

## Liten oversikt over forskjellige steder man kan navigere seg rundt i inne på en switch eller ruter:

Mode	Symbol	How to access this mode	Command for leaving this mode
User EXEC Mode	Router >	Default mode after booting. Press enter for accessing this.	Use <b>exit</b> command
Privileged EXEC mode	Router #	Use <b>enable</b> command from user exec mode for entering into this mode	exit
Global Configuration mode	Router(config)#	Use <b>configure terminal</b> command from privileged exec mode	Exit or Ctrl+Z for user EXEC mode
Interface Configuration	Router(config-if)#	Use <b>interface &lt;interface name+number&gt;</b> command from global configuration mode	Use <b>exit</b> command to return in global mode

For å en liste over aktuelle interfaces kan man bruke **show ip interface brief**.

Fargekoding for hvor aktuell kommando er gyldig:

Router>

Router#

Router(config)#

Router(config-if)#

Grunnleggende kommandoer for å navigere seg rundt, skru av og på interfaces, lagre config osv:

Command	Purpose
<b>enable</b>	Logs you into enable mode, which is also known as user exec mode or privileged mode
<b>configure terminal</b>	Logs you into configuration mode
<b>interface</b> <i>type/number</i>	Enters interface configuration mode for the specified interface. Examples: interface fastEthernet 0/1 interface VLAN 1 interface Serial 0/0/0 interface gigabitEthernet 0/1
<b>reload</b>	An exec mode command that reboots a Cisco switch or router
<b>hostname</b> <i>name</i>	Sets a hostname on the current Cisco network device. Required for configuring SSH.

<b>copy</b> <i>from-location to-location</i>	An enable mode command that copies files from one file location to another
<b>copy running-config startup-config</b>	An enable mode command that saves the active config, replacing the startup config when a Cisco network device initializes
<b>copy startup-config running-config</b>	An enable mode command that merges the startup config with the currently active config in RAM
<b>write erase</b>	An enable mode command that deletes the startup config
er	
<b>erase startup-config</b>	
<b>ip address</b> <i>ip-address mask</i>	Assigns an IP address and a subnet mask

<b>ipv6 unicast-routing</b>	Enables IPv6 on the current device.
<b>ipv6 address</b> <i>ipv6 address/prefix</i>	Assigns the IPv6 address and prefix on the interface.
<b>ipv6 address</b> <i>ipv6 address/prefix</i> <b>link-local</b>	Assigns the IPv6 address and prefix on the interface as a link-local address.
<b>shutdown</b>	Used in interface configuration mode. "Shutdown" shuts down the interface, while "no shutdown" brings up the interface.
<b>no shutdown</b>	
<b>ip default-gateway</b> <i>ip_address</i>	Sets the default gateway on a Cisco device. In the labs, this is <b>mostly used on switches</b> .
<b>no ip domain-lookup</b>	Disables DNS lookup, typically seen when "Translating ...." appears after a mistake.
<b>ip domain-name</b> <i>domain</i>	Sets the domain name. Required for configuring SSH. Example: cisco.net, lab.com, etc...
<b>show running-config</b>	An enable mode command that displays the current configuration

<b>description</b> <i>name-string</i>	A config interface command to describe or name an interface
<b>show running-config interface</b> <i>interface slot/number</i>	An enable mode command to display the running configuration for a specific interface
<b>show ip interface</b> <i>[type number]</i>  <b>show ip interface brief</b>	Displays the usability status of interfaces that are configured for IP.  Shows a summary of all interfaces with their status and configured address.

## Konfigurasjon av ruter, inspeksjon av ruting tabell og lignende:

<b>ip route</b> <i>network-number network-mask {ip-address   interface}</i>	Sets a static route in the IP routing table
<b>show ip route</b>	Shows the routing table on the current device

## Sikkerhetsrelaterte kommandoer:

<b>password</b> <i>pass-value</i>	Sets the password that is required if the login command (with no other parameters) is configured
<b>login</b>	Activates the password above, so that it is requested on login.
<b>login local</b>	Activates locally configured username and password instead (see below).

<b>exec-timeout</b> <i>number in minutes</i>	Sets the timeout for inactive users.
<b>username</b> <i>name password pass-value</i>	A global command that defines one of possibly multiple user names and associated passwords used for user authentication. It is used when the <b>login local</b> line configuration command has been used.
<b>enable password</b> <i>pass-value</i>	A configuration mode command that defines the password required when using the <b>enable</b> command. Less secure than the <b>enable secret</b> command, and it is recommended to use the <b>enable secret</b> command instead.
<b>enable secret</b> <i>pass-value</i>	A configuration mode command that sets this Cisco device password that is required for any user to enter enable mode. <b>Replaces the enable password</b> command if used.
<b>service password-encryption</b>	A configuration mode command that directs the Cisco IOS software to encrypt the passwords, CHAP secrets, and similar data saved in its configuration file
<b>ip domain-name</b> <i>name</i>	Configures a DNS domain name. <b>Must be set to activate SSH.</b>
<b>crypto key generate rsa</b> <i>modulus bits</i>	A configuration mode command that creates and stores the keys that are <b>required by SSH.</b>
<b>transport input</b> <i>{telnet   ssh}</i>	Used in vty line configuration mode, defines whether Telnet or SSH access is allowed into this switch. Both values can be specified in a single command to allow both Telnet and SSH access (default settings).
<b>ip ssh version 2</b>	Set the running SSH version to v2.
<b>security passwords min-length</b> <i>minimum password characters {0-16}</i>	Sets the minimum password length to the selected number of characters.
<b>login block-for</b> <i>seconds</i> <b>attempts</b> <i>number</i> <b>within</b> <i>seconds</i>	Sets the number of seconds to block new login attempts for, after x failed attempts within y seconds.