# Dell Switch OS10 configuration

## Configure Remote Access

### Configure Management IP address

OS10(config)# interface mgmt 1/1/1

OS10(conf-if-ma-1/1/1)# no ip address dhcp

OS10(conf-if-ma-1/1/1)# ip address 10.1.1.10/24

OS10(conf-if-ma-1/1/1)# no shutdown

### Configure Management route

OS10(config)# management route 10.10.20.0/24 10.1.1.1

OS10(config)# management route 172.16.0.0/16 managementethernet [send traffic in all the subnet]

### Configure username and password

The user role is a mandatory entry. Enter the password in clear text. It is converted to SHA-512 format in the running configuration. A password must have at least nine characters, including alphanumeric and special characters, and at least five different characters from the password that is previously used for the same username

Passwords must be at least 9 chars length and supports these special characters 

OS10(config)# username admin password alpha404! role sysadmin

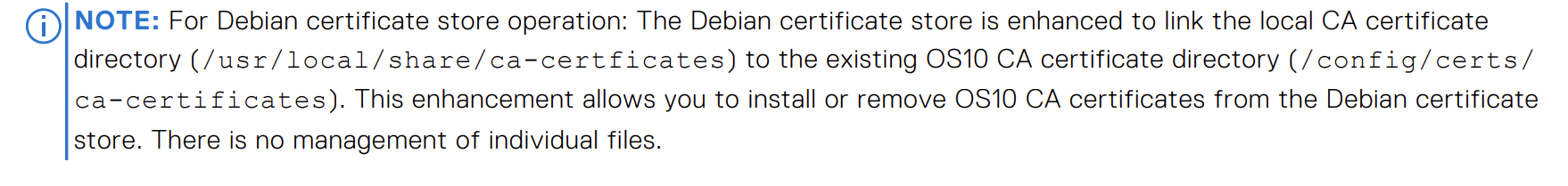
OS10(config)# username admin password alpha404! role sysadmin priv-lvl 10

