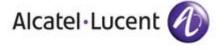# Omni Switch 6250/ 6450

Release 6.6.3.531.R01

The following is a list of issues that have been identified and corrected in AOS software release. This document is intended to be used as a pre-upgrade guide and does not replace the Release Notes which are created for every GA release of software.

Important Notice: For a copy of software release not posted on the Web or if you have any question or concern please contact Alcatel's Technical Support Department.

Problems Fixed Between Builds 375 and 413

PR	169945	Build:	6.6.3.386.R01

Summary: When IP phones connected to the OS6250 they crashed

PR	170802	Build:	6.6.3.404.R01

Summary: Special characters % and ! are refused in RADIUS/TACACS keys. Same were accepted in AOS 6.6.1

Explanation: Allow special characters % and ! in CLI input

PR	170503	Build:	6.6.3.404.R01

Summary: dshell is currently in use, try again later; CHASSIS warning unable to post semaphore, 6250 over memo

Explanation: Recover dshell for debug purpose

PR	171146	Build:	6.6.3.405.R01

Summary: snmpenginetime give wrong value for OID

Explanation: SNMP offset and snmpEngineTime corrections

Problems Fixed Between Builds 414 and 438

PR	172367	Build:	6.6.3.415.R01

Summary: Unable to set the maximum egress rate on OS6250

Explanation: Correcting the show port output to reflect in the configured bandwidth

PR	171812	Build:	6.6.3.415.R01

Summary: Per-Queue bandwidth issue when configured value is in the range 48   52 Mbps

Explanation: Fixing the Per-Queue bandwidth issue when configured value is in the range 48   52 Mbps

PR	173206	Build:	6.6.3.416.R01

Summary: 6250-M :: SAA error log seen every "interval" timer (10 min by default)

Explanation: Initialize Ethoam/SAA control entry before initiating the reply timestamp info stats

PR	170080	Build:	6.6.3.417.R01

Summary: Issue with "show aaa-device all-users" output.

Explanation: show aaa-device all-users will display all the clients in the switch.

PR	172353	Build:	6.6.3.421.R01

Summary: QoS queue WRR weights are reset if port is admin down/up

Explanation: Show qos queue command will properly display the configured queue weight after the interface is down/up.

PR	173963	Build:	6.6.3.422.R01

Summary: IPv6 next header condition is not accepted in CLI

Explanation: nh keyword removed from policy condition command

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PR	173410	Build:	6.6.3.423.R01

Summary: 10Gb license not getting applied on OS6450.

Explanation: Updated the applicability of the error message for the appropriate license

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PR	173517	Build:	6.6.3.424.R01

Summary: Following error message in OS6450, "LANPOWER (108) warning message:

+++ lpGetBackupPowerOnLine: 48v

Explanation: Validating the 48V in 6450 is skipped due to hardware not supported

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PR	174324	Build:	6.6.3.424.R01

Summary: First multicast packets are not flooded sometimes on OS6450 when disabled at VLAN level

Explanation: Configure correct vlan id in hardware while disabling/enabling multicast status on a vlan.

PR	171051	Build:	6.6.3.425.R01

Summary: Issue with SOURCEPHOTONICS SFP (SFP-100-BX20LT) which are 100MB SFP are displayed as 1000 by default

Explanation: Support for 100-FX SOURCE PHOTONICS SFP

PR	174577	Build:	6.6.3.428.R01

Summary: "user password-policy cannot-contain-username" shown incorrectly under show configuration snapshot

Explanation: Changes done to update running configuration correctly

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PR	172573	Build:	6.6.3.428.R01

Summary: When qos IS applied user ports are not able to ping each other.

Explanation: Accept arps on qos UserPorts for Ips which belongs to networks on UserPorts

PR	172729	Build:	6.6.3.429.R01

Summary: OS6450 stack issue causing loop-detection on OS10K

Explanation: Deferring adding of stacking ports to vlan table post the aggregation of the stacking ports.

PR	174436	Build:	6.6.3.430.R01

Summary: The "ip-source-filter" feature doesn't block ARP Spoofing attacks

Explanation: Block forwarding of ALL ARP requests on ISF enabled ports

Problems Fixed Between Builds 439 and 451

PR	175703	Build:	6.6.3.440.R01

Summary: Remote host device shows as unknown for OS6450 on OS6850

Explanation: Code changes done to display correct name in Remote host device in "show amap" output for missed OS6450 products

PR	175736	Build:	6.6.3.440.R01

Summary: "Show ni" command gives the output as "6450 24 PORT COPPER GE POE" where 6450-p24 is execpted.

PR	175247	Build:	6.6.3.441.R01

Summary: DHCP Option-60 Vendor Class Identifier to carry OS model specific details

Explanation: Option 60 for 66X based product in-line with the module name

PR	175171	Build:	6.6.3.441.R01

Summary: OS6450 sends "Omniswitch-OS6250" as the DHCP Option 60 Vendor Class Identifier

Explanation: Option 60 for OS6450 should be "Omniswitch-OS6450"

PR	174513	Build:	6.6.3.441.R01

Summary: OS6450 Switch (DHCP client) sends "DHCP Decline" (clients which are getting IP from the dhcp server)

Explanation: Changed the transaction ID for Dhcp-Inform packets

PR	173962	Build:	6.6.3.442.R01

Summary: An error is send to console when configuring policy list "type ingress"

Explanation: Corrected the Validation for Ingress Policy List Configuration

PR	174428	Build:	6.6.3.442.R01

Summary: The "ipv6" keyword is not taken into account in "policy condition"

Explanation: Corrected IPV6 Keyword Usage in ICMP policy condition

PR	**175606**	Build:	6.6.3.443.R01
Summary:	6250-P24 stack units reboot (except Primary unit) and PMD file generated		
Explanation:	Prevent the condition of spurious interrupts when insertion and extraction of power supplies happen at the same time.		

PR	**174967**	Build:	6.6.3.443.R01
Summary:	hal_fdb_delete_shadow_entry error on console		
Explanation:	Ignore the ip multicast packets in qdispatcher when LPS & UNI are impemented in the port.		

PR	**175516**	Build:	6.6.3.445.R01
Summary:	OS6250 - LLDP not working with MITEL phones after the firmware upgrade of the phones.		
Explanation:	Instead of the dropping the frame, handle the packet and generate error		

PR	**176559**	Build:	6.6.3.445.R01
Summary:	switch displayed as 6648 on AMAP output		
Explanation:	Have done changes to display correct name in Remote host device in "show amap" output for all the devices.		

PR	**160755**	Build:	6.6.3.447.R01
Summary:	A SAP doesn't process any frames if the number of CVLANs exceeds 256		
Explanation:	Error message seen on console when number of vstk SAp VPA crosses the limit of 256 and SAP not able to process any packet for existing VPAs after that		

PR	**175236**	Build:	6.6.3.447.R01
Summary:	mdi & mdix is not working properly in the OS6250.		
Explanation:	Added a error message for the interfaces crossover command when executed in cli.		

PR	**175781**	Build:	6.6.3.448.R01
Summary:	6450 igmp Proxy Service not functioning properly.		
Explanation:	During handling of IGMP Packets in software, multiple VLAN tags are handled properly.		

PR	**176953**	Build:	6.6.3.450.R01
Summary:	Rule mapped to ingress\egress policy list is not applied after reload.		
Explanation:	policy list ergress type egress rules r1" saved as "policy list egress rules r1" in boot.cfg", so it will not parsed during the bootup. fix done to make the right qos command to save on the boot.cfg so that it would be parsed without any error while rebooting.		

PR	**177138**	Build:	6.6.3.451.R01
Summary:	"debug system kf0" and upgrade to AOS 6.6.3.438.R01 corrupts flash (meta blocks)		
Explanation:	Fix to prevent flash issues when upgrading to latest 6.6.3.R01 builds and executing "debug system kf0" command.		

Problems Fixed Between Builds 452 and 470

PR	**166699**	Build:	6.6.3.452.R01
Summary:	show microcode working, ls, show log swlog and fsck /flash commands are not giving any output on CLI		

PR	**162618**	Build:	6.6.3.452.R01
Summary:	Implementation of the new swlog when CPU over/below the threshold		
Explanation:	Implementaion of new swlog when Cpu crosses the above/below threshold value		

PR	**176573**	Build:	6.6.3.452.R01
Summary:	Remote command-log does not include IP address of session at the syslog		
Explanation:	Code changes done to send value 0 as argument for showDebug while sending command info to the session mgr for logging		

PR	**176617**	Build:	6.6.3.452.R01
Summary:	Qos user port configuration gets changed after a reload.		
Explanation:	qos userport filter and shutdown uses the single list for parsing the configurations, Need to reset the list once the parsing was done for the particular category. Ensure the configuration applied for one category should not reflect in other.		

PR	**177208**	Build:	6.6.3.452.R01
Summary:	"Show ni" command gives the output as "OS6450-C10" where "OS6450-10" is excepted.		
Explanation:	Work around to display proper model name and description as per the requirement		

PR	**177139**	Build:	6.6.3.453.R01
Summary:	IPv6 reachability issue while IPv4 works.		
Explanation:	Done mirroring of neighbor solicitation packets to CPU		

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PR	**177110**	Build:	6.6.3.453.R01

Summary: Radius Return Attributes for SSH in OS6450

Explanation: Have done changes to display correct hexa value for SSH in "show aaa priv hexa" output.

