Intermediate Release Notes

Omni Switch 9000E, 6850E, 6855 & 6400

Release 6.4.5.635.R02

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 403 and 418

PR | **177302** | Build: | 6.4.5.404.R02
Summary: IP interface remains down after DHL failover
Explanation: When linkagg is DHL, when last port leaves agg, fast agg down was generated which was causing IP interface to go down. Same has been fixed.

PR | **170703** | Build: | 6.4.5.408.R02
Summary: IP CAM not getting power when connected to OS6850E
Explanation: Code changes done to change the threshold of the foldback protection from a voltage drop of 10V down to a drop of 35V by setting the appropriate PoE register.

PR | **173595** | Build: | 6.4.5.412.R02
Summary: BFD session DOWN on one side only
Explanation: Don t configure egress mask for Network ports in MPLS

PR | **174849** | Build: | 6.4.5.412.R02
Summary: VRRP BFD session still UP after BFD process completely disabled
Explanation: Stamp 802.1q with priority 6 for BFD Control and Echo Packets
Handle Link-Agg and ARP Resolution Events for Sessions which are not in ADMIN_DOWN state only.

PR | **174818** | Build: | 6.4.5.416.R02
Summary: OS68 stack split with dump files, keep crashing and taking over the primary role
Explanation: Validate bootp length for all incoming Bootp/Dhcp Packets

PR | **177386** | Build: | 6.4.5.418.R02
Summary: DHL slow convergence time
Explanation: On DHL ports, flush mac based on protected and unprotected vlan bits

Problems Fixed Between Builds 419 and 442

PR | **177722** | Build: | 6.4.5.420.R02
Summary: IGMP General Queries are sent back on uplinks
Explanation: Issue with non-uc hash mode fixed.

PR | **177585** | Build: | 6.4.5.427.R02
Summary: dense mode multicast flows partially lose after several link/up/down on the Core
Explanation: Dense mode multicast flows partially lose after several link/up/down issue fixed

PR | **169877** | Build: | 6.4.5.428.R02
Summary: Attempt to copy working to cert w/flash synchro failed

Explanation: Reset the flash synchro global flags in all units.

PR	176700	Build:	6.4.5.429.R02
Summary:	Random 802.1x clients are not getting authenticated once we reboot 6850 and 9000		
Explanation:	The new CMM variable "onexCMMFirstRunup" introduced to defer the authentication process and set NI variable onexFirstRunup in all NIs via AlcatelDebug.cfg.		

PR	178394	Build:	6.4.5.429.R02
Summary:	IPMS,IPMR convergence after primary stack slot power failure		
Explanation:	When non-unicast hashing is not enabled and when primary NI goes down, convergence time will be in the range of 20 to 25seconds.		

PR	178296	Build:	6.4.5.430.R02
Summary:	Switch crashed with SNMP agent & tCS_PRB task suspended		
Explanation:	Defensive check added to prevent SNMP agent crash		

PR	170039	Build:	6.4.5.431.R02
Summary:	Stack split happened and unit remaining "down". LED is blinking as normal on that unit		
Explanation:	Stack Debug Log enhanced and stack split timeout increased to 60 seconds		

PR	167483	Build:	6.4.5.434.R02
Summary:	Static ARP with "mac-address-table static-multicast" doesn't work on OS6850E-24X		
Explanation:	Static multicast support on standalone OS6850E introduced		

PR	179245	Build:	6.4.5.434.R02
Summary:	can display extended stats only for rule having split source port group!" even though all rules having split PG.		
Explanation:	Throw error only when the policy rule is in non-split mode		

PR	173643	Build:	6.4.5.434.R02
Summary:	netJobRing overflow in 6850E and crash analysis required		
Explanation:	IPEDR will not use the global semaphore to lock the interface list		

PR	178441	Build:	6.4.5.434.R02
Summary:	Fast takeover in a stack takes 8.7 seconds if power down the active unit		
Explanation:	Introduced a mechanism to inform tagging of link-agg ports in hardware in case the link-agg port previous role is standby		

PR	178444	Build:	6.4.5.435.R02
Summary:	Please allow configuration of ipedrArpUnreachAge with millisecond granularity		
Explanation:	The delay between inter-ARP messages is implemented at millisecond level granularity. The value of ipedrArpUnreachAge can now be set at ms level.		

PR	**179444**	Build:	6.4.5.436.R02
Summary:	Relay agent not adding the interface-id in relay-forward to server - Client cannot get DHCPv6 IP.		
Explanation:	The interface ID is a mandatory field for the DCHP server to parse a relay forward message. We have made a change for the relay agent to insert the interface Id correctly when Dhcp snooping is enabled at switch level.		

PR	**178962**	Build:	6.4.5.437.R02
Summary:	OS9700E: DHCPACK after DHCPINFORM is broadcasted to other vlans by the core switch.		
Explanation:	Do not process unicast Dhcp reply packets if it is destined to another relay agent		

PR	**179794**	Build:	6.4.5.440.R02
Summary:	"debug ip set ipedrArpUnreachControl 0" is present in running config by default		
Explanation:	When only icmp unreachable host-unreachable is configured, ICMP un-reachable message would be sent to only the source which has initiated the ARP in the switch. All other following source packets would not be responded by ICMP un-reachable message.		
	After ARP entry is timed out, again if new source initiates the ARP entry in the switch a new ICMP un-reachable message would be generated to the new source.		
	======== NOTE: For complete (existing) functionality both icmp unreachable host-unreachable and debug set ipedrArpUnreachControl 0 should be configured. ========		

PR	**180011**	Build:	6.4.5.441.R02
Summary:	CP user's connectivity issue when the CP authenticated user moved the user port on 9700E		
Explanation:	The code changes are done to update AAA application in case of MAC deletion on authenticated ports during mac movement		

PR	**180027**	Build:	6.4.5.441.R02
Summary:	DHCP offer's header source IP address and router option (3) is different		
Explanation:	Source IP Modification is controlled by Debug variable. If there is a mismatch in socket and DIP of DHCP Server packets it will be modified In AlcatelDebug.cfg debug set udpModRepIp 1		

PR	**180129**	Build:	6.4.5.441.R02
Summary:	CP authenticated user's MAC-address never leaned on 802.1x port		
Explanation:	The heap timers for CP users were exhausted, when captive portal user ports are admin down. This is corrected to release those used timers when the ports are		

admin down. The fix is provided for captive portal user connectivity issues caused due to admin down of ports with lots of captive portal user.

Problems Fixed Between Builds 443 and 474

PR	180441	Build:	6.4.5.443.R02
Summary:	We are unable to configure Black hole static route		
Explanation:	Do not execute certain checks when gateway of static-route is that of loopback		

PR	180750	Build:	6.4.5.445.R02
Summary:	DHCP offer is replying from VRRP IP interfaces		
Explanation:	process unicast DHCP ACK / OFFER if it is only for me. It is controlled by already available customer specific variable		

PR	177971	Build:	6.4.5.445.R02
Summary:	Corrupted UDP frame received in 6.4.4.585R01		
Explanation:	Since trailer byte is getting added at the end, message "corrupted UDP frame" is displayed. In order to find out the port no and mac address from where the packet is received, they are included in the warning message.		

PR	178616	Build:	6.4.5.446.R02
Summary:	802.1x MAC in filtering when takeover of PRI unit while PC went to hibernating		
Explanation:	Hardware learning status for .1x Macs are properly updated in SLN database		

PR	177340	Build:	6.4.5.446.R02
Summary:	Need to know the root cause for the OS6850 slot-1 crash.		
Explanation:	we introduce semaphore for the global structure with timeout value 2 , Ad8021xPort in order to avoid simultaneous read write		

PR	180763	Build:	6.4.5.451.R02
Summary:	A port goes into violation due QoS user-port after receiving a DNS query		
Explanation:	IPMS not working after QoS reapply is fixed.		

PR	180961	Build:	6.4.5.452.R02
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	181061	Build:	6.4.5.452.R02
Summary:	If the command "user test user read-only snmp?" is issued, the switch will reboot.		
Explanation:	Switch won't be rebooted upon using "user test user read-only snmp.		

PR	181033	Build:	6.4.5.453.R02
Summary:	Client has leaned the gateway ARP entry as physical MAC-address instead of VRRP MAC		

Explanation: If we are VRRP Owner Never generate GARP with physical MAC

PR	**181464**	Build:	6.4.5.454.R02

Summary: Loopback routes are not displayed in OS6850E switch with 6.4.5.447 RO2 release.
Explanation: Problem Statement:
Loopback routes are not displayed in OS6850E switch with 6.4.5.447 RO2 release.

Fix Detail:
After black hole route feature was introduced, it was not possible to view them in the output of show ip route because there is no valid interface for these routes. Added a check to print the route if the gateway is configured with loopback address.

PR	**180607**	Build:	6.4.5.455.R02

Summary: Incorrect output shown in show sip snooping statistics
Explanation: Packets which have issues during parsing were termed as dropped but were taken for processing. Have introduced a new variable to track these kind of packets. (SipparseErrors)

PR	**181230**	Build:	6.4.5.455.R02

Summary: PXE clients unable to get DHCP IP addresses with UDP relay configured on OS9702(6.4.5.R01.445)
Explanation: Don t configure VPA for ports which are not part of the linkagg.

PR	**179971**	Build:	6.4.5.455.R02

Summary: Stack of 6850 crashed due to the suspension of the task "taLnkAgg "
Explanation: As per the customer request defence check have been made not to access invalid memory pointer and also debugs has been added to track the task which corrupts the pointer

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PR	**181422**	Build:	6.4.5.455.R02

Summary: After upgrade to 6.4.5.442.R02, with show microcode working the code uploaded code is not shown.
Explanation: show microcode working will show proper code uploaded in working directory.

PR	**179472**	Build:	6.4.5.456.R02

Summary: Connectivity issues in NI-modules randomly for certain Vlan's
Explanation: MAC aging timer will be triggered from S/w.

PR	**181615**	Build:	6.4.5.458.R02

Summary: ICMP reply sent on Admin down port of Linkagg
Explanation: ICMP reply sent on Admin down port of Linkagg. Customer faces connectivity issues when 4 ports of a linkagg are down. The packets were trying to go through one of the ports which is already down.

PR	**180864**	Build:	6.4.5.458.R02
Summary:	tCS_PRB task suspension in CMM-A and non-supplicant output not obtained in CMM-B after takeover		
Explanation:	Socket handling mechanism changed in IPMS CMM to avoid this task suspension		

PR	**181474**	Build:	6.4.5.458.R02
Summary:	BFD session does not come up when slot 1 come up as secondary		
Explanation:	Proper source and destination is done while handling takeover functionality in BFD		

PR	**177629**	Build:	6.4.5.460.R02
Summary:	CMM takeover happened and all NIs were RESET impacted the service.		
Explanation:	to introduce task delay between successive reads of the temperature sensor once the temperature goes beyond the danger threshold. This would enable the system to buy more time and ascertain if the temperature increase is genuine and prolonged		

PR	**176883**	Build:	6.4.5.461.R02
Summary:	OS9-GNI-C24E module crashed showing Higig link down messages in switch logs.		
Explanation:	Implementation of a trap to notify the user on NI reset due to fabric errors.		

