



StarOS™ Software Version 21.6.b23 and Ultra Service Platform Software Version 6.2.b13 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.b23 and USP release 6.2.b13. These release notes are applicable to the ASR5500, VPC-SI, and VPC-DI platforms.

Table 1 - Release Package Information

Package	Description	Version
StarOS packages	The StarOS package.	21.6.b23, build 73246
usp-6_2_b13-9759.iso	The USP software package containing component RPMs (bundles). Refer to Table 2 for information on the specific bundles.	6.2.b13.9759
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.b23, build 73246, Epoch 7576
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 7109
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.	2.0.3, Epoch 418

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.b23, build 73246
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 ggsn-mme subscriber-data-optimization	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
CSCvh67681	20% SM CPU increase when Traffic Optim is enabled with 100% heavy session in single event perf test	pdn-gw
CSCvk29371	bgtpc peer-salvation keyword is missing under context level configuration	pdn-gw

Resolved 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
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
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	defaut 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](#).

Resolved Bugs in this Release

Bug ID	Headline	Product Found*
CSCvq98247	BFD sessions went into AdminDown state upon VM un-deployment from ESC	epdg
CSCvk58720	Congestion action applied even after congestion is cleared	mme
CSCvi66788	VPC-DI incorrectly reports Standby SF when N+1 count is less	sae-gw
CSCvq63005	Gbmgr restart seen on gbmgr_rx_gns_pdu	sgsn
CSCvr46564	S4-SGSN not responding to RAU	sgsn
CSCvq95375	Activate 2G PDP after failure with 'Message not compatible with the protocol state	sgsn
CSCvr02239	Reverting the debug changes from release image	sgsn
CSCvr36749	Activate 2G PDP after failure 'Message not compatible with the protocol state' after IMS APN enabled	sgsn
CSCvj94838	[ULTRA-M] Fatal Signal 11: Segmentation fault @ emctrl_add_notify_elem()	staros
CSCvh27616	Multiple Task restarts and Chassis reload if SF recovery in progress when CF switchover is initiated	staros
CSCvm70852	After CF VM is respawned , sometimes hd-raid resynch on newly spawned CF-VM takes more than 2hrs	staros
CSCvo46728	random BFD sessions do NOT comeup at time of VNF reload - Flap peer leaf interface to recover	staros
CSCvq19559	Wrong values on show port utilization table - StarOS VPC-DI	staros
CSCvq61583	BFD Session remain in UP state even if peer is down	staros
CSCvi44228	Incorrect time format for msg-format rfc5424	staros
CSCvm44517	Control plane interface 1/0/cpbond0 utilization is high	staros
CSCvn01449	Syslog messages missing hostname after evlogd kill	staros
CSCvr12413	ioerr_cnt increasing in every 5 min for a VPC system due to temperature check	staros
CSCvi91068	repeated resmgr 14537 warning messages in log post 21.7.2 upgrade	staros
CSCvj25091	QvPC-DI unknown SMART support	staros
CSCvm52919	EM caching old reboot request and case complete VNF VM reboots later and cause complete VNF reload	usp-uas

* 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**.

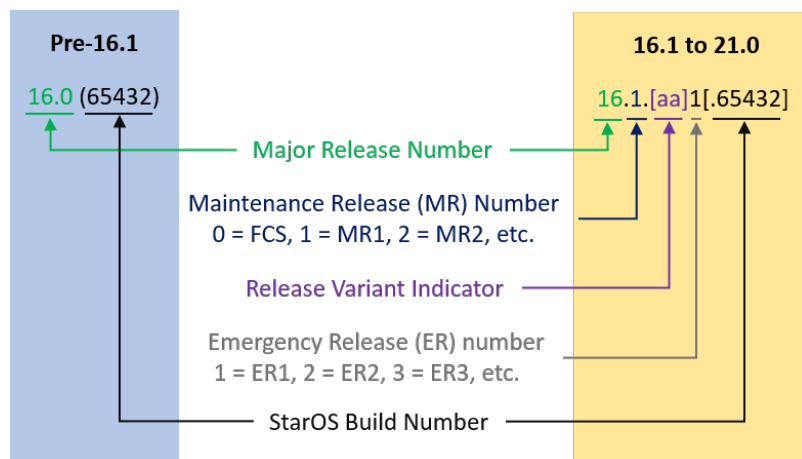
StarOS Version Numbering System

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.

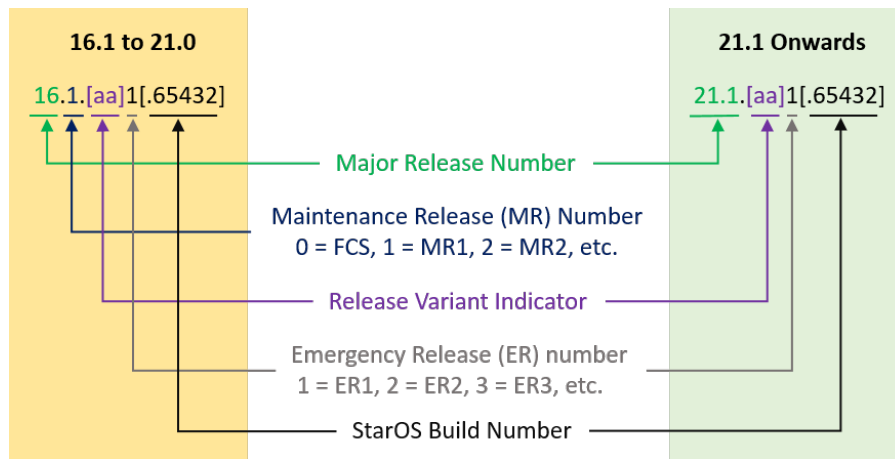
Prior to release 16.1, the *Image Version* field displayed a branch of software including the build number, for example “16.0 (55435)”. Subsequent releases of software for the major release differed only in build number. Lab Quality/EFT releases versus deployment releases also differed only in build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