



VMware Aria Operations for Networks

On-premises, SaaS, and federated cloud SaaS offerings

At a glance

VMware Aria Operations for Networks delivers intelligent operations for software-defined networking and security. VMware Aria Operations for Networks consists of both SaaS and on-premises solutions. These offerings help customers build an optimized, highly available and secure network infrastructure across multi-cloud environments. They accelerate application discovery, migration, network segmentation planning and deployment; enable visibility across virtual and physical networks; and provide operational views to manage and scale VMware NSX, VMware Cloud on AWS, VMware SD-WAN, VMware NSX Advanced Load Balancer™, VMware HCX®, and many other deployments.

Accelerate application security and networking across private, public and hybrid clouds

Today's tools for monitoring the dataflow for optimum east-west traffic can be challenging and time-consuming because they involve manual processes. Niche and legacy network management tools do not provide converged visibility across virtual and physical networks to optimize performance. Customers need a simple, easy-to-use, end-to-end management tool to troubleshoot and get best practices compliance for VMware NSX®, VMware SD-WAN™, and VMware Cloud™ deployments.

VMware Aria Operations™ for Networks (formerly VMware vRealize® Network Insight™) integrates with many vendors and can help provide end-to-end visibility with both physical and virtual infrastructure with a comprehensive flow assessment. This provides visibility for modeling security and firewall rules, and viewing that network segmentation is working by monitoring compliance postures over time. In addition, VMware Aria Operations for Networks can help you improve performance and availability with converged visibility across physical and virtual networks. You can also simplify NSX operations management with an intuitive UI and natural language search to quickly pinpoint issues and troubleshoot, as well as get best practices deployment and compliance recommendations.

VMware Aria Operations for Networks Assurance and Verification enables formal verification by using a unified mathematical model of how the network functions. This improves network performance with more proactive monitoring capabilities in comparison to typical reactive network monitoring. Business intent checks enable better network planning and troubleshooting, which result in the assurance of better uptime and network resiliency.

VMware Aria Operations for Networks Universal is available as an on-premises deployment or as a federated cloud software-as-a-service (SaaS) offering.

Key benefits

- Accelerate network segmentation planning and deployment with VMware Aria Operations for Networks working together with NSX Intelligence™
- Audit changes to the security posture and ensure compliance
- Troubleshoot quickly across virtual and physical network and security infrastructure
- Manage and scale NSX deployments with confidence
- Manage network and security across private clouds, public clouds and SD-WAN consistently
- Reduce business risk by mapping application dependencies during application migration planning
- Accelerate performance of your business-critical applications by optimizing your network and eliminating bottlenecks
- Operationalize Kubernetes and troubleshoot connectivity issues between containerized workloads

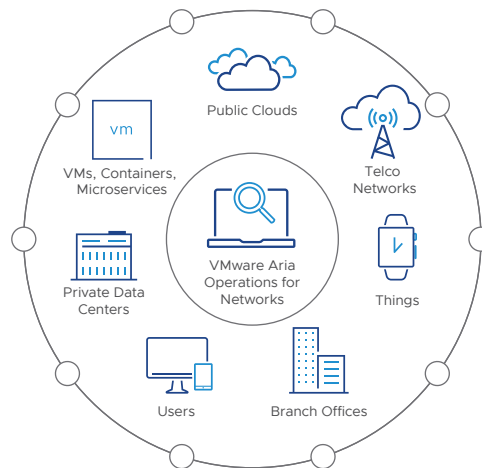


Figure 1: VMware Aria Operations for Networks provides security planning and network visibility across the virtual cloud network.

Use cases

Networking

- Gain unified visibility across hybrid and multi-cloud environments
- Gain visibility for NSX, VMware SD-WAN, VMware HCX, Kubernetes, VMware Cloud on AWS, Amazon Web Services (AWS), Microsoft Azure, Azure VMware Solution, Google Cloud VMware Engine, Oracle Cloud VMware Solution, and VMware Cloud on Dell
- Gain visibility between overlay and underlay networks
- Enable end-to-end troubleshooting, traffic and path analytics
- Enable network assurance and verification
- Utilize guided network troubleshooting for intuitive root-cause analysis

Applications

- Enable application discovery and plan application migrations
- Measure application latency and performance
- Reduce mean time to repair (MTTR) for application connectivity issues
- Optimize application performance by eliminating network bottlenecks
- Analyze traffic and apps across hybrid cloud and multi-cloud

Security

- Plan app security and cloud migration
- Plan security; recommend firewall policies and network segmentation apps
- Troubleshoot security for hybrid applications and designated crown jewels across virtual machines (VMs), containers and clouds
- Map dependencies to reduce risk during app migration

Feature matrix by edition/version of VMware Aria Operations for Networks					
Capability	Advanced	Enterprise	SaaS version	For VMware SD-WAN	Universal
Federated network analytics					•
Interchangeable deployment on-premises or as SaaS					•
Pinboards	•	•	•	•	•
Federal Information Processing Standards (FIPS 140-2) validated cryptographic modules	•	•	•	•	•
Deployment backup and restore	•	•			•
Virtual flows (VDS IPFIX, V2V, V2P)	•	•	•		•
NSX Firewall network segmentation planning and operations (NSX IPFIX)	•	•	•		•
Basic application discovery (names, tags, RegEx)	•	•	•		•
NSX Day 2 ops (topology view, health checklist, edge load balance dashboard)	•	•	•		•
Visibility across third-party switches, routers, firewalls and load balancers	•	•	•		•
Check Point firewall	•	•	•		•
Public APIs	•	•	•		•
DNS mapping (import bind file)	•	•	•		•
VMware Aria Operations integration (on premises)	•	•			•
Application dashboard (alerts, intent failures, security issues, and guided network troubleshooting incidents)		•	•		•
VMware Aria Operations integration (SaaS)			•		•
Guided network troubleshooting		•	•		•
Live agent chat support			•		•
SaaS locations in U.S. West (Oregon), Canada Central (Montreal), Europe (London), (Frankfurt), Asia Pacific (Mumbai), Asia Pacific (Tokyo), and Asia Pacific (Sydney)			•		•
Crown jewels – Security and mission-critical VM and IP address analysis		•	•		•

