

# 前言

## 系统环境：Centos7、jdk1.8

私服是一种特殊的远程仓库，它是架设在局域网内的仓库服务，私服代理广域网上的远程仓库，供局域网内的用户使用。当Maven需要下载构件的时候，它从私服请求，如果私服上不存在该构件，则从外部远程仓库下载，缓存在私服上之后，再为Maven的下载请求提供服务。

# 安装

## 一、安装maven 3.6.1

### 1. 下载maven

```
1 # wget下载maven3.6.1
2 [root@localhost home]# wget http://mirrors.tuna.tsinghua.edu.cn/apache/maven/maven-3/3.6.1/binaries/apache-maven-3.6.1-bin.tar.gz20
21 # 解压maven
22 [root@localhost home]# tar -zxvf apache-maven-3.6.1-bin.tar.gz 27
28 # 重命名maven
29 [root@localhost home]# mv apache-maven-3.6.1 maven
```

### 2. 设置maven环境变量

```
1 # 修改环境变量增加maven
2 [root@localhost home]# vi /etc/profile
3
4     export MAVEN_HOME=/home/maven
5     export PATH=$MAVEN_HOME/bin:$PATH
6
7 # 重载生效
8 [root@localhost home]# source /etc/profile
```

### 3. 验证maven

```
1 [root@localhost home]# mvn -v
2 Apache Maven 3.6.1 (d66c9c0b3152b2e69ee9bac180bb8fcc8e6af555; 2019-04-05T03:00:29+08:00)
3 Maven home: /home/maven
4 Java version: 1.8.0_221, vendor: Oracle Corporation, runtime: /home/jdk/jre
5 Default locale: zh_CN, platform encoding: UTF-8
6 OS name: "linux", version: "3.10.0-957.27.2.el7.x86_64", arch: "amd64", family: "unix"
```

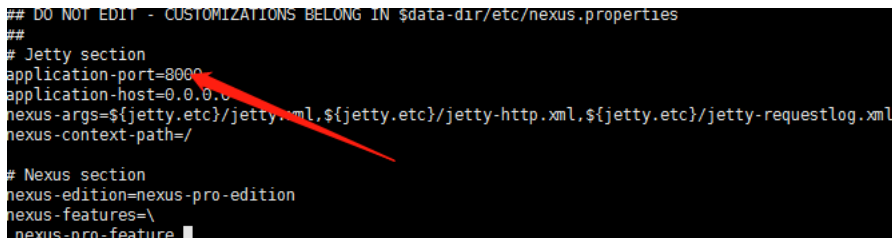
## 二、安装Nexus3.11.0 maven私服

### 1. 下载

```
1 # wget下载nexus的tar包
2 [root@localhost home]# wget http://sonatype-download.global.ssl.fastly.net/nexus/3/nexus-3.6.0-02-unix.tar.gz
3
4 # 解压
5 [root@localhost home]# tar -C nexus -zxvf nexus-3.6.0-02-unix.tar.gz
6
7 [root@localhost home]# cd nexus
8 [root@localhost nexus]# ls
9 nexus-3.6.0-02 sonatype-work
10 [root@localhost nexus]# mv nexus-3.6.0-02/ nexus
11
12 [root@localhost nexus]# ls -l
13 总用量 0
14 drwxr-xr-x. 9 root root 136 9月 19 13:11 nexus
15 drwxr-xr-x. 3 root root 20 9月 19 13:11 sonatype-work
```

### 2. 修改nexus端口号

修改etc目录下nexus-default.properties文件



```
## DO NOT EDIT - CUSTOMIZATIONS BELONG IN $data-dir/etc/nexus.properties
##
# Jetty section
application-port=8080
application-host=0.0.0.0
nexus-args=${jetty.etc}/jetty.xml,${jetty.etc}/jetty-http.xml,${jetty.etc}/jetty-requestlog.xml
nexus-context-path=/
# Nexus section
nexus-edition=nexus-pro-edition
nexus-features=\
nexus-pro-feature
```

