



Avi Vantage 18.1.X Release Notes

Avi Technical Reference (v18.1)

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Issues Resolved in 18.1.5 Patch Release

Issues Resolved in 18.1.5-10p1

- AV-58098: Virtual service fails to come up for OpenStack Rocky release

Issues Resolved in 18.1.5-8p1

- AV-59927: After a reboot Service Engine may not connect back to the Controller

Issues Resolved in 18.1.5-7p2

- AV-58181: Handle IPv6 routes application with /48 mask

Issues Resolved in 18.1.5-7p1

- AV-54379: Service Engine failure after bond VLAN interface was deleted
- AV-55606: In DPDK mode, all the interrupt resources were not released to the kernel by the Service Engine at the time of stopping the services
- AV-58039: SE-DP crash while retrieving interface statistics from DP
- AV-58446: CSP: Physical link flap causes virtual function (VF) connectivity loss

Issues Resolved in 18.1.5-6p1

- AV-56179: Auth profiles created with same name stop working

Issues Resolved in 18.1.5-5p1

- AV-56113: OpenShift on Azure: One Service Engine is stuck in OPER_DISABLED mode even though Kubernetes node is in Ready state

Issues Resolved in 18.1.5-4p3

- AV-58660: Polling for Azure VM scalesets stops if a scaleset is deleted from Azure, without being removed from Avi pool

Issues Resolved in 18.1.5-4p2

- AV-56476: Back polling interval switched back to 60 seconds by removing unnecessary Azure API call for scalesets to avoid rate limiting errors in scaleset polling

Issues Resolved in 18.1.5-4p1

- AV-54968: Reduce the number of API calls made for polling Azure virtual machine scale sets
- AV-55941: Azure scale set polling does not update the pools and can hit rate limiting errors on Azure

Issues Resolved in 18.1.5-3p2

- AV-56660: Service Engine restarts on applying Controller patch that requires a reboot

Issues Resolved in 18.1.5-3p1

- AV-53448: OpenStack: Neutron APIs timeout in a large deployment
- AV-54186: Service Engine failure when certificate expires
- AV-54964: SQL injection possible while using some APIs

Issues Resolved in 18.1.5-2p1

- AV-52095: PKI profile with CRL enabled breaks after 24 hours
- AV-53301: In Avi UI, under virtual service > security tab, small graphs on right side fail to load
- AV-53902: Configuring proxy protocol in UI does not work
- AV-54109: Unable to update system configuration in CLI scripting mode
- AV-54186: Virtual service goes to fault state when certificate expiry warning is generated
- AV-54302: Avi infoblox integration create pointer in forward instead of reverse lookup zone

Issues Resolved in 18.1.5-1p2

- AV-58384: Remove duplicate pool members with an IP address 0.0.0.0

Issues Resolved in 18.1.5-1p1

- AV-53025: Service Engine failure on inserting HTTP header in a request body event DataScript
- AV-53039: Enabling/Disabling WAF rules with non-ASCII characters fails
- AV-53365: Incorrect handling of Nagios health monitor requests
- AV-53914: Service Engine failure when Response event Datascript runs in the context of HTTP response generated by a request event DataScript
- AV-54186: Virtual service goes to fault state when certificate expiry warning is generated
- AV-55454: Service Engine failure for virtual service with application type System-SSL-Application when network profile type is set to TCP Fast

What's New in 18.1.5

ADC

- Support for selecting a Service Engine based on a consistent hash of the client-ip[, port]
- [Support for Request header with location of the originating client IP on a DataScript or HTTP Policy](#)
- [Support SNI with HTTP/2](#)

Analytics

- Support for SIP health monitor over TCP

Containers

- [Support for using alternate ingress provider](#)
- [Kubernetes: Opt-in or Opt-out support for load balancer deployment in conformance with Kubernetes standards](#)
- OpenShift: Avi ServiceAccounts restricted to just projects requesting egress pod service
- OpenShift: Support for enforcing OpenShift information and annotations

Logging

- [Support for capturing client cipher list in logs when SSL handshake fails due to cipher mismatch](#)
- Support for capturing headers in significant logs
- Support for large trap payload in SNMP trap notifications

