

CentOS7.9-Java 多版本镜像使用帮助文档

1、镜像环境说明

镜像版本说明 操作系统: CentOS7.9 64 位
Java 运行环境 (CentOS 7.9 64 位 | Java 1.8 | Java1.7 | Tomcat 8 | nginx 1.16)

1.1 镜像安装说明

镜像环境里相应软件的安装，是基于 CentOS 7 纯净版版的官方软件包安装配 置，系统安全策略配置，系统调优、优化了相应功能。

在镜像环境中，所有软件包都是使用源码手工安装完成，您可以自由根据需 求在 CentOS 7.9 系统中做自定义服务配置，安装后的环境跟全部属于默认配置。

1.2 软件默认配置:

Nginx 配置文件路径: /etc/nginx/nginx.conf
Java1.7 路径: /usr/local/jdk1.7
Java1.8 路径: /usr/local/jdk1.8
Tomcat 主配置文件: /usr/local/apache-tomcat-8.5.28/conf/server.xml

3、软件目录及配置列表

所有软件都采用源码方式安装

Nginx 端口 80,
Tomcat 端口 8080;

4、软件操作命令汇总

Nginx: systemctl start|stop|restart nginx



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```
[root@waoqi123 local]# systemctl status nginx
● nginx.service - The nginx HTTP and reverse proxy server
  Loaded: loaded (/usr/lib/systemd/system/nginx.service; disabled; vendor preset: disabled)
  Active: active (running) since Wed 2021-03-03 11:10:34 CST; 18min ago
    Process: 11887 ExecStart=/usr/sbin/nginx (code=exited, status=0/SUCCESS)
   Process: 11883 ExecStartPre=/usr/sbin/nginx -t (code=exited, status=0/SUCCESS)
   Process: 11881 ExecStartPre=/usr/bin/rm -f /run/nginx.pid (code=exited, status=0/SUCCESS)
 Main PID: 11890 (nginx)
  CGroup: /system.slice/nginx.service
          ├─11890 nginx: master process /usr/sbin/nginx
          ├─11891 nginx: worker process
          └─11892 nginx: worker process