Feature matrix by edition/version of VMware Aria Operations for Networks					
Capability	Advanced	Enterprise	SaaS version	For VMware SD-WAN	Universal
Network device auto discovery		•	•		•
Flow/threshold analytics and reporting		•	•		•
Flow IPv6 traffic from VMware vCenter® and NSX	•	•	•		•
NSX Advanced Load Balancer		•	•		•
NSX PCI compliance dashboard		•	•		•
NSX Intelligence integration		•	•		•
NSX federation visibility		•	•		•
VMware HCX troubleshooting and monitoring, including the VM-to-VM path		•	•		•
ServiceNow integration for app discovery		•	•		•
Security planning and visibility for VMware Cloud on AWS		•	•		•
Amazon Web Services		•	•		•
VMware Cloud on AWS		•	•		•
VMware Cloud on AWS Direct Connect		•	•		•
Microsoft Azure		•	•		•
Azure VMware Solution		•	•		•
Google Cloud VMware Engine		•	•		•
Oracle Cloud VMware Solution		•	•		•
VMware Cloud on Dell		•	•		•
DNS resolution with Infoblox		•	•		•
Physical flows (NetFlow v7 and v9, and sFlow)		•	•		•
Visibility for VMware Tanzu® Kubernetes Grid™ Integrated Edition, Kubernetes, and Red Hat OpenShift		•	•		•
Visibility of NSX Container Plug-in for OpenShift 4.x (Kubernetes cluster)		•	•		•

Feature matrix by edition/version of VMware Aria Operations for Networks					
Capability	Advanced	Enterprise	SaaS version	For VMware SD-WAN	Universal
Network and security analytics (top talkers, anomalies, outlier detection, etc.)		•	•		•
Configurable and extended retention period for data		•	•		•
Cisco Application Centric Infrastructure (ACI) with network assurance and verification support		•	•		•
Cisco BGP-EVPN underlay/overlay visibility		•	•		•
Arista BGP-EVPN underlay/overlay visibility		•	•		•
Juniper Ethernet VPN VM-to-VM path		•	•		•
Flow-based application discovery (powered by machine learning)		•	•		•
Assurance and verification		•	•		•
VMware HCX L2 extension in VMware Cloud		•	•		•
Streaming databus		•	•		•
VMware Cloud Partner Navigator™ for service providers and managed service providers (MSPs)			•	• (Cloud SaaS)	•
VMware SD-WAN visibility and analytics				•	
VMware SD-WAN application discovery and performance optimization				•	
VMware SD-WAN application and network health monitoring				•	
VMware SD-WAN connectivity, path visibility and hotspot detection				•	
VMware SD-WAN troubleshooting and out-of-the-box analytics				•	
VMware SD-WAN capacity planning				•	
VMware SD-WAN assessment				•	
VMware SD-WAN time series historic insights				•	
VMware SD-WAN configuration change management				•	

Learn more

For more feature packaging details, refer to the [VMware Aria Operations for Networks documentation](#).

VMware Aria Operations for Networks on-premises term licenses are also available in one- and three-year subscription terms with VMware NSX. Read the [VMware Product Guide](#) for more information.

Licensing for Remote Office Branch Office is available by VMs instead of CPU. Native public cloud licensing is available with vCPU.

VMware Aria Operations for Networks Universal is available in one-, three-, and five-year subscriptions. For more information, read the [VMware Cloud Services Guide](#).

The solution is available in VMware Aria Universal Suite™ (formerly vRealize Cloud Universal™) Enterprise Plus as one-, three-, and five-year subscriptions.

Visibility for VDI is available by CCU.

For information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit vmware.com/products or search online for an authorized reseller in your area at partnerlocator.vmware.com.

For detailed product specifications and system requirements, refer to the [VMware Aria Operations for Networks documentation](#).

VMware Aria Operations for Networks for VMware SD-WAN

- End-to-end visibility of VMware SD-WAN connectivity to the cloud and the data center
- Flow and traffic analysis of applications and business services used by edge sites
- Site-/branch-level visibility and troubleshooting of connectivity to apps and the data center
- Licensing for the VMware Aria Operations for Networks add-on for VMware SD-WAN is based on edges, VMware SD-WAN bandwidth, and term length
- When used to monitor the data center, VMware Aria Operations for Networks for VMware SD-WAN requires either VMware Aria Operations for Networks Universal, the SaaS version of VMware Aria Operations for Networks, or VMware Aria Operations for Networks Enterprise

VMware Aria Operations for Networks Assurance and Verification

For each license purchased, the software will allow monitoring of one network device. The term network device refers to routers, switches, firewalls and load balancers that are not processor or CPU based.

Support and professional services

VMware offers global support and subscription (SnS) services to all VMware Aria Operations for Networks customers. For customers requiring additional services, VMware also offers professional services engagements on best practices and getting started with your deployment, both directly and through an extensive network of certified professionals: vmware.com/services.