

VMware Aria Automation

Infrastructure automation powering VMware Cloud Foundation

Key benefits

Deliver a secure self-service multi-cloud 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 Clouds and native public clouds.

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 an infrastructure automation platform powering VMware Cloud Foundation. It delivers a self-service multi-cloud with governance and resource lifecycle management across VMware Clouds and public clouds. It leverages a service-driven cloud computing interface, policy controlled self-service catalog, Infrastructure as Code (IaC), and infrastructure pipelining. It enables Cloud Ops teams to maintain frictionless governance and control while empowering developers with a high level of agility and flexibility.

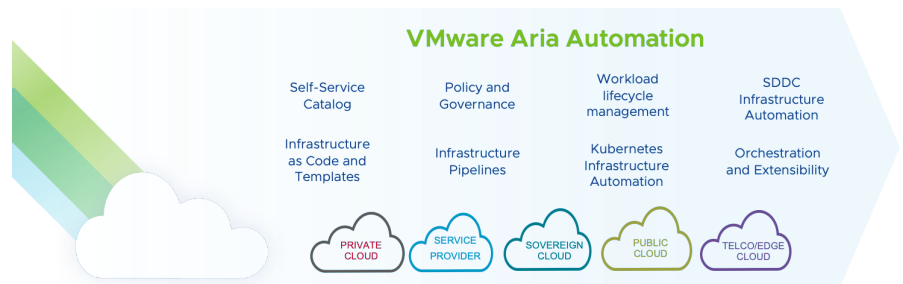


Figure 1: VMware Aria Automation overview.

Multi-cloud infrastructure automation

Quickly get started with a self-service multi-cloud

VMware Aria Automation is designed to provide immediate value for deep, native integrations across the VMware stack and self-service cloud setup for VMware Cloud Foundation™. Utilize the Cloud Resource Center for the management of all discovered, onboarded and provisioned deployments across compute, storage, networking, and security. Extend management beyond VMware Clouds - discover and onboard workloads, organize cloud resources, provision with templates, extensible actions, Day 2 actions, policies, and a service catalog, and apply them to public clouds, including AWS, Azure, and GCP.

Self-service provisioning with consistent 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

“With VMware Aria Automation we’re providing a public cloud-like user experience while maintaining security, compliance, and control. We are a small team, but VMware enables us to offer anything as a service (XaaS).”

Philippe Morel
Director of IT Operations and Infrastructure
EPFL

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 self-service lifecycle management through the self-service catalog.

configuration and policy definitions can be used to create 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 public cloud constructs, Kubernetes clusters and namespaces, , and custom resources into templates that can be deployed to any public cloud endpoint. A new plugin-based framework enables faster availability and increased native cloud resource coverage for new services added by providers as they become available. New native resources can be used alongside classic resources for public clouds as well as new VMware Cloud resources (e.g. Avi Load Balancer) 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 third-party tools, such as Salt, Ansible, and Puppet. 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. 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.

For more information or to purchase VMware products

Call 877-4-VMWARE (outside North America, +1-650-427-5000), visit vmware.com/products/aria-automation, or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the [VMware Aria Automation](#) documentation.

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 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.

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. It provides the ability to create a private cloud based on VMware Cloud Foundation. 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.