



Supported Packages and System Requirements

- [Memory Requirements, on page 1](#)
- [Supported Hardware, on page 2](#)
- [Determining the Software Version for Cisco IOS XE Dublin 17.12.1y, on page 2](#)
- [Determining the Software Version for Cisco IOS XE Dublin 17.12.1x, on page 3](#)
- [Determining the Software Version for Cisco IOS XE Dublin 17.12.1w, on page 4](#)
- [Determining the Software Version for Cisco IOS XE Dublin 17.12.1, on page 5](#)
- [Determine Firmware Support, on page 6](#)

Memory Requirements

The following table displays the memory recommendations for the Cisco cBR-8 routers with Cisco IOS XE Dublin 17.12.1y feature sets.

Table 1: Memory Recommendations for the Cisco cBR-8 Routers with Cisco IOS XE Dublin 17.12.1y

| Feature Set | Cisco cBR-8 Route Processor | Software Image | Recommended Flash Memory | Recommended DRAM Memory | Runs From |
|--------------------------|---------------------------------|-------------------------------------|--------------------------|-------------------------|------------|
| CISCO IOS-XE universalk9 | Cisco cBR-8 (CBR) Processor | cbrsup-universalk9.17.12.1y.SPA.bin | 8G | 48G | Harddisk |
| CISCO IOS-XE CLC K9 | Cisco cBR-8 (CYLONS) Processor | cbrsup-universalk9.17.12.1y.SPA.bin | 8G | 16G | Supervisor |
| CISCO IOS-XE Kobol-R | Cisco cBR-8 (Kobol-R) Processor | cbrsup-universalk9.17.12.1y.SPA.bin | 8G | 64G | Supervisor |

Supported Hardware

For detailed information about the hardware supported in Cisco IOS XE Dublin 17.12.1y and its maintenance releases, see: [How and What to Order](#).

Cisco announced September 18, 2020, as the end-of-sale date for the Cisco cBR-8 Leoben1 based DOCSIS line cards (CBR-LC-*-16U30) and SUP60 (CBR-CCAP-SUP-60G).

For further information regarding end-of-sale and end-of-life announcements, see <https://www.cisco.com/c/en/us/products/video/cbr-series-converged-broadband-routers/eos-eol-notice-listing.html>.

Determining the Software Version for Cisco IOS XE Dublin 17.12.1y

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show ver
Load for five secs: 80%/8%; one minute: 63%; five minutes: 72%
Time source is NTP, 09:49:35.258 CST Fri Apr 26 2024
Cisco IOS XE Software, Version 17.12.01y
Cisco IOS Software [Dublin], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version 17.12.1y,
RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2024 by Cisco Systems, Inc.
Compiled Wed 24-Apr-24 09:18 by mcpre
```

```
Cisco IOS-XE software, Copyright (c) 2005-2024 by cisco Systems, Inc.
All rights reserved. Certain components of Cisco IOS-XE software are
licensed under the GNU General Public License ("GPL") Version 2.0. The
software code licensed under GPL Version 2.0 is free software that comes
with ABSOLUTELY NO WARRANTY. You can redistribute and/or modify such
GPL code under the terms of GPL Version 2.0. For more details, see the
documentation or "License Notice" file accompanying the IOS-XE software,
or the applicable URL provided on the flyer accompanying the IOS-XE
software.
```