Networking

- [Support for increased number of BGP Peers](#)
- [Support for HTTP request retry policy](#)
- [Support for HTTP server reselect when the connection fails](#)
- [UDP maximum session idle timeout increased to one hour for maintaining longer open UDP sessions](#)

OpenStack

- [Support to choose SE group/VRF context from LBaaS v2 driver configuration](#)

Private Cloud

- vCenter: Support for virtual hardware version 10. Deprecated support for ESXi 5.0, ESXi 5.1

Public Cloud

- [AWS: Support for tighter control over AWS security group auto-creation](#)
- [Azure: Support for market place licensing](#)
- [Azure: Support for Managed Services Identity \(MSI\) based authentication for Microsoft Azure](#)

Security

- WAF: Support for combined buffering and streaming mode for the request body
- Support for setting access permission to HSM groups independent of SSL key and certificates

System

- Support for adding client IP filter for Service Engine packet capture
- [Support for restarting Service Engine one at a time when resources in SE group are changed](#)

Key Changes in 18.1.5

- AV-51312: To interact with Avi Vantage version 18.1.5, the Avi SDK needs to be upgraded to the latest.

Issues Resolved in 18.1.5

- AV-33959: URL invalid encoding for redirect action
- AV-36484: OpenStack: Service Engine anti-affinity not working after Service Engine creation failure
- AV-41838: Avi Controller portal not available after changing the Controller certificate and rebooting
- AV-41878: OpenShift: Insecure termination policy does not work with HTTP when shared virtual service is used
- AV-42367: GSLB service updates may not get delivered to the DNS virtual service after an upgrade
- AV-42445: OpenStack: Virtual service placement fails after creating due to Controller process failure
- AV-42719: IP address allocation failed in spite of free IPs
- AV-43048: Frequent updates to the IPAM object can cause disk space exhaustion
- AV-43455: Avi Vantage fails to import root CA certificate if it has generalized time format instead of UTC format
- AV-43926: Service Engine may fail if the name of a WAF profile is changed when it is already associated with a virtual service
- AV-43929: Cisco CSP 2100: IPv6 failure with SRIOV NICs
- AV-43973: VMware: Pool members added by FQDN change to 0.0.0.0 IP address if DNS resolution fails
- AV-43980: Secure channel flapping between the Controller and SE when GRO is enabled
- AV-44089: Service Engine with large memory may fail during a SE list update for a virtual service
- AV-44239: Service Engine fails if external log server cannot be resolved to an IP address
- AV-44473: Import configuration fails if string contains unicode character