PR	**142907**	Build:	6.6.3.457.R01

Summary: mac stuck at filtering on a mobile-tag group after a power failure or reload the ni

Explanation: Mobile Tag option retained even after NI reset

PR	**177338**	Build:	6.6.3.461.R01

Summary: OS6250 RIP interface stopping sending of route updates under particular conditions

Explanation: The customer specific workaround is controlled by debug variable:
You can set this is in dshell or in AlcatelDebug.cfg

debug set ripRedistMaxAllowedRoutes 5

5 denotes the number of routes you want to redistribute to RIP from local r

PR	**177781**	Build:	6.6.3.462.R01

Summary: Issue with source learning on port 1/1 and more than 20/25 ports are mobile

PR	**177189**	Build:	6.6.3.466.R01

Summary: Not possible to configure IPMVLAN address for the multicast network address

Explanation: Mask option for group address included in ipmvlan cli command

PR	**179195**	Build:	6.6.3.468.R01

Summary: idle unit crash with taIpx suspend

Explanation: IPX packets will not be handled in software as Omni Switches does not support IPX

Problems Fixed Between Builds 471 and 478

PR	**178020**	Build:	6.6.3.471.R01

Summary: qos user-port shutdown dhcp-server is not working

Explanation: Previously In 663R01, a UserPort with Spoofing enabled should have at least one IP interface. If no interfaces are configured in the switch, we would drop the traffic, but not shut the port down. A similar issue was fixed in 644 and we have merged the change (to delete the check and accept if at least one interface is configured) done using PR #132621 to 663R01 to make it work. Now this part of the code is same in 644 and 663 and it works fine.

PR	**178004**	Build:	6.6.3.471.R01
Summary:	OS6450: Unable to get authentication using AAA.		
Explanation:	Fix done to calculate and display the correct bitmap value in webview.		

PR	**178575**	Build:	6.6.3.471.R01
Summary:	Rule mapped to qos policy list missing after reboot		
Explanation:	Validate qos rule with default action "accept"		

PR	**178087**	Build:	6.6.3.471.R01
Summary:	OS6450 tftp incorrect behavior		
Explanation:	Clearing the buffer to prevent taking previous file name from the buffer		

PR	**178945**	Build:	6.6.3.471.R01
Summary:	6450/6250 standalone switch always not shown as monoswitch while doing a mib walk		
Explanation:	Check has been added to set the syncronization status as CS_SYNCHROSTATUS_MONOCMM if it is a standalone unit		

PR	**178021**	Build:	6.6.3.471.R01
Summary:	Poor traffic shaping performance on OS6450		
Explanation:	Modified the code to allow user to configure depth based on their requirement, and default depth is configured to 12KB.		

PR	**178702**	Build:	6.6.3.474.R01
Summary:	DHCP release packets seen twice on NNI port.		
Explanation:	By disabling snooping in that vlan, two release packets are not seen and also client interface in that switch can get ip		

PR	**179935**	Build:	6.6.3.474.R01
Summary:	"Show NI" and "Show Hardware info" shows two different FPGA versions on OS6450-P48.		

PR	**180320**	Build:	6.6.3.477.R01
Summary:	Stack not accessible through Management IP address with Excep in task: taNiEsmDrv PC : 0xd76e440 mes		

Problems Fixed Between Builds 479 and 495

PR	**180028**	Build:	6.6.3.480.R01
Summary:	IPMS not working after qos reapply		
Explanation:	IPMS policies configured using QOS does not work after changing the disposition.		

PR	**180837**	Build:	6.6.3.480.R01
Summary:	Switch doesn't recognize IGMP packet with IP Header Total Length Field 46 bytes and discards the pkt		
Explanation:	Switch doesn't recognize IGMP packet with IP Header with total length field of 46 bytes. As long as the IGMP message type is recognized, we must ignore anything past the first 8 octets while processing the packet.		

PR	**180961**	Build:	6.6.3.481.R01
Summary:	6850E - QOS policy list disappear after switch reboot generating a boot.cfg.1.err file		
Explanation:	Generated CLI to parse from and type keywords properly.		

PR	**180834**	Build:	6.6.3.482.R01
Summary:	OS6450 - Mobility issue		

PR	**180803**	Build:	6.6.3.482.R01
Summary:	DHCP discover packets getting dropped		
Explanation:	DHCP discover packets are not considered as spoof		

PR	**181243**	Build:	6.6.3.482.R01
Summary:	Usertable not in sync after flash synchro was performed.		
Explanation:	Enabling the change in password on Primary to reflect on secondary CMM also.		

PR	**181112**	Build:	6.6.3.483.R01
Summary:	In SAA statistics RTT Avg values are smaller than RTT Min in case of ICMP Packet loss		

PR	**181004**	Build:	6.6.3.483.R01
Summary:	Switch crash while enabling mobile tag.		
Explanation:	Fix for preventing crash while enabling mobile tag		

PR	**181045**	Build:	6.6.3.484.R01
Summary:	MIB walk for DhcpSnoopingPortIpSourceFiltering does not shows all the ports.		
Explanation:	Mibwalk shows the status of all mobile ports if snooping is enabled globally		

PR	**180605**	Build:	6.6.3.486.R01
Summary:	Ping delay to and from OS6250 or OS6450 experiences very high variation		
Explanation:	Ping delay to 6450		

PR	**181685**	Build:	6.6.3.487.R01
Summary:	Stack split with taStp task suspended		

PR	**180754**	Build:	6.6.3.487.R01
Summary:	Third-party AP 1200 not powering up		
Explanation:	Code changes done to allow AT power for class 1,2 and 3 devices.		

PR	**181581**	Build:	6.6.3.487.R01
Summary:	"show stack status" showing incorrect values.		
Explanation:	Corrected "show stack status" tokens display issue.		

PR	**181003**	Build:	6.6.3.489.R01
Summary:	Delay on port activating with LLDP-MED configuration on OS6450.		
Explanation:	when IP phone is connected to switch1 on port 1/4 and port 1/24 of switch1 is connected to the switch2 1/10. when the IP phone gets up, the mac address of the IP phone is getting learned properly on the port 1/4 of the switch1 and uplink port 1/10 of switch2.then when we connect IP phone to to the port 1/4 of switch2. the mac address of the IP Phone is not getting on the Port till the mac on the uplink port gets aged out. Once the mac is getting aged out ,it is get learned on the connected port.ie the Mac movement is not happening properly when we have connect to IP phone . So Changes have been done for proper mac movement handling .		

PR	**181695**	Build:	6.6.3.490.R01
Summary:	OS6450 Stack issue: Primary CMM MAC is not getting synchronized correctly to IDLE Unit.		
Explanation:	IDLE unit Interface MAC is correctly synced with the Primary CMM MAC in the hardware table.		

PR	**180489**	Build:	6.6.3.490.R01
Summary:	Unable to enable mobility after deleting 802.1q tagging on the port		
Explanation:	Ports can be configured as Mobile after removal of 802.1q tagging .		

PR	**181650**	Build:	6.6.3.490.R01
Summary:	VLANs to see each other traffic when in "bridge" is in "mode flat" on OS6250 & OS6450		
Explanation:	Code correction done for VLAN 1 traffic to be received only by port configured for VLAN 1.		

PR	**181456**	Build:	6.6.3.490.R01
Summary:	OS 6250 hanged with exception in task taEthOAM_NI, tSLNAdrLrn, Ipedr		
Explanation:	Added a defensive check to check for the pointer value of encoded TLV.		

PR	**179754**	Build:	6.6.3.490.R01
Summary:	Fan temperature co-relation queries and to modify the level at which fan starts cooling.		
Explanation:	Added a global variable "RunFanAtFullSpeed" through which fan speed can be adjusted irrespective of temperature for 6450-U24 model either by cli/AlcatelDebug.cfg.		

Problems Fixed Between Builds 496 and 510

PR	**182027**	Build:	6.6.3.496.R01
Summary:	QoS value is showing negative value		
Explanation:	alaQoSQueuePacketsSent count always be positive.		

PR	**182150**	Build:	6.6.3.496.R01
Summary:	Inconsistent QoS Manager when programming egress policy rules		
Explanation:	Error will not be thrown when the order of configuring the egress policy rules are changed.		

PR	**182564**	Build:	6.6.3.497.R01
Summary:	OS6450 - IP connectivity issue after upgrading stack to 6.6.3.495.R01		

PR	**182292**	Build:	6.6.3.498.R01
Summary:	The switch configured with tacacs+ server gets crashed when tried to telnet to switch.		
Explanation:	Packet with size exceeding the buffer size caused the crash , fix done to increase the buffer size to accommodate such packet(s).		

PR	**182502**	Build:	6.6.3.498.R01
Summary:	Issue of mac address display in OS6250		
Explanation:	changing the severity level to warning and correcting the mac address display issue		

PR	**181850**	Build:	6.6.3.499.R01
Summary:	when DHCP snooping enabled on the switch then the PXE clients are unable to get the response		
Explanation:	DHCP packets are trapped using source UDP Port (instead of destination UDP Port which does not match for PXE Packets)		

PR	**182219**	Build:	6.6.3.499.R01
Summary:	DHCP server showing the lease time as 0 while configured as infinity.		
Explanation:	Changes done to display the lease time correctly when infinite lease time is set in server		

PR	**182667**	Build:	6.6.3.499.R01
Summary:	Remote address 0.0.0.0 is reported in accounting command packets sent from switch to server		

PR	**182718**	Build:	6.6.3.500.R01
Summary:	Max command lengths are 250 for accounting and 259 for authorization		
Explanation:	The argument max length as per Tacacs+ packet format can support max of 255, thus if the argument length is more than 255, it is truncated to 255, so that accounting is succeeded.		