PR	**176341**	Build:	6.4.5.462.R02
Summary:	100% CPU utilization due to IPv6 Neighbor Solicitation packets copied to CPU by default		
Explanation:	Debug cli to set or reset trapping of unknown ipv6 multicast,neighbor solicitation, Martian packets to CPU is introduced. By default it is enabled. To disable this feature following Command can be used debug ipv6 set ipv6ControlProtocolDisable 0 NOTE: disabling this flag will modify switch behavior not to accept any multicast control packets, neighbor solicitation packets, Martian packets. So protocols using these Multicast control packets (ff02::) will not work when disabling this feature.		

PR	**181766**	Build:	6.4.5.463.R02
Summary:	Unable to pass IGMP querier when port-mapping is enabled		
Explanation:	IGMP query packets weren't egressed through user port when port mapping was enabled, is fixed.		

PR	**181389**	Build:	6.4.5.464.R02
Summary:	Fast takeover in a stack takes 12.6 s when reloading NI 4 from CLI		
Explanation:	Convergence due to Ni reload will be less than 1 second.		

PR	**181792**	Build:	6.4.5.464.R02
Summary:	switch crashed with the suspension of the task "tBgp0" " tCsCSMtask2" " tCS_PRB"		
Explanation:	Added defense fix to check if route attribute is null		

PR	**179967**	Build:	6.4.5.464.R02
Summary:	High CPU Noticed in stack of 6850		
Explanation:	Debug cli to disable L3 slow path CPU is introduced. By default it is enabled. To disable the following Command can be used "debug ip set ipv4L3SlowPathToCpu 0"		

PR	**182030**	Build:	6.4.5.465.R02
Summary:	sip-snooping issue: useless entry in "ended-calls" output		
Explanation:	Problem Statement: Duplicate entries in output of show sip-snooping call-records ended-calls . When a call is initiated from Phone A to Phone B, a new entry is created in a linked list which keeps track of the list of ended calls even before the call is accepted by B. After the call ends, instead of updating the old entry, we seem to create a new entry in the linked list. Fix Detail: When adding new entries to the structure, we first check if there is an entry already present with the same call-id, if yes, we update that entry, else, we create a new entry.		

PR	**182038**	Build:	6.4.5.465.R02
Summary:	OS 9700E switch crashed and rebooted with Fatal error		
Explanation:	Fix provided for this crash. Invalid parameters are passed for debug statement.		

PR	**181245**	Build:	6.4.5.465.R02
Summary:	Issue#5: Switch crash when Dhcp server config contains mac-address with ":" instead of a "-"		
Explanation:	code changes has been done to accept the mac address specified with both colon and hypen while parsing the configuration file		

PR	**181388**	Build:	6.4.5.466.R02
Summary:	NI's not receiving the message when mac age set through CLI		
Explanation:	NI's are receiving the message when mac age set through CLI		

PR	**182019**	Build:	6.4.5.467.R02
Summary:	change DR-PRIORITY on PIM interface cause video to drop Video traffic and never recover		
Explanation:	Multicast packets getting dropped when DR-Priority was changed in PIM interface is fixed.		

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PR	**182033**	Build:	6.4.5.467.R02

Summary: sip-snooping Mos and Rfactor values are always 0

Explanation: MOS and R-Factor are methods for assessing voice quality. When IP phones do not support these features, they send a value of 127 in the RTCP packet during a voice call. Our SIP implementation does not record R Factor or MOS if it is 127 and so was displaying the value as 0 in show command output. But, 0 also falls in the range of allowed R Factor value. To avoid confusion, if both min and max values are 0 for R Factor and MOS, we now display NA, as it is highly unlikely that min and max values to be 0 in a voice call.

PR	**181604**	Build:	6.4.5.468.R02

Summary: OS 6850E Switch crashed and dump generated.No suspended task seen.

Explanation: Added debugs to dump socket related information of higher priority tasks into the PMD.

PR	**182247**	Build:	6.4.5.469.R02

Summary: Request to control interim update message only for CP users

Explanation: Introduced flag (onexSendNoPeriodicUpdateCPInProgress) to control sending of accounting Interim (3) packets for CP in Progress Users.
Set it to 1, if we don t need Interim (3) packets for CP in progress users (default value 0)
Set it to 0, if we need Interim (3) packets for CP in progress users

PR	**182532**	Build:	6.4.5.470.R02

Summary: Dropping DHCP client packet as source MAC address and chaddr are different.

Explanation: When a client sends DHCP DISCOVER, it inserts its mac address in the BOOTP part of the packet (chaddr) and in the Ethernet header. A check was introduced in 645R02 using PR #170904 to drop DHCP packets if MAC in chaddr and Ethernet header are different. In customer s network, for any packet that is sent out of the client, a wireless adapter replaces the source mac-address of the client with its own mac-address, because of this DHC packets were dropped.

PR	**182222**	Build:	6.4.5.470.R02

Summary: Faulty loop detection in MC-LAG in 6.4.5.R02

Explanation: MC LAG, loop detected wrongly due to packets received in Higig Ports. These packets from Higig ports should be ignored.

PR	**180342**	Build:	6.4.5.443.R02

Summary: Bootp request packet dropped while snooping is activated.

Explanation: BOOTP packets are not dropped even when DHCP snooping is enabled by enabling the variable udpFloodDirBcat to 1.

PR	180602	Build:	6.4.5.465.R02

Summary: High CPU issue on stack due to SrcLrn task hogging CPU.

Explanation: High CPU was observed due to read operation over the duplicate static MAC present on one port, root cause of the issue was, during bootup static MACs on LPS port were moving from their tagged vlan 1 to default vlan of the LPS port. This was the corener case where MACs were configured in vlan 1 which was tagged vlan of LPS port .Check introduced to prevent the reconfiguration of the vlan 1 (tagged +static mac in boot.cfg at time of boot up .

PR	181521	Build:	6.4.5.454.R02

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 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	180652	Build:	6.4.5.447.R02

Summary: Hosts are not reachable until the linkagg link on the secondary unit is active

Explanation: Installation of default route when a NI comes up (hot swap) after interface routes are installed in the hardware

PR	180740	Build:	6.4.5.445.R02

Summary: Additional dummy timer index changes needs to be addressed

Explanation: Non Supplicant Captive portal users will be authenticated successfully.

PR	177675	Build:	6.4.5.461.R02

Summary: ERPv2 convergence time above 50ms withL2 - 10G

Explanation: ERP Convergence will be less than 50ms.

PR	180946	Build:	6.4.5.452.R02

Summary: With the 6.4.5.402.R02 code, the tech support layer3 file show arp entry is not shown and need to know the buffer size.

Explanation: code changes is done to resolve the tech support layer3 file show arp entry is not shown while using "more tech support layer3.log" command

PR	180283	Build:	6.4.5.449.R02

Summary: BFD session does not come up when slot 1 come up as secondary.

Explanation: While handling takeover send NBR DOWN message to static routes which have bfd enabled and has gone down due to takeover event

Problems Fixed Between Builds 475 and 493

PR	182910	Build:	6.4.5.475.R02

Summary: Switch reboots when IP phone is connected.

Explanation: Array is handled properly to prevent memory corruption.

PR	**181903**	Build:	6.4.5.475.R02

Summary: OS9702 unable to ping the Mclag VIP IP from the edge mclag switches.
Explanation: MCLAG VIP ping issue, due to VIP arp entry being deleted after clear arp-cache, is fixed.

PR	**183066**	Build:	6.4.5.476.R02

Summary: Kerberos snooping is not working with TCP
Explanation: TCP Packet have 4 byte extra in the Kerberos packet format which is not there in UDP. So TCP Packet need to be decoded by keeping this 4 byte also into account.

PR	**181852**	Build:	6.4.5.476.R02

Summary: "LBD not working on ports 41 to 48.
Explanation: Fix done for the correct port bit map setting for the loopback-detection enable on per port level.

PR	**181583**	Build:	6.4.5.477.R02

Summary: OS9702E Ni6 (OS9-GNI-C24E) crashed with talpms task
Explanation: added debugs to narrow down the value of index corruption

PR	**183595**	Build:	6.4.5.478.R02

Summary: 6850E - SIP active call does not ends immediately after hanging up, then switch crash
Explanation: Switch log had invalid argument. Corrected this.

PR	**182363**	Build:	6.4.5.479.R02

Summary: CPauth-user MAC is flushing out once secondary unit is rebooted.
Explanation: Possible Loop creation in Linkagg during the Link-down or Aggregate down is avoided.

PR	**183025**	Build:	6.4.5.479.R02

Summary: Unknown policy issue with 802.1x Authentication
Explanation: Changes done to resend the client MAC, if stuck in unknown policy during auth process due to bulk authentication and IPC congestion.

PR	**183937**	Build:	6.4.5.480.R02

Summary: ARP entries are getting populated in boot.cfg
Explanation: Strict checking for interface types when scanning through the ARP list fixed the 127.x.x.x static ARP entry problem and change not to make ARP static unless CMM is generating it.

PR	**183031**	Build:	6.4.5.481.R02

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	**182667**	Build:	6.4.5.481.R02
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	**182659**	Build:	6.4.5.481.R02
Summary:	Tacacs+ security issue with OmniSwitch.		
Explanation:	Tacacs Authorisation replies will be processed in order with the help of unique reference for each trancation which will avoid security issue due to stale replies.		

PR	**182637**	Build:	6.4.5.481.R02
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:	6.4.5.481.R02
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	**182918**	Build:	6.4.5.481.R02
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	**184068**	Build:	6.4.5.481.R02
Summary:	Stack got crashed while performing QOS changes		
Explanation:	As the crash is not re-creatable, provided defensive fix.		

PR	**182755**	Build:	6.4.5.482.R02
Summary:	OV traps seen Vs switch logs events discrepancies.		
Explanation:	Rectifying discrepancy of timestamp between OV and the switch.		

PR	**184689**	Build:	6.4.5.484.R02
Summary:	QoS trust Port got shutdown with protocol dhcp-server or dns-reply		
Explanation:	While processing for QOS shutdown, process only first packet of fragmented packet and not all the fragmented packets		

PR	**183591**	Build:	6.4.5.484.R02
Summary:	OS9802E: port mapping on port 22, 23, 24 is leaking broadcast into other ports on different NI.		
Explanation:	Proper Port Mapping Validation for GNI-U24 / C-24 Boards in Hardware for specific ports has been modified		

PR	**183948**	Build:	6.4.5.484.R02
Summary:	stack crashed due to tCS_PRB and Qos task suspension when QOS is added or deleted.		
Explanation:	When qos is added or deleted switch wont crash.		

