# CCNAv7 Introduction to Networks & Security IOS Commands

## Basic Commands

Log into device

Router> enable

Router# disable

Router> enable

Router# configure terminal

Router(config)# hostname R1

R1(config)# no ip domain-lookup

R1 (config)# line console 0

R1(config)# line console 0

R1(config-line)# password cisco

R1(config-line)# login

R1(config-line)# logging sync

R1 (config-line) # line vty 0 15

R1(config-line)# password cisco

R1(config-line)# login

R1(config-line)# exit

R1(config)# enable secret class

R1(config)# enable password notsogood

R1(config)# service password-encryption

R1(config)# banner login #Authorised Personnel Only!#

R1(config)# banner motd “Device maintenance will take place on Friday”

R1(config)# ipv6 unicast-routing (to enable ipv6 routing)

R1(config)# exit

R1# show running-config

R1# show startup-config

R1# copy running-config startup-config

## Resetting Routers/Switches

Switch# show flash

Switch# delete vlan.dat

Switch# *do you want to do this(confirm)*

Switch# erase startup-config

Switch# *do you want to do this(confirm)*

Switch# reload

## Configuring Interfaces

Switch(config)# interface vlan1

Switch(config-if)# description Solent JM406 Lab

Switch(config-if)# ip address 192.168.1.99 255.255.255.0

Switch(config-if)# no shut

Switch(config-if)# exit

Switch(config)# ip default-gateway 192.168.1.1

Router(config)# interface g0/0

Router(config-if)# description Connection to LAN Switch

Router(config-if)# ip address 192.168.1.1 255.255.255.0

Router(config-if)# ipv6 address 2001:db8:acad:a::1/64

Router(config-if)# ipv6 address fe80::1 link-local

Router(config-if)# no shut

## Show Commands

R1# show ip|ipv6 interface

R1# show ip|ipv6 interface brief

R1# show ip|ipv6 route

R1# show interfaces

R1# show interfaces *interface-type interface-number*

R1# ping *address*

R1# ping (press enter for extended ping)

R1# traceroute *address*

R1# traceroute (press enter for extended ping)

R1# show ip ports all

R1# show control-plane host open-ports

R1# show arp

R1# show protocols

R1# show version

## Device Security Commands

R1# auto secure

R1(config)# security passwords min-length *number of characters*

R1(config)# login block-for *seconds* attempts *number* within *seconds*

R1(config)# line console 0

R1(config-line)# exec-timeout *mins secs*

R1(config-line)# exit

R1(config)# ip domain-name *name of domain*

R1(config)# ip ssh version 2

R1(config)# username *name* privilege *level* secret *password*

R1(config)# crypto key generate rsa (packet tracer)

R1(config)# line vty 0 15

R1(config-line)# transport input ssh |telnet |ssh telnet |none

R1(config-line)# login local

R1(config-line)# exit

## Management

R1# show cdp neighbors

R1# show cdp neighbors detail

R1# undebug all

R1# debug ip icmp

R1# ping *address*

R1# no debug ip icmp or R1# undebug ip icmp

## Remote monitoring

R1# telnet *address*

R2# debug ip icmp

R2# ping *address*

(No debug information seen)

R2# terminal monitor

R2# ping *address*

(Debug information seen)

R2# terminal no monitor

## Resetting Routers/Switches

Switch# show flash

Switch# delete vlan.dat

Switch# *do you want to do this(confirm)*

Switch# erase startup-config

Switch# *do you want to do this (confirm)*

Switch# reload

## HTTP Service

S1(config)# ip http authentication enable

S1(config)# ip http server