PR	**183031**	Build:	6.6.3.500.R01
Summary:	aaa accounting command local not printing any commands in swlogs		
Explanation:	aaa accounting command works fine after reload and accounting messages are logged in switch log .		

PR	**182637**	Build:	6.6.3.500.R01
Summary:	Accounting packets sent to all the servers configured with tacacs		
Explanation:	Tacacs accounting packet will be sent only to first active Server		

PR	**182391**	Build:	6.6.3.500.R01
Summary:	In OS6850 aaa accounting command server1, server2 local Local parameter is not working.		
Explanation:	As per CLI guide code change have been done to accept aaa accounting command server as LOCAL		

PR	**183170**	Build:	6.6.3.501.R01
Summary:	Password command on secondary management module should not be allowed		
Explanation:	Password command is not allowed in secondary CMM		

PR	**183151**	Build:	6.6.3.502.R01

Summary: simple ping from the WLAN controller console to the OS6250/6450 is only 20% successful however from

Explanation: Checksum is calculated properly for an ICMP packet received from different vendors.

PR	**183277**	Build:	6.6.3.502.R01

Summary: Issue with Command::ethernet-service nni 1/10 tpid 0x88a8.

Explanation: Fix done to change the tpid on nni port based on the configuration made for the tpid either 8100 or 88a8.

PR	**183168**	Build:	6.6.3.502.R01

Summary: Crash issue with Omni switch.

PR	**183032**	Build:	6.6.3.502.R01

Summary: Unexpected crash noticed with Omni Switch.

PR	**183839**	Build:	6.6.3.510.R01

swlogs filled with below error message

Summary: DHLAA   error Csnmp(2332)
DHLAA   error Cpm(193)

Explanation: Below switch logs are changed from errors to debug
DHLAA   error Csnmp(2332)
DHLAA   error Cpm(193)

PR	**182251**	Build:	6.6.3.510.R01

Summary: OS6450 - MAC movement not happening properly between stack members

Explanation: MAC movement on mobile ports across Ni's is handled properly .

PR	**183686**	Build:	6.6.3.510.R01

Summary: OS6250 configuration changes has not save flash memory.

Explanation: Fix done for Mip overflow in ethernet services

Problems Fixed Between Builds 511 and 520

PR	**185665**	Build:	6.6.3.512.R01

Summary: "show ethernet-service uni-profile ieee-drop-all l2pt-statistics" triggers an error

Explanation: Fix done to stop the error for expected behavior while accessing l2pt-statistics for uni profile IEEE_FWD_ALL and IEEE_DROP_ALL.

PR	**183666**	Build:	6.6.3.514.R01

Summary: DHCP discover from extended module port like 1/51 is not forwarded to linkagg port

Explanation: After initialization uplink ports will not lose their vlan membership .

PR	**186071**	Build:	6.6.3.515.R01

Summary: OS6250 configuration changes has not save flash memory.(old PR#183686)

Explanation: Fix done for Mip overflow in ethernet services.

PR	**186423**	Build:	6.6.3.515.R01

Summary: OS6450: swlog showing wrong port number.

Explanation: The fix contains correction of port number in swlog for SFP plug out on fixed SFP plus port and Stacking ports.

Problems Fixed Between Builds 521 and 531

PR	**186067**	Build:	6.6.3.521.R01

Summary: Qos Policy is getting matched and getting altered by the qos policy, but the policy counter does not

PR	**188671**	Build:	6.6.3.523.R01

Summary: static routes become inactive after reload the switch.

PR	**188806**	Build:	6.6.3.524.R01

Summary: No IP connectivity after removing a VLAN from protected VLAN list in an ERP ring

Explanation: Deletion of protected vlan in flat mode doesn't change STP status of the erp ports in other protected to blocking

PR	**188451**	Build:	6.6.3.524.R01

Summary: Switch got crash again with Mozilla Firefox(25.0.1) when we FTP the switch.

Explanation: Provided defensive mechanism to avoid crash

PR	**188774**	Build:	6.6.3.525.R01

Summary: DHCP Discover and Offer are not forwarded between trusted ports

Under Verification:

PR	**155739**	Build:	6.6.3.26.R01

Summary: SNMP Violating MAC Trap

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PR	**154905**	Build:	6.6.3.164.R01
Summary:	When using tunnel-group-private-id for 802.1x, hex tag fails but string value succeeds		
Explanation:	Corrected logic to copy TUNNEL_PRIVATE_GP_ID information from radius packet irrespective of length		

PR	**164144**	Build:	6.6.3.180.R01
Summary:	OS6250 ipmvlan bootcast problem with set-top-boxes		

PR	**163485**	Build:	6.6.3.183.R01
Summary:	OS6250 - IPMS tasks hogging 100% CPU after reboot whereas IP multicast status is disabled		

PR	**157631**	Build:	6.6.3.184.R01
Summary:	How to disable the gratuitous ARP.		
Explanation:	Introduced control over sending of gratuitous arps for ips configured for interfaces in the switch. This is done by help of existing variable "ipedrArpPoisonLrn", when set to 0 will stop the sending of gratuitous arps over the network.		

PR	**154917**	Build:	6.6.3.188.R01
Summary:	DHCP discover packet is dropped when "dhcp-snooping" is enabled when connected to telco.		

PR	**158283**	Build:	6.6.3.197.R01
Summary:	Switches susceptible to Denial of Service attack on UDP port 123 (ntp)		
Explanation:	A node receiving an error response should not be responded automatically to it with it's own error response.		

PR	**156542**	Build:	6.6.3.199.R01
Summary:	PCs are not able to get IP address until we disable the DHCP-snooping		

PR	**155507**	Build:	6.6.3.199.R01
Summary:	DHCP discover packets drooped when discover has different client and source MAC addresses		
Explanation:	When the mac-address verification is disabled And if the source mac address and Hardware mac-address are different, Source mac is replaced with Hardware mac address in the software mac-address list available in udp-relay module.		

PR	**155961**	Build:	6.6.3.206.R01

Summary: issue were static routes added on fly are going inactive and after a reboot few will come up.

Explanation: Allow host specific static route, if the gateway is on different subnet

PR	**155894**	Build:	6.6.3.223.R01

Summary: No multicast neighbor seen with "show ip multicast neighbor" although querier properly seen

Explanation: PIM/DVMRP packets trapped to CPU, for CPU to learn neighbor router to forward multicast data to it.

PR	**163332**	Build:	6.6.3.225.R01

Summary: If 802.1x and LPS are enabled then a MAC address of a supplicant is not learned

Explanation: Search and delete LPS table as per vlan specified

PR	**163281**	Build:	6.6.3.225.R01

Summary: Authenticated-T after receiving an Access-Reject from the RADIUS server

PR	**160039**	Build:	6.6.3.246.R01

Summary: After upgrade to 6.4.3.779.R01, vlan 1 traffic is not passing through tagged port

Explanation: Clear untagged port bitmap alone for all vlans while initializing stp task

PR	**129352**	Build:	6.6.3.251.R01

Summary: After resetting NI 16 switch crashed on tNetTask

Explanation: Code changes done to add the task trace of tnet task into swlog.

PR	**157953**	Build:	6.6.3.260.R01

Summary: Need to redefine the MAC range in alaPhones mac group

Explanation: Addition of mac range to the existing alaPhones mac group

PR	**163868**	Build:	6.6.3.282.R01

Summary: "qos user-port shutdown bpdu" does not work on mobile ports

PR	**167148**	Build:	6.6.3.366.R01

Summary: AOS Switch does not respond to MS Windows 7 ARP with APIPA source IP.

Explanation: Policy Switch Network group can be used from LDAP for QOS configuration

PR	**162946**	Build:	6.6.3.403.R01

Summary: Sending any packets with destination tunnel MAC (01:00:0c:cd:cd:d0) dropped at the UNI port.

Explanation: To disable layer 2 tunneling protocol using debug variable from AlcatelDebug.cfg[If noMacTunnelFeature =1, the layer 2 protocol tunneling is disabled, "debug set MacTunnelFeature 1"]

PR	**158888**	Build:	6.6.3.408.R01

Summary: The default (blt) network group Switch cannot be used via OmniVista.

Explanation: Policy Switch Network group can be used from LDAP for QOS configuration

PR	**169442**	Build:	6.6.3.419.R01

Summary: OS6250 - ipms_flood_unknown feature does not exist in 6.6.x

Explanation: Added Support for the CLI command "ip multicast flood unknown enable/disable"

PR	**144097**	Build:	6.6.3.427.R01

Summary: vlan mac-range mobile port in filtering

Explanation: Allow packets with vlan id 0 to be classified based on vlan-mac rule

PR	**172887**	Build:	6.6.3.430.R01

Summary: OS6250 Sends AMAP from a STP disabled port

Explanation: Amap status can be enabled / disabled per port

PR	**175596**	Build:	6.6.3.440.R01

Summary: Command "show ip helper dhcp-snooping ip-source-filter {vlan | port}" not working in 6250

Explanation: Command Implemented to show port level ip source filtering info , configured in DHCP Snooping

PR	**174567**	Build:	6.6.3.457.R01

Summary: VU-091113-1: Vulnerability in the SSL/TLS protocol.