#### To change a system administrator password, reenter the command for the administrator username with a new password.

OS10(config)# username admin password beta@1 role sysadmin

## HTTPS support for HTTP services

Https supports both self signed and third-party signed certificates



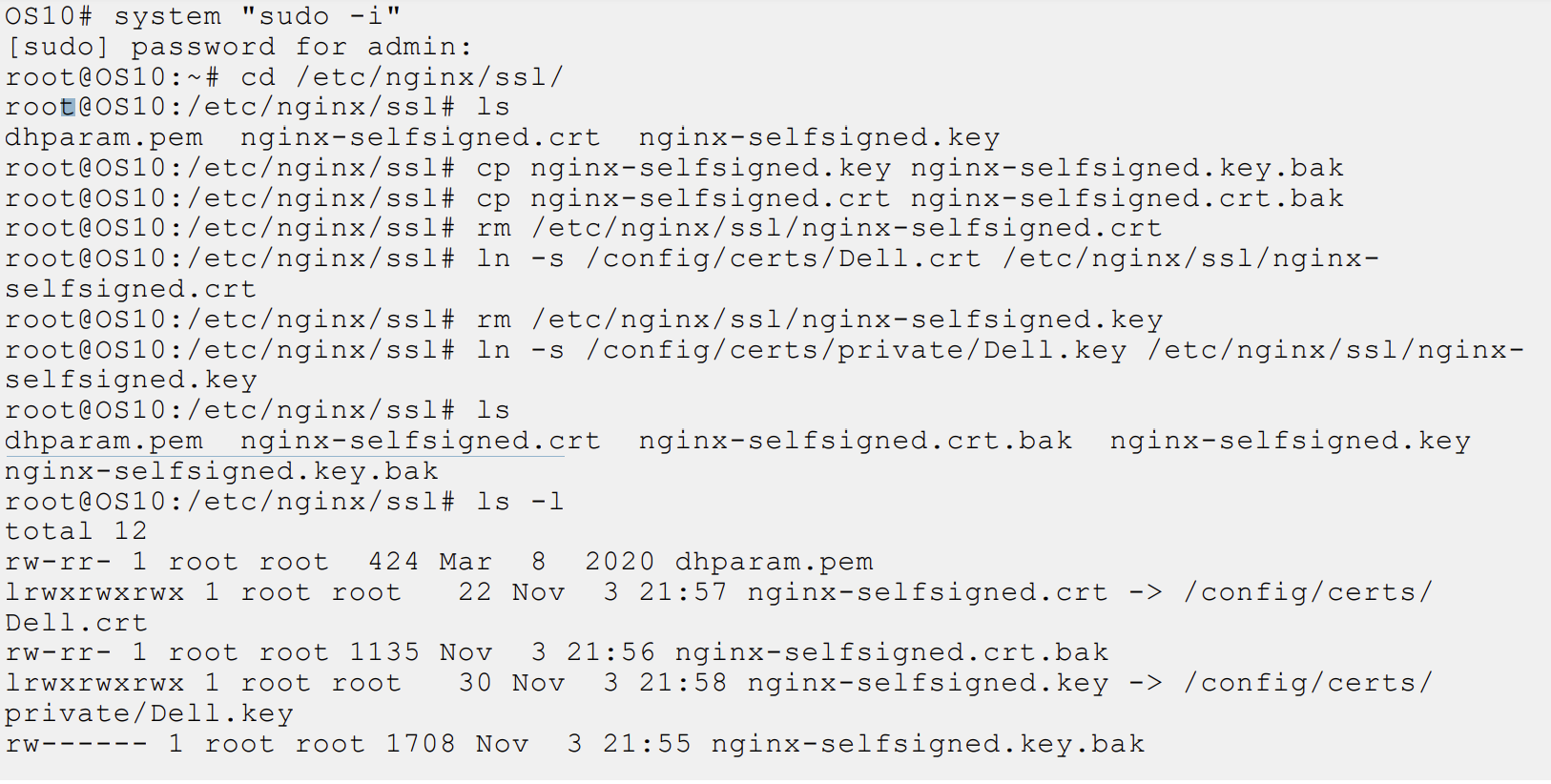
## Updating HTTP certificates

### Use the crypto cert generate command to create a self-signed certificate with a validity period of maximum 10 years.

OS10# crypto cert generate self-signed

Install the self-signed certificate that you have created using the crypto cert install command. OS10# crypto cert install cert-file home://Dell.pem key-file home://Dell.key

### Login into Linux shell and link the newly installed certificate and key



OS10# system "sudo -i"

[sudo] password for admin:

root@OS10:~# cd /etc/nginx/ssl/

root@OS10:/etc/nginx/ssl# ls

dhparam.pem nginx-selfsigned.crt nginx-selfsigned.key

root@OS10:/etc/nginx/ssl# cp nginx-selfsigned.key nginx-selfsigned.key.bak root@OS10:/etc/nginx/ssl# cp nginx-selfsigned.crt nginx-selfsigned.crt.bak root@OS10:/etc/nginx/ssl# rm /etc/nginx/ssl/nginx-selfsigned.crt root@OS10:/etc/nginx/ssl# ln -s /config/certs/Dell.crt /etc/nginx/ssl/nginxselfsigned.crt root@OS10:/etc/nginx/ssl# rm /etc/nginx/ssl/nginx-selfsigned.key root@OS10:/etc/nginx/ssl# ln -s /config/certs/private/Dell.key /etc/nginx/ssl/nginxselfsigned.key root@OS10:/etc/nginx/ssl# ls dhparam.pem nginx-selfsigned.crt nginx-selfsigned.crt.bak nginx-selfsigned.key nginx-selfsigned.key.bak root@OS10:/etc/nginx/ssl# ls -l total 12 rw-rr- 1 root root 424 Mar 8 2020 dhparam.pem lrwxrwxrwx 1 root root 22 Nov 3 21:57 nginx-selfsigned.crt -> /config/certs/ Dell.crt rw-rr- 1 root root 1135 Nov 3 21:56 nginx-selfsigned.crt.bak lrwxrwxrwx 1 root root 30 Nov 3 21:58 nginx-selfsigned.key -> /config/certs/ private/Dell.key rw------ 1 root root 1708 Nov 3 21:55 nginx-selfsigned.key.bak

### Check the nginx service status.

root@OS10:/etc/nginx/ssl# service nginx status

### Restart the nginx service.

root@OS10:/etc/nginx/ssl# service nginx restart

## Scheduled reload

All the scheduled reload commands runns in the EXEC mode

The Scheduled reload configuration is not retained after a switch reboot.

Changing the system time does not affect the scheduled reload time.

Scheduled reload is not performed when the scure boot feature is enabled and the startup configuration is not protected

Scheduled reload is not supported when zero touch deployment(ZTD) is in progress, Or when an image install is in progress.

