# **Nginx**

## Nginx安装

```
1 #单体
2 docker run -d -p 8090:80 -v
    /home/nginx/:/var/log/nginx/ \
3 -v
    /home/nginx/config/nginx.conf:/etc/nginx/nginx.con
    f --name nginx nginx
4 #单体 监听多个端口号
5 docker run -d -p 8000:80 -p 8080:90 -v
    /home/nginx/:/var/log/nginx/ -v
    /home/nginx/config/nginx.conf:/etc/nginx/nginx.con
    f --name nginx nginx
6
7 ps aux|grep nginx
8
```

##

# 配置实例\_反向代理1

```
worker_processes 1;
events {
    worker_connections 1024;
}

http {
    include mime.types;
```

```
default_type application/octet-stream;
 8
 9
10
       sendfile
11
                        on;
12
       #tcp_nopush
                        on;
13
       #keepalive_timeout 0;
14
15
       keepalive_timeout 65;
16
17
       #gzip on;
18
19
        server {
20
            listen
                         80;
            server_name localhost;
21
22
23
            location / {
24
               proxy_pass https://www.baidu.com;
25
               expires 3m;
26
            }
27
                                           /404.html;
28
           #error_page 404
29
30
           # redirect server error pages to the
   static page /50x.html
31
            #
           error_page 500 502 503 504 /50x.html;
32
           location = /50x.html {
33
                       html;
34
                root
            }
35
36
37
38
       }
39
40
41
42 | }
```

## 配置实例\_反向代理2

```
1
 2
   worker_processes 1;
 3
   events {
       worker_connections 1024;
 4
 5
   }
 6
 7
 8
   http {
 9
       include mime.types;
       default_type application/octet-stream;
10
11
       sendfile
                       on:
12
       #tcp_nopush
                       on;
13
       #keepalive_timeout 0;
14
       keepalive_timeout 65;
15
       #gzip on;
16
       server {
17
           listen
                         80;
18
           server_name localhost;
19
20
           location / {
              proxy_pass https://blog.csdn.net;
21
22
              expires 3m;
23
24
           #http://localhost/a/
25
            location ~/a/ {
26
               # 设定请求转发的地址
   https://www.baidu.com/a
               # 192.68.1.201/a/ ...jgp
27
             proxy_pass https://www.baidu.com;
28
29
           }
30
           location ~/b/ {
               # 设定请求转发的地址
31
   https://www.cnblogs.com/b
32
                # 192.68.1.202/b/ ....html.doc
```

```
proxy_pass https://www.cnblogs.com;
33
           }
34
35
36
           #error_page 404
                                          /404.html;
37
38
           # redirect server error pages to the
   static page /50x.html
39
           error_page 500 502 503 504 /50x.html;
40
           location = /50x.html {
41
42
                root html;
43
           }
44
45
46
       }
47
48
49 }
50
```

# 配置实例\_反向代理3

```
1
   worker_processes 1;
 3
   events {
 4
       worker_connections 1024;
 5
   }
 6
 7
   http {
 8
       include
9
               mime.types;
       default_type application/octet-stream;
10
11
12
13
       sendfile
                       on;
14
       #tcp_nopush
                       on;
```

```
15
       #keepalive_timeout 0;
16
       keepalive_timeout 65;
17
18
19
       #gzip on;
20
21
       server {
22
            listen
                         80;
23
            server_name localhost;
24
25
            location / {
26
               proxy_pass https://blog.csdn.net;
27
               expires 3m;
28
            }
29
                                           /404.html;
            #error_page 404
30
           # redirect server error pages to the
31
   static page /50x.html
32
            #
33
            error_page 500 502 503 504 /50x.html;
34
           location = /50x.html {
35
                     html;
                root
36
            }
37
38
39
       }
40
   server {
41
            listen
                         90;
42
            server_name localhost;
43
            location / {
44
               proxy_pass https://www.baidu.com;
45
            }
46
47
            #error_page 404
                                           /404.html;
48
49
           # redirect server error pages to the
   static page /50x.html
```

```
50
            error_page 500 502 503 504 /50x.html;
51
52
            location = /50x.html {
53
                root
                       html;
            }
54
55
56
57
       }
58
59 }
60
```

