



Apache BalancerMember

Apache로 WAS(Tomcat, Jboss)를 분기 시켜주는 목적

Apache 설치 후

환경설정 파일 httpd.conf 설정

```
root@hunbin-qa1-krc-apache-vm-01:/etc/httpd/conf
#ErrorDocument 500 "The server made a boo boo."
#ErrorDocument 404 /missing.html
#ErrorDocument 404 "/cgi-bin/missing_handler.pl"
#ErrorDocument 402 http://www.example.com/subscription_info.html
#
#
# EnableMMAP and EnableSendfile: On systems that support it,
# memory-mapping or the sendfile syscall may be used to deliver
# files. This usually improves server performance, but must
# be turned off when serving from networked-mounted
# filesystems or if support for these functions is otherwise
# broken on your system.
# Defaults if commented: EnableMMAP On, EnableSendfile Off
#
#EnableMMAP off
EnableSendfile on
#
# Supplemental configuration
#
# Load config files in the "/etc/httpd/conf.d" directory, if any.
IncludeOptional conf.d/*.conf
include conf/vhost.conf
```

Apache 환경이 VM마다 매우 다르다. binary, yum install 마다 다름

httpd.conf도 환경마다 다름

Yum install

```
Include conf/vhost.conf    #삽입
```

Binary install

```
# Virtual hosts
Include conf/extra/httpd-vhosts.conf    #주석 해제

#binary install의 경우 proxy 모듈을 주석해제 시켜야한다.
```

vhost.conf 경로

Yum install

```
cd /etc/httpd/conf
vi vhost.conf          #새로 만들기
```

Binary install

```
cd /opt/apache/conf/extra
vi httpd-vhosts.conf    #vhosts.conf 파일이 생성 되어 있다
```

vhost.conf

yum install

root@hunbin-qa1-krc-apache-vm-01:/etc/httpd/conf

```
<VirtualHost *:80>
#ServerAdmin 172.19.0.4
#ProxyRequests Off
#ProxyPreserveHost On
#ProxyPass / http://172.19.1.4:8080/ acquire=3000 timeout=600 Keepalive=On
#ProxyPassReverse / http://172.19.1.4:8080/
#ErrorLog "logs/proxy-error_log"
#CustomLog "logs/proxy-access_log" common
#</VirtualHost>

Timeout 300

KeepAlive Off
MaxKeepAliveRequests 0
KeepAliveTimeout 5

ProxyRequests Off
ProxyPreserveHost On

<Proxy balancer://172.19.0.4>

    Order deny,allow
    Allow from all

    BalancerMember http://172.19.1.5:8080 route=node1
    BalancerMember http://172.19.1.4:8080 route=node2

</Proxy>

<VirtualHost *:80>

    ServerName 172.19.0.4
    ProxyPass / balancer://172.19.0.4/
    ProxyPassReverse / balancer://172.19.0.4/

    <Directory />
        Order allow,deny
        Allow from all
    </Directory>

</VirtualHost>
```

```
Timeout 300

KeepAlive Off
MaxKeepAliveRequests 0
KeepAliveTimeout 5

ProxyRequests Off
ProxyPreserveHost On

<Proxy balancer://172.19.0.4>

    Order deny,allow
```

```
Allow from all

BalancerMember http://172.19.1.5:8080 route=node1
BalancerMember http://172.19.1.4:8080 route=node2

</Proxy>

<VirtualHost *:80>

    ServerName 172.19.0.4
    ProxyPass / balancer://172.19.0.4/
    ProxyPassReverse / balancer://172.19.0.4/

    <Directory />
        Order allow,deny
        Allow from all
    </Directory>

</VirtualHost>
```

Binary install

```

# Virtual Hosts
#
# Required modules: mod_log_config

# If you want to maintain multiple domains/hostnames on your
# machine you can setup VirtualHost containers for them. Most configurations
# use only name-based virtual hosts so the server doesn't need to worry about
# IP addresses. This is indicated by the asterisks in the directives below.
#
# Please see the documentation at
# <URL:http://httpd.apache.org/docs/2.4/vhosts/>
# for further details before you try to setup virtual hosts.
#
# You may use the command line option '-S' to verify your virtual host
# configuration.

#
# VirtualHost example:
# Almost any Apache directive may go into a VirtualHost container.
# The first VirtualHost section is used for all requests that do not
# match a ServerName or ServerAlias in any <VirtualHost> block.
#
Timeout 300

KeepAlive Off
MaxKeepAliveRequests 0
KeepAliveTimeout 5

ProxyRequests Off
ProxyPreserveHost On

<Proxy balancer://192.168.56.118>

    Order deny,allow
    Allow from all

    BalancerMember http://192.168.56.118:8080 route=node1
    BalancerMember http://192.168.56.123:8080 route=node2

</Proxy>

<VirtualHost *:80>

    ServerName 192.168.56.118
    ProxyPass / balancer://192.168.56.118/
    ProxyPassReverse / balancer://192.168.56.118/

    <Directory />
        Order allow,deny
        Allow from all
    </Directory>

</VirtualHost>
~
"httpd-vhosts.conf" 53L, 1328C

