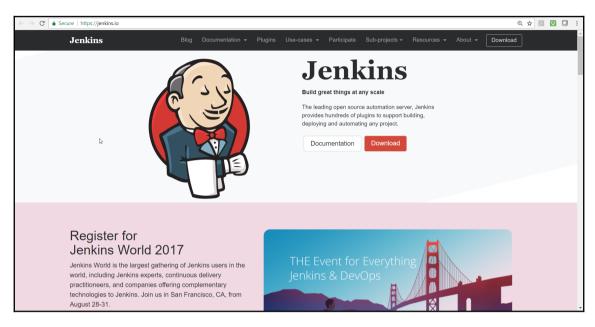
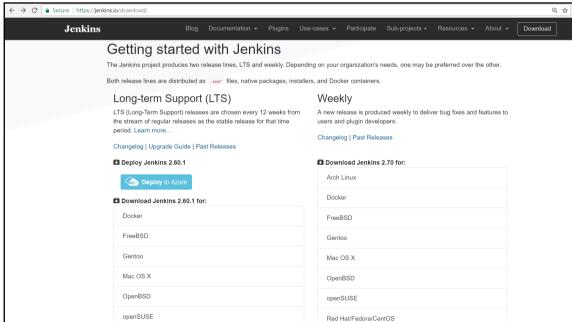
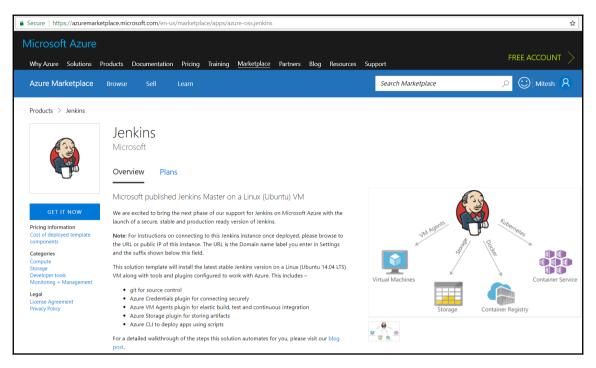
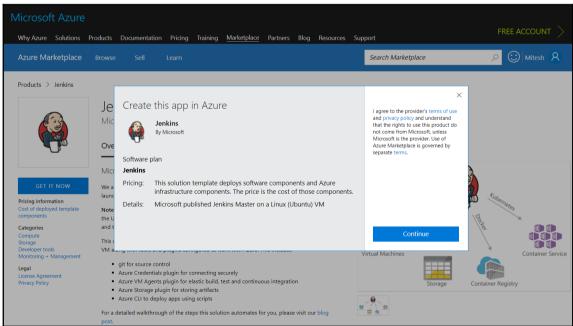
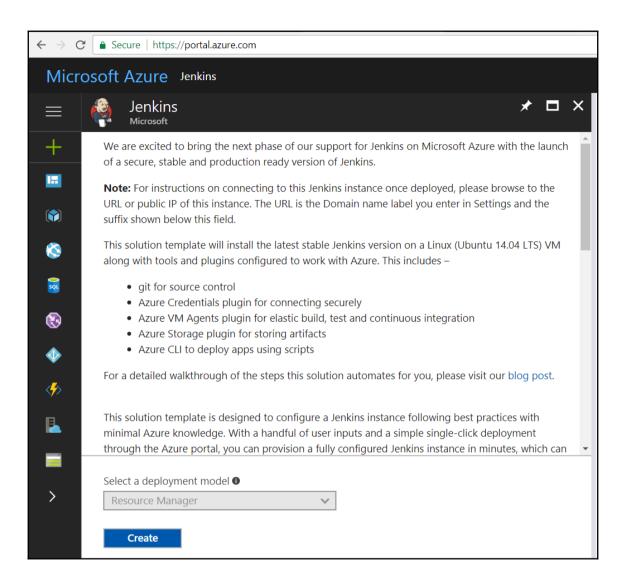
Chapter 01: Getting Started with Jenkins

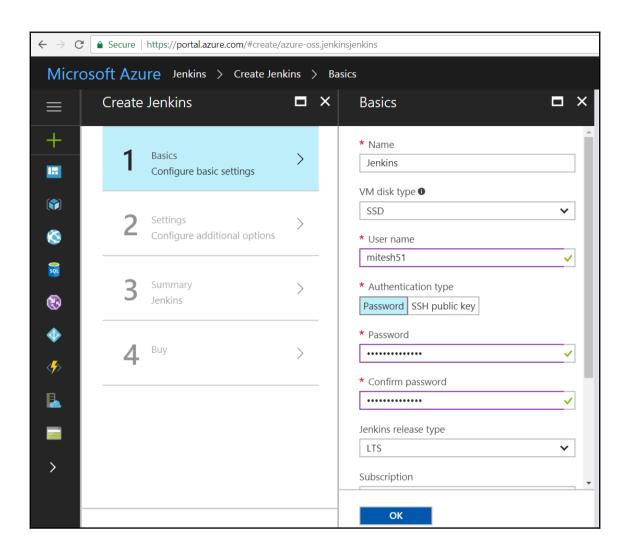


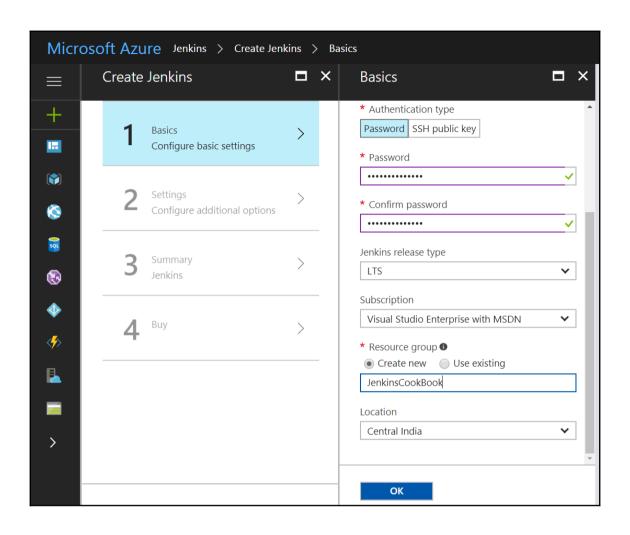


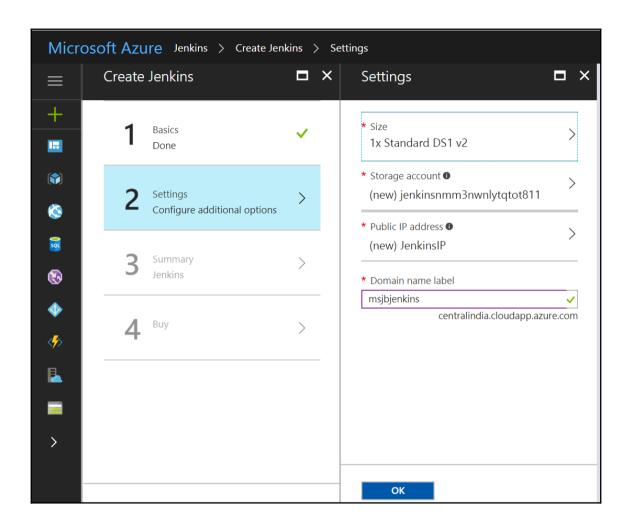


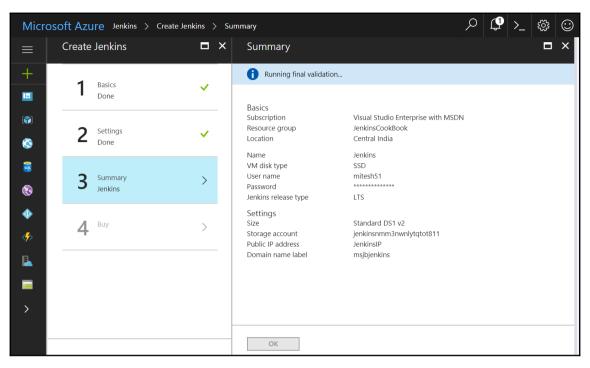


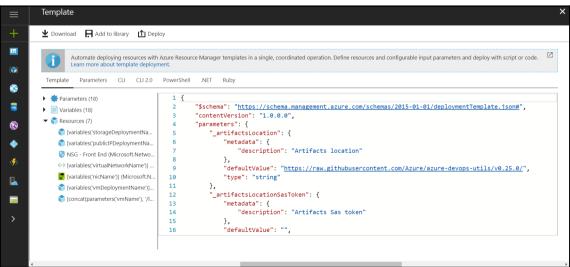


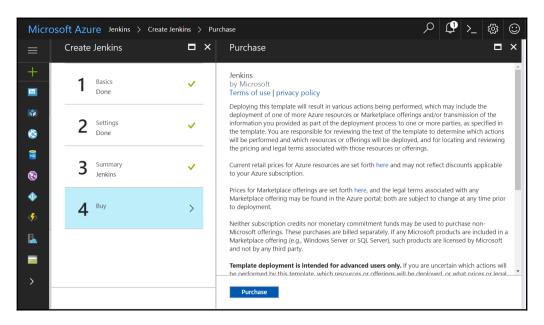


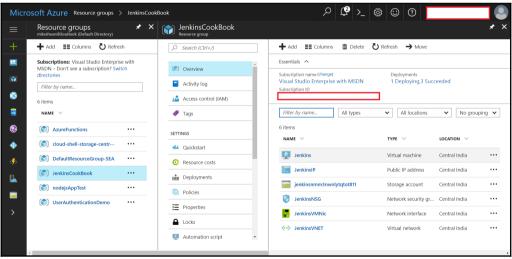




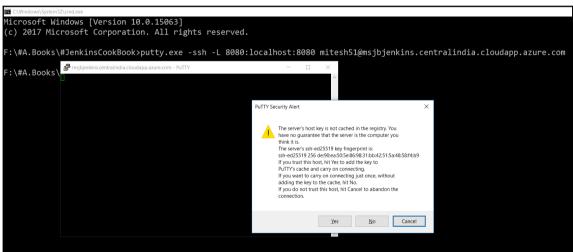


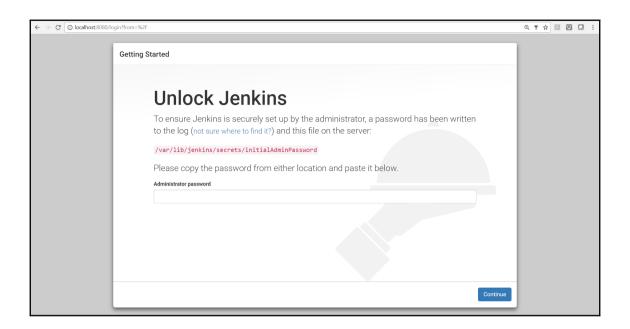




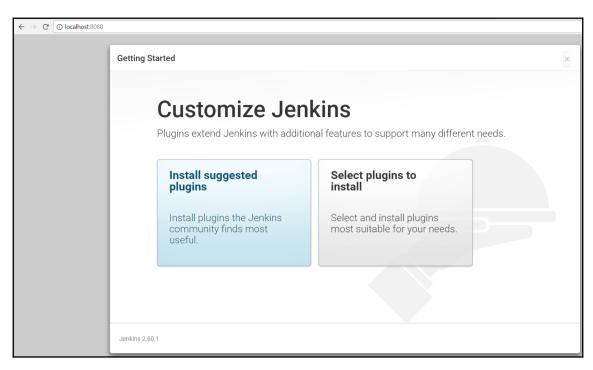


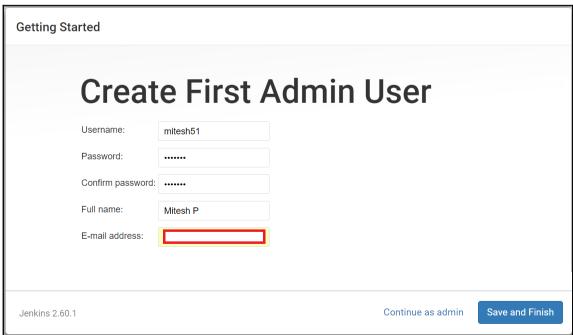


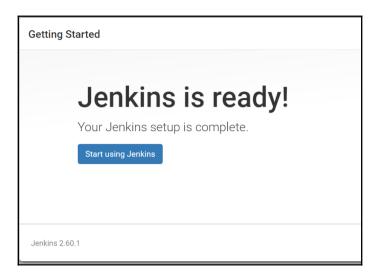


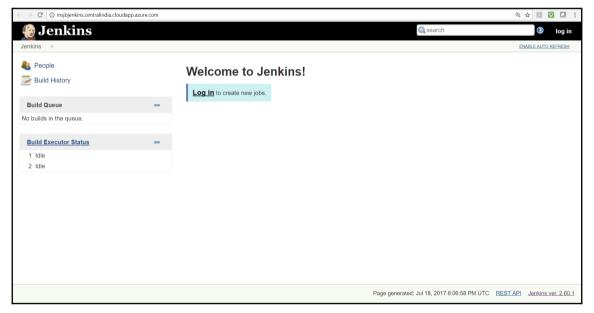


mitesh51@Jenkins:~\$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword e0a0e477a2234e7bb45061173512eeff mitesh51@Jenkins:~\$











Install as Windows Service

Installs Jenkins as a Windows service to this system, so that Jenkins starts automatically when the machine boots.

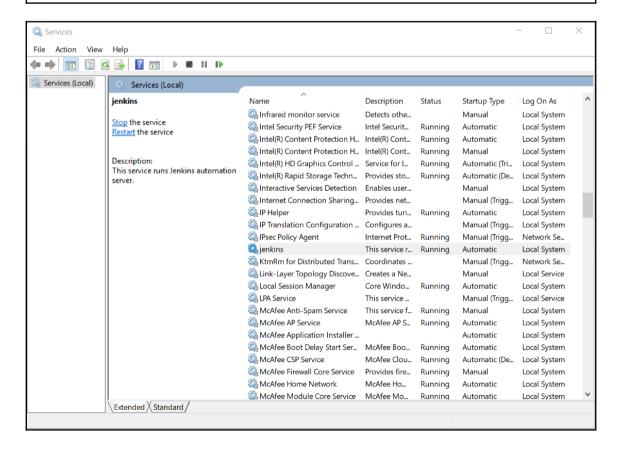


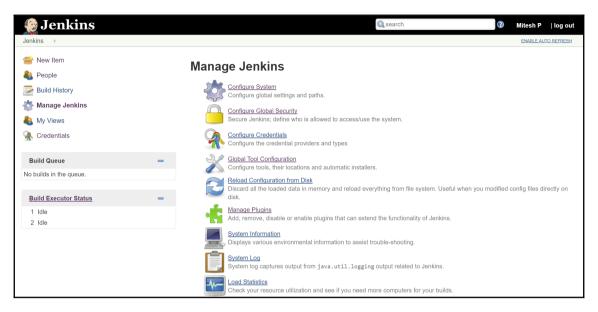


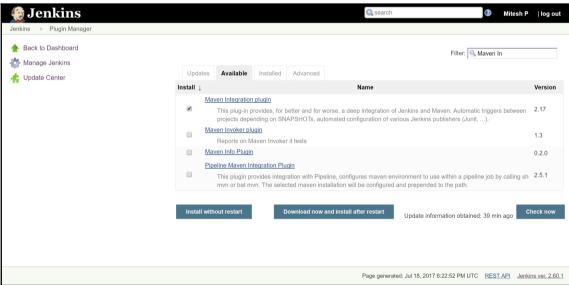
Installation Complete

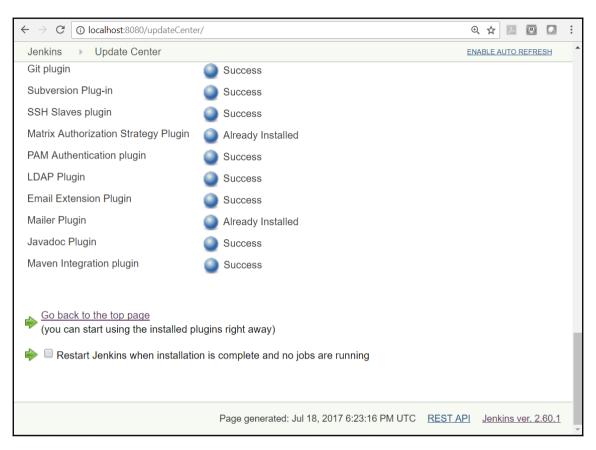
Installation is successfully completed. Do you want to stop this Jenkins and start a newly installed Windows service?

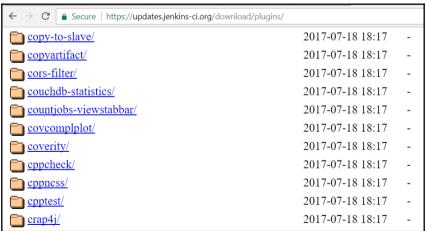
Yes





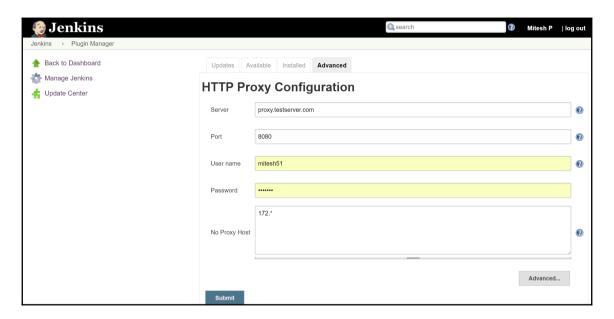


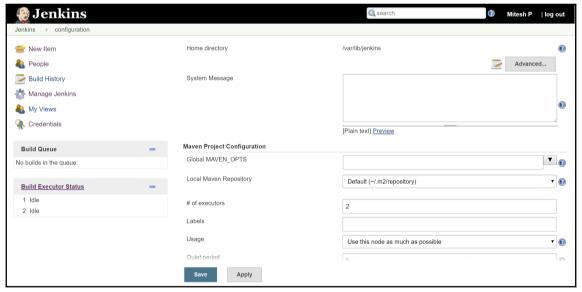


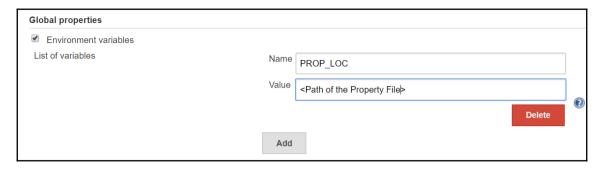




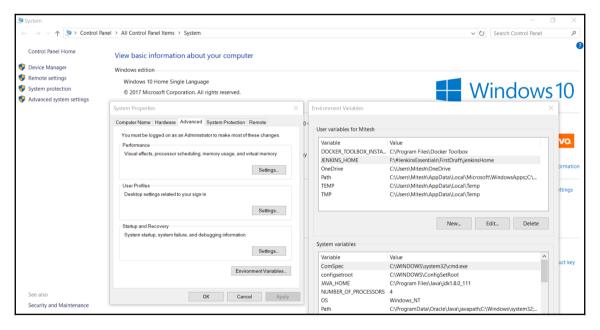




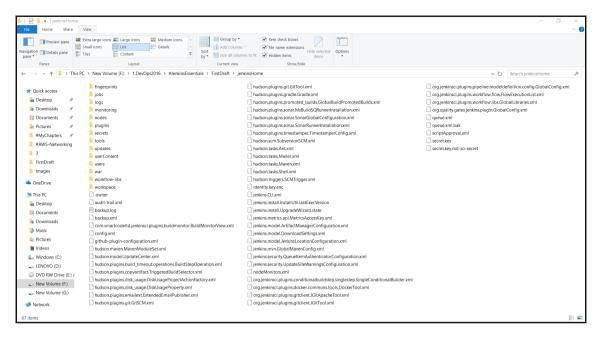






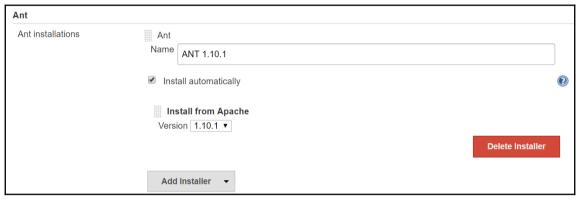


```
mitesh51@Jenkins:
mitesh51@Jenkins:~$ vi /etc/default/jenkins
NAME=jenkins
JAVA=/usr/bin/java
JAVA ARGS="-Djava.awt.headless=true
PIDFILE=/var/run/$NAME/$NAME.pid
JENKINS USER=$NAME
JENKINS GROUP=$NAME
JENKINS WAR=/usr/share/$NAME/$NAME.war
JENKINS HOME=/var/lib/$NAME
RUN STANDALONE=true
JENKINS LOG=/var/log/$NAME/$NAME.log
```

