

# Cloud & IT Automation

## FastTrack for Nutanix Kubernetes Engine

### BENEFITS

- Accelerate your adoption of the Nutanix Kubernetes Engine by leveraging experienced consultants
- Understand how the Nutanix Kubernetes Engine helps you to optimize the use of Kubernetes in your environment
- Identify requirements and considerations to successfully deploy your applications as containers

### OVERVIEW

Nutanix Kubernetes Engine, formerly Karbon, is a turnkey offering that provides simplified provisioning and operations of Kubernetes clusters. Kubernetes is an open source container orchestration system for deploying and managing container-based applications.

The FastTrack for Nutanix Kubernetes Engine service provides you with a deployment of Nutanix Kubernetes Engine on an existing Nutanix Enterprise Cloud platform running the AHV hypervisor and Prism Central.

### SERVICE SCOPE

**This service includes a maximum of 10 participants and addresses:**

- Deliver a product overview session introducing Nutanix Kubernetes Engine
- Lead an architectural overview and review of Nutanix AOS, AHV, Prism, Nutanix Kubernetes Engine and Kubernetes components
- Review features and functions of Nutanix Kubernetes Engine, including deployment topologies, scaling out nodes, one-click upgrades and built-in add-ons
- Deploy Nutanix Kubernetes Engine cluster
- Deploy sample stateful application leveraging Nutanix Volumes as persistent volume storage provider
- Demonstrate Nutanix Container Storage Interface (CSI) capabilities such as provisioning, snapshots and volumes management
- Demonstrate how to scale worker nodes
- Demonstrate Nutanix Kubernetes Engine one-click upgrade
- Demonstrate how to perform basic troubleshooting and monitoring using Kibana and Prometheus add-ons
- Knowledge transfer including review/coaching session on the deployment

**Note:** Integration with external systems is beyond the scope of this FastTrack deployment.

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## PREREQUISITES

- Existing functional and properly sized Nutanix cluster running latest versions of AOS, AHV and Prism Central
- Fundamental understanding of Cloud Native, Docker and Kubernetes
- Necessary network infrastructure preparation (all service/pod CIDR ranges and IPAM-enabled virtual network)
- Appropriate Nutanix product license
- Internet connectivity, through proxy without authentication or direct connection
- Required accounts (user/service) and access permissions (i.e., LDAP)
- Knowledge of command line and file editors
- Previously deployed Files instance required if deploying Nutanix CSI for Files
- Previously deployed Objects instance required if deploying unstructured data use cases

- Showcase north / south communications through Ingress Controller and Kubernetes LoadBalancer service (optional)
- Implement basic network policies through Calico (optional)
- Implement Nutanix CSI for Files (optional, see prerequisites)
- Implement unstructured data use cases using Nutanix Objects (optional, see prerequisites)

**Note:** All 3rd-party integrations must be CNCF certified (<https://landscape.cncf.io>) and considered official (i.e., stable helm chart).

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## DELIVERABLES

- Knowledge transfer workshop
- Requirements gathering and design review workshop
- Deployment of Nutanix Kubernetes Engine as per Nutanix best practices
- Operational overview and handover
- Project documentation

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## TASK

	Duration
FastTrack for Nutanix Kubernetes Engine	typically 3 days

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## TERMS AND CONDITIONS

This document contains the entire scope of the service offer. Anything not explicitly included above is out of scope. This service offer is subject to the Nutanix Services General Terms and Conditions that can be viewed at <https://www.nutanix.com/support-services/consulting-services/terms-and-conditions>



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