VyOS
Networks

VYOS 1.5 CIRCINUS

VyOS 1.5 Circinus - Release Notes:

Overview

VyOS 1.5 "Circinus" is a major release of the VyOS network operating system, a Debian-based open-source platform for routing, firewalling, and VPN services. This release includes **1,379 resolved tasks** backed by **2,243 merged pull requests** across **21 repositories**. Key areas of development include new features across interfaces, routing, VPN, firewall, DHCP, and VPP (Vector Packet Processing), along with extensive bug fixes and infrastructure improvements.

Change summary:

Category	Count
bug	700
feature	280
improvement	118
internal	116
unspecified	73
cosmetic	29
feature-removal	14
optimization	12
infrastructure	12
upgrade	11
vulnerability	9
documentation	2
behavior-change	2
deprecation	1

Breaking Changes & API Incompatibilities *(4 items)*

These changes modify CLI syntax, behavior, or validation in ways that may require configuration migration. Review carefully before upgrading.

- SNAT "any" interface error (nat) **BREAKING** ⚠️ syntax incompatibility

- Typos in select ConfigError messages in dhcpv6-server (dhcp) **BREAKING** ⚠️ syntax incompatibility

- VyOS allows multicast addresses to be assigned to interfaces (config-system) **BREAKING** ⚠️ syntax incompatibility

Security Fixes *(9 items)*

- Include microcode update packages for both Intel and AMD64 cpus

- zabbix-agent affected by CVE-2023-32728 (RCE via S.M.A.R.T. plugin)

- Update vyos-http-api-tools for package Starlette security advisory

- Update vyos-http-api-tools for package python-multipart security advisory

- Private SSH key reuse in the console server service

- CVE-2024-3596 (BlastRADIUS) mitigations for pam_radius

- CVE-2026-3608: Stack overflow in Kea daemons

- Bump HostAP version to 2.11

- Malicious user can potentially crash accel-ppp with a specially crafter L2TP packet

New Features *(280 items)*

Interfaces

- Support veth interfaces to working with netns

- op-mode add MAC VRF and MTU for show interfaces summary

- Disable USB autosuspend ⚠️ behavior change

- Allow adding a geneve interface to the vrf

- Return a dict when querying information about a single interface ⚠️ behavior change

- Show command for interface messages

- IPv6 SLAAC: Option to suppress Interval advertisement on RA packet

- WiFi: Enable WiFi6 (IEEE 802.11ax) for 2.4GHz AccesPoints

- Add VLAN type option to bridge firewalls

- VPP add op-mode to show bridge-domain

- Add operational mode commands commands for bridge spanning tree information

- Implement auto-ignore-prefix syntax for router advertisements

- Add kernel options isolcpus, nohz_full, rcu_nocbs, hugepages, numa_balancing

- Add root-guard and bpdu-guard option to bridge interfaces

- Add description to vlan-to-vni mappings

- Move "clear connection" to "reset connection" ⚠️ behavior change

- Add user-defined MAC address to dummy interfaces

- Add op-mode for VLAN-to-VNI mapping

- Add interrupt coalescing configuration support for Ethernet interfaces

- Add operational mode 'show interfaces kernel statistics' command

- Add 'vlan-to-vni statistics' op-mode command

- VPP add op-mode commands to show LACP

- Provide CLI for FRR link-params and mpls-te export

- VPP: Add support for PPPoE on bonding interfaces

- VPP: Move bonding interface from 'vpp' to 'interfaces vpp bonding' ⚠️ syntax change

- Add Router Advertisement (RA) base-interface support for IPv6 wildcard prefix derivation and includes validation and smoketests

- VPP: Migrate ipip interface to 'interfaces vpp ipip' ⚠️ syntax change

- VPP: Migrate loopback interface to 'interfaces vpp loopback' ⚠️ syntax change

- VPP: Migrate bridge interface to 'interfaces vpp bridge' ⚠️ syntax change

- VPP: Migrate xconnect interface to 'interfaces vpp xconnect' ⚠️ syntax change

- VPP: Move op mode command 'show vpp lacp/bridge' to 'show interfaces vpp' ⚠️ behavior change

Routing

- Support SRv6

- Support BGP Prefix Origin Validation State Extended Community (RFC 8097)

- DHCPv6 server prefix delegation - dynamically add route to delegated prefix via requesting router

- [BMP-BGP] Routing monitoring feature

- [DHCP] static route dhcp-interface issues

- Policy local-route ability set protocol and port

- Add bgp remove-private-as all option

- Add "show ip nht" op-mode command (IPv4 nexthop tracking table)

- Add GeoIP matching support for policy route

- Build FRR with LUA scripts --enable-scripting option

- ospfv3 - add allow to set metric-type to ospf redistribution while frr docs says its possible

- igmp: migrate "protocols igmp" to "protocols pim" ⚠️ syntax change

- Add support for RPKI source IP

- Failover Route using DHCP provided gateway

- Add 'show rpki as-number' and 'show rpki prefix'

- Allow larger table ids in policy route

- Add BGP solo option for peer group

- Add SRv6 encapsulation source address option

- Add SRv6 configuration support to IS-IS

- Add SRv6 locator format option

- Add redistribution of NHRP to other routing protocols

- Route leaking using route-map

- Add source-vrf source option to route maps

- Add route-map and metric options to "redistribute table" in BGP ⚠️ syntax change

- Add the option to disable enforce-first-as at peer level

- Add Filtering Option for 'show bgp ipv4/ipv6 vpn' by RD and Prefix

- Add CLI to disable LDP establish hello packets

- Add an option to import routes from a non-default table into the system RIB

- RPKI VRF Support

- show * bgp neighbors * advertised-routes detail or show * bgp neighbors *received-routes detail missing

- Add reset ip bgp all soft in out

- Add FRR no-ipv6-auto-ra option

- SRv6 uSID IS-IS capability

- Upgrade FRR to 10.5

- Make failover route vrf-aware

- frr_exporter should export IPv6 BGP sessions

- Add option to select FRR profile

- bgp: Implement neighbor X remote-as auto

- BGP add loc-rib feature for BMP

- Update tech-support archive and output content

- Add IPv4 SRv6 route commands

VPN

- Use base64 or hex format in ipsec.secrets to allow double quotes

- Enable wireguard debug messages by default

- Allow using domain names for WireGuard peer addresses

- HTTPS API ability to import PKI certificates

- Rewrite L2TP service to get_config_dict

- Allow creation of wireguard interfaces without requiring peers

- Add server-bridge options to OpenVPN server

- ipsec: support disabling rekey of CHILD_SA ⚠️ behavior change

- VPN IPsec add the ability to exclude IPv6 traffic selectors for VTI interfaces

- Add the option "timeout" for DPD in IKEv2

- VPP add the vpp-crypto-engines dependency for IPSec

- Expose "send_cert always" swanctl configuration for ipsec vpn road warrior configuration

- IPSEC PPK Support

- VPP: Refactor IPsec settings to use only 'ipsec-acceleration' flag ⚠️ syntax change

Firewall

- Add support for raw tables to firewall

- Dynamic Firewall groups

- Add VRF support for "update geoip"

- Add capability to use local and external dynamic-lists for firewall rules but also for various policies such as access-list, route-maps etc.

- Firewall mark - Add capabilities for matching firewall mark

- Firewall - Add set options of "set policy route" to normal firewall rules

- Separate interface and VRF options in firewall zone configuration ⚠️ syntax change

- Add a configuration command for ethertypes that bridge firewalls should always accept ⚠️ syntax change

- Improve firewall remote-group op-mode output with details from nftables

- Add a completion helper for "geoip country-code" in firewall

DHCP

- DHCP Option 82 Support

- High Availability in DHCPv6 -ISC DHCP Failover/Kea

- VRF support for Kea-based DHCP server

- dhcpv6-server: common-options does not support all DHCP options

- Add op mode command "show dhcpv6 server statistics"

- Add an option to start sessions with an unclassified packet to IPoE server

- Support for dhcp option 138 (RFC-5417)

- Add support for renew in REST Server

- Support for DHCP option 26 (MTU)

- VPP add PPPoE enable-pass-nd-and-dhcpv6 option

- VPP: Enable ip4-dhcp-client-detect feature if interface address is configured as DHCP

- Support captive portal identification in IPv6 router advertisements (RFC 8910)

VPP (Vector Packet Processing)

- VPP add sflow plugin

- Add VPP IPFIX feature

- VRRP plugin on VPP

- Backport VPP feature to 1.5 image

- Update patches for VPP add build with fixes for multicast routes

- VPP bump version to the stable 2506

- VPP Change defaults and add a warning about maximum routes count for current configuration

- VPP load vfio modules before starting VPP

- VPP: Enable support of ixgbevf driver for DPDK

- VPP: Increase allowed num-rx-desc limit for DPDK

- VPP: Add basic vpp policer configuration

- VPP Rewrite sFlow implementation

- Support children of bond interfaces in VPP NAT

- accel-ppp-ng: make a VPP integration a separate plugin ⚠️ behavior change

- VPP add correct socket permissions for API

- VPP: Set 'vpp-cp' option automatically if interface is in VPP

- VPP: Enable ip6-icmp-ra-punt feature on interfaces with DHCPv6 address configured

- VPP: Rewrite the CLI for ACL tcp-flags ⚠️ syntax change

- VPP: Change ACL node 'macip' to 'mac' ⚠️ syntax change

- VPP: Rename "logging default-log-level" to "logging default-level" ⚠️ syntax change

- VPP: Refactor resource settings into 'resource-allocation' section ⚠️ syntax change

- VPP: Unify CPU settings into a single 'cpu-cores' node under 'resource-allocation' ⚠️ syntax change

- VPP: limit VPP to validated NICs unless allow-unsupported-nics is set ⚠️ behavior change

- Move VPP operational mode 'show vpp interfaces' to 'show interfaces vpp' ⚠️ behavior change

- VPP: Move 'ignore-kernel-routes' option out of resource-allocation section ⚠️ syntax change

Containers

- Allow using more than one tuned profile ⚠️ syntax change

- Rootless containers/set uid/gid for container ⚠️ syntax change

- Add support for container health check commands

- Add support for disabling built-in DNS for containers

- Add mtu configuration for container network

- node_exporter textfile collector option

- Add support for configuring container registry mirrors

- Allow tmpfs mounts within containers

- Macvlan support for podman containers

- Containers add capability CAP_MKNOD

- containers: Allow privileged option

- container: Add user-defined MAC address option to container configs

- oci: remove features from container image which are not supported

PPPoE

- Create the same view of pool configuration for all accel-ppp services

- Rewrite ipv6 pool section to ipv6 named pools in Accel-ppp services

- Create the same view of ppp section for all accel-ppp services ⚠️ syntax change

- Rewrite Accel-PPP services to an identical feature set

- Add PPPoE server options to accept any service name and blank service name

- IPoE-server add the ability to configure Lua scripts for username mapping

- Build package binaries script should exit if a package repository cannot be cloned for some reason

- Add build script for accel-ppp-ng repo

- Add a configurable VPP-CP listen interface option to accel-ppp-ng

- Migrate from accel-ppp to accel-ppp-ng

- Add a PPPoE mapping between the data-plane and control-plane interfaces in VPP

- Bump accel-ppp-ng version to d8c4d38

- login: issue warning if TACACS or RADIUS source-address is not configured on the system

