

Supported Packages and System Requirements

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Memory Requirements

The following table displays the memory recommendations for the Cisco cBR-8 routers with Cisco IOS XE Amsterdam 17.3.x feature sets.

Table 1: Memory Recommendations for the Cisco cBR-8 Routers with Cisco IOS XE Amsterdam 17.3.1z

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-universalk9.17.3.01z.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR-8 (CYLONS) Processor	cbrsup-universalk9.17.3.01z.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE Kobol-R	Cisco cBR-8 (Kobol-R) Processor	cbrsup-universalk9.17.3.01z.SPA.bin	8G	64G	Supervisor

Table 2: Memory Recommendations for the Cisco cBR-8 Routers with Cisco IOS XE Amsterdam 17.3.1x

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-universalk9.17.3.01x.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR-8 (CYLONS) Processor	cbrsup-universalk9.17.3.01x.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE Kobol-R	Cisco cBR-8 (Kobol-R) Processor	cbrsup-universalk9.17.3.01x.SPA.bin	8G	64G	Supervisor

Table 3: Memory Recommendations for the Cisco cBR-8 Routers with Cisco IOS XE Amsterdam 17.3.1w

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-universalk9.17.3.01w.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR-8 (CYLONS) Processor	cbrsup-universalk9.17.3.01w.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE Kobol-R	Cisco cBR-8 (Kobol-R) Processor	cbrsup-universalk9.17.3.01w.SPA.bin	8G	64G	Supervisor

Hardware Supported

For detailed information about the hardware supported in Cisco IOS XE Amsterdam 17.3.x and its maintenance releases, see: How and What to Order.



Note

The Cisco cBR-8 chassis must house line cards with either downstream DOCSIS 3.0 PHY modules or downstream DOCSIS 3.1 PHY modules. Mixed configuration is not supported.

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).

Cisco IOS XE Amsterdam 17.3.1w is the first Cisco cBR-8 software release to discontinue support for these end-of-sale products. For more details on the end-of-sale and end-of-life announcements, see: https://www.cisco.com/c/en/us/products/collateral/video/cbr-series-converged-broadband-routers/eos-eol-notice-c51-743587.html.

Determining the Software Version for Cisco IOS XE Amsterdam 17.3.1z

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
Cisco IOS XE Software, Version 17.03.01z
Cisco IOS Software [Amsterdam], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
17.3.1z, RELEASE SOFTWARE (fc6)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2021 by Cisco Systems, Inc.
Compiled Mon 26-Apr-21 15:48 by mcpre
```

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```
ROM: 16.7(7r)S
```

Router uptime is 5 minutes
Uptime for this control processor is 12 minutes
System returned to ROM by reload at 22:08:41 EDT Mon Apr 26 2021
System image file is "harddisk:cbrsup-universalk9.17.03.01z.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.

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

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Cisco cBR-8 (CBR) processor (revision CBR) with 8438300K/6147K bytes of memory. Processor board ID FXS1927Q4VZ
24 Gigabit Ethernet interfaces 32768K bytes of non-volatile configuration memory. 50331648K bytes of physical memory. 7739391K bytes of eUSB flash at bootflash:. 97620247K bytes of SATA hard disk at harddisk:.

Configuration register is 0x0
```

Determining the Software Version for Cisco IOS XE Amsterdam 17.3.1x

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 version
Load for five secs: 15%/1%; one minute: 16%; five minutes: 29%
Time source is NTP, 14:01:08.967 EST Thu Dec 3 2020
Cisco IOS XE Software, Version 17.03.01x
Cisco IOS Software [Amsterdam], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
17.3.1x, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
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Compiled Thu 03-Dec-20 02:22 by mcpre
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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(6r)S
Router uptime is 12 minutes
Uptime for this control processor is 19 minutes
System returned to ROM by reload at 13:38:17 EST Thu Dec 3 2020
System restarted at 13:48:29 EST Thu Dec 3 2020
System image file is "harddisk:cbrsup-universalk9.17.03.01x.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
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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/stgrg.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 16250817 \text{K}/6147 \text{K} bytes of memory.
Processor board ID FXS2038Q3HF
72 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:.
15157248K bytes of USB flash at usb0:.
Configuration register is 0x0
```

Determining the Software Version for Cisco IOS XE Amsterdam 17.3.1w

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 version
Load for five secs: 39%/4%; one minute: 17%; five minutes: 16%
Time source is NTP, 10:33:56.187 PDT Wed Sep 30 2020
Cisco IOS XE Software, Version 17.03.01w
Cisco IOS Software [Amsterdam], cBR Software (X86 64 LINUX IOSD-UNIVERSALK9-M), Version
17.3.1w, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2020 by Cisco Systems, Inc.
Compiled Fri 25-Sep-20 12:43 by mcpre
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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(6r)S-NO DEV MODE
Router uptime is 5 hours, 36 minutes
Uptime for this control processor is 5 hours, 42 minutes
System returned to ROM by reload at 04:44:24 PDT Wed Sep 30 2020
System restarted at 04:57:24 PDT Wed Sep 30 2020
System image file is "harddisk:cbrsup-universalk9.17.03.01w.SPA.bin"
Last reload reason: Reload Command
This product contains cryptographic features and is subject to United
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Importers, exporters, distributors and users are responsible for
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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 12344596K/6147K bytes of memory.
Processor board ID FXS1849Q1FE
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
```

Determine Firmware Support

This section describes firmware that are 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 Gibraltar 16.12.1w or later.

Table 4: Firmware Packages and Versions Supported in Cisco IOS XE Amsterdam 17.3.1z

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(6r)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	00010001	show platform diag
	CBR-DPIC-8X10G Firmware	00010001	show platform diag
DPIC 100G Uboot and FPGA	CBR-DPIC-2X100G Firmware	00020005	show platform diag
CBR-CCAP-LC-80G-R ADM1266 (qty 4)	CBR-CCAP-LC-G2-R ADM1266	2.5	show platform diag
RF-PROT-PIC Firmware	CBR-RF-PROT-PIC Firmware	00000721	show platform diag

Table 5: Firmware Packages and Versions Supported in Cisco IOS XE Amsterdam 17.3.1x

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

Internal Name	Component Name	Required Minimum Version	Command
Supervisor ROMMON	CBR-CCAP-SUP-160G ROMMON and CBR-CCAP-SUP-250G ROMMON	16.7(6r)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	00010001	show platform diag
	CBR-DPIC-8X10G Firmware	00010001	show platform diag
DPIC 100G Uboot and FPGA	CBR-DPIC-2X100G Firmware	00020005	show platform diag
CBR-CCAP-LC-80G-R ADM1266 (qty 4)	CBR-CCAP-LC-G2-R ADM1266	2.5	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 Amsterdam 17.3.1w.

Table 6: Firmware Packages and Versions Supported in Cisco IOS XE Amsterdam 17.3.1w

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(6r)S	show platform
Line Card CPLD	CBR-CCAP-LC-40G CPLD	00000026	show platform diag

Internal Name	Component Name	Required Minimum Version	Command
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	00010001	show platform diag
	CBR-DPIC-8X10G Firmware	00010001	show platform diag
DPIC 100G Uboot and FPGA	CBR-DPIC-2X100G Firmware	00020005	show platform diag
CBR-CCAP-LC-80G-R ADM1266 (qty 4)	CBR-CCAP-LC-G2-R ADM1266	2.5	show platform diag
RF-PROT-PIC Firmware	CBR-RF-PROT-PIC Firmware	00000721	show platform diag

Determine Firmware Support