- AV-44659: Error message on saving HTTP security policy with rate-limit and local response HTML file
- AV-45040: Unable to update the virtual service name to have () parentheses from UI, but can change from API and CLI
- AV-45221: Virtual service placement stuck in a state to acquire IP addresses for network/subnet for SNI parent
- AV-45496: Service Engine may fail if TLS persistence is used for a non-SSL pool
- AV-45747: XML content for a WAF enabled virtual service causes log file growth on the Service Engine
- AV-45852: OpenShift: Delay in creating Avi routes
- AV-45943: Health monitor fails if there is a before the HTTP/x.x in the send string
- AV-45967: Azure: The Avi Controller tries to delete non-Avi VM's disk
- AV-45970: Non admin users are able to view users, tenants, and role mapping configuration
- AV-46045: Linux server cloud: Service Engine may fail when DPDK is enabled on Mellanox NICs in a port channel
- AV-46061: Third party GSLB sites are not shown in the list of DNS policy primary and fallback sites
- AV-46169: Syslog message with invalid PRI 324
- AV-46190: Two virtual services with same IP in two different tenants do not work if placed on the same Service Engine
- AV-46349: Packet buffer usage went up causing Service Engine to be unreachable
- AV-46650: Unable to use regex or list of strings for basic authentication
- AV-46742: Service Engine stuck in a disabled state while the cluster and SEs are having intermittent network partitioning issues
- AV-46832: Mellanox interfaces on the Service Engine are not restored correctly after an SE failure
- AV-46883: Service Engine fails if TCP FastPath network profile is used for DNS application with DNS-over-TCP enabled
- AV-46899: OpenShift: Stale Avi bridge ports are not being cleaned up
- AV-47080: Linux server cloud: Service Engine may fail on using multiple bond interfaces to advertise VIP via BGP
- AV-47140: SMTP error while running email test
- AV-47185: OpenShift: Egress pod not coming up on Azure
- AV-47249: AWS: Nodes added to the pool by FQDN does not update when the IPs are changed
- AV-47333: Upgrade hung on remote task when the time is not synced between Service Engine and the Controller
- AV-47387: vCenter discovery does not complete after a Controller warmstart
- AV-47437: Linux server cloud: Default route may not take effect on using Mellanox NICs in inband mode
- AV-47500: WAF: Service Engine may fail under memory pressure
- AV-47568: Service Engine failure due to a corrupted persistence cookie
- AV-47574: vCenter API version 6.7U1 is not supported by Avi Controller
- AV-47600: Service Engine may stop processing packets if it has been up for more than 392 days
- AV-47647: Service Engine failure due to out of memory condition with WAF enabled
- AV-47650: Service Engine advertising routes to BGP for virtual service that are not placed
- AV-47661: SMTP alerts not working with anonymous SMTP settings
- AV-47797: When RSS is enabled, connections to pool servers delayed due to dropped SYN+ACK packets causing retransmits
- AV-47800: When VIP to SNAT is enabled, changing non critical fields (ex. name) causes virtual service to detach and reattach to Service Engines
- AV-50783: Virtual service cannot be enabled due to IP address exhaustion
- AV-50784: Azure: HTTP Health monitor fails for VMs added to a pool from a scale set because of "_" in the hostname
- AV-51019: Linux server cloud: NIC bonding may fail on Ubuntu 16.04 servers when Service Engine is restarted
- AV-51330: Service Engine failure when Layer 4 SSL virtual service is configured without a pool
- AV-52374: DNS virtual service with preserve client IP does not work for UDP traffic
- AV-52822: Upgrade fails if roles exist without any privilege

Issues Resolved in 18.1.4

- AV-43756: Exporting configuration from CLI requires passphrase
- AV-44673: OpenShift: All Service Engines in OpenShift cloud fails to upgrade with SE_IMAGE_INSTALL error

What's New in 18.1.4

- Support for configuring certificates for internal key exchange service on port 8443

Issues Resolved in 18.1.3 Patch Releases

Issues Resolved in 18.1.3-3p4

- AV-53815: Pool / virtual service state inconsistent in corner cases
- AV-55491: SNI parent pool is not coming up after deleting and adding the server back

Issues Resolved in 18.1.3-2p5

- AV-56197: Zone transfer through Avi DNS virtual service fails after limit of a certain number of records

Issues Resolved in 18.1.3-2p4

- AV-54379: Service Engine crash after bond VLAN interface was deleted on bonded VLAN interface

Issues Resolved in 18.1.3-9p1

- AV-47003: Few of the pool groups are missing after the test for leader node permanent failure is triggered, but they exist in the vCenter.
- AV-50783: In a VMware environment, rediscovery of Service Engines fails as virtual services cannot be enabled due to IP address exhaustion.

Issues Resolved in 18.1.3-3p3

- AV-52174: In Azure multi-NIC environment, need to add a route for management to reach the metadata server at initialization time

Issues Resolved in 18.1.3-5p2

- AV-51849: SE UI Configuration: Support for VLAN list and creation button for CLOUD_NONE

Issues Resolved in 18.1.3-6p1

- AV-46349: SE_PKT_BUFF_HIGH event and buffer usage went up causing SE to be unreachable

Issues Resolved in 18.1.3-4p3

- AV-43973: VMware: Pool members added by FQDN brings the virtual service down
- AV-47249: AWS: Nodes added to the pool by FQDN does not update when the IPs are changed
- AV-47661: SMTP alerts not working with anonymous SMTP settings

Issues Resolved in 18.1.3-2p3

- AV-41006: IPv6: Learn link local IP in internal network and fix multiple dhclient
- AV-47122: VMware write access: Handling IPv6 server down events