- login: replace getpwall() based user enumeration to avoid NSS/TACACS timeouts

- IPv6 autoconfiguration does not work on PPPoE client interfaces

NAT

- Selective proxy-arp/proxy-ndp when doing SNAT/DNAT

- CGNAT add op-mode to get current port allocation mapping

- CGNAT add the ability to show allocation per external or internal address

- CGNAT add address allocation logs to syslog during commit

- Add support for NAT66 destination groups

- VPP: Improve "nat44 no-forwarding" feature name and description in CLI ⚠ syntax change

- VPP add IPFIX NAT events for NAT DET44

- Add support for NAT66 source groups

- VPP: Move 'nat44' and 'settings nat44' sections to 'nat nat44' ⚠ syntax change

System

- Nightly builds are not signed

- Recover from failed boots/upgrades automatically

- Add configurable kernel boot parameters

- Check architecture and flavor compatibility on upgrade attempts ⚠ behavior change

- Display the support URL from image build data in LTS builds

- Add warning message for unsaved changes in the dialog before initiating an upgrade

- Image update: confirm image name is available before accepting

- Add "system kernel option quiet" to suppress boot messages

- Make the raw image build more robust

- Remove tshark binary from all builds

- Clean docker-vyos from vyos-build repo

- login: warn user if default credentials are used

DNS

- Service dns forwarding add the ability to configure ZonetoCache

- Allow setting name server for containers

- blackbox_exporter for probing endpoints

Management

- Make an API endpoint for for anonymous host info retrieval (e.g. by a login page)

- Option to define source IP for rsyslog

- Migrate SSH fingerprints to the new image on upgrade

- Add support for SSH certificate configuration

- rpki: move file based SSH keys for authentication to PKI subsystem ⚠️ syntax change

- WiFi: Enable support for 6GHz AccesPoints

- SSH FIDO2 Support

- ssh: defining cipher rijndael-cbc@lysator.liu.se will break SSH daemon ⚠️ syntax change

Monitoring

- Add ability to set include_ifmib_iface_prefix and ifmib_max_num_ifaces for SNMP

- Enable nvme_hwmon and drivetemp in KERNEL

- show more detail when using lldp

- Group prometheus exporter config options ⚠️ syntax change

- Add an option to configure LLDP operation mode (receive, transmit, both, or none) ⚠️ syntax change

- HAProxy add health check probes to a port other than the one to which normal traffic is sent

- Re-enable service monitoring telegraf for ARM64 builds

QoS

- QoS - traffic-class-map services

- Add missing QoS Op Mode Commands

Tunnels

- vxlan: change port to IANA assigned default port ⚠ syntax change

- Change VXLAN default MTU to 1500 bytes ⚠ syntax change

- Support VXLAN VLAN-VNI range mapping in CLI

- Add port option to GENEVE tunnels

- VPP: Move vxlan interface from 'vpp' to 'interfaces vpp vxlan' ⚠ syntax change

- VPP: Migrate gre interface to 'interfaces vpp gre' ⚠ syntax change

- VPP add the ability to set key for GRE tunnels

Cloud

- Add AWS gateway load-balancing tunnel handler (gwlbtun)

- Bump aws-gwlbtun to version c1fd48b

- cloud-init: Implement smoketests for testing

Configuration System

- commit archive to GIT

- Allow commit-confirm through http API

- TPM-backed config encryption

- Add rollback-soft feature to rollback without a reboot

- Change to BBR as TCP congestion control, or at least make it an config option

- Add op-mode-definitions XML cache

- Add support for AMD pstate driver

- Enable exFAT in the kernel config

- syslog: convert old configuration format to "advanced" ⚠ syntax change

- Allow configuring more timeouts for HAProxy

- Extend HTTP API load/merge request to allow passing config in body

- Inform users about configuration load failures on login

- Add system login to config-sync

- pki: calls to node_changed_presence() must use unmangled config paths

- sshd: add support for config test mode

- Kernel: move common configuration options shared between ARM64 and AMD64 to a single file

VyOS Core (vyos-1x)

- Add an option to assign static IP address to IPoE server users ⚠️ syntax change

- Add capability to start VPP dataplane during system deployment

Uncategorized

- Allow wan load-balancing rules to match against groups

- Create Prometheus Exporter for VyOS

- Do not always delete all bond members when adding new ones

- Add TLS functionality for rsyslog

- Add support to "reject" routes - emit an ICMP unreachable when matched

- Rewrite load-balancing wan to XML/Python ⚠️ syntax change

- Rewrite the wireless op mode in the new style

- mdns repeater: Add op-mode commands

- Add CLI and configuration scripts for stunnel

- Add reboot and poweroff the system via API

- Add a warning when the user tries to set a password too simple ⚠️ behavior change

- Support additional health check protocols in reverse-proxy

- CGNAT conntrack connections should be deleted if address or port range is changed

- Add an option to get tech support reports in a machine-readable format

- openconnect: add support for new multi ca-certificate CLI node

- Include hostname in the reboot/shutdown warning messsage

- Raise an error when trying to get information about network interfaces that don't exist ⚠️ behavior change

- op-cmd: show mac-sec details encrytion info

- Move commands that do not fit anywhere else in the new "execute" family ⚠️ behavior change

- Machine-readable operational mode support for traceroute

- Move "clear session" to "reset session" ⚠️ behavior change

- Disable nginx software version reporting ⚠️ behavior change

- Add ipmitool

- Merge the hsflowd-based sFlow implementation into "set system flow-accouting" ⚠️ syntax change

- Avahi: add option to define mdns-repeater max-cache entries

- Add support for source groups in NAT66

- Support HTTP compression in HAProxy responses

- Add hwloc package to get info and generate CPU NUMA topology

- Add a command to automatically upload tech-support report archives to a server

- Add op-mode command for all interfaces on host

- Update prometheus exporters

- Add "show log conntrack" op command

- pki: add functionality to renew certbot-issued certificates using an optional force option

- Add support for certificate-based authentication in OpenConnect

- Bump keepalived version to 2.3.3

- haproxy: Add -m end option to match domain suffix

- Development: dict_search_arg function that returns user defined default

- Allow multiple interfaces types in completion helper 'list_interfaces'

- Support yescrypt

- Add support for disk controllers with the kernel MPI3MR option

- Switch to yescrypt password encryption

- Use journalctl for "show log tail"

- Support kernel panic reboot during early boot

- Add progress indicator/streaming stdout redirect

- Update Linux kernel to 6.6.117

- Add support for MaxMind GeoIP database

- Update Linux Kernel to 6.6.121

- Adds support for the MTC_S16209x driver ICs to the LCDd templates

- Improve LCD support

- Update Linux Kernel to 6.6.128

Bug Fixes *(700 items)*

Interfaces

- "show interfaces vrrp" does not return any interface

- OpenVPN server with TAP interface, client didn't see network

- wireless: cannot set regulatory domain

- WAN load-balancing exclude rules break PBR

- Ability to set host part IPv6 address via interface IP token

- Deleting a parent interface does not delete its underlying VLAN interfaces

- VRRP router with rfc3768-compatibility sends multiple ARP replies

- Source validation on interface does not work properly

- Firewall - Remove or extend constraint on 'interface-name'

- Flow-accounting crushes when IMT is enabled

- vyos-1x should generate XML cache after building command templates for less cryptic error on typo

- bridge: missing member interface validator (validation change)

- Flowtable with Bond Race

- MSS Clamping Not Applied to VRF Interface from MPLS Cloud

- vyos unbootable after 1.4-rolling-202308240020 to 1.5-rolling-202312010026 upgrade

- ping (ip or hostname) interface <tab> produces error

- Reboots fail with eapol WAN interface

- vyos.template.first_host_address() does not honor RFC4291 section 2.6.1

- verify_source_interface should not allow dynamic interfaces like ppp, l2tp, ipoe or sstpc client interfaces (validation change)

- Grub problem(?) Serial Console no longer working ⚠️ behavior change

- Configuration fails to load on boot if offloading has VLAN interfaces defined

- disconnect interface wwan0 throws exception

- ethernet: hw-tc-offload does not actually get enabled on the NIC

- Kernel NIC-drivers for Huawei NICs are not properly enabled

- hsflowd fails to start when using a tunnel interface

- dhcp6c@pppoe0.service cannot stop gracefully when VyOS shutdowns

- VNI not set on VRF after reboot

- VRRP rfc3768-compatibility not working correctly when resulting interface name is over 15 characters

- vyos-1x: WiFi Regulatory Domain should be set system-wide instead of per-device

- "monitor traffic" incorrectly consumes some arguments

- ISIS - advertise-passive-only not install route in the RIB

- interfaces: 20-to-21 -> migration fails if new system has less ethernet interfaces

- Changing VRF on interface fails

- pppoe: operation command connect/disconnect failed

- wireless: hostapd occationly gets deactivated via systemd and causes loss in connectivity

- suricata: multiple interfaces use same af_packet cluster_id, leading to crash

- Confid dependency works incorrectly for conntrack and conntrack-sync

- VXLAN Interface configuration lost due to improper bridge detachment

- Offload settings are being automatically updated to reflect kernel settings ⚠️ behavior change

- Strings with spaces in "set interfaces * address" cause an ipaddrcheck argument error

- Operational mode command "show bridge vni" is broken

- Bridge option "isolated" disappears after reboot

- Autocomplete for "show arp interface" is missing non-ethernet interfaces

- Offload RPS fails on CPUs with more than 32 cores

- Unable to remove DHCP client from interface when dynamic IPv6 address is configured

- VPP xdp-options should check the driver before applying (validation change)

- Cannot set an agent-address in sFlow if VRF is used

- Firewall interface-group with a container interface fails validation on reboot

- Incomplete error message on trying to add a physical interfaces to more than one bonding interface

- Bridge allows to specify the same member interface more than one time

- WLB configuration not migrated from 1.5-rolling-202408210022

- virtual-ethernet interface vif MTU does not work

- wifi: mac80211_hwsim kernel module no longer supports VLAN interfaces in smoketests

- Haproxy mistake URL instead of the PATH in the description redirect-location

- netplug: PermissionError on fast interface changes

- Do not allow deleting interfaces referenced in flowtables

- Bonding interface mode allows malformed variations of 802.3ad

- Modem connection code doesn't work

- Zone-based firewalls fails on VLAN aware bridges

- WAN load balancing information is not shown immediately after startup

- Inconsistent MAC address behaviour on bond interfaces ⚠️ behavior change

- WAN load balancer always has nftables limit configured

- IPv6 default route disappears after upgrade

- VPP configuration after upgrade cannot be loaded immediatelt and requires a second reboot

- If VPP crashes, the system loads without hugepages

- VPP add new interface to sFlow fails

- VPP delete sFlow configuration does not work

- "show interfaces l2tpv3" does not show any interface information

- Static ARP entries are missing after an interface status change

- The output of 'show interfaces kernel' has incorrect columns and layout issues

- op-mode: 'show interfaces' description wrapping is broken

- VPP CGNAT commit failure and runtime errors with DPDK (driver ice) on custom build

- VPP: L3 connectivity is lost after adding/removing an interface to a bridge

- Operational mode command 'reset connection' is broken

- Invalid order of interface/sub interface removal greatly decreases commit performance

- VPP mistakenly tries to override drivers twice

- Kea will not offer address from subnet of secondary interface address

- op-cmd: "reset ip arp table" is not working

- VPP dependency issue when set interface address and NAT44 address translation interface in one commit

- VPP: rx-mode interrupt DPDK/XDP doesn't start on ena and ixgbevf drivers

- virtual-ethernet interfaces are not exposed to "list_interface --broadcast" completion helper

