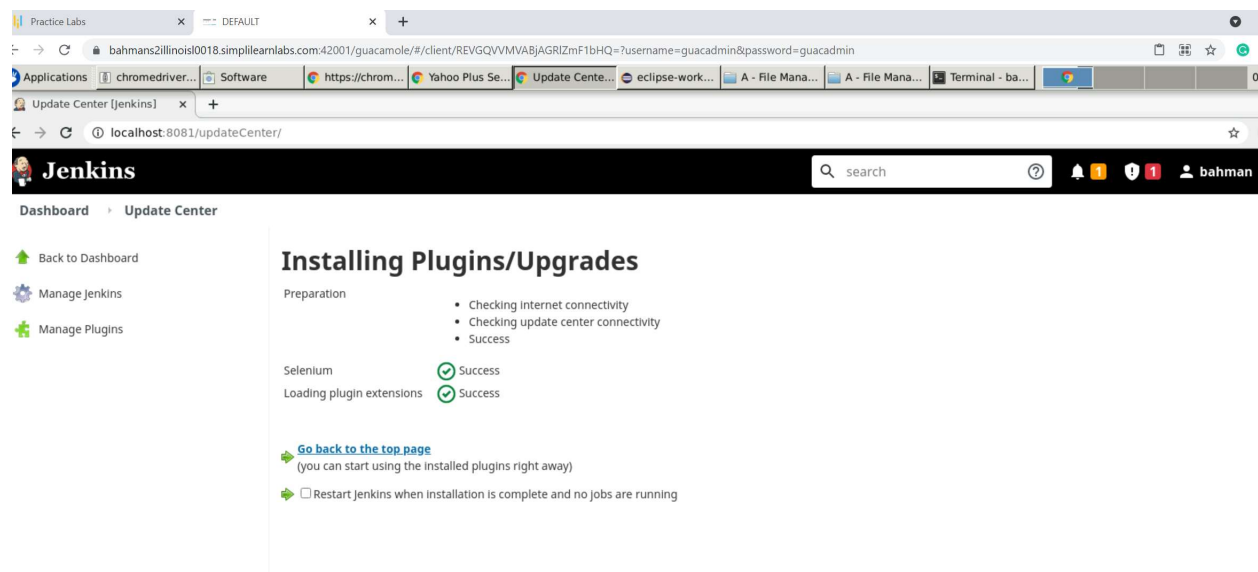


# Continuous Integration with Selenium in Jenkins

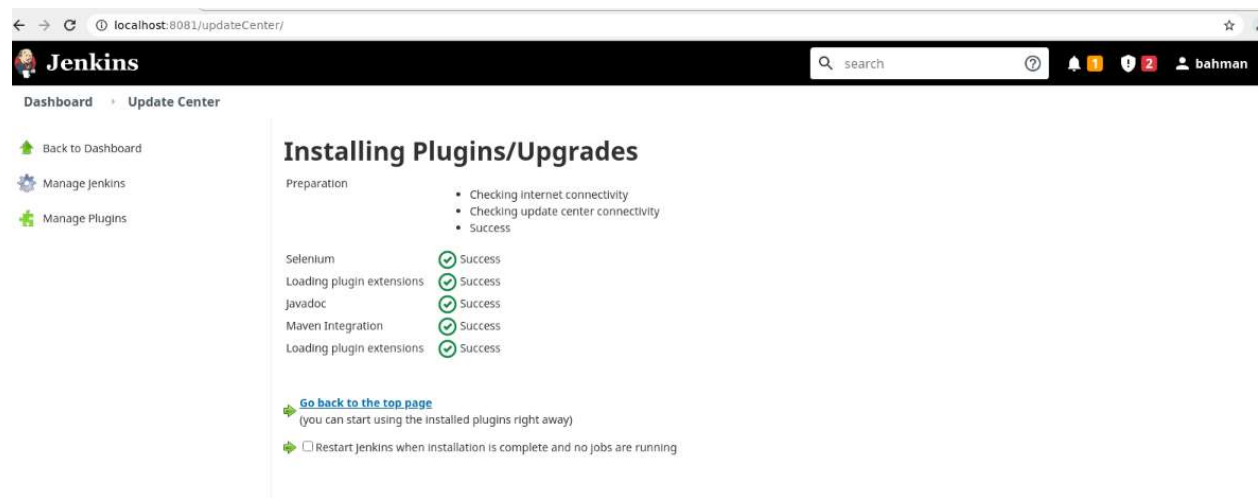
As a DevOps engineer, you are required to perform continuous integration with Selenium and TestNG in Jenkins

Expected Deliverables: Console output from Jenkins dashboard

## 1. Installing selenium plugin on Jenkins



## 2. Installing Maven-Integration on Jenkins



## 3. Create a Jenkins project using Maven

The screenshot shows the Jenkins configuration page for a job named 'PG\_bahman\_Maven'. The 'Build' tab is selected, showing the 'Build' section. The 'Root POM' field is set to '/home/bahmans2illinoi/jenkinsDemo/pom.xml'. The 'Goals and options' field is empty. The 'MAVEN\_OPTS' field is empty. There are several checkboxes for build options: 'Incremental build - only build changed modules', 'Disable automatic artifact archiving', 'Disable automatic site documentation artifact archiving', 'Disable automatic fingerprinting of consumed and produced artifacts', 'Enable triggering of downstream projects', and 'Block downstream trigger when building'. The 'Save' and 'Apply' buttons are at the bottom.