PR	**183281**	Build:	6.4.5.484.R02
Summary:	Port status is showing as forwarding inspite there is no link connected on the interface.		
Explanation:	When the port physically goes down it should not be displayed in "show spantree active ports" output		

PR	**182585**	Build:	6.4.5.485.R02
Summary:	Issue with DHCP-snooping		
Explanation:	1. When the NI is powered up, the Chassis supervision sends a NI_UP message to UDP relay application, after this, UDP relay initiates socket communication with the NI and, when this is successful we consider that the NI is ready. 2. For incorrect linkagg port entry, we have implemented a method to automatically scan all trusted ports using a timer (runs 240 secs after the application is initialized and during takeover) which are a part of a linkagg and update the linkagg port details in UDP relay CMM context if they are not updated correctly.		

PR	**185527**	Build:	6.4.5.487.R02
Summary:	IGMP general query packet creating loop.		
Explanation:	Fixed the issue with IGMP query getting loopbacked when hash-control non-ucast is enabled.		

PR	**185223**	Build:	6.4.5.488.R02
Summary:	DHCP Ip helper not working after upgrading the OS6400 to 6.4.5.474.R02.		
Explanation:	cleared the buffer after processing the dying gasp message		

PR	**186466**	Build:	6.4.5.489.R02
Summary:	Unable to generate the trap 223 on 6850E		
Explanation:	Added debug trap for chassis backup power supply (BPS) state change		

PR	**185998**	Build:	6.4.5.490.R02
Summary:	Finisar 10Gig SFP is not working with VFL link however same SFP transciever is working with non-VFL		
Explanation:	Changes made to support VFLs on 1G/10G Finisar dual speed 1g/10g SFP (FTLX8571D3BCV-AF).		

PR	**187222**	Build:	6.4.5.492.R02
Summary:	OS6850E linkagg port 1/50 and 2/50 default vlan went blocking without a loop		
Explanation:	STP Data sync to update the port stp status corrected.		

PR	186235	Build:	6.4.5.492.R02

Summary: Issue with VRF in OS6850E (Ref.PR#185871)

Explanation: While handling backup import routes, proper route message sent to IPNI. Hence The reported issue is what VRF is fixed.

Problems Fixed Between Builds 494 and 507

PR	187284	Build:	6.4.5.494.R02

Summary: OS9800E ni-4 crashed with suspending taQoS task.

Explanation: Defense fix to validate the vlan id before sending the packet to ipni from qosni as it is getting corrupted due to ipc message corruption.

PR	185994	Build:	6.4.5.494.R02

Summary: Issues getting the SFP-DUAL-MM 100/1000 SFP to run at 100Mb in a 6850E setup

Explanation: Changes done to support 100 Mbps in SFP-DUAL-MM on combo ports

PR	187156	Build:	6.4.5.494.R02

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.

PR	184284	Build:	6.4.5.495.R02

Summary: Repeated crash on the stack.

Explanation: Fix done to handle power fail interrupts in such a way that it does not cause any abnormal system hang.

PR	187384	Build:	6.4.5.495.R02

Summary: NI 3 of a stack of 4 6850Es has been crashing continuously generating PMD files.

Explanation: Handled error conditions during socket buffer receive and hence preventing task suspension during buffer release.

PR	187130	Build:	6.4.5.495.R02

Summary: lanpower cli on port 1/43 is reversed with port 1/44 and vice versa

Explanation: Code changes done to mapping the phy port to device channel in proper order

PR	187210	Build:	6.4.5.498.R02

Summary: OS6850E crashed with suspending tCS_PRB and taIpni and rebooted however after rebooting OS6850E work

Explanation: we introduce semaphore for the global structure with timeout value 2 , to avoid simultaneous access by more than one task

PR	187580	Build:	6.4.5.498.R02
Summary:	In switch OS6850E-24[N5183053] code running 6.4.5.479.R02 got rebooted/crashed on 3 Nov at 21:23 due to due watchdog dump for the IPmem task and after reboot the switch working fine. we need to know RCA for the reboot and crash.		
Explanation:	The crashing of switch due to priority inversion by ipmem task has been fixed.		

PR	187623	Build:	6.4.5.499.R02
Summary:	ERPv2 convergence delay over 2 minutes when admin down LAG member ports		
Explanation:	ERP will converge during Admin down of linkagg ports		

PR	188137	Build:	6.4.5.500.R02
Summary:	OS6850E linkagg blocking issue.		
Explanation:	STP Ni and CMM task communication optimized.		

PR	188140	Build:	6.4.5.500.R02
Summary:	AAA configuration for LDAP server failing on the code 6.4.5.497.R02		
Explanation:	Fix done to preserve LDAP configurations after reload of the switch.		

PR	184739	Build:	6.4.5.505.R02
Summary:	Change the frequency of swlog messages.		
Explanation:	Code changes has been done for changing the frequency of printing low flash messages in swlog.		

PR	188382	Build:	6.4.5.505.R02
Summary:	Detach in HW in not re initializing the NI properly after a crash, vlan port bitmap is missing, because of this connectivity is lost.		
Explanation:	Ni re-initialization is handled properly after a sudden crash180.		

PR	188684	Build:	6.4.5.505.R02
Summary:	DHCP hanging issue		
Explanation:	Buffer is cleared if its failed to reach CMM socket		

PR	188896	Build:	6.4.5.506.R02
Summary:	High CPU on distribution switches and DHCP issue on OS9 core switches		
Explanation:	Fixed the crash issue while trying to resolve the incomplete ARPs		

PR	188750	Build:	6.4.5.506.R02
Summary:	1 Gig SFP showing as Unknown when inserted in OS9-XNI-U12E with 6.4.5.R02.474 code.		
Explanation:	Fix for display issue when 1GIG SFP is inserted in 10GIG port on XNI-U12		

PR	187370	Build:	6.4.5.507.R02
Summary:	Issue with IGMP membership report on MVRP-registered VLAN		

Explanation: Updating dynamic vlans information to IPMS.

Problems Fixed Between Builds 508 and 516

PR   **187286**   Build: 6.4.5.508.R02
Summary: With "show 802.1x non-supplicant users" command not showing the correct output.
Explanation: Fix done to handle the proper mib overflow condition to execute the "Show 802.1x non-supplicant" correctly.

PR   **188541**   Build: 6.4.5.509.R02
Summary: MED extended power over mdi TLV not advertised on OS6850E
Explanation: Fix done to retrieve correct port power and priority info for appropriate PoE controller for 6850E and 6855 switches to perform power negotiation over lldp.

PR   **186966**   Build: 6.4.5.510.R02
Summary: Unable to issue command through GUI
Explanation: CMM index value is updated from chassis mib when the stacking is disabled-so that the copy working certified from flash-sync applied successfully

PR   **189170**   Build: 6.4.5.512.R02
Summary: Gbic "type" information missing in the Inventory in OV for 6450 & 6850E
Explanation: Changes are done to display GBIC type information in OV.

PR   **190026**   Build: 6.4.5.513.R02
Summary: Switches in the network crashed at the same time with udpv6Relay task.
Explanation: Fix done for this crash, when udpv6 relay packet size crosses it's max size, the packet shall be dropped and logged.

PR   **189124**   Build: 6.4.5.513.R02
Summary: Permanent MAC cannot be changed from one vlan to another VLAN in the LPS port
Explanation: Fix done to allow to change permanent MAC address from one vlan to another VLAN on the LPS port. And do not change tagged vlan of the LPS port during boot up.

PR   **190680**   Build: 6.4.5.516.R02
Summary: Specific "system contact" command raises boot.cfg.1.err on next reboot
Explanation: Changes has been made to store string in boot.cfg in double quotes irrespective of special symbols (','   '?' '!' , which will consider as delimiter)

PR   **188007**   Build: 6.4.5.516.R02
Summary: Duplicate IP address 10.66.191.249 from port 5/17 eth addr 00005e:000191
Explanation: strict checking has been introduced in qosni to send only arp packets to ipni for logging duplicate ip address

Problems Fixed Between Builds 517 and 528

PR	**191448**	Build:	6.4.5.517.R02
Summary:	OS6850E: OSPF opaque LSA doesn't pass on 6850E even after enabling the Opaque transit capability		
Explanation:	O-bit of DD packet is set for making neighbors opaque-capable.		

PR	**190576**	Build:	6.4.5.517.R02
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	**191069**	Build:	6.4.5.517.R02
Summary:	How to change the default DNS keyword list for 802.1x CP		
Explanation:	Fix was done for proper handling of disabling the dns keyword list for 802.1x captive portal		

PR	**190900**	Build:	6.4.5.520.R02
Summary:	SSH connection to 127.2.X.1 (NIX) is refused		
Explanation:	dshell flag is introduced that will open up the telnet session to the NIs for some time by calling the function "debugTelnetEnable" in dshell, in case the telnet is disabled.		

PR	**190971**	Build:	6.4.5.521.R02
Summary:	"zcSend" CODE 3997698 0x3d0002" error seen in logs and unable to save the configuration		
Explanation:	Merge done in 645R02 for to avoid the webview permanent stuck due to temporary socket errors and hence webview communication with the other tasks will not be affected.		

PR	**192189**	Build:	6.4.5.521.R02
Summary:	UNP configuration issue (same command repeated twice in boot.cfg) with OS6850E Stack.		
Explanation:	InIndex is updated with the correct ifIndex value from where the display has to be continued when there is an overflow.		

PR	**191402**	Build:	6.4.5.521.R02
Summary:	mac-address not learnt by the switch due to l2 conflict		
Explanation:	As a workaround, Dual hashing algorithm for better indexing can be enabled via AlcatelDebug.cfg.		

PR	**192062**	Build:	6.4.5.523.R02
Summary:	onex_process_aging(862): incoming msg for port 3007, reason 12, mac 0x336092f0, vlanId 0 onex_pro		
Explanation:	Debug logs are now correctly controlled and will not dump on the screen.		

PR	192562	Build:	6.4.5.528.R02
Summary:	OS9700 Console access is getting freeze when we do "debug show multi-chassis peer-linkagg port"		
Explanation:	Changes are done such that session will not freeze after issuing the command "debug show multi-chassis peer-linkagg port"		

PR	192143	Build:	6.4.5.528.R02
Summary:	SNMP OID for getting the total mac-address count in the switch.		
Explanation:	Fix was done to add a Mib object (slMacAgingTotCount) to get total mac-address count on the vlans.		

Problems Fixed Between Builds 529 and 569

PR	191728	Build:	6.4.5.530.R02
Summary:	Issue with MC-Lag consistency		
Explanation:	Implementation of ToDo List to process MCM consistency TLVs.		

PR	191232	Build:	6.4.5.531.R02
Summary:	OS6450: Device physically connected to port 1/4, however its Mac is shown on port trunk port 1/23. Mac authentication not working.		
Explanation:	Added a recovery mechanism to reopen malfunctioning IPC socket.		

PR	193213	Build:	6.4.5.533.R02
Summary:	port status trap regarding up/down is not working		
Explanation:	Port status trap is set to display at swlog info level when trap is enabled for that port.		

