

Computer Systems Administration (IE2060) 2nd Year, 2nd Semester

Assignment

Firewall configurations Submitted to Sri Lanka Institute of Information Technology

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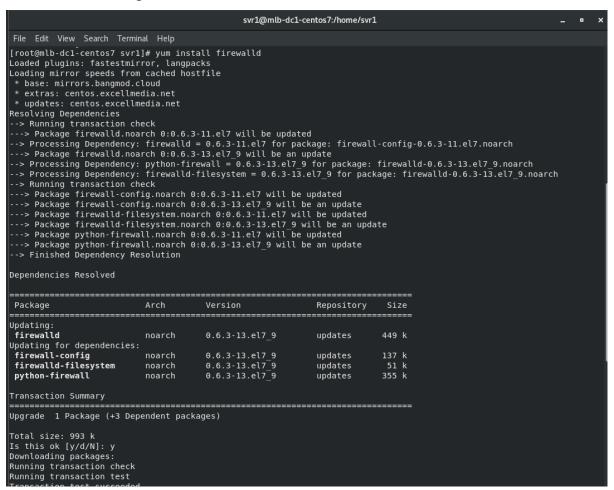
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1. Installing Firewall



2. Enable firewall

```
Complete!
[root@mlb-dc1-centos7 svr1]# systemctl enable firewalld
[root@mlb-dc1-centos7 svr1]#
```

3. Check firewall state

```
[svr1@mlb-dc1-centos7 ~]$ firewall-cmd --state
running
```

4. Copping forward.csa.lk zone to user created zones from named

```
[root@mlb-dc1-centos7 zones]# cd /var/named
[root@mlb-dc1-centos7 named]# ls -al
total 48
rw-r--r-. 1 root root
                           335 Oct 13 11:01 :
drwxrwx--T. 8 root named 4096 Oct 22 22:14
drwxr-xr-x. 23 root root
                          4096 Oct 20 18:58
drwxr-x---. 7 root named
                            61 Sep 6 04:19 chroot
drwxr-x---. 7 root named
                            61 Sep 6 04:19 chroot sdb
                            0 Oct 13 05:00 csa.lk
-rw-r--r--. 1 root root
drwxrwx---. 2 named named
                            75 Oct 20 19:26 data
                            60 Oct 17 22:26 dynamic
drwxrwx---. 2 named named
                           6 Mar 31 2020 dyndb-ldap
drwxrwx---. 2 root named
-rw-r--r-. 1 root root 280 Oct 22 22:08 forward.csa.lk
-rw-r--r--. 1 root root 12288 Oct 20 03:29 .forward.csa.lk.swp
-rw-r----. 1 root named 2253 Apr 5 2018 named.ca
                            0 Oct 13 05:02 named-checkzone
rw-r--r--. 1 root root
rw-r----. 1 root named 152 Dec 15 2009 named.empty
rw-r----. 1 root named
                         152 Jun 21 2007 named.localhost
rw-r----. 1 root named 168 Dec 15 2009 named.loopback
rw-r--r--. 1 root root 335 Oct 20 02:49 reverse.csa.lk
                            0 Oct 20 03:18 REVERSE.csa.lk
-rw-r--r--. 1 root root
                            6 Feb 23 2022 slaves
drwxrwx---. 2 named named
[root@mlb-dc1-centos7 named]# cp reverse.csa.lk /etc/firewalld/zones
[root@mlb-dc1-centos7 named]# cp forward.csa.lk /etc/firewalld/zones
```

5. Checking available zones on user created zones

```
[root@mlb-dc1-centos7 named]# cd /etc/firewalld/zones
[root@mlb-dc1-centos7 zones]#
[root@mlb-dc1-centos7 zones]#
[root@mlb-dc1-centos7 zones]# ls -al
total 16
drwxr-x---. 2 root root 90 Oct 22 22:28 .
drwxr-x---. 7 root root 133 Oct 21 01:48 ..
-rw-r--r--. 1 root root 280 Oct 22 22:28 forward.csa.lk
-rw-r--r--. 1 root root 421 Oct 20 19:09 public.xml
-rw-r--r--. 1 root root 385 Oct 20 19:09 public.xml.old
-rw-r--r--. 1 root root 335 Oct 22 22:28 reverse.csa.lk
[root@mlb-dc1-centos7 zones]#
```

6. Adding ports to the firewall

```
[root@mlb-dc1-centos7 zones]# firewall-cmd --permanent --add-port=636/tcp
success
[root@mlb-dc1-centos7 zones]# firewall-cmd --permanent --add-port=161/tcp
success
[root@mlb-dc1-centos7 zones]# firewall-cmd --permanent --add-port=50000/tcp
success
[root@mlb-dc1-centos7 zones]# firewall-cmd --permanent --add-service=http
success
```

7. Adding https to firewall

```
[root@mlb-dc1-centos7 zones]# firewall-cmd --permanent --add-service=https
success
```