

Restrictions and Limitations

Note The error message "PLATFORM-1-NOSPACE: SD bootflash : no space alarm assert" may occur in the following scenarios:

- Any sector of SD Card gets corrupted
- Improper shut down of router
- power outage.

This issue is observed on platforms which use EXT2 file systems.

We recommend performing a reload of the router. As a result, above alarm will not be seen during the next reload due to FSCK(file systems check) execution.

However, If the error persists after a router reload, we recommend to format the bootflash or FSCK manually from IOS.

- From the Cisco IOS XE 16.5.1 and 16.6.1 releases, In-Service Software Upgrade (ISSU) isn't supported on the router to the latest releases. For more information on the compatible release versions, see ISSU Support Matrix.
- The port restriction on 1-port OC-192 or 8-port low rate CEM interface module is on port pair groups. If you have OC48 configured on a port, the possible port pair groups are 0-1, 2-3, 4-5, 6-7. If one of the port within this port group is configured with OC48 rate, the other port can't be used.
- RS422 pinout works only on ports from 0 to 7.
- The **ip cef accounting** command isn't supported on the router.
- Configuration sync does *not* happen on the Standby RSP when the active RSP has Cisco Software Licensing configured, and the standby RSP has Smart Licensing configured on the router. If the active RSP has Smart Licensing configured, the state of the standby RSP is undetermined. The state could be pending or authorized as the sync between the RSP modules isn't performed.
- Evaluation mode feature licenses may not be available to use after disabling, and enabling the smart licensing on the RSP2 module. A reload of the router is required.
- Ingress counters aren't incremented for packets of the below format on the RSP3 module for the 10 Gigabit Ethernet interfaces, 100 Gigabit Ethernet interfaces, and 40 Gigabit Ethernet interfaces:

Packet Format

MAC header---->Vlan header---->Length/Type

When these packets are received on the RSP3 module, the packets aren't dropped, but the counters aren't incremented.

- T1 SAToP, T3 SAToP, and CT3 are supported on an UPSR ring only with local connect mode. Cross-connect configuration of T1, T3, and CT3 circuits to UPSR aren't supported.
- PTP isn't supported when 8-port 10 Gigabit Ethernet interface module is in oversubscribed mode.
- ISSU isn't supported between a Cisco IOS XE 3S release and the Cisco IOS XE Amsterdam 17.3.x release.
- These following restrictions are applicable only to Cisco RSP2 module.
  - Traffic is dropped when packets of size 64–100 bytes are sent on 1G and 10G ports.
    - For 64-byte packets, traffic drop is seen at 70% and beyond of the line rate.
    - For 90-byte packets, traffic drop is seen at 90% and beyond of the line rate.
    - For 95-byte packets, traffic drop is seen at 95% and beyond of the line rate.
  - Traffic is dropped when:
    - Traffic is sent on a VRF interface.
    - Traffic is sent across layer 2 and layer 3.

  However, traffic isn't dropped when the packet size is greater than 100 bytes, even if the packets are sent bi-directionally at the line rate.

Note The before mentioned restriction is documented very specific to Snake Topology and applicable for RSP2 platforms only. The drops may occur only when there is line rate traffic on all 1G or 10G interface on the node in a Snake manner.

- Port channel 61-64 isn't supported in the 16.11.1a release. The range of configurable port channel interfaces has been limited to 60.
- Effective with Cisco IOS XE Everest 16.6.1, the VPLS over Port-channel (PoCH) scale is reduced from 48 to 24 for Cisco ASR 900 RSP3 module.

Note The PoCH scale for Cisco ASR 907 routers is 48.

- One Ternary Content-Addressable Memory (TCAM) entry is utilized for Segment Routing Performance Measurement. This is required for the hardware timestamping to function.
- While performing an auto upgrade of ROMMON, only primary partition is upgraded. Use the **upgrade rom-mon filename** command to upgrade the secondary partition of the ROMMON during the auto

upgrade. However, the router can be reloaded during the next planned reload to complete the secondary rommon upgrade. This is applicable to ASR 903 and ASR 907 routers.

- One Ternary Content-Addressable Memory (TCAM) entry is utilized for Segment Routing Performance Measurement. This is required for the hardware timestamping to function.
- In the Cisco IOS XE 17.1.1 release, the EVPN EVI type is VLAN-based by default, and while configuring for the EVPN EVI type, it is recommended to configure the EVPN EVI type as VLAN-based, VLAN bundle and VLAN aware model.
- For Cisco IOS XE Gibraltar Release 16.9.5, Cisco IOS XE Gibraltar Release 16.12.3, and Cisco IOS XE Amsterdam 17.1.x, a minimum diskspace of 2 MB is required in the boot flash memory file system for a successful ROMMON auto upgrade process. For a diskspace lesser than 2 MB, ROMMON auto upgrade fails and the router reboots. This is applicable to Cisco ASR 903 and Cisco ASR 907 routers.
- In the Cisco IOS XE 16.12.1, 17.1.1, and 17.2.1 releases, IPSec isn’t supported on the Cisco RSP3 module.
- CEM circuit provisioning issues may occur during downgrade from Cisco IOS XE Amsterdam 17.3.1 to any lower versions or during upgrade to Cisco IOS XE Amsterdam 17.3.1 from any lower versions, if the CEM scale values are greater than 10500 APS/UPSR in protected CEM circuits. So, ensure that the CEM scale values aren’t greater than 10500, during ISSU to or from 17.3.1.
- Some router models aren’t fully compliant with all IETF guidelines as exemplified by running the pyang tool with the **lint** flag. The errors and warnings exhibited by running the pyang tool with the **lint** flag are currently non-critical as they do not impact the semantic of the models or prevent the models from being used as part of the toolchains. A script has been provided, "check-models.sh", that runs pyang with **lint** validation enabled, but ignoring certain errors. This allows the developer to determine what issues may be present.

  As part of model validation for the Cisco IOS XE Amsterdam 17.3.1 release, "LEAFREF_IDENTIFIER_NOT_FOUND" and "STRICT_XPATH_FUNCTIONS" error types are ignored.