```
ROM: 17.15(1r)S
```

```
CST-CBR8-SongJiang uptime is 1 day, 1 hour, 25 minutes
Uptime for this control processor is 1 day, 1 hour, 30 minutes
System returned to ROM by SSO Switchover at 08:15:30 CST Thu Apr 25 2024
System restarted at 08:27:30 CST Thu Apr 25 2024
System image file is "harddisk:cbrsup-universalk9.17.12.01y.SPA.bin"
Last reload reason: Reload Command
```

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable

to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:
<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to
export@cisco.com.

Smart Licensing Status: REGISTERED/OUT OF COMPLIANCE

Cisco cBR-8 (CBR) processor (revision CBR) with 14430954K/6147K bytes of memory.
Processor board ID FXS2023Q4TA
80 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7649279K bytes of eUSB flash at bootflash:.
117155287K bytes of SATA hard disk at harddisk:.

Configuration register is 0x1822

Router#

Determining the Software Version for Cisco IOS XE Dublin 17.12.1x

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show ver
Load for five secs: 63%/7%; one minute: 40%; five minutes: 43%
Time source is NTP, 06:01:37.333 PDT Wed Oct 26 2022
Cisco IOS XE Software, Version 17.12.01x
Cisco IOS Software [Dublin], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version 17.12.1x,
  RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2022 by Cisco Systems, Inc.
Compiled Thu 20-Oct-22 19:21 by mcpre
```

```
Cisco IOS-XE software, Copyright (c) 2005-2022 by cisco Systems, Inc.
All rights reserved. Certain components of Cisco IOS-XE software are
licensed under the GNU General Public License ("GPL") Version 2.0. The
software code licensed under GPL Version 2.0 is free software that comes
with ABSOLUTELY NO WARRANTY. You can redistribute and/or modify such
GPL code under the terms of GPL Version 2.0. For more details, see the
documentation or "License Notice" file accompanying the IOS-XE software,
or the applicable URL provided on the flyer accompanying the IOS-XE
software.
```

```
ROM: 16.7(8r)S
```

```
CST_RPHY_LS uptime is 4 days, 1 hour, 2 minutes
Uptime for this control processor is 3 days, 7 hours, 30 minutes
System returned to ROM by SSO Switchover at 22:27:19 PDT Sat Oct 22 2022
System restarted at 22:36:45 PDT Sat Oct 22 2022
System image file is "harddisk:cbrsup-universalk9.17.12.01x-FC3.SPA.bin"
Last reload reason: redundancy force-switchover
```

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wvl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to export@cisco.com.

Smart Licensing Status: UNREGISTERED/EVAL MODE

Cisco cBR-8 (CBR) processor (revision CBRVE) with 14445324K/6147K bytes of memory.
 Processor board ID FXS2024Q7DJ
 64 Gigabit Ethernet interfaces
 16 Ten Gigabit Ethernet interfaces
 4 Hundred Gigabit Ethernet interfaces
 32768K bytes of non-volatile configuration memory.
 50331648K bytes of physical memory.
 7649279K bytes of eUSB flash at bootflash:.
 234365527K bytes of SATA hard disk at harddisk:.

Configuration register is 0x2

Router#

Determining the Software Version for Cisco IOS XE Dublin 17.12.1w

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show ver
Load for five secs: 63%/7%; one minute: 40%; five minutes: 43%
Time source is NTP, 06:01:37.333 PDT Wed Oct 26 2022
Cisco IOS XE Software, Version 17.12.01w
Cisco IOS Software [Dublin], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version 17.12.1w,
  RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2022 by Cisco Systems, Inc.
Compiled Thu 20-Oct-22 19:21 by mcpre
```

Cisco IOS-XE software, Copyright (c) 2005-2022 by cisco Systems, Inc. All rights reserved. Certain components of Cisco IOS-XE software are licensed under the GNU General Public License ("GPL") Version 2.0. The software code licensed under GPL Version 2.0 is free software that comes with ABSOLUTELY NO WARRANTY. You can redistribute and/or modify such GPL code under the terms of GPL Version 2.0. For more details, see the documentation or "License Notice" file accompanying the IOS-XE software, or the applicable URL provided on the flyer accompanying the IOS-XE software.

```
ROM: 16.7(8r)S
```

```
CST_RPHY_LS uptime is 4 days, 1 hour, 2 minutes
Uptime for this control processor is 3 days, 7 hours, 30 minutes
System returned to ROM by SSO Switchover at 22:27:19 PDT Sat Oct 22 2022
System restarted at 22:36:45 PDT Sat Oct 22 2022
System image file is "harddisk:cbrsup-universalk9.17.12.01w-FC3.SPA.bin"
Last reload reason: redundancy force-switchover
```

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to export@cisco.com.

