Downgrade Software on Router That Runs Cisco IOS-XE SD-WAN to Classic Cisco IOS-XE Software

Contents

Introduction

This document describes how to perform a software downgrade on a router that runs Cisco IOS®-XE SD-WAN back to the original (ordinary/classic) Cisco IOS-XE software.

Problem

The user cannot configure **boot system flash bootflash:** image settings in order to boot the original Cisco IOS-XE image:

```
router#config-transaction

admin connected from 127.0.0.1 using console on router
router(config)# boot ? ^ % Invalid input detected at '^' marker. router(config)# boot system
flash bootflash:c1100-universalk9_ias.16.06.05.SPA.bin
------------------^
syntax error: unknown command
```

Solution

The procedure is similar to a software upgrade to Cisco IOS-XE SD-WAN software.

1. Copy the required software to the bootflash or upload to a USB flash drive.
2. Ensure that the router is connected to a management console.
3. If PnP is running, stop PnP in order to allow access to the CLI:

   ```
   router# pnpa service discovery stop
   ```
4. Change the config-register to 0x0:

   ```
   router# config-transaction
   router(config)# config-register 0x0
   router(config)# commit
   router(config)# end
   ```
5. Verify that the config-register is set to 0x0 when the router reboots:

```
router# show bootvar
BOOT variable = bootflash:packages.conf,1;bootflash:prev_packages.conf,1;
CONFIG_FILE variable does not exist
BOOTLDR variable does not exist
Configuration register is 0x0

Standby not ready to show bootvar
```

6. Reboot the router:

```
router# reload
Proceed with reload? [confirm] Yes
```

The router reboots and goes into ROMMON mode.

7. Check the router's bootflash in order to obtain the software image name to load:

```
rommon 1> dir bootflash
rommon 2> boot bootflash:c1100-universalk9_ias.16.06.05.SPA.bin
```

The router reboots with the previous software image.

8. Set config-register to the original value (for example, 0x2102) after the reload and save it:

```
router# config terminal
router(config)# config-register 0x2102
router(config)# end
router# wr
```