Explanation: Disabling Renegotiation in open SSL

PR	**174371**	Build:	6.6.3.457.R01

Summary: VU-101208-2: Vulnerabilities in OpenSSL

Explanation: Work around for using older Netscape browser and servers is not available now

PR	**178076**	Build:	6.6.3.475.R01

Summary: 6450: pmd analysis needed

Explanation: Length of the incoming bootp/ dhcp packets are validated.

PR	**181862**	Build:	6.6.3.489.R01

Summary: DHCP Snooping issue with port mobility for IP Phones.

Explanation: DHCP Snooping issue with port mobility for IP Phones. Assuming a client connected to a port in 6450 which has mobility and LPS enabled, the switch seems to drop the DISCOVER packet from the client when snooping is enabled. And the other issue is that the MAC of the client was not getting learned with DISCOVER packet. Seems that on a mobile port, if DISCOVER packet comes in with unknown SA, first, Group Mobility determines the vlan the packet should classify in. For this reason, packet was not sent to Source Learning. And, when snooping is enabled, DISCOVER packet received on a LPS port when being checked for DHCP rules was failing even when there were no DHCP rules.

PR	**182918**	Build:	6.6.3.500.R01

Summary: Messages from TACACS+ server are not reported to end user in the console output

Explanation: Changes have been done to intimate the end user with server responds message.

PR	**183430**	Build:	6.6.3.511.R01

Summary: UNP with policy list is not getting matched.

Explanation: Now ARP replies forwarded through the switch.

PR	**186887**	Build:	6.6.3.517.R01

Summary: Spanning tree issue with Omni Switch with MSTP protocol when we disable cist on ports.

Explanation: Fix done to display the correct status of the STP operational status, after disabling the cist on port.

PR	**187275**	Build:	6.6.3.521.R01

Summary: I2C read error is overwhelming the switch, need to tone down the retries

PR	**185859**	Build:	6.6.3.526.R01

Summary: Stack splits when enable qos rules to protect user port.

PR	**189941**	Build:	6.6.3.528.R01

Summary: "qos user-port shutdown bpdu" - shutdown is not triggered by PVST+ BPDUs until 1x1 PVST+ compatibility

PR	**190178**	Build:	6.6.3.529.R01

Summary: OS6450 switches in stack crashed with suspended tasks: tCsCSMtask2 & Vrrp .

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PR	**174943**	Build:	6.6.3.450.R01
Summary:	Unable to create ipmvlan on a OS6450 running 663 GA in Enterprise mode.		
Explanation:	Changes made to ensure the ipmvlan in enterprise mode will work for non metro units.(Non metro units should support ipmvlan enterprise mode irrespective of metro license, License required only for ipmvaln in vlan stacking mode)		

PR	**189171**	Build:	6.6.3.530.R01
Summary:	OS 6250 stack reboot issue		

PR	**185296**	Build:	6.6.3.510.R01
Summary:	TACACS Authorization not working properly when server becomes unreachable and then becomes reachable		
Explanation:	Tacacs authorsiation will be handled properly during the change in server status from unreachable to reachable.		

PR	**183211**	Build:	6.6.3.501.R01
Summary:	with aaa accounting command local having more than 255 character crashes the switch		
Explanation:	As per our analysis the root cause of the issue is whenever aaa send command message to server for processing the accounting request, the aaa command accounting will use the maximum size of command length which is 512.but when aaa command accounting is configured as local, it is using the buffer of size 255 because of this local accounting server is not able to hold the entire values of accounting command which also makes the switch to crash. So changes have been made to increase the buffer size as same as accounting command.		

PR	**182768**	Build:	6.6.3.500.R01
Summary:	Not all commands are sent to TACACS+ server to be authorized from the OmniSwitch.		
Explanation:	We have done changes for whoami and history size. We have added these commands to session management families.		

PR	**114746**	Build:	6.6.3.411.R01
Summary:	6200 :: %BRG_AMAP-N-AMAP_STATUS: AMAP status: Port g1 data changed.		
Explanation:	Initialize the buffer used for filling system name so that AMAP status change messages are not displayed wrongly.		

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PR	**156049**	Build:	6.6.3.188.R01

Summary: OS9 - Subnet broadcast in Bootp Packets are not relayed to the relay address configured.

Explanation: Bootp buffer handling size increased from 1024 to 1400 to handle pxe discover packets

NOTE: BOOTP Packets of Max Size 1400 Bytes only will be handled by AOS 64x Devices

PR	**160791**	Build:	6.6.3.490.R01

Summary: OS6850:Problem in QoS no trusted port.

Explanation: Changed mechanism to copy webhostname from http request header

PR	**174370**	Build:	6.6.3.457.R01

Summary: VU-110617-3: Vulnerability in OpenSSL

Explanation: Add protection against ECDSA timing attacks

PR	**173664**	Build:	6.6.3.428.R01

Summary: Syslog message output seen with a different format

Explanation: Syslog message to follow RFC 3164 format

PR	**174571**	Build:	6.6.3.472.R01

Summary: VU-080718-1: Vulnerability in various IPv6 protocol implementations.

Explanation: Vulnerability Fix based on the openbsd patch

PR	**177150**	Build:	6.6.3.486.R01

Summary: Issue with DHCP snooping, dropping the DHCP ACK frame

Explanation: DHCP Request packet will be relayed to only the server-ip ,if it carries in his contents. This implementation is controlled by debug variable "dhcp_isc_enable". This is disabled by default, to enable this feature set this varaible in AlcatelDebug.cfg

PR	**156360**	Build:	6.6.3.205.R01

Summary: OS6400 doesn't forward option-82 information to another switch (Telco) when DHCP snooping is enabled

Explanation: The DHCP packet will be forwarded without stripping opt82 format from the packet if POLICY_KEEP is enabled.

PR	**158136**	Build:	6.6.3.278.R01

Summary: OS 6250 flash corruption happened in 6.6.1.791

Explanation: 6250 Enhanced upgrade procedure for flash corruption & corrected few flash related errors

PR	**160597**	Build:	6.6.3.188.R01
Summary:	OS6850: Problem in flushing of RIP route from routing table.		
Explanation:	RIP Drc Retry queue is scheduled as needed		

PR	**159544**	Build:	6.6.3.415.R01
Summary:	OS6250 QoS port maximum egress bandwidth maximum ingress bandwidth		
Explanation:	Correct the policing CBS and EBS values. Also provide options to configure the maxBucketSize field in the shaper. (qos port max default depth)		

PR	**161347**	Build:	6.6.3.212.R01
Summary:	crash on radius server nt reachble message "Excep in task: RADIUS Cli PC : 0x2607b78 "		
Explanation:	Fix to restrict the typecasting only for authentication requests. So accounting requests will not have any chance to go and access the wrong location.		

PR	**166712**	Build:	6.6.3.442.R01
Summary:	STR NON FATAL messages on log after the switch was upgraded		
Explanation:	case for mip_chassisSupervisionRfsDfSlot has been included in order to avoid error messages(No such instance: rcvd nominatot 1invalid) in the log.		

PR	**166512**	Build:	6.6.3.428.R01
Summary:	OS6850 - LPS MAC learning issue		
Explanation:	Correcting flush logic on LPS port for permanent mac		

PR	**173649**	Build:	6.6.3.447.R01
Summary:	Swlog logging messages on high CPU status for CMM / NI. Reference PR# 162618		
Explanation:	Additional Changes added to the current swlog to display if CMM/NI side task is affected while during an CPU spike		

PR	**173651**	Build:	6.6.3.450.R01
Summary:	SAA statistics are not consistent		
Explanation:	Corrected the SAA Statistics with Proper timestamp in Packets		

PR	**170650**	Build:	6.6.3.455.R01
Summary:	UNP-Allocation fails in case of bulk 802.1x-client-requests.		
Explanation:	DataPackets from Client before authentication is properly handled.		

PR	**156504**	Build:	6.6.3.188.R01
Summary:	CMM crashed with tCs_Probe task suspended: Analysis required		
Explanation:	Defense check added to prevent the Crash on an access of Invalid node in the IPV6 router List		

PR	**169586**	Build:	6.6.3.386.R01
Summary:	OS6450-POE Switches: Disabled POE ports comes up for few seconds after a switch reboot.		
Explanation:	PoE disabled till configuration from CMM is applied		

PR	**180448**	Build:	6.6.3.478.R01
Summary:	multicast packet drops in IP-DECT environment		
Explanation:	Instead of tagging a flood bitmap index to multicast disabled software learned flows, we will flush the same from hardware if the vlan multicast status is disabled		

PR	**176235**	Build:	6.6.3.473.R01
Summary:	OS6250 LED problem: Some LEDs are not flashing though the link is up		
Explanation:	When the unit s stacking LED is on, recover the switch to normal state where the port LEDs would be ON after 30 seconds. Also the issue with stack push button is resolved with FPGA version 14.		

PR	**177090**	Build:	6.6.3.477.R01
Summary:	IP CAM not getting power when connected to 6250 device		
Explanation:	Changes done on the PoE controller firmware to change the threshold of the foldback protection for voltage drop.		