### 配置实例\_负载均衡

#### 轮询

```
1 worker_processes 1;
 2
   events {
       worker_connections 1024;
   }
 4
 5
 6
 7
   http {
 8
       include mime.types;
       default_type application/octet-stream;
 9
10
11
12
       sendfile
                        on;
       #tcp_nopush
13
                        on;
14
15
       #keepalive_timeout 0;
       keepalive_timeout 65;
16
17
18
       #gzip on;
19
20
       upstream myserver{
```

```
21
           server 192.168.3.201:8080;
22
           server 192.168.3.201:8081;
23
           }
       server {
24
25
                   80;
           listen
26
           server_name localhost;
27
           location / {
28
              proxy_pass http://myserver;
29
30
           }
31
32
                                          /404.html;
           #error_page 404
33
34
           # redirect server error pages to the
   static page /50x.html
35
           #
           error_page 500 502 503 504 /50x.html;
36
           location = /50x.html {
37
               root html;
38
39
           }
40
41
42
       }
43
44
45
46 }
```

#启动验证

```
1 #构建镜像
 2 docker build -t nginx_webapi .
 3
  #启动项目
4 docker run -d -p8080:80 -v
   /home/nginx/Zhaoxi.WebApi/8080/appsettings.json:/
   app/appsettings.json --name
  nginx_webapi8080 nginx_webapi
 6 #启动项目
  docker run -d -p8081:80 -v
   /home/nginx/Zhaoxi.WebApi/8081/appsettings.json:/
   app/appsettings.json --name nginx_webapi8081
   nginx_webapi
 8
 9
   ###http://192.168.3.201:8090/get
10
```

### weight权重

可以给每一台服务器设置一个权重,这样权重高的干的活也就会多一点

```
1  upstream myserver{
2     server 192.168.3.201:8080 weight=5;
3     server 192.168.3.201:8081 weight=10;
4  }
```

#### ip\_hash

这种方式是基于客户端的ip地址,采用hash算法计算下一个请求要选择哪一个服务器,这样固定的ip会访问同一个服务器,可以解决session问题

```
1
2  upstream myserver{
3     ip_hash;
4     server 192.168.3.201:8080;
5     server 192.168.3.201:8081;
6  }
```

#### least\_conn最少链接

会将下一个请求分发到当前链接数最少的一台服务器

```
1 upstream myserver {
2     least_conn;
3     server 192.168.3.201:8080;
4     server 192.168.3.201:8081;
5  }
```

#### fair

按后端服务器的响应时间来分配请求,响应时间短的优先分配。

```
1 upstream myserver {
2     fair;
3     server 192.168.3.201:8080;
4     server 192.168.3.201:8081;
5     }
6
```

#### url\_hash

按访问url的hash结果来分配请求,使每个url定向到同一个后端服 务器

资源集群服务器,缓存文件,文件存储在第三发服务,则可以缓存到本 地服务器

```
1 upstream myserver {
2    hash $request_uri;
3    server squid1:3128;
4    server squid2:3128;
5 }
```

# Nginx 配置实例-动静分离

```
1 worker_processes
                     1;
 2
  events {
 3
       worker_connections 1024;
 4
   }
 5
 6
 7
   http {
       include mime.types;
 8
       default_type application/octet-stream;
9
10
11
12
       sendfile
                       on;
13
       #tcp_nopush on;
14
       #keepalive_timeout 0;
15
       keepalive_timeout 65;
16
17
18
       #gzip on;
19
20
       server {
21
           listen
                  80:
           server_name localhost;
22
23
24
           location / {
25
              proxy_pass https://www.baidu.com;
26
              expires 3m;
27
           }
            location /www/ {
28
```

```
root /data/;
29
30
               index index.html index.htm;
31
            }
32
            location /image/ {
33
               root /data/;
               autoindex on;
34
35
           }
36
37
                                          /404.html;
           #error_page 404
38
39
           # redirect server error pages to the
   static page /50x.html
           #
40
41
           error_page 500 502 503 504 /50x.html;
42
           location = /50x.html {
                root html;
43
           }
44
45
46
47
       }
48
49
50
51 }
```