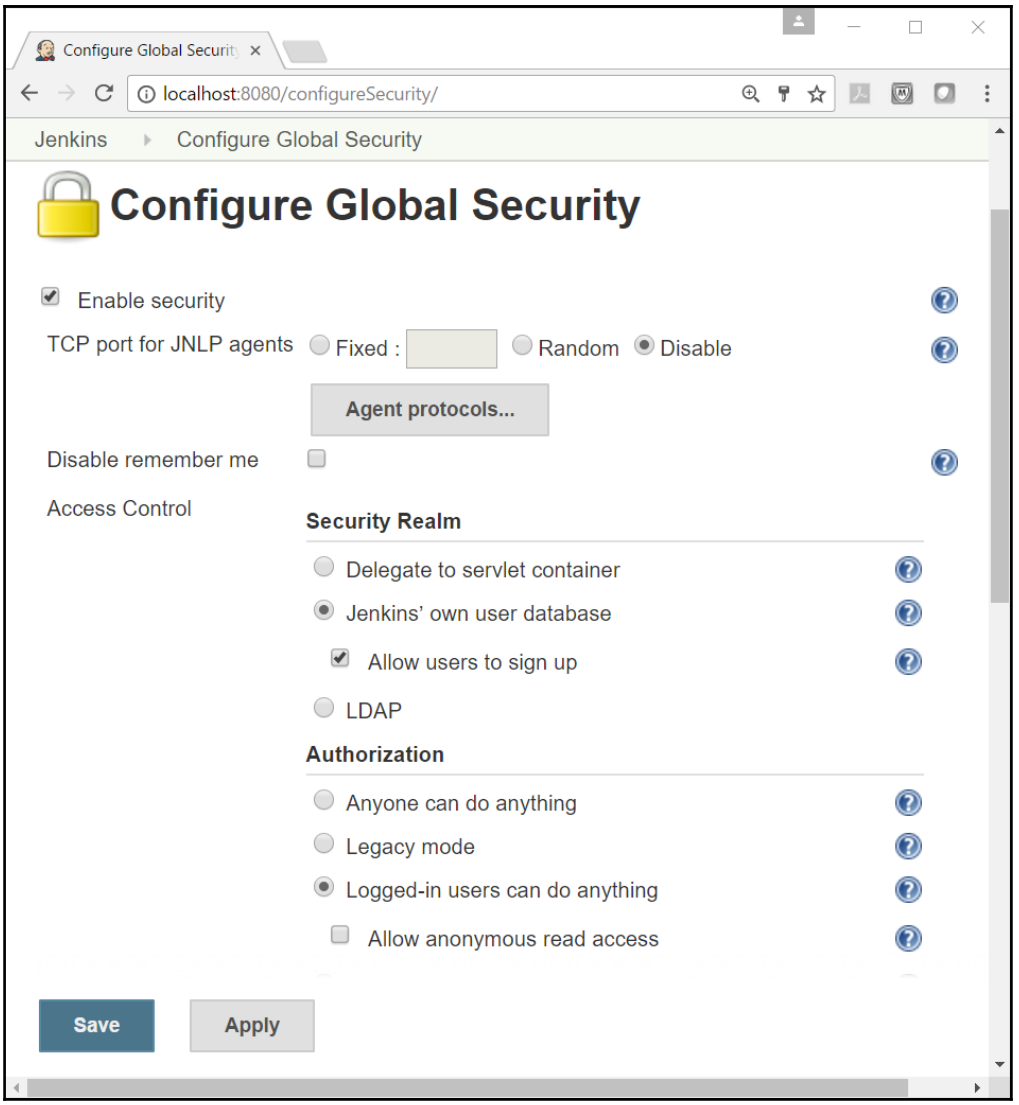


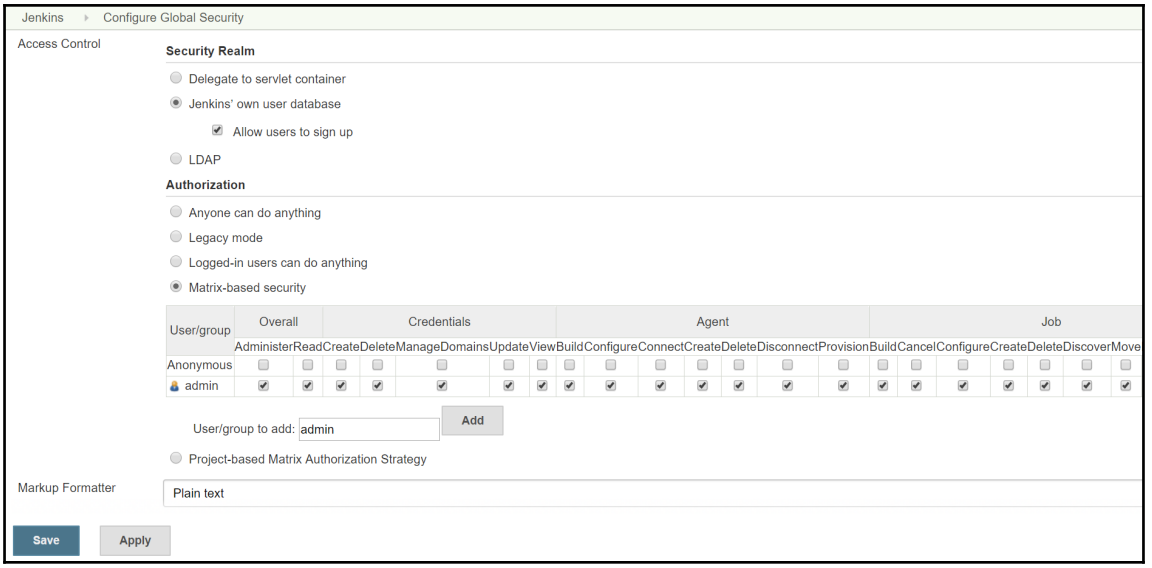

System Log
System log captures output from java.util.logging output related to Jenkins.
Load Statistics
Check your resource utilization and see if you need more computers for your builds.
Jenkins CLI
Access/manage Jenkins from your shell, or from your script.
Script Console
Executes arbitrary script for administration/trouble-shooting/diagnostics.
Manage Nodes
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
About Jenkins
See the version and license information.
Manage Old Data
Scrub configuration files to remove remnants from old plugins and earlier versions.
Install as Windows Service
Installs Jenkins as a Windows service to this system, so that Jenkins starts automatically when the machine boots.