PR	**187195**	Build:	6.6.3.516.R01
Summary:	6450P10: using SFP-GIG-T on port 1/11 or 1/12 prevents the link to come up post a reload		
Explanation:	Changes done to ensure the 1G link using triple speed SFP remains up post a reload on OS6450 P10 boards.		

PR	**155814**	Build:	6.6.3.171.R01
Summary:	OS-9000 getting crashed whenever we enable/disable the stp status via WEB GUI on port basis.		
Explanation:	Reset stp pointer to initial value after changing admin status for all mstp instances		

PR	**156356**	Build:	6.6.3.186.R01
Summary:	OS6850 gives internal error when trying to add same ip for snmp station as the loopback0		
Explanation:	SNMP Station address configuration restricted only to Pure Loopback0 address (not same as physical ip interface address)		

PR	**155084**	Build:	6.6.3.225.R01
Summary:	Issue with Dchp snooping PXE with AltBootService (UDP 4011)		
Explanation:	Not to drop non-dhcp packets(with Dest Port 68 or 67) when snooping is enabled		

PR	**160221**	Build:	6.6.3.195.R01
Summary:	Is it possible to have NTP server DNS name in boot.cfg instead of ip address of NTP server		
Explanation:	DNS name will be displayed in configuration snapshot if NTP server is configured with DNS name.		

PR	**171329**	Build:	6.6.3.408.R01
Summary:	Interface flood rate command remains on the CLI for 6450.		

PR	**171349**	Build:	6.6.3.410.R01
Summary:	OS6250M - Need explanation for ETHOAM log "error 2018:handle_dmr_info:Timer expired at CMM."		
Explanation:	Changed severity of the ethoam log message "handle_dmr_info:Timer expired at CMM"		

PR	**171193**	Build:	6.6.3.404.R01
Summary:	OS6250 crashed with taEthOAM_NI task suspended when tried to pull statistics from SAM.		
Explanation:	Optimize memory management on receiving CFMs over SAA configured		

PR	**180822**	Build:	6.6.3.498.R01
Summary:	Query upgrading SSH Version to 5.2		

PR	**181549**	Build:	6.6.3.498.R01
Summary:	SSH vulnerabilities in OS9800: SSL Version 2 (v2) Protocol Detection which reportedly suffers from s		
Explanation:	Disabled the ssl-v2 support due to vulnerabilities		

PR	**181521**	Build:	6.6.3.484.R01
Summary:	Locally configured routes are displayed with EMP interface when we configured with 6.4.5.447 R01 build		
Explanation:	When a route with gateway 127.0.0.1 is configured, the interface was getting displayed as a EMP because of the ifindex value of the route is 0 . A condition is introduced to display the interface of routes with gateway 127.0.0.1 as "Loopback' in routing database.		

| PR | **175252** | Build: | 6.6.3.431.R01 |

Summary: L2pt-statistics not working on OS6250-8m running AOS 6.6.3.416
Explanation: Fix the QOS PCL entries to get the accurate L2TP profile behavior

| PR | **176959** | Build: | 6.6.3.473.R01 |

Summary: ARP entry of printbox aging out in combination with NAC setup on particular stack
Explanation: Proper handling of CCODE in case of ARP packets received on a .1x port

| PR | **189500** | Build: | 6.6.3.527.R01 |

Summary: DHCP packets getting dropped on the trusted ports.

| PR | **186818** | Build: | 6.6.3.515.R01 |

Summary: OS6450-P10 crashes when a new vlan is created when running on a official 663.514.R01.

| PR | **186600** | Build: | 6.6.3.522.R01 |

Summary: psNotOperational Power supply is inoperable, Object: powerSuply 2, Index: 65
Explanation: Changes done to send trap only when power supply is present and non-operational.

| PR | **159993** | Build: | 6.6.3.225.R01 |

Summary: 802.1x issue after upgrade to 6.4.3
Explanation: Pass message to all Nis when mobile entry is deleted

| PR | **159333** | Build: | 6.6.3.246.R01 |

Summary: IP interface status remains up even when link agg goes down.
Explanation: Deactivate the IP interface, when the corresponding vlan(STP disabled vlan) is operationally down.

| PR | **163005** | Build: | 6.6.3.225.R01 |

Summary: MAC address is learned but no connectivity
Explanation: Correcting dot1x message and callback handling

| PR | **166306** | Build: | 6.6.3.260.R01 |

Summary: snmpenginetime give wrong value for OID
Explanation: Reset SNMP engine when the time limit exceeds for snmp engine time.

PR	**180835**	Build:	6.6.3.481.R01

Summary: SSL related Vulnerabilities in OS6850E Switches.

Explanation: For web view Authentication ssl certificate is integrated in code under path

/sw/management/switch_management/emweb/html/avlan/custom

. These certificates were incorporated in secu.img and get extracted to the switch

PR	**174986**	Build:	6.6.3.438.R01

Summary: OS6450-P48 crash issue.

Explanation: Code changes to prevent File System Error issue.

For more details about OS6450 file system error issue, refer the tech tip

(Knowledge base) document# 12505 in Customer Support website.

For more details about OS6250 file system error issue, refer the tech tip

(Knowledge base) document# 12506 in Customer Support website.

PR	**188377**	Build:	6.6.3.522.R01

Summary: NTP issue with Omni switch.

Explanation: Controlling the snapshot of NTP configuration to store the IP address

PR	**187933**	Build:	6.6.3.521.R01

Summary: Multiple simultaneous crashes (stacked and standalone)

PR	**184016**	Build:	6.6.3.512.R01

Summary: Unable to retrieve entire Mac-address table per port through SNMP

Explanation: Fix done to retrieve all the static mac entries on LPS port through the snmp.

PR	**154325**	Build:	6.6.3.197.R01

Summary: Relay-agent(switch) forwards only the first offer pkt with snooping enable

Explanation: Accept all DHCP-OFFERs when multiple offers are received, when dhcp-snooping is enabled

PR	**160479**	Build:	6.6.3.415.R01

Summary: Changes to qos port max default depth alone are not applied , AOS 6.6.x

Explanation: qos port depth command will work similar to 64x

PR	**160497**	Build:	6.6.3.260.R01
Summary:	802.1X not connecting all users after reboot of 6850 (ref PR#156204)		
Explanation:	Ignore packet received on dot1x port for ip task to be ready after reload		

PR	**162320**	Build:	6.6.3.197.R01
Summary:	DHCP snooping is not working in slot 7 on a stack of 8 units of 6850.		
Explanation:	Reset Udprelay-CMM to NI socket completely on NI down events		

PR	**165716**	Build:	6.6.3.445.R01
Summary:	Incorrect NAS Port value in Radius accounting request		
Explanation:	Introduced NASPortValueEnable flag to control NAS port value. Default value 0, NAS prt value will be 77. WHen set to 1, NAS Port will be the co-responding port number		

PR	**180623**	Build:	6.6.3.482.R01
Summary:	In OmniSwitch OS6400/OS6850RE,"Running configuration and saved configuration are different" is shown		
Explanation:	Modified the behaviour of Show Configuration Status to sync with CMM Configuration Status		

PR	**179716**	Build:	6.6.3.504.R01
Summary:	Third-party GBPTControl frames (DA mac 01:00:0c:cd:cd:d0) tunneled by software in 6.6.3.R01		
Explanation:	Implemented CLI command to enable and disable MAC tunneling as below:		

 ethernet-service mac-tunneling enable/disable   (usage: To enable or disable the mac-tunneling feature).

 show ethernet-service mac-tunneling   (usage:To know the status of the mac-tunnel feature like whether the feature is enabled or disabled and applied or not).

In 6.6.X releases the uni profile treatment should be tunnel for following protocols in order to tunnel along with the above command in order to tunnel the DA MAC 01:00:0c:cd:cd:d0

PAGP
UDLD
CDP
VTP
DTP
PVST
VLAN
UPLINK

PR	**188601**	Build:	6.6.3.529.R01

Summary: Unable to see snmp traps when enabling dying gasp on switch.
Explanation: adding dying gasp trap support for snmp version 1 (v1)

PR	**187362**	Build:	6.6.3.517.R01

Summary: 6450-P10: Detect MAC movement when moving same PC among DHCP-SNOOPING ports.

PR	**188855**	Build:	6.6.3.524.R01

Summary: lacp agg actor port priority command accepting value beyond 0-255

PR	**185970**	Build:	6.6.3.513.R01

Summary: DHCP snooping trusted port and binding table
Explanation: Implemented the cli "show ip helper dhcp-snooping ip-source-filter binding".
This command is used to display the binding entries for the clients connected
in ip-source-filtering enabled ports.

PR	**186300**	Build:	6.6.3.523.R01

Summary: show fan output not giving the exact status of the fan.
Explanation: Fix done to show proper running FAN status for OS6450

PR	**182765**	Build:	6.6.3.500.R01

Summary: EXIT command issue with Omni Switch.
Explanation: Changes have been done to intimate accounting command information for
exit command to tacacs server even there is no configuration

Known Issues:

PR	**183629**

Summary: unable to create QOS Rule with Register profile
Explanation: QoS Port nested command with register keyword is handled properly

PR	**180957**

Summary: Duplicate primary and secondary switch were noticed after we reload the
entire stack
Explanation: Fix done to unblock AOS tasks when unable to write output on to the tty
driver's write buffer.