### 3. 修改maven运行jvm

修改bin目录下的nexus.vmoptions文件

```
[root@localhost bin]# cat nexus.vmoptions
-Xms1200M
-Xmx1200M
-XX:MaxDirectMemorySize=2G
-XX:+UnlockDiagnosticVMOptions
-XX:+UnsyncloadClass
-XX:+LogVMOutput
-XX:LogFile=../sonatype-work/nexus3/log/jvm.log
-XX:-OmitStackTraceInFastThrow
-Djava.net.preferIPv4Stack=true
-Dkaraf.home=.
-Dkaraf.base=.
-Dkaraf.etc=etc/karaf
-Djava.util.logging.config.file=etc/karaf/java.util.logging.properties
-Dkaraf.data=../sonatype-work/nexus3
-Djava.io.tmpdir=../sonatype-work/nexus3/tmp
-Dkaraf.startLocalConsole=false
```

#### 4.启动私服

```
1 [root@localhost bin]# pwd
2 /home/nexus/nexus/bin
3 [root@localhost bin]# ./nexus start
4 WARNING: *****
5 WARNING: Detected execution as "root" user. This is NOT recommended!
6 WARNING: *****
7 Starting nexus
```

此处警告：可以useradd nexus，然后chown -R nexus:nexus /home/nexus 然后重启nexus解决

nexus start|stop|status|restart

5.浏览器打开<http://192.168.8.10:8002/>访问，默认密码admin/admin123。nexus启动很慢，耐心等待。



System Requirement: max file descriptors [4096] likely too low, increase to at least [65536].

登录发现警告 “System Requirement: max file descriptors [4096] likely too low, increase to at least [65536].”

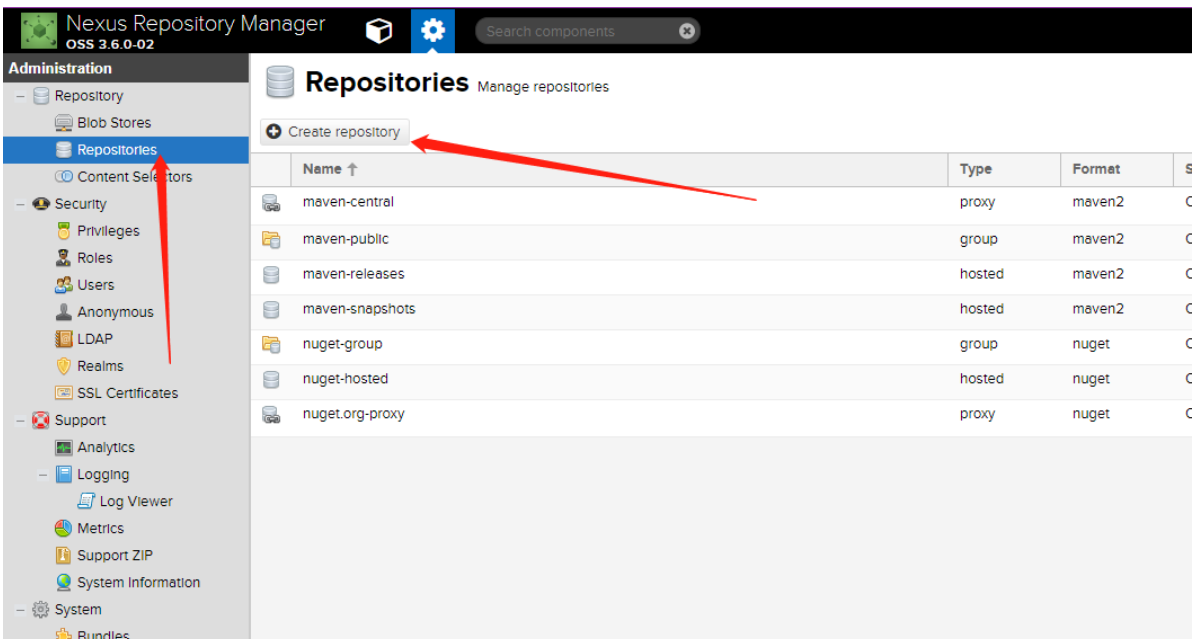
解决：vi /etc/security/limits.conf



在文件末尾增加
























```
* soft nfile 65536
* hard nfile 65536
* soft nproc 4096
* hard nproc 4096
```

重启nexus解决。

#### 6.创建java仓库



 **Repositories** /  Select Recipe

Recipe ↑
 bower (group)
 bower (hosted)
 bower (proxy)
 docker (group)
 docker (hosted)
 docker (proxy)
 gitifs (hosted)
 maven2 (group)
 maven2 (hosted)
 maven2 (proxy)
 npm (group)
 npm (hosted)
 npm (proxy)
 nuget (group)
 nuget (hosted)
 nuget (proxy)
 pypi (group)
 pypi (hosted)
 pypi (proxy)
 raw (group)
 raw (hosted)
 raw (proxy)
 rubygems (group)

这里选择 maven2 ( hosted )

**Name:**

A unique identifier for this repository

java

**Online:**

☒ If checked, the repository accepts incoming requests

**Maven 2**

**Version policy:**

What type of artifacts does this repository store?

