SONiC-Vpp 2025.05 Release Notes

New Sonic-Vpp Features Coming in as part of 2025.05

- VxLAN vnet peering
 - HLD https://github.com/sonic-net/sonic-platform-vpp/blob/main/docs/HLD/vxlan-vnet.md
 - SONIC HLD https://github.com/sonic-net/SONiC/blob/master/doc/vxlan/Vxlan_hld.md
- Multihop BFD
- Tunnel Termination ACL
- PortChannel
 - HLD https://github.com/sonic-net/sonic-platform-vpp/blob/main/docs/HLD/vpp-lag.md
- SRv6
 - Support uN, uA, uDT4/6, H-Encaps and SRv6 policy
- SONiC-VPP into sonic-buildimage as a new platform
 - Sonic-vpp is always up to date with SONiC
 - Combined lib-sai (sonic-vs, sonic-vpp)
- Test Suites/Validation
 - sonic-mgmt T1 and T1-LAG topology

Sonic-Vpp: Build Enhancements

- git clone --recurse-submodules https://github.com/sonic-buildimage.git
- make init
- make configure PLATFORM=vpp
- make SONIC_BUILD_JOBS=4 target/sonic-vpp.img.gz

Sonic-Vpp: How to upgrade VPP?

- Validated Vpp-version(version 25.06) is uploaded to buildkite to avoid rebuilding Vpp each time
 - https://buildkite.com/organizations/sonic-vpp/packages/registries/vpp
- For Feature development, one can upgrade VPP
 - How to upgrade vpp (for development to bring in new dataplane changes)
 - Increase vpp version number in sonic-buildimage/rules/vpp.mk to build from source
 - To simply move to a new git commit in master branch, set the commit ID in https://github.com/sonic-net/sonic-platform-vpp/blob/main/vppbld/vpp_version
 - If we need to checkout a different branch, modify https://github.com/sonic-net/sonic-platform-vpp/blob/main/vppbld/Makefile
 - See https://github.com/sonic-net/sonic-platform-vpp/blob/main/vppbld/README.md
- New Vpp versions can be uploaded to buildkite please work with Cisco team for now

SONiC-Mgmt Test for Sonic-Vpp

- Sonic T1/T1-lag VPP Topology Bring Up to start minigraph
 - https://github.com/sonic-net/sonic-mgmt/pull/17892
 - Details in docs/testbed/README.testbed.VPP.md
- Sonic-Mgmt Sonic-VPP Test Marker used to skip tests no applicable to vpp + failures that need further debugging on sonic-vpp (open PR/inprogress)
 - https://github.com/sonic-net/sonic-mgmt/pull/17855

Sonic-VPP: SONiC-Mgmt Test Results - Core Functions on T1-topo (skips are T0 cases or not supported by VPP)

	Actual Total	Total	Skip	Pass	Error	Fail
arp	3	36	33	3	0	0
bgp*	36	122	86	36	0	0
ip*	15	19	4	15	0	0
ipfwd	8	12	4	8	0	0
route*	6	26	20	6	0	0
vxlan	68	108	40	68	0	0
test_interfaces_single	1	1	0	1	0	0
Total:	137	324	187	137	0	0

- bgp, ip and route are unstable. Occasionally one failed testcase in each of them.
- Only listed tests involving data plane.