```

Timeout 300

```

KeepAlive Off
MaxKeepAliveRequests 0
KeepAliveTimeout 5

ProxyRequests Off
ProxyPreserveHost On

<Proxy balancer://192.168.56.118>

    Order deny,allow
    Allow from all

    BalancerMember http://192.168.56.118:8080 route=node1
    BalancerMember http://192.168.56.123:8080 route=node2

</Proxy>

<VirtualHost *:80>

    ServerName 192.168.56.118
    ProxyPass / balancer://192.168.56.118/
    ProxyPassReverse / balancer://192.168.56.118/

    <Directory />
        Order allow,deny
        Allow from all
    </Directory>

</VirtualHost>

```

Apache 재기동

```

#Yum install
systemctl restart httpd
#Binary install
cd /opt/apache/bin
./apachectl start

```

Apache IP로 접속하면


← → ↻ 주의 요함 | 52.231.162.14

Home Documentation Configuration Examples Wiki Mailing Lists Find Help

Apache Tomcat/9.0.58

APACHE SOFTWARE FOUNDATION
http://www.apache.org/

If you're seeing this, you've successfully installed Tomcat. Congratulations!



Recommended Reading:

- [Security Considerations How-To](#)
- [Manager Application How-To](#)
- [Clustering/Session Replication How-To](#)

[Server Status](#)

[Manager App](#)

[Host Manager](#)

Developer Quick Start

- [Tomcat Setup](#)
- [First Web Application](#)
- [Realms & AAA](#)
- [JDBC DataSources](#)
- [Examples](#)
- [Servlet Specifications](#)
- [Tomcat Versions](#)

Managing Tomcat

For security, access to the [manager webapp](#) is restricted. Users are defined in:

```
$CATALINA_HOME/conf/tomcat-users.xml
```

In Tomcat 9.0 access to the manager application is split between different users.
[Read more...](#)

[Release Notes](#)

[Changelog](#)

[Migration Guide](#)

[Security Notices](#)

Documentation

[Tomcat 9.0 Documentation](#)

[Tomcat 9.0 Configuration](#)

[Tomcat Wiki](#)

Find additional important configuration information in:

`$CATALINA_HOME/RUNNING.txt`

Developers may be interested in:

[Tomcat 9.0 Bug Database](#)

[Tomcat 9.0 JavaDocs](#)

[Tomcat 9.0 Git Repository at GitHub](#)

Getting Help

[FAQ and Mailing Lists](#)

The following mailing lists are available:

[tomcat-announce](#)
Important announcements, releases, security vulnerability notifications. (Low volume).

[tomcat-users](#)
User support and discussion

[taglibs-user](#)
User support and discussion for [Apache Taglibs](#)

[tomcat-dev](#)
Development mailing list, including commit messages

Other Downloads

- [Tomcat Connectors](#)
- [Tomcat Native](#)
- [Taglibs](#)
- [Deployer](#)

Other Documentation

- [Tomcat Connectors](#)
- [mod_jk Documentation](#)
- [Tomcat Native](#)
- [Deployer](#)

Get Involved

- [Overview](#)
- [Source Repositories](#)
- [Mailing Lists](#)
- [Wiki](#)

Miscellaneous

- [Contact](#)
- [Legal](#)
- [Sponsorship](#)
- [Thanks](#)

Apache Software Foundation

- [Who We Are](#)
- [Heritage](#)
- [Apache Home](#)
- [Resources](#)

Copyright ©1999-2022 Apache Software Foundation. All Rights Reserved

80번 포트로 Tomcat 화면이 나온다

한쪽 Tomcat이 down되더라도 Tomcat 이중화 셋팅을 해냈기에 그대로 나오는 것을 볼수 있다.

apache 1대에

BalancerMember http://192.168.56.118:8080

BalancerMember http://192.168.56.123:8080

Tomcat 2대 구성하기

#Yum 설치는 Azure Cloud 환경에서 Test

#Binary 설치는 Local VM 환경에서 Test

#TroubleShooting

503 Error

Service Temporarily Unavailable

The server is temporarily unable to service your request due to maintenance downtime or capacity problems. Please try again later.

처음 연동하고 503 Error가 발생하였습니다.

Tomcat의 server.xml 파일 옵션을 수정

수정 전

```
<Connector port="8080" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443" />
<!-- A "Connector" using the shared thread pool-->
<!--
```

수정 후

```
<Connector port="8080" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443"
    address="0.0.0.0"
    secretRequired="false" />
```

#수정 전

```
<Connector port="8080" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443" />
```

#수정 후

```
<Connector port="8080" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443"
    address="0.0.0.0"
    secretRequired="false" />
```

#추가 사항

```
address="0.0.0.0", secretRequired="false"    #삽입
```