PR	192935	Build:	6.4.5.535.R02
Summary:	In 2x OS6850E-U24X facing 1 hrs. 100% max and the switch got crashed watchdog dump task tNiSup&Prb		
Explanation:	Added functionality to empty the SLCMM Todo list if the number of messages exceeds 5000. Message statistics will be dumped to		

PR	185576	Build:	6.4.5.536.R02
Summary:	OS 6850 crash observed (reference to PR#182942)		
Explanation:	Defensive fix has been added to validate data portion of bcm packet.		

PR	185794	Build:	6.4.5.536.R02
Summary:	OS 6400 crash issue		
Explanation:	Additional debug addition for crash issue.		

PR	**194018**	Build:	6.4.5.541.R02

Summary: Need to add   show qos statistics and   show qos config command in the show tech-support files.

Explanation: Added show qos statistics and show qos config commands in tech-support (layer3) log files.

PR	**193384**	Build:	6.4.5.544.R02

Summary: Removing the power from primary, reloaded the entire stack with crash files in few units.

Explanation: Code changes done to avoid the display issue in "show stack topology" when stacking cable removed between primary and its neighboring unit(issue only in stack of 8). When the last iteration of neighbor list 1 is reached, ignore the check for last neighbor existence i.e. neighbor [8].Hence the link status for neighbor [8] will be set to link DOWN. When the link state goes up, existing implementation will take care that this gets updated when the reverse link (neighbor list 2) is iterated.

PR	**194636**	Build:	6.4.5.544.R02

Summary: OS9000E-synchronization issue after issuing the "interfaces clear-violation-all" command in AoS 6.4.5.528.R02 code.

Explanation: Modified the behavior of show configuration status to sync with cmm configuration status

PR	**193125**	Build:	6.4.5.546.R02

Summary: New Dual Speed SFP from SOURCEPHOTONICS can't negotiate to speed of 100

Explanation: Fix done to correct the default speed while using Dual speed SFP in OS9 & OS68

PR	**194549**	Build:	6.4.5.549.R02

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

PR	**195083**	Build:	6.4.5.550.R02

Summary: OpenSSL vulnerablity CVE-2014-0224 and CVE-2014-0160

Explanation: OpenSSL vulnerablity CVE-2014-0224 and CVE-2014-0160 has been handled.

PR	**194561**	Build:	6.4.5.551.R02

Summary: CP user mac-addresses are not learnt however authentication is successful.

Explanation: Fix done to add the captive portal authenticated mac addresses in the mac address table.

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PR	**195666**	Build:	6.4.5.552.R02
Summary:	In an ERP ring of 3 OS9000E switches, seeing newly added vlans as operational down		
Explanation:	Code changes are done to handle STG state properly for the linkagg's in ERP NI.		

PR	**195369**	Build:	6.4.5.552.R02
Summary:	Connectivity issue to devices from one of the 2 OS9000E Core switches in MC-LAG		
Explanation:	Connectivity issues due to arp inconsistency in Mclag is resolved.		

PR	**193814**	Build:	6.4.5.553.R02
Summary:	High Memory utilization seen on OS9000E with slcMsgHandler task holding the memory		
Explanation:	More debugs are added to take logs during memory spike.		

PR	**194646**	Build:	6.4.5.554.R02
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	**195392**	Build:	6.4.5.555.R02
Summary:	Memory leak in 6.4.5.442.R02.		
Explanation:	Buffer free is handled properly in all error cases.		

PR	**196448**	Build:	6.4.5.562.R02
Summary:	"ip helper dhcp-snooping option-82 policy" is not available in AOS 6.4.5.R02		
Explanation:	Implemented the "ip helper dhcp-snooping option-82 policy CLI.		

Problems Fixed Between Builds 570 and 608

PR	**196326**	Build:	6.4.5.570.R02
Summary:	WCCP configuration get enabled after the reload		
Explanation:	WCCP configuration are proper after reload		

PR	**195485**	Build:	6.4.5.570.R02
Summary:	OS 6850E stack synchronisation issues		
Explanation:	Code merge done to propagate the value of global variable from primary to secondary when a specific configuration change (like interface admin down or vlan creation etc.) is done. Hence when PS is removed (or if primary unit goes down abruptly) and the reload status is displayed as "ALL STACK" in show running-directory then the whole stack will go for reload.		

PR	**196307**	Build:	6.4.5.570.R02
Summary:	XON-XOFF protocol gets enabled after reboot		
Explanation:	Fix done to disabling the session XON-XOFF protocol by default.		

PR	**195554**	Build:	6.4.5.570.R02
Summary:	IP phone getting the IP address after 5 reboots		
Explanation:	Fix done to get the IP address from Ip phone.		

PR	**197031**	Build:	6.4.5.573.R02
Summary:	LBD is not working after switch reload even LBD configuration is present in boot.cfg.		
Explanation:	Code changes has been done to enable the loopback detection in standalone OS9 chassis.		

PR	**196445**	Build:	6.4.5.575.R02
Summary:	Server DHCP messages processed on a port in "client-only" mode		
Explanation:	RDIP DHCP Snooping changes		

PR	**196450**	Build:	6.4.5.575.R02
Summary:	OS6850-U24X-Mac learning on port instead of Linkagg ID.		
Explanation:	made changes to avoid callback on ports part of linkagg		

PR	**197202**	Build:	6.4.5.577.R02
Summary:	Issue with " violation-recovery-time" of a specific port		
Explanation:	Code merge done by correcting the index value for EISNAPPC datastructure with hybrid port value.		

PR	**198327**	Build:	6.4.5.580.R02
Summary:	Port security Issue		
Explanation:	Made the changes to do not learn the static mac on their port		

PR	**198830**	Build:	6.4.5.582.R02
Summary:	OS6850E crashed multiple times		
Explanation:	Defensive fix has been added to validate data portion of bcm packet.		

PR	**199092**	Build:	6.4.5.583.R02
Summary:	OS9000E (6.4.5.569.R02), mac address displayed in two different ports in the CP table (aaa-device all-users), however there is no mac address displayed in the mac address table.		
Explanation:	Code changes has been done to update the current timer correctly in case of CP authentication		

PR	**197847**	Build:	6.4.5.584.R02

Summary: OS9702E HIGH CPU noticed due to SrcLrn Task.

Explanation: In OS6850E high cpu seen for the top task is 'SrcLrn' task.- increased the to do expiry from 1 sec to 3 sec.

PR	**199127**	Build:	6.4.5.585.R02

Summary: DHCP relay issue on MC-LAG with multi-net configuration.

Explanation: Relay agent takes the primary vip-address IP configured to the Vlan.

PR	**198819**	Build:	6.4.5.585.R02

Summary: MAC address learnt though 802.1x state is Captive-portal CP In-Progress.

Explanation: Fix done to synchronize the onex and mac table during mac move on different ports with different vlan.

PR	**198473**	Build:	6.4.5.588.R02

Summary: High Memory utilization seen on OS9000E with slcMsgHandler task holding the memory

Explanation: Made the changes to free the allocated memory and added the debug to trace the places wherever memory is allocating and freeing.

PR	**199609**	Build:	6.4.5.588.R02

Summary: OS6850E erp-ring <num> enable command missing after the reboot issue

Explanation: erp-ring <num> enable command is exists after reload. No Error will be thrown in boot.cfg.err file

PR	**198801**	Build:	6.4.5.590.R02

Summary: Loop back Detection feature is not working in OS9000E on Slot-8

Explanation: Fix done for proper slot check while configuring LBD

PR	**199662**	Build:	6.4.5.591.R02

Summary: Failover failed with "NI 2 DOWN, Excessive wait for Takeover Ack" and "

Explanation: Code changes done to handle NI takeover timeout properly for primary NI.

PR	**190788**	Build:	6.4.5.593.R02

Summary: Particular port of OS9-XNI-U12E module on OS9702E down

Explanation: Code changes done to allow UDLD in static linkagg ports.

PR	**198594**	Build:	6.4.5.594.R02

Summary: Error while issuing "write-memory flash synchro" on stack of OS6850E.

Explanation: Set longCommandStatus as complete after auto sync.

PR	200212	Build:	6.4.5.597.R02

Summary: OS6850E-Stack having issues with "copy working certified"

Explanation: Code Changes done to avoid the time differences due to DST effect and due to timezone changes which will rectify the failure of certify process when DST is enabled.

PR	200620	Build:	6.4.5.599.R02

Summary: LLDPDU crashing the switch 6855-14

Explanation: Code changes done to avoid switch crashing while processing the LLDP packets.

PR	199642	Build:	6.4.5.600.R02

Summary: OS9702E crashed when issued slcDumpEvtLog and crash reason Exception in interrupt context

Explanation: Fix done to avoid the crash while dumping the "slcDumpEvtLog" from the dshell.

PR	200234	Build:	6.4.5.603.R02

Summary: LLDP traps are generated by the 6850E switches

Explanation: Code changes has been done to avoid the traps which are generated by processing Special LLDP packets.

PR	201367	Build:	6.4.5.604.R02

Summary: PIM SM routing stops after reconvergence in STP ring

Explanation: Multicast Traffic loss during the STP convergence is fixed. Multicast source movement from one port to another port will create a proper h/w entry.

PR	201216	Build:	6.4.5.605.R02

Summary: 802.1x having issues with Random clients

Explanation: Fix done to avoid the onex and SL table mismatch in case of client is getting moved from supplicant to non-supp and vice versa with the same vlan.

PR	198350	Build:	6.4.5.606.R02

Summary: High CPU noticed in UNIT 1 in the stack of 5 switches due to the task UdpRly

Explanation: Code change has been done to check the interface status before processing the dhcp packet.

PR	201947	Build:	6.4.5.607.R02

Summary: MAC movement in one VLAN flushing MAC in all VLANs when using 802.1x

Explanation: Fix done to avoid the onex and SL table mismatch in case of client is getting moved from supplicant to non-supp and again non-supplicant with diff vlan on diff ports

PR	201948	Build:	6.4.5.607.R02

Summary: MAC address learnt though 802.1x state is Captive-portal CP In-Progress.

Explanation: Fix the mac-address table inconsistency after continuous mac move

Problems Fixed Between Builds 609 and 635

PR	**201123**	Build:	6.4.5.609.R02
Summary:	OS6850E: error NI[3/0]: Field 56 in table config is NULL.		
Explanation:	Invalid Error won't be thrown in QoS log.		

PR	**199875**	Build:	6.4.5.611.R02
Summary:	Power supply Display issue-show power shows AC instead of DC supply		
Explanation:	Corrected the power supply type display issue		

PR	**197501**	Build:	6.4.5.614.R02
Summary:	OS6450 showing many lbdProcessMsg:459 messages in swlogs		
Explanation:	Setting appropriate debug level for LDB switch log message		

PR	**198476**	Build:	6.4.5.617.R02
Summary:	OS9702E HIGH CPU_IPMEM		
Explanation:	Fix high cpu in ipmem due to timers		

PR	**203221**	Build:	6.4.5.618.R02
Summary:	Radius Accounting Interim updates are not sent in irregular intervals.		
Explanation:	Code changes done to send the radius accounting packets properly for all clients.		

