



StarOS™ Software Version 21.6.b24 and Ultra Service Platform Software Version 6.2.b14 Release Notes

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Introduction

This Release Note identifies changes and issues related to this software release. This emergency release is based on StarOS release 21.6.b24 and USP release 6.2.b14. These release notes are applicable to the ASR5500, VPC-SI, VPC-DI and USP platforms.

Table 1 - Release Package Information

Package	Description	Version
StarOS packages	The StarOS package.	21.6.b24, build 73758
usp-6_2_b14-10260.iso	The USP software package containing component RPMs (bundles). Refer to Table 2 for information on the specific bundles.	6.2.b14.10260
ultram-manager-2.0.3-1.x86_64.rpm	The Ultra M Health bundle RPM containing images for the event management functionality. This RPM is also packaged in the USP ISO.	2.0.3-1
usp_rpm_verify_utils-6.2.b13.tar	USP RPM Verification Utilities.	6.2.b13-1

Table 2 - Bundles Comprising the USP ISO

USP Bundle Name	Description	Version
usp-em-bundle	The Element Manager (EM) Bundle RPM containing images and metadata for the Ultra Element Manager (UEM) module.	6.2.0, Epoch 7582
usp-ugp-bundle	The Ultra Gateway Platform (UGP) Bundle RPM containing images for Ultra Packet core (VPC-DI). This bundle contains non-trusted images.	StarOS 21.6.b24, build 73758, Epoch 8054
usp-yang-bundle	The Yang Bundle RPM containing YANG data models including the VNFD and VNFR.	1.0.0, Epoch 4034

Feature and Behavior Changes

USP Bundle Name	Description	Version
usp-uas-bundle	The Ultra Automation Services Bundle RPM containing AutoVNF, Ultra Web Services (UWS), and other automation packages.	6.2.0, Epoch 8109
usp-auto-it-bundle	The bundle containing the AutoIT packages required to deploy the UAS.	5.8.0, Epoch 4241
usp-vnfm-bundle	The VNFM Bundle RPM containing an image and a boot-up script for ESC (Elastic Service Controller).	ESC 4.0.0.104, Epoch 4035
ultram-manager	The Ultra M Manager bundle RPM containing images for the event management functionality. This RPM is also provided separately from the USP ISO.	2.0.4, Epoch 619

Feature and Behavior Changes

For a complete list of feature and behavior changes associated with the corresponding 21.6.x StarOS software release, refer to the [Release Change Reference](#).

For a complete list of feature and behavior changes associated with the corresponding 6.2.x USP software release, refer to the [Release Change Reference](#).

Related Documentation

For a complete list of available documentation related to this release, go to <https://www.cisco.com/c/en/us/support/wireless/asr-5000-series/products-installation-and-configuration-guides-list.html>.

Installation and Upgrade Notes

This Release Note does not contain installation and upgrade instructions. Refer to the existing installation documentation for specific installation and upgrade considerations.

Ultra M Hyper-Converged Model Component Versions

HW	SW	Version
NA	StarOS	21.6.b24, build 73758
NA	ESC	4.0.0.104
NA	RH Kernel	RHEL Server 7.5
NA	OpenStack version	OSP10
UCS C220M5S	BIOS	3.1(3e)
	CIMC	3.1(3i)
	MLOM	4.2(3b)
	XL710	2.4.10 [kernel driver]

Open Bugs in this Release

HW	SW	Version
	ENIC Version	2.3.0.42
	FNIC Version	1.6.0.34
Nexus 9364C (Leafs)	BIOS	05.33
	NX-OS	9.2(2)
Nexus 9336C (Spine)	BIOS	05.33
	NX-OS	9.2(2)

Firmware Updates

There are no firmware upgrades required for this release.

Open Bugs in this Release

The following table lists the known bugs that remain open since USP 6.2.0 (non-StarOS) and StarOS 21.6.0.

NOTE: This software release may contain open bugs first identified in other releases. Additional information for all open bugs for this release are available in the [Cisco Bug Search Tool](#).