Issues Resolved in 18.1.3-3p2

- AV-46087: GCP: Move ILB advanced route create API from alpha to beta

Issues Resolved in 18.1.3-5p1

- AV-46190: Two virtual services with same IP in two different tenants do not work if placed on the same SE
- AV-46447: Enable routing on all VRFs
- AV-46449: Configure floating interface IPs on all VRFs
- AV-45490: Defer VLAN cleanup if secondary IPs are present on IFP
- AV-45867: Service Engine datapath hitting a panic in `rt_tables_get_rnh_ptr`

Issues Resolved in 18.1.3-2p1

- AV-43929: IPv6 failure on Cisco CSP 2100 with SRIOV NICs
- AV-44709: VIP advertisement does not work through Ipv6 BGP peer.

Issues Resolved in 18.1.3-1p1

- AV-43910: OCI: Avi Controller fails to discover all SE VMs which may result in virtual service creation or placement failures

What's New in 18.1.3

ADC

- [Support for Mellanox MCX4121A-ACAT ConnectX-4 Lx EN NIC,25GbE](#)
- [Support for custom rate limiter in DataScript](#)

DNS

- [DNS server and pool selection using DNS policy](#)
- [Infoblox DNS: Support to append "usable domain" as a suffix, if the host does not end with a usable domain](#)

Networking

- [Streaming mode for HTTP/2 uploads](#)
- [Support for Session Initiation Protocol \(SIP\)](#)

Private Cloud

- [Linux server cloud: Support for RHEL 7.5](#)
- [OpenShift: Handle port mapping on the service port for virtual service](#)

Public Cloud

- [Azure: Automated multi Azure LB support for OpenShift](#)
- Azure: Allow custom tags for resources

Security

- [Support for hiding Personally Identifiable Information \(PII\) in logs](#)

Issues Resolved in 18.1.3

- AV-28815: Shared memory usage is not considered for SE health status
- AV-32521: Traceroute within the namespace does not show the hops
- AV-34396: UI: GSLB service cannot map to SNI child virtual service

- AV-35713: Change in cipher list in Controller access controls does not change the accepted cipher list in SSH
- AV-40376: Standby Service Engine is also advertising the VIP route to BGP in legacy active/standby mode with SNAT
- AV-40988: Bare metal: Status of all hosts show "start in progress" when only one of the host is non-responsive
- AV-41232: BGP peering not established on Service Engine restart when there are a lot of VRFs
- AV-41289: Service Engine failure on updating `dp_hb_frequency` value in Service Engine properties
- AV-41710: Azure: Pools configured with Azure scale sets may go down when there is an Azure API error
- AV-41842: STARTTLS fails on sending an email if the server does not support TLS
- AV-41861: Memory leak during RSS scaleout
- AV-41877: OpenShift: Ingress creation fails with "Max VS per IP reached" message
- AV-41880: Avi Controller is not registered in APIC as a Logical Device
- AV-42079: OCI IPAM support for legacy HA
- AV-42759: Azure: Latency increases after some time

Issues Resolved in 18.1.2 Patch Releases

Issues Resolved in 18.1.2-1p1

- AV-41006: DHCP is not working for IPv6 addresses
- AV-41767: OpenStack: Cluster VIP is not programmed correctly when using Contrail
- AV-41880: Avi Controller is not registered in APIC as a Logical Device

What's New in 18.1.2

ADC

- [HTTP caching can now be controlled by specifying URIs, in addition to MIME types](#)
- [Support for sharing pool groups across virtual services](#)
- [IPv6 protocol support both at the client and server side for bare metal, VMware, OpenStack and Linux server cloud environments](#)
- [Support for HTTP/2 for client-side connections](#)
- [Minimum number of Service Engines for VS placement can be dynamically reduced](#)
- [Support for L4 SSL virtual service to handle both SSL and non-SSL ports on both client and server side](#)
- [Customized response pages can be created for errors generated in TCP, SSL/TLS, HTTP, WAF, and DataScript processing](#)
- [Support to set a server timeout on a per-request basis](#)
- [Strings in string groups can now be edited](#)
- [A DataScript can read an HTTP response body](#)