PR	**203892**	Build:	6.4.5.619.R02
Summary:	OS6850 switch crashed with PMD file with SNMPagt		
Explanation:	Defensive check added to prevent SNMPagt crash when dumping last ten traps to PMD		

PR	**204021**	Build:	6.4.5.619.R02
Summary:	"OID not increasing" error is noticed while SNMP walk is performed to fetch ERP port status.		
Explanation:	Fix done to avoid the error "OID not increasing" noticed during SNMP walk to fetch ERP port status.		

PR	**203508**	Build:	6.4.5.621.R02
Summary:	I2 C error messages seen in OS 6855 switch		
Explanation:	Fix high cpu by increase the read delay incrementally in steps when temperature sensor i2c read failures		

PR	**204755**	Build:	6.4.5.623.R02
Summary:	Impact analysis on your products with CVE-2015-0291 t1_lib.c in OpenSSL 1.0.2.		
Explanation:	OpenSSL Vulnerability - CVE-2015-0287,CVE-2015-0289,CVE-2015-0292,CVE-2015-0209,CVE-2015-0288		

PR	204879	Build:	6.4.5.624.R02

Summary: 6850E stack - ERP not converging

Explanation: Code changes done to update the ERP ring id properly when NI went down inorder to converge the ERP.

PR	201881	Build:	6.4.5.625.R02

Summary: NTP Vulnerability query - CVE-2014-9293 CVE-2014-9294 CVE-2014-9295 CVE-2014-9296 CVE-2013-5211

Explanation: Code changes done to fix NTP vulnerabilities CVE-2014-9295 & CVE-2013-5211. Other vulnerabilities (CVE-2014-9293,CVE-2014-9294,CVE-2014-9296) do not affect AOS.

PR	205239	Build:	6.4.5.626.R02

Summary: 6850E stack : DHCP clients are no longer able to get dhcp address after rebooting unit-2

Explanation: Revert back to default VRF when processing over on non-default VRF

PR	205738	Build:	6.4.5.627.R02

Summary: OS9000E: Crashed with AAA and tDrcIpmrm0 tasks suspended.

Explanation: Defensive check added to prevent IPMRM crash when deleting skip list

PR	205086	Build:	6.4.5.629.R02

Summary: ARP table is not getting updated.

Explanation: (a) when ip loopback0 interface is removed it is not getting removed from ipni route list, this is removed (b) while checking whether an ip is part of local interface, the AOS special condition of looback0 == interface ip is not taken care properly, modified the same.

PR	205639	Build:	6.4.5.629.R02

Summary: OS6850E - Port-Security issue

Explanation: Changes to drop ARP based on LPS state

PR	205756	Build:	6.4.5.629.R02

Summary: Auth server down: 802.1x user-name and MAC not updated on user authentication. Server reachable fails

Explanation: Fix the inconsistency between 802.1x table and source learning when deleting context

PR	205150	Build:	6.4.5.629.R02

Summary: Alcatel-Lucent OmniSwitch 6450 Web Interface Weak Session ID CVE-2015-2804

Explanation: Increased Session ID strength in web Interface to prevent session guessing Attacks.

Under Verification:

PR	**169401**	Build:	6.4.5.182.R02
Summary:	Clients not getting the IP address when NAP is enabled		
Explanation:	Allowed Bootp length in Udp-Relay is 1464		

PR	**163003**	Build:	6.4.5.232.R02
Summary:	Radius cli task suspended on OS9800 running 6.4.3.717.R01		
Explanation:	Radius cli task suspension issue is fixed		

PR	**170828**	Build:	6.4.5.248.R02
Summary:	Incorrect PIM DR		
Explanation:	Fix done to shows correct DR values in "show ip pim interface" command.		

PR	**172190**	Build:	6.4.5.408.R02
Summary:	Blocking Multicast traffic on interface connecting to Third Party router.		
Explanation:	Mroute-Boundary check condition is modified to accommodate all the multicast data ranges		

PR	**174272**	Build:	6.4.5.408.R02
Summary:	OS9000E 100% CPU due to pim3 task		
Explanation:	Fix done for PIM task crash due to route delete in IPRM context		

PR	**175088**	Build:	6.4.5.412.R02
Summary:	OS9700E crashed with task tsMplsNi in suspended state.		
Explanation:	MPLS Reconnection mechanism is changed properly		

PR	**171349**	Build:	6.4.5.413.R02
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	**175082**	Build:	6.4.5.418.R02
Summary:	OS9700/9600 NI reset with PMDs when trying to test the hotswap.		
Explanation:	Fix done not to send ERP_CONFIG_NOT_CERTIFIED or any message to Ni while takeover is in progress.		

PR	**174980**	Build:	6.4.5.420.R02
Summary:	dhcpd server crashes switch when Windows 7 computer with long name requests DHCP		
Explanation:	Coded to log host name separately, so it can get enough buffer size		

PR	**159876**	Build:	6.4.5.428.R02

Summary: HTTP code redirection from 301 permanent redirect to 307 temporary redirect

Explanation: Allow temporary http redirection 307 for avlan clients. This is controlled by debug flag tempRedirect.

PR	**171587**	Build:	6.4.5.433.R02

Summary: Issue with bpdu shutdown on mobile ports.

Explanation: BPDU Link-Shutdown on 802.1x/mobile ports

PR	**177781**	Build:	6.4.5.435.R02

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	**178348**	Build:	6.4.5.447.R02

Summary: "Read-only MIb are not accesible.

Explanation: Access permissons for some objects of alaDot1xDeviceStatusTable are changed to read-only.

PR	**176699**	Build:	6.4.5.447.R02

Summary: Some qos policies randomly applied to UNP profile are not working

Explanation: Policy list will be updated only for the clients (supplicant/non supplicant) who has been associated with the policy list.

PR	**180268**	Build:	6.4.5.448.R02

Summary: Reference to 178515: MIB not available for the "Number of Status Change" in the "show interfaces slot/port" command.

Explanation: "Number of Status Change" display is added in MIB

PR	**178228**	Build:	6.4.5.448.R02

Summary: "STR FATAL" error raised while checksum calculation

Explanation: Closed the unused file system fd before creating new fd

PR	**178702**	Build:	6.4.5.449.R02

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	**179610**	Build:	6.4.5.450.R02

Summary: Switch crashed due to data exception in IPMS-NI.

Explanation: Added debugs to dump the packet in pmd if there is a corruption of Ethernet frame pointer and data portion of the packet

PR	**179968**	Build:	6.4.5.451.R02

Summary: ARP specific QoS rules cannot be logged

Explanation: ARP specific QoS rules can be logged

PR	**181247**	Build:	6.4.5.460.R02

Summary: PIM Issue

Explanation: PIM Protocol in OmniSwitches will handle jumbo frame PIM Control Packets

PR	**180500**	Build:	6.4.5.465.R02

Summary: Corrupted UDP frame! bplen:318 efp->length:68 port:15/2 smac:00:00:00:00:fe:01

Explanation: Corrupted UDP frame logs will be printed only once in swlog if multiple packets comes from the same source.

PR	**182219**	Build:	6.4.5.475.R02

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	**185690**	Build:	6.4.5.488.R02

Summary: 6850E: mac learning not working on lacp linkagg

Explanation: Flushing events on the highgig have been optimised.

PR	**185296**	Build:	6.4.5.488.R02

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	**184016**	Build:	6.4.5.489.R02

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	**184393**	Build:	6.4.5.502.R02

Summary: After power cycle the snmp access is allow for few minutes without aaa authentication default l

Explanation: Fix done to disallow the access to the snmp server immediately after power cycle, when there is no aaa authentication snmp configuration.

PR	**181549**	Build:	6.4.5.505.R02

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	**189730**	Build:	6.4.5.511.R02
Summary:	OS6855 allows the command to change mode to OS6850E.		
Explanation:	Changes are done to not allow command to change stack mode in 6855.		

PR	**192654**	Build:	6.4.5.537.R02
Summary:	OS6850-802.1X users did not display in show command.		
Explanation:	Fix done to display all the onex clients information in global display when there are forced authrorized ports present.		

PR	**197568**	Build:	6.4.5.585.R02
Summary:	Multicast rp-candidate issue with OS6850E.		
Explanation:	PIM-Bootsrap fragmentation issues fixed		

PR	**197425**	Build:	6.4.5.588.R02
Summary:	Randomly switches losses the SSH and Console access to the switch		
Explanation:	Forcefully deleting sftp task after waiting for certain time at sshd task		

PR	**199440**	Build:	6.4.5.595.R02
Summary:	Vulnerability in SSLv3 (POODLE / CVE -2014- 3566)		
Explanation:	Disable SSLv3 to mitigate POODLE attack		

PR	**197294**	Build:	6.4.5.596.R02
Summary:	OS6850 crashed with Memory dump file		
Explanation:	Code change to avoid NULL pointer access.		

PR	**199151**	Build:	6.4.5.600.R02
Summary:	OS9702E running on the code 6.4.5.528 crashed.		
Explanation:	Dump lat 10 SNMP traps to PMD to aid crash debugging.		

PR	**204988**	Build:	6.4.5.628.R02
Summary:	Ping is not working when LPS is enabled.		
Explanation:	Fixed source learning IPC reactor socket communication failure		

PR	**171193**	Build:	6.4.5.103.R02
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	**186908**	Build:	6.4.5.517.R02
Summary:	Switch crashing because of vlan name lenght.		
Explanation:	The size of the data structure that holds the VLAN name was increased to avoid overflow.		

PR	**191570**	Build:	6.4.5.631.R02
Summary:	L3 slow path CPU processed packets caused network instability (CPU running at 100% utilization)		
Explanation:	By default ip packets with options won't be trapped to CPU. Only when IPV6 interface is present or ipv6 multicast is enabled, ip packets with options will be trapped to CPU.		

PR	**189990**	Build:	6.4.5.513.R02
Summary:	ISFP is flapping in stack of OS6855-U24X.		
Explanation:	Changes done to avoid iSFP flapping in stack of OS6855-U24X.		

PR	**178782**	Build:	6.4.5.442.R02
Summary:	Failback in a stack takes more than 2 seconds when "reload ni 2" (expected less than 1 second)		
Explanation:	On a fully connected stack full ring topology, the re- convergence is around 2 seconds when NI reloads and come up. The traffic flows from starting NI to the diagonally opposite NI on the stacking ring. The code changes are done to reduce this convergence to around 550ms when NI reloads and comes up.		

PR	**176082**	Build:	6.4.5.423.R02
Summary:	In "reload all at" command seconds difference seen		
Explanation:	"reload all at" command shows exact seconds at which the reload has been planned.		