Release

**Layout policy:**

Validate that all paths are maven artifact or metadata paths

Strict

**Storage**

**Blob store:**

Blob store used to store asset contents

default

**Strict Content Type Validation:**

☒ Validate that all content uploaded to this repository is of a MIME type appropriate for the repository format

**Hosted**

**Deployment policy:**

Controls if deployments of and updates to artifacts are allowed

Allow redeploy

maven配置：修改maven的settings.xml配置文件

```
<!--nexus服务器-->
<servers>
  <server>
    <id>releases</id>
    <username>admin</username>
    <password>admin123</password>
  </server>
  <server>
    <id>Snapshots</id>
    <username>admin</username>
```

```

        <password>admin123</password>
    </server>

</servers>
<!--一组资源库的url地址 id和name自定义, mirrorOf的值设置为central, 写死的-->
<mirrors>
    <!--
    #后续测试增加maven私服的配置后, 无法拉取官方的jar包, 注释掉解决问题
    <mirror>
        <id>nexus</id>
        <name>java</name>
        <url>http://192.168.8.10:8002/repository/java/</url>
        <mirrorOf>central</mirrorOf>
    </mirror>
-->

    <mirror>
        <id>alimaven</id>
        <name>aliyun maven</name>
        <url>http://maven.aliyun.com/nexus/content/groups/public/</url>
        <mirrorOf>central</mirrorOf>
    </mirror>

</mirrors>

<profiles>
    <profile>
        <id>jdk-1.8</id>
        <activation>
            <activeByDefault>true</activeByDefault>
            <jdk>1.8</jdk>
        </activation>
        <properties>
            <maven.compiler.source>1.8</maven.compiler.source>
            <maven.compiler.target>1.8</maven.compiler.target>
            <maven.compiler.compilerVersion>1.8</maven.compiler.compilerVersion>
        </properties>
    </profile>

    <profile>
        <id>nexus-java</id>
        <!-- 远程仓库列表 -->
        <repositories>
            <repository>
                <id>java</id>
                <name>Nexus Central</name>
                <!-- 虚拟的URL形式, 指向镜像的URL-->
                <url>http://192.168.8.10:8002/repository/java/</url>
                <layout>default</layout>
                <!-- 表示可以从这个仓库下载releases版本的构件-->
                <releases>
                    <enabled>true</enabled>
                </releases>
                <!-- 表示可以从这个仓库下载snapshot版本的构件 -->
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </repository>
        </repositories>
        <!-- 插件仓库列表 -->
        <pluginRepositories>
            <pluginRepository>
                <id>java</id>
                <name>Nexus Central</name>
                <url>http://192.168.8.10:8002/repository/java/</url>
                <layout>default</layout>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
                <releases>
                    <enabled>true</enabled>
                </releases>
            </pluginRepository>
        </pluginRepositories>
    </profile>
</profiles>

<activeProfiles>
    <!--需要激活 <profile>中的ID才生效-->
    <activeProfile>nexus-java</activeProfile>
    <activeProfile>jdk-1.8</activeProfile>
</activeProfiles>

<!-- activeProfiles
| List of profiles that are active for all builds.
|
<activeProfiles>
    <activeProfile>alwaysActiveProfile</activeProfile>
    <activeProfile>anotherAlwaysActiveProfile</activeProfile>
</activeProfiles>

```

maven私服其他仓库建立及调用过程请参考：<https://www.cnblogs.com/kongweifeng/p/9369936.html>

常见错误问题：

1.未认证或认证失败：错误码401

```
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-deploy-plugin:2.8.2:deploy (default-deploy) on project mingbytesiteapi: Failed to deploy artifacts: Co
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoExecutionException
```

解决：maven的setting.xml配置文件中的server username和密码未配置或者配置不正确

```
<server>
  <id>releases</id>
  <username>admin</username>
  <password>admin123</password>
</server>
<server>
  <id>Snapshots</id>
  <username>admin</username>
  <password>admin123</password>
</server>
```