Bug ID	Headline	Product Found*
CSCvk10055	Task restart while handling delete bearer.	epdg
CSCvn88975	Unexpected QoS mapping between EPC QCI 8 and Pre-Release 8 QoS	ggsn
CSCvh67114	sessmgr restarts at function egtpc_validate_context_ack_rsp_evt	mme
CSCvh82217	sessmgr task restart during MME start Auth procedure.	mme
CSCvj40660	MME to support 10KB pkt size on Sbc interface	mme
CSCvm21245	Ghost enodeB associations after CSCvf74768	mme
CSCvm09103	mme-service binding was missing due to mismatch in the license.	mme
CSCvn62920	LTE - Wifi - LTE HO fails when ULA does not include MIP6-Agent-Info	mme
CSCvo57948	Very inbalanced sessmgr distribution after enabling sgsn-mme subscriber-data-optimization	mme
CSCvr10617	Enh: add warning when TAI stat collection takes too long and trap when beyond	mme
CSCvs24495	sessmgr restarts at function egtpc_send_req_msg()	mme
CSCvi06043	aaamgr restarted multiple times on srp switch-over	pdn-gw
CSCvp31063	Modify bearer request getting rejected due to IMEI check while using IMS APN	pdn-gw
CSCvg95957	Single instance of Bulkstat facility restart seen on active CISCO ASR5500	pdn-gw
CSCvk29371	gtpc peer-salvation keyword is missing under context level configuration	pdn-gw

Open Bugs in this Release

Bug ID	Headline	Product Found*
CSCvk52505	Crypto map configuration on interface rejected, when maximum number of ikev1 ipsecmgr tasks reached	pdn-gw
CSCvm47811	Adding debug info to understand restart counter change from SGW causing PGW to mark sessions down	pdn-gw
CSCvm93977	Inconsistency between AAAAccServerUnreachable and AAAAccSvrUnreachable causing SNMP trap issues	pdn-gw
CSCvp50493	Memory leak in CLI show active-charging credit-control statistics	pdn-gw
CSCvg88726	[ICSR] Increase number of Dynamic rule failure logs	pdn-gw
CSCvi06491	The default behaviour of diameter encode-supported-features has changed in 21.7	pdn-gw
CSCvm19430	NAT64 ipv6 fragment header identification field always zero	pdn-gw
CSCvr43249	Framed route not added even when Radius Authentication Server sends Framed Route AVP towards PGW	pdn-gw
CSCvg77087	XL - GGSN/SAE-GW on VPC-DI - aaamgr in Active CF card in Memory warn state	sae-gw
CSCvh64982	Planned SRP switchover followed by switchover due to BGP failure - aaamgr restarts	sae-gw
CSCvj48443	Cisco SAEGW sends incorrect ARP value after a IDFT procedure in DDN towards MME	sae-gw
CSCvs18939	Multiple Instances of sessmgr restart observed in sgsn_app_allocate_svc_req_cb()	sgsn
CSCvs35724	Multiple instances of sessmgr restart observed in egtpc_handle_change_notf_req_evt()	sgsn
CSCvi50398	core file size limited to 2048 bytes in VPC resulting in core file transfer failure	staros
CSCvh54162	[ePDG] performing iftask restart is causing SF to restart on ultraM with servicemode as epdg	staros
CSCvh68111	The beakerd process has a memory leak	staros
CSCvi65014	Restart of vpnmgr task adversely affecting the connectivity.	staros
CSCvh84131	default mcdma latency is 0 leading to inefficiency	staros
CSCvh99381	SDR cli output shows all Enaled/Disabled command at all times.	staros
CSCvm73155	Unable to update module p2p after unplanned DPC migration	staros
CSCvj04691	AutoVNF recovery post upgrade does not spawn the upgraded image	usp-uas
CSCvj04799	AutoVNF upgrade failure - rollback to secondary image does not happen	usp-uas
* Information in the "Product Found" column identifies the product in which the bug was initially identified.		

Resolved Bugs in this Release

The following table lists the known bugs that are resolved in USP 6.2.b13 (non-StarOS) and StarOS 21.6.b23 releases.

NOTE: This software release may contain bug fixes first introduced in other releases. Additional information for all resolved bugs for this release are available in the [Cisco Bug Search Tool](#).

Bug ID	Headline	Product Found*
CSCvr89168	Sessmgr restarts when handling modify bearer command	sgsn
* Information in the "Product Found" column identifies the product in which the bug was initially identified.		