### Use case 1

If you need to schedule the reload of the switch after a specific time, use the reload in [hhh:mm | mm] command

OS10# reload in 10:15

OS10# show reload

Reload scheduled at Fri Jan 8 13:43:01 2021 UTC (in 10 hours and 15 minutes)

### Use case 2

If you need to schedule the reload of the switch at a specific date and time, use the reload at [hh:mm] [YYYY-MM-DD] command.

OS10# reload at 15:30 2021-03-10

OS10# show reload

Reload scheduled at Fri Mar 10 15:30:00 2021 UTC (in 10 hours and 15 minutes)

### Use case 3

If you provide the time only using the reload at command, scheduled reload performs at the next occurrence of that time

OS10# reload at 15:30

OS10# show reload

Reload scheduled at Fri Mar 10 15:30:00 2021 UTC (in 10 hours and 15 minutes)

reload cancel

## Clean reset

Poser la question à Slim

It is supported by VMs and switch platforms supporting UEFI

### Enabling clean reset

OS10# clean-reset enable

OS10# reload

### Disabling Clean Reset

OS10# clean-reset disable

OS10# reload

### Show the clean reset status

OS10# show clean-reset status

# CLI Basics

## User accounts

OS10 defines two categories of user accounts:

● To log in to the CLI, use admin for the user name and password.

● To log in to the Linux shell, use linuxadmin for the user name and password.

NOTE: You cannot delete the default linuxadmin user name. You can delete the default admin user name only if at least one OS10 user with the sysadmin role is configured.

## Transaction-Based Configuration mode

In this mode configuration changes are stored in condidate configuration untill we commit the changes to the running configuration to take effect

## Check device status

show command-history from EXEC mode to view trace messages for each executed command

show system from EXEC mode to view the system status information;

## Candidate configuration

OS10# show diff candidate-configuration running-configuration

OS10#

OS10# start transaction

Commit configuration changes in candidate configuration in Transaction mode

1. Change to Transaction-based configuration mode from EXEC mode.

start transaction

1. Enter configuration commands. For example, enable an interface from INTERFACE mode.

interface ethernet 1/1/1

no shutdown

1. Save the configuration changes to the running configuration.

do commit

OS10# show running-configuration compressed

OS10# discard =>when errors occur

## Prevent configuration changes

OS10# lock

OS10# unlock

## Copy running configuration to local directory or remote server

OS10# copy running-configuration scp://root:calvin@10.11.63.120/tmp/qaz.txt

## Copy file to running configuration

OS10# copy scp://root:calvin@10.11.63.120/tmp/qaz.txt running-configuration

To apply a set of commands to the current running configuration and execute them immediately

The copied commands do not replace the existing commands. If the copy command fails, any commands that were successfully copied before the failure occurred are maintained

## Copy running configuration to startup configuration

OS10# copy running-configuration startup-configuration

## Restore startup configuration

### Back up startup file

OS10# copy config://startup.xml config://backup-9-28.xml

### Back up startup file to server

OS10# copy config://startup.xml scp://userid:password@hostip/backup-9-28.xml

### Restore startup file from backup

OS10# copy config://backup-9-28.xml config://startup.xml

OS10# reload

System configuration has been modified. Save? [yes/no]:no

## Reload system image

OS10# reload

### Set next boot image

OS10# boot system standby

OS10# show boot

OS10# show boot detail

## Filter show commands

display-xml — Displays output in XML format.

● except — Displays only text that does not match a pattern.

● find — Searches for the first occurrence of a pattern and displays all further configurations.

● grep — Displays only the text that matches a specified pattern. Special characters in regular expressions, such as ^ (matches the beginning of a text string), $ (matches the end of a string), and .. (matches any character in the string) are supported.

● no-more — Does not paginate output.

● save — Saves the output to a file.

### Display all output

OS10# show running-configuration | no-more

display-xml

## Common OS10 commands

OS10# dir config

OS10# dir

OS10# delete startup-configuration

OS10# license install scp://user:userpwd/10.1.1.10/CFNNX42-NOSEnterpriseLicense.lic

### show environment

OS10# show environment

Displays information about environmental system components, such as temperature, fan, and voltage

### show inventory

OS10# show inventory

Displays system inventory information

### show license status

OS10# show license status

### show version

OS10# show version

### system

OS10# system command

Executes a Linux command from within OS10