- Removing PPPoE interface in smoketests and throw a PermissionError

- VPP: Changing NAT44 Settings Resets `forwarding_enabled` to False

- VPP: Unexpected None interface in CGNAT when ethernet subinterface is removed from vif

- Virtual ethernet interfaces do not correctly check for the missing peer option

- bond: missing validation of member interface MTU

- Unhandled exception when setting up bonding interface on AWS

- bond: member interface completion helper shows vlan subinterfaces

- Configuring non-existig Ethernet interface causes an unhandled exception

- "monitor traffic" fails with an unhandled exception on Ctrl-C

- VPP: Implement global 'interface-rx-mode' setting ⚠️ syntax change

- VPP mistakenly allows interfaces to be members of more than one bridge or bonding interface

- VPP: unexpected headers in the op mode output if LACP is not configured

- VPP MTU configuration ignored for bonding GRE IPIP interfaces

- VPP add a bridge without members leads Traceback error

- SPAN port mirroring continues after configuration is removed

- bridge STP: port priority value is written to path cost instead

- VPP: Remove xconnect interfaces with bonding member interface ⚠️ syntax change

- macsec: changing source-interface takes no effect

Routing

- RPKI doesn't boot properly

- BGP large-community-list regex validation is incomplete

- DHCP default route duplicated when moving interface between VRFs

- bgp config migration failed with v6only option configured with peer-group

- Service config-sync can freeze the secondary router if it has commit-archive location

- Policy local-route bug after migration to destination node address

- ldpd neighbour template errors

- Improve compatibility between OpenVPN on VyOS 1.5 and OpenVPN Connect Client

- static dhcp-interface routes not installed

- BGP Large Community List Validation Broken

- [1.3.5 -> 1.4.0-RC1 Migration] OSPF Passive Interface Configuration Not Working Correctly

- Multi-hop BFD connections can't be established; please add minimum-ttl option

- rpki: known-hosts-file is no longer supported by FRR CLI - remove VyOS CLI node ⚠️ syntax change

- static-route option breaks DHCP server

- Losing default route after first reboot (cloud-init & DHCP)

- Multi-Protocol BGP is broken by 6PE patch in upstream FRR 9.1

- no-default-route not being honoured

- policy route ipv4 rule order behaviour

- bgp: missing completion helper for peer-groups inside a VRF

- ospf: smoketest "router ospf' not found in" for ldp sync

- Command `protocols static multicast` does not have any effect

- Problems with simultaneous usage of multiple `vtysh` processes

- rpki connection not working

- Invalid route-map caused bgpd to crash (validation change)

- OSPF smoketest fail

- The default route distance for PPPoE (210) in the migration script is incorrect and may break server availability

- multicast: static multicast routing throws TypeError

- bfd: fix invalid generated template when no multi-hop profile is defined

- FRR zebra: Kernel routes are not updated properly

- FRR config is lost upon daemon restart

- Issue with Configuration Migration from VyOS 1.3.8 to 1.4.1

- Static Route not working when PPPoE configured

- Adding community 'internet' throws an exception

- "redistribute table" option in BGP does not work correctly

- Impossible to delete protocols under VRF

- FRR 9.1.x 10.2.x does not redistribute OSPF kernel table x routes

- isisd: Fix memory leaks when the transition of neighbor state from non-UP to DOWN

- Route reflector client check not working for peer-group

- IPv6 assigned address using SLAAC is not cleared when SLAAC is deconfigured ⚠️ behavior change

- Invalid sysctl configuration during startup causes IPv6 default route to be installed for DHCPv6 only interface ⚠️ behavior change

- FRRouting Configuration Loss on Abnormal Service Restart

- FRR does not redistribute BGP table x routes

- Table 254 is a default table and must not be used for VRF

- OSPF NSSA translation error

- FRR 10.2 build binaries fail

- Unable to set OSPF plaintext authentication on specific interface in one area

- BGP config fails when route-reflector-client is configured and peer-group is not used

- Backup next-hop is not installed in IS-IS LFA as expected

- Prometheus Exporters (Blackbox, FRR, Node) Fail to Start with IPv6 Listen Address Configuration

- Redirect stdout and catch exceptions from FRRender under vyos-configd

- FRR: add pre-apply validation using "frr-reload --test"

- BGP route reflector configuration broken due to

- Default DHCP route under VRF is deleted on commit that reloads FRR

- wlb: Route tables do not repopulate when an interface is disconnected

- bgpd crashed, when BGP EVPN peers are changed/rebooted

- vrf: deleting one out of two VRFs with static routes throw KeyError

- isis: configuration migrator 0 -> 1 broken

- ISIS: lsp-refresh-interval does not accept higher value other than default 900

- enforce-first-as should be explicitly unset in FRR unless explicity set in Vyos ⚠️ syntax change

- igmp-proxy: missing service restart possibility

- ospf: virtual-link takes invalid input data <INT> (validation change)

- Local Routes Duplicated

VPN

- op-mode IPSec show vpn ike sa always shows L-TIME 0

- l2tp configuration not cleared after delete

- vpn l2tp logging level configuration ⚠ behavior change

- Wireguard peer public key update leaves redundant peers and breaks connectivity

- Generate wiregurad keys via HTTP-API fails

- PKI import OpenVPN shared key includes unexpected BEGIN and END

- Verification problem for `set vpn ipsec interface`

- IPSEC does not apply after l2tp configuration was changed

- Error on adding a wireguard interface to OSPFv3

- OpenVPN certificate revocation does not work properly

- OpenNHRP DMVPN configuration file clean after reboot if we have any IPSec configuration

- IPsec some proposal combinations could be invalid and the service strongswan stops

- Reset vpn ipsec command breaks tunnel and does not reset SAs that are down

- L2tp smoketest fails if vyos-configd is running

- Openvpn site-to-site mode with TLS not starting

- ipsec profile generation error

- Generate openvpn client-config ignores configured protocol type

- ipsec: remote access VPN: "generate ipsec profile ios-remote-access" wrong profile for x509 auth

- ipsec: remote access VPN: "generate ipsec profile windows-remote-access" broken

- show vpn ike sa peer always shows all SAs

- IPSEC op-commands do not work

- OpenVPN error : Unable to bind the tunnel interface to bridge if misconfigured first

- vyos-domain-resolver fails if no wireguard instances are defined

- VXLAN interfaces disappear if the parent wireguard interface was changed

- Unhandled template error in "generate ipsec profile ios-remote-access"

- IPv6 Prefix Delegation does not work for PPP/L2TP with RADIUS attribute Accel-VRF-Name

- Wireguard: Traceback error received if the public-key starts with //

- certbot: When using ACME certificates, consuming daemons are not reloaded on update

- Multiple IPSEC SA not initiating/IPSec SA not renewing

- VPN Openconnect does not check the dictionary key server with the authentication mode RADIUS

- VPN IPsec log level does not work

- VPN IPsec unexpected passthrough logic bug

- Fix the output command "show vpn ipsec connection" for passthrough tunnels

- "show interfaces wireguard" fails when fwmark is set

- Command 'set vpn ipsec disable-uniqreqids' does nothing

- IPsec service fails after upgrading from 1.3.8 to 1.4.2 if protocol all is configured

- IPSec traffic-selectors without prefixes are rendered incorrectly in the swanctl.conf

- The "respond" connection-type in IPSec peer settings must be renamed to "trap" ⚠️ syntax change

- OpenVPN site-to-site tunnels not working after upgrade from 1.4 due data-ciphers incompatibility

- VPP IPsec traffic stops working after the reboot

- Improper OpenVPN certificates migration from 1.3 to 1.4

- Incorrect configuration logic for IPsec in VPP

- pki: configuration issues on reboot when ACME is used together with listen-address

- op-mode: "run generate pki wireguard key-pair install" returns error

- Commit fails removing VTI interface in IPsec config

- Do not assign dynamic prefix assignment mode to transport-mode IPsec tunnels

- HTTPS API for /generate not working properly for wireguard interface

- openvpn: service restart loop if no cipher specified ⚠️ behavior change

- ipsec: remote-access commit fails when local port is configured

Firewall

- Value validation for domain-groups seems to be broken

- Zone-Based Firewalling in VyOS Sagitta 1.4

- Both show firewall group and show firewall summary fails

- Firewall does not delete networks from the table raw

- Log firewall - Wrong command after firewall refactor

- Firewall can not pass the smoketest

- Firewall "log enable" logs every packet

- Firewall groups deletion can break config

- generate firewall rule-resequence drops geoip country-code from output

- Migrated Firewall Global State Policy ineffective on latest firewall zone config

- VyOS 1.3 to 1.4 LTS Firewall ruleset migration script breaks configuration

- Firewall upgrade fails because of icmpv6

- Firewall - opmode for ipv6

- Firewall fails to delete inbound-interface name

- nftables: Operation not supported when using match-ipsec in outbound firewall

- Firewall - Time not working properly when not using UTC

- Conntrack/NAT not being disabled when VRFs are defined

- Destination Nat not Making Firewall Rules

- Firewall - Error while printing groups

- Firewall op mode output incomplete

- Firewall bridge allways passes traffic to IP layer

- Missing completion for `show firewall <ipv4|ipv6> name <name> rule` commands

- vrf: nftables conntrack ct_iface_map contains multiple identical entries

- 1.5-rolling-202407250020 - fail to set firewall flowtable offload hardware

- Error on firewall while using jump-target and no custom ruleset are present

- Show log firewall not printing logs for default-actions for custom ruleset

- IP Address range in firewall rules throws error

- op-mode command 'show firewall" is not complete

- GeoIP database update fails without a clear error when a system name server is not configured

- Ruleset information for ipv6 firewall "prerouting raw" shows wrong default action

- PPPoE traffic is classified as invalid

- Zebra failing to start with FRR 10.2.1 update

- Setting the default action of a firewall zone to drop causes a commit error

- Global state-policy invalid cannot be set to action reject

- vyos-domain-resolver not picking up non-default configuration values

- op-mode: not all groups are displayed correctly with `show firewall groups`

- syslog: duplicate kernel log entries

- FQDN resolver uses IPv4 cache for failed IPv6 resolution

- Firewall rules allow empty nodes

- "show firewall" does not include logged global state policy entries

- Zone-based firewall with VRF causes issues ⚠️ behavior change

- Custom conntrack timeouts not working

- WAN load balancing rule fails when using comma-separated ports

- Impossible to add dynamic interfaces to the firewall zone

- Modifying firewall groups does not update dependent NAT66 nft rules

- firewall ipv6: nftables syntax error if 'recent' match option is set

- firewall: add-address-to-group destination-address uses saddr instead of daddr

DHCP

- DNS server addresses from DHCPv6 are not added to resolv.conf

- DHCP Lease not displayed with a static map

- The show dhcp server leases operation mode command does not work as expected

- dhcp-server allows duplicate static-mapping for the same IP address

- Dhcp bug in latest 1.5 rolling releases

- DHCP allow same MAC Address on same subnet

- DHCP: show dhcp server leases not showing all leases

- DHCP6: no leases are created unless specifying a "interface" on the zone

- dhcp: migration fails for duplicate static-mapping ⚠️ syntax change

- Incorrect dhcp-options vendor-class-id regex ⚠️ behavior change

- Description doesnt seem to allow for non international characters

- Clear dhcp-server lease throws python exception on 1.5-rolling

- can't view dhcp server leases if logged in as a tacacs account

- Release DHCP interface does not work

- Zone-based Firewalls on Bridges would flag related DHCP traffic invalid

- DHCP Exclude IP - Error Config

- 'restart vrrp` Functionality Broken

- KEA DHCP-server sometimes could be in the race condition

- DHCP records out of sync with vyos hostd state after system restart

- dhcp: smoketests fail as IP address is not removed in time

- Allow configuring IPoE servers without a client IP pool if DHCP relay is used

- dhcp server statistics/leases on latest rolling gives error,tried on fresh install and migrated install same error