Mar  3 11:10:34 waoqi123 systemd[1]: Starting The nginx HTTP and reverse proxy server...
Mar  3 11:10:34 waoqi123 nginx[11883]: nginx: the configuration file /etc/nginx/nginx.conf syntax is
Mar  3 11:10:34 waoqi123 nginx[11883]: nginx: configuration file /etc/nginx/nginx.conf test is succe
Mar  3 11:10:34 waoqi123 systemd[1]: Started The nginx HTTP and reverse proxy server.
[root@waoqi123 local]#
```

启动 Tomcat 需要 ps -ef | grep tomcat 查到进程号，选择 kill 进程号，再使用 startuo.sh 启动 tomcat

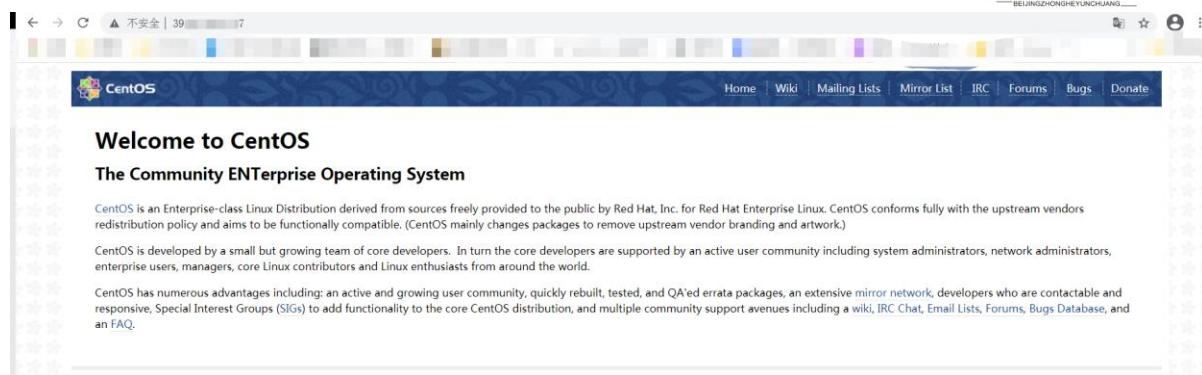
```
[root@waoqi123 local]# ps -ef|grep tomcat
root 11474 1 0 10:54 pts/0 00:00:05 /usr/local/java/bin/java -Djava.util.logging.config.file=/usr/local/apache-tomcat-8.5.28/conf/logging.properties -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager -Djdk.tls.ephemeralDHKeySize=2048 -Djava.protocol.handler.pkgs=org.apache.catalina.webresources -Dignore.endorsed.dirs= -classpath /usr/local/apache-tomcat-8.5.28/bin/bootstrap.jar:/usr/local/apache-tomcat-8.5.28/bin/tomcat-juli.jar -Dcatalina.base=/usr/local/apache-tomcat-8.5.28 -Dcatalina.home=/usr/local/apache-tomcat-8.5.28 -Djava.io.tmpdir=/usr/local/apache-tomcat-8.5.28/temp org.apache.catalina.startup.Bootstrap start
root 11921 1604 0 11:31 pts/0 00:00:00 grep --color=auto tomcat
[root@waoqi123 local]# kill -9 11474
```

5、验证

Tomcat 验证页面: <http://ip:8080>

The screenshot shows the Apache Tomcat 8.5.28 welcome page. At the top, there's a navigation bar with links for Home, Documentation, Configuration, Examples, Wiki, and Mailing Lists. To the right of the navigation is a "Find Help" search bar. The main title "Apache Tomcat/8.5.28" is centered above a green banner that says "If you're seeing this, you've successfully installed Tomcat. Congratulations!". Below the banner is a cartoon cat icon next to the text "Recommended Reading:" followed by links to Security Considerations HOW-TO, Manager Application HOW-TO, and Clustering/Session Replication HOW-TO. To the right of the banner are three buttons: "Server Status", "Manager App", and "Host Manager". Below the banner, there's a section titled "Developer Quick Start" with links to Tomcat Setup, First Web Application, Realms & AAA, JDBC DataSources, Examples, Servlet Specifications, and Tomcat Versions. The bottom of the page is divided into three yellow boxes: "Managing Tomcat" (with sections for security, users, and links to Release Notes, Changelog, Migration Guide, and Security Notices), "Documentation" (with links to Tomcat 8.5 Documentation, Configuration, and Wiki, along with developer information and links to CATALINA_HOME/RUNNING.txt and CATALINA_HOME/LOGGING.txt), and "Getting Help" (with links to FAQ and Mailing Lists, and a list of available mailing lists: tomcat-announce, tomcat-users, taglibs-user, and tomcat-dev).

Nginx 验证页面: <http://ip>



6、java 版本切换

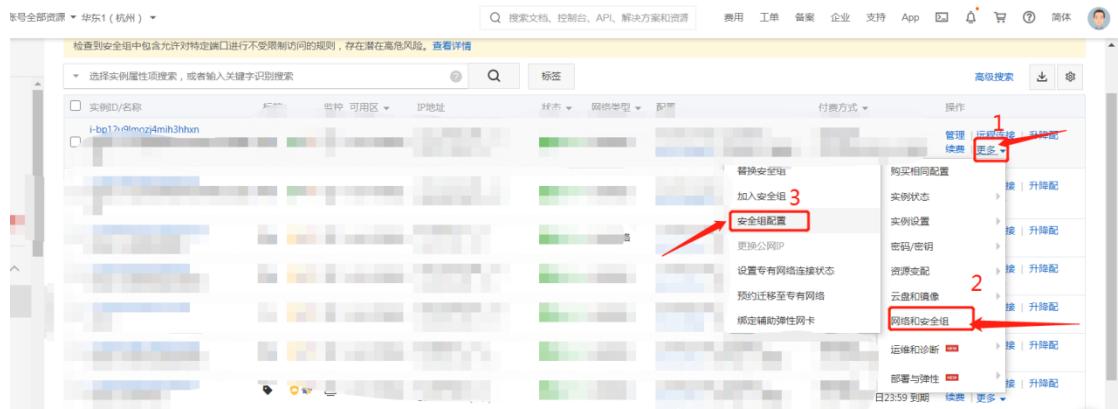
使用 alternatives --config java 命令切换版本，可选择 1 或者 2 来控制 Java 版本，如图：