Manage Users
Create/delete/modify users that can log in to this Jenkins
In-process Script Approval
Allows a Jenkins administrator to review proposed scripts (written e.g. in Groovy) which run inside the Jenkins process and so could bypass security restrictions.
Prepare for Shutdown
Stops executing new builds, so that the system can be eventually shut down safely.

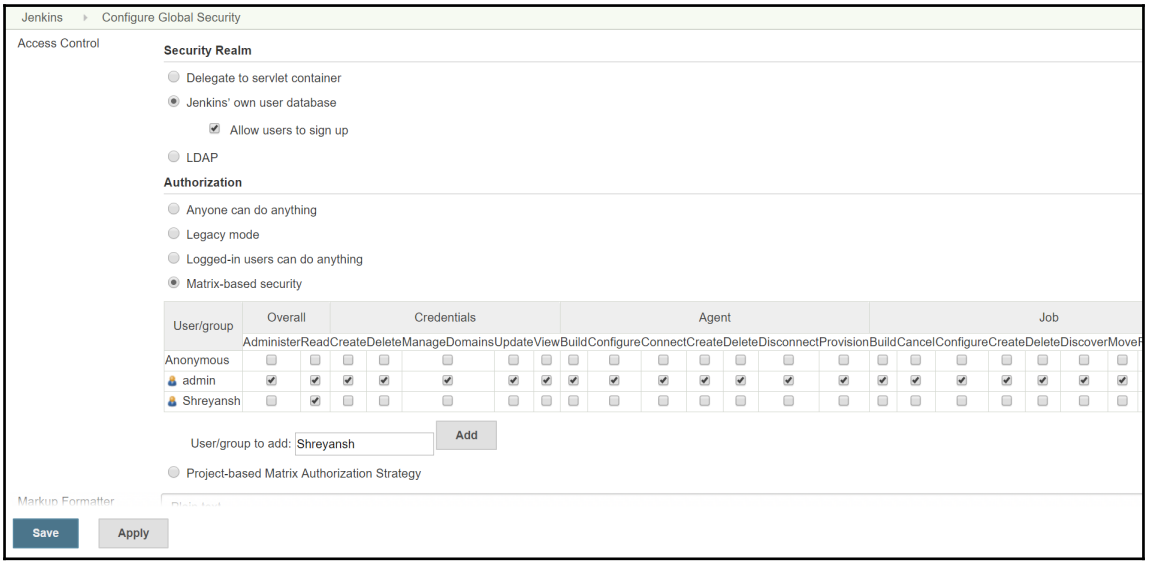

Jenkins
1
admin
| log out
Jenkins
Jenkins' own user database
ENABLE AUTO REFRESH
Back to Dashboard
Manage Jenkins
Create User
Users
These users can log into Jenkins. This is a sub set of this list, which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.
User Id
Name
admin
admin