Operator Notes

Elastic Services Controller

This version of the Cisco VPC has been validated for operation with Cisco Elastic Services Controller (ESC) version 4.0.0.104 ESC software can be downloaded here: <https://software.cisco.com/download/navigator.html>

Once on the page, navigate to the software location by selecting **Cloud and Systems Management > Service Management and Orchestration > Elastic Services Controller > Elastic Services Controller 4.0 > All Releases > 4.0.0**.

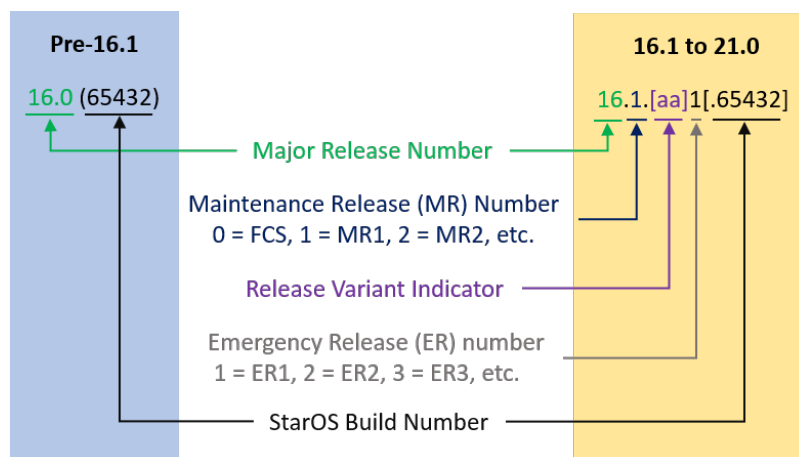
StarOS Version Numbering System

The output of the **show version** command displays detailed information about the version of StarOS currently running on the ASR 5x00 or Cisco Virtualized Packet Core platform.

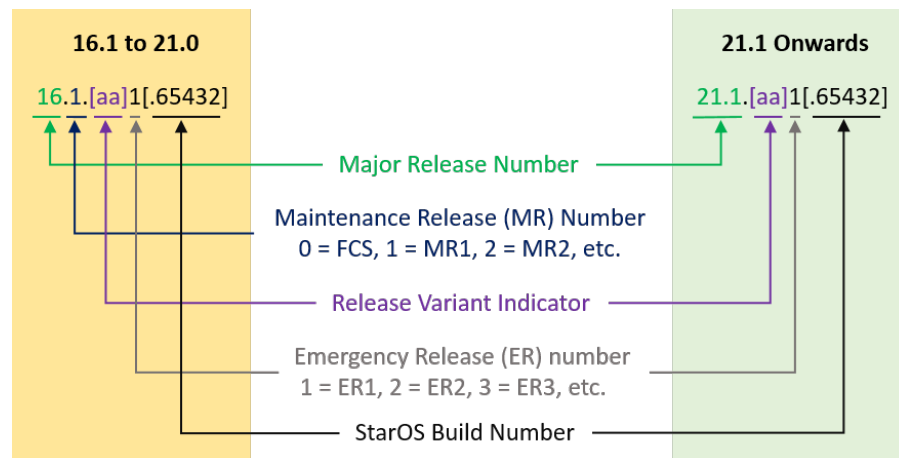
Prior to release 16.1, the *Image Version* field displayed a branch of software including the build number, for example "16.0 (55435)". Subsequent releases of software for the major release differed only in build number. Lab Quality/EFT releases versus deployment releases also differed only in build number.

From release 16.1 onwards, the output of the **show version** command, as well as the terminology used to describe the Build Version Number fields, has changed. Additionally, **show version** will display slightly different information depending on whether or not a build is suitable for deployment.

The Version Build Number for releases between 16.1 and 21.0 include a major, maintenance, and emergency release number, for example "16.1.2".



The Version Build Number for releases 21.1 and later include a major and emergency release number, for example, “21.1.1”.



In either scenario, the appropriate version number field increments after a version has been released. The new version numbering format is a contiguous sequential number that represents incremental changes between releases. This format will facilitate identifying the changes between releases when using Bug Search Tool to research software releases.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*, at: <https://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

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