

Omni Switch 6250/ 6450

Release 6.6.3.552.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.

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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
Explanation: Fix the LLDP crash when med devices are connected to OS6250

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 memory.
Explanation: Recover dshell for debug purpose

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 **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 "intervall" timer (10 min by default)
Explanation: Initialize Ethoam/SAA control entry before initing 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	

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	

PR	173517	Build: 6.6.3.424.R01
Summary:	Following error message in OS6450, "LANPOWER (108) warning message: +++ IpGetBackupPowerOnLine: 48v	
Explanation:	Validating the 48V in 6450 is skipped due to hardware not supported	

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	

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 excepted.
 Explanation: Workaround to display proper Model name and Description in show NI o/p

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 implemented 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 entire frame, it handles the packet and generate the 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 an 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 egress 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 **162618** Build: 6.6.3.452.R01
 Summary: Implementation of the new swlog when CPU over/below the threshold
 Explanation: Implementation 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	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	
Explanation:	New debug command on CLI has been introduced to collect some basic debugs	

PR	177208	Build: 6.6.3.452.R01
Summary:	"Show ni" command gives the output as "OS6450-C10" where "OS6450-10" is expected.	
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	

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 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	
Explanation:	Corrected the port bitmap calculation to refrain the port from becoming mobile if the mobility is not enabled.	

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 talpx 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 switches always not shown as monoswitch while doing a mib walk
Explanation: Check has been added to set the synchronization 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 **179935** Build: 6.6.3.474.R01
Summary: "Show NI" and "Show Hardware info" shows two different FPGA versions on OS6450-P48.
Explanation: Corrected the issue in FPGA version display on show hardware info o/p

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 **180320** Build: 6.6.3.477.R01
 Summary: Stack not accessible through Management IP address with Except in task: taNiEsmDrv PC : 0xd76e440 message.
 Explanation: Changes done to resolve deadlock condition that occurs between niEsmDrv and niSup&Prb tasks.

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 packet
 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
 Explanation: Mac filtered due to Mobiletag disabled on vlan will move to bridging when next subsequent frame is untagged and matching a vlan MAC rule .

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: User table 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
 Explanation: Code changes have done to correct the calculation of avg rtt value for all the received packets in case of ICMP 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 show 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 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, lpedr	
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 is 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
 Explanation: Changes done to resolve IP connectivity issue on UserPorts .

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 **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
 Explanation: Sftp accounting packets will have the ip address of the client .

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 from the pxe server.
 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 **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 **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 **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 **183168** Build: 6.6.3.502.R01

Summary: Crash issue with Omni switch.

Explanation: Defensive check has been added to validate the path during FTP session on browser

PR **183032** Build: 6.6.3.502.R01

Summary: Unexpected crash noticed with Omni Switch.

Explanation: check added for pointer validity for sending buffer of radius auth request

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 switch to WLAN is 100%.

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

PR **183839** Build: 6.6.3.510.R01
 Summary: swlogs filled with below error message
 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.

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 **187362** Build: 6.6.3.517.R01
Summary: 6450-P10: Detect MAC movement when moving same PC among DHCP-SNOOPING ports.
Explanation: Detect Movement of clients in dhcp binding only for same vlan

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 getting incremented.
Explanation: With this fix match counts will increment properly

PR **188671** Build: 6.6.3.523.R01
Summary: static routes become inactive after reload the switch.
Explanation: Changes has been done to keep static route as active after reload.

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
Explanation: when SRC mac and client mac of discover packet is different, update the client mac in the cmm context even though mac-verification disable command is configured.

PR **190178** Build: 6.6.3.529.R01
Summary: OS6450 switches in stack crashed with suspended tasks: tCsCSMtask2 & Vrrp .
Explanation: Defensive check added in order to avoid crash because of invalid memory access.

PR **189171** Build: 6.6.3.530.R01
Summary: OS 6250 stack reboot issue
Explanation: Debug added in watchdog pmd - stack reboot issue

PR **188601** Build: 6.6.3.531.R01
Summary: Unable to see snmp traps when enabling dying gasp on switch.
Explanation: adding dying gasp trap support for snmp version 1 (v1)

Problems Fixed Between Builds 532 and 552

PR **190532** Build: 6.6.3.533.R01
Summary: OS 6450 DHL issue with the 802.1q vlan
Explanation: Code changes done so that adding a new tagged VLAN to a DHL port does not affect the traffic on the default VLAN.