- show dhcp server leases index out of range error

- DHCPv6 client is restarted on every change to the interface

- DHCPv6: add smoketest verifying that there is no invalid syntax or parsing error for wide-dhcpv6-client

- netplug: behavior change 1.3.8 -> 1.4 when interface with DHCP address looses carrier

- netplug: DHCPv6 address is not cleared when interface is going to operational down

- IPoE: Add stricter validation for giaddr if dhcp-relay is configured (validation change)

- Incorrect sla-len in DHCPv6 client prefix delegation

- VPP fails to load XDP on GCP with gve driver

- KEA dhcpv6-server does not start in 1.5 stream Q2 image

- DHCP server subnet id range must not allow zero

- DHCP-server lease cannot be cleared

- dhcp6c fails to restart after interface down & up when using only PD

- Incorrect column name in "show dhcp client leases"

- DHCP server ping check option does not work

- "restart dhcp server" command fails

- Improve dhcpv6 prefix verification, add fallback check of Kea config

- dhcpv6: migrator fix for non VIF interfaces for default routes

- VPP logs are duplicating in systemd journal

- "renew dhcpv6" does not work with prefix delegation

- dhcpv6-server: config allows overlapping subnets

- dhcpv6: prefix-delegation interfaces should be properly checked for correctness

VPP (Vector Packet Processing)

- VPP cannot add interface to dataplane if it already has an address configured

- VPP CPU workers should be calculated and verified

- VPP CPU corelist-workers should be calculated and verified

- VPP CPU main-core should be verified (validation change)

- VPP CPU inverted range of corelist-workers has to be verified and not applied

- VPP CPU skip-cores should be verified (validation change)

- VPP buffers page size should be verified (validation change)

- VPP interface mode interrupt or polling does not work

- VPP verify and calculate memory default-hugepage-size (validation change)

- VPP verify memory main-heap-page-size allocation

- VPP statseg page-size verify

- Interface parameters are not synchronized correctly in VPP

- Add a check for unsupported encryption algorithms to VPP IPsec

- VPP HugePages calculation is incorrect

- VPP verify does not rely on the 1G hugepages

- VPP does not verify buffers memory for rx/tx queues

- VPP crypto engines configuration should be changed in the template

- [VPP] Cannot set additional CPU worker despite isolation: "Not enough free CPUs in the system"

- VPP fails to start with logging level set to 'Error'

- VPP: 'set vpp settings memory default-hugepage-size' doesn't set default hugepage size

- VPP: NAT44 rules with port requires protocol specification and vice versa

- VPP de-hardcode x86_64 for the plugin path

- Image build does not use the latest VPP binaries

- VPP cannot start on the first try on some "slow" platforms

- VPP: Fix API calls for sFlow

- VPP trigger rebuild binary based on vyos-vpp-patches does not work

- VPP: Verify driver is not executed if vpp already enabled for this nic

- VPP fails to start with buffers page-size 1G

- VPP: Fix op mode commands which use unsupported in circinus <virtualTagNode>

- VPP: 'show vpp ipfix' unhandled exception when vpp is not enabled

- Disallow configuration of IPoE server on VPP interface

- VPP: Fix smoke test for sflow for new VPP version 25.10

- VPP: enabling VPP twice results in FileExistsError exception

Containers

- container: Container environment variable cannot be set

- pmacct package contains unwanted data

- Container registry with authentication prevents config load (section container) after reboot

- container: do not allow deleting images which have a container running ⚠️ behavior change

- Container configurations on VyOS 1.5 prevent containers from starting ⚠️ syntax change

- Smoketest fails: fastnetmon killed due to OOM

- Unexpected error when restart container via native Podman command

- Podman 4.9.5 is missing "podman.sock" service socket

- Container warning about failed input/output

- Container network loses VRF on container restart

- container: cannot remove image when used by more then one tag

- 'show/monitor log container' fails when 'log-driver journald' enabled

- Container sysctl parameters with values containing spaces cause errors

- Settings multiple DNS resolvers for containers prevents container start

- Upgrading images on machines withour hardware UUIDs causes loss of all containers

PPPoE

- Add completion and validation for the accel-ppp RADIUS vendor option
- Disable sudo for PAM RADIUS
- QoS config on pppoe interface resets back to fq_codel after tunnel reboots
- Invalid format of pool range in accel-ppp services
- tunnel: sourceing from dynamic pppoe0 interface will fail on reboots
- Source address for RADIUS auth is not working in OpenConnect server
- RADIUS source-address option does not work with IPv6
- Add an option to limit the number of threads for accel-ppp services
- syslog: ensure rsyslog is registered as default systemd syslog service
- CoA is not applied to Accel-PPP services
- DHCPv6 does not work on PPPoE interfaces
- Unable to apply OpenConnect RADIUS accounting settings
- PPPoE Discovery and Wake-on-LAN Traffic marked invalid on bridge interfaces
- VPP: pppoe doesn't work with vpp in circinus
- Accel-PPP: disabled users can still authenticate

NAT

- Conntrack FTP helper does not work properly ⚠️ behavior change
- NAT66 source rule with negation source/destination prefix causes TypeError
- SNAT "any" interface error **BREAKING** ⚠️syntax incompatibility
- connection-status nat destination firewall filter not working in 1.4.0-epa1
- NAT does not work with network-groups
- CGNAT external pools containing dashes cause Traceback error
- SNAT op-mode fails with flowtable offload entries
- CGNAT add check if external and internal pools exists
- Negating interface names in NAT configuration causes invalid warnings
- CGNAT does not rely on seq number

- CGNAT allocation calculation may sometimes be incorrect

- NAT checking translation address is an expensive operation

- WAN Load Balancer Default SNAT Behaviour ⚠️ behavior change

- "show nat source/destination rules" proto column is inaccurate

- VPP: Too Strict Validation for NAT44 Static Rules

- VPP: nat44 and cgnat should not use the same interfaces

System

- Generate PKI expect 2 character country code

- After add system image the boot stuck and works again after the second reboot

- Fix timezone migrator (system 13-to-14)

- Install image from live ISO always defaults boot to KVM entry

- Config migrate to image upgrade does not properly generate home directory

- Change to definition of environment variable 'vyos_rootfs_dir' is incorrect

- Error in migrating configuration from VyOS 1.4

- HTTPS API image cannot be updated

- image-tools should copy ssh host keys on image update

- Clear old raid data on new install image

- Don't echo password on install image

- image-tools: restore vrf-aware 'add system image'

- image-tools: restore authentication on 'add system image'

- image-tools: 'show system image' Command Not in Order

- Replace partprobe with partx due to unable to install VyOS

- image-tools: minor regression in pruning version files in compatibility mode

- image-tools: a check of valid image name is missing from 'add image'

- Fix typo in 'remote' module preventing 'add system image' via ftp

- Resolve intermittent failures in cleanup function after failed image install

- image-tools: install fails from PXE boot into live iso due to restrictive logic

- Revert addition of Linux Kernel MT7921 driver

- Migration scripts fails for the circinus

- Debian security repository URLs are not overwritten correctly in the image build script

- Update Dockerfile for change in Opam install.sh

- Missing 'version' in manifest.json will cause a timeout of 'make test'

- Disallow upgrades to non-matching flavors ⚠️ behavior change

- Confusing error messages when trying to downgrade to pre-1.4 images

- Boot failure after installing on RAID1

- Upgrade may fail on instances with limited memory due to insufficient space in /tmp/

- Fix sed pattern for change in OPAM install.sh

- Some sysctl options like nf_conntrack_buckets are different between a clean install and the first reboot

- Cracklib data is missing from the image which makes it impossible to run password complexity checks

- grub: "system option kernel" options are not honored after image upgrade

- Image upgrade fails when the "system option kernel" subtree is empty

- Incorrect trailing backslash in node_exporter.service template when collectors.textfile is defined

- Remove unnecessary PAT for docker image rebuild

- Upgrade from 1.3.x to 1.4.2 or later fails due to an ISO image format change

- Update fails if the system does not have system options kernel

- Encrypting updated image config overwrites existing TPM key

- Image installer doesn't detect previous installation

- Syslog remote ports from node names are not migrated to the new syntax correctly

- Update from 1.3.8 to 1.5 results in missing configuration

DNS

- Router resolves as 127.0.1.1 when using Router's Recursive DNS

- Fix file access mode for dynamic dns configuration

- Migration Error for Dynamic DNS "Service dns dynamic address" doesn't exist

- dns-dynamic 0-to-1 probably missing migration of rfc2136 -> nsupdate

NTP

- 'show ntp' Commands Not Working

- date: manually changing time/date is not synced into hardware clock

- System CA Not Updated with Configuration

- Empty "ntp" CLI node causes a config migration error when upgrading from VyOS 1.3.x ⚠️ behavior change

Management

- Home owner directory changed to vyos for the user after reboot

- HTTPS API doesn't start without configured keys even when GraphQL authentication type is set to token

- Update vyos-http-api-tools for security advisory

- ssh scripts should work with arguments again; they do not anymore ⚠️ behavior change

- HTTP API segfault during concurrent configuration requests

- Update vyos-http-api-tools for package idna security advisory

- Command 'restart ssh' not working

- SSH keys with the same name replace each other during system initialization by Cloud-init

- Return output from configd in multipart message to maintain resilience on error

- SSH Agent is not available for Git commit archive

- Update vyos-http-api-tools for package h11 security advisory

- reboot/shutdown: unable to log in prior 5 minutes to planned reboot/shutdown time

- VPP after configuring CGNAT the host does not respond on SSH and cannot initiate DNS request

- Vyconf: Call libvyosconfig functions from main thread under http-api

- config-sync: TypeError: 'coroutine' object is not iterable

- ssh: re-generating server key causes PermissionError

- The motd for system update-check is removed after reboot

- Incorrect validation of ports in VPP ACLs

Monitoring

- show lldp neighbors generates TypeError when neighbor has no `descr`

- SNMP service removal fails

- Suppress unsupported interfaces from appearing in messages log by Telegraf

- SNMPD show logs systemstats_linux: unexpected header length

- Error: "nft table ip vyos_filter not found" when commiting prometheus-client (validation change)

- SNMP extension script paths relative to /config/user-data do not work as expected

- Loki authentication token length restriction of 128 characters is too short for many cloud providers

- Unhandled exception in SNMP v3 configuration without engineid.