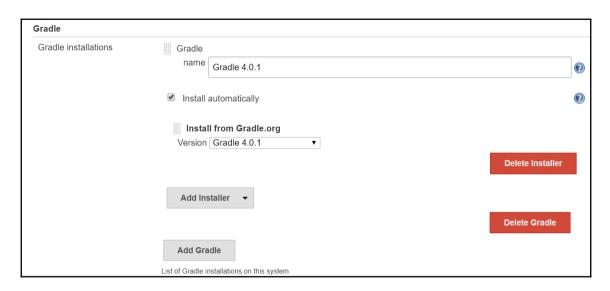


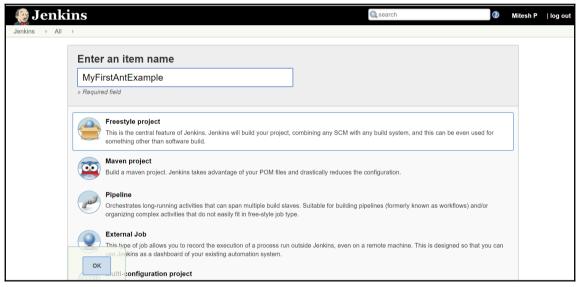


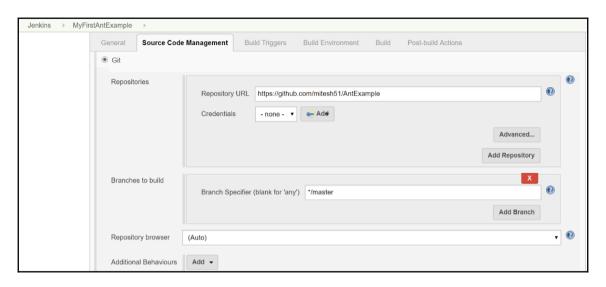




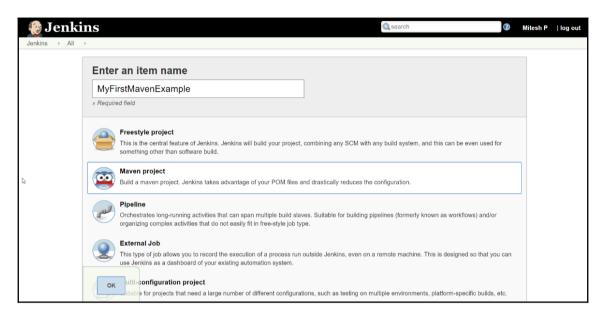


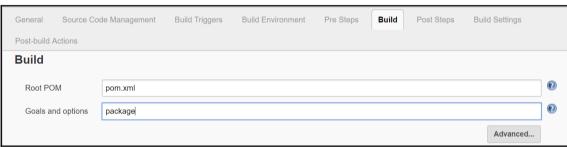






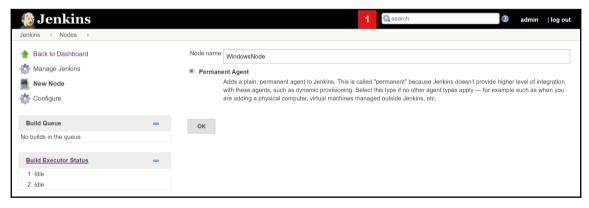


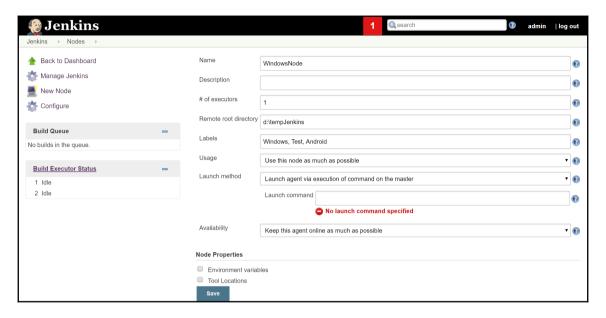


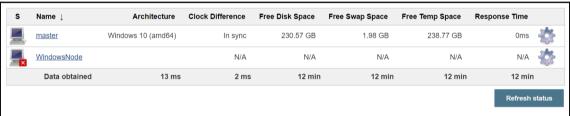


Chapter 02: Management and Monitoring of Jenkins



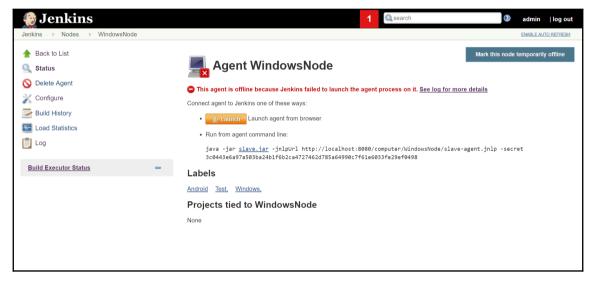




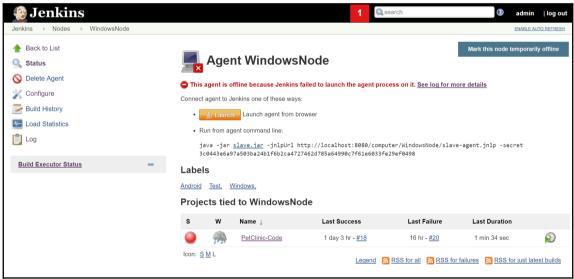


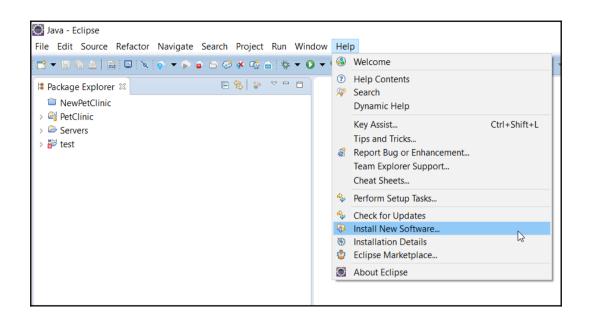


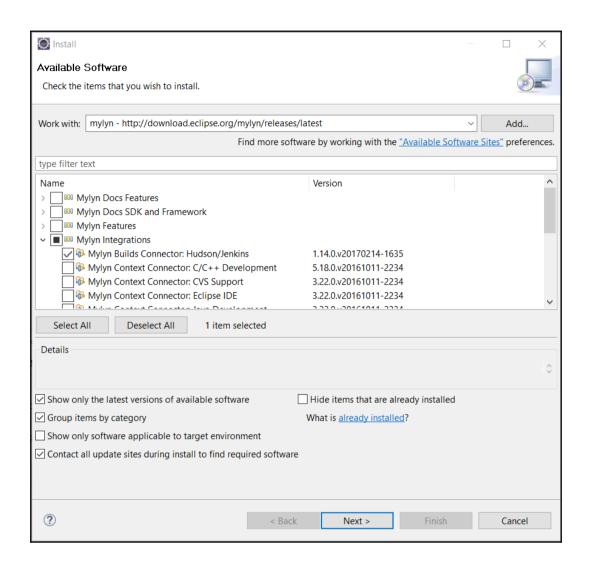


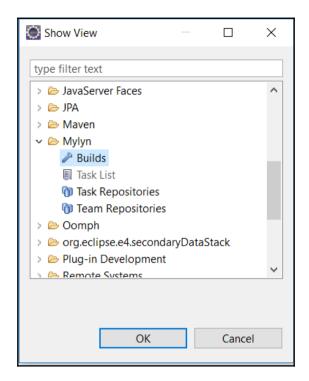


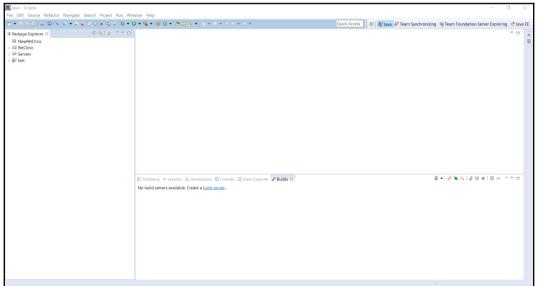


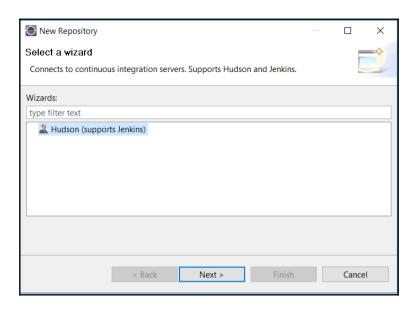


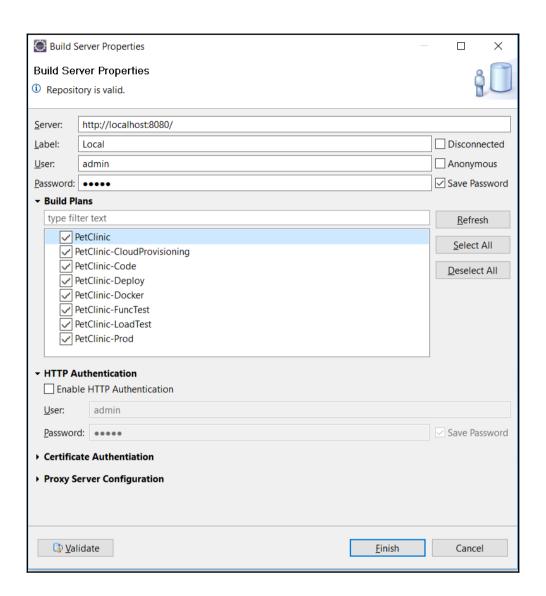


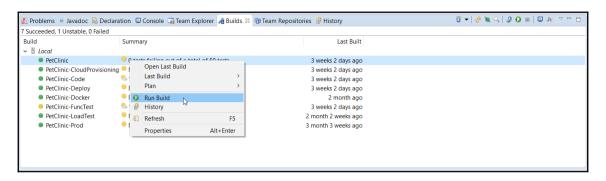


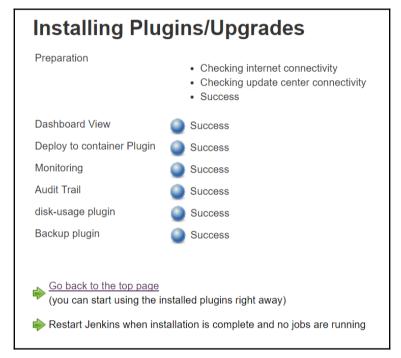














Disk Usage

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.

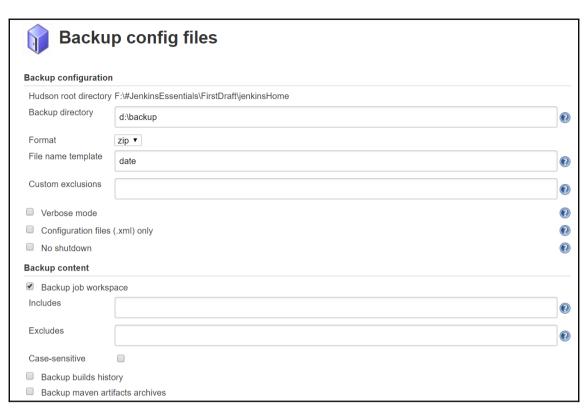
You can also view the monitoring of Jenkins nodes.

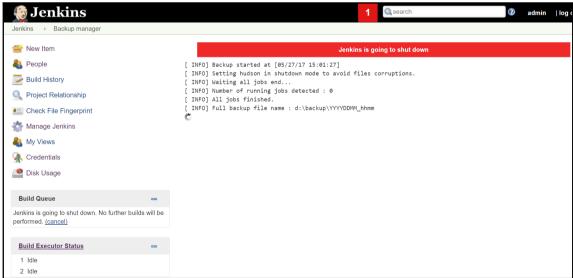


Prepare for Shutdown

Stops executing new builds, so that the system can be eventually shut down safely.

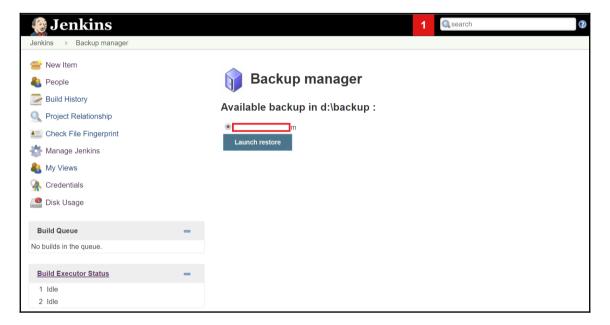






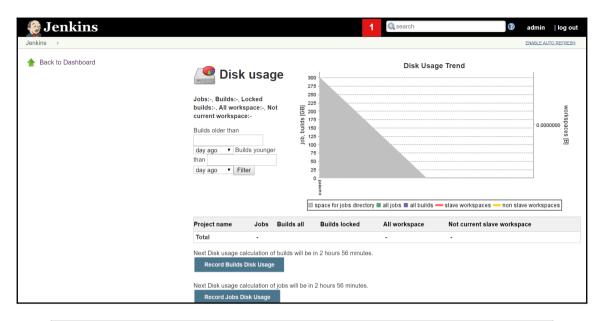
```
Jenkins is going to shut down

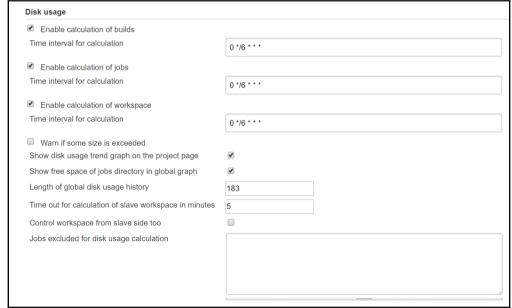
[ INFO] Backup started at [05/27/17 15:01:27]
[ INFO] Setting hudson in shutdown mode to avoid files corruptions.
[ INFO] Waiting all jobs end...
[ INFO] Number of running jobs detected : 0
[ INFO] All jobs finished.
[ INFO] Full backup file name : d:\backup\YYYYYDDMM_hhmm
[ INFO] Saved files : 12482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

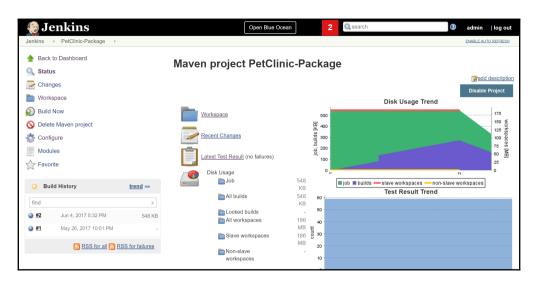


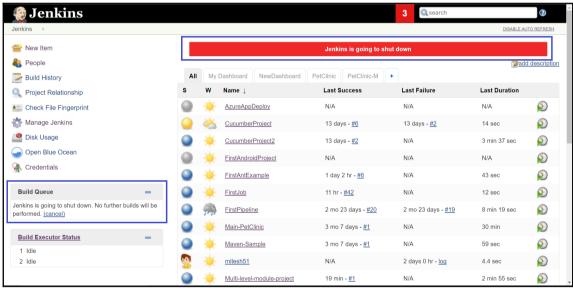
```
Command Prompt
C:\Users\Mitesh\Downloads>java -jar jenkins-cli.jar -s http://localhost:8080/ help
 add-job-to-view
   Adds jobs to view.
 build
   Builds a job, and optionally waits until its completion.
 cancel-quiet-down
   Cancel the effect of the "quiet-down" command.
 clear-queue
   Clears the build queue.
 connect-node
   Reconnect to a node(s)
 console
   Retrieves console output of a build.
 copy-job
   Copies a job.
 create-credentials-by-xml
   Create Credential by XML
 create-credentials-domain-by-xml
   Create Credentials Domain by XML
 create-job
   Creates a new job by reading stdin as a configuration XML file.
 create-node
   Creates a new node by reading stdin as a XML configuration.
 create-view
   Creates a new view by reading stdin as a XML configuration.
 declarative-linter
   Validate a Jenkinsfile containing a Declarative Pipeline
 delete-builds
   Deletes build record(s).
 delete-credentials
   Delete a Credential
 delete-credentials-domain
   Delete a Credentials Domain
 delete-job
   Deletes job(s).
 delete-node
   Deletes node(s)
 delete-view
   Deletes view(s).
```

