

VMware Aria Automation

VMware Cloud Foundation Automation

Key benefits

Deliver a self-service cloud that enables:

Quick time to value

- 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.

A true cloud experience

- Implement a self-service private cloud operating model with governance and resource lifecycle management across on-premises data centers or on any supported public cloud.

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 cloud infrastructure automation solution powering VMware Cloud Foundation. It delivers a self-service private cloud with governance and resource lifecycle management across on-premises data centers or on any supported public cloud. It leverages a service-driven cloud computing interface, a 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.

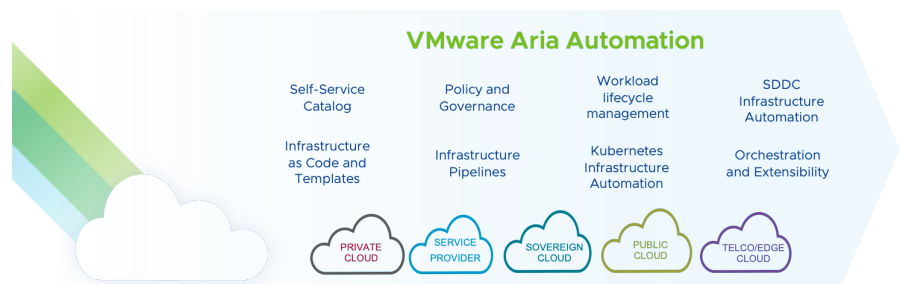


Figure 1: VMware Aria Automation overview.

Cloud infrastructure automation

Quickly get started with a self-service cloud

VMware Aria Automation is designed to provide immediate value for deep, native integrations across the VMware stack and guided cloud setup for VMware Cloud Foundation™. Jump start a self-service private cloud experience for your developers. Utilize the Cloud Resource Center for the management of all discovered, onboarded and provisioned deployments across compute, storage, networking, and security. Discover and onboard workloads, organize cloud resources, provision with templates, extensible actions, Day 2 actions, policies, and a service catalog.

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 configuration and policy definitions can be used to create policy-enforced

“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 private cloud

Deliver consistent self-service consumption and delivery of infrastructure across on-premises data centers or on any supported public cloud.

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.

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 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 cloud support allows users to embed public cloud constructs, Kubernetes clusters and namespaces, supervisor objects, and custom resources into templates that can be deployed to any supported public cloud endpoint. Native VMware resources (e.g. VMware Avi Load Balancer) can also be used to create VMware Aria Automation Templates. Private AI Automation Services, built in as an integrated component of VMware Cloud Foundation, allows users to automate private AI service setup and provisioning of GPU-enabled machines for ML workloads.

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. You can automate release pipeline management with VMware Aria Automation Pipelines™. 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 Tanzu® integration enables cloud admins to create Kubernetes environments based on vSphere. Cloud Consumption Interface, available on-premises for VMware Cloud Foundation customers through VMware Aria Automation, offers a simple and secure self-service consumption of all Kubernetes-based, desired state Infrastructure as a Service (IaaS) APIs that are available in vSphere. This allows enterprises to easily implement a DevOps experience and develop applications with more agility, flexibility, and modern techniques on vSphere while maintaining control of their infrastructure.

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.

How to purchase

VMware Aria Automation is available only as a component of VMware Cloud Foundation, VMware's private cloud solution that can be deployed on-premises in your data center or on any supported public cloud.

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 Assembler

VMware Aria Automation Assembler™ is a 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.

VMware Aria Automation features

VMware Cloud Foundation Automation	VMware vSphere Standard	VMware vSphere Foundation	VMware Cloud Foundation Edge	VMware Cloud Foundation
IaaS Consumption Surface	No	No	Yes	Yes
Policy-based Governance	No	No	Yes	Yes
Infrastructure as Code	No	No	Yes	Yes
Kubernetes Automation	No	No	Yes	Yes
Network Automation	No	No	Yes	Yes
Private AI Automation	No	No	Yes	Yes
SDDC Infrastructure Consumption	No	No	Yes	Yes
Workload Lifecycle Management	No	No	Yes	Yes
Orchestration & Extensibility	No	No	Yes	Yes