
Netberg SONiC release notes.202411

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1. Overviews

Netberg SONiC 202411.n0 provides feature updates, bugs fixes, and enhacements over Netberg SONiC 202311.n0.

1.1. Platforms supported

Broadcom Trident3 x2, x5, and x7 series

- Aurora 221
- Aurora 621
- Aurora 721

Broadcom Trident4 X11 series

- Aurora 830

1.2. New features

- Weighted-Cost Multi-Path

2. Fixed Issues

Issue	Description
Build-image 3383	Fixed two issues: "show vxlan remotevtep" OperStatus was always "oper_down", and ARP traffic was dropped in VXLAN-EVPN tunnels.
SWSS 3478	Fixed the issue where NEIGH_TABLE was not populated with VXLAN routes.
Utilities 2729	Fixed the issue where "show storm-control interface EthernetX" returned an error.

3. Feature List

"*" - supported, "-" - not supported

Feature	Sub-feature	Aurora 221	Aurora 621, 721	Aurora 830
L2 Features				
LAG	LACP/LACP fallback	*	*	*
	LACP fast-rate	*	*	*
LLDP		*	*	*
VLAN, VLAN Trunk		*	*	*
FDB (MAC Aging/ Learning)		*	*	*
MC-LAG L2		*	*	*
	Storm Control		*	*
*	TPID		*	*
*				
BGP		*	*	*
	BGP Graceful Restart Helper	*	*	*
	BGP Stack Graceful Restart	*	*	*
	BGP Unnumbered	*	*	*
	BGP EVPN	*	*	*
ECMP	Coarse-grained ECMP	*	*	*
	Fine-grained ECMP	*	*	*
WCMP		-	*	*
VRF		*	*	*
	VRF route leaking	*	*	*
IPv6		*	*	*
EVPN/VXLAN		*	*	*
OSPF v2		*	*	*
BFD		*	*	*
Static routing		*	*	*
Subport		*	*	*
MC-LAG (L3)		*	*	*
Proxy ARP		*	*	*
QoS				

Feature	Sub-feature	Aurora 221	Aurora 621, 721	Aurora 830
Buffer Profiles		*	*	*
ECN		-	*	*
WRED		-	*	*
Classification	DSCP	*	*	*
	ACL	*	*	*
	IPv6 ACL	*	*	*
Marking	DSCP	*	*	*
Diffserv		*	*	*
PFC/ Asym PFC		-	*	*
PFC Watchdog (WD)		-	*	*
PFC Watermark		-	*	*
Scheduling		*	*	*
Shaping (Port, Queue)		*	*	*
RoCEv2		*	*	*
Security				
CoPP (Control Plane Policing)		*	*	*
ACL Permit/ Deny		*	*	*
IPv6 ACL		*	*	*
MAC ACL		*	*	*
Control Plane ACL		*	*	*
AAA		*	*	*
System/ Management				
Standard Linux shell tools		*	*	*
Linux application integration		*	*	*
SNMP		*	*	*
Syslog		*	*	*
NTP		*	*	*
DHCP/DHCPv6 Relay		*	*	*
Sysdump		*	*	*
SONiC Image management		*	*	*
Fast reload		*	*	*
Warm reboot		*	*	*

Feature	Sub-feature	Aurora 221	Aurora 621, 721	Aurora 830
Platform/Thermal Monitor		*	*	*
Transceiver Monitor		*	*	*
DOM Optics Data		*	*	*
gRPC		*	*	*
Feature Control		*	*	*
Open SSH/SCP/SFTP		*	*	*
Critical Resource Monitoring (CRM)		*	*	*
Management VRF		*	*	*
Mirroring (Everflow/ ERSPAN/ SPAN)		*	*	*
Port Speed, FEC, MTU		*	*	*
Dynamic Port Breakout (DPB)		*	*	*
Auto Negotiation/ Link Training		*	*	*
Telemetry		*	*	*
sFlow		*	*	*
Drop Counters		*	*	*
SSD diagnostics		*	*	*
NAT		*	*	*
ZTP		*	*	*
Container Warm Restart		*	*	*
Log Levels		*	*	*

