

VMware Aria Automation

Multi-cloud infrastructure automation platform

Key benefits

Deliver a secure, self-service multi-cloud environment that enables:

- Faster time to market – Offload manual tasks with advanced workflows and agile templating. Enjoy immediate value with guided setup, resource discovery and onboarding, resource organization, provisioning, and Day 2 actions.
- Private/hybrid/public clouds – Enable governance and resource lifecycle management across VMware Cloud and native public cloud environments.
- Compliant software states – Easily define optimized, compliant software states and enforce them across your entire environment—virtualized, hybrid or public cloud—with powerful, intuitive configuration automation.
- Security and control – Establish consistent policies across multi-cloud environments and strengthen infrastructure with native compliance management and vulnerability remediation.
- Accelerated innovation – Expedite the adoption of new, cloud native technologies with a future-ready platform built on IaC and DevOps principles.

What is VMware Aria Automation?

VMware Aria Automation™ is an infrastructure automation platform that delivers a secure, self-service multi-cloud environment with governance and resource lifecycle management across VMware Cloud™ and native public cloud environments. It leverages a service-driven cloud computing interface, a policy-controlled self-service catalog, infrastructure as code (IaC), infrastructure pipelining, and the innovative power of Salt. VMware Aria Automation enables cloud operations teams to maintain frictionless governance and control while empowering developers with a high level of agility and flexibility. For security automation, it delivers consistent policies across multi-cloud environments and strengthens infrastructure with native compliance management and vulnerability remediation.

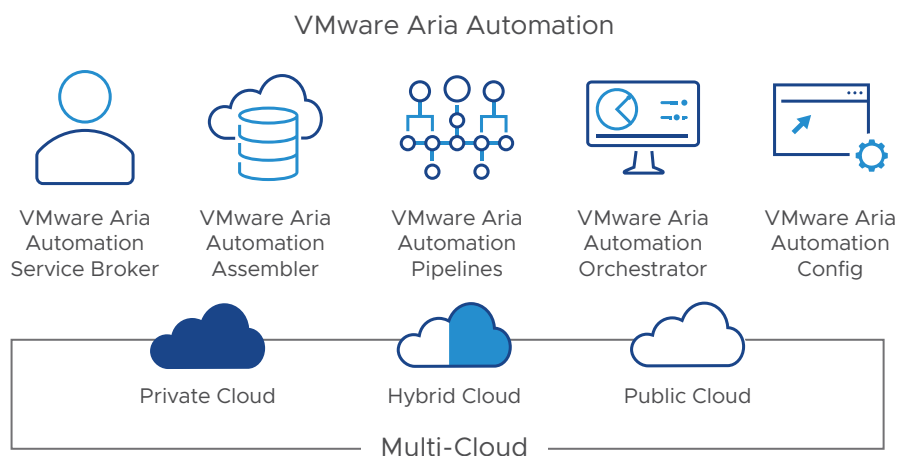


Figure 1: VMware Aria Automation overview.

Multi-cloud infrastructure automation

Quickly get started with secure, self-service multi-cloud

VMware Aria Automation is designed to provide immediate value for deep, native integrations across the VMware stack with VMware Aria Operations™ and self-service cloud setup for VMware Cloud Foundation™ and VMware Cloud. Utilize the Cloud Resource Center to manage all discovered, onboarded and provisioned deployments across compute, storage, networking and security. Extend management beyond VMware Cloud environments: Discover and onboard workloads; organize cloud resources; provision with templates; enable

Customer use cases

- Self-service multi-cloud – Deliver consistent self-service consumption and delivery of infrastructure across VMware Cloud and native public cloud environments.
- DevOps for infrastructure – Enable a powerful IaC platform with support for infrastructure pipelining and iterative development.
- Kubernetes automation – Automate Kubernetes cluster and namespace management and support for vSphere with Tanzu. Deliver rules created by Tanzu Mission Control and lifecycle management through the self-service catalog.
- Security operations – Harness event-driven automation to deliver full-service, closed-loop IT system compliance enforcement and vulnerability remediation.

extensible actions, Day 2 actions, policies, and a service catalog; and apply them to native public clouds, including Amazon Web Services, Microsoft Azure, and Google Cloud Platform.

