## EPAM Systems, RD Dep.

### MTN.*NIX.09
### Continuous Delivery with Jenkins

# MTN.*NIX.09 Continuous Delivery with Jenkins

## Software build principles

| REVISION HISTORY | | | | | |
|---|---|---|---|---|---|
| | | | | Approved | |
| Ver. | Description of Change | Author | Date | Name | Effective Date |
| <1.0> | Initial revision | Aleksandr Mazurenko | <25-Jun-2017> | | |
| | | | | | |

## Task 1. Maven build

### Review

Implement Maven build script for sample project.

### Task

1. Install Maven
2. Clone GitHub project
   git@github.com:MNT-Lab/build-t00ls.git
3. Create your own branch based on master by pattern:
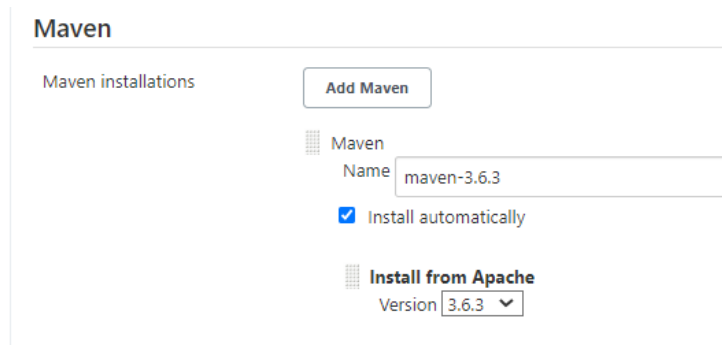   First char of name + surname

Example: The name of student -  Serhei Ivanou. The branch will be **sivanou**.

4. Implement pom.xml script to clean, compile, test, create jar file and distribution artifact. (source code in 'src' repo).
5. All changes should be tracked by commits to own branch
6. Push to GitHub
7. Setup Jenkins job ("helloworld-**sivanou**-maven-build")
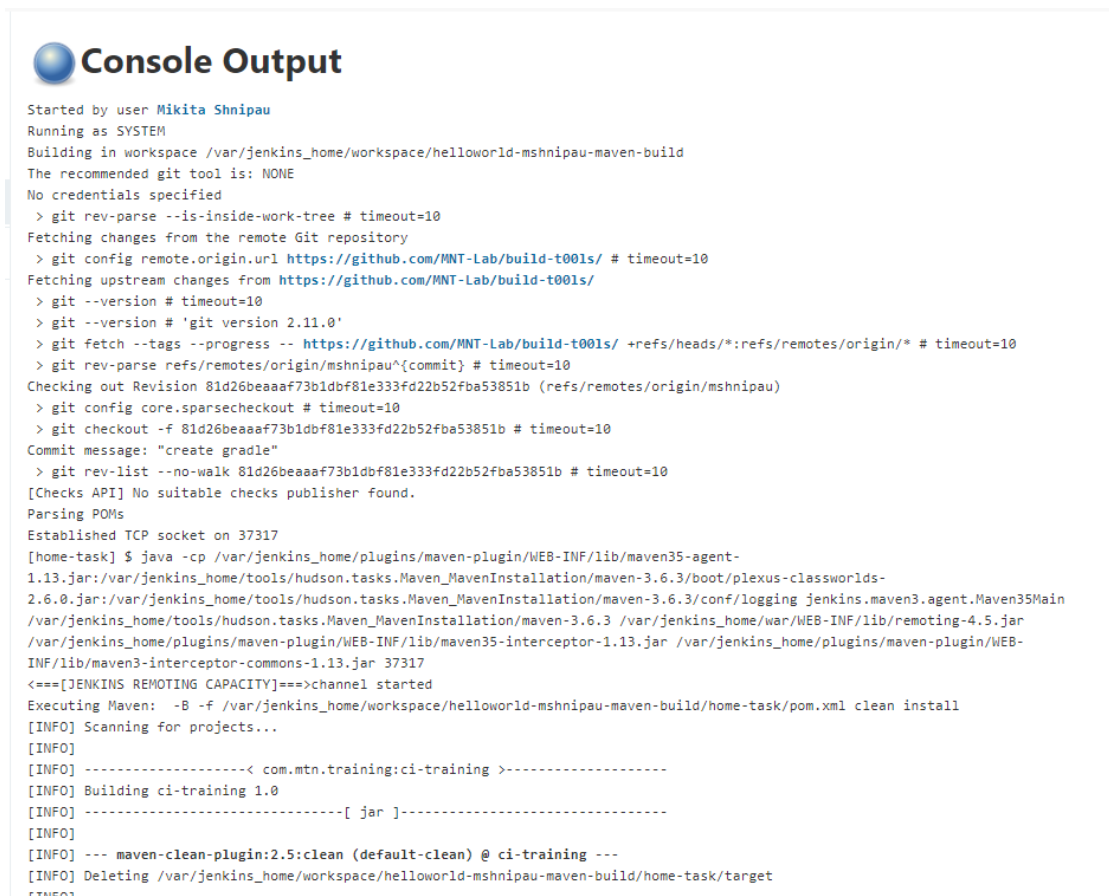   a) build from repository (poll SCM)