```
Command Prompt
C:\Users\Mitesh\Downloads>java -jar jenkins-cli.jar -s http://localhost:8080/ version
2.73
C:\Users\Mitesh\Downloads>java -jar jenkins-cli.jar -s http://localhost:8080/ who-am-i
Authenticated as: anonymous
Authorities:
 anonymous
C:\Users\Mitesh\Downloads>java -jar jenkins-cli.jar -s http://localhost:8080/ list-jobs
AzureAppDeploy
CucumberProject
CucumberProject2
FirstAndroidProject
FirstAntExample
FirstJob
FirstPipeline
Main-PetClinic
Maven-Sample
mitesh51
PetClinic-Code
PetClinic-Deploy
PetClinic-FuncTest
PetClinic-LoadTest
PetClinic-Package
PetClinic-Prod
PetClinicWebHook
SonarHTMLCSSJS
SpringBoot
Test
TestPipeline
ZapTest
ZapTestBackup
C:\Users\Mitesh\Downloads>
```

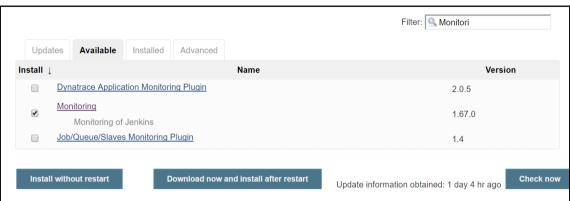


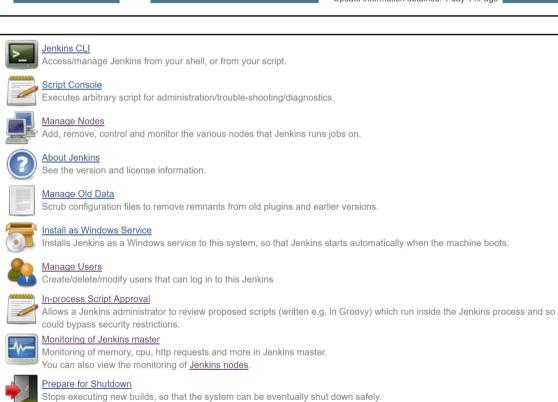


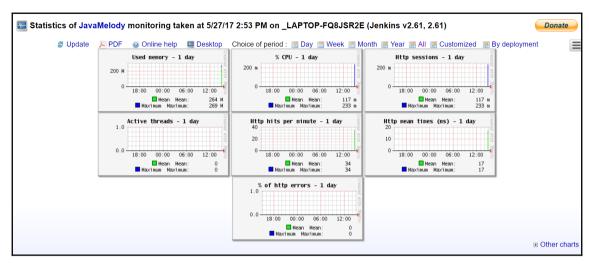


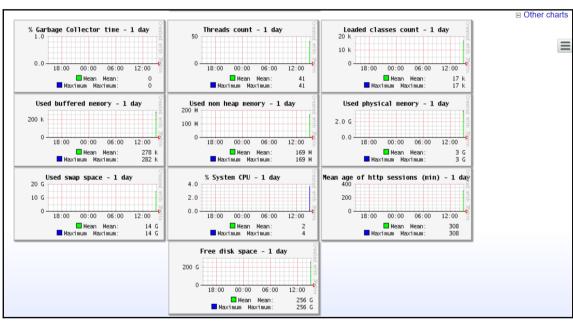


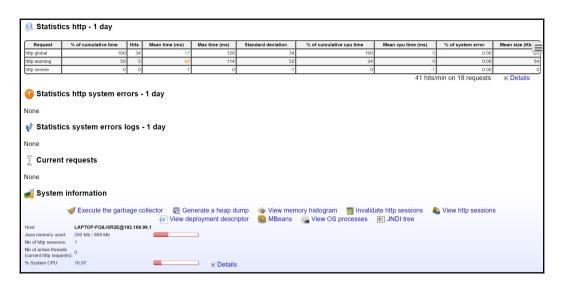


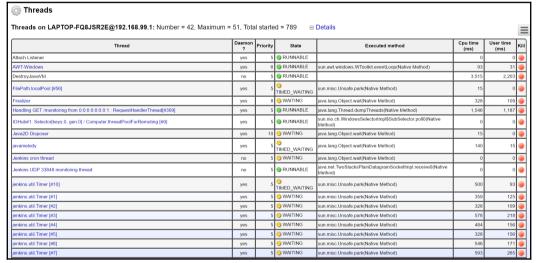


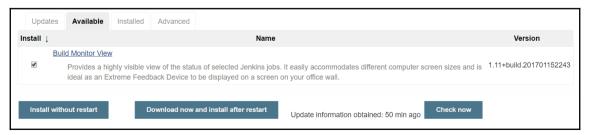


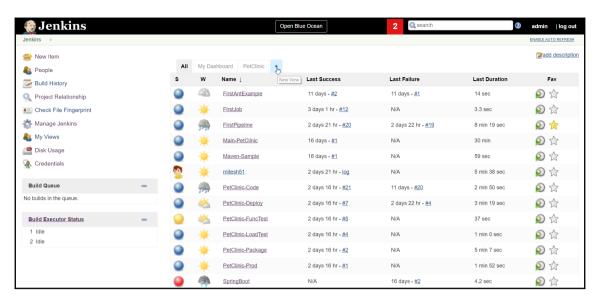


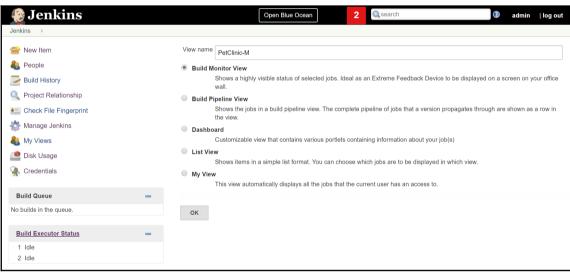


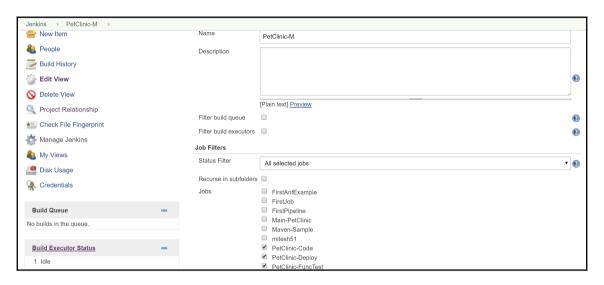


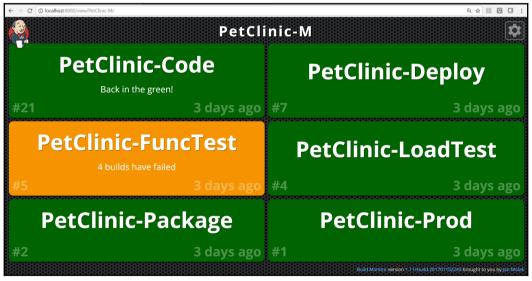


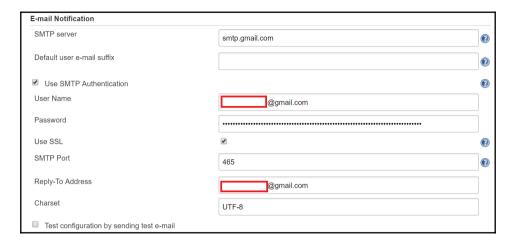


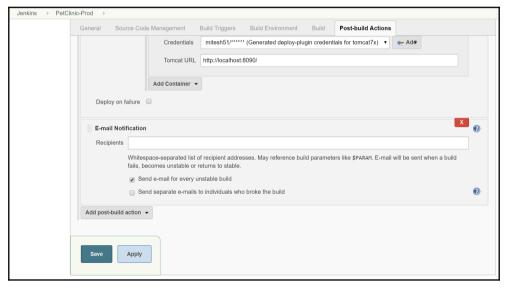


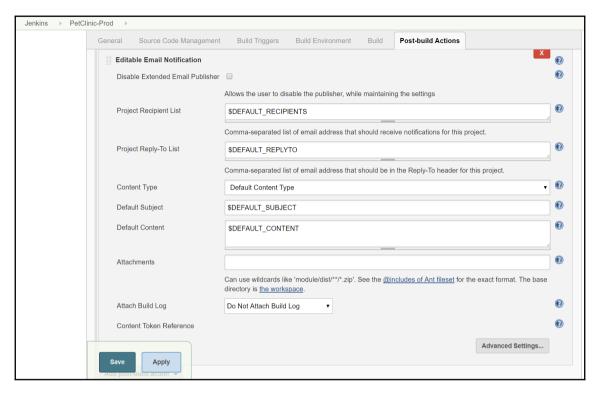






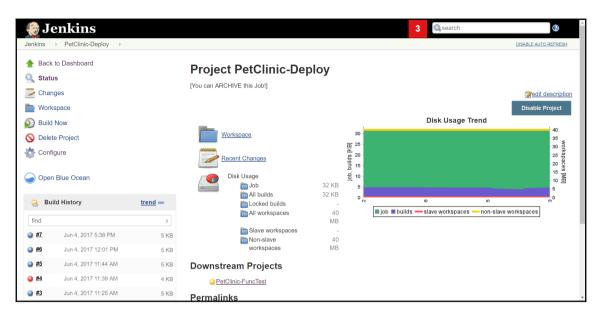


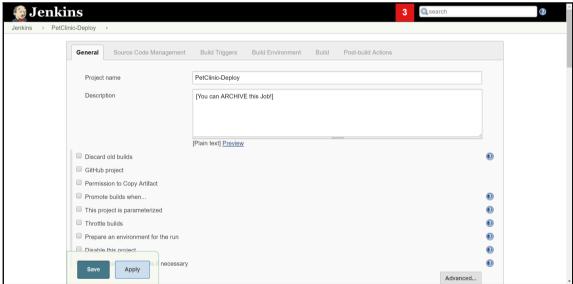




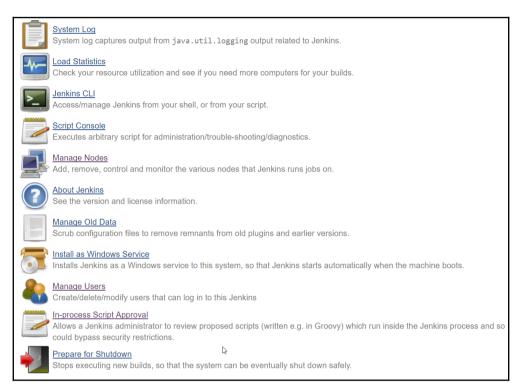


Jenkins Result Name: AzureAppDeploy Name: CucumberProject Project has same month as build Name: CucumberProject2 Project has same month as build Name: FirstAndroidProject Name: FirstAntExample Project has same month as build Name: FirstJob Project has same month as build Name: FirstPipeline Name: Main-PetClinic Name: Maven-Sample Name: mitesh51 Name: PetClinic-Code Name: PetClinic-Deploy Name: PetClinic-FuncTest



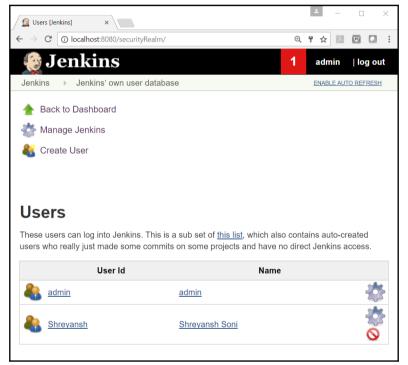


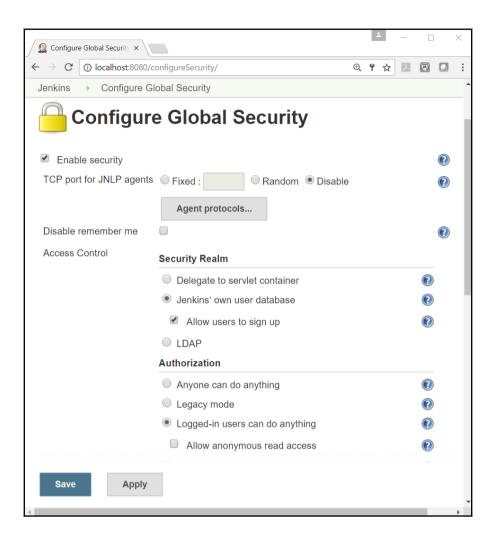
Chapter 03: Managing Security



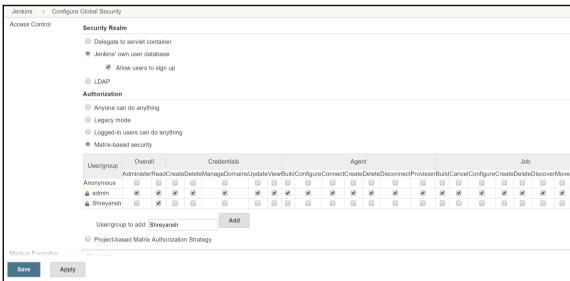


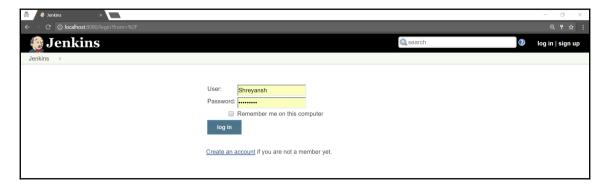


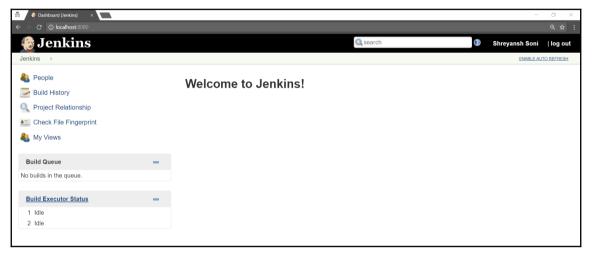


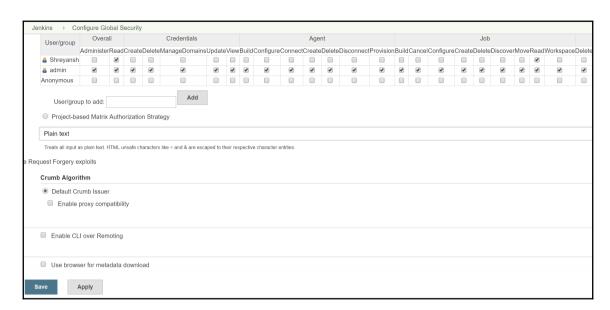


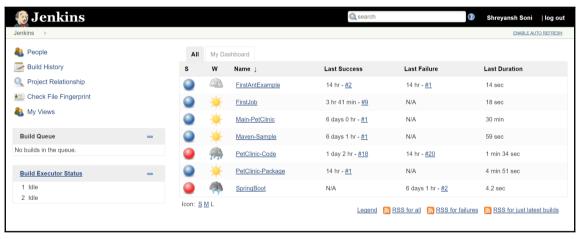








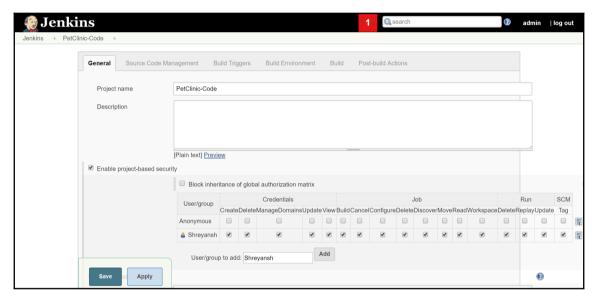


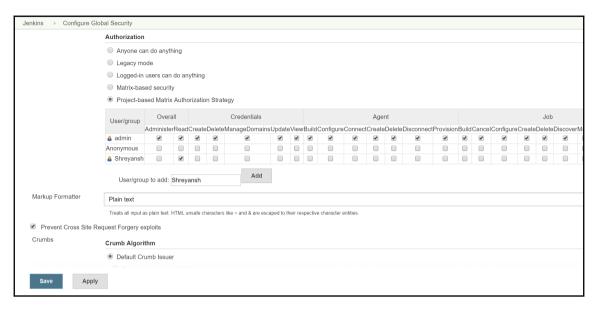


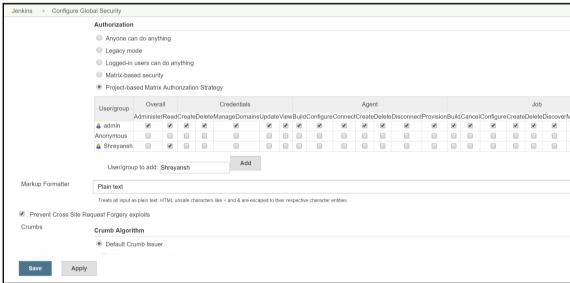


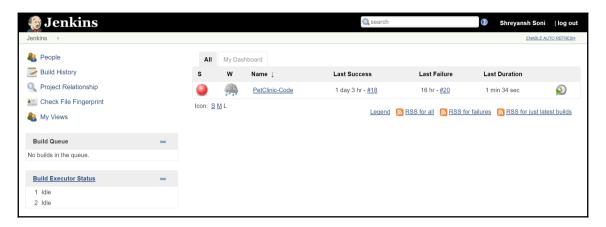




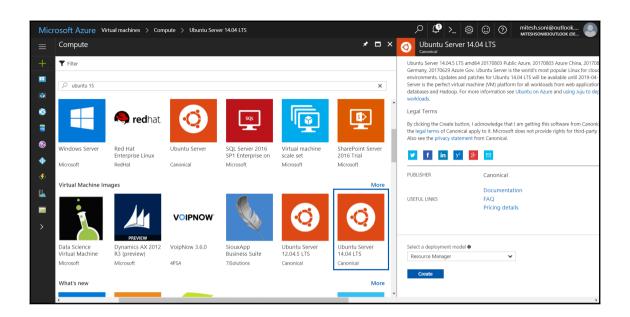


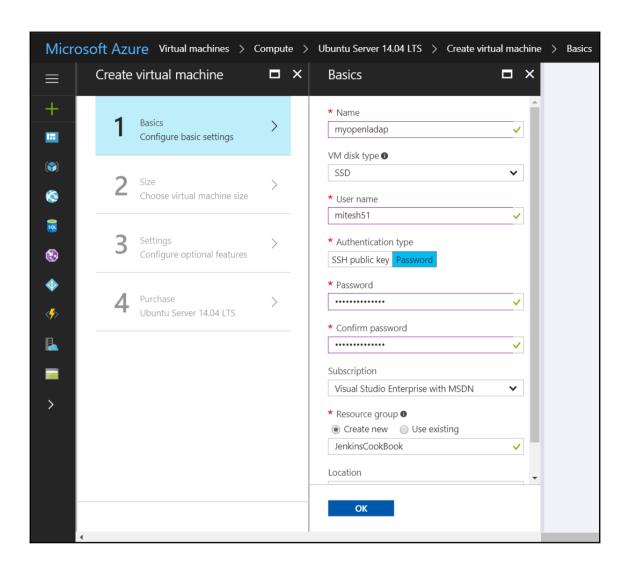


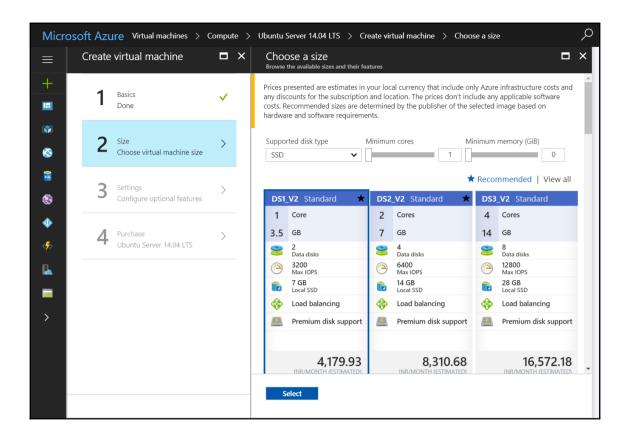


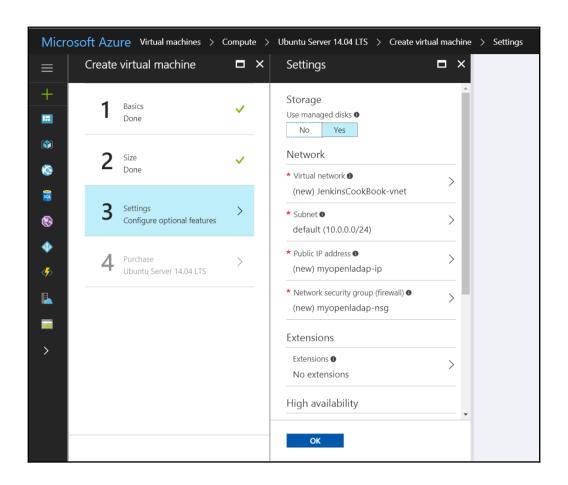


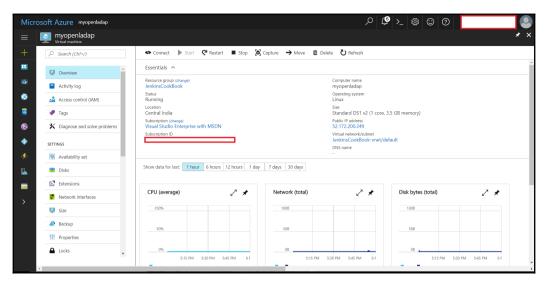


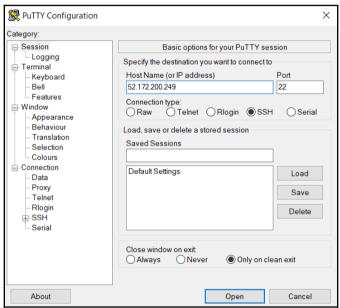


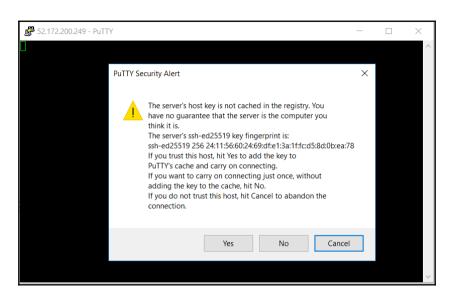


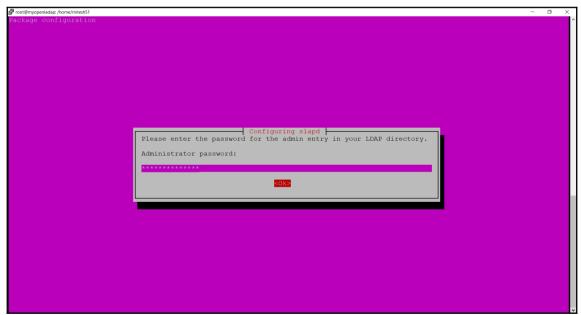




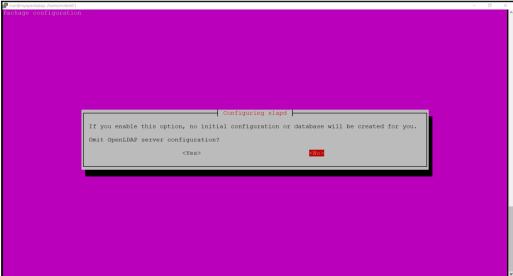




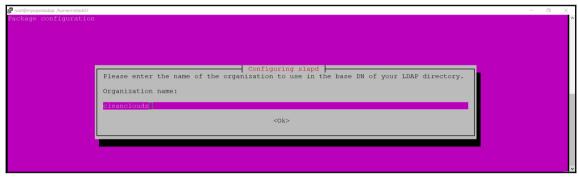




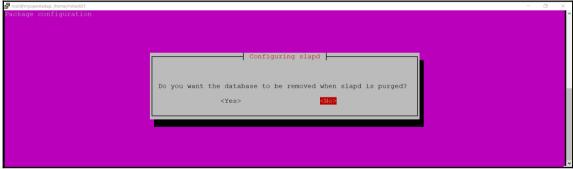


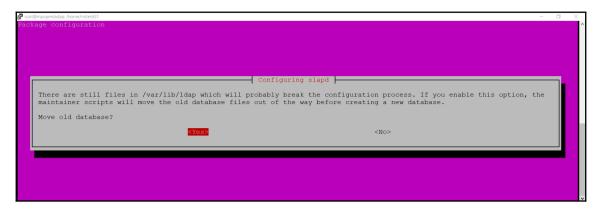




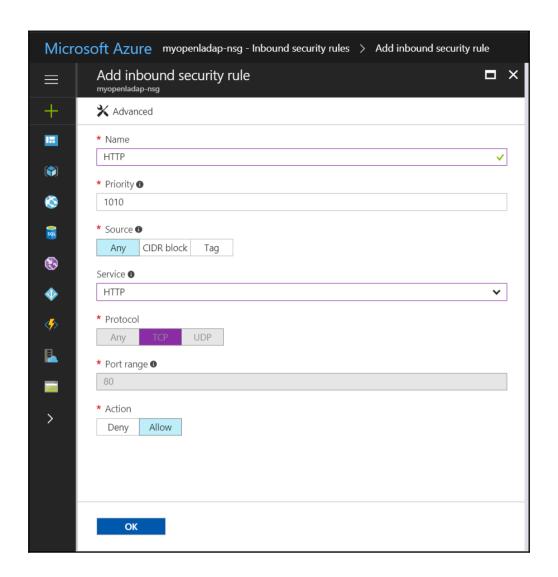


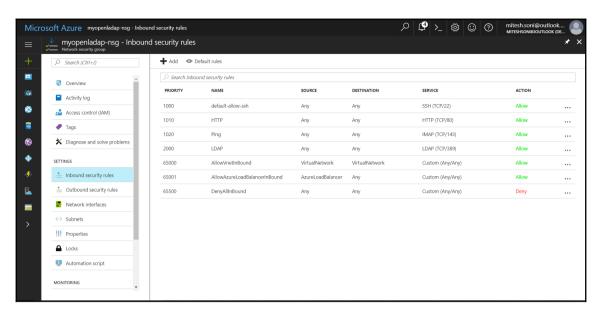






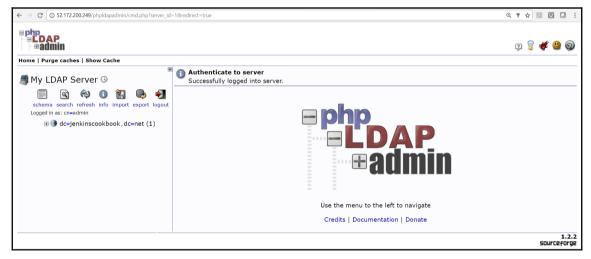


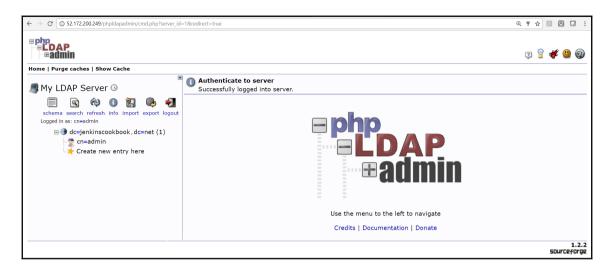


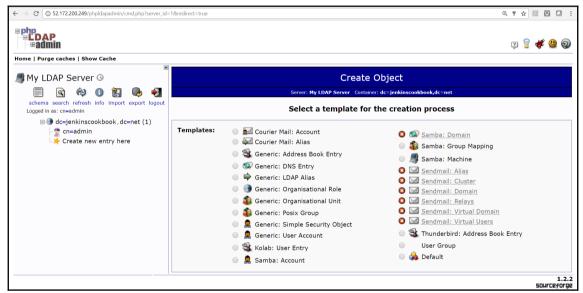






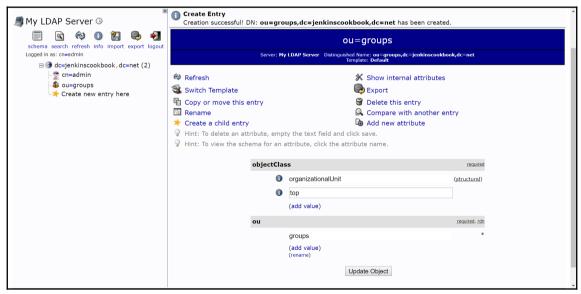




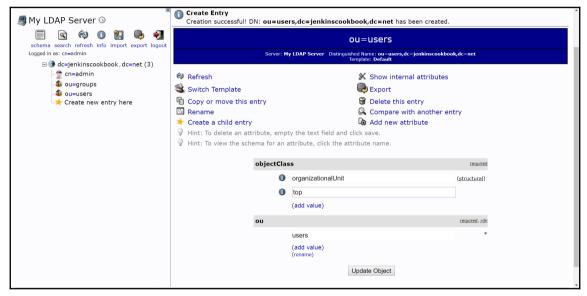


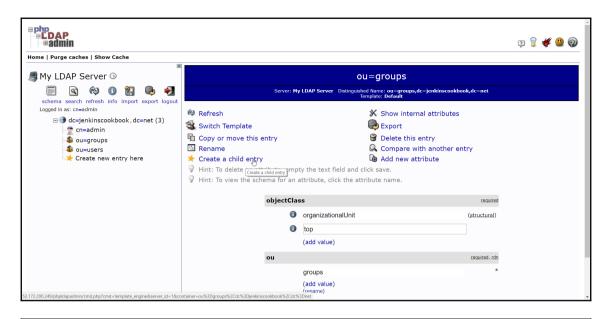










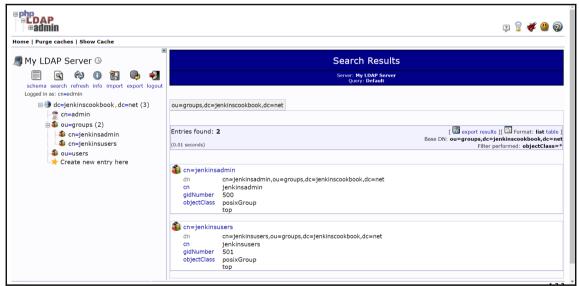




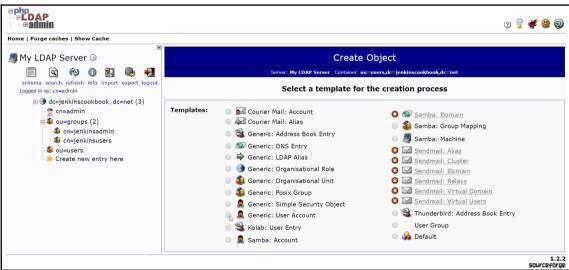




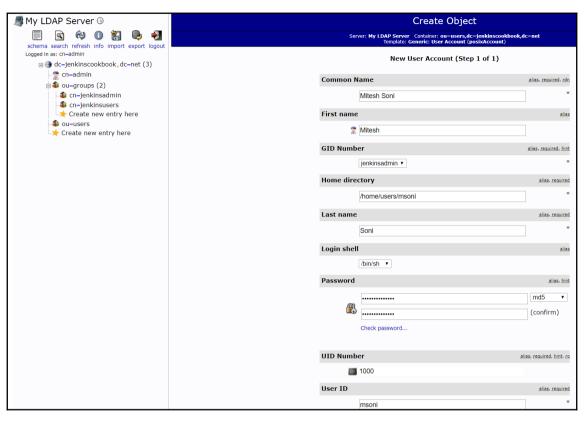


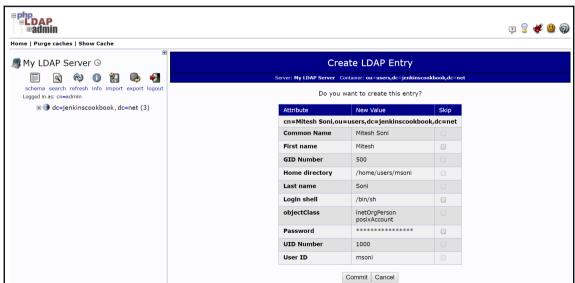


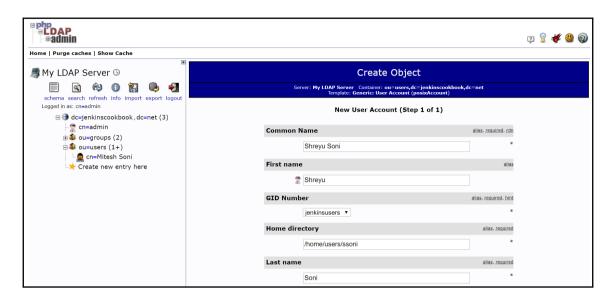


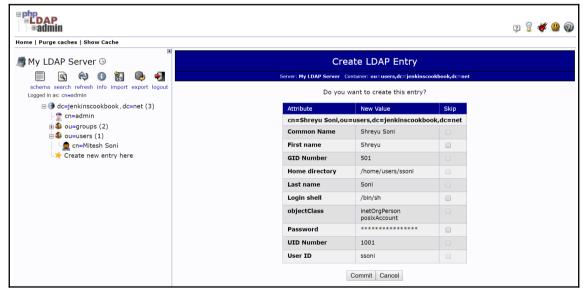


| □ Php □ EDAP □ ■ admin | | | | |
|--|--|--|--|--|
| Home Purge caches Show Cache | | | | |
| ■ My LDAP Server ③ | Create Object | | | |
| schema search refresh info import export logout | Server: My LDAP Server Container: ou=users,dc=jenkinscookbook,dc=net Template: Generic: User Account (posixAccount) | | | |
| ⊕ dc=jenkinscookbook,dc=net (3) | New User Account (Step 1 of 1) | | | |
| ou=admin cougroups (2) cougroups (2) cougent cougening | Common Name | | | |
| | jcuser1 | | | |
| | First name | | | |
| | ₹ Shreyu | | | |
| | GID Number | | | |
| | jenkinsadmin ▼ | | | |
| | Home directory | | | |
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| | Last name | | | |
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| 4 | Ladin shall | | | |





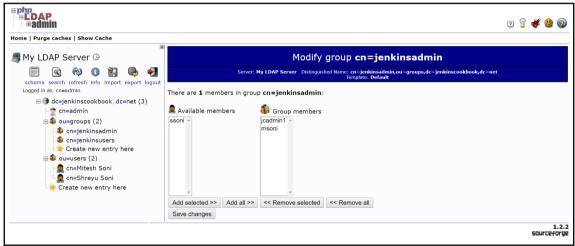




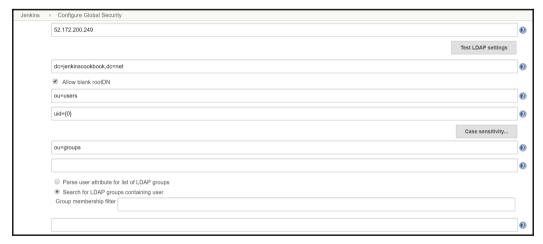


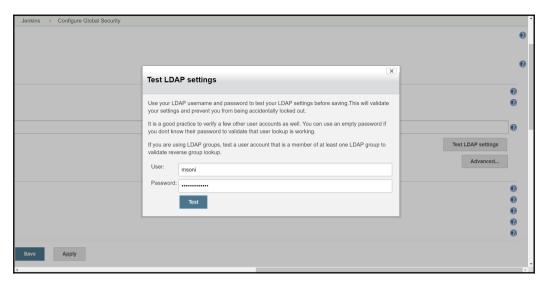






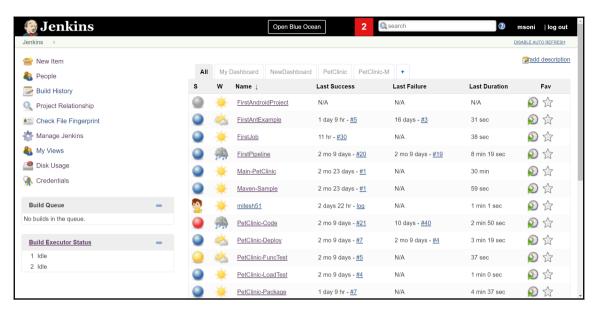




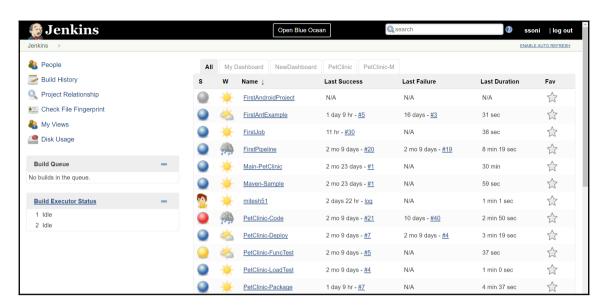




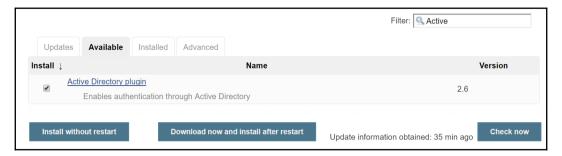


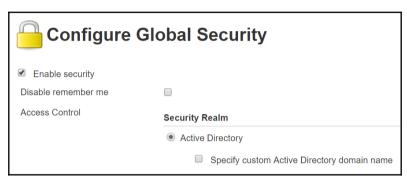


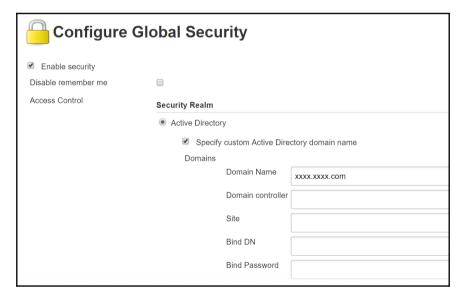




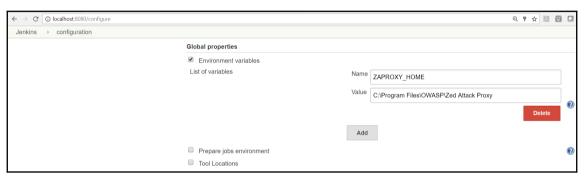


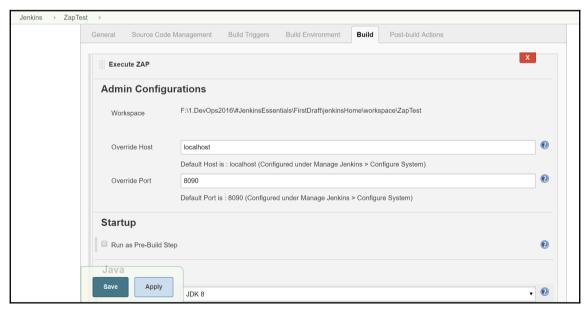


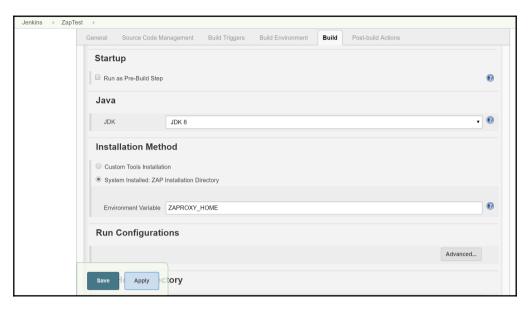


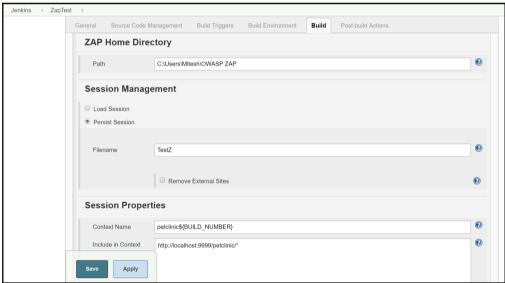


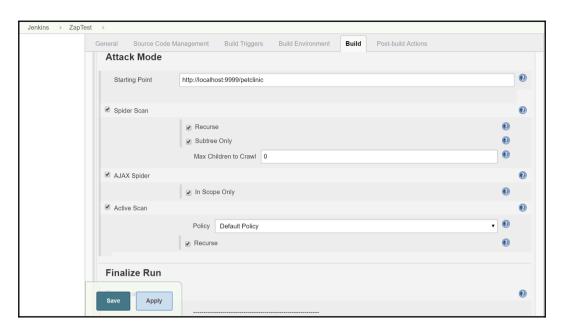


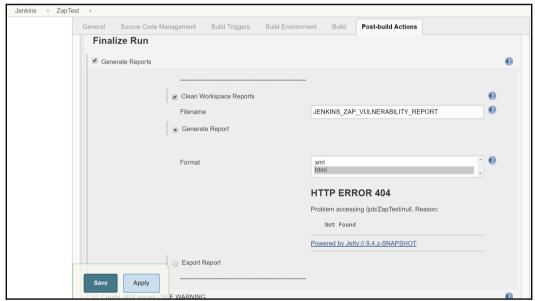


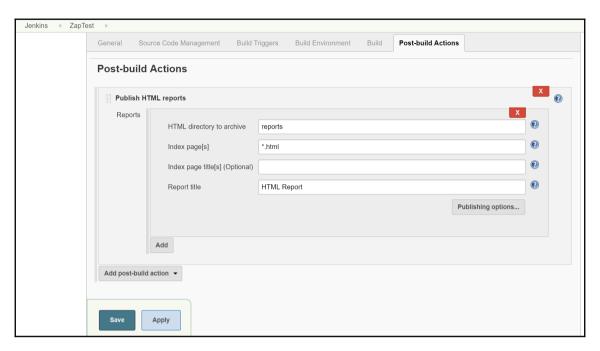


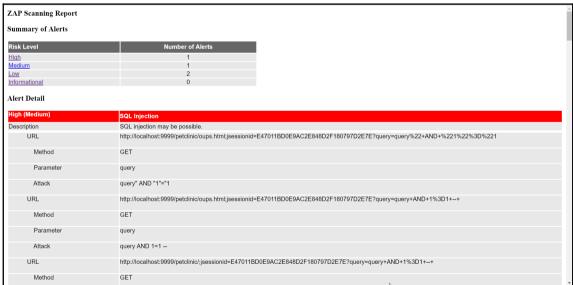








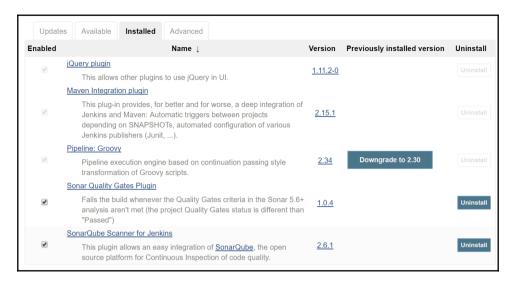


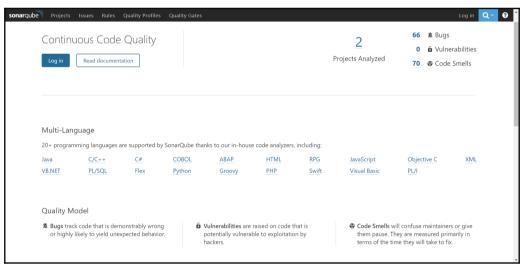


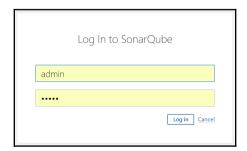
Chapter 04: Improving Code Quality

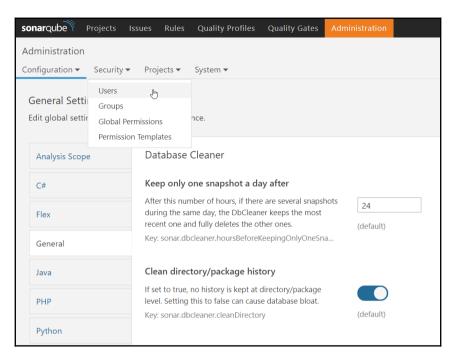
| > New Volume (F:) > #A.Books > #JenkinsCookBook > sonarqube-6.3.1 > bin > windows-x86-64 > | | | | |
|--|------------------|--------------------|--------|--|
| Name | Date modified | Туре | Size | |
| lib | 01-08-2017 08:31 | File folder | | |
| InstallNTService.bat | 11-04-2017 13:55 | Windows Batch File | 2 KB | |
| StartNTService.bat | 11-04-2017 13:55 | Windows Batch File | 2 KB | |
| StartSonar.bat | 11-04-2017 13:55 | Windows Batch File | 2 KB | |
| StopNTService.bat | 11-04-2017 13:55 | Windows Batch File | 2 KB | |
| UninstallNTService.bat | 11-04-2017 13:55 | Windows Batch File | 2 KB | |
| \$\text{\$\exitt{\$\text{\$\exittit{\$\text{\$\exittitt{\$\text{\$\}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}} | 11-04-2017 13:39 | Application | 216 KB | |

