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MTN.*NIX.09
Continuous Delivery with Jenkins

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Software build principles

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

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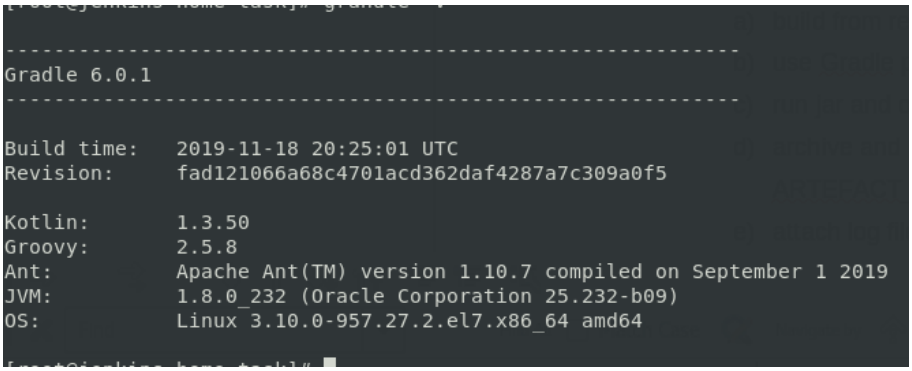
Task 1. Gradle build

Review

Implement Gradle build script for sample project.

Task

1. Install Gradle



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

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

4. Implement **build.gradle** build to clean, compile, test, create jar file and distribution artifact. (source code in 'src' repo).

5. Build file should contain:

   - Tasks: "build-custom" , "test-custom" and "hello".
   - "hello" should depend on "test-custom", "test-custom" should depend on "build"
   - setting custom artifact name

```
plugins {
  id 'java'
  id 'maven-publish'
  id 'java-library-distribution'
}

task hello {
  doLast {
    println 'Hello world!'
  }
}

jar {
  manifest {
```

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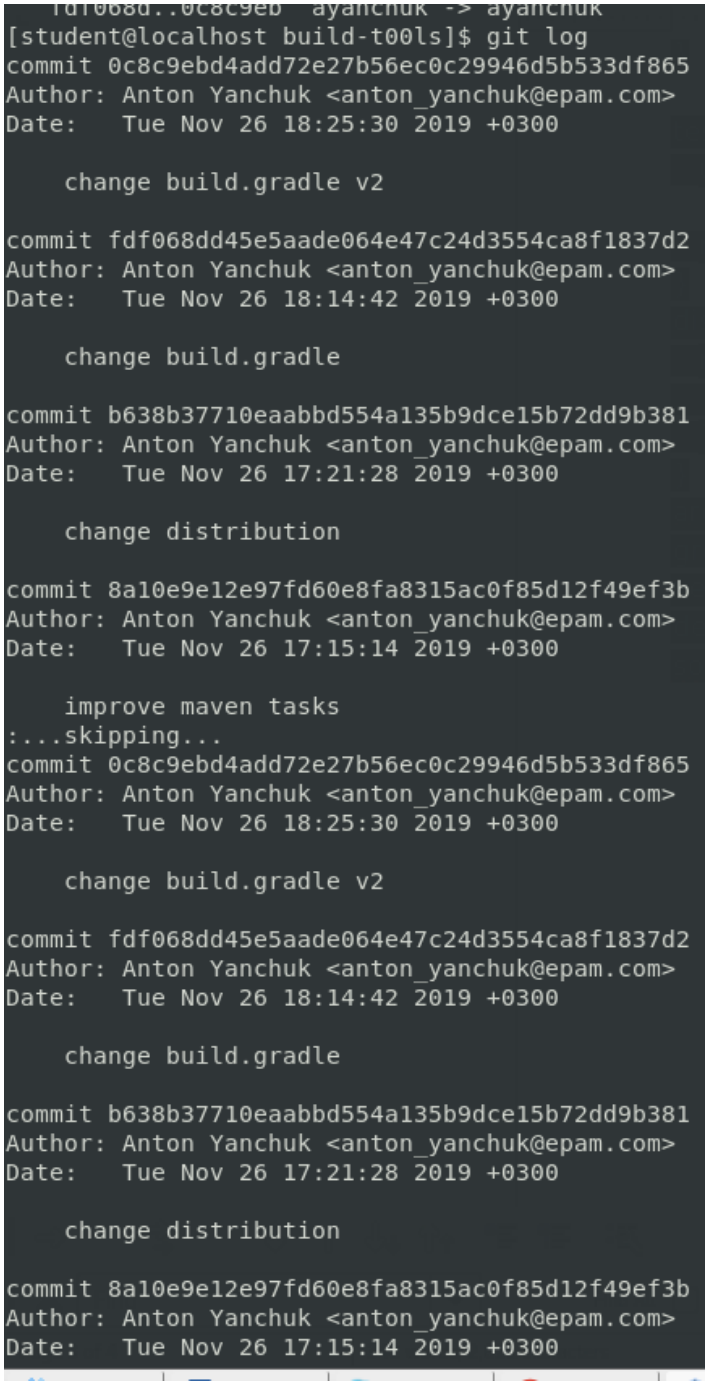
```
    attributes(
        'Main-Class': 'com.test.Project'
    )
  }
}

repositories {
  mavenLocal()
  maven {
    url = 'http://repo.maven.apache.org/maven2'
  }
}

dependencies {
  implementation 'org.apache.commons:commons-collections4:4.1'
  implementation 'log4j:log4j:1.2.17'
  testImplementation 'junit:junit:4.11'
}

test{
  useJUnit()

  maxHeapSize = '50M'
}
distributions {
  main {
    distributionBaseName = 'my-name'
  }
}
archivesBaseName = 'home-task-ayanchuk'
group = 'com.test'
version = '1.0-SNAPSHOT'
description = 'gradle-home-task'
sourceCompatibility = '1.8'
```

