

Apache Module mod_proxy_balancer

mod_proxy_balancer requires the service of **mod_proxy**, and it provides load balancing for all the supported protocols.

mod_proxy_balancer has following scheduling algorithm

- mod_lbmethod_byrequests
- mod_lbmethod_bytraffic
- mod_lbmethod_bybusyness
- mod_lbmethod_heartbeat

Followings are the example of a balancer configuration:

```
<Proxy "balancer://mycluster">
    BalancerMember "http://192.168.1.50:80"
    BalancerMember "http://192.168.1.51:80"
</Proxy>
ProxyPass          "/test" "balancer://mycluster"
ProxyPassReverse   "/test" "balancer://mycluster"
```

Followings are another example of balancer configuration:

```
<VirtualHost *:80>
    ServerName cdn.foo.net

    ProxyRequests    Off
    ProxyVia         Off
    ProxyPreserveHost On

    <Proxy *>
        Require all granted
    </Proxy>

    <Proxy balancer://mycluster>
        BalancerMember http://192.168.10.7:80 route=1 connectiontimeout=1
        BalancerMember http://192.168.10.8:80 route=2 connectiontimeout=1

        ProxySet lbmethod=byrequests
        ProxySet stickysession=ROUTEID
    </Proxy>
    ProxyPass          "/" "balancer://mycluster"
    ProxyPassReverse   "/" "balancer://mycluster"

    DocumentRoot "/pub/cdn.qsok.com/"
    CustomLog /var/log/httpd/cdn.its-newid.net-access.log combined
    ErrorLog /var/log/httpd/cdn.its-newid.net-error.log
</VirtualHost>
```

If you encounter errors like below in case that you use PHP combined with Apache, you will need to use other configuration. Probably you may not able to get any session data from your client.

Internal Server Error

The server encountered an internal error or misconfiguration and was unable to complete your request.

Please contact the server administrator at chunkang@ to inform them of the time this error occurred, and the actions you performed just before this error.

More information about this error may be available in the server error log.

Below configuration will enable you to use your PHP codes as designed.

```
<VirtualHost *:80>
    ServerName cdn.foo.net

    ProxyRequests    Off
    ProxyVia         Off
    ProxyPreserveHost On

    <Proxy *>
        Require all granted
    </Proxy>

    ProxyPass        /balancer-manager      !
    ProxyPass        /          balancer://mycluster/    stickysession=BALANCEID nofailover=On
    ProxyPassReverse  /          http://192.168.10.7:80
    ProxyPassReverse  /          http://192.168.10.8:80
    <Proxy balancer://mycluster>
        BalancerMember http://192.168.10.7:80    route=1 connectiontimeout=1
        BalancerMember http://192.168.10.8:80    route=2 connectiontimeout=1
        ProxySet lbmethod=byrequests
    </Proxy>

    <Location /balancer-manager>
        SetHandler balancer-manager
        Order deny,allow
        Allow from all
    </Location>

    DocumentRoot "/pub/cdn.qsok.com/"
    CustomLog /var/log/httpd/cdn.its-newid.net-access.log combined
    ErrorLog /var/log/httpd/cdn.its-newid.net-error.log
</VirtualHost>
```