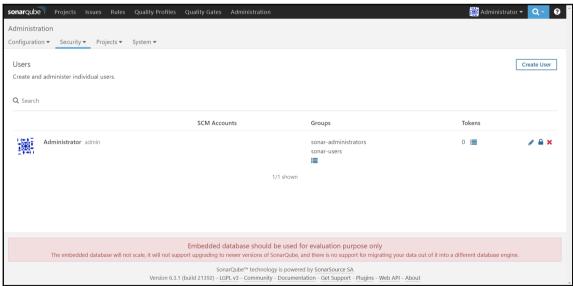
```
F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64>StartSonar.bat
wrapper | --> Wrapper Started as Console
wrapper | Launching a JVM...
Jvm 1 | Wrapper (Version 3.2.3) http://wrapper.tanukisoftware.org
Jvm 1 | Copyright 1999-2006 Tanuki Software, Inc. All Rights Reserved.
Jvm 1 | Copyright 1999-2006 Tanuki Software, Inc. All Rights Reserved.
Jvm 1 | 2017.08.01 08:35:31 INFO | app[][o.s.p.m.JavaProcessLauncher] Launch process[es]: C:\Program Files\Java\jre1.8.0111\bin\java
-Djava.awt.headless=true -Xmx16 -Xms256m -Xss256k -Djna.nosys=true -Xx:+UseParNewGC -XX:+UseConcMarkSweepGC -XX:CMSInitiatingOccupancy
Fraction=75 -XX:+UseConcMarkSweepGC -XX:+UseConcMarkSweepGC -XX:+UseConcMarkSweepGC -XX:+UseConcMa
```



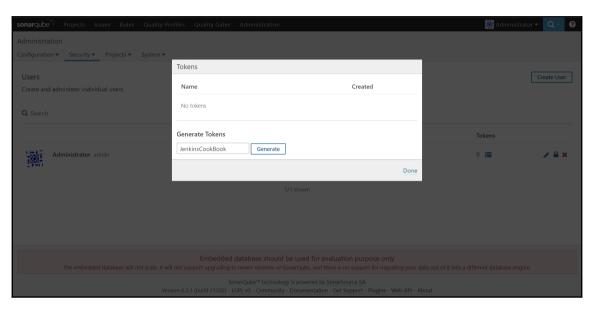


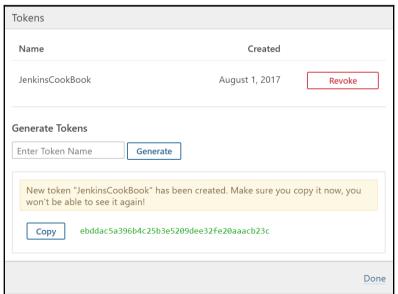




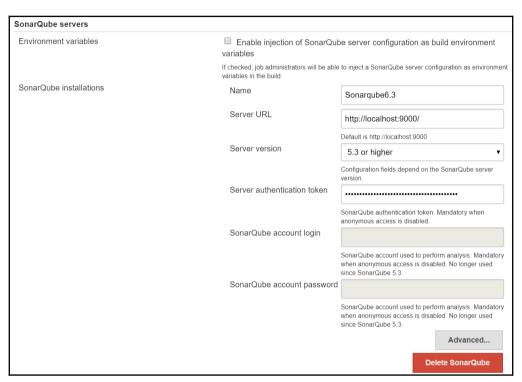


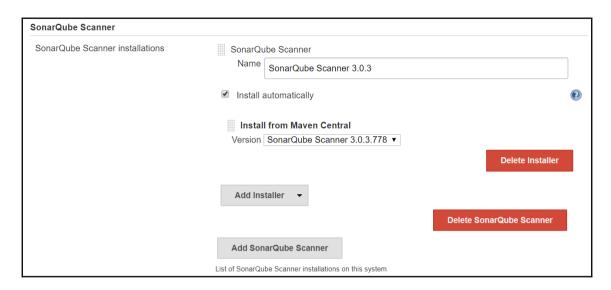


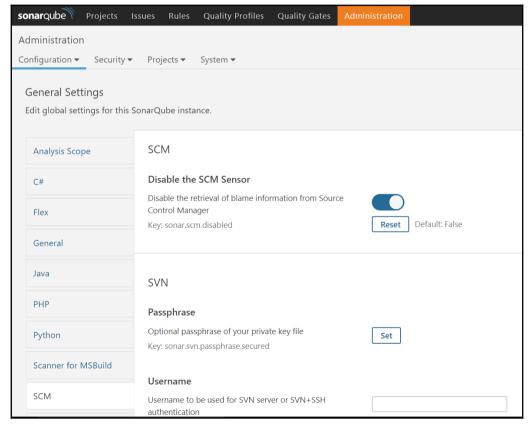


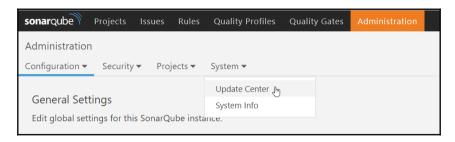


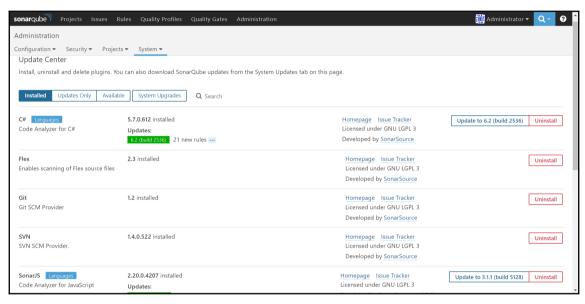


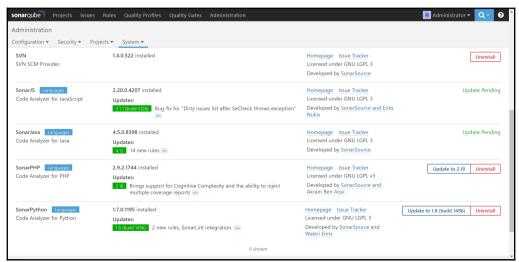


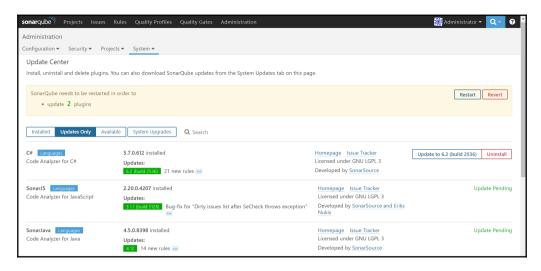


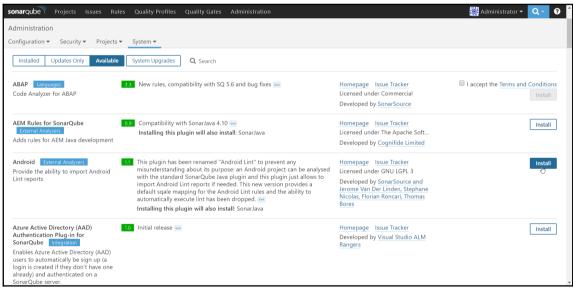




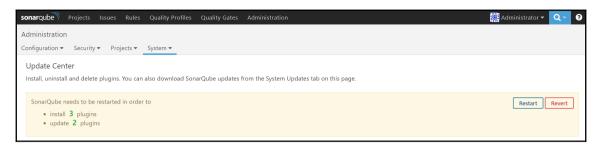




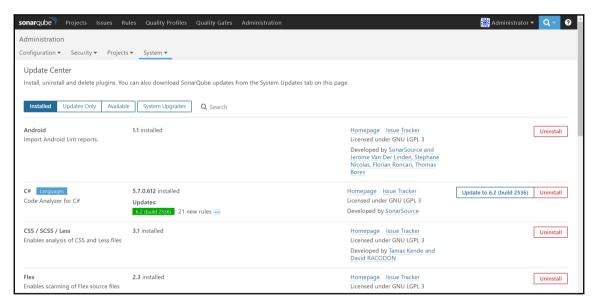


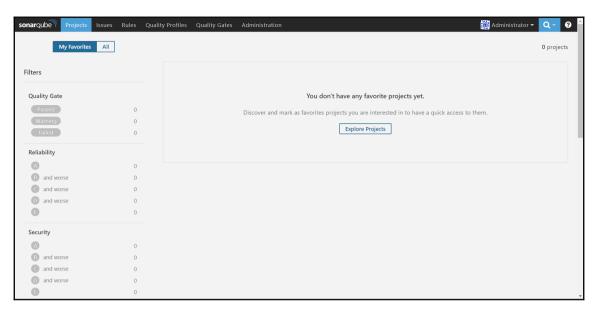


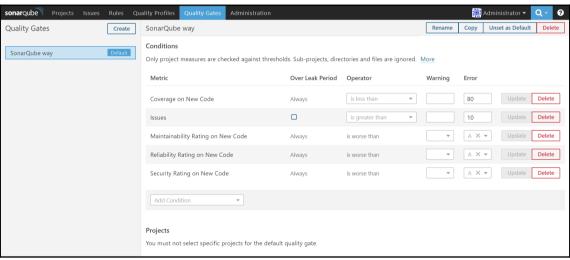


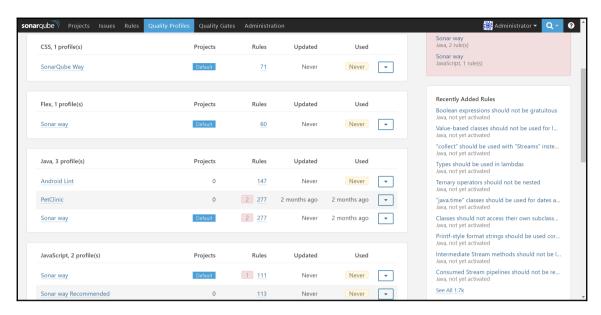


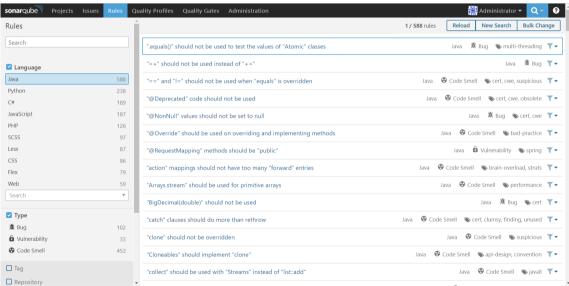




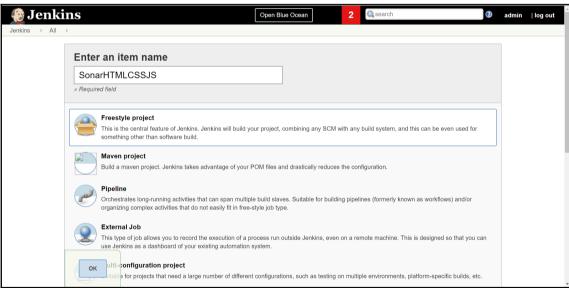


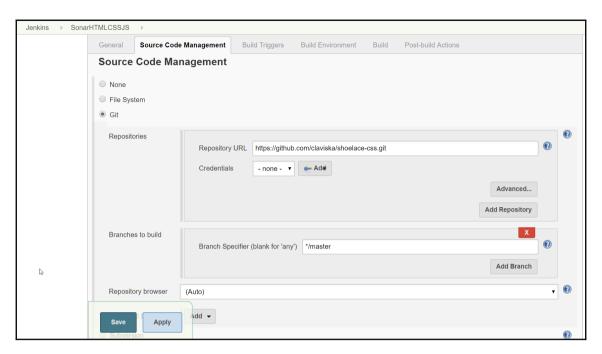


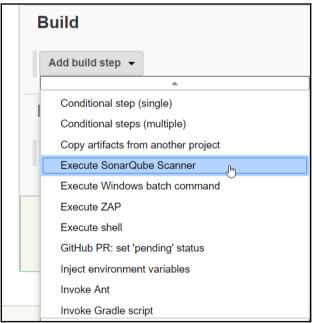


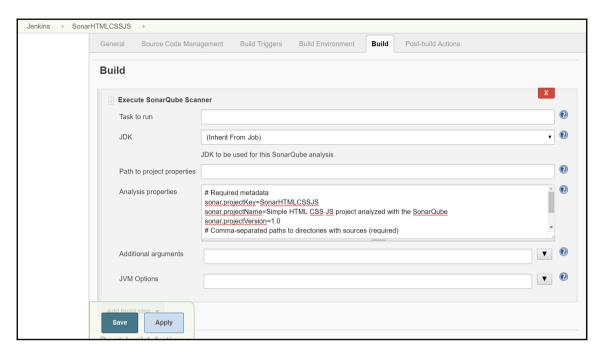


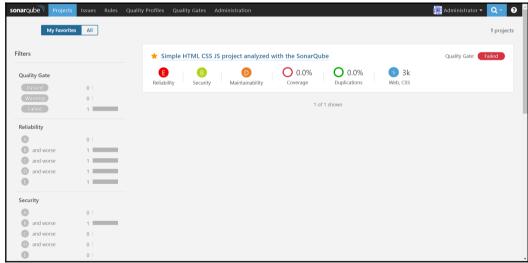


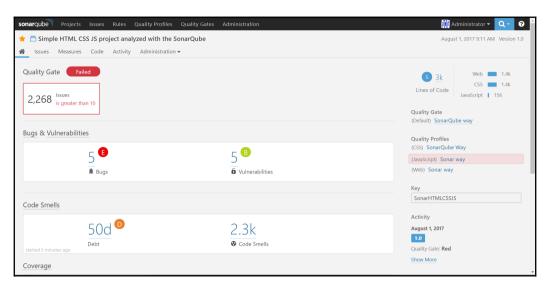


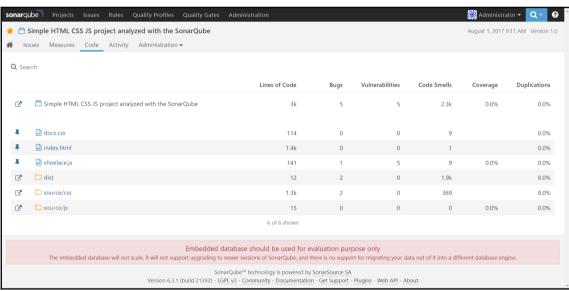


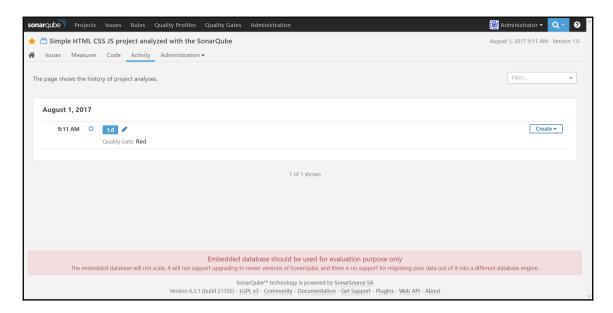


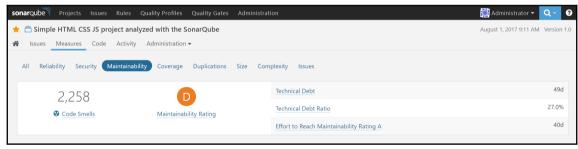


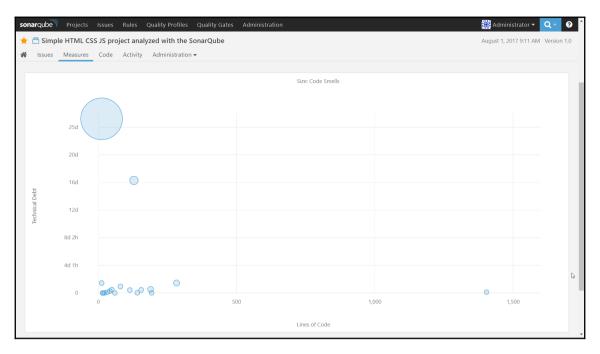


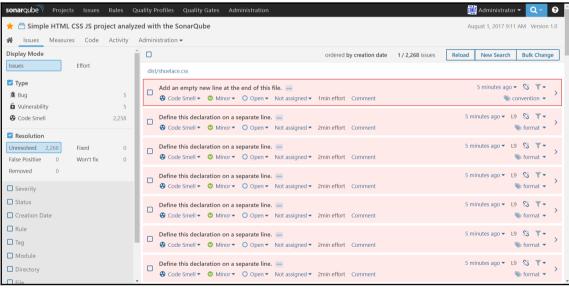


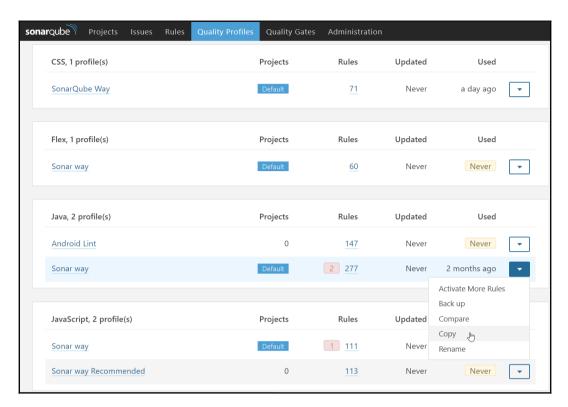




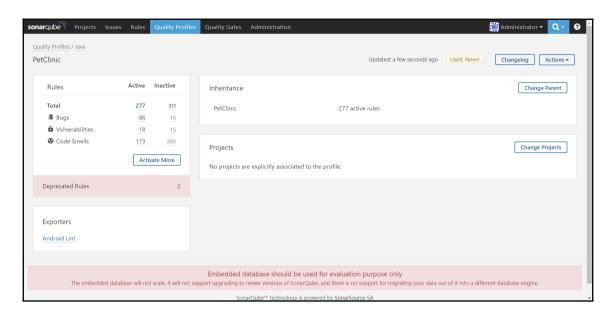


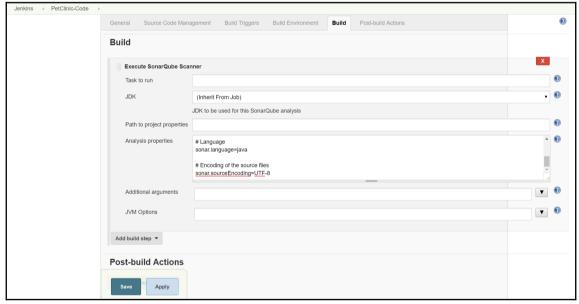


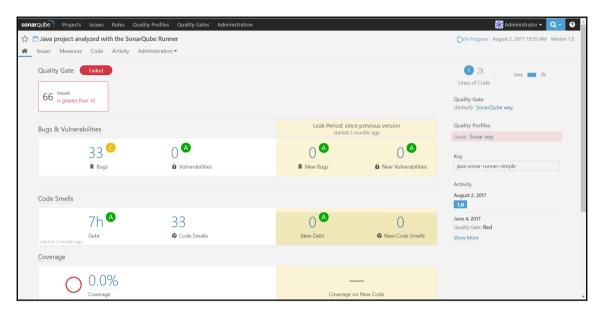


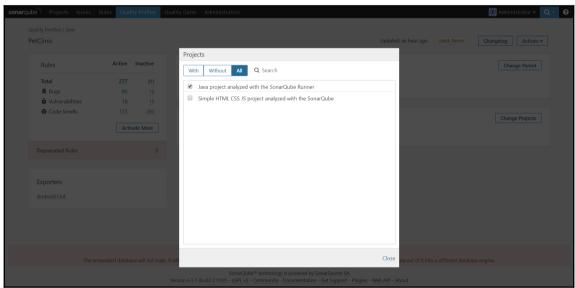


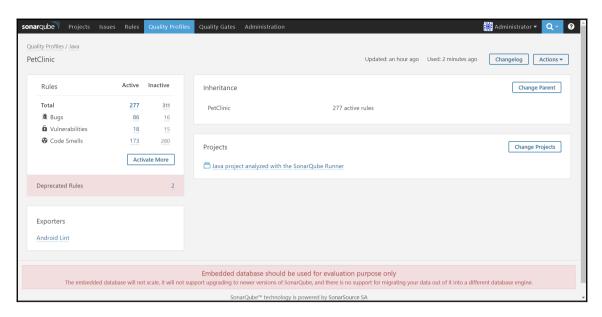


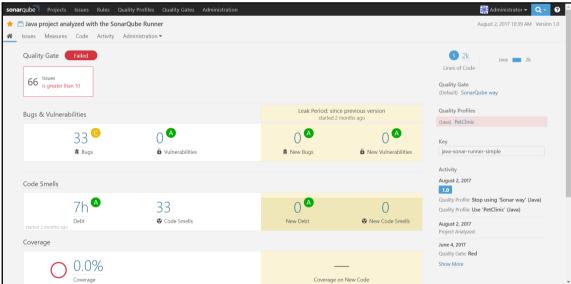


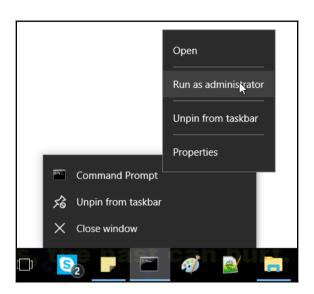




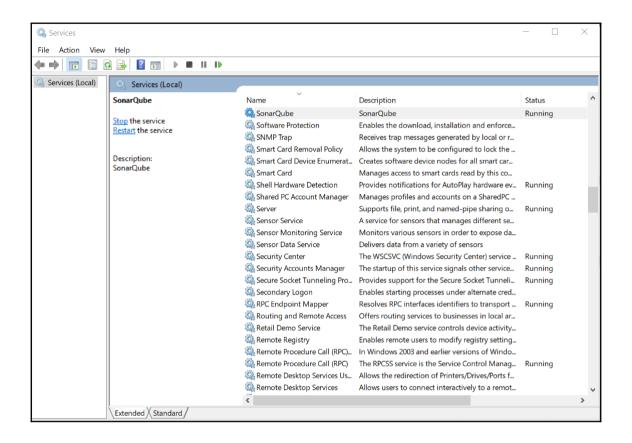




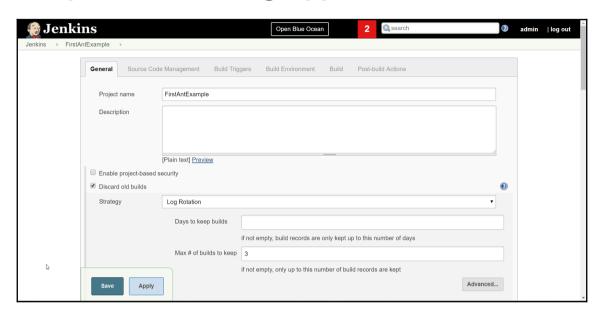


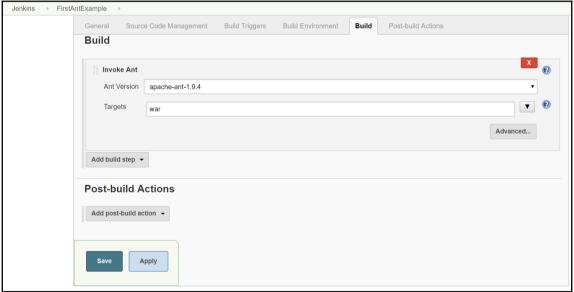


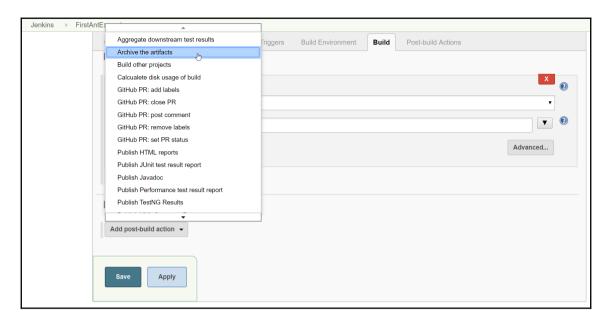
```
Administrator: Command Prompt
F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64>dir
Volume in drive F is New Volume
Volume Serial Number is 6A72-42C1
Directory of F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64
01-08-2017 08:31
                    <DIR>
01-08-2017 08:31
                    <DIR>
11-04-2017 13:55
                             1.272 InstallNTService.bat
01-08-2017 08:31
                    <DIR>
                                   lib
11-04-2017 13:55
                             1,262 StartNTService.bat
11-04-2017 13:55
                             1,424 StartSonar.bat
11-04-2017 13:55
                             1,260 StopNTService.bat
11-04-2017 13:55
                             1,276 UninstallNTService.bat
11-04-2017 13:39
                            220,672 wrapper.exe
              6 File(s)
                               227,166 bytes
               3 Dir(s) 242,244,472,832 bytes free
F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64>StartNTService.bat
wrapper | The SonarQube service is not installed - The specified service does not exist
as an installed service. (0x424)
Press any key to continue . . .
F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64>InstallNTService.bat
wrapper | SonarQube installed.
F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64>StartNTService.bat
wrapper
          Starting the SonarQube service...
          Waiting to start...
wrapper
wrapper
        SonarQube started.
F:\#A.Books\#JenkinsCookBook\sonarqube-6.3.1\bin\windows-x86-64>
```

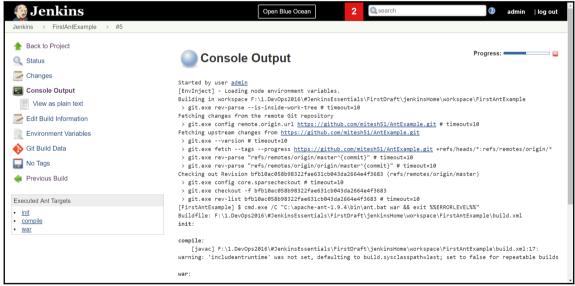


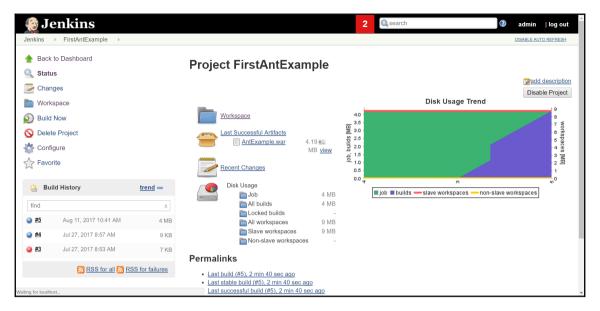
Chapter 05: Building Applications in Jenkins

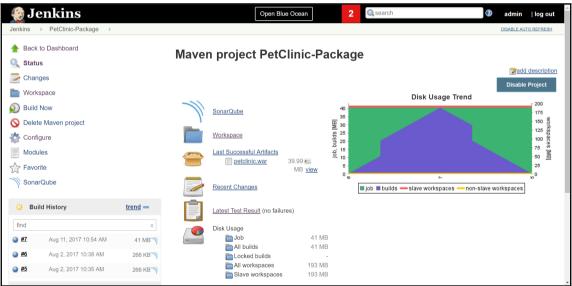


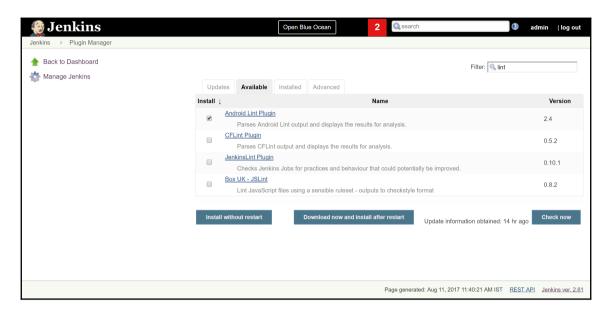


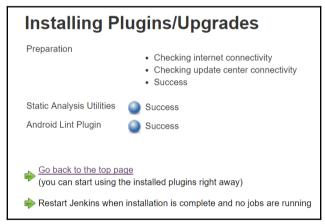


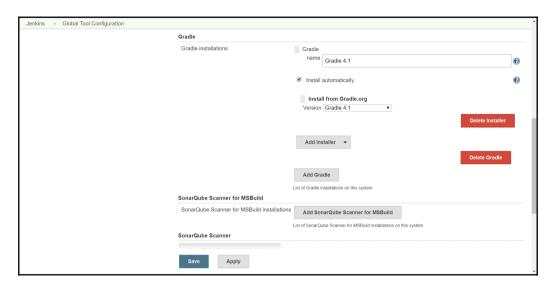


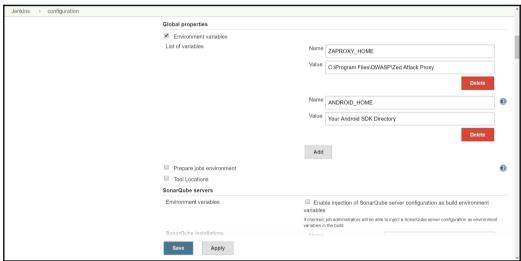


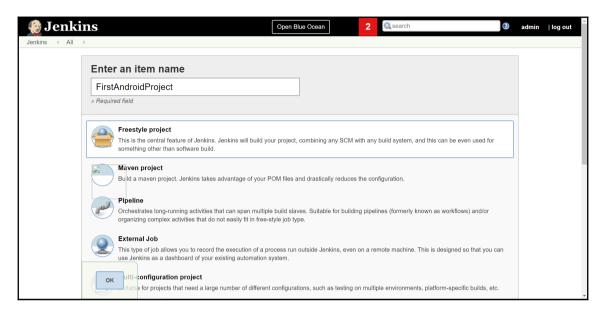


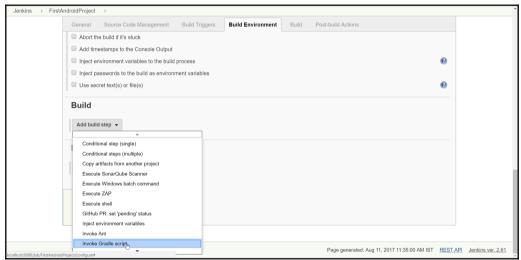


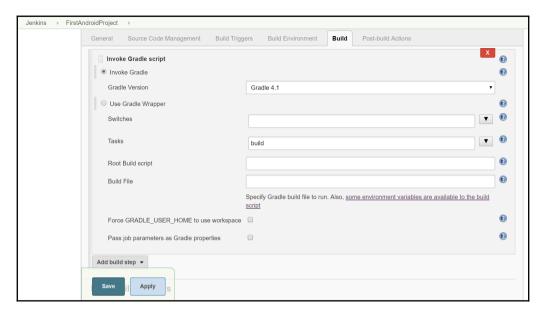


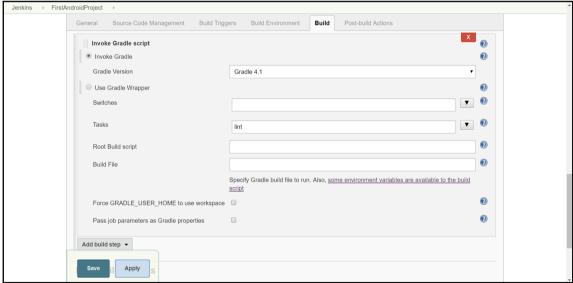


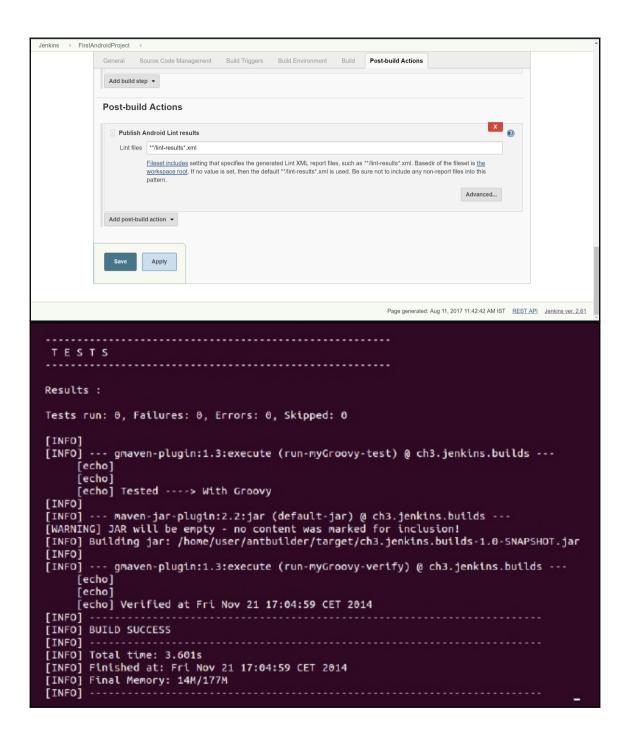




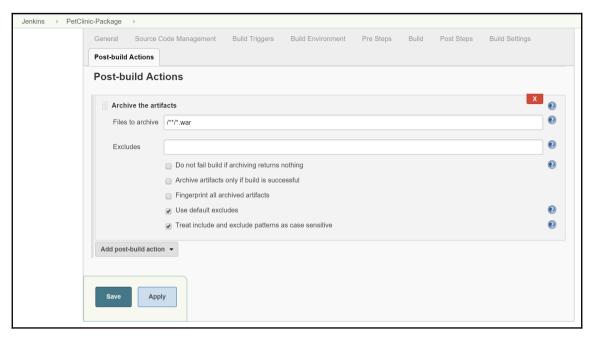


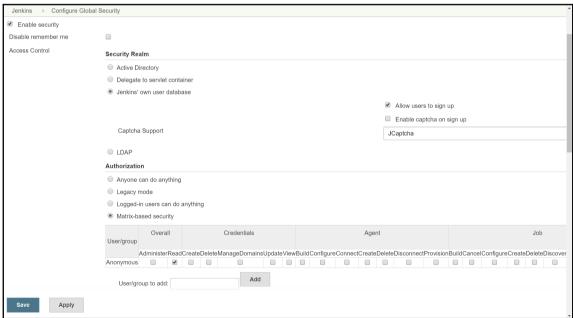


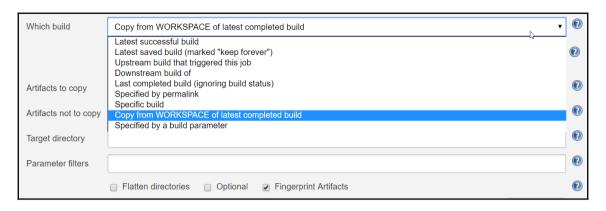


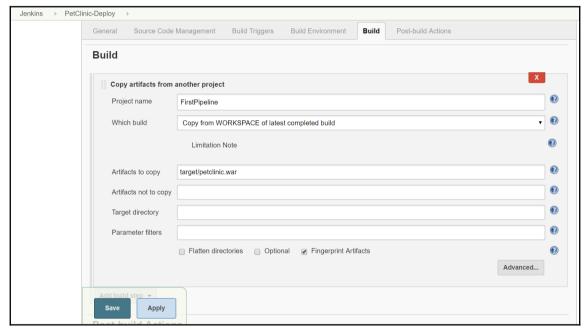


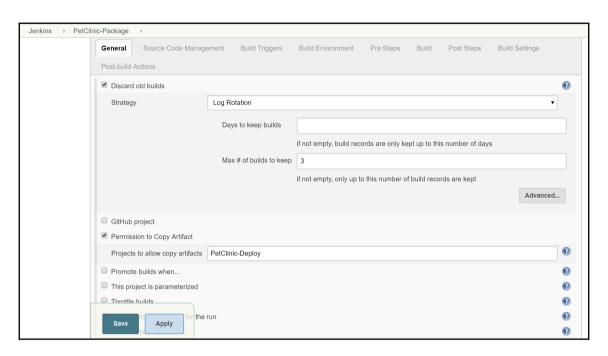
Chapter 06: Continuous Delivery

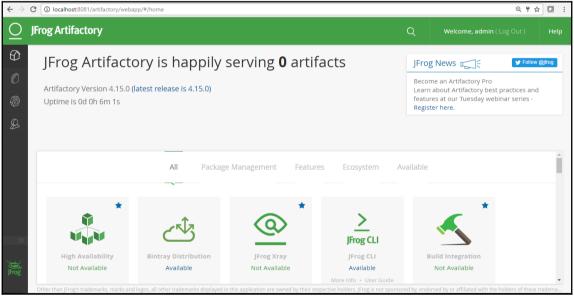


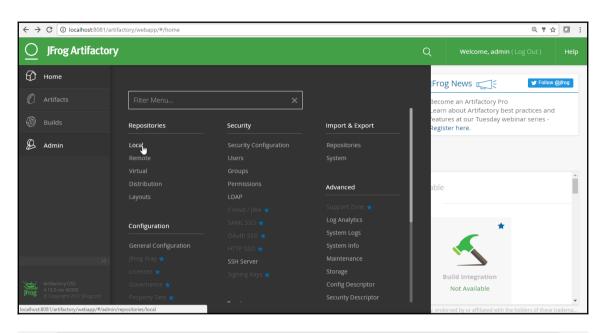


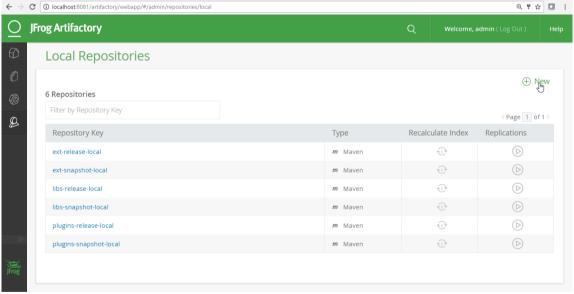


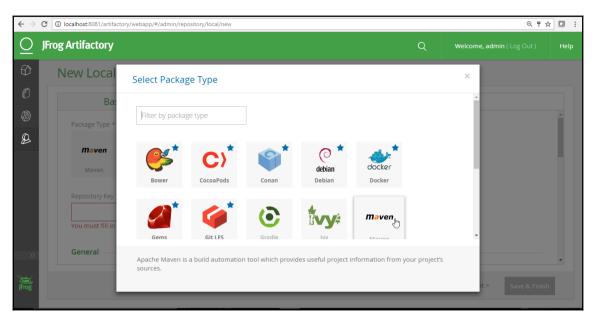


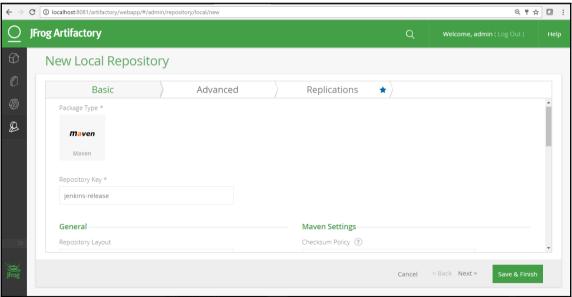


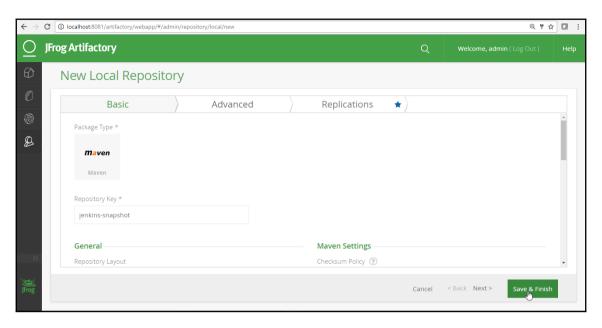


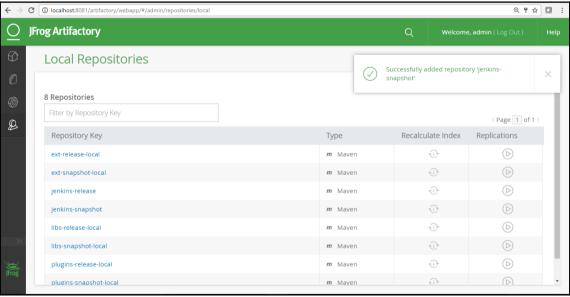


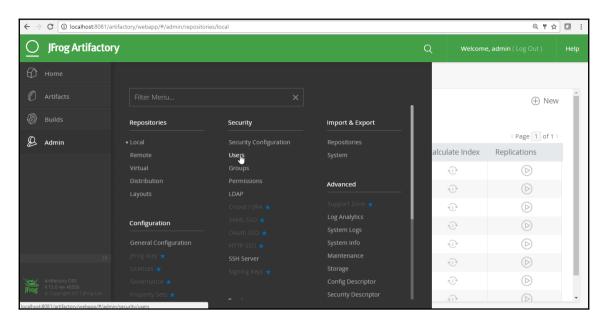


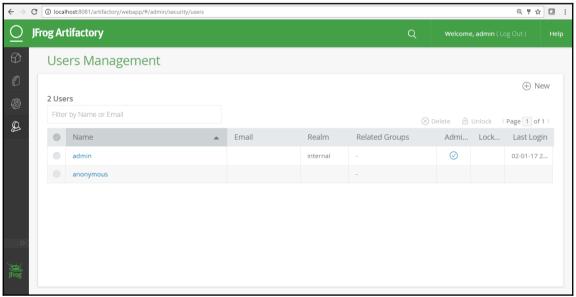


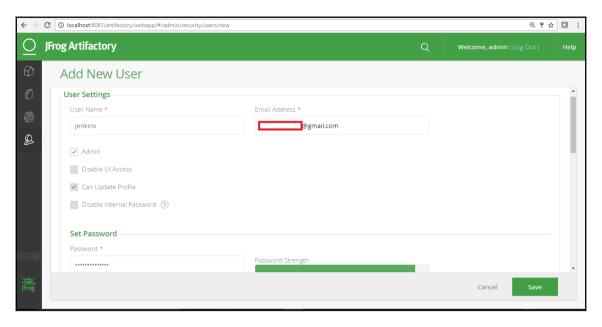


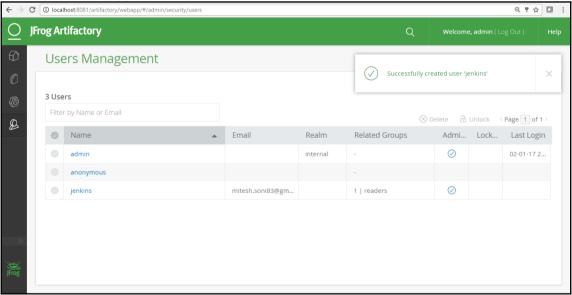


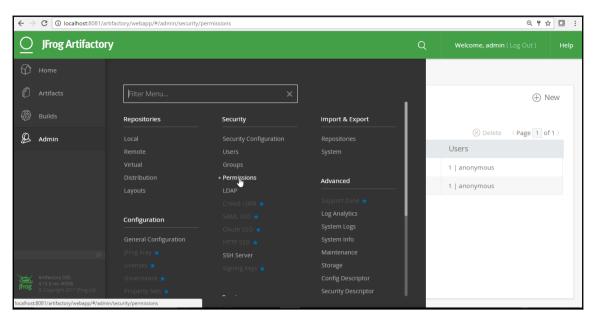


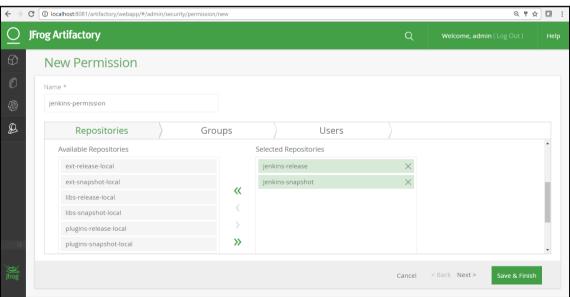


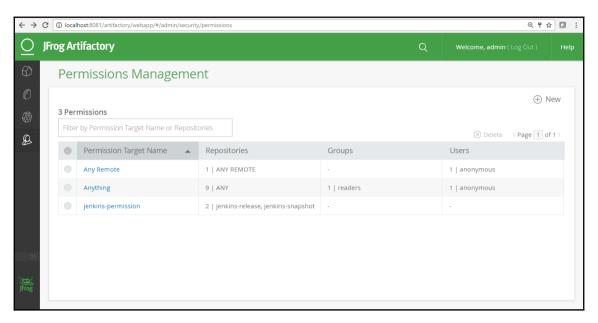


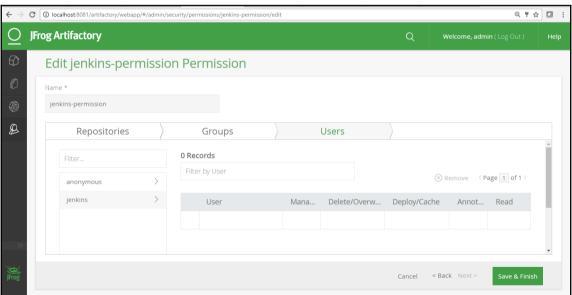


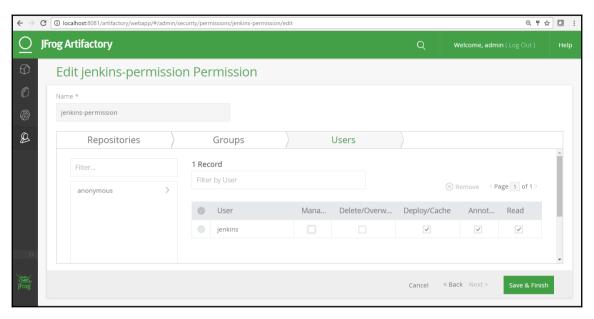


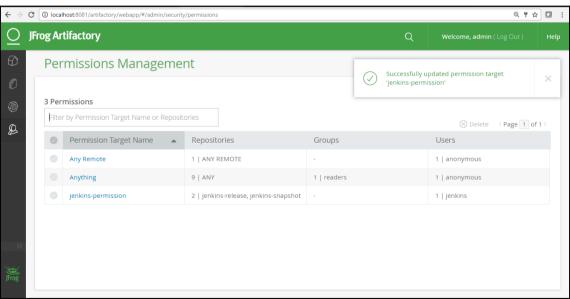




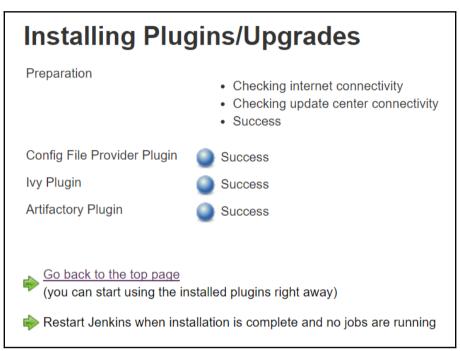


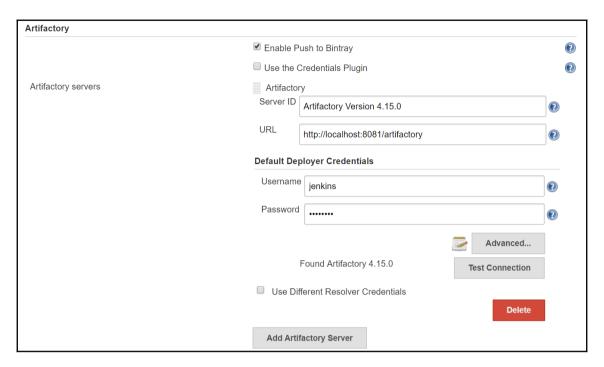




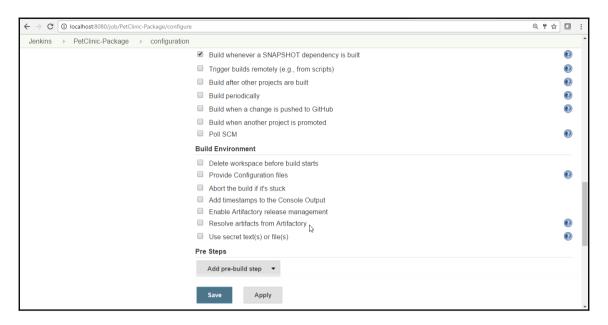


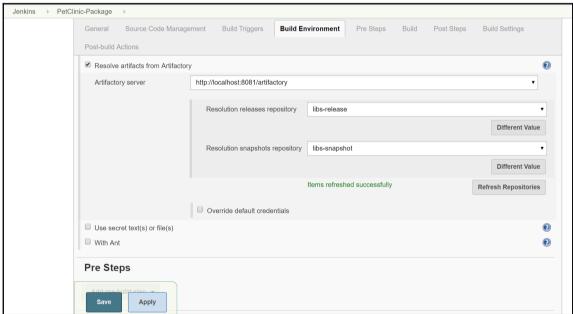


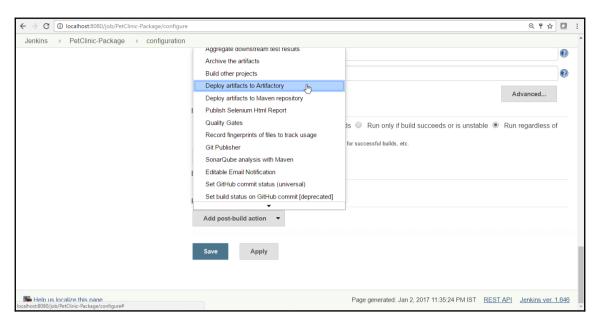


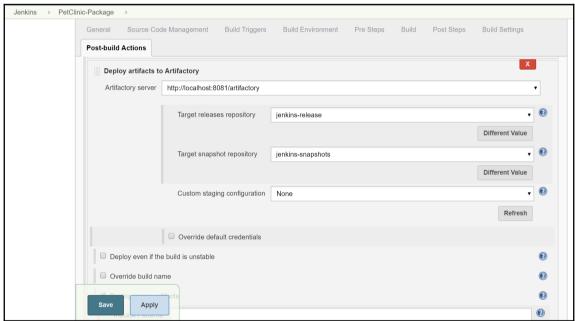






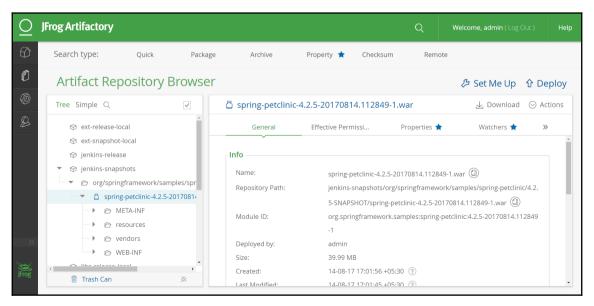


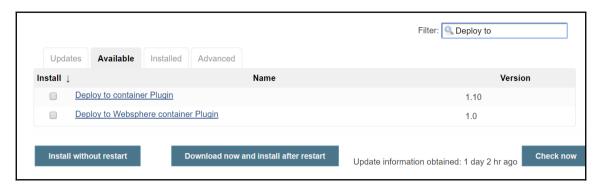