PR **190451** Build: 6.6.3.533.R01
Summary: Dying-gasp syslog doesn't contain switch IP or hostname
Explanation: sending dying gasp message to syslog server along with hostname.

PR **189884** Build: 6.6.3.534.R01
Summary: Switch losing its connectivity to the network , 10 mins after applying the QOS rule
Explanation: Router mac is configured properly when loopback0 interface is created. Now the ARP gets resolved properly.

PR **190576** Build: 6.6.3.535.R01
Summary: ip helper dhcp-snooping option-82 command not saved in boot.cfg
Explanation: error will be thrown if dhcp-snooping related configurations are done before enabling snooping

PR **192072** Build: 6.6.3.537.R01
Summary: SAA shows negative value for Max RTT & Max jitter
Explanation: Do not update the aggregate record if the latest iteration value is -1.

PR **189941** Build: 6.6.3.537.R01
Summary: "qos user-port shutdown bpdu" - shutdown is not triggered by PVST+ BPDUs until 1x1 PVST+ compatibility
Explanation: The corresponding hardware entry is made active regardless of PVST+ mode is enabled or not.

PR **192437** Build: 6.6.3.538.R01
Summary: 6450: POE does not work on above port #10 for Third PartyPhone 7960
Explanation: 6450: POE does not work on above port #10 for Third Party Phone 7960 when all port are connected with non poe devices.

PR **189885** Build: 6.6.3.539.R01
Summary: PVST+: Two root ports if linkagg are on different NIs
Explanation: STP will converge with PVST+ when linkaggs are configured across NI's.

PR **192174** Build: 6.6.3.539.R01
 Summary: How to restrict the admin user ID to have console only access.
 Explanation: Allows restriction of admin user to have console only access to switch

PR **192999** Build: 6.6.3.541.R01
 Summary: Fans randomly shutting down and starting up on OS6450 switch
 Explanation: Fix done to show proper running FAN status for OS6450

PR **191968** Build: 6.6.3.541.R01
 Summary: Dying gasp trap format not similar to other traps
 Explanation: Dying gasp trap (syslog server) format modified to be in sync with the other traps.

PR **193566** Build: 6.6.3.542.R01
 Summary: Switch crashed with the suspension of the task "tSLNAdrLrn"
 Explanation: severity level increased in a function to avoid crash

PR **193178** Build: 6.6.3.546.R01
 Summary: OS6450 switches loosing connectivity randomly.
 Explanation: Do not update the port based on ARP request packets

Under Verification:

PR **155739** Build: 6.6.3.26.R01
 Summary: SNMP Violating MAC Trap

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	
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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"]	
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PR	158888	Build: 6.6.3.408.R01
Summary:	The default (blt) network group Switch cannot be used via Omni Vista.	
Explanation:	Policy Switch Network group can be used from LDAP for QOS configuration	
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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	
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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	
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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	
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PR	174567	Build: 6.6.3.457.R01
Summary:	VU-091113-1: Vulnerability in the SSL/TLS protocol.	
Explanation:	Disabling Renegotiation in open SSL	
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PR	178076	Build: 6.6.3.475.R01
Summary:	6450: pmd analysis needed	
Explanation:	Length of the incoming bootp/dhcp packets are validated.	
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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	189500	Build: 6.6.3.527.R01
Summary:	DHCP packets getting dropped on the trusted ports.	
Explanation:	Dhcp packet without End option also be processed, if the port is configured as trust.	

PR	190109	Build: 6.6.3.534.R01
Summary:	Stack splits when enable qos rules to protect user port.	
Explanation:	Stack split don't happens on protecting user ports.	

PR	156663	Build: 6.6.3.537.R01
Summary:	Authentication failure trap sent after snmpv3 session establishment	
Explanation:	Authentication failure Trap not required for snmpv3 time window errors.	

PR	192221	Build: 6.6.3.540.R01
Summary:	OS6450: want to know if it is possible to get the "total power consumed" and the "total power available.	
Explanation:	Enhanced the 'show lanpower' o/p to have total power consumption and total power remaining info	

PR	193984	Build: 6.6.3.543.R01
Summary:	OIDs displaying different information between 6.6.3.478 and 531.	
Explanation:	Data type is displayed as integer instead of counter 32. Made necessary changes.	