PR	**175703**	Build:	6.4.5.425.R02
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	**181087**	Build:	6.4.5.461.R02
Summary:	CTRL+* during stack reload crashes stack units		
Explanation:	Code change done to avoid taking mutex In order to avoid incomplete pmd file generation		

PR	**159987**	Build:	6.4.5.416.R02
Summary:	BGP not showing the route in kernel table		
Explanation:	Reset Peer when interface comes up and neighbor ship is already established		

PR	**176959**	Build:	6.4.5.445.R02
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	**175794**	Build:	6.4.5.417.R02
Summary:	Stack Split / Crash		
Explanation:	Validate malloc failure when switch is trying to synchronize dhcpBind.db		

PR	**185304**	Build:	6.4.5.498.R02
Summary:	Switch loses its connection after issuing the command "no mac-address-table"		
Explanation:	Do not delete the mac-address if mac-port is cpu port		

PR	**190230**	Build:	6.4.5.517.R02
Summary:	VRRP tracking commands getting cleared on a stack of OS6850E switches when primary unit reloads.		
Explanation:	Validation of slot availability is avoided during reload and takeover		

PR	**173657**	Build:	6.4.5.432.R02
Summary:	"maximum bandwidth 0K" doesn't work immediately		
Explanation:	Configure 0 depth when bandwidth is 0. Hence not allocating any tokens for packet to go through.		

PR	**174607**	Build:	6.4.5.196.R02
Summary:	CPLD version not updating correctly in swlogs		
Explanation:	Corrected the CPLD version number for 6850E in swlogs		

PR	**184858**	Build:	6.4.5.498.R02
Summary:	DDM threshold temperature alarm.		
Explanation:	Code changes done to prevent warning message until SFP reads the exact DDM values.		

PR	**153855**	Build:	6.4.5.49.R02
Summary:	OS9702E crashed: P1:Startup default SecondaryN value: 0x100		
Explanation:	Removing invalid "sflow receiver" command which causes a crash.		

PR	**205494**	Build:	6.4.5.628.R02
Summary:	SLB is not working properly when we use TCP probe.		
Explanation:	Fixed SLB probe socket state issue		

PR	**178087**	Build:	6.4.5.443.R02
Summary:	OS6450 tftp incorrect behavior		
Explanation:	Clearing the buffer to prevent taking previous file name from the buffer		

PR	**188374**	Build:	6.4.5.585.R02
Summary:	duplicate line appear in boot.cfg file		
Explanation:	Changes done to prevent MIP overflow in ethernet service and interfaces modules.		

PR	**181233**	Build:	6.4.5.465.R02
Summary:	OS 6850 Loopback-detection not working		
Explanation:	Reducing LBD Tx timer to 1 second		

PR	**176730**	Build:	6.4.5.447.R02
Summary:	tCS_PRB (d780fe8) & WebView (81bdb88) suspended on OS6850 Stack.		
Explanation:	Check has made to verify username and password for captive portal login page		

PR	**179918**	Build:	6.4.5.450.R02
Summary:	Switch crashed with tCsCSMtask2,tCS_CCM,tCS_PRB tasks suspended		
Explanation:	Defensive check added to avoid null pointer access		

PR	**182646**	Build:	6.4.5.481.R02
Summary:	PIM task got stuck in a wrong state		
Explanation:	Send Join (non-periodic) only if the upstream state is not in joined state		

PR	**183531**	Build:	6.4.5.482.R02
Summary:	Swlog filled with error message "qosNiRDPbrUpdateNhipEntry: entry_reinstall returned -4"		
Explanation:	Error "qosNiRDPbrUpdateNhipEntry: entry_reinstall returned -4" will not be thrown.		

PR	**183594**	Build:	6.4.5.477.R02
Summary:	OoS display issue with Omniswitch.		
Explanation:	Ensured the configurations applied for one category should not reflect in other.		

PR	**179602**	Build:	6.4.5.447.R02
Summary:	Account terminate cause seen on the interim update.		
Explanation:	Code changes has been done to display the acct-terminete-cause only in the stop packet		

PR	**183211**	Build:	6.4.5.481.R02
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	**182292**	Build:	6.4.5.482.R02
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	**167944**	Build:	6.4.5.434.R02
Summary:	SLB Cluster IP is not able to ping from Secondary unit of the 6850 stack		
Explanation:	Flush old proxy arp for SLB cluster ip after takeover		

PR	**179287**	Build:	6.4.5.445.R02
Summary:	temperature sensor problem on some devices (i2cRandomRead ERROR)		
Explanation:	Swlog messages are added to display port number in which the sfp inserted that is responsible bus lock up		

PR	**171051**	Build:	6.4.5.423.R02
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	**169150**	Build:	6.4.5.482.R02
Summary:	OS6250 doesn't generate any trap when connectivity to a MEP is restored		
Explanation:	Trap will be generated when MEP connection is restored.		

PR	**174214**	Build:	6.4.5.417.R02
Summary:	DHCP offer not received when client is connected to NI 2 of a stack		
Explanation:	Clients in the vlan for which ip interface's forwarding state is disabled will not get IP, unless relayUcastReply = 1		

PR	**194004**	Build:	6.4.5.545.R02
Summary:	Ouput of show interface link-monitoring statistics missing few interfaces in all chassis after 3rd i		
Explanation:	Fix done to avoid MIP overflow		

PR	**190033**	Build:	6.4.5.512.R02
Summary:	NIs on 9700E down, Multiple PMDs generated.		
Explanation:	Increase the slbProbe task priorty so that it can compete for CPU attention.		

PR	**191506**	Build:	6.4.5.583.R02
Summary:	Source Learning task, re-engineering needed due to issue faced under PR 190033		
Explanation:	Code changes has been done to reconnect the socket in case of broken pipe between NI and CMM		

PR	**172374**	Build:	6.4.5.421.R02
Summary:	Issue with QoS command "show policy classify l3" on OS6850.		
Explanation:	Added an option to view the pending policies in the show policy classify CLI command		

PR	**171983**	Build:	6.4.5.429.R02
Summary:	QoS Policy PIM neighbor prevention problem		
Explanation:	Allow user policy precedence over system rules when "debug qos internal "slice 0/0 copytocpuflag 1"" is used		

PR	**193688**	Build:	6.4.5.538.R02

Summary: ALU branded SFP-GIG-T (triple speed) is not working with 100Mbps / 10Mbps.
Explanation: Code change done to accept the ALU Branded triple speed copper SFP part number as triple speed SFP.

PR	**172494**	Build:	6.4.5.421.R02

Summary: Multicast prune is not forwarding within 2 seconds and it takes 2 1/2 min in pim dense
Explanation: Assert information is cleared when state moves to no-info and re-assertion is started

PR	**174371**	Build:	6.4.5.444.R02

Summary: VU-101208-2: Vulnerabilities in OpenSSL
Explanation: Work around for using older Netscape browser and servers is not available now

PR	**169759**	Build:	6.4.5.262.R02

Summary: Ebgp multihop command does not changes the TTL value in a BGP neighbor packets
Explanation: Updated the TTL value in EBGP control packets

PR	**174577**	Build:	6.4.5.189.R02

Summary: "user password-policy cannot-contain-username" shown incorrectly under show configuration snapshot
Explanation: Changes done to update running configuration correctly

PR	**179424**	Build:	6.4.5.447.R02

Summary: Issue with NLB unicast rooting
Explanation: NOTE: THIS WORKS ONLY ON STANDALONE OS6850E
               arp <Server-Virtual-IP><Unicast MAC> alias "NLB_UNICAST_FLOOD"

               You need to configure NLB ARP with keyword "NLB_UNICAST_FLOOD" so that NLB destined packets would be flooded (on various nlb server ports) on destined vlan.

PR	**155356**	Build:	6.4.5.311.R02

Summary: Vista PC goes to filtering mode when binding is enabled as there is no reply for first 4 ARP request
Explanation: Ignore arp request,probe packet with sender ip address as 0 on mobile port

PR	**185616**	Build:	6.4.5.494.R02

Summary: Traffic stops while the LED remains lit on OS9702E.
Explanation: Rectifying discrepancy in setting speed to 100 in a dual speed SFP

PR	**167344**	Build:	6.4.5.46.R02
Summary:	DHLAA forwarding loop when the primary unit reloaded and came back as idle or secondary unit		
Explanation:	Fix provided to avoid simultaneous connection between DHLAA across NIs by checking if socket connection already exists before retrying.		

PR	**189881**	Build:	6.4.5.529.R02
Summary:	Issue with time synchronization with NTP on Layer 2 switch		
Explanation:	Changes have been made to set the dispersion value to the sample dispersion value in the case of global variable "ntpAccept" enabled.		

PR	**161177**	Build:	6.4.5.423.R02
Summary:	Auto-negotiation not working properly on OS6400 only for 100Mbps patch cable.		
Explanation:	Ethernet@wirespeed feature has been enabled.		

PR	**169391**	Build:	6.4.5.424.R02
Summary:	High Memory Utilization is OS6855		
Explanation:	Optimize memory management when traps are absorbed.		

PR	**175249**	Build:	6.4.5.426.R02
Summary:	Auto-negotiation not working properly on 6850E only for 100Mbps patch cable.		
Explanation:	Auto-negotiation works properly on OS6850E when 100Mbps patch cables connected		

PR	**158326**	Build:	6.4.5.249.R02
Summary:	tCS_PRB, tIPrm0 and tPim0 tasks suspended on OS9800 running 6.4.3.668.R01		
Explanation:	Inter module message size limit is checked for a remote probability occurrence		

PR	**179630**	Build:	6.4.5.443.R02
Summary:	CVLAN all works, however if a range of CVLAN or individual CVLAN is mapped to the SVLAN, then the co		
Explanation:	Message to delete the SVLAN is added to be sent from CMM while unbinding the UNI		

PR	**177517**	Build:	6.4.5.444.R02
Summary:	NI2 on nw-dsb-fwo crashed with PMD		
Explanation:	With this fix the reported crash won't occur.		

PR	**183170**	Build:	6.4.5.481.R02
Summary:	Password command on secondary management module should not be allowed		
Explanation:	Password command is not allowed in secondary CMM		

PR	**182768**	Build:	6.4.5.482.R02
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	**183528**	Build:	6.4.5.486.R02
Summary:	SVCMGR error smgrMIPReactorReceive: MIP queue error! Line=2609		
Explanation:	Switch will not crash when SNMPGet opeation is done with invalid index for object "alaServiceMgrPortMode".		

PR	**170503**	Build:	6.4.5.518.R02
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	**181508**	Build:	6.4.5.487.R02
Summary:	ntp server configuration does not store IP Address of NTP server, instead it resolves NTP server to		
Explanation:	Controlling the snapshot of NTP configuaration to store the IP address		

PR	**178945**	Build:	6.4.5.443.R02
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	**177453**	Build:	6.4.5.445.R02
Summary:	CTRL + keys trigger OS6850 reboot		
Explanation:	Bypass SIGQUIT signal processing on IDLE units CLI.		

PR	**176573**	Build:	6.4.5.425.R02
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	**198572**	Build:	6.4.5.589.R02
Summary:	Error "ntpGetResponse: Error 4 (No data available), final pkt"		
Explanation:	Bug fix for NTP peer creation and deletion issue. On NTP peer definition, if passive association exists already with peer, remove this association and instead create an active peering association with same peer. Also fixed the problem in passive peer deletion.		