New Software Features:

1. Control Frame Tunnel Statistics

Introduction:

This feature Enhancement provides the facility to view the statistics of the processing of Layer 2 control frames received per port per protocol on UNI and NNI ports as set according to the UNI-Profile

Platforms Supported:

Omni Switch 6450, 6250M

Commands usage:

show ethernet-service uni [[linkagg<num>] / <port>]] l2pt-statistics
This command displays per UNI port statistics of all protocols. When no port(s) specified, statistics of all UNI ports are displayed.

Syntax Definitions
Num   Linkagg whose statistics are requested
Port   Port whose statistics are requested.

Usage Guidelines:

The port should be an UNI port

```
172.25.50.200 - PuTTY

PS1: 172.25.50.70-> show ethernet-service uni l2pt-statistics
Rx,Tunnel and Drop are counted only in software

                          MAC          Source
Port            L2 Protocol              Rx        Tunnel        Drop
   Peer      MAC Tunnel   De-tunnel     MAC
------+--------------------------------+------------+------------+------------+-
----------+------------+------------+---------------
 0/1     802.3ad                                0            0            0
         0                0           0           -
 0/1     LACPMARKER                             0            0            0
         0                0           0           -
 0/1     OAM                                    0            0            0
         0                0           0           -
 0/1     802.1x                                 0            0            0
         0                0           0           -
 0/1     802.1ab                                0            0            0
         0                0           0           -
 0/1     AMAP                                   0            0            0
         0                0           0           -
 0/1     PAGP                                   0            0            0
         0                0           0           -
 0/1     UDLD                                   0            0            0
         0                0           0           -
 0/1     CDP                                    0            0            0
         0                0           0           -
 0/1     VTP                                    0            0            0
         0                0           0           -
 0/1     DTP                                    0            0            0
         0                0           0           -
 0/1     PVST                                   0            0            0
         0                0           0           -
 0/1     VLAN                                   0            0            0
         0                0           0           -
 0/1     UPLINK                                 0            0            0
         0                0           0           -
 0/1     STP                                   73           73            0
         0                0           0           -
 0/1     GVRP                                   0            0            0
         0                0           0           -
 0/1     MVRP                                   0            0            0
         0                0           0           -
```

show ethernet-service nni [[linkagg<num>] / <port>]] l2pt-statistics
This command displays per NNI port statistics of all protocols. When no port(s) specified, statistics of all NNI ports are displayed.

Syntax Definitions:
Num   Linkagg whose statistics are requested
Port   Port whose statistics are requested.

Usage Guidelines:
The port should be an NNI port

Example :

```
PS2: 172.25.50.73-> show ethernet-service nni l2pt-statistics

  Port   Rx Mac-Tunnel   Mac-tunnel discard
-------+--------------+-------------------
  1/3          169              0

PS2: 172.25.50.73-> 
```

*s*how *e*thernet-service uni-profile [*<profile_name>*] *l*2pt-statistics

This command displays per uni-profile statistics of all protocols. When no profile specified, statistics of all UNI profiles are displayed.

Syntax Definitions:

    Uni profile name   Name of the uni-profile whose statistics to be displayed.

Usage Guidelines:

When the name is given, the uni-profile entry should be already configured

```
->
->
-> show ethernet-service uni-profile u4 l2pt-statistics
UNI Profile: u4
        Total RX:                                       97,
        L2 Protocol:
                802.3ad, OAM, LACPMARKER
                        Rx:                             0,
                        Hardware processing:            CPU,
                802_1x
                        Rx:                             0,
                        Hardware processing:            DROP,
                802.1ab
                        Rx:                             4,
                        Hardware processing:            DROP,
                AMAP
                        Rx:                             3,
                        Hardware processing:            DROP,
                PAPG, UDLD, CDP, DTP, VTP, PVST, VLAN, UPLINK
                        Rx:                             0,
                        Hardware processing:            CPU,
                STP
                        Rx:                             90,
                        Hardware processing:            CPU,
                GVRP, MVRP
                        Rx:                             0,
                        Hardware processing:            FWD,
```

*c*lear *e*thernet-service uni [[linkagg*<num>*] / *<port>*]] *l*2pt-statistics

Alcatel·Lucent

This command clears UNI port statistics of all protocols.

Syntax Definitions:

Num   *Linkagg whose statistics to be cleared*
Port   *Port whose statistics to be cleared*

Usage Guidelines:

The port should be an UNI port

clear ethernet-service nni [[linkagg\<num\>] / \<port\>]] l2pt-statistics
This command clears NNI port statistics of all protocols.

Syntax Definitions:
Num   *Linkagg whose statistics to be cleared*
Port   *Port whose statistics to be cleared*

Usage Guidelines:
The port should be an NNI port

clear ethernet-service uni-profile [\<uni profile_name\>] l2pt-statistics
This command clears uni profile statistics of all protocols.

Syntax Definitions:

Uni profile name   Name of the uni-profile whose statistics to be displayed.

Usage Guidelines:

When the name is given, the uni-profile should be already configured

Limitations:

None

2. Acct-Input-Gigawords & Acct-Output-Gigawords

Introduction:

This enhancement feature provides the facility to identify how many times the Acct-Input-Octets(type-42), Acct-Output-Octets(Type-43) counter has wrapped around 2^32 it will calculate the value in multiples of 4GB and send using the attributes Acct-Input-Gigawords (type 52) & Acct-Output-Gigawords (type 53).Earlier, size of Acct-Input-Octets & Acct-Output-Octets with which we can only represent maximum 4GB(2^32) of Octets. In this enhancement Acct-Input-Gigawords, Acct-Output-Gigawords will be sent in Interim-Update, Periodic-Interim-Update & Stop Messages. Acct-Input-Gigawords, Acct-Output-Gigawords that are sent in accounting packets for both supplicant and non-supplicant users.

Platforms Supported:
Omni Switch 6250
Omni Switch 6450

Commands usage:

No New commands introduced

Limitations:

None

3. Case Sensitive Mac-Address Authentication

Introduction:

This enhancement feature enables the AOS switches to send MAC address of the non-supplicant client in lower case as username and password for authentication to the authentication server. During non-supplicant authentication the client MAC address is sent as username and password. Earlier, for non-supplicant authentication the client MAC address is sent as username and password .This MAC address is sent in Uppercase for username and password. This enhancement enables to the send the MAC address of client as username and password in lower case.

Platforms Supported:
Omni Switch 6250
Omni Switch 6450

Commands usage:

No New commands introduced

Limitations:

None

4. UNP Bandwidth Rate Limiting

Introduction:

This feature Enhancement provides the facility to apply ingress and egress bandwidth limitations on a port on basis of UNP classification locally or remotely through radius-server return attribute. A UNP profile will be associated with maximum ingress and egress bandwidth, whenever authenticates under UNP policy either through radius returned UNP attribute or through local policy, associated bandwidth limitations are applied on port. When Qos port with ingress or egress bandwidth specified will override bandwidth associated due to UNP. If ingress/egress bandwidth is set through qos port command then any change in qos port parameter will over ride bandwidth set due to UNP.

When multiple users authenticate under same port latest bandwidth limitation will overwrite the previous limitation existing on the port. Earlier there was no option to associate bandwidth parameters with UNP. Hence No bandwidth limitation can be applied to the port on basis of UNP classification.

Platforms Supported:
 Omni Switch 6450
 Omni Switch 6250/ OS6250M

Commands usage:

aaa user-network-profile name <profile-name> vlan <vlan> [maximum-ingress-bandwidth <num> maximum-egress-bandwidth <num> maximum-default-depth <num>]

> *Syntax Definitions*
> Maximum-ingress-bandwidth   Ingress bandwidth to be applied on the port
> Maximum-egress-bandwidth   egress bandwidth to be applied on the port
> Maximum-default-depth   depth to be applied on the port
>
> Defaults
> Maximum-ingress-bandwidth   -1 (no rate-limit)
> Maximum-egress-bandwidth   -1 (no rate-limit)
> Maximum-default-depth   -1 (1 Mbps)

Show 802.1X rate-limit

```
-> show 802.1x rate-limit

Slot  Max                        Ingress BW                      Max                    Egress BW
Port  Ingress-BW  Type  UNP-ProfileName                          Egress-BW   Type   UNP-ProfileName
-----+----------+------+-------------------------------+---------+------+-------------------------------
 3/7        64K   UNP                            geetha8        64K   UNP                            geetha8
```

Limitations:

None

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5. LPS Sticky mode

Introduction:

This feature Enhancement provides the facility to configure the learning window to learn all Mac as static. Earlier, The LPS feature limits the number of MACs that can be learned, up to a pre-determined number, plus supports a learning time window, and provides logging and notification if a rule violation occurs. This feature is enhanced to learn the MAC as static from the initial stage

Platforms Supported:
Omni Switch 6450
Omni Switch 6250/ 6250M

Commands usage:

  port-security shutdown <num> [no-aging {enable|disable}] [convert-to-static {enable|disable}] [boot-up {enable|disable}] [learn-as-static {enable|disable]

Syntax Definitions

Learn-as-static : this option is used for learning a MAC as static during learning
                          window.

Enable   : Enables LAS functionality on this port.

Disable   : Disables LAS feature on this port without removing LPS configuration.

Usage Guidelines

By default, LAS admin-status is N/A.