PR	194646	Build: 6.6.3.547.R01
Summary:	Multiple issues with DHCP Snooping and IP helper	
Explanation:	If dhcp offer packet is received in client vlan by a relay agent, it will be dropped. In this specific customer scenario, since the gateway is made another switch instead of relay agent, offer packet is routed by that switch and sent to relay agent in client vlan. As a work around for this scenario, if allowRoutedReplyOnClientPort is set to 1 , offer packet will not dropped if it is received on client vlan.	

PR	195237	Build: 6.6.3.549.R01
Summary:	Port stealing attacks are not prevented by DHCP snooping IP-source filter	
Explanation:	ip helper DHCP snooping ip-source-filter will block the gratuitous ARP packets when sent by the attacker with spoofed MAC addresses	

PR	195083	Build: 6.6.3.551.R01
Summary:	OpenSSL vulnerability CVE-2014-0224 and CVE-2014-0160	
Explanation:	Code change done to overcome the vulnerability by accepting CCS message only during appropriate phases of a SSL/TLS handshake.	

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 responds to MS Windows 7 ARP with APIPA source IP.	
Explanation:	Policy Switch Network group can be used from LDAP for QOS configuration	

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	174943	Build: 6.6.3.450.R01
Summary:	Unable to create ipmvlan on an 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	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	182768	Build: 6.6.3.500.R01
Summary:	Not all commands are sent to TACACS+ server to be authorized from the Omni Switch.	
Explanation:	we have done changes for whoami and history size. We have added these commands to session management families.	

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	191915	Build: 6.6.3.539.R01
Summary:	IPMVLAN nic error down(605) bcd_ipms_routing_down(0, 250)	
Explanation:	Multicast status for per vlan is enabled in HW during NI init.	

PR	195257	Build: 6.6.3.548.R01
Summary:	DHCP offer packet is not forwarded by OS6450 udp relay	
Explanation:	Per vlan rtr mac destined changes	

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.	

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 webhost name from http request header	

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 opensbd patch	

PR	174370	Build: 6.6.3.457.R01
Summary:	VU-110617-3: Vulnerability in OpenSSL	
Explanation:	Add protection against ECDSA timing attacks	

PR	180822	Build: 6.6.3.498.R01
Summary:	Query upgrading SSH Version to 5.2	
Explanation:	The order of selection of the ciphers are changed so that it will consider AES CTR mode and arcfour ciphers are not vulnerable to this attack.	

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 variable in AlcatelDebug.cfg	

PR	187933	Build: 6.6.3.521.R01
Summary:	Multiple simultaneous crashes (stacked and standalone)	
Explanation:	Drop the relay packet if size is more than 8192 bytes	
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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.	
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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	
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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	
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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)	
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PR	161347	Build: 6.6.3.212.R01
Summary:	crash on radius server nt reachable message "Except in task: RADIUS Cli PC : 0x2607b78 "	
Explanation:	We did fix to restrict the typecasting only for authentication requests. So accounting requests will not have any chance to go and access the wrong location.	
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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 nominator 1invalid) in the log.	
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PR	166512	Build: 6.6.3.428.R01
Summary:	OS6850 - LPS MAC learning issue	
Explanation:	Correcting flush logic on LPS port for permanent mac	
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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	
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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	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	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	170650	Build: 6.6.3.455.R01
Summary:	UNP-Allocation fails in case of bulk 802.1x-client-requests.	
Explanation:	Data Packets 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	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	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 fold back protection for voltage drop.	

PR	185859	Build: 6.6.3.526.R01
Summary:	Stack splits when enable qos rules to protect user port.	
Explanation:	Added some delay for port up/down when clear-violation all is executed. With this change stack split won't happen.	

PR	192052	Build: 6.6.3.538.R01
Summary:	OS6450: Need to know TACACS server status in the Omni switch.	
Explanation:	Tacacs server down messages will be logged in swlog	

PR	190641	Build: 6.6.3.532.R01
Summary:	MDNS packet with size of 1509 not get flooded with "ip multicast enabled"	
Explanation:	Code changes are done for Writing hardware register entries in all Hardware's for Control Packets.	