PR	198684	Build:	6.4.5.578.R02
Summary:	DHCP Offer is not transferred to a Client in VRRP environment		
Explanation:	Dhcp snooping in global mode, The VRRP environment is handled. Packet with vrrp dst mac should be processed.		

PR	192072	Build:	6.4.5.524.R02
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	171651	Build:	6.4.5.424.R02
Summary:	Stack crashed when the command policy port group test-qos mode split 1/15 is given.		
Explanation:	While configuring spilt mode for port group, validate the conditions with no destination port groups		

PR	198586	Build:	6.4.5.595.R02
Summary:	OpenSSH version upgrade query. OS6850E.		
Explanation:	CVE-2010-5107, CVE-2011-5000, CVE-2010-4755 : Vulnerabilities for OpenSSH 5.0		

PR	189784	Build:	6.4.5.596.R02
Summary:	Switch memory utilization increases and exceeds threshold.		
Explanation:	Code changes are done to prevent IPC congestion between STP CMM and STP NI		

PR	165716	Build:	6.4.5.421.R02
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	172809	Build:	6.4.5.429.R02
Summary:	Inconsistency between boot.cfg and "show configuration snapshot" after upgrade from AOS 6.3.4.R01		
Explanation:	VSTK MIP: Correcting aggregate port handling in show commands		

PR	175805	Build:	6.4.5.446.R02
Summary:	LLDP log messages does not have port information		
Explanation:	Added the port information for LLDP log messages in slot/port format.		

PR	180957	Build:	6.4.5.519.R02
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.		

PR	**187480**	Build:	6.4.5.495.R02

Summary: OS6850E unable to certify the switches after the daylight changes are applied.

Explanation: Code changes done to perform CERTIFY process successfully when DST is enabled.

PR	**195257**	Build:	6.4.5.560.R02

Summary: DHCP offer packet is not forwarded by OS6450 udp relay

Explanation: Per vlan rtr mac destined changes

PR	**166410**	Build:	6.4.5.155.R02

Summary: Issue with Remote port mirroring related to QOS configuration.

Explanation: Have Cleared hardware register entry (EGR_RSPAN_VLAN_TAG) too, when remote port mirroring is unconfigured.

PR	**186157**	Build:	6.4.5.514.R02

Summary: Configuration of SHA+AES on OS 9702E to work with whatsup Gold.

Explanation: Code changes done to fix SHA/AES for snmpv3

PR	**176940**	Build:	6.4.5.448.R02

Summary: Reload command not working after upgrading the stack from 6.4.4.415 R01 to 6.4.4.577 R01.

Explanation: Exit from dshell as well when remote connection to the IDLE units ended

PR	**181664**	Build:	6.4.5.465.R02

Summary: Ref. to PR# 178515. Customer want to use the mac-flush debug command without the timer option.

Explanation: If the MAC count is increasing too fast and the flush is not successful due to port flaps or stp port change, then following solution could be used. Here we are forcing the flush to number of times with in the same day. Earlier, we had the force flush capability once every day. This was done using
"Debug source-learning forced aging cycle time <HH:MM> threshold <mac countr>"
This capability is enhanced to force flush the flush the MAC address more times in a day.
After setting the force cycle flush, use macPerHourFlush in AlcatelDebug.cfg to trigger flush within the same day every few\ hours once

In alcatelDebug.cfg set the value of macPerHourFlush to 1 if an hourly check is required from above time.

Debug set macPerHourFlush 1

The value of macPerHourFlush will control the frequency of the flush within a day. If it is set to a value 2, then flush would be done every two hours from the set time and so on.

PR	**183625**	Build:	6.4.5.481.R02
Summary:	LSA5 (default route) does not displayed on backbone router (CBB1 and CBB2) when we add new area on backbone router (CPE1 and CPE2).		
Explanation:	Proper bitmask used for flags which denote ospf asbr-merge. So LSA5 will be displayed on backbone router.		

PR	**183951**	Build:	6.4.5.482.R02
Summary:	Service sap-using sap gives error for a specific sap.		
Explanation:	Proper validation of linkagg ports in SAP configuration carried out		

PR	**180489**	Build:	6.4.5.469.R02
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	**180822**	Build:	6.4.5.460.R02
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	**198917**	Build:	6.4.5.595.R02
Summary:	high cpu noticed when we poll the device from OV		
Explanation:	Introduction of debug variable to control the healthMonDeviceTrap generated from switch when CPU crosses threshold limits.		

PR	**171954**	Build:	6.4.5.426.R02
Summary:	OS_6850 crash with QOS task suspend		
Explanation:	Prevented Invalid FD access while accepting the sockets for HIC Re-Directed Packets and Introduced age out concept to Stale File Descriptors for connection which is opened more than 2 minutes, so that valid/further sessions can get accepted without any issues		

PR	**176313**	Build:	6.4.5.435.R02
Summary:	Network related issue while adding a second link to a static LAG.		
Explanation:	Linkagg port status is properly updated		

PR	**175179**	Build:	6.4.5.423.R02
Summary:	OS9700/9800 Telnet not working		
Explanation:	Added debug API's to recover the opened TELNET sessions and also to dump the state information of all opened sessions.		

PR	**174571**	Build:	6.4.5.445.R02
Summary:	VU-080718-1: Vulnerability in various IPv6 protocol implementations.		
Explanation:	Vulnerability Fix based on the openbsd patch		

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PR	**188774**	Build:	6.4.5.540.R02

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 eventhough mac- verification disable command is configured.

PR	**170018**	Build:	6.4.5.417.R02

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	**167271**	Build:	6.4.5.430.R02

Summary: IP multicast traffic drops when the primary switch in the stack is failed.

Explanation: Flushing of multicast source entries upon takeover was optimized

PR	**179716**	Build:	6.4.5.511.R02

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	**191588**	Build:	6.4.5.521.R02

Summary: BPDU Shutdown failure: qos user-port link-shutdown bpdu does not seem to shut down the ports

Explanation: With this change port shutdown properly.

PR	**158888**	Build:	6.4.5.421.R02

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	**200684**	Build:	6.4.5.600.R02
Summary:	Link flapping noticed for the ports of OS6850E switches on NMS.		
Explanation:	Fix done to avoid high CPU in SAA		

PR	**162981**	Build:	6.4.5.422.R02
Summary:	Not able to change password on secondary unit of 6850 stack		
Explanation:	Enabling the change in password on Primary to reflect on secondary CMM also		

PR	**173185**	Build:	6.4.5.430.R02
Summary:	Stack reboot causing DHL VLANs in unsupported list.		
Explanation:	dhl vlan takeover will happen properly incase of other NI is down during reboot		

PR	**178863**	Build:	6.4.5.446.R02
Summary:	Unable to authenticate AVLAN after upgrading from 6.3.4.R01 to 6.4.4.585.R01 and Error message "qDis		
Explanation:	Ccode is not handle properly whenavlan port-bound is enabled. Code changes is done to flush the ccode entry when the process gets done.		

PR	**172210**	Build:	6.4.5.233.R02
Summary:	Switch crashed due to suspension of bcmRX and tCsCSMtask2		
Explanation:	Added A Null check to Prevent the crash		

PR	**207332**	Build:	6.4.5.634.R02
Summary:	AAA info AAA Unknown		
Explanation:	Code changes done to update the Radius Interim-update messages properly in swlogs.		

PR	**176593**	Build:	6.4.5.420.R02
Summary:	OS 9700E switch crashed with tSLNAdrLrn task suspension.		
Explanation:	Defensive fix have made so that it won't call semTake if the sem id is zero.		

PR	**179722**	Build:	6.4.5.450.R02
Summary:	alaDoSTrap DoS Type: 14		
Explanation:	MIB is defined for anti-spoofing dos type		

PR	**180623**	Build:	6.4.5.452.R02
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	**167885**	Build:	6.4.5.447.R02
Summary:	MIB or OID to monitor port utilization (InBits/s and OutBits/s) on switch		
Explanation:	Code changes done to add new MIB OID to monitor port utilization of outbit was implemented		

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PR	**190387**	Build:	6.4.5.520.R02
Summary:	OK LED of the OS6400-P24 is always "solid amber after upgrade.		
Explanation:	Fixed the issue of PoE devices powering up during boot-up (CPLD 17) and to correct the OK LED behaviour (CPLD 18)		

PR	**160528**	Build:	6.4.5.433.R02
Summary:	OS6850 is duplicating 802.1x commands line under show configuration snapshot output.		
Explanation:	Handle MIP overflow errors in aaa snapshot		

PR	**156321**	Build:	6.4.5.413.R02
Summary:	UNP policy group doesn't work on 9700		
Explanation:	More appropriate error message has been given while configuring UNP rule for not supported cases.		

PR	**182718**	Build:	6.4.5.486.R02
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	**182765**	Build:	6.4.5.482.R02
Summary:	EXIT command issue with OmniSwitch.		
Explanation:	Changes have been done to intimate accounting command information for exit command to Tacacs server even there is no configuration		

PR	**185058**	Build:	6.4.5.486.R02
Summary:	tDvmrp0 ,tCsCSMtask2 and tCS_PRB. These are the tasks suspended and locked.		
Explanation:	Fix to avoid null pointer access		

PR	**205223**	Build:	6.4.5.632.R02
Summary:	MAC address table and 802.1x table inconsistency issue		
Explanation:	Code changes done to update the SL CMM data base properly when LPS enabled.		

PR	**191795**	Build:	6.4.5.519.R02
Summary:	Static route not showing the snapshot but however throwing the message "Static route already exists"		
Explanation:	Including the entry causing mip_overflow in show configuration snapshot ip-routing.		

PR	**187475**	Build:	6.4.5.502.R02
Summary:	Show interfaces link-monitoring statistics command not executing past interface 3/42		
Explanation:	Fix done to handle the proper mib overflow condition to execute the "Show interfaces link-monitoring statistics command" correctly.		

PR	**190094**	Build:	6.4.5.514.R02
Summary:	ARP packets dropped before reaching CPU on NI1		
Explanation:	ARP Packets won't be dropped.		

PR	**193617**	Build:	6.4.5.593.R02
Summary:	OSPF routes are installed with delay into the routing table		
Explanation:	first packet LSA handling and OSPF LSA length overflow handling		

PR	**182223**	Build:	6.4.5.485.R02
Summary:	OS6850 stack switch has been crashed "tCS_PRB & taIpni" task is suspended.		
Explanation:	changes done to drop the ARP packets received on higig port		

PR	**162121**	Build:	6.4.5.233.R02
Summary:	100% CPU hike in 6400 unit 1 due to taIpni		
Explanation:	Semaphore lock in 802.1x to prevent task lockup		

PR	**189398**	Build:	6.4.5.510.R02
Summary:	CSU: OS6850E Stack running high CPU had stack-split and both units crashed.		
Explanation:	High CPU and stack split issue is fixed as the code change to not to send entry with index 0 to NI		

PR	**202351**	Build:	6.4.5.622.R02
Summary:	OS6400 crash with 'memPartAlloc: block too big - 4136 in partition 0x5622c4' messages		
Explanation:	Code change done to fix high memory issue in taSTP task		

PR	**179308**	Build:	6.4.5.469.R02
Summary:	High CPU due to task bcmLink.0 Ref PR#176562		
Explanation:	Number of interrupts exceeds the threshold of ~150(?) interrupts per second, disable the interrupts to the system, which would prevent interrupt based link scanning to be done. System perform Polling based link scanning and send a traps to SNMP		

PR	**184682**	Build:	6.4.5.613.R02
Summary:	Linkagg issue in a Vlan stacking configuration		
Explanation:	Packets with Double tags egrgresing out of uni port acrsossNi will not be losing inner tag.		