```
[root@waoqi123 bin]# alternatives --config java
There are 2 programs which provide 'java'.
Selection      Command
-----+-----+
*+ 1          /usr/local/jdk1.8/bin/java
  2          /usr/local/jdk1.7/bin/java
Enter to keep the current selection[+], or type selection number: 1
[root@waoqi123 bin]# java -version
java version "1.8.0_261"
Java(TM) SE Runtime Environment (build 1.8.0_261-b12)
Java HotSpot(TM) 64-Bit Server VM (build 25.261-b12, mixed mode)
[root@waoqi123 bin]#
```

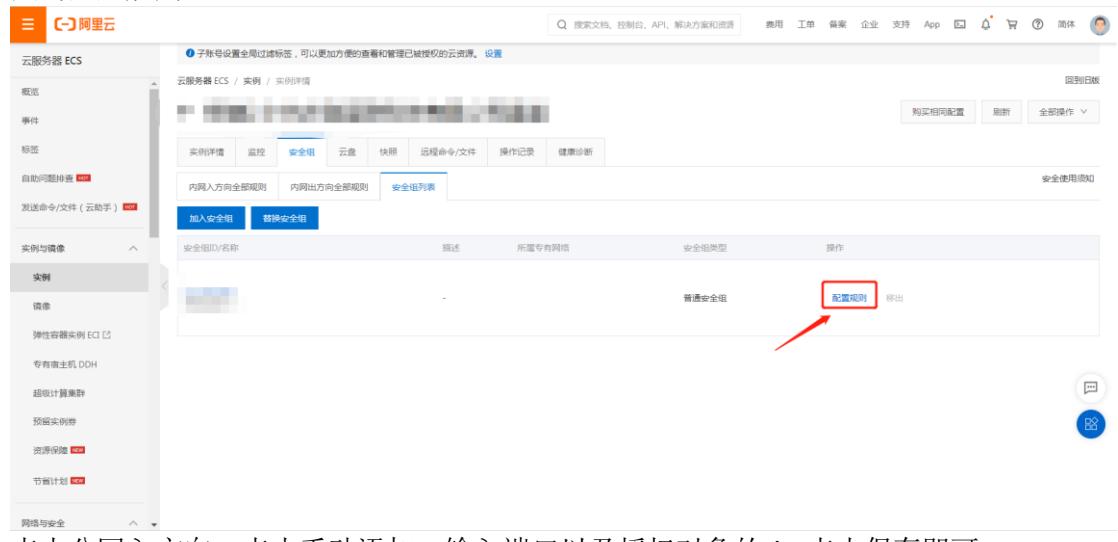
```
[root@waoqi123 bin]# alternatives --config java
There are 2 programs which provide 'java'.
Selection      Command
-----+-----+
*+ 1          /usr/local/jdk1.8/bin/java
  2          /usr/local/jdk1.7/bin/java
Enter to keep the current selection[+], or type selection number: 2
[root@waoqi123 bin]# java -version
java version "1.7.0_79"
Java(TM) SE Runtime Environment (build 1.7.0_79-b15)
Java HotSpot(TM) 64-Bit Server VM (build 24.79-b02, mixed mode)
[root@waoqi123 bin]#
```

7、阿里云开放安全组

如图步骤依次点击到安全组配置



点击配置规则



点击公网入方向，点击手动添加，输入端口以及授权对象的 ip 点击保存即可



8、配置 nginx 反向代理 tomcat（可选）

(1) 保证 nginx 以及 tomcat 是启动的