DNS

- [DNS Quad-A \(AAAA\) and DNS64 support](#)
- [DNS Policy enhancement: Support to return specific A, AAAA, CNAME or NS record\(s\) for a matching FQDN](#)

Security

- Client logs: [Support for removing or masking Personally Identifiable Information \(PII\) in request-headers and response-headers fields](#)
- [WAF: Enhanced metrics to estimate WAF SE resource sizing](#)
- `sslkeyandcertificate/generatecertificate, sslkeyandcertificate/[uuid]/importcertificate, sslkeyandcertificate/importkeyandcertificate` endpoints deprecated

Analytics

- Client log streaming now supports TCP as well as optional syslog header
- [For higher performance and scale, client logs can be streamed directly from SE memory without initially writing to disk](#)

Operations

- [Controller syslog events can be sent in JSON-formatted messages for consumption by a wider range of tools](#)

System

- HA: [Automatic SE failover, even when Controller is down or unreachable](#)

Public Cloud

- [AWS: Alert user when an AWS Auto Scaling group referenced by an Avi pool is deleted](#)
- [AWS: Route 53 AWS account can be different from Controller AWS account](#)
- [AWS: Each tenant may create and manage its cloud in AWS](#)
- [Azure: Each tenant may create and manage its cloud in Azure](#)
- [GCP: Support user-owned IP ranges for VIPs](#)
- [GCP: Support for GCP autoscaling groups](#)

Cisco ACI

- [Multiple virtual services can share the same service graph in ACI](#)
- [Avi Service Graph implementation changed from 2 node to 1 node](#)

Private Cloud

- [VMware: Support for VMware vSphere 6.7](#)

Networking

- [Cisco CSP2100: VLAN trunking support](#)
- [Multihop BGP peer support for iBGP](#)

Automation

- Golang package for Avi SDK
- Native Terraform provider support for managing Avi configuration

Issues Resolved in 18.1.2

- AV-23166: OpenShift: Logs consume more disk than the configured limit causing disk to fill up, leading to SE failure
- AV-23359: After changing one of the nodes in cluster, virtual service analytics page does not render data due to inconsistent metrics mapping between SE and the Controller
- AV-31453: Changes to /etc/docker/daemon.json are not preserved across Avi Vantage upgrade
- AV-34379: DataScript in non-admin tenant cannot reference shared IP groups in admin tenant
- AV-34396: UI: global service cannot map to SNI child virtual service
- AV-35683: VLAN interface IP removed after changing the bond interface members
- AV-35689: API session ID does not expire
- AV-36958: Avi Service Engine responds to ARP for non-VIP addresses in OpenShift
- AV-38322: Portal stuck at initialization with leader in inactive state
- AV-38353: UDP traceroute to VIP does not work if df bit is set in the packet

- AV-38533: OpenShift: Service Engines may fail after deploying route with an invalid SSL certificate
- AV-39027: OpenStack with Contrail plugin: All traffic for VIP subnet is being routed to Service Engine
- AV-39760: Controller UI shows wrong metrics for End to End UDP Log Analytics
- AV-40377: Cisco CSP2100: Secondary Service Engine may not process flows if multiple bond interfaces are in use
- AV-40421: UI: While creating a Service Engine VLAN interface, UI drop-down menu shows only 8 VRFs

Known Issues in 18.1.2

- AV-40988 : Linux Server Cloud: Status of all hosts show "start in progress" when only one of the host is non-responsive

Performing the Upgrade

Upgrade prerequisite: The current version of Avi Controller must be 17.2 or later.

[Upgrade Instructions](#)

[Protocol Ports Used by Avi Vantage for Management Communication](#)

Supported Platforms

Refer to [System Requirements: Ecosystem](#)

Product Documentation

For more information, please see the following documents, also available within this [knowledge base](#).

Installation Guides

- [Avi Vantage Installation Guides](#)

Open Source Package Information

- Copyright Information [<https://s3.amazonaws.com/aviopensource/18.1.3/copyrights.pdf>]
- Packages used [<https://s3.amazonaws.com/aviopensource/18.1.3/packages.pdf>]

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