# Lab 1.1 – Príprava – premazanie

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# Topo



# Požadované kroky

* Rozdelenie do skupín po dvoch na topo, každý ma DLS/ALS dvojicu
* Nakáblovania a zapojenie
* Lab podľa labákov pre CCNP SWITCH v7,0 lab 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task** | **Konfigurácia** | | **Verifikácia** | |
| **Mazanie** | | | | |
| Na všetkých prepínačoch, treba reload | | | | |
| Zmaž init konfig | Erase startup-config  Or erase start | | Show startup | |
| Zmaž cert pre ssh/https | Delete /force multiple-fs | | Show flash ==> multiple-fs | |
| Zmaž vlan definície | Delete vlan.dat  No vlan XY | | Sh flash ==> vlan.dat  Sh vlan  Sh vlan brief | |
| **SDM** | | | | |
| Overenie čo používam |  |  | | Show sdm prefer |
| Overenie čo dané sdm ponúka |  |  | | Sh sdm prefer MENO\_TEMPLATE |
| Nstavenie sdm | DLS1/DLS2  (config)#sdm prefer dual-ipv4-and-ipv6 routing  reload | ALS1/LAS2  (config)#sdm prefer lanbase-routing  reload | | Sh sdm prefer |
| **Inicializácia a mazanie** | | | | |
| Nastavenie init konfigu | hostname DLS1  ip domain-name CCNP.NET  no ip domain lookup  interface range f0/1-24 , g0/1-2  shutdown  exit  vtp mode transparent  line con 0  no exec-timeout  logging synchronous  exit  line vty 0 15  no login  login privilege 15  end | |  | |
| Nastavenie mazania: ideal pre každý switch spravit tclsh skript a spúšťať na začiatku labu | Tclsh skript or  Erase startup  Delete /force vlan.dat  Delete /force multiple-fs | |  | |

# Overenie cudzej konfigurácie – príkazy a listingy

Cudzí konfig sa dá zistiť:

* Prítomnosť startup konfigurácie
* Existencia definícií vlan (nie je v startup okrem extended vlan)
* Certifikáty pre HTTPS/SSH

## Overenie startup

Show startup

Ak existuje zmazať:

Erase startup

## Overenie certs

DLS1# **sh flash**

Directory of flash:/

2 -rwx 17629440 Mar 1 1993 00:15:59 +00:00 c3560-ipservicesk9-mz.150-2.SE8.bin

3 drwx 2560 Mar 1 1993 02:49:47 +00:00 tshoot

37 -rwx 556 Mar 1 1993 00:00:56 +00:00 vlan.dat

38 drwx 2048 Mar 1 1993 02:50:20 +00:00 tpp

63 -rwx 319 Mar 1 1993 00:58:29 +00:00 reset.tcl

64 -rwx 4120 Mar 1 1993 00:01:17 +00:00 multiple-fs

65 -rwx 1683 Mar 1 1993 00:01:17 +00:00 config.text

66 -rwx 1918 Mar 1 1993 00:01:17 +00:00 private-config.text

Zmazanie:

delete /force multiple-fs

Overenie:

Sh flash

## Overenie VLAN

Existencia vlan dat súboru vo flash:

DLS1# **sh flash**

Directory of flash:/

2 -rwx 17629440 Mar 1 1993 00:15:59 +00:00 c3560-ipservicesk9-mz.150-2.SE8.bin

3 drwx 2560 Mar 1 1993 02:49:47 +00:00 tshoot

37 -rwx 556 Mar 1 1993 00:00:56 +00:00 vlan.dat

38 drwx 2048 Mar 1 1993 02:50:20 +00:00 tpp

63 -rwx 319 Mar 1 1993 00:58:29 +00:00 reset.tcl

64 -rwx 4120 Mar 1 1993 00:01:17 +00:00 multiple-fs

65 -rwx 1683 Mar 1 1993 00:01:17 +00:00 config.text

66 -rwx 1918 Mar 1 1993 00:01:17 +00:00 private-config.text

Existencia definícií VLAN

Sh vlan

Zmazanie

Delete vlan,.dat

Po každej z predchádzajácich činností je potrebný reload.

# SDM templates

Overenie čo prepínač používa: default býva desktop

DLS1#show sdm prefer

The current template is "desktop IPv4 and IPv6 routing" template.