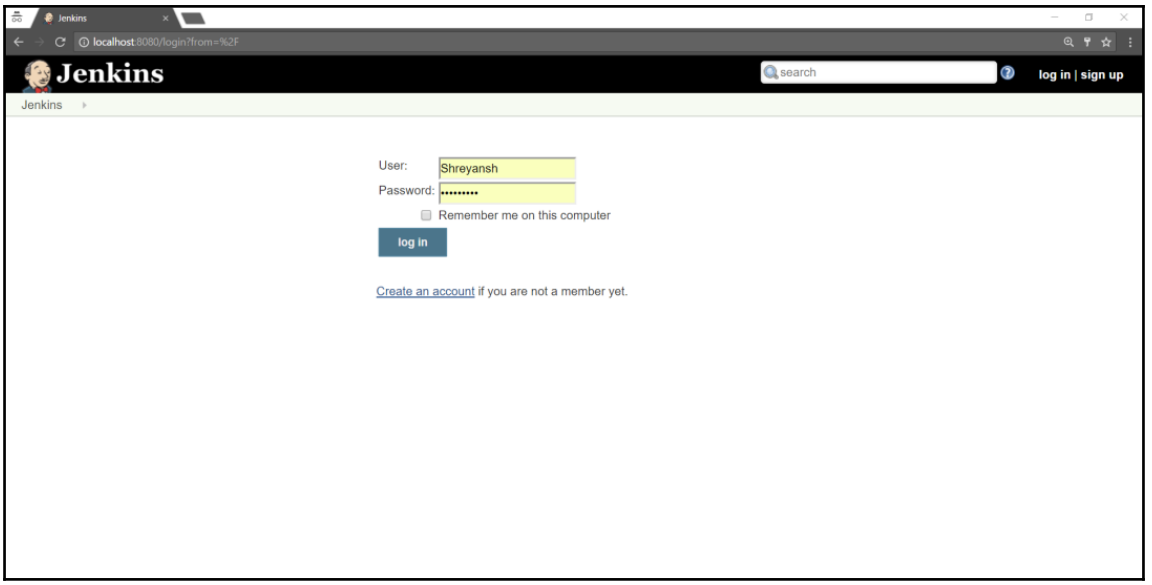

Jenkins
Jenkins
Jenkins' own user database
Back to Dashboard
Manage Jenkins
Create User
Create User
Username:
Shreyansh
Password:
Confirm password:
Full name:
Shreyansh Soni
E-mail address:
@gmail.com
Create User

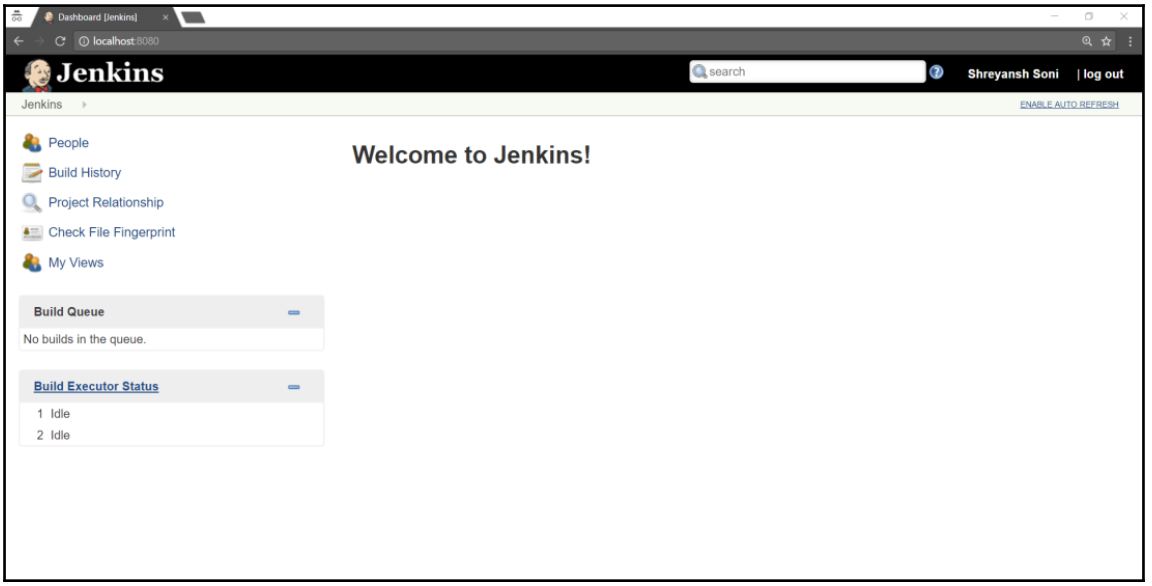

Users [Jenkins]
localhost:8080/securityRealm/
Jenkins
1
admin
| log out
Jenkins
Jenkins' own user database
ENABLE AUTO REFRESH
Back to Dashboard
Manage Jenkins
Create User
Users
These users can log into Jenkins. This is a sub set of this list, which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.
User Id
Name
admin
admin
Shreyansh
Shreyansh Soni

