

```
ciscoasa(config)#interface gigabitEthernet 1/1
ciscoasa(config-if)#nameif inside
ciscoasa(config-if)#security-level 100
ciscoasa(config-if)#ip address 192.168.10.1 255.255.255.0
ciscoasa(config-if)#no shut
```

```
ciscoasa(config)#interface gigabitEthernet 1/2
ciscoasa(config-if)#nameif outside
ciscoasa(config-if)#security-level 0
ciscoasa(config-if)#ip address 172.16.20.1 255.255.255.0
ciscoasa(config-if)#no shut
```

```
ciscoasa(config)#interface gigabitEthernet 1/3
ciscoasa(config-if)#nameif dmz
ciscoasa(config-if)#security-level 50
ciscoasa(config-if)#ip address 172.20.30.1 255.255.255.0
ciscoasa(config-if)#no shut
```

inside network pc -> ip : 192.168.10.100/24

-> gateway : 192.168.10.1/24

outside network pc -> ip : 172.16.20.112/24

-> gateway : 172.16.20.1/24

dmz ssh server -> ip : 172.20.30.100/24

-> gateway : 172.20.30.1/24

-----configure dmz with a mapped static ip for outside-----

```
ciscoasa(config)#object network dmz-real-server
```

```
ciscoasa(config-network-object)#host 172.20.30.100
```

```
ciscoasa(config-network-object)#nat (dmz,outside) static 172.20.30.3
```

-----allow ssh access from outside to the dmz mapped host-----

```
ciscoasa(config)#access-list out2dmztcpssh extended permit tcp any object dmz-real-server eq 22
```

```
ciscoasa(config)#access-group out2dmztcpssh in interface outside
```

-----allow ssh access from dmz to inside host-----

```
ciscoasa(config)#access-list dmz2insidetcps ssh extended permit tcp object dmz-real-server host 192.168.10.100 eq 22
```

```
ciscoasa(config)#access-group dmz2insidetcps ssh in interface dmz
```

3) By the NAT rules when any outside host try to access the DMZ ssh server, it goes through the 172.20.30.3 ip, which is mapped to 172.20.30.100 (real ip address of ssh server) at the dmz interface.

Then from the out2dmztcpssh ACL rule it allows **only the tcp ssh traffic** from outside, to access the dmz ssh server. So it is declared in the outside interface.

From dmz2insidetcps ssh ACL rule it **only allows tcp ssh traffic** from **one host** which is 172.20.30.100 (DMZ ssh server) to access the **only one inside host** which is 192.168.10.100 (inside ssh host).

Here I have not declared any ACL rule connected with inside and outside network, so the default rules are applied. Because of that outside network cannot access the inside network directly through ssh or any other method.

If outside network want to access the inside network through ssh, first they have to log in to the DMZ ssh server and from that log in to the inside ssh service. So outside network can access only ssh service of inside network indirectly.