4. Table Sizes

Resource	Aurora 221	Aurora 621, 721	Aurora 830
VLANs per system	4094	4094	4094
VLAN members per system	73692	524032	524032
VLAN members per VLAN	54	128	128
VLAN interfaces per system	255	1023	495
Port Channels	SW: 128 HW: 128	SW: 128 HW: 2048	SW: 128 HW: 1024
Port Channel Members per system	54	128	128
Port Channel Members per Port Channel	8	128	128
Max PVST instances (STP)	253	255	253
Max MAC per system/ VLAN / Port (one entry is used by CPU MAC)	65536	32768	81920
Max L3 interfaces	255	1022	1021
Max IPv4 addresses per L3 interface	Port:16237 VLAN:4095	Port:16045 VLAN:4095	Port:20000 VLAN:4095
Max IPv4 routes per system	/32:10234 /24:10234	/32:163767 /24:163765	/32:65444 /24:65443
Max IPv6 per system	/128:512 /64:4094	/128:38142 /64:38142	/128:15611 /64:58619
Max static routes	1024	1024	1024
Max VRF	200	1016	500
Max BGP routes	v4:10232 v6:511	v4:81883 v6:32763	v4:65442 v6:37363
Max BGP routes RIB IN	v4:10232 v6:511	v4:81883 v6:32763	v4:65442 v6:37363
Max ECMP groups per system	32	256	128
Max paths per ECMP group	32	64	128
Max nexthops	28671	8190	32767
Max BFD sessions	64	64	64
Max ARP	31976	16333	65535
Max Buffer Pools	-	Ingress:4 Egress:4	Ingress:4 Egress:4
Max Buffer Profiles	-	64	64
Max PFC to Queue profiles	-	SW:64 HW:4	SW:64 HW:7
Max DSCP-TC profiles	64	64	64

Resource	Aurora 221	Aurora 621, 721	Aurora 830
Max TC-PG profiles	-	64	7
Max TC-Queues profiles	SW:64 HW:4	SW:64 HW:4	SW:64 HW:15
Max TC-DSCP profiles	64	64	-
Max ECN-WRED profiles	-	SW:128 HW:128	SW:128 HW:64
Max Scheduling profiles	128	128	128
Max ACL table type	4	4	4
Max Ingress IPv4 ACL	5	3	4
Max ACL rules per Ingress IPv4 ACL table	4590	2304	2047
Max Ingress IPv4 ACL rules per system	4590	2304	8188
Max Ingress IPv6 ACL	5	3	2
Max ACL rules per Ingress IPv6 ACL table	4590	2304	2047
Max Ingress IPv6 ACL rules per system	4590	2304	4094
Max Egress IPv4 ACL Tables	2	2	4
Max ACL rules per Egress IPv4 ACL table	512	1024	2047
Max Egress IPv4 ACL rules per system	512	1024	2047
Max Egress IPv6 ACL Tables	1	1	1
Max ACL rules per Egress IPv6 ACL table	256	512	511
Max Egress IPv6 ACL rules per system	256	512	511
Max mirror session	4 for TX/RX or 3 for both	4 for TX/RX or 3 for both	8 for TX/RX or 7 for both
Max source ports per mirror session	53	127	129
Max destinations per mirror session	1	1	1
Max sFlow sample rate sessions	63	63	63
Max EVPN MAC addresses	~8K	~8K	~8K
Max VXLAN tunnels	1020	4092	991
Max L2VNIs	4094	4094	4094
Max VxLAN Access Member Ports	5670	12160	14926
VRF (L3 VNI)	253	1021	494
Overlay routes - IPv4 + IPv6	v4:10K v6:512	v4:164K v6:64K	v4:65K v6:65k
Max MLAG members	53	88	88

Resource	Aurora 221	Aurora 621, 721	Aurora 830
Max static MAC (FDB entries)	1024	1024	1024