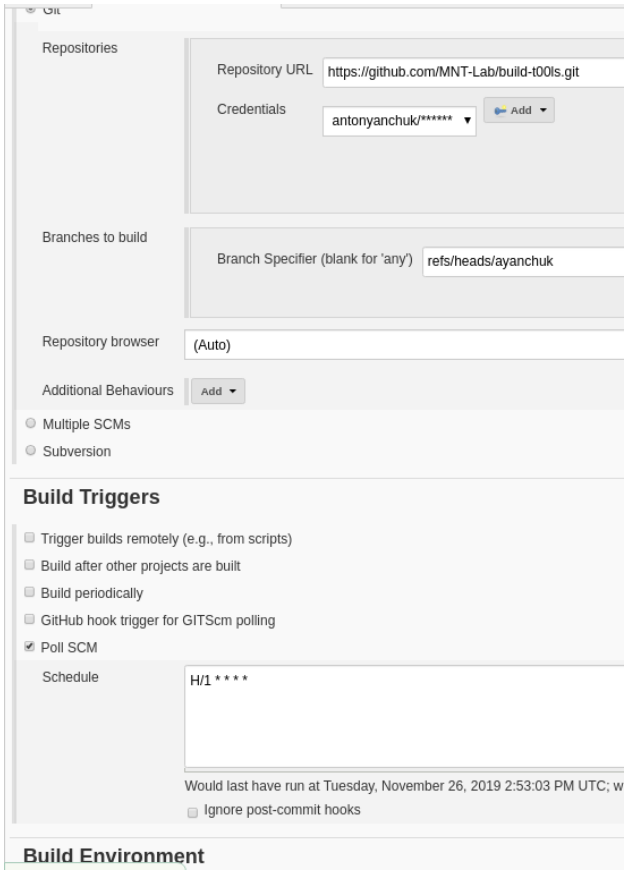
-

6. All changes should be tracked by commits to own branch

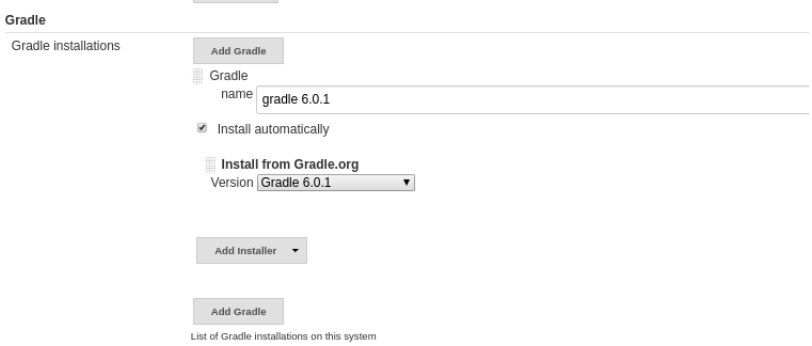


7. Push to GitHub

8. Setup Jenkins job(“helloworld-**sivanou**-gradle-build”)::
   a) build from repository (poll SCM)



   b) use Gradle plugin

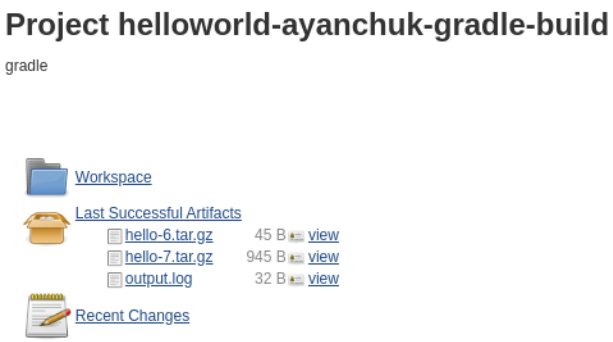


c) run jar and output save to file ‘output.log’

d) archive and attach jar file

ARTEFACT_NAME=hello-$BUILD_NUMBER.tar.gz

e) attach log file to build



Additional Practice: install gradle wrapper and try to manipulate by tasks/commands

Report:

Email pattern: [MNT-CD-4]-FirstName-LastName

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