- All prometheus exporters start regardless of configuration

- SNMP community regex is incompatible with PCRE2

- Service monitoring prometheus stops unconfigured services

- Service monitoring prometheus cannot start

- snmp: trap target broken with SNMPv3

QoS

- Shaper QoS policy does not recognize 'lowdelay' DSCP value

- QoS shaper ceiling does not work

- QoS policy limiter broken if class without match

- Upgrade from 1.3.4 to 1.4 Rolling fails QoS

- QoS policy shaper-hfsc class does not have a `bandwidth` node but requires one in the check

- QoS policy shaper-hfsc is not implemented

- QoS policy shaper vif with ceiling fails on commit

- QoS r2q wrong calculation

- QoS policy shaper wrong class_id_max and default_minor_id

- QoS policy limiter without specified class selector error

- QoS policy shaper target and interval wrong calcuations

- QoS Policy Limiter - classes for marked traffic do not work

- QoS CAKE config with PPPoE interface does not load after reboot

- Incorrect flow isolation policy parameters generated for CAKE QoS policies

- QoS match filter by interface doesn't work

- QoS policy priority-queue is broken by default

- Unhandled exception when setting priority-queue QoS policy type to random-detect

- Support matching ethertype in QoS policies

- "show qos shaper" doesn't work with VRFs

- QoS match TCP ACK not working

- Smoketest QoS limiter fails

Tunnels

- VxLAN and bridge error bug

- interfaces: verify supplied VRF name on all interface types

- VPP sometimes a recursive error may occur

- VXLAN needs to make remote and group options mutually exclusive

- smoketest: fix unbound variable issue when checking for VXLAN remote and group error

- Command 'show vpn debug peer <peer_name>' does not work correctly

Cloud

- Flavor build system fails with third-party packages

- VyOS with Cloud-init and VRF stucks at reboot/shutdown process

- WALinuxAgent crashes in Azure

- The aws-gwlbtun service cannot start

- VPP fails to commit on AWS unless vfio module is manually loaded

- VPP fails to load XDP on AWS with ena driver

- Move AWS GLB CLI configuration to a separate package

- VPP fails to run on 4vCPU Azure/AWS vm (minimal CPU requirements not met)

- Add CMake package as a dependency of aws-gwlbtun package.

MPLS

- LDP Hello packets are generated to answer incoming Hello before forming neighbor adjacency

- smoketest: TypeError: VyOSUnitTestSHIM.TestCase.getFRRconfig() got an unexpected keyword argument 'substring'

Configuration System

- Performance system option destroy defined sysctl custom params

- Add latest versions to default config files

- Flow-accounting uacctd.service cannot restart correctly

- config-mgmt: normalize archive updates and commit log entries

- HAProxy renders timeouts incorrectly

- Missing check for boot_configuration_complete raises error in vyos-save-config.py

- reboot now and poweroff does not work

- ARP/NDP table-size isnt set properly

- VRRP - Error if using IPv6 Link Local as hello source address

- unknown parameter 'nf_conntrack_helper' ignored

- op-cmd: Interrupting the "tech-support report" command generates error

- op cmd: generate tech-support archive: does not work

- Fix indexing error in configdep script organization

- reverse-proxy pki filenames mismatch

- rsyslog - Not working when using facility=all

- Password recovery does not work if public keys are configured

- Fix imprecise check for remote file name in vyos-load-config.py

- VTI tunnels lose their v6 Link Local addresses when set down/up

- Unable to load config via HTTP

- commit-archive to FTP server broken after update (VyOS 1.5-rolling)

- rollback check max revision number does not work

- show interfaces wireless info

- Failure to Load Config on Recent 1.5 Versions

- Preserve file ownership in /config subdirs on add system image

- pki: service update ignored if certificate name contains a hyphen (-)

- Trying to commit an OpenConnect configuration without any local users results in an exception

- Config mode system_console.py is not aware of revised GRUB file structure

- "reboot in 1" not working

- vrf: RTNETLINK answers: File exists

- IP subnets not usable in UPnP ACLs

- [1.3.x -> 1.5.x] migrating threw exception in /opt/vyatta/etc/config-migrate/migrate/https/5-to-6, performed workaround **BREAKING** ⚠️syntax incompatibility

- Can not build VyOS if repository it not cloned to a branch (validation change)

- [1.3.3->1.4.0-epa1 Migration] Most of config missing

- Config commits are not synced properly because 00vyos-sync is deleted by vyos-router

- Regression in commit-archive for non-interactive configuration

- Nginx does not allow big config queries for configure endpoint API

- Use a compliant TOML parser

- Updating the system image without enough space for the files can break the system ⚠️ behavior change

- Specific error is not returned via the HTTP API during a configuration failure.

- Correct the syntax of config.boot.default [..., 'ntp', 'server'] from leaf node with value to tag node

- PermissionError on /config/auth/letsencrypt/live/ when running show pki

- interrupting rollback with Ctrl-C displays an exception trace

- nat64 input validation required ⚠️ syntax change

- PermissionError: [Errno 13] Permission denied: '/config/auth/letsencrypt/live/..../cert.pem

- Add/Improve support for CLI config scripts that change the underlying actual configuration and make them work with vyos-configd

- login: user vyos cannot be deleted under vyos-configd

- TPM config encryption is broken

- vyos-configd should return commit error on config dependency error

- IPoE-server extended-scripts do not work

- `ConfigError()` behavior is wrong with running `vyos-configd`

- configd should report exceptions uncaught by conf_mode scripts as commit error

- VyOS local system users TACACS+ authorization requests do not work correctly

- nat64 config mode script configures state outside of canonical functions, preventing running under configd

- Config mode scripts should call modprobe with a standard function

- Add missing standard functions to config mode scripts, and confirm in existing nosetest

- inject missing env vars in configd to support configfs util

- verify_interface_exists should not instantiate its own Config object

- Fix typo in write_file util

- ssh-client source-interface CLI option failing with traceback

- Commit command does not validate its arguments

- The new version of iproute2 breaks smoketsts

- The conntrack logger daemon continues running after its configuration is deleted

- Can not remove config-management from config - raises AttributeError

- udev rule incorrectly skipping ttyACM usb serial devices

- VRF name "up" is reserved and should not be used (validation change)

- Losing configuration after a power failure/reset

- VPP unix poll-sleep-usec should be verified and fixed for correct range of values (validation change)

- HTTP API upstream task timeout (504 Gateway Timeout)

- PKI: Unable to switch from custom cert to ACME when haproxy service is running with 'redirect-http-to-https' option

- vyos-netplug-dhcp-client requires Config instead of ConfigTreeQuery

- VyOS cloud init fails with No such file or directory: '/opt/vyatta/etc/config.boot.default'

- image upgrade will replace symlinks with a copy

- pki: race condition for acme requested certificates - CA auto import only on the second run

- Need commit validation for interfaces when mtu configured below 1280

- Arguments of lb_config are not properly quoted

- Router advertisement duplicate prefix safeguard ⚠️ behavior change

- HTTPS API listens on all addresses after changing its listen-address

- Conntrack Rule Fails When Using Comma-Separated Ports

- vrf: config Migration failed 1.3.4--> 1.4.2 for static routes

- HAProxy: remove unsupported syslog facilities and log levels ⚠️ syntax change

- Unable to load the config file when community attribute define with "replace"

- ARM64 config fails to commit due to ttyS0 console

- Fix commit-confirm action 'reboot'

- Fix default commit-confirm action

- Trying to create a VRF named "vni" leads to an unhandled exception

- pki: TypeError: argument of type 'NoneType' is not iterable when HAProxy is not in use

- Configuration encryption doesn't work with no TPM present

- certbot: when using acme certificate, error received "name 'add_cli_node' is not defined"

- Commit fails to apply configuration: /run/nftables-ct.conf on conntrack timeout rule removal

- linux-perf package missing required shared libraries

- Disabling TPM encryption empties the /opt/vyatta/etc/config/

- Enabling TPM encryption causes commit revisions write to fail

- Interrupted TPM encryption enable process causes config load errors

- TPM encryption disable fails when executed for the second time

- Saving the system configuration does not always update the bind mount and may destroy the config file

- VPP: switching from XDP to DPDK driver fails in cloud vm (hv_netvsc)

- VPP: Bonding interface fails when changing VPP configuration

- VPP: setting cpu skip-cores with no main-core configured crashes vpp process

- VPP: 'delete vpp' commit fails on GCP

- The /config bind mount does not respect inode updates

- Set system option kernel memory fails on some platforms as CPU does not have the vendor_id option

- The system option kernel cpu nohz-full is not supported by the current Kernel options

- VPP gets stuck when rx-queue-size is used with XDP

- Missing validation for the memory hugepage-count option

- VPP does not support veth interfaces

- config-mgmt: add baseline archived config file on first boot to avoid misleading error messages

- certbot: renewal ineffective due to wrong config location

- Use a smarter file comparison in boolean test unsaved_commits()

- Commit errors on removing VPP NAT44 rules

- VyOS allows multicast addresses to be assigned to interfaces **BREAKING** ⚠️syntax incompatibility

- VPP: configuration commit fail causes interface state corruption

- tacacs: nss_tacplus: buffer truncated due to size limitation

- Confirm the key when config encryption is configured without TPM

- NetFlow commit fails due to ip6tables hook when version 5 is configured

- VyOS HTTPS API becomes unresponsive during concurrent config-file load operations

- Image installer copies wrong config from previous installations created with legacy config bind construction

- syslog: file archive size rendered as 0k in logrotate config

- Disallow non alpha-numeric characters in VRF names (validation change)

- compare: missing handler for KeyboardInterrupt

- VPP verify helper for buffers has mistake config path

- arm64: system packages are missing for TACACS+ auth

- IS-IS/OpenFabric: commit fails when domain-password md5 is configured

- redirect/QoS: Issue in duplex shaping (redirect to input interface)

Policy-Based Routing

- vrf: prevent deletion if instance referenced in PBR

VyOS Core (vyos-1x)

- Modification of any interface setting sets MTU back to default when MTU has been inherited from a bond

- validator: Use native URL validator instead of regex-based validator

- PPPoE server does not allow listening on physical interfaces if VLANs are present in the configuration

- Smoketests for DHCP Server can falsely fail

- 'add system image' error if we choose not to copy an active config

- vrf: dhcp does not work when VRF name contains a hyphen

- Unable to delete container image in 1.4 nightly build "Error: `podman ps` takes no arguments"

- Remove references to OPAM in skel/.bashrc

Build System

- Some entries are missing or wrong in toml for builds for the arm64 architecture

- Build Causes Errors When "--version" Contains Slashes ("/")

- Building VyOS (Dockerized) current ISO fails dues to unmet dependencies podman : Depends: libgpgme11t64 (>= 1.4.1) but it is not installable

Uncategorized

- HTTPS API, changing API key fails but goes through

- Stray compiled Python objects break the VMware virtual machine resume script

- show pki certificate Doesnt show x509 certificates

- Wireless interfaces do not get IPv6 link-local address assigned

- syslog: remove outdated reference to sysvinit rsyslog file in logrotate template

- Syslog doesn't send timezone information to the server ⚠️ behavior change

- Conntrack logging doesnt seem to be working

- 'set system option performance throughput' enables IPv6 forwarding even if it's explicitly disabled with 'set system ipv6 disable-forwarding'

- Smoketests fail for vyos:current (test_netns.py)

- Fix ddclient cache entries

- Adjust RAID smoketest for non-deterministic SCSI device probing

- MACsec not encrypting

- custom conntrack timeout rule not applicable

- busybox cannot connect some websites from initramfs

- vyos.configdict.node_changed does not return keys per adding

- Minor revision to unicode support in configtree backend

- ixgbe: failed to initialize because an unsupported SFP+ module type was detected.