The selected template optimizes the resources in

the switch to support this level of features for

8 routed interfaces and 1024 VLANs.

number of unicast mac addresses: 1.5K

number of IPv4 IGMP groups + multicast routes: 1K

number of IPv4 unicast routes: 2.75K

number of directly-connected IPv4 hosts: 1.5K

number of indirect IPv4 routes: 1.25K

number of IPv6 multicast groups: 1.125k

number of IPv6 unicast routes: 2.75K

number of directly-connected IPv6 addresses: 1.5K

number of indirect IPv6 unicast routes: 1.25K

number of IPv4 policy based routing aces: 0.25K

number of IPv4/MAC qos aces: 0.5K

number of IPv4/MAC security aces: 0.5K

number of IPv6 policy based routing aces: 0.25K

number of IPv6 qos aces: 0.625k

number of IPv6 security aces: 0.5K

Čo dané sdm templates ponúka, napr. routing

DLS1#show sdm prefer routing

"desktop routing" template:

The selected template optimizes the resources in

the switch to support this level of features for

8 routed interfaces and 1024 VLANs.

number of unicast mac addresses: 3K

number of IPv4 IGMP groups + multicast routes: 1K

number of IPv4 unicast routes: 11K

number of directly-connected IPv4 hosts: 3K

number of indirect IPv4 routes: 8K

number of IPv6 multicast groups: 0

number of IPv6 unicast routes: 0

number of directly-connected IPv6 addresses: 0

number of indirect IPv6 unicast routes: 0

number of IPv4 policy based routing aces: 0.5K

number of IPv4/MAC qos aces: 0.5K

number of IPv4/MAC security aces: 1K

number of IPv6 policy based routing aces: 0

number of IPv6 qos aces: 20

number of IPv6 security aces: 25

tu nie je napr. Žiadna podpora ipv6

## Nastavenie sdm pre prepínače v topo:

DLS1(config)#sdm prefer ?

access Access bias

default Default bias

dual-ipv4-and-ipv6 Support both IPv4 and IPv6

routing Unicast bias

vlan VLAN bias

DLS1(config)# sdm prefer dual-ipv4-and-ipv6 routing

Reload

Finálne nastav:

* Pre 355x nastav: dual-ipv4-and-ipv6
* Pre 2960: lanbase-routing
* Pre 2950:

### A over:

Sh sdm prefer

# Príprava na premazávania a init konfig

## Init konfig – tclsh or N++

### Pre DLS1

Vytvoríme tclsh script ktorý do flash vytvorí súbor BASE.CFG, ten sa po premazaní skopíruje do running-config. Alternatíva j e pripraviť si tieto príkazy do text editora bez tclsh príkazov

Pozor na úvodzovky v príkaze open:

tclsh

puts [ open "flash:BASE.CFG" w+ ] {

hostname DLS1

ip domain-name CCNP.NET

no ip domain lookup

interface range f0/1-24 , g0/1-2

shutdown

exit

vtp mode transparent

line con 0

no exec-timeout

logging synchronous

exit

line vty 0 15

no login

privilege level 15

end

}

Tclquit

Potom po bootnuti

copy BASE.CFG running-config

## Mazanie - tclsh

### DLS1/DLS2:

tclsh

puts [ open "flash:reset.tcl" w+ ] {

typeahead "\n"

copy running-config startup-config

typeahead "\n"

erase startup-config

delete /force vlan.dat

delete /force multiple-fs

ios\_config "sdm prefer dual-ipv4-and-ipv6 routing"

typeahead "\n"

puts "Reloading the switch in 1 minute, type reload cancel to halt"

typeahead "\n"

reload in 1 RESET.TCL SCRIPT RUN

}

tclquit

### ALS1/ALS2:

tclsh

puts [ open "flash:reset.tcl" w+ ] {

typeahead "\n"

copy running-config startup-config

typeahead "\n"

erase startup-config

delete /force vlan.dat

delete /force multiple-fs

ios\_config "sdm prefer lanbase-routing"

typeahead "\n"

puts "Reloading the switch in 1 minute, type reload cancel to halt"

typeahead "\n"

reload in 1 RESET.TCL SCRIPT RUN

}

tclquit

Sputenie:

**tclsh reset.tcl**