

## Task 2. Managing build Artifacts

### Review

Previously installed Jenkins server will be used for this task. Nexus server will be installed as an artifact repository.

### Task

1. Install and configure Nexus server.

```
● nexus.service - nexus service
   Loaded: loaded (/etc/systemd/system/nexus.service; enabled; vendor preset:
   Active: active (running) since Sun 2022-01-30 13:59:57 +03; 11min ago
   Process: 788 ExecStart=/opt/nexus/bin/nexus start (code=exited, status=0/SU
   Main PID: 995 (java)
     Tasks: 78 (limit: 4632)
    Memory: 1.5G
    CGroup: /system.slice/nexus.service
            └─995 /usr/lib/jvm/java-8-openjdk-amd64/jre/bin/java -server -Dins
```

2. Configure Nginx so that access to Nexus is via <http://nexus>

```
upstream backend {
    server 127.0.0.1:8081;
}

server {
    listen 80 default_server;
    server_name [::]:80 nexus;

    location / {
        proxy_pass http://backend/;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection "upgrade";
        proxy_set_header Host $http_host;

        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forward-For $proxy_add_x_forwarded_for;
        proxy_set_header X-Forward-Proto http;
        proxy_set_header X-Nginx-Proxy true;

        proxy_redirect off;
    }
}
```

3. Configure Jenkins/Maven to use Nexus server for all Maven artifact downloads

### Nexus Repository Manager Publisher

**Nexus Instance**

nexus

**Nexus Repository** ?

Sample\_snap

**Tag** ?

**Packages**

**Group**

com.test

**Artifact**

jenkins

**Version**

\$BUILD\_NUMBER

**Packaging**

tar.gz

**Artifacts**

**Maven Artifact**

**File Path**

hello-\$BUILD\_NUMBER.tar.gz

**Classifier**

**Extension**

Add Artifact Path

4. Choose some open-source project for building with Jenkins (example - <https://github.com/jenkinsci/jenkins>). Requirement to this project – it should be Maven-based.
5. Configure build section (Maven build) – should create some artifact (ARTEFACT\_NAME=Jenkins-\$BUILD\_NUMBER)
6. Nexus should be used as Maven dependency proxy.

```
<mirrors>
  <mirror>
    <id>nexus</id>
    <mirrorOf>*</mirrorOf>
    <name>nexus-proxy</name>
    <url>http://192.168.31.125:8081/repository/nexus-proxy/</url>
  </mirror>
</mirrors>
```

```

<profiles>
  <profile>
    <id>nexus-profile</id>
    <repositories>
      <repository>
        <id>central</id>
        <url>http://central</url>
        <releases><enabled>true</enabled></releases>
        <snapshots><enabled>true</enabled></snapshots>
      </repository>
    </repositories>
    <pluginRepositories>
      <pluginRepository>
        <id>central</id>
        <url>http://central</url>
        <releases><enabled>true</enabled></releases>
        <snapshots><enabled>true</enabled></snapshots>
      </pluginRepository>
    </pluginRepositories>
  </profile>
</profiles>

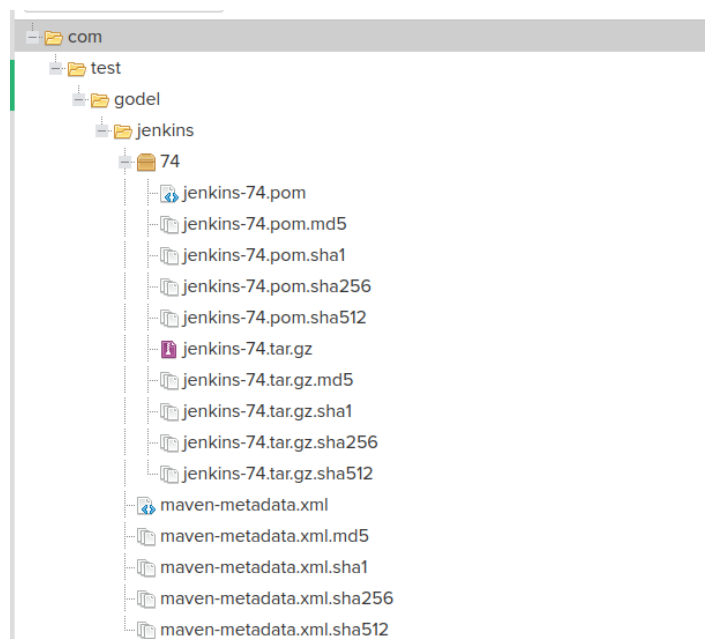
```

```

<activeProfiles>
  <activeProfile>nexus-profile</activeProfile>
</activeProfiles>














```

7. Create tar.gz
8. Upload artifact to Nexus



## HTML View

---

-  aopalliance
-  asm
-  backport-util-concurrent
-  classworlds
-  com
-  commons-cli
-  commons-collections
-  commons-io
-  commons-logging
-  javax
-  junit
-  log4j
-  org