Self-service provisioning with consistent compliance, policy and control

End users can request IT services through a common, self-service catalog that aggregates services, templates and images from multiple endpoints. With fine-grained policy management, admins can apply predefined and custom roles, policies and approval flows to projects and organizations to provide the desired level of access for all internal users. Templated cloud configuration and policy definitions can be used to create compliant, policy-enforced cloud environments in a centralized location. This provides organizations with holistic visibility of their policies and any violations within their cloud environments, and related applications and resources. For identity management, VMware Aria Automation provides integration with VMware Workspace ONE® Access™ and Microsoft Active Directory.

Infrastructure automation across multi-cloud environments

To optimize infrastructure workload deployments, the VMware Aria Automation Templates™ designer allows users to model business-critical IT services by using a visual canvas with a drag-and-drop interface. Templates can also be defined through IaC using the YAML format. Cloud-agnostic templates can be deployed quickly and effortlessly to any endpoints based on predefined policies. Enhanced multi-cloud support allows users to embed native public cloud constructs, Kubernetes clusters and namespaces, Terraform configuration files, and custom resources into templates that can be deployed to any public cloud endpoint. A new plug-in-based framework enables faster availability and increased native public cloud resource coverage for new services added by providers as they become available. New native public cloud resources can be used alongside classic resources to create VMware Aria Automation Templates.

Infrastructure as code and Kubernetes automation

VMware Aria Automation is a powerful DevOps platform that supports IaC, infrastructure pipelining, and seamless integrations with native state management via VMware Aria Automation Config™ and third-party tools, such as Ansible, Puppet and Terraform. Discover the native SaltStack configuration automation via modules for VMware Cloud, VMware vSphere®, and VMware NSX®. Leverage VMware Aria Automation Config and VMware Carbon Black Cloud™ integration to combine intelligent vulnerability insight from VMware Carbon Black Workload™ with the powerful IT automation from VMware Aria Automation for Secure Hosts. Automate release pipeline management with VMware Aria Automation Pipelines™, while increased coverage for infrastructure and app pipelines is offered through the easy-to-use, self-service catalog. Enhanced visibility and analytics provide an end-to-end view of all pipelines and their status.

For more information or to purchase VMware products

Call 877-4-VMWARE (outside North America, +1-650-427-5000).

Visit the [VMware Aria Automation product page](#).

VMware Aria Automation also provides Kubernetes infrastructure automation capabilities. The vSphere with VMware Tanzu® integration enables cloud admins to create Kubernetes environments based on vSphere. VMware Tanzu Mission Control™ integrations enable cloud admins to deliver rules created by Tanzu Mission Control and lifecycle management through the self-service catalog. It empowers DevOps teams to request vSphere with VMware Tanzu Kubernetes Grid™ clusters either via VMware Aria Automation Templates or the VMware Aria™ Automation Service Broker™ self-service catalog interface.

VMware Aria Automation components

VMware Aria Automation Service Broker

VMware Aria Automation Service Broker aggregates content from multiple resources and platforms, including VMware Aria Automation Assembler™, VMware Aria Automation Orchestrator™, and native public clouds, into a common catalog accessible via a graphical interface or APIs. It provides a self-service model with flexible, policy-based governance to regulate service and resource consumption. For VMware Aria Universal Suite™ customers, it enables federation of multiple local VMware Aria Automation instances through a SaaS catalog.

VMware Aria Automation Assembler

VMware Aria Automation Assembler is a multi-cloud provisioning service that provides a cloud API layer utilized by the templating engine. For virtualized data center infrastructure based on VMware Cloud Foundation, it offers the ability to create a private cloud. VMware Aria Automation Assembler also supports powerful custom extensibility frameworks, including the serverless function Action-Based Extensibility (ABX), VMware Aria Automation Orchestrator workflows, and event-broker subscriptions.

VMware Aria Automation Pipelines

VMware Aria Automation Pipelines automates the application and infrastructure delivery process with release pipeline management, including visibility and analytics into active pipelines and their status for troubleshooting. It allows DevOps teams to leverage existing tools and processes with out-of-the-box integrations.

VMware Aria Automation Orchestrator

VMware Aria Automation Orchestrator simplifies and automates complex data center infrastructure tasks, delivering consistent remediation of issues, extensibility and fast service delivery.

VMware Aria Automation Config

VMware Aria Automation Config, powered by the Salt open source automation engine, easily defines optimized, compliant software states and enforces them across your entire environment—virtualized, hybrid or public cloud—with powerful, intuitive configuration automation.