CHEATSHEET v0.2

- You do not always need to enter a full command. If there is no ambiguity, it will understand it. (**conf t** == **configure terminal**, **copy running-config startup-config** == **copy r s** etc)
- If you do not know the command, you can always use "**?**" question mark to see available commands and their brief explanation. Long and difficult ones become easier with using "**?**".
- To cancel any command you can use "no" (no hostname, no ip address etc). (Does not work for some commands)
- Use the Question Mark (?) to Display On-Screen Command Help
- Complete a Partial Command with the Tab Key (conf<Tab> -> configure)
- UP arrow and DOWN arrow keys are available (see previous commands as in terminal of Ubuntu or cmd)
- **Ctrl-A** to return directly to the beginning of the line. **Ctrl-E** Move cursor to the end of the line
- **Ctrl-U** to Delete the whole line. **Ctrl-W** to Delete the word to the left from the cursor.
- **Ctrl-K** Erase characters from the cursor to end of the line. **Ctrl-X** Erase characters from the cursor to beginning of the line. **Ctrl+Shift+6** disturb redirecting, networking or any other process that takes much time.

The short hand commands are shown in the brackets. **Angle brackets are not included to the command**.

Enable (en) – move from User Exec mode to Priv Exec mode

Configure terminal (conf t) – move from Priv Exec mode to global configuration mode

Exit – move one step back to previous mode

End – move two steps back (like from interface mode to Priv Exec mode)

copy running-config startup-config (copy r s) – save current configuration to NVRAM (a device will boot with our configs)

hostname <name> - Assign a name of a device

banner motd "….." - Configure a message of the day (MOTD) banner (Showed when accessing device's configurations)

enable secret <…> - Configure an encrypted password to secure access to privileged mode.

interface gigabitEthernet 0/0 (g0/0) or **fastEthernet 0/13 (f0/13)** – selecting an interface to configure

ip address (ip add) <x.x.x.x> <y.y.y.y> - setting an ip address(x.x.x.x) with a subnet mask y.y.y.y (in interface mode)

no shutdown – turn on the interface (change status to up) (in interface mode)

description <….> - set up a specific description for an interface (in interface mode)

line console 0 (lin con 0) – entering a primary terminal (console) line

password <…> - set a password to a console line (in console line mode and vty interfaces)

login – enable password checking for a console line (in console line mode and vty interfaces)

line vty 0 15 – enters a VirtualTeletYpe interface (for remote connection) (range is 0-15, usually we will need 0-5)

login local - require the local user profiles when connecting remotely

transport input ssh – activate connection on ssh protocol (in vty interface)

transport input telnet – activate connection on telnet protocol (in vty interface)

service password-encryption – encrypt system passwords (global configuration mode)

show running-config (show run) – show detailed current configuration operations (priv exec mode)

show interfaces – show detailed information about statuses of the interfaces

show ip interface brief (show ip int br) – brief summary of IP status and configuration of interfaces

ip default-gateway <…> - configure the default gateway address on switch

ipv6 address <…>/64 – configure Ipv6 address on an interface

ipv6 address <> link local – configure link local address for an interface (used as a gateway address in IPv6 addressing and for neighbor discovery) (this address is usually taken from FE80::/10 range)

ip dhcp excluded-address <start ip> <end ip> - range of ip addresses that are not distributed by the DHCP server

ip dhcp pool <name> - creates a pool with specified name. Also enters to dhcp-config mode.

network <network address> <subnet mask> - identify the range of available ip addresses that DHCP server can distribute (available from dhcp-config mode)

default-router <ip address> - define the default gateway router. Typically, the gateway is the LAN interface of the router closest to the client devices

dns-server <ip address> - address of the DNS server that is available to a DHCPv4 client