```
Smart Licensing Status: UNREGISTERED/EVAL MODE
```

```
Cisco cBR-8 (CBR) processor (revision CBRVE) with 14445324K/6147K bytes of memory.
Processor board ID FXS2024Q7DJ
64 Gigabit Ethernet interfaces
16 Ten Gigabit Ethernet interfaces
4 Hundred Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7649279K bytes of eUSB flash at bootflash:.
234365527K bytes of SATA hard disk at harddisk:.
```

```
Configuration register is 0x2
```

```
Router#
```

Determining the Software Version for Cisco IOS XE Dublin 17.12.1

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
router#show version
Load for five secs: 54%/5%; one minute: 65%; five minutes: 66%
Time source is NTP, 22:52:28.192 PDT Tue Jul 25 2023
Cisco IOS XE Software, Version 17.12.01
Cisco IOS Software [Dublin], CBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version 17.12.1,
RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2023 by Cisco Systems, Inc.
Compiled Tue 25-Jul-23 15:49 by mcpre
```

Cisco IOS-XE software, Copyright (c) 2005-2023 by cisco Systems, Inc. All rights reserved. Certain components of Cisco IOS-XE software are licensed under the GNU General Public License ("GPL") Version 2.0. The software code licensed under GPL Version 2.0 is free software that comes with ABSOLUTELY NO WARRANTY. You can redistribute and/or modify such GPL code under the terms of GPL Version 2.0. For more details, see the documentation or "License Notice" file accompanying the IOS-XE software, or the applicable URL provided on the flyer accompanying the IOS-XE software.

ROM: 16.7(8r)S

```
router uptime is 1 hour, 3 minutes
Uptime for this control processor is 1 hour, 10 minutes
System returned to ROM by reload at 21:37:36 PDT Tue Apr 25 2023
System restarted at 21:48:58 PDT Tue Aug 25 2023
System image file is "harddisk:cbrsup-universalk9.17.09.01y.SPA.bin"
Last reload reason: Reload Command
```

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wvl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to export@cisco.com.

Smart Licensing Status: REGISTERED/OUT OF COMPLIANCE

```
Cisco cBR-8 (CBR) processor (revision CBRVE) with 14445086K/6147K bytes of memory.
Processor board ID FXS2024Q7DJ
64 Gigabit Ethernet interfaces
16 Ten Gigabit Ethernet interfaces
4 Hundred Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7649279K bytes of eUSB flash at bootflash:.
234365527K bytes of SATA hard disk at harddisk:.
```

Configuration register is 0x2

router#

Determine Firmware Support

This section describes firmware that is supported for the Cisco cBR-8 Converged Broadband Routers.

For more information, see the [Install and Upgrade Guides](#).



Note If you want to upgrade to one of the Supervisor CPLD versions mentioned in the table, the chassis must have Cisco IOS XE Bengaluru 17.6.1a or later.

Table 2: Firmware Packages and Versions Supported in Cisco IOS XE Dublin 17.12.1y

| Internal Name | Component Name | Required Minimum Version | Command |
|------------------------------------|--|---------------------------------|---------------------------|
| Supervisor CPLD | CBR-CCAP-SUP-160G CPLD | 16052011 19071712 (optional) | show platform |
| | CBR-CCAP-SUP-250G CPLD | 170724E0 190717E1 (optional) | show platform |
| Supervisor ROMMON | CBR-CCAP-SUP-160G ROMMON and CBR-CCAP-SUP-250G ROMMON | 16.7(9r)s | show platform |
| Line Card CPLD | CBR-CCAP-LC-40G CPLD | 00000026 | show platform diag |
| DOCSIS 3.1 downstream module Micro | CBR-CCAP-LC-40G Gemini2 Micro | 3.1A | show platform diag |
| DOCSIS 3.1 downstream module FPGA | CBR-CCAP-LC-40G Gemini2 Apollo | 4.484F | show platform diag |
| DPIC Uboot and FPGA | CBR-DPIC-8X10G Firmware | 00010001 | show platform diag |
| DPIC 100G Uboot and FPGA | CBR-DPIC-2X100G Firmware | 00020006 | show platform diag |
| RF-PROT-PIC Firmware | CBR-RF-PROT-PIC Firmware | 00000721 | show platform diag |

Upgrade Cisco cBR-8 to the minimum supported firmware revisions for the Cisco IOS XE Dublin 17.12.1y