- pki: unable to generate fingerprint for ACME issued certificates

- Invalid variables referenced in reverse proxy validation

- Include constraintGroup element in reference tree

- reverse-proxy: full CA chain is not build when verifying backend server

- host-name has no explicit priority to be set on system boot

- WiFi: Beamformer support for 802.11ac (VHT at 5GHz) is broken

- Raw output for system storage op mode causes exceptions on live CD

- `vyos_net_name` locking logic is broken

- Unhandled exception in "show openconnect-server sessions"

- image_format is image_formatS in some build-flavor files

- [vyos-1x] unlimited _noteworthy in vyos.airbag cause memory leak

- syslog: fix the behavior of "syslog global preserve-fqdn"

- Segmentation fault when checking incorrect IP ranges with ipaddrcheck

- syslog: remote syslog broken after "add format option to include timezone in message"

- Display the EULA in "run show license"

- babel: can not set IPv6 distribution-list in access-list6 format

- Build package script misses dependencies

- Missing cron file for geoip auto update

- Use VyOS release-train in /etc/os-release codename over Debian release name

- 'set service webproxy domain-noncache <domain>' command does not work

- Fix misleading debug message from vyos-configd

- haproxy op-mode missing after rename

- Remove unintended binary files from ipaddrcheck source tree and keep them from re-appearing

- syslog: advanced format should not have IPv6 addresses in [] brackets

- Proxmox grub console type should be tty0 by default

- syslog: typos in rsyslog.conf

- ACME certificate updates fail due to missing timezone info

- kea_get_domain_from_subnet_id returning incorrect domain name

- Return the old scripts to generate tech-support archive

- wwan: extend smoketests to cover WWAN driver option and hwsim

- Fix uuidgen warning if DMI doesn't have product_serial or it empty

- "show wan-load-balance" command is broken

- Fix missing import and incorrect check in nat64

- Op-mode command show system memory cache does not work

- QAT support is not detected on Intel C62x virtual function devices

- Smoke test cli/test_vpn_ipsec.py typo makes DPD check always pass

- Encryption disable prompts for a recovery key even if volume already mounted

- syslog freezes when file size reaches 512KB

- Modify the amazon-ssm-agent build script to work correctly on all platforms

- Fix amazon-cloudwatch-agent build

- SquashFS compression options do not work properly for ARM64

- dh_missing: warning: usr/libexec/vyos/vyos_net_name exists in debian/tmp but is not installed to anywhere

- vyos-1x is missing an explicit package dependency on net-tools

- KeyError: 'model name' executing cpu info summary on arm64

- Set airbag enable to default log=False

- Log redirected stdout from FRRender under vyos-configd

- LUKS encryption passphrase is visible during input

- Add missing, explicit runtime dependency on python3-systemd

- GeoIP database update is broken due to permissions issues

- Update pyjwt in vyos-https-api-tools for security advisory

Improvements *(118 items)*

Interfaces

- Interface match - Simplified and unified cli ⚠️ syntax change

- EVPN ESI Multihoming

- EVPN-MH - missing options in uplink ports

- wireless: add op-mode command for hostapd and wpa_supplicant logs

- op-mode: "monitor bandwidth" add support for listing all interfaces concurrently

- Accel-ppp separate vlan-mon from listen interfaces

- Add EAPOL Bonding Support

Routing

- Cleanup of FRR daemons-file and various FRR fixes

- bgp: add new features from FRR 9

- isis: add new features from FRR 9

- op-mode: add "show ipv6 route vrf <name> <prefix>" command

- Allow for Peer-Groups in ipv4-labeled-unicast SAFI

- Added segment routing check for index size and SRGB size

- bgp: add additional missing FRR features

- bgp: add EVPN MAC-VRF Site-of-Origin support

- ospfv3: add support to redistribute IS-IS routes

- Add/update EVPN op commands

- Missing Well Known Communities in Command Completion

VPN

- Rewrite L2TP/PPTP/SSTP/PPPoE services to get_config_dict

- Rename DPD action `hold` to `trap` ⚠️ syntax change

- L2TP RADIUS backup and weight settings

- replay_window setting under vpn in config ⚠️ behavior change

Firewall

- Make the chain policy configurable ⚠️ behavior change

- Add conntrack helper matching on firewall

- Firewall default-action log

- Allow selecting mac-groups in bridge firewall

- Rename 'enable-default-log' to 'default-log' ⚠️ syntax change

- Firewall zone - Re add op-mode commands

DHCP

- Display static DHCP server leases in the operational command output

- About dhcp client hooks

- DHCP client custom dhcp-options

- WWAN modems using raw-ip do not work with dhclient/dhcp6c ⚠️ behavior change

- Kea DHCP: Expose match-client-id setting ⚠️ syntax change

VPP (Vector Packet Processing)

- Enable VFIO support

Containers

- op-mode: container: support removing all container images at once

- Add config option for container cpu limit

PPPoE

- pppoe: allow to specify MRU in addition to already configurable MTU

- Improvements in PPPoE configuration ⚠️ syntax change

- Extend override-default script to allow embedded defaultValue settings

NAT

- Add package nat-rtsp-dkms

- NAT - Inbound or outbound interface should not be mandatory

- NAT - Allow interface groups on nat rules

- Add "NAT" to "generate" command for rule resequence

- CGNAT drop hard limit that allowed only one translation rule

- Fix/Update NAT Logging

- NAT - Add support for fqdn entries

System

- Adjust new image tools for non-interactive use

- Restore scanning configs when live installing ⚠️ behavior change

- Add ability to add additional minisign keys

- Add set/show system image to /image endpoint

- Upgrade ddclient 3.11.2 release

- show system image should reverse order by addition date

- image-tools: relax restriction on image-name length from 32 to 64

- Restore annotations of (running)/(default boot) in select image list

- Missing minisign public key for rolling release

- Add image-tools support for configurable kernel boot options

- Configure system-specific capabilities independently of migration scripts

- Improvements to migration system

- Attempt hint for console type during image install

- open-vm-tools missing in nightly-builds starting from version 1.5-rolling-202404220020 ⚠ behavior change

- Upgrade ethtool to 6.10 to make use of more --json options

DNS

- Miscellaneous improvements and fixes for dynamic DNS configuration

- Implement ECS settings for PowerDNS recursor

- Improve reliability of the vyos powerdns recursor implementation

- Adjust dynamic dns configuration address subpath to be more intuitive and other op-mode adjustments ⚠ syntax change

- PKI: Support RFC822 (email) names in SAN

NTP

- NTP leap smear

- Limit NTP allow-client config to internal addresses by default

- show ntp is not vrf aware

- op-mode: ntp: add support for NTP service restart via CLI

Management

- Support per-service cache management for dynamic dns providers ⚠ syntax change

- Command to display fingerprint

- Add show show ssh dynamic-protection attacker and show log ssh dynamic-protection

- hsflowd: add VRF support

Monitoring

- Disable by default SNMP for Keepalived VRRP

- Adding Loki plugin to Telegraf

- lldp: missing input validation for interface names (validation change)

QoS

- Add triple-isolate flow isolation option to CAKE QoS policy

- QoS policy set default speed to 100mbit or 1gbit instead of 10mbit

Tunnels

- Disable VXLAN bridge learning and enable neigh_suppress when using EVPN ⚠️ behavior change

- Add VXLAN vnifilter support

Cloud

- Enable VFIO No-IOMMU support in kernel config

Configuration System

- Execute VRRP transition script when `set high-availability disable` is commited

- Add support for extending config-mode dependencies in supplemental package

- Update config test to check resulting migrations

- Openconnect - HTTPS security headers are missing

- reverse-proxy load-balancing service should support multiple certificates for frontend ⚠️ syntax change

- Add Infiniband kernel modules

- Add support for ACME protocol (LetsEncrypt)

- Allow commit-confirm to use soft-rollback instead of reboot

- ixgbe: Add 1000BASE-BX support

- Support configuring sys-nice capability for containers ⚠️ syntax change

- Enable Generic Hyper-V UIO driver in kernel config

- Add module for iterating over modifications to a config file

- Add additional languages as keyboard-layout

- Add support ECDSA keys in PKI

Uncategorized

- Improvement: system login: show configured 2FA OTP key

- For reverse-proxy type of load-balancing feature, support "backup" option in backends configuration

- List of debian archives is out of date (non-free-firmware is missing)

- Rewrite add/delete raid member to Python and remove from vyatta-op

- Add util to get drive device name from id

- Add an option to exclude single values to the numeric validator

- Add VRF support for mtr

- Adding variable vyos_persistence_dir (and improve variable vyos_rootfs_dir)

- Add load_config module

- Add op-mode command to restart IPv6 RA daemon

- op-mode: list multicast group membership

- login: add possibility to disable individual local user accounts

- Add user util numactl

- rpki: add support for CLI knobs expire-interval and retry-interval

- add Mediatek MT7921 to defconfig

- Add option to set custom HTTP headers in reverse-proxy responses

- Explicitly set the default reverse proxy mode to HTTP

- Auto import Lets Encrypt root CA while using pki certificate acme

- Add support for WPA-Enterprise client-mode

- Add logging options to load-balancer reverse-proxy

- Return False for boolean check in_session when running under configd

Optimizations *(12 items)*

- pmacct-based NetFlow implementation's performance is insufficient for modern networks

- Nonstripped binaries exists in VyOS

- Only select required Kernel CGROUP controllers

- Add an optimized get_config_dict for op-mode

- Make node path completion read directly from the active config directory tree

- Use ipaddrcheck for validating IP address ranges

- VyOS' FRR is not linked against PCRE2, reducing BGP convergence performance

- sudo: remove spam messages to syslog

- Addition and deletion of allowed-vlans on a bridge member is slow

- Optimise Wireguard peer handling

- New NetFlow implementation based on ipt-netflow ⚠ syntax change

- Refactor and improve geoip handling

Deprecated / Removed Features *(15 items)*

- Update dynamic dns configuration path to be consistent with other areas of VyOS ⚠ syntax change

- http: remove virtual-host configuration in webserver ⚠ syntax change

- NHRP don´t start on reboot from version 1.5-rolling-202401010026 ⚠ behavior change

- Remove unused parameter node from reverse-proxy backend

- Remove op-mode 'show configuration files' as misleading

- Remove VM guest agents from the generic flavor for the rolling release ⚠ behavior change

- Remove Fastnetmon from the image ⚠ syntax change

- Remove support for GnuPG signatures ⚠ behavior change

- Remove irqtop from the image ⚠ behavior change

- Delete the "run show login level" command ⚠ behavior change

- Move "vpp settings host-resources" to "system option host-resources" ⚠ syntax change

- Remove operational mode commands for viewing route cache

- Mark Salt minion deprecated

- Remove the option to manually select XDP as VPP driver ⚠ syntax change

- VPP: Get rid of 'dpdk-options' section for 'num-*' parameters ⚠ syntax change

Behavior Changes *(2 items)*

- Source NAT Port Mapping setting of Fully-Random is superfluous in Kernels 5.0 onwards

- Deprecate the net30 topology option in OpenVPN ⚠ syntax change

Internal / Infrastructure *(139 items)*

- Python Unit testing

- Migrate NHRP(DMVPN) to FRR

- Migrate vyatta-op-quagga to new XML format

- Add ability to mark nodes as non-tag nodes

- Remove legacy version files in vyatta-cfg-system/cfg-version

- Rewrite the NTP op mode in the new format

- Move libvyosconfig build out of the Docker image

- Establish common file name pattern for XML conf mode commands

- OPENVPN -DEPRECATED OPTION: --cipher

- salt: upgrade minion to 3005.2

- Provide list of config-mode scripts scheduled for proposed commit

- Additional dynamic dns improvements to align with ddclient 3.11.1 release

- mdns repeater: Always reload systemd daemon before applying changes

- pim(6): rewrite FRR PIM daemon configuration to get_config_dict() and add missing IGMP features

- Update to StrongSwan 5.9.11

- http: api: smoketests fail as they can not establish IPv6 connection to uvicorn backend server

- http: rewrite conf-mode script to get_config_dict()

- Remove auxiliary http-api.conf for simplification of http-api config mode script