PR	193396	Build:	6.4.5.555.R02
Summary:	Connectivity issue after configuring the QoS for ingress bandwidth in OS9702E.		
Explanation:	Depth Configuring properly in hardware.		

PR	193056	Build:	6.4.5.534.R02
Summary:	Issue with ARP inconsistency in Mclag		
Explanation:	To reduce the time taken in processing the ARP_DEL message.		

PR	173598	Build:	6.4.5.424.R02
Summary:	Issue with a special character and ssh session		
Explanation:	While parse the tty modes to the terminal fd, set all of the option bits and disable the special ROM monitor trap character CTRL+X and CTRL+C		

PR	194285	Build:	6.4.5.546.R02
Summary:	When FIPS enable, SNMPv3 session established with MD5+DES. microcode 6.4.5.528.R02		
Explanation:	Code changes done not to allow authentication other than SHA+AES and SHA+3DES when FIPS mode is enabled		

PR	167383	Build:	6.4.5.248.R02
Summary:	PIM RP convergence problem.		
Explanation:	PIM RP hold time updated properly when multiple RPs listed in bootstrap message		

PR	164365	Build:	6.4.5.253.R02
Summary:	Loopback0 if configured in same network as PIM interface is not sending RP & group info to neighbor		
Explanation:	PIM configured with loopback0 address as RP forwards multicast stream properly.		

PR	189534	Build:	6.4.5.516.R02
Summary:	Reachability issue with ERP setup with LACP Linkagg.		
Explanation:	IP Interface Status will be updated for vlans Associated with ERP Linkagg Ports.		

PR	181724	Build:	6.4.5.486.R02
Summary:	SrcLrn, tOddJob, tSlcAgeTimer, tSlcHgTimer, la_cmm_tick, stpTick & tahw_l2		
Explanation:	As per our analysis the RCA of the issue is currently we have not validating the length of the buffer received for IPC transmission. This result in crash on the system whenever the buffer size is Zero. We have done code changes for validating the length of the buffer before sending to the destination Application.		

PR	168946	Build:	6.4.5.479.R02
Summary:	Switch rebooted and PMD file generated. Task "taSLNEvent" suspended		
Explanation:	Code changes done to fix this crash.		

PR	**194353**	Build:	6.4.5.574.R02
Summary:	OS6850E crashed with SNMPagt & tCS_PRB tasks		
Explanation:	Code changes done to ensure accessing valid varbind during bulk request		

PR	**165666**	Build:	6.4.5.229.R02
Summary:	loopback0 interface in vrf cannot be advertised with bgp		
Explanation:	Loopback0 in non-default vrfs can also be used for advertisement		

PR	**182836**	Build:	6.4.5.477.R02
Summary:	OSPF LSA type 5 never aged out and don't have a reason to exist in the OSPF DB at all		
Explanation:	There was a protocol value mismatch. We were using the protocol value of old route for new LSA entry. Have corrected this.		

PR	**172211**	Build:	6.4.5.416.R02
Summary:	Intermittent BGP routes are missing in the routing Table		
Explanation:	Overlapping routes display issue in BGP is fixed		

PR	**177682**	Build:	6.4.5.435.R02
Summary:	Switch crash with task taEthOAM_NI suspend		
Explanation:	Initialised the ethoam attribute variables during Init		

PR	**170717**	Build:	6.4.5.416.R02
Summary:	IP-Helper Mac Movement Errors in switch logs. These messages shouldn't be an error message and it should be a warning messages.		
Explanation:	Modified the IP-Helper MAC Movement Swlog Messages severity to "Warning"		

PR	**164297**	Build:	6.4.5.420.R02
Summary:	DHCP Server database updation failed - 6400 switch running 6.4.3.520.R01 release code		
Explanation:	File Descriptor is handled properly while updating DHCP SERVER Database.		

PR	**178227**	Build:	6.4.5.445.R02
Summary:	"Automatic Remote configuration download" does not work		
Explanation:	Timeout interval is 30s by default. Introduced a global variable "rmtCfgTimeoutInterval" to increase the timeout interval.		

PR	**176617**	Build:	6.4.5.421.R02
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	**170650**	Build:	6.4.5.412.R02
Summary:	UNP-Allocation fails in case of bulk 802.1x-client-requests.		
Explanation:	DataPackets from Client before authentication is properly handled.		

PR	**185017**	Build:	6.4.5.485.R02
Summary:	Mac movement issue during DHL convergence when MAC flush mode is "RAW".		
Explanation:	Proper Gport validation while generating packets during DHL port change		

PR	**185448**	Build:	6.4.5.502.R02
Summary:	ERP ring got blocked due to UDLD flood and switch got crashed with generating PMD file with suspended		
Explanation:	Prevent UDLD configuration for aggregate port or tagged aggregate port		

PR	**168443**	Build:	6.4.5.237.R02
Summary:	High CPU utilization on 6850		
Explanation:	High CPU utilization on IPMS is fixed		

PR	**180835**	Build:	6.4.5.451.R02
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	**175734**	Build:	6.4.5.433.R02
Summary:	OS6850E set DEI bit for qos rule hit packets over 10/s when log is enable on the rule.		
Explanation:	Don t set CFI bit for packets that are switched/routed when qos-logging is enabled		

PR	**174567**	Build:	6.4.5.444.R02
Summary:	VU-091113-1: Vulnerability in the SSL/TLS protocol.		
Explanation:	Disabling Renegotiation in open SSL		

PR	**193462**	Build:	6.4.5.572.R02
Summary:	6850: Disable IP interface 10.123.0.1 (captive portal) when 802.1x is not configured, so it won't recreate.		
Explanation:	ARP replies for IP Default CP address 10.123.0.1 is not sent out when 802.1x is not configured.		

PR	**188695**	Build:	6.4.5.511.R02
Summary:	Issue with ip dos anti-spoofing clear command.		
Explanation:	statistics command will not change the configuration status of the switch		

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PR	**171547**	Build:	6.4.5.155.R02
Summary:	Port-security issue.		
Explanation:	LPS: Correcting pseudo-static MAC transitions		

PR	**192200**	Build:	6.4.5.585.R02
Summary:	When we do flash synchro we notice error message in swlog "CCM_CSM_FLASH_SYNCHRO_RS-appError 24"		
Explanation:	Fix to avoid internal ftp hung issue during flash-synchro causing CVM timeout		

PR	**195734**	Build:	6.4.5.553.R02
Summary:	OS6850 switch rebooted with no PMD file.		
Explanation:	Corrected "show stack status" tokens display issue.		

PR	**180838**	Build:	6.4.5.488.R02
Summary:	stack of switches crashed due to the suspension of the task "tCsCSMtask2" and "tCS_PRB "		
Explanation:	Code changes for console lockup after 3 unsuccessful attempts.		

PR	**203577**	Build:	6.4.5.630.R02
Summary:	Secondary unit of a stack is rebooting after a hard takeover.		
Explanation:	Fix the flash sync flags between primary and secondary unit		

PR	**166151**	Build:	6.4.5.230.R02
Summary:	When VRRP is enabled for NLB server vlan, client loses connectivity to VIP for NLB.		
Explanation:	Care taken to retain the Static Arp entries in both H/W and S/W when VRRP is enabled/disabled.		

PR	**177303**	Build:	6.4.5.418.R02
Summary:	Config for ethernet service svlan done but not shown on "show configuration snapshot".		
Explanation:	Mip-Overflow for E-service NNI Link-Agg is handled properly		

PR	**168834**	Build:	6.4.5.416.R02
Summary:	OS 9700 BGP configured with AS-prepend issues.		
Explanation:	Update the queued attribute structure to 0 if an attribute already exists and peer's send policy is sent for re-evaluation		

PR	**178145**	Build:	6.4.5.445.R02
Summary:	Reference to the PR# 177283. I have opened new PR.		
Explanation:	Crash due to invalid payloadlen value fixed.		

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PR	177150	Build:	6.4.5.416.R02
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	176455	Build:	6.4.5.417.R02
Summary:	"IP-HELPER warning Corrupted UDP frame! bplen:303 efp->length:350" messages in the switch logs of OS		
Explanation:	Have done changes to allow packets when trailer byte is added at the end		

PR	168309	Build:	6.4.5.429.R02
Summary:	Static route showing as 'inactive' even the routes are reachable and able to ping.		
Explanation:	Removed outgoing interface deletion code		

PR	158241	Build:	6.4.5.426.R02
Summary:	"show qos queue" showing wrong values		
Explanation:	Design change for resetting the qos hardware counters, No clear on read. Show qos queue command showing wrong values corrected.		

PR	160221	Build:	6.4.5.142.R02
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.		

Known Issues:

PR	202073	Build:	6.4.5.608.R02
Summary:	Convergence time is more than expected while BFD is configured.		
Explanation:	Delay in the l3 flushing process profiling is required.		

New Software Features:

1. Opaque LSA support

Introduction:
This feature enhancement facilitates support for opaque LSA type 10 and type 11, Hence if Omni-switch is used as a transit router between two opaque capable routers, opaque LSA(type 10 and type 11) received by Omni-switch will be stored in the appropriate LSDB and forwarded to the neighboring OSPF router.

Earlier only type-9 opaque LSA (graceful restart capability) was supported. If Other than this type 9 LSA, type 10 & type 11 LSA's are received, it was discarded. So if the Omni-Switch was used as an intermediate transit route between two opaque capable routers, the type 10 and 11 LSA was neither received nor forwarded by the Omni-switch.

Platforms Supported:
OmniSwitch 6850E, 6855, 9000E

Commands usage:

Ip ospf opaque-transit-capability <enable/disable>
Syntax Definitions
Enable   accept and forward type-10 and type-11 LSA's
Disable type-10 and type-11 LSA's will be discarded.

```
-> ip ospf opaque-transit-capability enable
```

Show ip ospf lsdb opaque
Will display type-10 opaque LSA's
```
-> show ip ospf lsdb opaque
```

Show ip ospf ext-opaque
Will display type-11 opaque LSA's
```
-> show ip ospf ext-lsdb
```

Limitations:
AOS devices shall not support for the origination and processing of type 10 and 11 LSA's and only transitioning these packets is handled as part of this feature enhancement.

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