```
Jenkins ▶ PetClinic-Package ▶ #13
[INFO] Scanning for projects...
[INFO] Initializing Artifactory Build-Info Recording
[HUDSON] Collecting dependencies info
[INFO]
[INFO] ------
[INFO] Building petclinic 4.2.5-SNAPSHOT
[INFO] -----
[INFO] Downloading: http://localhost:8081/artifactory/libs-release/com/itextpdf/itextpdf/5.4.5/itextpdf-
5.4.5.pom
log4j:WARN No appenders could be found for logger
(org.apache.maven.wagon.providers.http.httpclient.client.protocol.RequestAddCookies).
log4j:WARN Please initialize the log4j system properly.
log4j:WARN See http://logging.apache.org/log4j/1.2/faq.html#noconfig for more info.
[INFO] Downloaded: http://localhost:8081/artifactory/libs-release/com/itextpdf/itextpdf/5.4.5/itextpdf-
5.4.5.pom (9 KB at 3.7 KB/sec)
[INFO] Downloading: http://localhost:8081/artifactory/libs-release/com/itextpdf/itext-parent/1.0.0/itext-
parent-1.0.0.pom
[INFO] Downloaded: http://localhost:8081/artifactory/libs-release/com/itextpdf/itext-parent/1.0.0/itext-
parent-1.0.0.pom (4 KB at 9.3 KB/sec)
[INFO] Downloading: <a href="http://localhost:8081/artifactory/libs-release/com/itextpdf/itextpdf/5.4.5/itextpdf">http://localhost:8081/artifactory/libs-release/com/itextpdf/itextpdf/5.4.5/itextpdf</a>
5.4.5.jar
[INFO] Downloaded: http://localhost:8081/artifactory/libs-release/com/itextpdf/itextpdf/5.4.5/itextpdf-
5.4.5.jar (2054 KB at 137.0 KB/sec)
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ spring-petclinic ---
[INFO] Downloading: http://localhost:8081/artifactory/libs-release/org/apache/maven/maven-plugin-
api/2.0.6/maven-plugin-api-2.0.6.pom
[INFO] Downloaded: http://localhost:8081/artifactory/libs-release/org/apache/maven/maven-plugin-
api/2.0.6/maven-plugin-api-2.0.6.pom (2 KB at 0.4 KB/sec)
[INFO] Downloading: http://localhost:8081/artifactory/libs-release/org/apache/maven/maven/2.0.6/maven-
2.0.6.pom
```

Finished Calculation of disk usage of workspace in 2 second [INFO] Artifactory Build Info Recorder: Saving Build Info to 'F:\1.DevOps2016\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\PetClinic-Package\target\build-info.json' [INFO] Deploying artifact: http://localhost:8081/artifactory/jenkins-snapshots/org/springframework/samples/springpetclinic/4.2.5-SNAPSHOT/spring-petclinic-4.2.5-SNAPSHOT.war log4j:WARN No appenders could be found for logger (org.apache.http.client.protocol.RequestAddCookies). log4j:WARN Please initialize the log4j system properly. log4j:WARN See http://logging.apache.org/log4j/1.2/faq.html#noconfig for more info. [INFO] Artifactory Build Info Recorder: Deploying build info ... [INFO] Deploying build descriptor to: http://localhost:8081/artifactory/api/build [INFO] Build successfully deployed. Browse it in Artifactory under http://localhost:8081/artifactory/webapp/builds/PetClinic-Package/14 [INFO] ------[INFO] BUILD SUCCESS [INFO] ------[INFO] Total time: 03:53 min [INFO] Finished at: 2017-08-14T17:03:32+05:30 [INFO] Final Memory: 35M/245M [INFO] -----Waiting for Jenkins to finish collecting data [JENKINS] Archiving F:\1.DevOps2016\#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:\1.DevOps2016\#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 Archiving artifacts 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 2 second Finished: SUCCESS





