

Packet Tracer command list 2012

Radius Authentication default login setup

```
aaa new-model  
aaa authentication login default group radius  
radius-server host <IP> auth-port 1645 key Cisco
```

SSH

```
<set hostname>  
ip domain-name cisco.com  
crypto key generate rsa  
ip ssh version 2  
line vty 0 4  
transport input ssh  
SSH from host command line: ssh -l <username> <IP address>
```

Site-to-site VPN

```
crypto isakmp enable  
crypto isakmp policy 10  
encryption aes 256  
authentication pre-share  
group 5  
lifetime 3600  
  
crypto isakmp key VPNKEY address <outside public IP of remote site>  
  
crypto ipsec transform-set MYTRANS esp-aes 256 esp-sha-hmac  
  
crypto map MYMAP 1 ipsec-isakmp  
set peer <outside public IP of remote site>  
set transform-set MYTRANS  
match address AAA  
  
ip access-list extended AAA  
permit ip <source network> <source wildcard mask> <destination network> <destination wildcard mask>  
  
troubleshoot:  
show crypto isakmp sa  
show crypto ipsec sa
```

CBAC (inspect) ICMP example

Create block for incoming traffic

```
ip access-list extended lockout
deny icmp any any
```

Apply to outer interface, inbound

```
interface fa0/x
ip access-group lockout in
```

Create inspection rule to allow ICMP requests from the inside

```
ip inspect name ICMP icmp
```

Apply to inner interface, inbound or outbound depending on situation

```
interface fa0/x
ip inspect ICMP in
```

Debug inspected ICMP traffic

```
debug ip inspect protocol icmp
```

NTP

```
ntp server <NTP Server IP>
ntp authentication-key <x> md5 <password>
ntp update-calendar
ntp authenticate
ntp trusted-key
```

Syslog

```
logging <Syslog Server IP>
logging trap <trap type>
logging on
logging userinfo
logging console
logging buffered
```

Passwords

```
enable password cisco
enable secret cisco (encrypted)
service password-encryption (global)
line con 0 (console)
password cisco
line vty 0 4 (vty connections)
password cisco
```

Local authentication

```
username user password cisco  
line vty 0 4  
login local
```

Layer 2 security

```
storm-control  
switchport port-security  
switchport port-security mac-address  
switchport port-security maximum  
switchport port-security violation  
switchport nonegotiate  
  
switchport mode access  
switchport mode trunk
```