Perform Password Recovery on Catalyst 9000 Series Switches

Contents

Introduction

This document describes how to perform a password recovery on Catalyst 9000 series switches.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco IOS® XE software and basic CLI navigation
- Console access and terminal emulator configuration
- ROM Monitor mode (ROMMON) operations and configuration register functionality

Components Used

The information in this document is based on these software and hardware versions:

- Catalyst 9200, 9200L (Cisco IOS® XE)
- Catalyst 9300, 9300L (Cisco IOS® XE)
- Catalyst 9400 (Cisco IOS® XE)

- Catalyst 9500 (Cisco IOS® XE)
- Catalyst 9600 (Cisco IOS® XE)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Password Recovery for Standalone Switches

Procedure

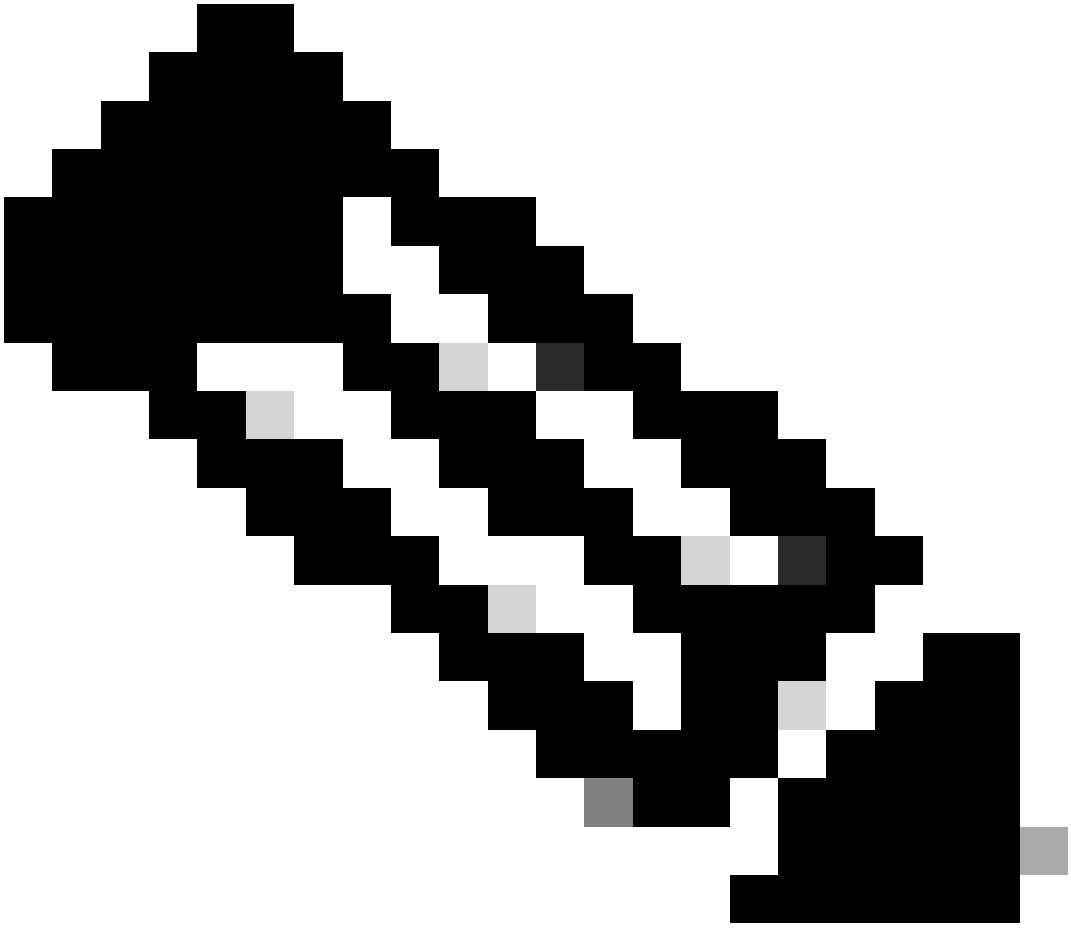
1. Power cycle the **active switch**.

2. If you see the prompt, press **Ctrl-C** to enter into ROMMON mode:

```
Initializing Hardware...

Initializing Hardware......

System Bootstrap, Version 17.12.1r, RELEASE SOFTWARE (P)

Compiled Mon 04/24/2023 22:21:00.36 by rel

Current ROMMON image : Primary

Last reset cause : PowerOn

C9300-48U platform with 8388608 Kbytes of main memory

Preparing to autoboot. [Press Ctrl-C to interrupt] 5 (interrupted)
```

3. If you do not see this prompt, press the **Mode** button repeatedly until this prompt appears:

```
switch:
```



Note: Consult the hardware installation guide for each platform to locate the Mode button.