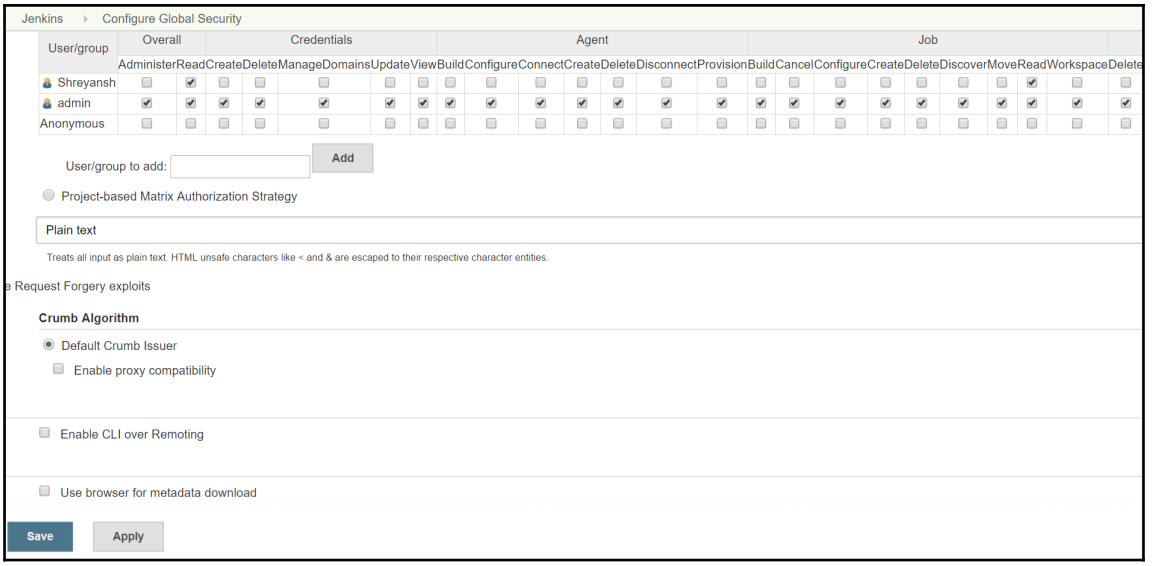

Configure Global Security
localhost:8080/configureSecurity/
Jenkins
Configure Global Security
Configure Global Security
Enable security
TCP port for JNLP agents
Fixed :
Random
Disable
Agent protocols...
Disable remember me
Access Control
Security Realm
Delegate to servlet container
Jenkins' own user database
Allow users to sign up
LDAP
Authorization
Anyone can do anything
Legacy mode
Logged-in users can do anything
Allow anonymous read access
Save
Apply

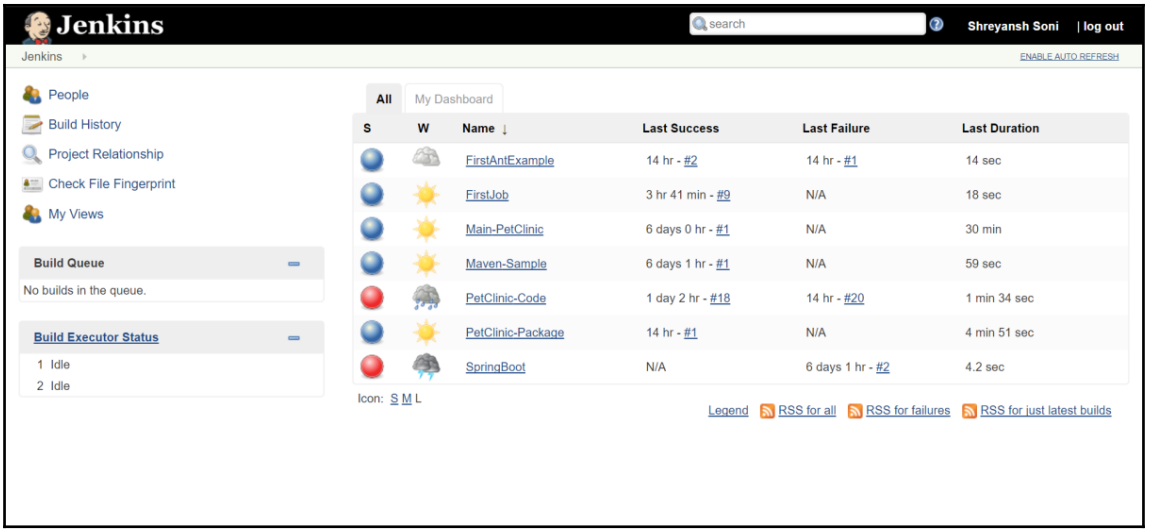

Jenkins
Configure Global Security
Access Control
Security Realm
Delegate to servlet container
Jenkins' own user database
Allow users to sign up
LDAP
Authorization
Anyone can do anything
Legacy mode
Logged-in users can do anything
Matrix-based security
User/group
Overall
Credentials
Agent
Job
Administer Read Create Delete Manage Domains Update View Build Configure Connect Create Delete Disconnect Provision Build Cancel Configure Create Delete Discover Move
Anonymous
admin
User/group to add:
admin
Add
Project-based Matrix Authorization Strategy
Markup Formatter
Plain text
Save
Apply