```
<!xml version='1.0' encoding='utf-8'?>

=<!--

<tomcat-users>

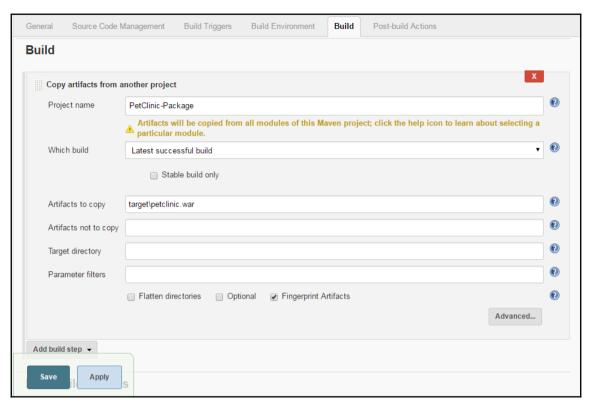
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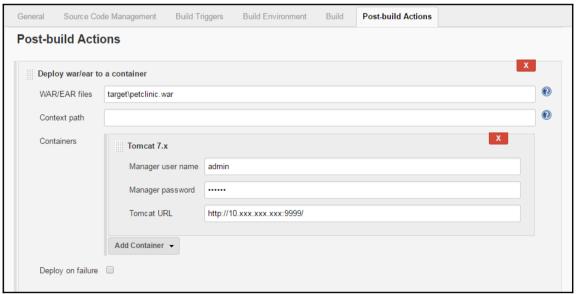
NOTE: The sample user and role entries below are intended for use with the examples web application. They are wrapped in a comment and thus are ignored when reading this file. If you wish to configure these users for use with the examples web application, do not forget to remove the <!...> that surrounds them. You will also need to set the passwords to something appropriate.

-->

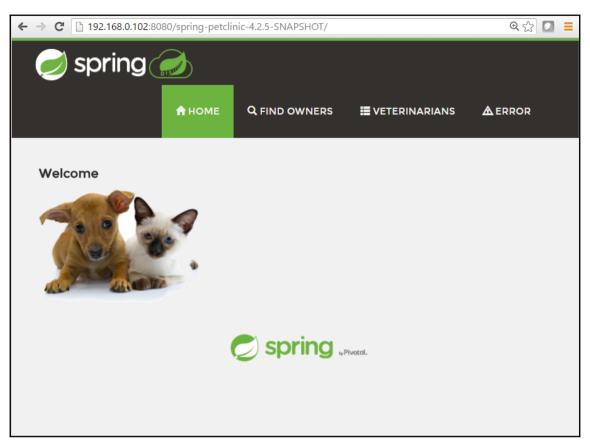
<rol>

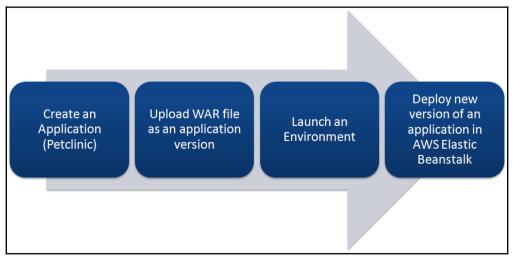
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        <user username="admin" password="admin@123" roles="manager-script"/>
        </tomcat-users>
```

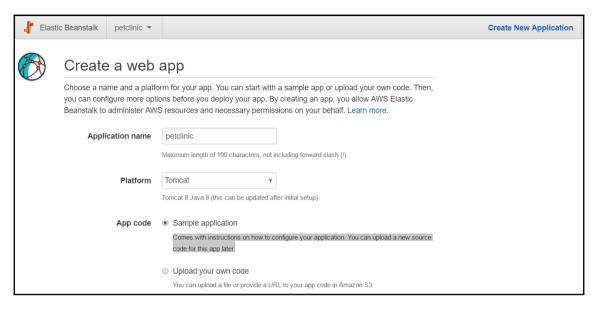


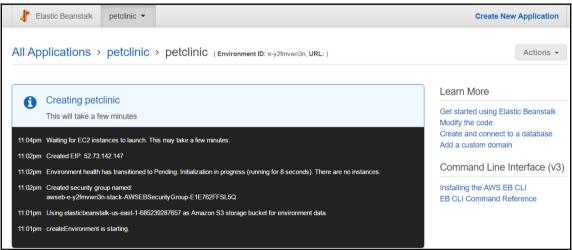