When disabled, all filtered MAC addresses on the port are removed and all bridged and static MAC addresses stay "forwarding". The LPS static Mac configuration is preserved. The source learning mode is set the hardware mode for the port and all new MAC addresses are learnt and not visible in the LPS context. The port-security configuration is still allowed but not applied, but configuration of LPS static Mac is refused. Reducing the "maximum" to a lower value than the number of static Mac is also refused.
.
port-security shutdown <0> [{ no-aging <enable|disable>} |{convert-to-static <enable | disable>} | {boot-up <enable|disable>} | {learn-as-static <enable|disable>}]

Configuration will enable user to use all the options for learning window when the shut down time is zero.

Syntax Definitions:

 Num   : Learning window time in minutes (Max value ->65535)

 No-aging   : When enabled, MAC learnt during learning window will not

be flushed.

Convert-to-static: When enabled, MAC are learnt during learning window
are converted into static MAC.
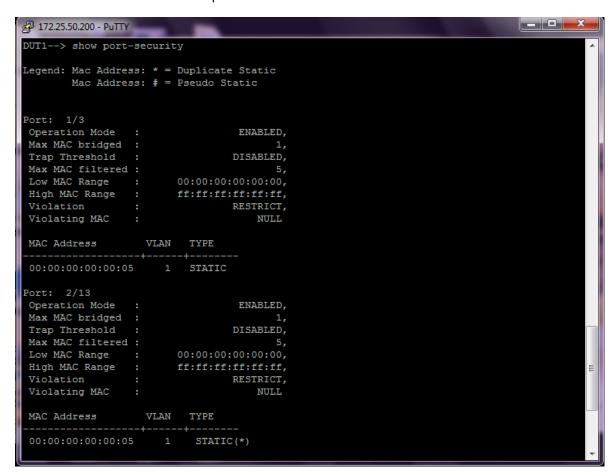
Boot-up   : When enabled, Learning window should occur at boot-up time when
box restarts.

Learn-as-static   : this option is used for learning a MAC as static during learning window.

Usage Guidelines:
User can use all, any or none of flags with "port-security shutdown 0 command now.
Show commands are same as in previous feature.

```
DUT1--> show port-security

Legend: Mac Address: * = Duplicate Static
        Mac Address: # = Pseudo Static


Port:  1/3
 Operation Mode    :                ENABLED,
 Max MAC bridged   :                      1,
 Trap Threshold    :               DISABLED,
 Max MAC filtered  :                      5,
 Low MAC Range     :     00:00:00:00:00:00,
 High MAC Range    :     ff:ff:ff:ff:ff:ff,
 Violation         :               RESTRICT,
 Violating MAC     :                   NULL

 MAC Address        VLAN   TYPE
------------------+------+--------
 00:00:00:00:00:05    1    STATIC

Port:  2/13
 Operation Mode    :                ENABLED,
 Max MAC bridged   :                      1,
 Trap Threshold    :               DISABLED,
 Max MAC filtered  :                      5,
 Low MAC Range     :     00:00:00:00:00:00,
 High MAC Range    :     ff:ff:ff:ff:ff:ff,
 Violation         :               RESTRICT,
 Violating MAC     :                   NULL

 MAC Address        VLAN   TYPE
------------------+------+--------
 00:00:00:00:00:05    1    STATIC(*)
```

Limitations:
None

6. DHCP SERVER

Introduction:

A DHCP server provides dynamic IP addresses on lease for client interfaces on a network. It manages a pool of IP addresses and information about client configuration parameters. The DHCP server obtains an IP address request from the client interfaces. After obtaining the requests, the DHCP server assigns an IP address, a lease period, and other IP configuration parameters, such as the subnet mask and the default gateway

For enabling the DHCP-server in DUT we have to keep the below files in flash/switch directory and it is having the information about ip address details assigned to client when DHCP-client sends DHCP-request.
dhcpd.pcy
dhcpd.conf

Platforms Supported:

Omni Switch 6450

Commands usage:

dhcp-server {enable | disable | restart}

Enables, disables, or restarts the DHCP server operation.

Syntax Definitions:

Enable   Enables operation status of the DHCP server.

Disable   Disables operation status of the DHCP server.

Restart   Restarts the DHCP Server.

clear dhcp-server statistics

Clears the packet counters of dhcp-server statistics.

show dhcp-server statistics [packets | hosts | subnets | all]

Displays the statistics of the DHCP server.

Syntax Definitions:

packets   Displays general statistical information along with specific information about data packets received, dropped and transmitted.

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hosts   Displays general statistical information along with specific information
                about hosts related to all the subnets.

subnets   Displays general statistical information along with specific information
                about all the subnets.

all   Displays all statistical information related to the DHCP server.

show dhcp-server leases [ip_address | mac_address | count] [type {static | dynamic}]

Displays the leases offered by the DHCP server.

Syntax Definitions:

ip_address   Specifies IP address of the interface configured with DHCP server.

mac_address   Specifies MAC address of the interface configured with DHCP server.

static   Displays only static leases.

dynamic   Displays only dynamic leases.

Limitations:
None

7. LLDP Power via MDI Enhancement

Introduction

This feature enhancement facilitates to support the link layer classification in order to interoperate with newer class 4 PD's(Powered Device) , because these devices require a response to the LLDPDU power via MDI TLV before they will draw additional power from PSE(Power). Earlier the maximum power is set to the maximum allowed power for the detected Power Class of the Power Device connected on the port. The Power Class detection is done via hardware by the POE controller. POE Devices in general can draw any amount of power up to the maximum power that is set for the port. In any condition, the maximum power that the PD can request from the PSE cannot exceed the maximum allowed power for the Power Class in which the PD(Powered Device) is detected, But these newer class 4PD's(Powered devices) requires to draw additional power than the maximum power set for the port Hence this feature is introduced.

Platforms Supported
Omni Switch 6250, 6450

Commands usage

lldp {slot/port | slot | chassis} tlv dot3 power-via-mdi {enable | disable}

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Syntax Definitions

slot/port   Slot number for the module and physical port number on that module
slot   The slot number for a specific module.
enable   Enables 802.3 TLV LLDPDU transmission.
disable   Disables 802.3 TLV LLDPDU transmission.

Usage Guidelines
• The LLDPDU must be enabled and set to transmit before using this command.
• If this command is applied to a slot or chassis, then the existing configuration related to this command is lost.

Limitations:
None

8. Increased number of Telnet/ Syslog & NTP

Introduction

This enhancement has increased the number increased of telnet sessions from 4 to 6, no of syslog servers increased from 3 to 12 and no of NTP servers increased from 3 to 12

Platforms Supported
Omni Switch 6250, 6450

Commands usage
No new CLI introduced for this

Limitations:
None

9. Enable / Disable the console session

Introduction

This feature Enhancement provides the facility to enable/disable the console cli session so that access to the switch configuration shell through the console port can be in a controlled manner as required. By default this facility (console access) will be enabled. This can also be stored in configuration file so that console access control can be applied even after reboot.

Recovery Procedure
If both the console cli session is disabled in the configuration file on both working and certified directory and if the telnet/ssh/web view session is not available to the switch, to get access to the switch console cli session user have to stop the switch in miniboot by setting the boot flags to 0x1000 and once the switch stops in miniboot user shall delete the configuration file and reboot the switch to get console access to the switch.

Earlier, there was no provision to control the access for console cli session.

Platforms Supported
Omni Switch 6250, 6450

Commands usage

Session console {enable disable}

Usage Guidelines
- By default, the cli console shell is enabled.

- The command shall be accepted only via Telnet/SSH session, and not through console sessions to the switch.

- When it is disabled, even the switch log output to the console shall be disabled.

- Command shall be stored to the configuration file using write memory.

- Command shall be used only on standalone unit, even if used in stack only primary unit console CLI session shall stay disabled.

Limitations:
None

10. 802.1q capability over NNI ports

Introduction:

This feature Enhancement provides the 'Standard VLAN support on NNI ports' will allow any standard (non-service) VLAN to be associated to NNI ports. This allowed association can be of type untagged or 8021q tagged. However, there is an exception for VLAN 1, which shall not be associated as untagged member to a NNI port. This will allow the customers to configure 802.1q services, QinQ service and untagged services using the same uplink NNI port. This will also allow the customer to use an untagged management VLAN to manage the switch via NNI ports.

With the implementation of this feature, the following will be the changes on the behavior of the switch:

The standard VLAN configuration (both untagged and 802.1q tagged association) will now be allowed on an NNI interface binded with a service VLAN.
- The binding of service VLAN to NNI interface will now be allowed when the interface (physical or linkagg) is already tagged with standard VLAN.
- 802.1q VLAN tagging to an NNI interface will not be allowed if the interface is set with TPID other than 0x8100.
- Any modification with respect to TPID will not be allowed if the NNI interface is 802.1q tagged.

There would also be significant changes with respect to the default VLAN of the NNI interface (both physical and LAG):

- If an interface is already an untagged member of a standard VLAN other than VLAN 1, then on making it an NNI interface, there should not be any change with respect to the default VLAN of the interface. (Currently, the default VLAN changes to 4095).
- If the default VLAN is removed from the NNI interface, then the default VLAN should be changed to 4095
- It implies, from the above two points, that it shall not be possible to configure VLAN 1 as default VLAN of an NNI interface.