- Use a single config mode script for https and http-api

- frr: smoketests must notice any daemon crash

- frr: update to 9.1 release

- mdns-repeater: Cleanup avahi-daemon configuration in /etc

- git/github: Adjust configuration for safe and baseline defaults

- Upgrade Kea to 2.4.x

- Remove old ssh-session-cleanup.service

- Rewrite PPTP service to get_config_dict

- vyos-utils: move to Dune as build system

- Upgrade Linux Kernel to 6.6.y (2023 LTS edition)

- Extend get_config_dict() with additional parameter with_pki that defaults to False

- Bump nftables and libnftnl version

- Update ethtool to 6.6

- ethtool: move string parsing to JSON parsing

- kea-dhcp4-server crashes due to incorrect lease file permissions after 1.5-rolling-202403120022 -> 1.5-rolling-202403230018 upgrade

- dropbear: package upgrade 2022.83-1 -> 2022.83-1+deb12u1

- Add util for ancestor owner/priority

- release.pref.chroot indentation broken

- non-free-firmware to trixie

- Get rid of the custom boot type check in version.py

- Use OCaml 4.14 for CI builds

- Missing the package kpartx for the container vyos-build:current-arm64

- Add branches of vyos-1x project

- Deprecate vyos-world package

- Improve the smoke test platform

- Rewrite "release dhcp interface <interface>" to Python to drop remaining Perl dependencies

- Deprecate vyatta-cfg-system and vyatta-op package

- Add circinus branch to labeler workflow

- op-mode: create generic service restart helper to work with the API

- Use a single style for all Python code

- Add an distinct exception for unconfigured objects to vyos.opmode

- Unexpected podman version 4.3.1

- Initial support for smoketesting op-mode commands

- Remove the remaining uses of per-protocol FRR configs

- Allow using list_nodes on paths that do not exist

- Add image graphs contributors

- Generate a build/manifest.json file after assembling the image(s)

- turn on bot with PR's between orgs for vyos-build

- add reusable workflows for vyatta-wanloadbalance

- Add a build type field to version data

- frr: upgrade routing suite to 10.2

- Fix commenting issue with integration test workflow

- Delete Jenkins packages

- Add a script for merging flavor files

- Add a build procedure for amazon-cloudwatch-agent

- Make vyos-1x repo URL in vyos-build a configurable parameter

- Allow development builds to have versions

- Add "stream" build type

- XCP-NG: xe-guest-utilities have been replaced by xen-guest-agent

- Add an option to specify bootloaders to the image build arguments

- Treat vyos-domain-resolver as a real service

- Extend smoketesting platform to also validate /etc/release | lsb_release content

- Add build/manifest.json to build artifacts for GitHub Actions

- vyos.ifconfig: drop iftype attribute

- TACACS: extend smoketests with a live tac_plus server running as container

- Allow wildcard in include directive in interface-definition files

- Source NAT smoke tests fail due to an incorrect interface name

- RADIUS: extend smoketests with a live freeradius server running as container

- Drop requirement of importing script in build time test test_configd_inspect.py

- Refactor kea dhcp op-mode functions to helper functions in vyos.kea

- Allow general binary includes in flavor files

- Display the non-production banner depending on the build type

- Image build fails due to missing linux-tools package

- Update Kea to 3.0

- Add libvyosconfig as git submodule of vyos-1x for stream builds

- Add vyos prefix to package names of RADIUS libs

- Add apply_patches option for the build packages script

- Build a compatible version of bash-completion from source

- Do not use Debian Buster repos in image build

- Cleanup unused Python3 imports

- Upgrade radvd to official v2.20 release

- Remove the APT option that allows downgrades from live-build configuration

- Remove MD5 sums from the image

- Pass credentials to download commands in environment variables

- Use PCRE2 in validation utilities

- Remove unnecessary uses of string start and end markers in validation regexes

- Use the reusable completion helper for the RADIUS dynamic authorization option in PPP/IPoE services

- Convert udp-broadcast-relay to the new package build system

- Remove copyright years from source files

- Add a test for DHCP default route with VRF

- Fix vyos-build makefile target test-no-interfaces

- Trigger rebuild VPP binaries if vyos-vpp-patches changed

- Set up a linter check to check complete files for syntax errors and missing imports

- Merge vyos-vpp repo into vyos-1x

- Exclude auxiliary directories from tarballs

- Add VPP tests per PR before merging

- Add missing dependency on libssl-dev for building tacacs packages

- Dehardcode x86_64 ARCH to build VPP libraries used for accel-ppp-ng

- Backport list_loaded_modules to 1.5

- Bump hsflowd version to dffc277

- Make "unused-import" check mandatory

- Integrate libvyosconfig repository into vyos-1x

- Use nose2 for unit tests

- Migrate the package build script to python3-tomli from python3-toml

- Add the VyOS repository key to the repo file

- Add the kpartx package to the default build container

- Remove accel-ppp from the packages as it replaced with accel-ppp-ng

- PPPoE: extend smoketests to test connection

- Remove calls to "sudo" in wan load-balancing CLI code

- Bump accel-ppp-ng to d13b611

- Drop the external sFlow plugin from VPP and use native sFlow plugin

- Smoketests: setUp() and tearDown() base class functions are not always called

- certbot: streamline implementation to avoid bugs due to duplicated code

- Consolidate container run arguments

- Hostap git repository URL has changed and needs an update

- smoketest: sporadic errors during VRF smoketests

- Remove the last remnants of pmacct

- xml: cleanup double CLI properties in NAT

- Remove the legacy Perl script for printing node priority data

- Smoketests: reorganize folder structure for embedded config tests

- Start building Kea from source

- Add smoketest for Kernel kexec and ARM Marvell CN9130 options

- get_config_dict() whould not always contain an empty pki node

- Make vyos-smoketest more user-friendly

- policy-route: cleanup nested XML include structure

- VPP: Consolidate recent migrations into a single downgrade migration (target version 6)

- frr: pin version to discrete commit and not the Git HEAD for stable/10.5

- VPP: Cleanup vpp interfaces and kernel-interfaces after migration

- Move opmode.vpp._verify to common vyos.opmode._verify() helper

- Add all Python files under vyos-1x/python/* to the Pylint check

- Normailze changelog version and debian/source options in VyOS fork of live-boot

Documentation *(2 items)*

- ▪ minisign.pub is wrong on https://vyos.net/get/nightly-builds/

- ▪ document global syslog options

Uncategorized / Cosmetic *(102 items)*

- ▪ Software basesd FastPath

- ▪ Add support for VLAN-Aware bridges

- ▪ Allow route-map 'set src' to reference both IPv4 and IPv6

- ▪ PAM RADIUS freezing when accounting does not configured on RADIUS server

- ▪ OpenVPN IPv6 fixes

- ▪ Disable conntrack helpers by default ⚠ behavior change

- ▪ Use Kea DHCP(v6) instead of ISC DHCP(v6)

- ▪ the bug of the command "show interfaces system"

- ▪ ipsec: no output for op-cmd "show vpn ike secrets"

- ▪ VyOS version in current branch should be changed from 1.4 to 1.5

- ▪ Add kernel conntrack_bridge module

- ▪ Multicast - PIM bfd feature enable

- ▪ Update the Intel ixgbe driver due to issues with Intel X533

- ▪ op-mode: login: DeprecationWarning: 'spwd'

- ▪ Add jq package to parse JSON files

- ▪ commit-archive: Ctrl+C should not eror out with stack trace, signal should be cought

- ▪ BGP label-unicast - enable ecmp

- ▪ Keepalived VRRP prefix is not necessary for the virtual address

- ▪ FRR 9.0.1 in VyOS current segfaults on show rpki prefix $prefix

- ▪ vxlan: migrate "external" CLI know to "parameters external"

- ▪ Monitoring telegraf deprecated plugins inputs outputs

- ▪ Update telegraf package

- ▪ PPPoE-server add max-starting option

- Systemd-udevd high CPU utilization for multiple dynamic ppp/l2tp/ipoe interfaces

- IPoE-server fails if next pool mentioned but not defined

- strip-private doesn't strip string after "secret"

- PPPoE-server shaper template bug down-limiter option does not rely on fwmark

- PPPoE-server adding new interface does not work

- Firewall, nat and policy route - Switch to valueless ⚠ syntax change

- WAN Load Balancing failover route tables aren't created

- Show MAC address VRF and MTU by default for "show interfaces"

- API output of show container image broken

- NAT66 op-mode bugs

- op-mode: ipv6 ospfv3 graceful-restart description contains incorrect info

- Protocol BGP add default values for config dictionary

- Add dmicode as an explicit dependency

- Fix GRUB installation on arm64

- Can't Add IPv6 Address to Containers

- Add SRv6 route commands

- Migrate "set service lldp snmp enable" -> `set service lldp snmp"

- Upgrade podman to Debian Trixie version 4.7.x

- Minor description fix (op-mode: generate wireguard)

- VyOS vm images use bookworm repo

- Cloud-init and DHCP exit hook errors

- pki: IPsec and VTI interface priority inversion when using x509 site-to-site peer

- DHCP Static mapping don't work on every first lease

- Firewall - bug in zone config

- Containers change systemd KillMode

- vrf - route-leak not work using route-target both command.

- pdns-recursor crashes on restart if hostfile-update is enabled and dhcp client sends hostname with trailing dot

- Rename 'close_action' value from `hold` to `trap` in IPSEC IKE

- Rewriting authentication section in accel-ppp services ⚠️ syntax change

- QoS policy shaper rate calculations could be wrong for some ethernet devices

- QoS policy shaper is currently miscalculating bandwidth and ceil values for the default class

- IPsec site-to-site migrated PKI ca certificates are created with an '@'

- load-balancing reverse-proxy can't configure root as a redirect

- Add option to enable resolve-via-default

- Bump keepalived version

- smoketest: updating http-api framework requires a pause before test

- QoS hide attempts to delete qdisc from devices

- Exception in event handler script

- Wrong scripting commands descriptions in accel-ppp services

- firewall: CLI description limit of 256 characters cause config upgrade issues

- Applying firewall rules with a non-existent interface group

- banner: implement ASCII contest winner default logo

- Tab completion for "set interfaces wireless wlan0 country-code" incorrect country "uk"

- OpenVPN IPv6 server: Unable to establish connection without local-host parameter

- Cleanup of not existing units

- Update the boot splash for VyOS 1.5 ISO

- TPM incorrect path import for rc_cmd

- Nftables build add dependency asciidoc-base

- Boot to multi-user.target instead of graphical.target

- Container config option to enable host pid

- Typos in select ConfigError messages in dhcpv6-server **BREAKING** ⚠️syntax incompatibility

- Bump conntrack to version 1:1.4.7-1

- load-balancing reverse-proxy: typo in timeout help

- Migrate conntrack timeout sysctl parameter to firewall

- MINOR Typo: set system conntrack timeout custom ipv4 rule X

- OpenVPN: Rename the CLI node option "ncp-ciphers" to "data-ciphers"

- Add a top level op mode word "execute"

- Add release_train circinus

- Add nonproduction banner ⚠ behavior change

- Implement reusable workflows for vyatta-cfg

- Make REST api and GraphQL api distinct nodes ⚠ syntax change

- rename reverse-proxy to haproxy ⚠ syntax change

- Need to stop forkflows (repo-sync.yml) repo-sync for the sagitta and circinus branches (from public) for all repos

- fix pr title workflow for pip install

- Move "show monitoring" and "show zebra" to "show monitoring frr" ⚠ behavior change