4. Use the **set** Command to view current ROMMON variables:

```
switch:set
```

5. Change the **SWITCH_IGNORE_STARTUP_CFG** variable to bypass the startup configuration:

```
switch:SWITCH_IGNORE_STARTUP_CFG=1
```

6. Boot the **switch**:

```
switch:boot
```

7. Once the switch finishes booting, access **privileged EXEC mode**:

```
Switch>enable
```

8. Copy the **startup configuration** to the **running configuration**:

```
Switch#copy start run
```

9. Set your **new password**:

```
Switch(config)#username admin privilege 15 secret NEWPASSWORD
```

10. Reset the variable to ensure the switch retains its configuration on reload:

```
Switch#no system ignore startupconfig switch all
```

11. Save the **configuration**:

```
Switch#copy run start
```

12. Verify that SWITCH_IGNORE_STARTUP_CFG is set to **zero**:

```
Switch#show romvar
```

Password Recovery for StackWise Deployments

Key Notes

Turn off **all the members** of the stack and leave only the **active switch** on. Otherwise, the configuration is transferred to the standby switch, and the password recovery is not successful.

Procedure

1. Turn off **all switches** in the stack.
2. Power on only the **active switch**.
3. Perform the same **steps** as in the standalone switch recovery:

- Interrupt the boot process to enter **ROMMON** (**Ctrl-C** or use the **Mode** button).
- Use set to view the ROMMON variables.
- Set SWITCH_IGNORE_STARTUP_CFG=1 .
- Boot the **switch**.
- Enter **privileged EXEC mode**.
- Copy **startup-config** to **running-config.**
- Set a new **password**.
- Reset the **ignore variable** with no system ignore startupconfig switch all.
- Save the **configuration**.
- Verify the variable is cleared with show romvar.

4. Once the password recovery process is complete and the configuration is saved, power on the rest of the **switches** in the stack.

Password Recovery for StackWise Virtual Deployment

Key Notes

- Start by turning off the **standby switch**.
- The **active switch** must be power cycled and accessed via console.
- StackWise Virtual configuration is retained in **ROMMON variables** and does not require reconfiguration.

Procedure

1. Turn off the **standby switch**.

2. Power cycle the **active switch**.

3. When prompted during boot, press **Ctrl-C** to enter ROMMON:

```
Initializing Hardware...


Initializing Hardware......


System Bootstrap, Version 17.8.1r[FC1], RELEASE SOFTWARE (P)

Compiled 03-02-2022 12:00:00.09 by rel


Current ROMMON image : Primary Rommon Image

Last reset cause: PowerOn

C9500-32QC platform with 16777216 Kbytes of main memory
```

```
Preparing to autoboot. [Press Ctrl-C to interrupt] 4 (interrupted)
rommon 1 >
```

4. Use the set command to review **ROMMON variables**:

```
rommon 1 > set
```

5. Set SWITCH_IGNORE_STARTUP_CFG=1:

```
rommon 2 > SWITCH_IGNORE_STARTUP_CFG=1
```

6. Boot the **switch**:

```
rommon 3 > boot
```

7. Once booted, verify the StackWise Virtual configuration remains:

```
Switch# show stackwise-virtual
```

8. Copy the **startup configuration** to the **running configuration**:

```
Switch#copy startup-config running-config
```

9. Set a **new password**:

```
Switch(config)#username admin privilege 15 secret NEWPASSWORD
```

10. Reset the SWITCH_IGNORE_STARTUP_CFG variable to **zero**:

```
Switch(config)#no system ignore startupconfig
```

11. Save the **configuration**:

```
Switch#copy run start
```

12. Verify the **ROMMON variable**:

```
Switch#show romvar
```

13. Power on the **standby switch**.

Password Recovery on Modular Chassis with Dual Supervisors

Key Notes

- Remove the **standby Supervisor (SUP)** module before proceeding.
- Console access to the **active Supervisor** is required.
- The procedure uses the same steps as for standalone switches.

Procedure

1. Power off the **chassis** and remove the **standby SUP**.
2. Power on the **chassis** with only the active SUP installed.
3. When prompted during boot, press **Ctrl-C** to enter ROMMON:

```
Initializing Hardware...


Initializing Hardware......


System Bootstrap, Version 17.8.1r[FC1], RELEASE SOFTWARE (P)

Compiled 03-02-2022 12:00:00.09 by rel


Current ROMMON image : Primary Rommon Image

Last reset cause: PowerOn

C9500-32QC platform with 16777216 Kbytes of main memory
```

```
Preparing to autoboot. [Press Ctrl-C to interrupt] 4 (interrupted)
rommon 1 >
```

4. Use the set command to review ROMMON variables:

```
rommon 1 > set
```

5. Set SWITCH_IGNORE_STARTUP_CFG=1:

```
rommon 2 > SWITCH_IGNORE_STARTUP_CFG=1
```

6. Boot the active SUP:

```
rommon 3 > boot
```

7. Once the switch boots, enter **EXEC mode**:

```
Switch>enable
```

8. Copy the **startup configuration** to the **running configuration**:

```
Switch#copy startup-config running-config
```

9. Set a new **password**:

```
Switch(config)#username admin privilege 15 secret NEWPASSWORD
```

10. Reset the SWITCH_IGNORE_STARTUP_CFG variable to **zero**:

```
Switch(config)#no system ignore startupconfig
```

11. Save the **configuration**:

```
Switch#copy run start
```

12. Verify the **ROMMON variable**:

```
Switch#show romvar
```

13. Reinsert the **standby SUP** while the chassis remains powered on.
14. Verify that redundancy is restored and both supervisors are operational.

Related Information

- Cisco Catalyst 9300 Series Switches Hardware Installation Guide
- System Management Configuration Guide
- Cisco Technical Support & Downloads