

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

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Problem](#)

[Solution](#)

[Related Information](#)

Introduction

This document describes how to perform a software downgrade on a router that runs Cisco IOS[®] XE SD-WAN back to the original software.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

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.

Note: This process for SD-WAN routers running releases prior to 17.2.x.

Problem

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

```
<#root>
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:

```
<#root>  
  
router#  
  
pnpa service discovery stop
```

4. Change the config-register to 0x0:

```
<#root>  
  
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:

```
<#root>  
  
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:

```
<#root>
router#
reload
Proceed with reload? [confirm]
Yes
```

The router reboots and goes into ROMMON mode.

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

```
<#root>
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:

```
<#root>
router#
config terminal
router(config)#
config-register 0x2102
router(config)#
end
router#
write
```

Related Information

- [Cisco Technical Support & Downloads](#)