```
ps -ef | grep nginx
```

```
ps -ef | grep tomcat
```



```
[root@waoqi123 bin]# ps -ef|grep nginx
root    11890      1  0 11:10 ?        00:00:00 nginx: master process /usr/sbin/nginx
nginx   11891 11890  0 11:10 ?        00:00:00 nginx: worker process
nginx   11892 11890  0 11:10 ?        00:00:00 nginx: worker process
root    11985 1604  0 12:17 pts/0    00:00:00 grep --color=auto nginx
[root@waoqi123 bin]# ps -ef|grep tomcat
root    11474      1  0 10:54 pts/0    00:00:08 /usr/local/java/bin/java -Djava.util.logging.config.file=/usr/local/apache-tomcat-8.5.28/conf/logging.properties -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager -Djdk.tls.ephemeralDHKeySize=2048 -Djava.protocol.handler.pkgs=org.apache.catalina.webresources -Dignore.endorsed.dirs= -classpath /usr/local/apache-tomcat-8.5.28/bin/bootstrap.jar:/usr/local/apache-tomcat-8.5.28/bin/tomcat-juli.jar -Dcatalina.base=/usr/local/apache-tomcat-8.5.28 -Dcatalina.home=/usr/local/apache-tomcat-8.5.28 -Djava.io.tmpdir=/usr/local/apache-tomcat-8.5.28/temp org.apache.catalina.startup.Bootstrap start
root    11987 1604  0 12:17 pts/0    00:00:00 grep --color=auto tomcat
[root@waoqi123 bin]# 
```

(2) 修改 nginx 配置信息

vim /etc/nginx/nginx.conf

在 location / {} 里添加

proxy_pass http://ip:端口 (tomcat 的 ip 和端口)

(3) 重启 nginx

systemctl restart nginx

(4) 测试

浏览器访问 http://ip 即可看到 tomcat 页面

【公司简介】

北京众合云创科技有限公司，以技术服务为核心的技术性服务商，公司技术实力雄厚，企业核心人员，来自于 BTA，拥有丰富的行业经验，以及扎实的技术功底，以及高效的团队管理经验。公司从软件定制开发，到后期安全运维服务，全方位为客户提供解决方案。节约客户成本，提高服务质量。

【声明】

1、镜像中如有收费软件，请根据软件官方说明购买使用版权，因版权问题产生的纠纷本公司概不负责。

2、镜像操作系统为公司定制，并经过反复测试验证，请参照商品详情中信息使用，免费镜像为客户体验使用，收费镜像为镜像制作费用，除镜像本身默认环境问题，均不含任何人工技术支持。

3、部分付费镜像有安全加固，但不保证服务器绝对安全，互联网中不存在绝对安全的服务器，请做好代码安全，并培养良好的使用习惯。

【售后问题】

1、如有软件不能正常使用的情况请联系在线技术支持；



2、如需在线技术支持，配置、调试、故障排查等参照本公司服务类商品定价，下单后联系技术支持；

【售后支持范围】

售后服务：初始环境不能正常使用；如有任何配置修改，不在售后支持范围；

售后服务时间：周一至周六 9: 00—20: 00 。

售后客服联系方式：15810196073 邮箱：hu.tang@waoqi.com

业务范围：服务器环境配置，故障排查（不含程序自身问题），数据库配置更改，数据库权限、账户，数据迁移，程序迁移，数据库故障 排查等；

费用范围：详情参照本公司服务类商品定价，或咨询在线技术支持。