```
Results :
Tests run: 59, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] --- maven-war-plugin: 2.3:war (default-war) @ spring-petclinic ---
[INFO] Packaging webapp
[INFO] Assembling webapp [spring-petclinic] in [d:\jenkins\workspace\PetClinic-Test\target\spring-
petclinic-4.2.5-SNAPSHOT]
[INFO] 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
```

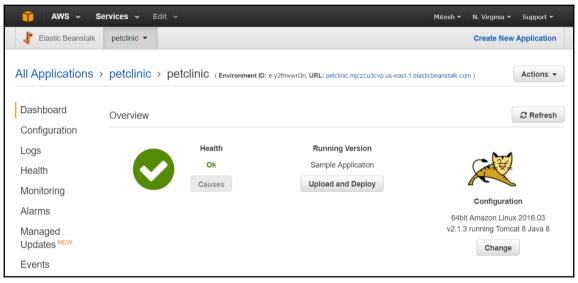


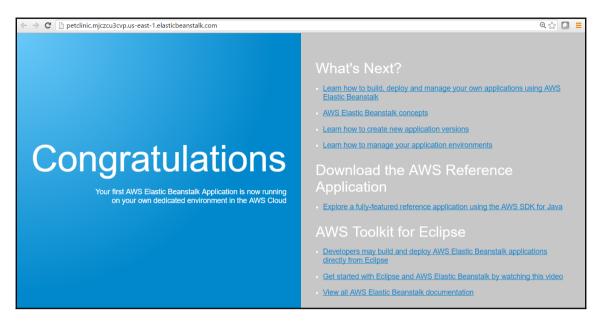


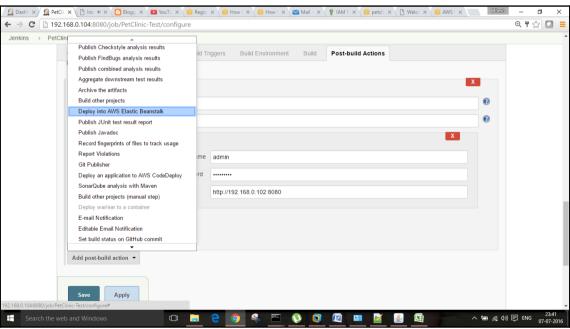


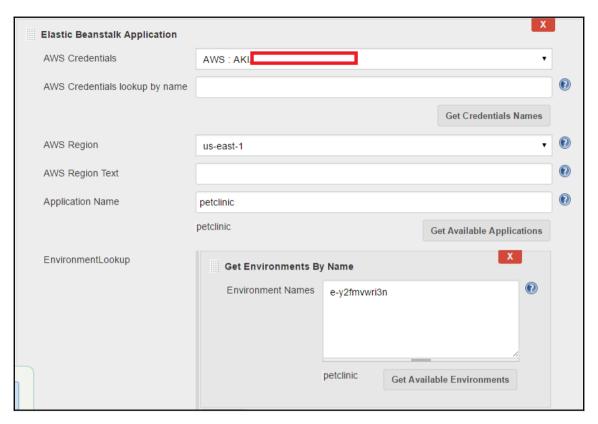


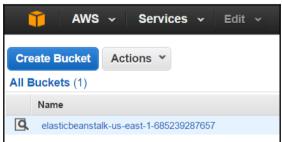


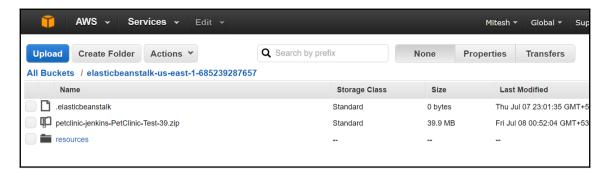


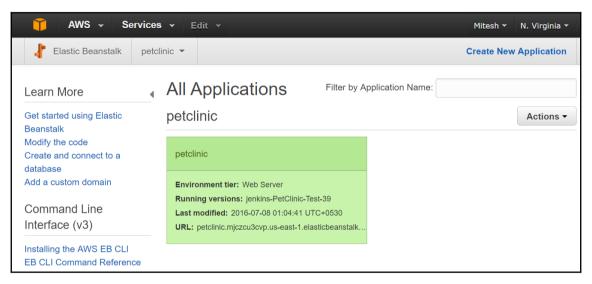


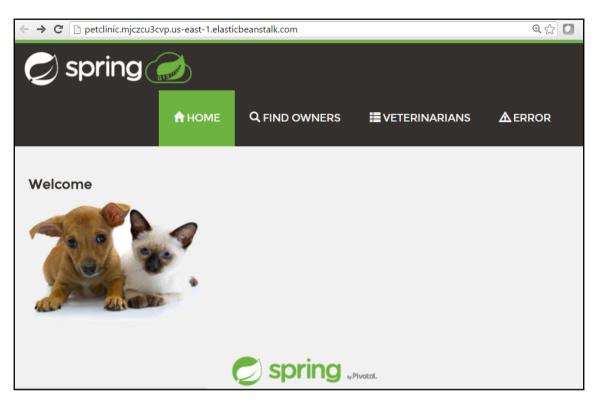


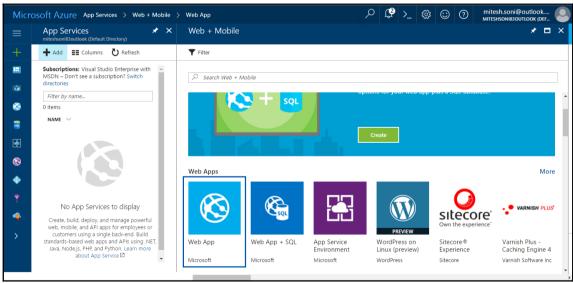


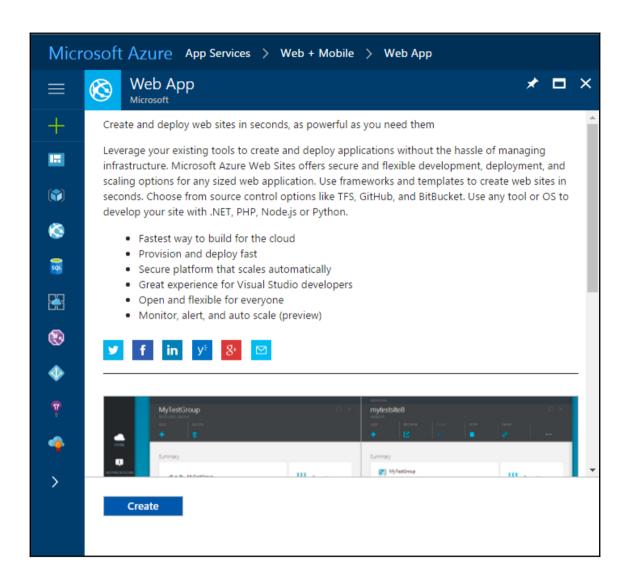


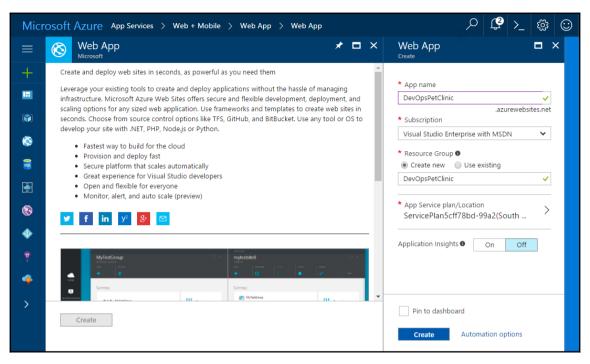


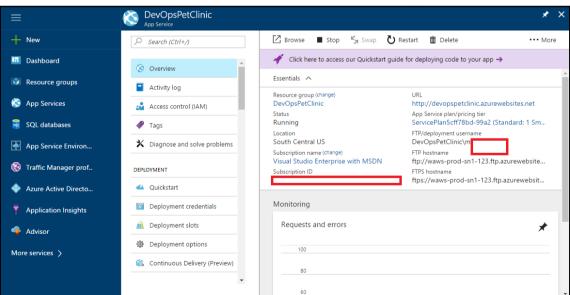


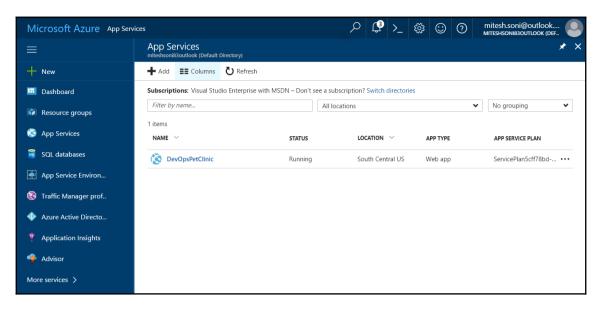


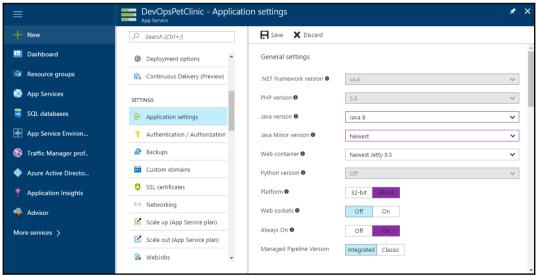


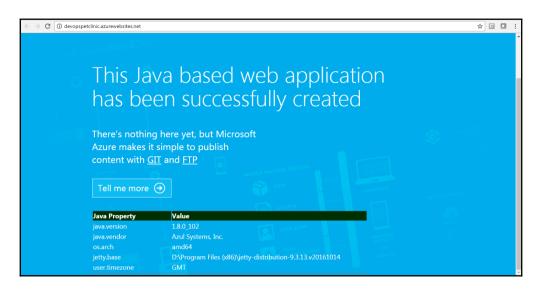


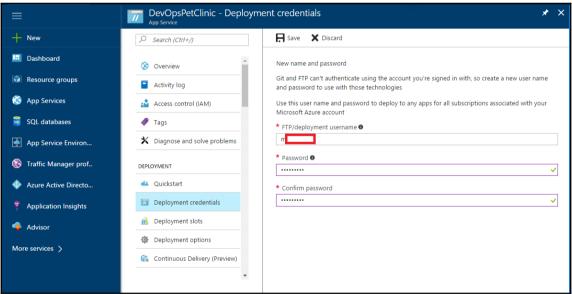


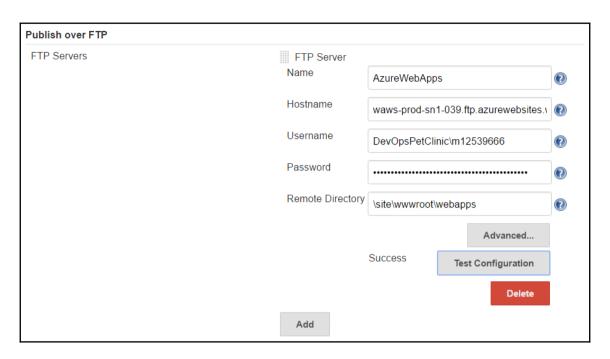


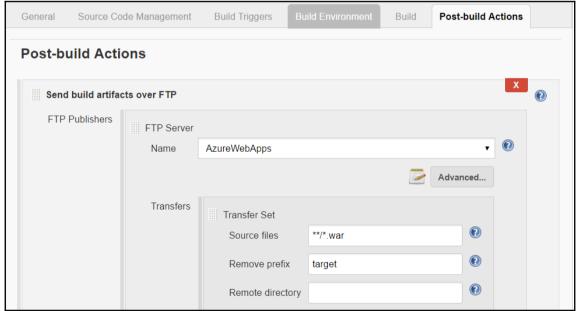


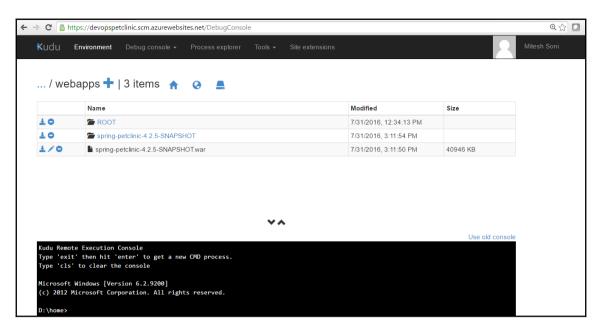


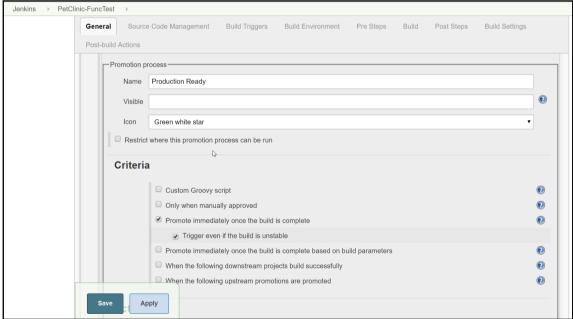




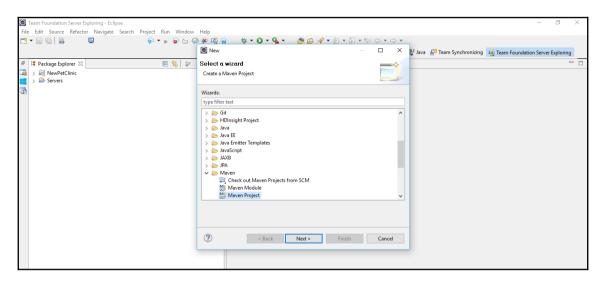


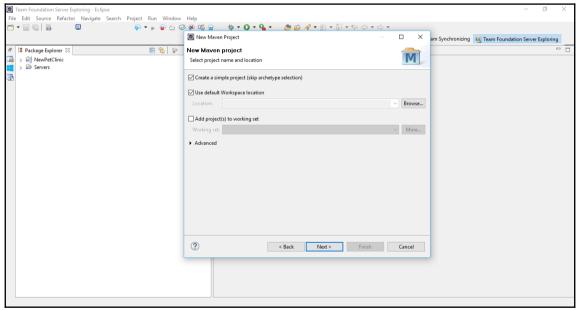


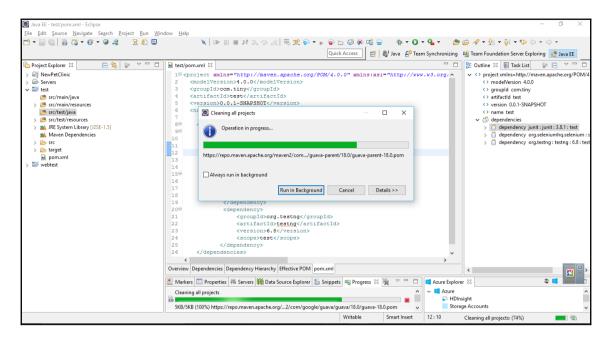


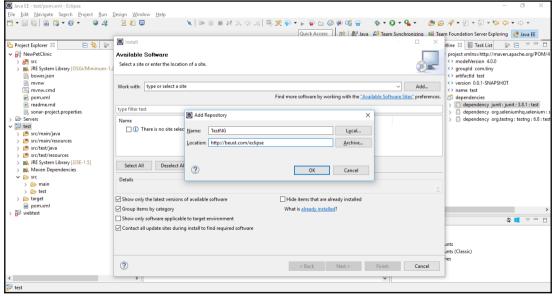


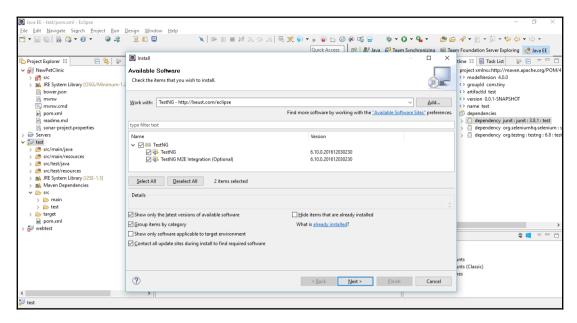
Chapter 07: Continous Testing

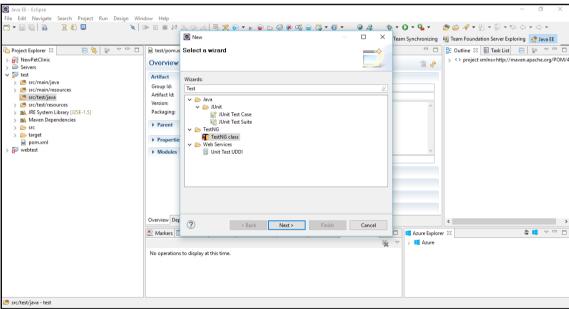


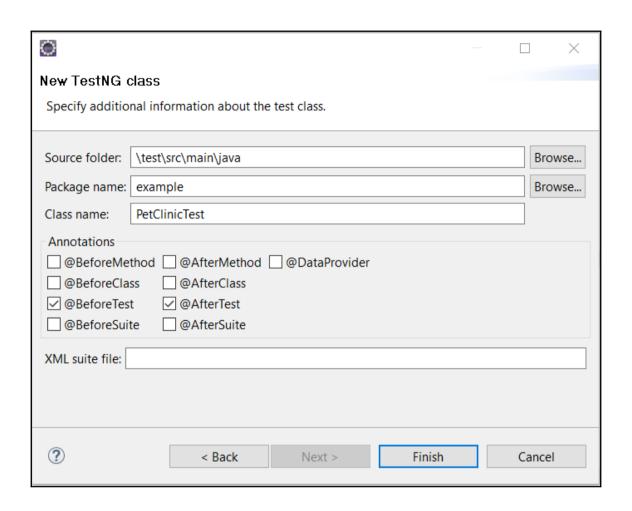


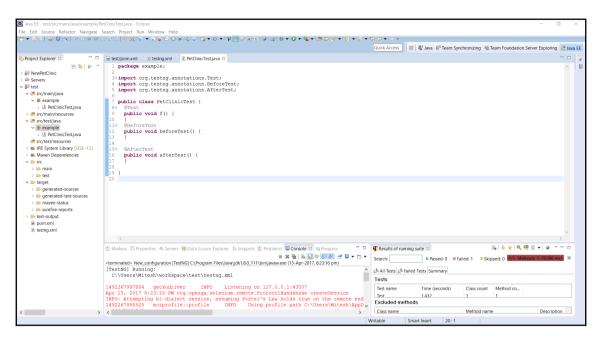


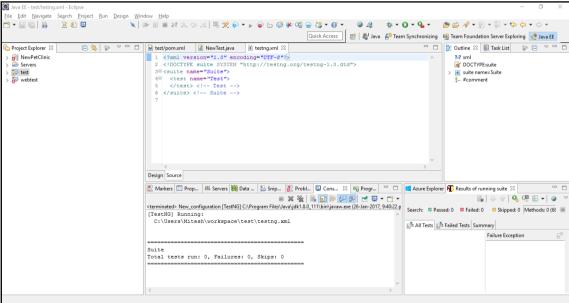


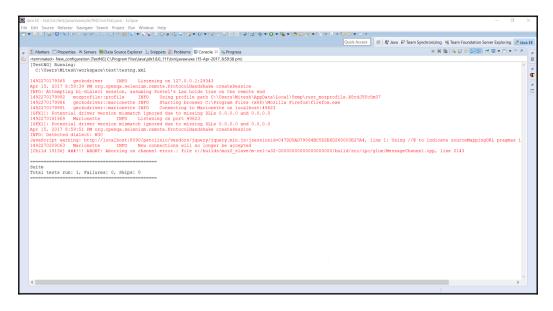


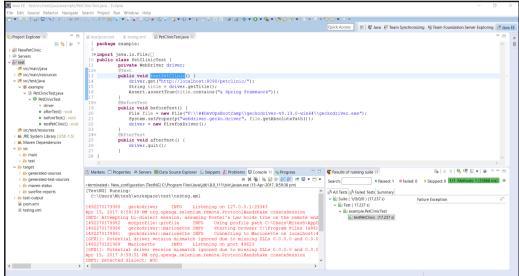


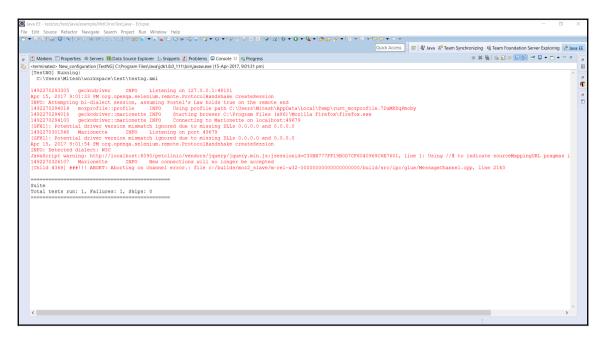


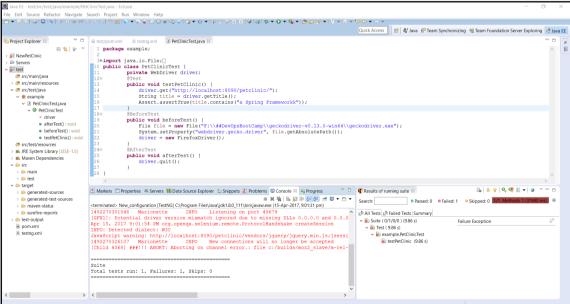




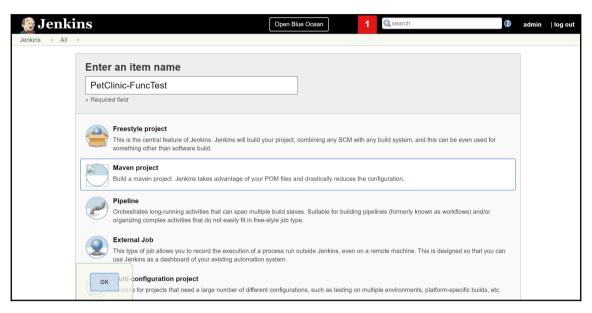


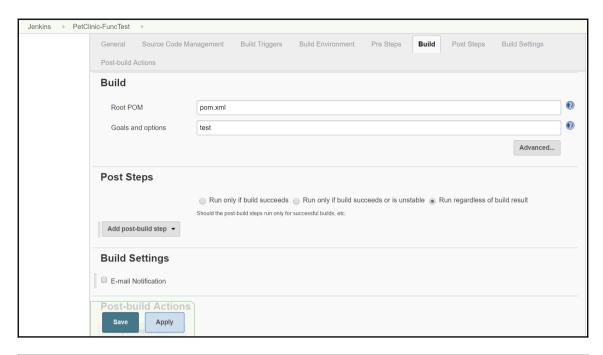




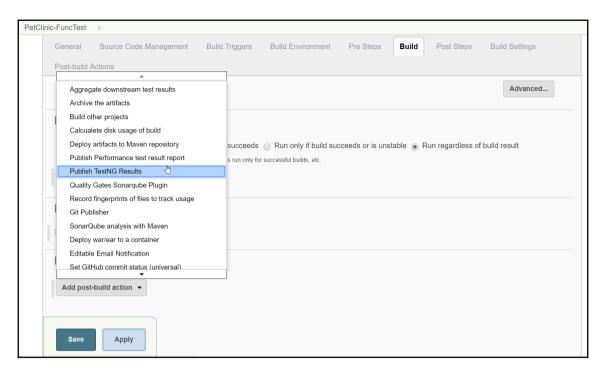




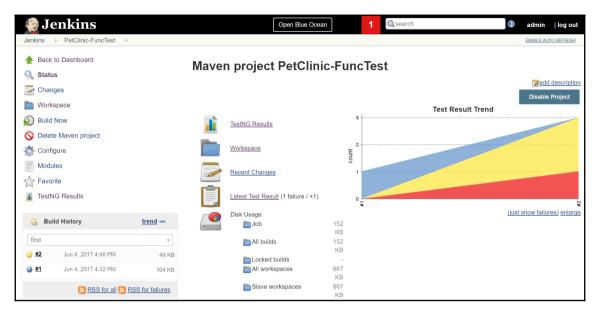




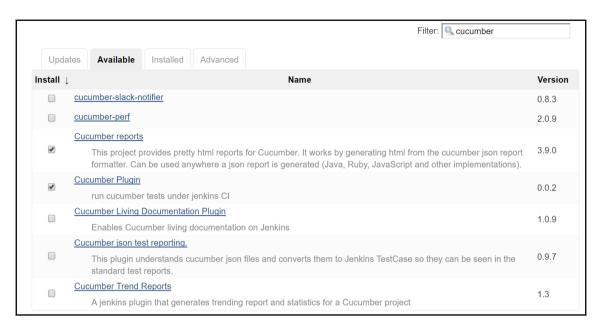
______ TESTS Running TestSuite 1496574254522 geckodriver INFO Listening on 127.0.0.1:6486 Jun 04, 2017 4:34:14 PM org.openqa.selenium.remote.ProtocolHandshake createSession INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end 1496574255134 mozprofile::profile INFO Using 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.openga.selenium.os.UnixProcess destrov 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

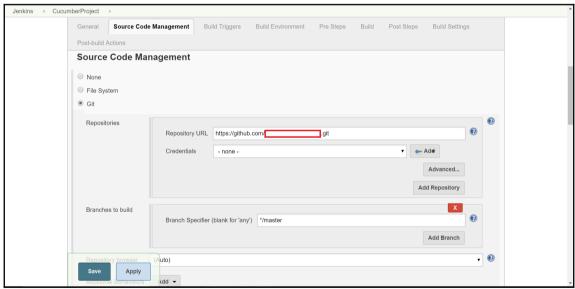




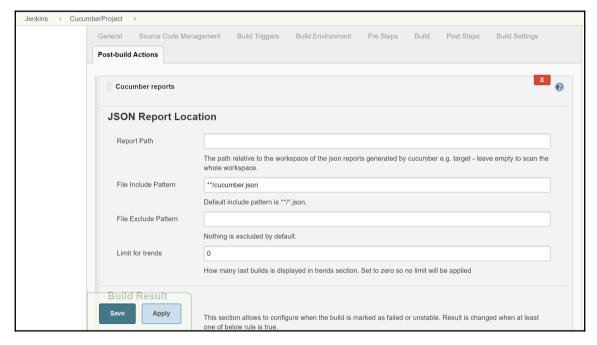


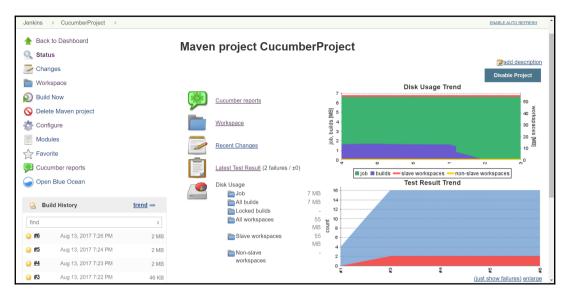






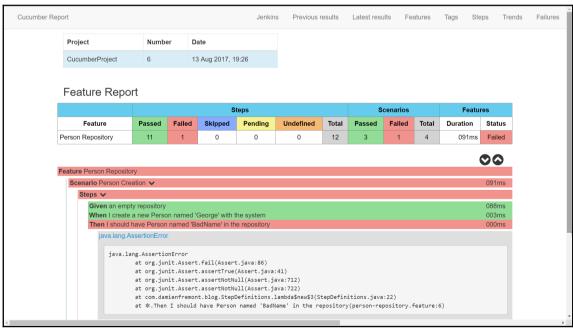




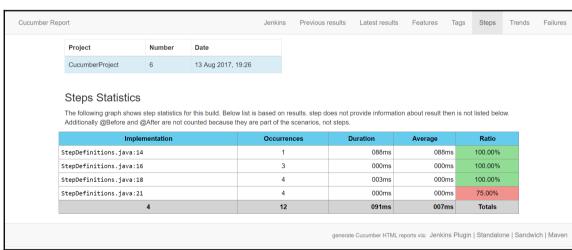




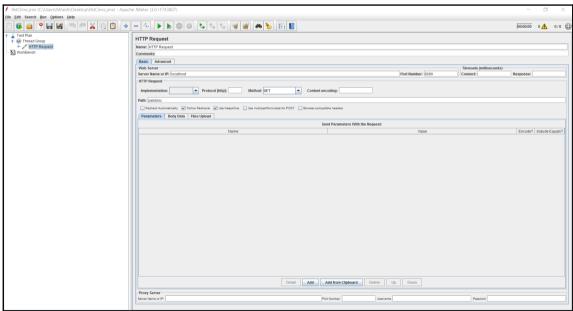


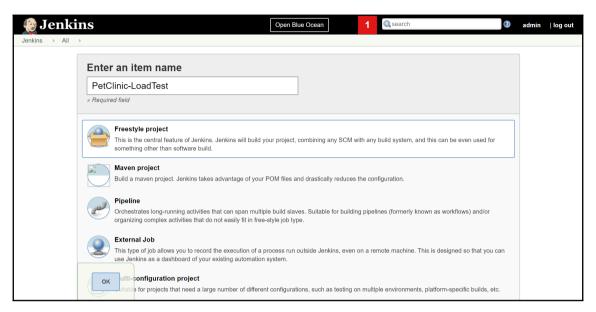


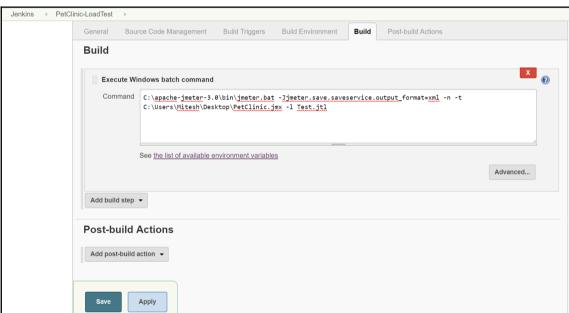


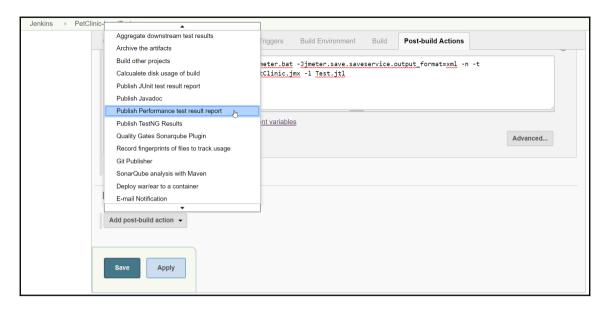


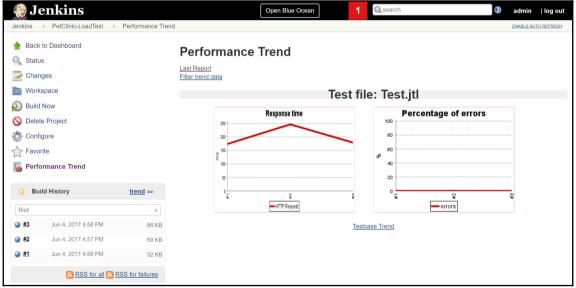


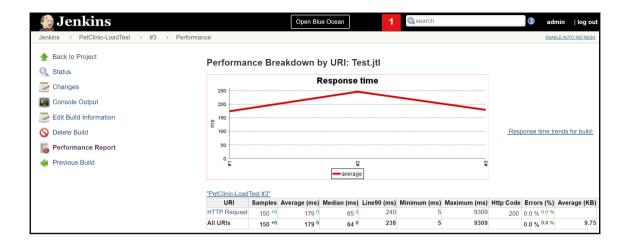




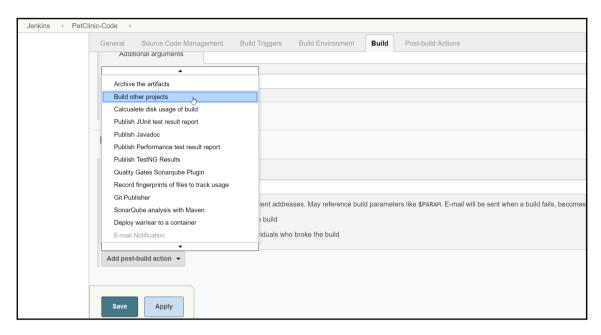


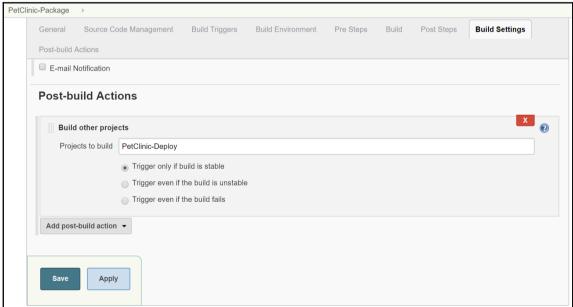


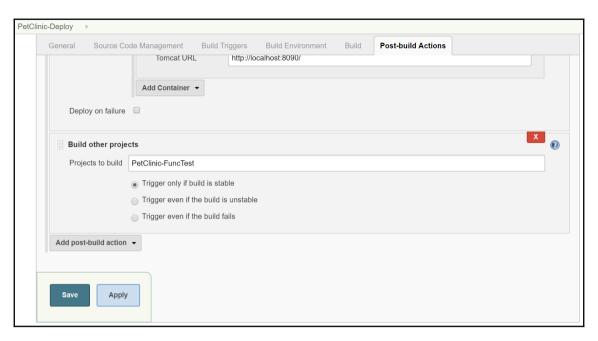


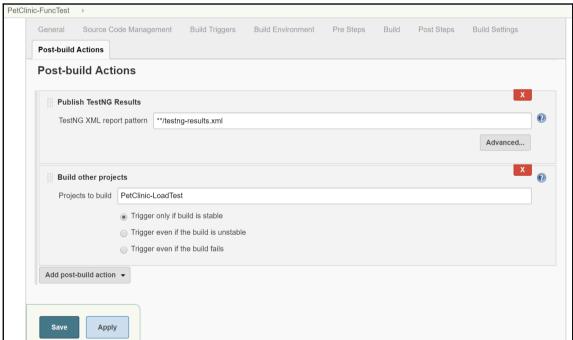


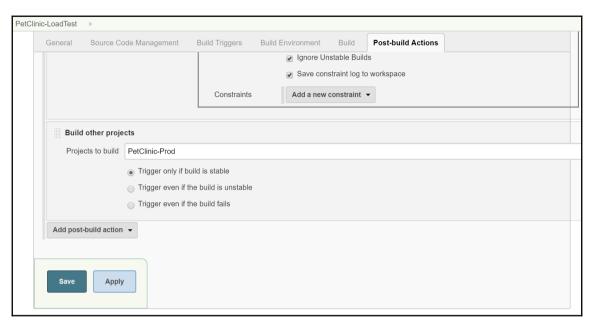
Chapter 08: Orchestration

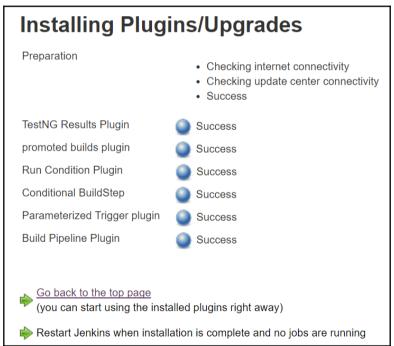


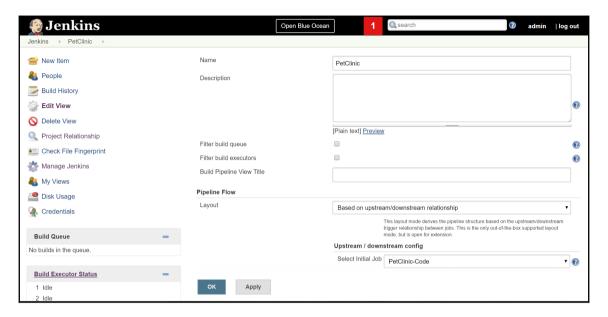


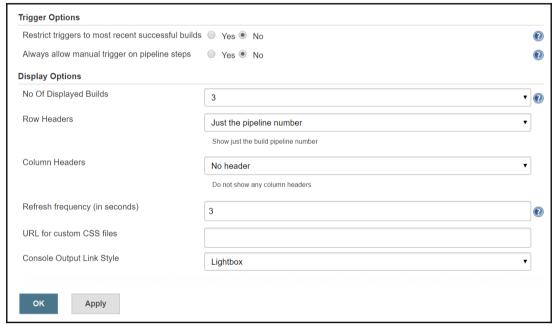


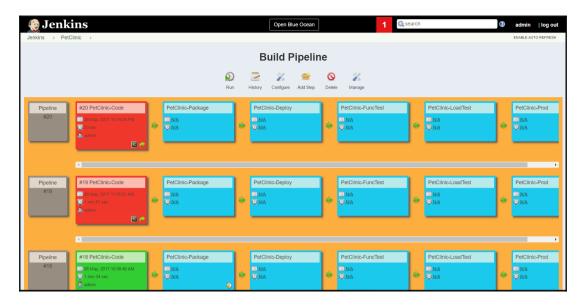


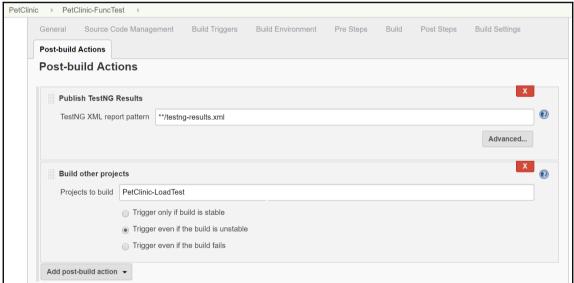


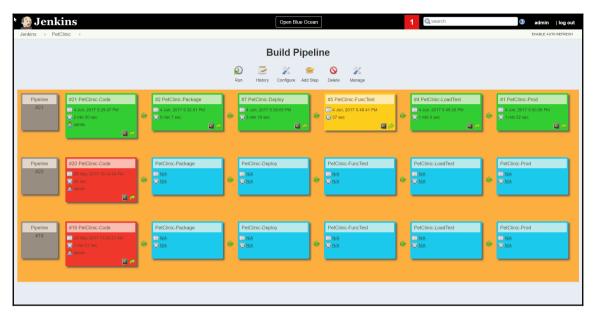


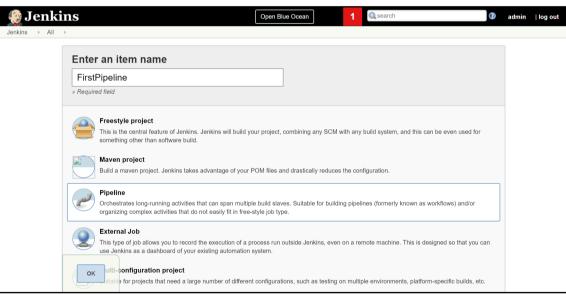


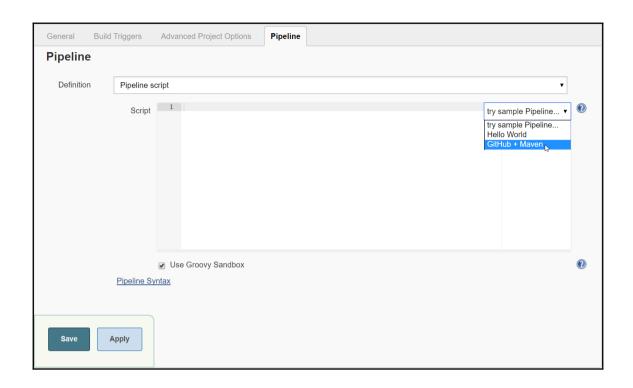


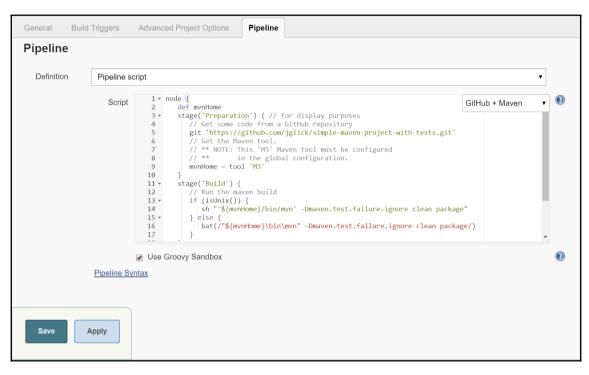


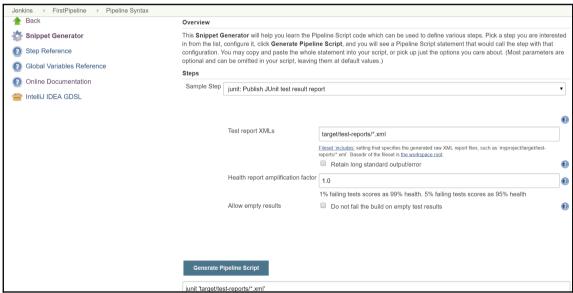


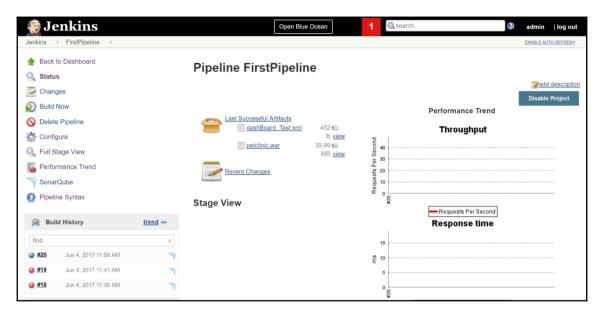


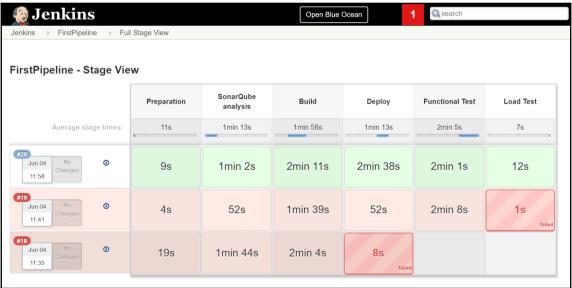




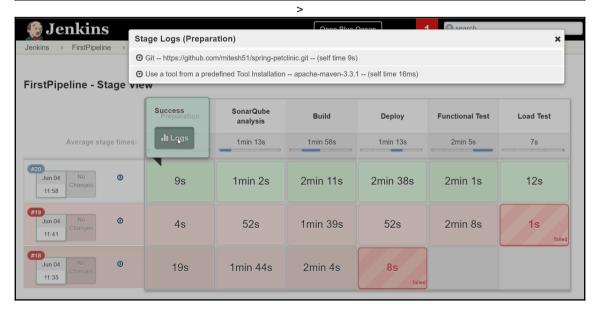


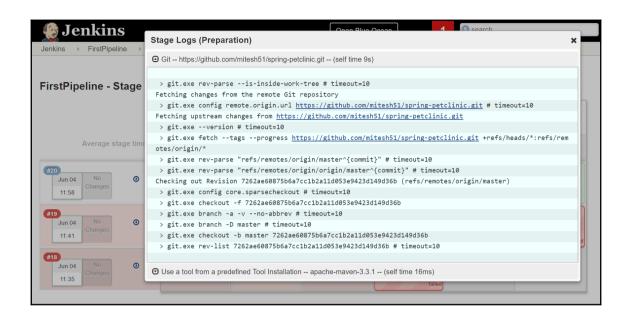






| Success Preparation | | SonarQube analysis | Build | Deploy | Functional Test | Load Test |
|------------------------|----------|-----------------------|----------|----------|-----------------|-----------|
| Average stage times: | ılı Logs | 1min 13s | 1min 58s | 1min 13s | 2min 5s | 7s |
| Jun 04 No Changes | 9s⊳ | 1min 2s | 2min 11s | 2min 38s | 2min 1s | 12s |
| Jun 04 No Changes | 4s | 52s | 1min 39s | 52s | 2min 8s | 1s |
| Jun 04 No Changes | 19s | 1min 44s | 2min 4s | 8s | | |







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
ools\hudson.plugins.sonar.SonarRunnerInstallation\SonarQube_Scanner_3.0.3/bin/sonar-scanner -
\label{eq:decomposition} Dsonar.host.url = & \frac{http://localhost:9000/}{localhost:9000/} - Dsonar.login = ****** - Dsonar.projectVersion = 1.0 - Construction = 1.0 - Constructi
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:\fiv*JenkinsEssentials\\FirstDraft\\jenkinsHome\\workspace\\FirstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\workspace\\firstPipeline\\sonar-fiv*JenkinsHome\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipeline\\firstPipe
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]
```