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 Dhcp 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	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	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	171329	Build: 6.6.3.408.R01
Summary:	Interface flood rate command remains on the CLI for 6450.	
Explanation:	Ensure default flood rate configurations are not stored in Boot.cfg file	

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	181549	Build: 6.6.3.498.R01
Summary:	SSH vulnerabilities in OS9800: SSL Version 2 (v2) Protocol Detection which reportedly suffers from suffers from several cryptographic flaws.	
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 an EMP because of the if index 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.	
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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	
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PR	186600	Build: 6.6.3.522.R01
Summary:	psNotOperational Power supply is inoperable, Object: powerSupply 2, Index: 65	
Explanation:	Changes done to send trap only when power supply is present and non-operational.	
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PR	186818	Build: 6.6.3.515.R01
Summary:	OS6450-P10 crashes when a new vlan is created when running on an official 663.514.R01.	
Explanation:	Crash won't occur when a new vlan is created.	
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PR	188855	Build: 6.6.3.524.R01
Summary:	lacc agg actor port priority command accepting value beyond 0-255	
Explanation:	The check for the bounds of lacc agg actor port priority has been changed to 0 to 255.	
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PR	188378	Build: 6.6.3.533.R01
Summary:	OS6250 Collision is noticed in GUI not in CLI.	
Explanation:	Corrected discrepancies in Rx collision counter under GUI RMON statistics	
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PR	191435	Build: 6.6.3.537.R01
Summary:	With copy working certified LLDP error messages seen and then synchronization was successful.	
Explanation:	Code changes done to not optimize checksum calculation if certify process is in process.	
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PR	194549	Build: 6.6.3.546.R01
Summary:	"ip helper dhcp-snooping bypass option-82-check enable" is lost after a reload	
Explanation:	Added "ip helper dhcp-snooping bypass option-82-check enable" cli after dhcp snooping enable/disable in snapshot	
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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	
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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	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	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/avlancustom . These certificates were incorporated in secu.img and get extracted to the switch	

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	187275	Build: 6.6.3.521.R01
Summary:	I2C read error is overwhelming the switch, need to tone down the retries	
Explanation:	Implemented a proper check to reduce the number of i2c read error messages based on the retry mechanism.	

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	190930	Build: 6.6.3.534.R01
Summary:	Port were not going to permanent shutdown after the maximum number of violation.	
Explanation:	Port moves to permanent shutdown state after maximum number of recoveries configured.	

PR	154325	Build: 6.6.3.197.R01
Summary:	Relay-agent(switch) forwards only the first offer packet 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 **170018** Build: 6.6.3.545.R01

Summary: OS9702 dhcp offer dropped when dhcp snooping is enabled

Explanation: Don't drop Dhcp-Offer when received on client port but not on client vlan. This behavior is controlled by debug flag "allowRoutedReplyOnClientPort". When it is set to 1: Then we allow switch to receive Bootp-Reply packet in the client port under the condition that the Vlan is different.

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

PR **180623** Build: 6.6.3.482.R01

Summary: In Omni Switch OS6400/OS6850RE, "Running configuration and saved configuration are different" is shown

Explanation: Modified the behavior 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 **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 **195079** Build: 6.6.3.550.R01
 Summary: issues with qos configuration.
 Explanation: Setting the auto phone default priority as Trusted.

PR **193460** Build: 6.6.3.542.R01
 Summary: OS6450 crash with taUDLDni and NIsup tasks suspended.
 Explanation: UDLD NI Crash on TTL timer expiry is resolved

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 try driver's write buffer.

PR **187156**

Summary: Malformed BPDU (wrong length) for default VLAN in XNI modules- BPDU dropped in firewall

Explanation: Added a control variable to set the BPDU length on 10Gig ports ,to force the length field of the BPDU to be equal the standard length 39.

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

```

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

show ethernet-service uni-profile [<profile_name>] l2pt-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,
```

clear ethernet-service uni [[linkagg<num>] / <port>]] l2pt-statistics

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:

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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-suppliant client in lower case as username and password for authentication to the authentication server. During non-suppliant authentication the client MAC address is sent as username and password. Earlier, for non-suppliant 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.

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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	Type
3/7	64K	UNP	geetha8	64K UNP geetha8

Limitations:

None

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.

```

172.25.50.200 - PuTTY
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.

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}
```

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 802.1q 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

```

Show the default VLAN of an NNI interface:

```

-> dshell
Working: [Kernel]->vstkShowPort

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

  Port      Type      TPID   BPDU*   Accepted   Lookup   Dflt   Cust-BPDU
  +-----+-----+-----+-----+-----+-----+-----+-----+
  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

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 excess 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.

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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.
- 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 pgl mode split 1/1 2/3
DUT1:172.25.50.70-> policy port group pgl 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.

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 }

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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

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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 "563abdlae5376e70" port
  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" port 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.

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