Jenkins
Configure Global Security
Access Control
Security Realm
Delegate to servlet container
Jenkins' own user database
Allow users to sign up
LDAP
Authorization
Anyone can do anything
Legacy mode
Logged-in users can do anything
Matrix-based security
User/group
Overall
Credentials
Agent
Job
Administer Read Create Delete Manage Domains Update View Build Configure Connect Create Delete Disconnect Provision Build Cancel Configure Create Delete Discover Move
Anonymous
admin
Shreyansh
User/group to add:
Shreyansh
Add
Project-based Matrix Authorization Strategy
Markup Formatter
Save
Apply

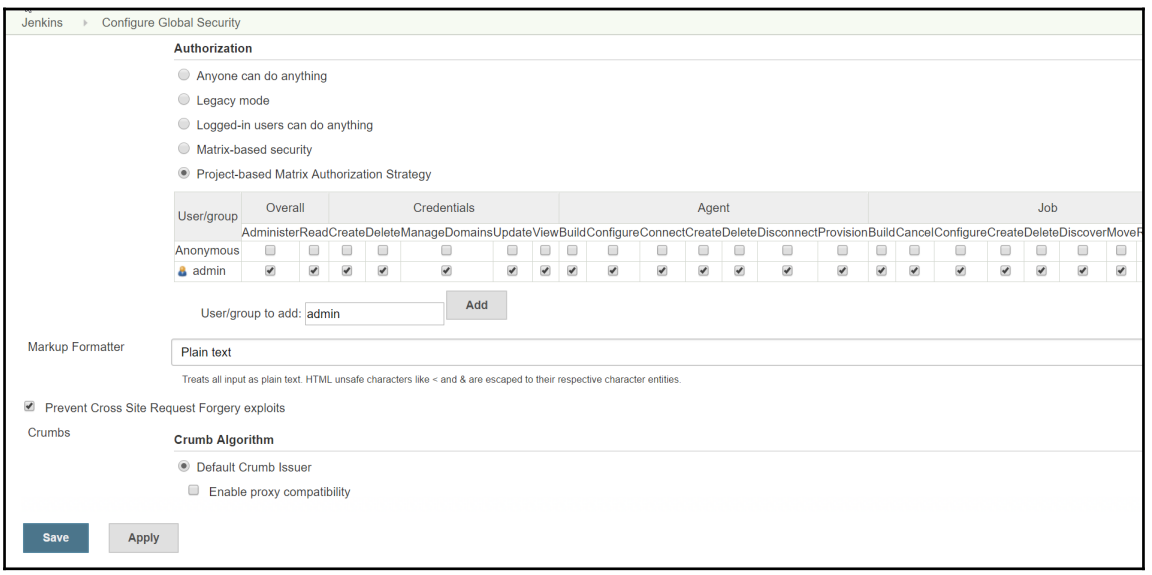

Jenkins
localhost:8080/login?from=%2F
Jenkins
search
log in | sign up
Jenkins
User:
Shreyansh
Password:
Remember me on this computer
log in
Create an account if you are not a member yet.

