

Workshop 11: Squid

1. Basic Installation Squid

```
#yum install squid
# rpm -q squid
# vim /etc/squid/squid.conf
Add Line #3007: visible_hostname localhost.localdomain
# service squid start
# chkconfig squid on
```

2. Basic ACL (Squid): Allow local network to access the Cache Server:

```
# vim /etc/squid/squid.conf
Line 632: acl our_networks src 192.168.0.0/24
Line 633: http_access allow our_networks

# Service squid restart
```

open a sample url on firefox : www.yahoo.com & count ...

Firefox: Edit-> Preferences -> Advanced -> Network -> Manual Proxy
Address IP: 127.0.0.1 Port: 3128
Use This Proxy server for all... -> checked

clean cache firefox & restart the application!

open the same url again : www.yahoo.com and count again

3. Performance tuning squid (Storage, Memory, Objects/Packets)

```
# vim /etc/squid/squid.conf
Line 1579: cache_mem 128 MB
Line 1588: maximum_object_size_in_memory 256 KB
Line 1786: cache_dir aufs /var/spool/squid 100000 16 256
Line 1825: maximum_object_size 50 MB
# service squid restart
```

4. Transparent cache (iptables NAT, redirect)

Step1:
Running the server as a router

Step 2:
iptables -t nat -A PREROUTING -p tcp --dport 80 -j REDIRECT --to 3128
iptables-save > /etc/sysconfig/iptables
vim /etc/squid/squid.conf:
Line 921: http_port 3128 transparent
service squid restart

5. Squid logging:

Part 1:

Step1: Default Directory

```
# cd /var/log/squid
```

Step2:

Check errors and debugging information

```
# tail -f cache.log
```

```
# /etc/init.d/squid restart
```

Step3:

Check access log information (main user log file)

```
# tail -f access.log
```

Browse a website from a client connected to squid server.

```
# firefox www.msn.com
```

Access.log fileds:

1. Request_Time (Unix Epoch)
2. Elapsed_time(ms) of page/object delivery
3. Remotehost(IP)
4. Code(squid actions)/status(http errors)
5. Bytes delivered to client
6. Method (Get/Post/Connect)
7. URL
8. IDENT
9. hierarchy (Direct/IP)
10. Type (MIME)

Step4:

check store log (store objects in cache)

```
# tail -f store.log
```

Store.log fileds:

1. Time
2. action (Release, Create, Swapout, Swapin)
3. file number (Location on disk /var/spool/squid)
4. HTTP status
5. HTTP Date
6. Last Modified
7. Expiration of content
8. MIME status
9. Size of content_length/actual size read
10. Method (Get/Post/Connect)
11. URL