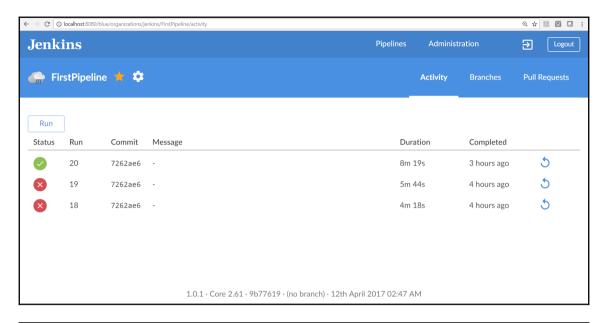
```
[INFO] Building war: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\target\petclinic.war
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 02:03 min
[INFO] Finished at: 2017-06-04T12:01:43+05:30
[INFO] Final Memory: 27M/88M
[INFO] ------
[Pipeline] }
[Pipeline] // 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 <a href="https://github.com/mitesh51/petclinic-func.git">https://github.com/mitesh51/petclinic-func.git</a> # timeout=10
Fetching upstream changes from <a href="https://github.com/mitesh51/petclinic-func.git">https://github.com/mitesh51/petclinic-func.git</a>
> git.exe --version # timeout=10
> git.exe fetch --tags --progress https://github.com/mitesh51/petclinic-func.git
+refs/heads/*:refs/remotes/origin/*
```

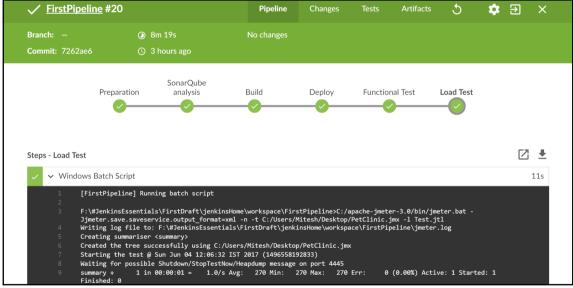
```
Results :
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 01:42 min
[INFO] Finished at: 2017-06-04T12:06:24+05:30
[INFO] Final Memory: 18M/80M
[INFO] ------
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Load Test)
[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 -1 Test.jtl
Writing log file to: F:\#JenkinsEssentials\FirstDraft\jenkinsHome\workspace\FirstPipeline\jmeter.log
Creating summariser <summarv>
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
                                          13 Min:
                                                     4 Max:
                                                            157 Err:
                                                                        0 (0.00%) Active: 0 Started: 1
summary +
            49 in 00:00:01 = 61.1/s Avg:
Finished: 1
summarv =
            50 in 00:00:02 = 27.0/s Avg:
                                          18 Min:
                                                     4 Max:
                                                             270 Err:
                                                                        0 (0.00%)
```



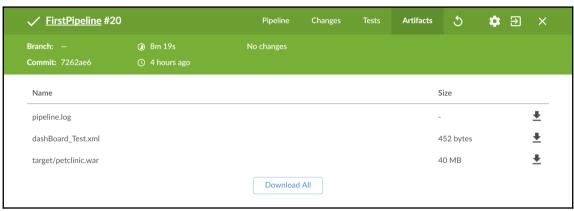
| Upda | tes Available | Installed | Advanced | | |
|-----------|----------------------|--------------|----------|---|---------|
| Install ↓ | | | | Name | Version |
| | Blue Ocean | | | | |
| • | | | | s the user experience of Jenkins. Designed from the ground up for Jenkins obs, Blue Ocean reduces clutter and increases clarity for every member of | 1.0.1 |
| | Common API for E | Blue Ocean | | | 1.0.1 |
| | Config API for Blu | e Ocean | | | 1.0.1 |
| | Dashboard for Blu | e Ocean | | | 1.0.1 |
| | Events API for Blu | e Ocean | | | 1.0.1 |
| | Git Pipeline for Blu | ue Ocean | | | 1.0.1 |
| | GitHub Pipeline fo | r Blue Ocear | 1 | | 1.0.1 |
| | i18n for Blue Ocea | <u>an</u> | | | 1.0.1 |
| | JWT for Blue Oce | <u>an</u> | | | 1.0.1 |
| | Personalization fo | r Blue Ocear | <u>1</u> | | 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 |









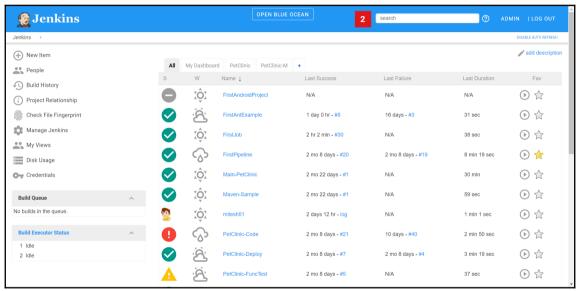
Chapter 09: Jenkins UI Customization

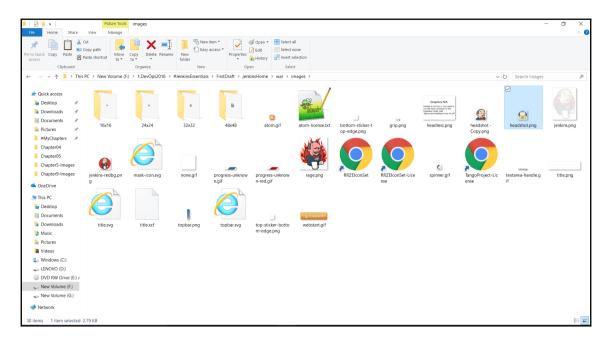


Preparation Checking internet connectivity Checking update center connectivity Success Static Analysis Utilities Success Android Lint Plugin Success Simple Theme Plugin Success Success Simple Theme Plugin Success Final Content of the top page (you can start using the installed plugins right away) Restart Jenkins when installation is complete and no jobs are running

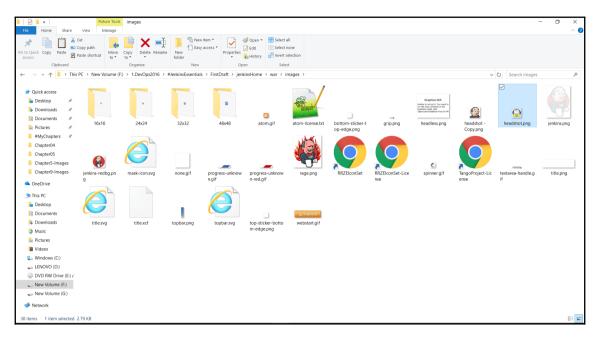


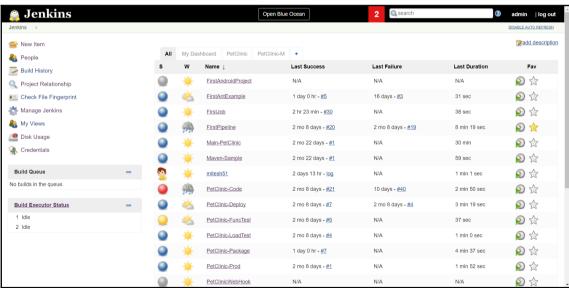




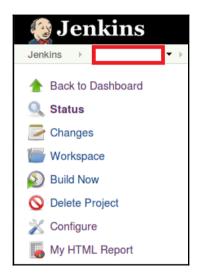




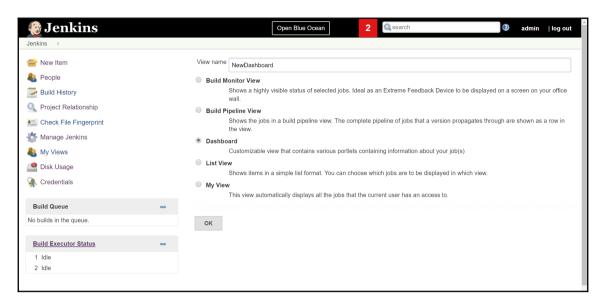


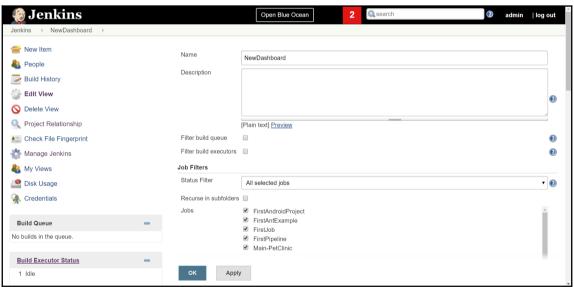




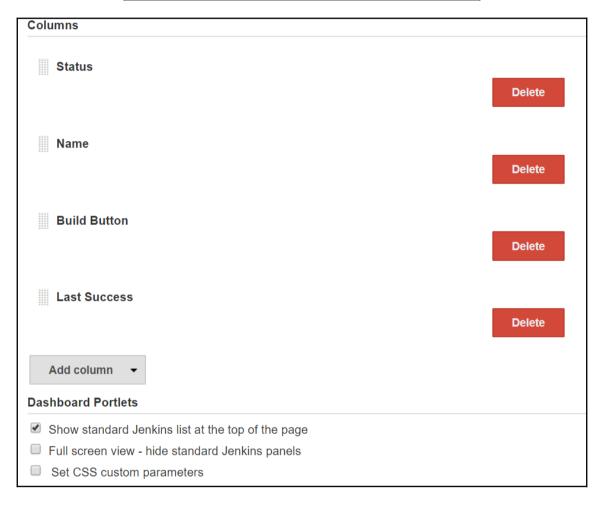


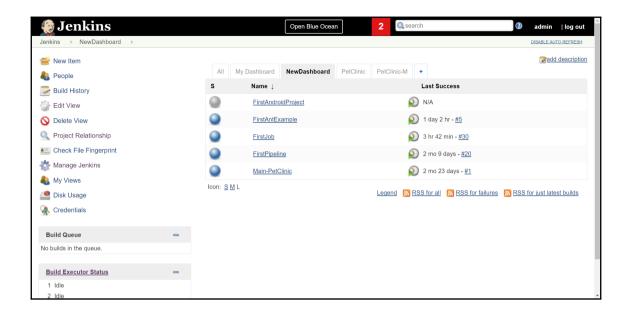


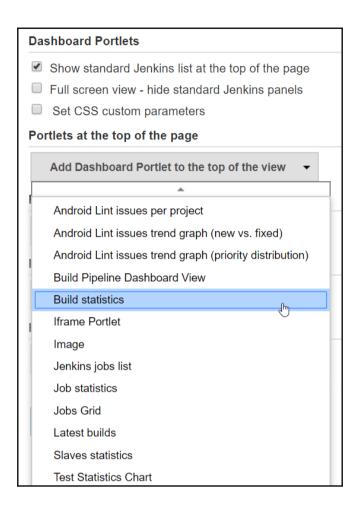


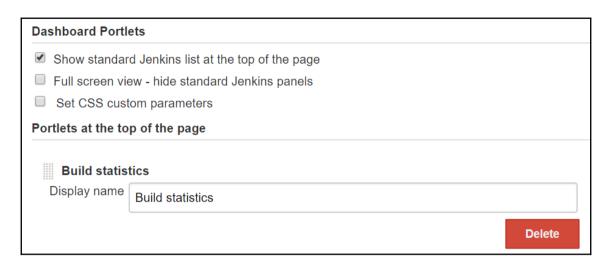


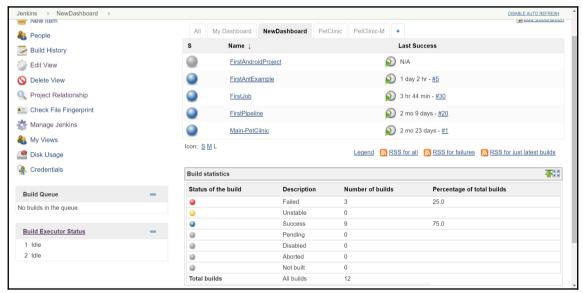
Dashboard Portlets ✓ Show standard Jenkins list at the top of the page □ Full screen view - hide standard Jenkins panels □ Set CSS custom parameters

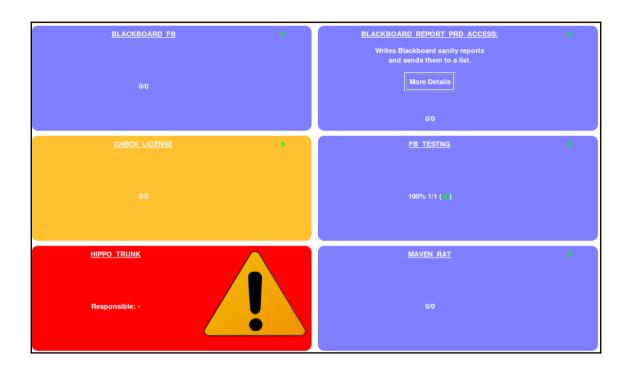












Appendix: Processes that Improve Quality