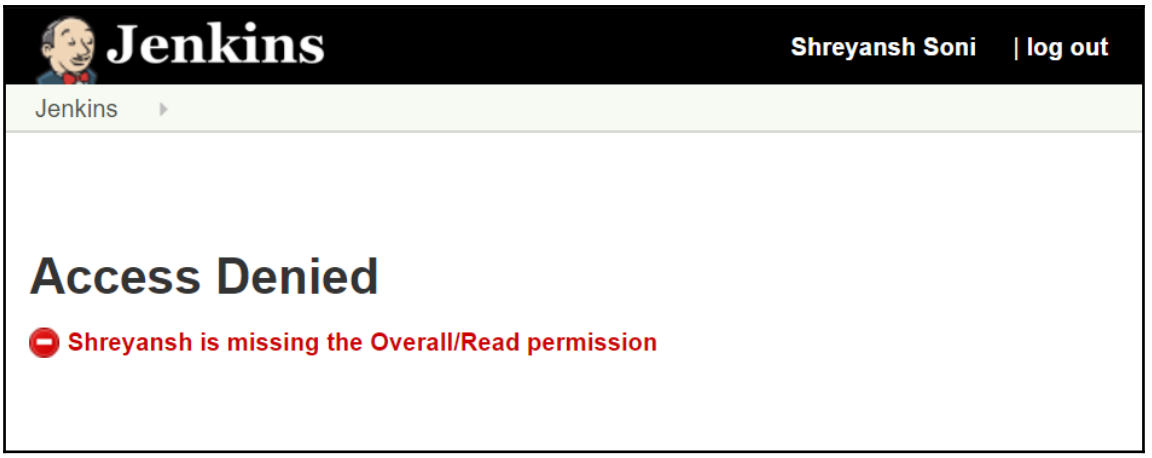

Dashboard [Jenkins]
localhost:8080
Jenkins
search
Shreyansh Soni
| log out
Jenkins
ENABLE AUTO REFRESH
People
Build History
Project Relationship
Check File Fingerprint
My Views
Welcome to Jenkins!
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle

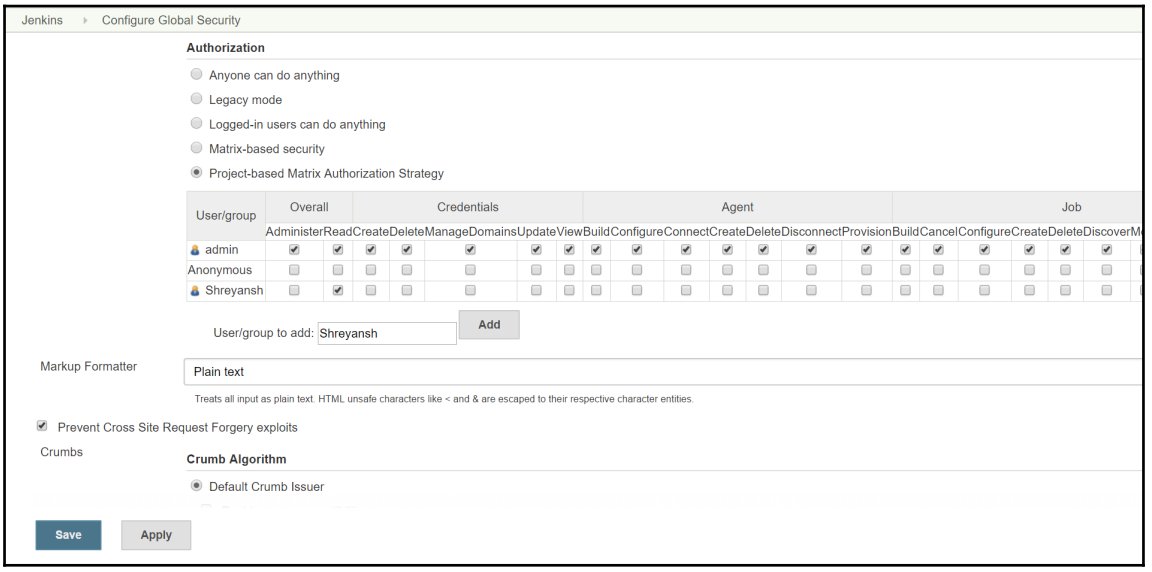

Jenkins
Configure Global Security
User/group
Overall
Credentials
Agent
Job
Administer
Read
CreateDelete
ManageDomains
Update
View
Build
Configure
Connect
Create
Delete
Disconnect
Provision
Build
Cancel
Configure
Create
Delete
Discover
Move
Read
Workspace
Delete
Shreyansh
admin
Anonymous
User/group to add:
Add
Project-based Matrix Authorization Strategy
Plain text
Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respective character entities.
e Request Forgery exploits
Crumb Algorithm
Default Crumb Issuer
Enable proxy compatibility
Enable CLI over Remoting
Use browser for metadata download
Save
Apply