b) use maven plugin



c) run jar and output save to file 'output.log'



```
Started by user Mikita Shnipau
Running as SYSTEM
Building in workspace /var/jenkins_home/workspace/helloworld-mshnipau-maven-build
The recommended git tool is: NONE
No credentials specified
 > git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
 > git config remote.origin.url https://github.com/MNT-Lab/build-t00ls/ # timeout=10
Fetching upstream changes from https://github.com/MNT-Lab/build-t00ls/
 > git --version # timeout=10
 > git --version # 'git version 2.11.0'
 > git fetch --tags --progress -- https://github.com/MNT-Lab/build-t00ls/ +refs/heads/*:refs/remotes/origin/* # timeout=10
 > git rev-parse refs/remotes/origin/mshnipau^{commit} # timeout=10
Checking out Revision 81d26beaaaf73b1dbf81e333fd22b52fba53851b (refs/remotes/origin/mshnipau)
 > git config core.sparsecheckout # timeout=10
 > git checkout -f 81d26beaaaf73b1dbf81e333fd22b52fba53851b # timeout=10
Commit message: "create gradle"
 > git rev-list --no-walk 81d26beaaaf73b1dbf81e333fd22b52fba53851b # timeout=10
[Checks API] No suitable checks publisher found.
Parsing POMs
Established TCP socket on 37317
[home-task] $ java -cp /var/jenkins_home/plugins/maven-plugin/WEB-INF/lib/maven35-agent-
1.13.jar:/var/jenkins_home/tools/hudson.tasks.Maven_MavenInstallation/maven-3.6.3/boot/plexus-classworlds-
2.6.0.jar:/var/jenkins_home/tools/hudson.tasks.Maven_MavenInstallation/maven-3.6.3/conf/logging jenkins.maven3.agent.Maven35Main
/var/jenkins_home/tools/hudson.tasks.Maven_MavenInstallation/maven-3.6.3 /var/jenkins_home/war/WEB-INF/lib/remoting-4.5.jar
/var/jenkins_home/plugins/maven-plugin/WEB-INF/lib/maven35-interceptor-1.13.jar /var/jenkins_home/plugins/maven-plugin/WEB-
INF/lib/maven3-interceptor-commons-1.13.jar 37317
<===[JENKINS REMOTING CAPACITY]===>channel started
Executing Maven:  -B -f /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/pom.xml clean install
[INFO] Scanning for projects...
[INFO]
[INFO] -------------------< com.mtn.training:ci-training >--------------------
[INFO] Building ci-training 1.0
[INFO] ------------------------------[ jar ]------------------------------
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ ci-training ---
[INFO] Deleting /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target
[INFO]
```

```
-----------------------------------------------------
 T E S T S
-----------------------------------------------------
Running com.test.UnitTest
test
Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.139 sec

Results :

Tests run: 2, Failures: 0, Errors: 0, Skipped: 0

[JENKINS] Recording test results
[INFO]
[INFO] --- maven-jar-plugin:3.0.2:jar (default-jar) @ ci-training ---
[INFO] Building jar: /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target/ci-training-1.0.jar
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ ci-training ---
[INFO] Installing /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target/ci-training-1.0.jar to
/var/jenkins_home/.m2/repository/com/mtn/training/ci-training/1.0/ci-training-1.0.jar
[INFO] Installing /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/pom.xml to
/var/jenkins_home/.m2/repository/com/mtn/training/ci-training/1.0/ci-training-1.0.pom
[Checks API] No suitable checks publisher found.
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  6.813 s
[INFO] Finished at: 2020-10-19T03:06:27Z
[INFO] ------------------------------------------------------------------------
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/pom.xml to com.mtn.training/ci-
training/1.0/ci-training-1.0.pom
[JENKINS] Archiving /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target/ci-training-1.0.jar to
com.mtn.training/ci-training/1.0/ci-training-1.0.jar
[helloworld-mshnipau-maven-build] $ /bin/sh -xe /tmp/jenkins783949230969124374.sh
+ java -jar /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target/ci-training-1.0.jar
channel stopped
+ tar -czvf hello-3.tar.gz /var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target/ci-training-1.0.jar
tar: Removing leading `/' from member names
/var/jenkins_home/workspace/helloworld-mshnipau-maven-build/home-task/target/ci-training-1.0.jar
Archiving artifacts
[Checks API] No suitable checks publisher found.
Finished: SUCCESS
```
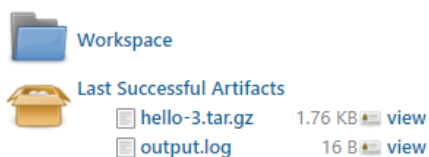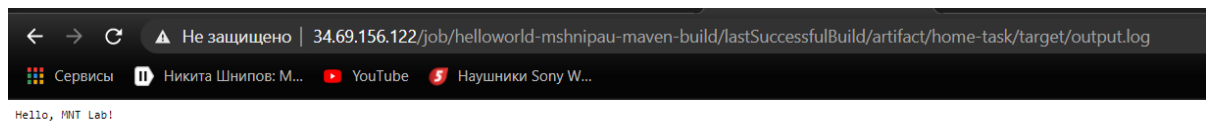
   d) archive and attach jar file

      ARTEFACT_NAME=hello-$BUILD_NUMBER.tar.gz

   e) attach log file to build (archive artifact plugin)

# Maven project helloworld-mshnipau-maven-build

Workspace

Last Successful Artifacts
hello-3.tar.gz     1.76 KB view
output.log        16 B view

Report:

Email pattern: [MNT-CD-3]-FirstName-LastName

Contains: GitHub link, Plugin config(screenshot), Job config(screenshot), output (screenshot)

GIT -     https://github.com/MNT-Lab/build-t00ls/tree/mshnipau