- "monitor log" should have no output color at all

- iproute2: disable colored output by default

- Update ipaddrcheck versions and changelogs

- Console text remains white and bold after boot messages

- Do not include "dirty" in build commit IDs

- Support listen PROXY protocol for haproxy

- ifconfig: Suppress unnecessary syslog noise from missing nftables rules

- Use internal repository to get the Salt packages

- Add correct runners for VPP tests

- Consistent naming of "memory" in op-mode

- BP not work "Login: issue warning if TACACS or RADIUS source-address is not configured on the system"

- Normalize operational mode command names that use capital letters ⚠ behavior change

- fix salt-minion smoketest after package rebuild

- VPP: Migrate 'poll-sleep-usec' setting path ⚠ syntax change

API Compatibility Summary

Title	Component	API Impact
Disable conntrack helpers by default	nat	behavior
Allow using more than one tuned profile	containers	syntax
Rewrite load-balancing wan to XML/Python	uncategorized	syntax
vpn l2tp logging level configuration	vpn	behavior
Rename DPD action `hold` to `trap`	vpn	syntax
Make the chain policy configurable	firewall	behavior
Syslog doesn't send timezone information to the server	uncategorized	behavior
Conntrack FTP helper does not work properly	nat	behavior
OPENVPN -DEPRECATED OPTION: --cipher	vpn	syntax
Support per-service cache management for dynamic dns providers	management	syntax
Disable VXLAN bridge learning and enable neigh_suppress when using EVPN	tunnels	behavior
bridge: missing member interface validator	interfaces	validation
vxlan: change port to IANA assigned default port	tunnels	syntax
Improvements in PPPoE configuration	pppoe	syntax
Interface match - Simplified and unified cli	interfaces	syntax
Additional dynamic dns improvements to align with ddclient 3.11.1 release	dns	syntax
Firewall, nat and policy route - Switch to valueless	firewall	syntax
igmp: migrate "protocols igmp" to "protocols pim"	routing	syntax
Restore scanning configs when live installing	system	behavior
Change VXLAN default MTU to 1500 bytes	tunnels	behavior
http: api: smoketests fail as they can not establish IPv6 connection to uvicorn backend server	uncategorized	syntax
Remove auxiliary http-api.conf for simplification of http-api config mode script	management	validation
frr: smoketests must notice any daemon crash	routing	validation

Title	Component	API Impact
Update dynamic dns configuration path to be consistent with other areas of VyOS	dns	syntax
reverse-proxy load-balancing service should support multiple certificates for frontend	config-system	syntax
SNAT "any" interface error	nat	syntax-incomp
Rename 'enable-default-log' to 'default-log'	firewall	syntax
verify_source_interface should not allow dynamic interfaces like ppp, l2tp, ipoe or sstpc client interfaces	interfaces	validation
http: remove virtual-host configuration in webserver	uncategorized	syntax
NHRP don´t start on reboot from version 1.5-rolling-202401010026	uncategorized	behavior
Grub problem(?) Serial Console no longer working	interfaces	behavior
Disable USB autosuspend	interfaces	behavior
Rootless containers/set uid/gid for container	containers	syntax
Rewriting authentication section in accel-ppp services	pppoe	syntax
WWAN modems using raw-ip do not work with dhclient/dhcp6c	dhcp	behavior
Adjust dynamic dns configuration address subpath to be more intuitive and other op-mode adjustments	dns	syntax
Create the same view of ppp section for all accel-ppp services	pppoe	syntax
replay_window setting under vpn in config	vpn	behavior
[1.3.x -> 1.5.x] migrating threw exception in /opt/vyatta/etc/config-migrate/migrate/https/5-to-6, performed workaround	config-system	syntax-incomp
rpki: known-hosts-file is no longer supported by FRR CLI - remove VyOS CLI node	routing	syntax
rpki: move file based SSH keys for authentication to PKI subsystem	management	syntax
ssh scripts should work with arguments again; they do not anymore	management	behavior
Kea DHCP: Expose match-client-id setting	dhcp	syntax
Can not build VyOS if repository it not cloned to a branch	config-system	validation
container: do not allow deleting images which have a container running	containers	behavior
dhcp: migration fails for duplicate static-mapping	dhcp	syntax

Title	Component	API Impact
Incorrect dhcp-options vendor-class-id regex	dhcp	behavior
Updating the system image without enough space for the files can break the system	config-system	behavior
Support configuring sys-nice capability for containers	config-system	syntax
Container configurations on VyOS 1.5 prevent containers from starting	containers	syntax
open-vm-tools missing in nightly-builds starting from version 1.5-rolling-202404220020	system	behavior
Add a warning when the user tries to set a password too simple	uncategorized	behavior
Typos in select ConfigError messages in dhcpv6-server	dhcp	syntax-incomp
Check architecture and flavor compatibility on upgrade attempts	system	behavior
nat64 input validation required	config-system	syntax
Error: "nft table ip vyos_filter not found" when commiting prometheus-client	monitoring	validation
Raise an error when trying to get information about network interfaces that don't exist	uncategorized	behavior
Return a dict when querying information about a single interface	interfaces	behavior
Deprecate the net30 topology option in OpenVPN	vpn	syntax
ipsec: support disabling rekey of CHILD_SA	vpn	behavior
Add an option to assign static IP address to IPoE server users	vyos-1x	syntax
Invalid route-map caused bgpd to crash	routing	validation
Move commands that do not fit anywhere else in the new "execute" family	uncategorized	behavior
Move "clear session" to "reset session"	uncategorized	behavior
Add nonproduction banner	uncategorized	behavior
Offload settings are being automatically updated to reflect kernel settings	interfaces	behavior
lldp: missing input validation for interface names	monitoring	validation
Disable nginx software version reporting	uncategorized	behavior
Make REST api and GraphQL api distinct nodes	management	syntax

Title	Component	API Impact
rename reverse-proxy to haproxy	uncategorized	syntax
frr: upgrade routing suite to 10.2	routing	syntax
Separate interface and VRF options in firewall zone configuration	firewall	syntax
Merge the hsflowd-based sFlow implementation into "set system flow-accouting"	uncategorized	syntax
Move "show monitoring" and "show zebra" to "show monitoring frr"	routing	behavior
Empty "ntp" CLI node causes a config migration error when upgrading from VyOS 1.3.x	ntp	behavior
Remove VM guest agents from the generic flavor for the rolling release	system	behavior
Add a configuration command for ethertypes that bridge firewalls should always accept	firewall	syntax
Group prometheus exporter config options	monitoring	syntax
syslog: convert old configuration format to "advanced"	config-system	syntax
VRF name "up" is reserved and should not be used	config-system	validation
Disallow upgrades to non-matching flavors	system	behavior
VPP unix poll-sleep-usec should be verified and fixed for correct range of values	config-system	validation
VPP CPU main-core should be verified	vpp	validation
VPP CPU skip-cores should be verified	vpp	validation
VPP buffers page size should be verified	vpp	validation
VPP xdp-options should check the driver before applying	interfaces	validation
VPP verify and calculate memory default-hugepage-size	vpp	validation
Add route-map and metric options to "redistribute table" in BGP	routing	syntax
Add an option to configure LLDP operation mode (receive, transmit, both, or none)	monitoring	syntax
Remove Fastnetmon from the image	system	syntax
Remove support for GnuPG signatures	system	behavior
Remove irqtop from the image	system	behavior

Title	Component	API Impact
IPv6 assigned address using SLAAC is not cleared when SLAAC is deconfigured	routing	behavior
Invalid sysctl configuration during startup causes IPv6 default route to be installed for DHCPv6 only interface	routing	behavior
Router advertisement duplicate prefix safeguard	config-system	behavior
Remove io_uring support from the kernel	uncategorized	behavior
HAProxy: remove unsupported syslog facilities and log levels	config-system	syntax
Zone-based firewall with VRF causes issues	firewall	behavior
IPoE: Add stricter validation for giaddr if dhcp-relay is configured	dhcp	validation
Delete the "run show login level" command	uncategorized	behavior
Move "clear connection" to "reset connection"	interfaces	behavior
Inconsistent MAC address behaviour on bond interfaces	interfaces	behavior
WAN Load Balancer Default SNAT Behaviour	nat	behavior
The "respond" connection-type in IPSec peer settings must be renamed to "trap"	vpn	syntax
Move "vpp settings host-resources" to "system option host-resources"	vpp	syntax
New NetFlow implementation based on ipt-netflow	interfaces	syntax
VPP: Improve "nat44 no-forwarding" feature name and description in CLI	nat	syntax
accel-ppp-ng: make a VPP integration a separate plugin	vpp	behavior
VyOS allows multicast addresses to be assigned to interfaces	config-system	syntax-incomp
Normalize operational mode command names that use capital letters	monitoring	behavior
ssh: defining cipher rijndael-cbc@lysator.liu.se will break SSH daemon	management	syntax
Remove the option to manually select XDP as VPP driver	vpp	syntax
enforce-first-as should be explicitly unset in FRR unless explicity set in Vyos	routing	syntax
VPP: Rewrite the CLI for ACL tcp-flags	vpp	syntax
VPP: Change ACL node 'macip' to 'mac'	vpp	syntax
VPP: Move 'nat44' and 'settings nat44' sections to 'nat nat44'	nat	syntax

Title	Component	API Impact
VPP: Rename "logging default-log-level" to "logging default-level"	vpp	syntax
VPP: Migrate 'poll-sleep-usec' setting path	vpp	syntax
VPP: Refactor resource settings into 'resource-allocation' section	vpp	syntax
VPP: Refactor IPsec settings to use only 'ipsec-acceleration' flag	vpn	syntax
VPP: Implement global 'interface-rx-mode' setting	interfaces	syntax
VPP: Unify CPU settings into a single 'cpu-cores' node under 'resource-allocation'	vpp	syntax
VPP: Get rid of 'dpdk-options' section for 'num-*' parameters	interfaces	syntax
VPP: Move bonding interface from 'vpp' to 'interfaces vpp bonding'	interfaces	syntax
VPP: Move vxlan interface from 'vpp' to 'interfaces vpp vxlan'	tunnels	syntax
openvpn: service restart loop if no cipher specified	vpn	behavior
VPP: Migrate ipip interface to 'interfaces vpp ipip'	interfaces	syntax
VPP: limit VPP to validated NICs unless allow-unsupported-nics is set	vpp	behavior
ospf: virtual-link takes invalid input data <INT>	routing	validation
Disallow non alpha-numeric characters in VRF names	config-system	validation
VPP: Migrate loopback interface to 'interfaces vpp loopback'	interfaces	syntax
VPP: Migrate gre interface to 'interfaces vpp gre'	tunnels	syntax
VPP: Migrate bridge interface to 'interfaces vpp bridge'	interfaces	syntax
VPP: Migrate xconnect interface to 'interfaces vpp xconnect'	interfaces	syntax
Move VPP operational mode 'show vpp interfaces' to 'show interfaces vpp'	vpp	behavior
VPP: Move 'ignore-kernel-routes' option out of resource-allocation section	vpp	syntax
VPP: Remove xconnect interfaces with bonding member interface	interfaces	syntax
VPP: Move op mode command 'show vpp lacp/bridge' to 'show interfaces vpp'	interfaces	behavior

Data Coverage

- **Total tasks:** 1,379

- **Tasks with linked PRs:** 771

- **PRs with task links:** 2176

- **PRs with no task link:** 67 (omitted)

- **Jira VD issues cross-referenced:** 219

- **Unique repositories:** 21