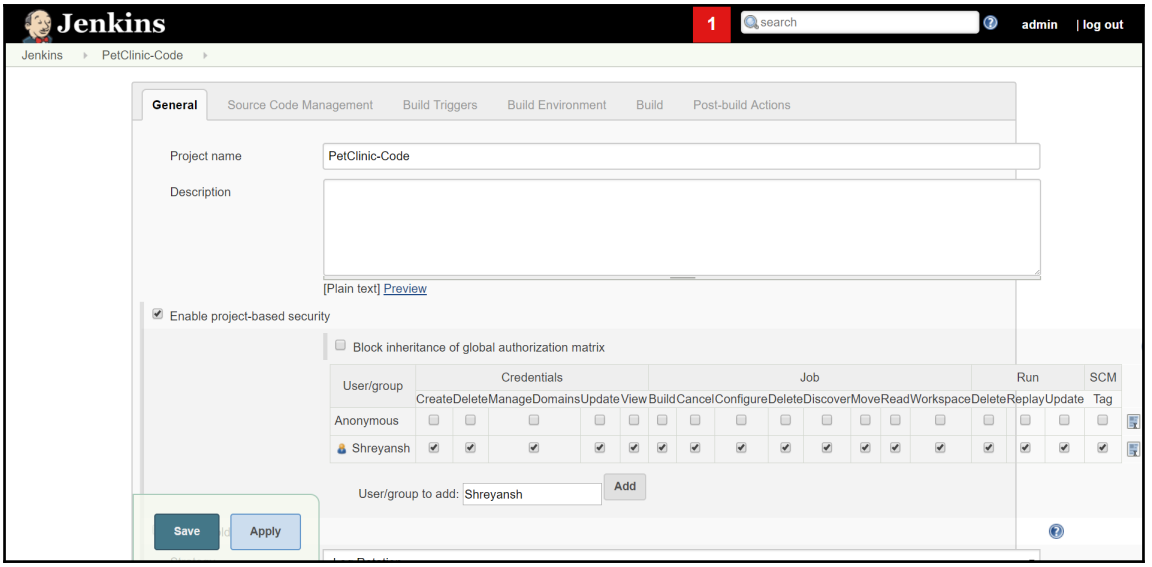

Jenkins
search
Shreyansh Soni
| log out
Jenkins
ENABLE AUTO REFRESH
People
Build History
Project Relationship
Check File Fingerprint
My Views
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
All
My Dashboard
S
W
Name ↓
Last Success
Last Failure
Last Duration
FirstAntExample
14 hr - #2
14 hr - #1
14 sec
FirstJob
3 hr 41 min - #9
N/A
18 sec
Main-PetClinic
6 days 0 hr - #1
N/A
30 min
Maven-Sample
6 days 1 hr - #1
N/A
59 sec
PetClinic-Code
1 day 2 hr - #18
14 hr - #20
1 min 34 sec
PetClinic-Package
14 hr - #1
N/A
4 min 51 sec
SpringBoot
N/A
6 days 1 hr - #2
4.2 sec
Icon: S M L
Legend
RSS for all
RSS for failures
RSS for just latest builds

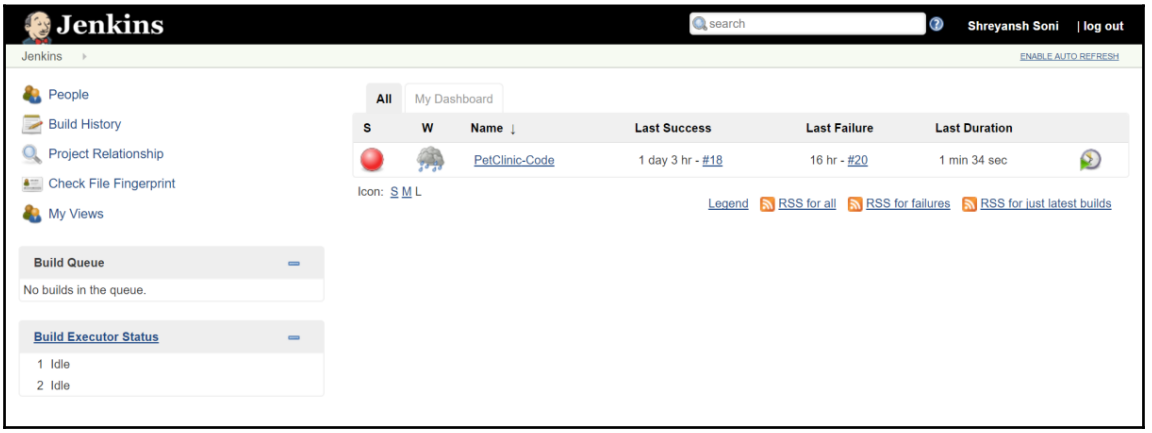
Jenkins
Jenkins ▸ PetClinic-Code
Back to Dashboard
Status
Changes
SonarQube
Build History
trend
find
x
#20 May 26, 2017 10:14 PM
#19 May 26, 2017 11:05 AM
#18 May 26, 2017 10:59 AM
RSS for all
RSS for failures
Project PetClinic-Code
SonarQube
Recent Changes
Permalinks
Last build (#20), 14 hr ago
Last stable build (#18), 1 day 2 hr ago
Last successful build (#18), 1 day 2 hr ago
Last failed build (#20), 14 hr ago
Last unsuccessful build (#20), 14 hr ago
Last completed build (#20), 14 hr ago