#### 4. Run and Final console output of Jenkins

The screenshot shows the Jenkins console output page for a job named 'PG\_bahman\_Maven' with build number '#2'. The page title is '10/5/2021 PG\_bahman\_Maven #2 Console [jenkins]'. The 'Console Output' tab is selected, showing the console output. The output text is: 'Started by user bahman', 'Running as SYSTEM', and 'Building in workspace /var/lib/jenkins/workspace/PG\_bahman\_Maven'. The page also includes a sidebar with various actions: 'Back to Project', 'Status', 'Changes', 'Console Output', 'View as plain text', 'Edit Build Information', 'Delete build #2', 'Test Result', 'Redeploy Artifacts', 'See Fingerprints', and 'Previous Build'.

```

10/5/2021 PG_bahman_Maven #2 Console [Jenkins]
[INFO] Scanning for projects...
[INFO]
[INFO]
Dashboard > PG_bahman_Maven > #2
[INFO] -----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ jenkinsDemo ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e.
build is platform dependent!
[INFO] skip non existing resourceDirectory
/home/bahmans2illinoi/jenkinsDemo/src/main/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.2:compile (default-compile) @ jenkinsDemo ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @
jenkinsDemo ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e.
build is platform dependent!
[INFO] skip non existing resourceDirectory
/home/bahmans2illinoi/jenkinsDemo/src/test/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.2:testCompile (default-testCompile) @ jenkinsDemo ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is
platform dependent!
[INFO] Compiling 1 source file to /home/bahmans2illinoi/jenkinsDemo/target/test-classes
[INFO]
[INFO] --- maven-surefire-plugin:2.17:test (default-test) @ jenkinsDemo ---
[INFO] Surefire report directory: /home/bahmans2illinoi/jenkinsDemo/target/surefire-
reports
[INFO] Downloading:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-
testng/2.17/surefire-testng-2.17.pom
[INFO] Downloaded:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-
testng/2.17/surefire-testng-2.17.pom (3 KB at 5.0 KB/sec)
[INFO] Downloading:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-
providers/2.17/surefire-providers-2.17.pom
[INFO] Downloaded:

```

```
10/5/2021 PG_bahman_Maven #2 Console [Jenkins]
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/testng/testng/5.7/testng-5.7.pom (12 KB at 976.0 KB/sec)
[INFO] Downloading:
Dashboard > PG_bahman_Maven > #2
testng/2.17/surefire-testng-2.17.jar
[INFO] Downloading:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/common-java5/2.17/common-java5-2.17.jar
[INFO] Downloaded:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-testng/2.17/surefire-testng-2.17.jar (36 KB at 986.1 KB/sec)
[INFO] Downloaded:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/common-java5/2.17/common-java5-2.17.jar (37 KB at 710.7 KB/sec)
[INFO] Downloading:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-testng-utils/2.17/surefire-testng-utils-2.17.jar
[INFO] Downloaded:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-testng-utils/2.17/surefire-testng-utils-2.17.jar (29 KB at 1523.3 KB/sec)
[INFO] Downloading:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-grouper/2.17/surefire-grouper-2.17.jar
[INFO] Downloaded:
https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-grouper/2.17/surefire-grouper-2.17.jar (38 KB at 2318.0 KB/sec)

-----
T E S T S
-----
Running jenkinsDemo.AppTest
Configuring TestNG with: TestNG652Configurator
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.225 sec - in jenkinsDemo.AppTest

Results :

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

[JENKINS] Recording test results
[INFO]
```

```
10/5/2021 PG_bahman_Maven #2 Console [Jenkins]
[WARNING] JARs will be empty - no content was added to the archive
[INFO] Building jar: /home/bahmans2illinoi/jenkinsDemo/target/jenkinsDemo-1.0-SNAPSHOT.jar
[INFO]
Dashboard > PG_bahman_Maven > #2
[INFO] Installing /home/bahmans2illinoi/jenkinsDemo/target/jenkinsDemo-1.0-SNAPSHOT.jar
to /var/lib/jenkins/.m2/repository/jenkinsDemo/jenkinsDemo/1.0-SNAPSHOT/jenkinsDemo-1.0-SNAPSHOT.jar
[INFO] Installing /home/bahmans2illinoi/jenkinsDemo/pom.xml to
/var/lib/jenkins/.m2/repository/jenkinsDemo/jenkinsDemo/1.0-SNAPSHOT/jenkinsDemo-1.0-SNAPSHOT.pom
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 6.433 s
[INFO] Finished at: 2021-10-05T02:38:27+00:00
[INFO] Final Memory: 27M/335M
[INFO] -----
[JENKINS] Archiving /home/bahmans2illinoi/jenkinsDemo/pom.xml to
jenkinsDemo/jenkinsDemo/1.0-SNAPSHOT/jenkinsDemo-1.0-SNAPSHOT.pom
[JENKINS] Archiving /home/bahmans2illinoi/jenkinsDemo/target/jenkinsDemo-1.0-SNAPSHOT.jar to jenkinsDemo/jenkinsDemo/1.0-SNAPSHOT/jenkinsDemo-1.0-SNAPSHOT.jar
/home/bahmans2illinoi/jenkinsDemo/pom.xml is not inside
/var/lib/jenkins/workspace/PG_bahman_Maven/home/bahmans2illinoi/jenkinsDemo/; will
archive in a separate pass
/home/bahmans2illinoi/jenkinsDemo/target/jenkinsDemo-1.0-SNAPSHOT.jar is not inside
/var/lib/jenkins/workspace/PG_bahman_Maven/home/bahmans2illinoi/jenkinsDemo/; will
archive in a separate pass
channel stopped
Finished: SUCCESS
```

Jenkins 2.303.1