



VMware Aria Automation

Modern infrastructure automation platform

Key benefits

Consistent automation across clouds and data centers enables:

- Faster time to market – Offload manual tasks with advanced workflows and agile templating.
- Ease of use – Rapidly set up and manage multi-cloud environments throughout the lifecycle with an intuitive, self-service consumption experience.
- Security and control – Establish consistent policies across multi-cloud environments and strengthen infrastructure with native compliance management, flexible cloud guardrails, and vulnerability remediation.
- Accelerated innovation – Expedite the adoption of new, cloud native technologies with a future-ready platform built on infrastructure as code (IaC) and DevOps principles.

What is VMware Aria Automation?

VMware Aria Automation™ is a modern infrastructure automation platform with event-driven state management. It is designed to help organizations control and secure self-service multi-cloud with governance and DevOps-based infrastructure delivery. With VMware Aria Automation, internal IT operations, DevOps engineers, developers, and the lines of business get the environments and resources they need faster with a public cloud-like user experience, while IT maintains security, compliance and control. This means customers benefit from increased scalability, speed, flexibility and reliability as they reduce the complexity of their IT environment, streamline IT processes, and deliver a DevOps-ready automation platform.

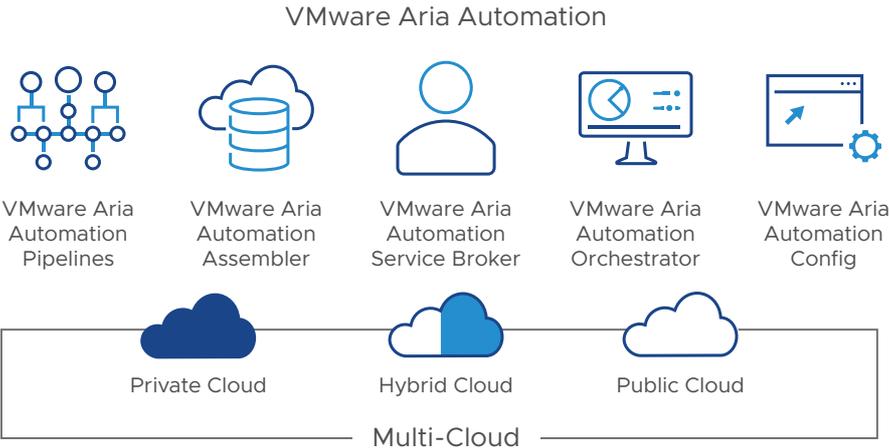


Figure 1: VMware Aria Automation overview.

Modern infrastructure automation platform

Easy, fast to set up and manage a secure multi-cloud environment

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 for the management of all discovered, onboarded and provisioned deployments across compute, storage, networking and security.

Customer use cases

- Self-service multi-cloud – Deliver consistent self-service consumption and delivery of infrastructure across VMware Cloud and public cloud environments.
- DevOps for infrastructure – Enable a powerful IaC platform with support for infrastructure pipelining and iterative development.
- Public cloud governance – Manage cost, performance, security, networking and configuration at scale for multi-cloud environments with an everything-as-code approach.
- Kubernetes automation – Automate Kubernetes cluster and namespace management and support for vSphere with Tanzu. Deliver rules created by Tanzu Mission Control and self-service lifecycle management through the self-service catalog.
- Network automation – Automate NSX to enable faster deployment and complete lifecycle automation of traditional and modern applications with networking and security services.
- Security operations – Harness event-driven automation to deliver full-service, closed-loop IT system compliance enforcement and vulnerability remediation.

Self-service provisioning with consistent compliance, policy and control

End users can ask for comprehensive IT services through a common, self-service product catalog that aggregates all services, templates and images from multiple clouds and platforms, including native public cloud services. With fine-grained policy management in VMware Aria Automation, 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 native integration with VMware Workspace ONE® Access™ and Microsoft Active Directory.

Self-service 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.

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

For more information or to purchase VMware products

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

Visit the product page:

vmware.com/products/aria-automation

VMware Aria Automation components

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. It also delivers a powerful multi-cloud governance and policy management framework with VMware Aria Guardrails™. Powered by the open source Idem Project, it automates the enforcement of rules for networking, security, cost, performance and configuration at scale for multi-cloud environments with an infrastructure and policy-as-code approach. 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 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 software-as-a-service (SaaS) catalog.

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 can easily define optimized, compliant software states and enforce them across your entire environment—virtualized, hybrid or public cloud—with powerful, intuitive configuration automation.

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 integration.