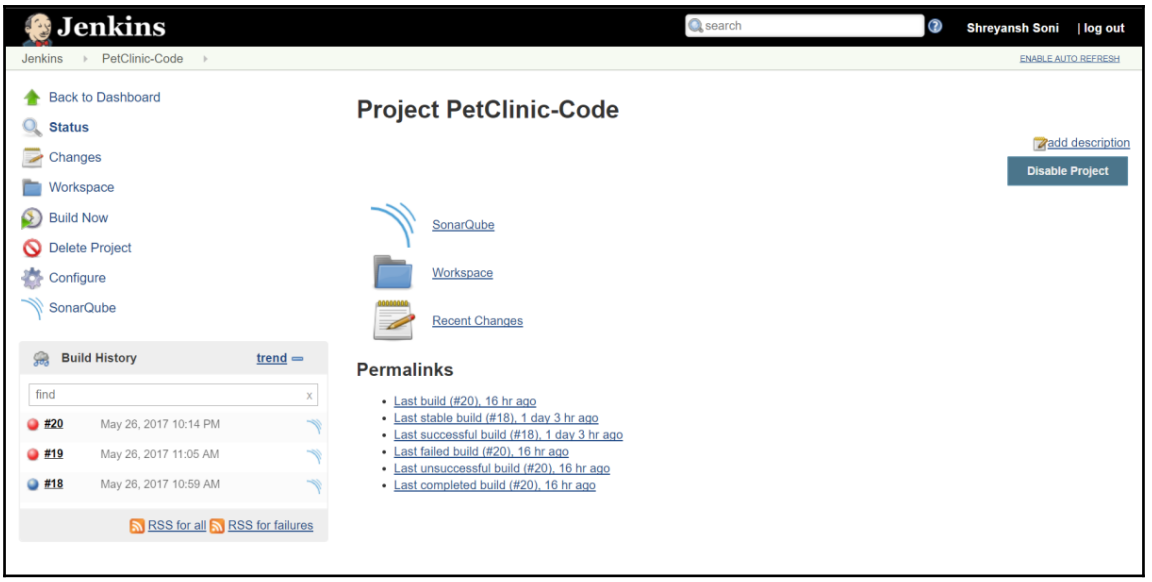

Jenkins ▸ Configure Global Security
Authorization
Anyone can do anything
Legacy mode
Logged-in users can do anything
Matrix-based security
Project-based Matrix Authorization Strategy
User/group
Overall
Credentials
Agent
Job
Administer
Read
CreateDeleteManageDomains
Update
View
Build
ConfigureConnectCreateDeleteDisconnectProvision
Build
Cancel
ConfigureCreateDeleteDiscover
Anonymous
admin
User/group to add:
admin
Add
Markup Formatter
Plain text
Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respective character entities.
Prevent Cross Site Request Forgery exploits
Crumbs
Crumb Algorithm
Default Crumb Issuer
Enable proxy compatibility
Save
Apply


Jenkins
Shreyansh Soni | log out
Jenkins
Access Denied
Shreyansh is missing the Overall/Read permission


Jenkins
Configure Global Security
Authorization
Anyone can do anything
Legacy mode
Logged-in users can do anything
Matrix-based security
Project-based Matrix Authorization Strategy
User/group
Overall
Credentials
Agent
Job
Administer Read Create Delete Manage Domains Update View Build Configure Connect Create Delete Disconnect Provision Build Cancel Configure Create Delete Discover
admin
Anonymous
Shreyansh
User/group to add: Shreyansh
Add
Markup Formatter
Plain text
Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respective character entities.
Prevent Cross Site Request Forgery exploits
Crumbs
Crumb Algorithm
Default Crumb Issuer
Save
Apply


Jenkins
1
search
admin
| log out
Jenkins
PetClinic-Code
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
Project name
PetClinic-Code
Description
[Plain text] Preview
Enable project-based security
Block inheritance of global authorization matrix
User/group
Credentials
Job
Run
SCM
Create Delete Manage Domains Update View Build Cancel Configure Delete Discover Move Read Workspace Delete Replay Update Tag
Anonymous
Shreyansh
User/group to add: Shreyansh
Add
Save
Apply


Jenkins
search
Shreyansh Soni
| log out
Jenkins
ENABLE AUTO REFRESH
People
Build History
Project Relationship
Check File Fingerprint
My Views
All
My Dashboard
S
W
Name
Last Success
Last Failure
Last Duration
PetClinic-Code
1 day 3 hr - #18
16 hr - #20
1 min 34 sec
Icon: S M L
Legend
RSS for all
RSS for failures
RSS for just latest builds
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle


Jenkins
search
Shreyansh Soni
| log out
Jenkins
PetClinic-Code
ENABLE AUTO REFRESH
Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Project
Configure
SonarQube
Build History
trend
find
#20 May 26, 2017 10:14 PM
#19 May 26, 2017 11:05 AM
#18 May 26, 2017 10:59 AM
RSS for all
RSS for failures
Project PetClinic-Code
add description
Disable Project
SonarQube
Workspace
Recent Changes
Permalinks
Last build (#20), 16 hr ago
Last stable build (#18), 1 day 3 hr ago
Last successful build (#18), 1 day 3 hr ago
Last failed build (#20), 16 hr ago
Last unsuccessful build (#20), 16 hr ago
Last completed build (#20), 16 hr ago