Platforms Supported:
Omni Switch 6450
Omni Switch 6250

Commands usage:

Show the standard VLAN of an NNI interface:

```
-> ethernet-service svlan 1000
-> ethernet-service service-name customerA svlan 1000
-> ethernet-service svlan 1000 nni 1/38
-> vlan 10
-> vlan 10 port default 1/38
-> show vlan port 1/38
 vlan      type       status
--------+---------+--------------
   10     default    forwarding
 1000     vstkQtag   forwarding
```

Show 802.1q on NNI port:

```
-> ethernet-service svlan 1000
-> ethernet-service svlan 1000 nni 1/38
-> vlan 10
-> vlan 10 802.1q 1/38
-> show 802.1q 1/38

Acceptable Frame Type    :      Any Frame Type
Force Tag Internal       :                NA
Tagged VLANS    Internal Description
-------------+------------------------------------------+
         10    TAG PORT 1/38 VLAN 10
       1000    SVLAN
```

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Show the default VLAN of an NNI interface:

```
-> dshell
Working: [Kernel]->vstkShowPort

****** VLAN Stacking Port ***********

                                 Accepted   Lookup   Dflt   Cust-BPDU
  Port      Type      TPID   BPDU*    frames*    miss*    svlan   on NNI$
+-------+---------+------+--------+---------+--------+------+----------+
   1/14   user-cus   8100   flooded   all        drop     4095    disable
   1/38   network    8100   flooded   all        drop     4095    disable
-----------------------------------------------------------------------
```

Limitations:

   None

11. TRI SPEED (10/100/1000)SFP SUPPORT ON OS6450 U24

Introduction:

This feature Enhancement provides the 'Tri speed SFP support on OS6450 U24'.The Copper Small Form Pluggable(SFP)s Finisar FCLF 8521-3 and Finisar FCLF 8521 P2BTL are compatible with Gigabit Ethernet(1000 Mbps), Fast Ethernet (100 Mbps) and Ethernet(10 Mbps).

Platforms Supported:

      Omni Switch 6450

Commands usage:

      Show interface : show configuration snapshot interface

Syntax Definitions

      Configuration snapshot interface   verify the configuration of the interface

Limitations:

      None

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12. POLICY PORT GROUP ENHANCEMENT

Introduction

This feature enhancement facilitates to configure policy rule that specifies rate limiting as action for a group of ports or individual ports as per our requirement. For this enhancement new attribute "split & non-split" has been added for a policy port group to specify whether the group needs to be treated as a list of individual port or not respectively. This feature provides the following two modes to be applied as a part of the policy source port group:

1. Non-split: When used with this mode, the rule for rate limiting is applied for the group of ports. This is the default behavior for the source port group.

2. Split: When used with this mode, the rule for rate limiting is actually applied for each of the individual ports. However, the action is not restricted to rate limit the incoming traffic, action could be anything other than the keyword "share". Moreover, other actions can also be applied in addition to rate limiting, such as changing the dscp value, etc. Any incoming traffic in access of the applied bandwidth to an individual port will be dropped.

 Before this enhancement, on configuring a policy rule that specifies a rate limiter as action and a source port group as condition, the rate limiter is actually applied for the group of ports, not each individual port.

Platforms Supported

Omni Switch OS6250M(Metro), OS6450

Commands usage

policy port group <name> [mode {non-split | split}] <slot/port> <slot/port1-port2>

Syntax Definitions

split   When used with this mode, the rule for rate limiting is actually applied for
             each of the individual ports.

non-split   When used with this mode, the rule for rate limiting is applied for the group of ports.
               This is the default behavior for the source port group.

Usage Guidelines

➢ When the port group is configured in the split mode, the rule needs to be split into multiple sub-rules.

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> ➤ Depending on the policy condition for the rule, each sub-rule may consist of multiple entries
> ➤ The rate limiter is to be shared between the entries for the same sub-rule.

```
DUT1:172.25.50.70-> policy port group pg1 mode split 1/1 2/3
DUT1:172.25.50.70-> policy port group pg1 mode non-split 2/1 2/2
```

show active policy rule r1 extended:

```
DUT1:172.25.50.70-> show active policy rule extended
Policy                          Port                          Matches
r1                              1/1                           6336985
                                2/3                           2808383
```

show active policy rule r1 meter-statistics extended:

```
DUT1:172.25.50.70-> show active policy rule meter-statistics extended
Policy:r1,  Port:1/1
Green    :              2198284
Yellow   :                    1
Red      :              8379624
Matches  :   10577909
Policy:r1,  Port:2/3
Green    :              2124936
Yellow   :                48294
Red      :              3428873
Matches  :    5602103
```

show policy port group:

```
DUT1:172.25.50.70-> show policy port group
 Group Name                         From  Entries          Mode
 Slot01                             blt   1/1-10     non-split

 Slot02                             blt   2/1-10     non-split

 pg1                                cli   1/1           split
                                          2/3
```

Limitations:

The scope of this feature is limited to source port group can be attached to only default policy list. Any rule with the source port group in the split mode attached to policy list will throw an error.

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13. SSH Access to Read-Only Users

Introduction:

This feature Enhancement provides the facility to Establish a SSH Session for a Read-Only Users through Switch as Local Server,Radius Server,LDAP,TACACS.This SSH Read-Only Session allows to view the SSH Specific show commands .
Earlier it is not possible to SSH to a switch and access for a user unless he has read-write   permissions. This is the current default behavior. But telnet to switch does not validate the permissions of the user and therefore switch becomes accessible.

Platforms Supported:

Omni Switch 6450, 6250

Commands usage:

user {username} read-only ssh password {maximum 8 }

Syntax Definitions:

Read-only :Specify the User Privilege
Ssh:The type of Service and Family the Belong to.

Defaults

Parameter	Default
Read only for families	None

Usage Guidelines

> ➢ Read-Only user configuration must specify the SSH family
> ➢ Creating a user with Family as "none " will not permit access to SSH

Show users:

Displays information about the all the user configuration

Examples:

```
 User name = goog,
  Password expiration     = None,
  Password allow to be modified date      = None,
  Account lockout     = None,
  Password bad attempts     = 0,
  Read Only for domains   = ,
  Read only for families  = ssh ,
  Read/Write for domains  = None,
  Snmp allowed     = YES,
  Snmp authentication     = NONE,
  Snmp encryption     = NONE
```

LIMITATIONS:

None

14.TACACS Command Based Authorization

Introduction:

 Prior to this enhancement command authorization in TACACS is done based on partition-management family that the command belongs to.

According to the new feature, after authentication, once command based authorization is enabled then every cli command that the user executes on the switch is sent to the TACACS+ server. So TACACS+ server will do the authorization for the whole command and send the RESPONSE message to the TACACS+ client. If command based authorization is disabled then PM family for the command is sent for the authorization.

Platforms Supported:

Omni Switch 6250, 6450

Commands usage:
        aaa tacacs command-authorization {enable/disable}
        By default command authorization is disabled

Configuration snapshot:

1. Snapshot of : aaa tacacs command-authorization disable

```
172.25.50.21 show configuration snapshot aaa
! AAA :
aaa radius-server "radius" host 172.25.50.220 key e47ac0f11e9fa869 retransmit 3
timeout 2 auth-port 1812 acct-port 1813
aaa tacacs+-server "SysServTACACS" host 172.65.200.20 key "563abd1ae5376e70" por
t 49 timeout 2
aaa authentication console "local"
aaa authentication telnet "SysServTACACS"
aaa authentication ftp "local"
aaa authentication http "local"
aaa authentication ssh "SysServTACACS"
aaa authentication 802.1x "radius"
aaa authentication mac "radius"
! PARTM :
! AVLAN :
! 802.1x :
```

2. Snapshot of : aaa tacacs command-authorization enable

```
172.25.50.21 aaa tacacs command-authorization enable
172.25.50.21 show configuration snapshot aaa
! AAA :
aaa tacacs command-authorization enable
aaa radius-server "radius" host 172.25.50.220 key e47ac0f11e9fa869 retransmit 3
timeout 2 auth-port 1812 acct-port 1813
aaa tacacs+-server "SysServTACACS" host 172.65.200.20 key "563abd1ae5376e70" por
t 49 timeout 2
aaa authentication console "local"
aaa authentication telnet "SysServTACACS"
aaa authentication ftp "local"
aaa authentication http "local"
aaa authentication ssh "SysServTACACS"
aaa authentication 802.1x "radius"
aaa authentication mac "radius"
! PARTM :
! AVLAN :
! 802.1x :
172.25.50.21
```

Limitations:
Snmp and http are not supported in Command based authorization.

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15. Tacacs Server-Wait-Time

Introduction

This feature is introduced to configure wait time, which depicts the time that CLI task can wait for aaa response to be received from Tacacs+ server, before processing the next consecutive command passed by the user.

Earlier, there was no provision to control the time gap between the response received from the Tacacs+ server for a previous authorization request and current authorization request that is sent from AOS switch to Tacacs+ server, when there are continuous authorization requests. Hence unauthorized users were able to perform write operations on switch.

Platforms Supported

Omni Switch 6250, 6450

Commands usage

aaa tacacs server-wait-time <seconds>

Usage Guidelines

- By default, the wait time value is 5 seconds.
- The Maximum wait time value that can be configured is 200 Seconds
- The Minimum wait time value that can be configured is 0 Seconds

Limitations:
None