# **Nutanix Kubernetes Platform Deployment**

Product Code: CNS-CLDN-A-SVC-DEP

# At-a-Glance

#### Stage: Deploy

The Nutanix Kubernetes Platform (NKP) Deployment service accelerates the deployment of NKP on a supported hardware platform for a supported on-premises or cloud infrastructure provider, including Nutanix Cloud Infrastructure (NCI) or Nutanix Cloud Clusters (NC2) clusters. This offer is ideal for the Deploy stage of the hybrid multicloud journey.

### **Related Services**

- Nutanix Kubernetes Design Workshop
- Infrastructure Deployment
- NC2 Deployment
- NUS Deployment

# Service Scope

Highly skilled consultants with solid domain expertise and rich experience begin by deploying NKP according to Nutanix recommended practices and the customer-provided Design document. After the deployment, the consultant creates a customized As-built document and updated Configuration Workbook to document the final configuration of the cluster(s)

### **Essential Edition**

For customers who want to deploy NKP on an on-premises NCI or NC2 cluster.

The Essential Edition includes the following activities:

- Review customer-provided Design and Configuration documentation
- Configure NCI for NKP, as needed
- Configure Nutanix Unified Storage (NUS) Files or Objects data services for NKP, as needed
- Setup/configure NKP deployment host for NKP cluster deployments
- Configure a single NKP image registry, as needed
- Configure virtual networking for NKP nodes
- Configure virtual storage for NKP nodes and containerized workloads
- Deploy a single NKP-supported Cluster API (CAPI) provisioned NKP cluster
- Configure NKP banner and licensing
- Deploy and configure a default supported container storage interface (CSI) based on the CAPI provisioning method used
- Configure NKP-based identity provider (IdP) authentication

### **Advanced Edition**

The Advanced Edition is for customers who want to deploy NKP on a supported cloud or on-premises infrastructure provider, including NKP Platform Applications.

The Advanced Edition includes the following activities:

- Everything in the Essential Edition
- Configure an NKP Compute node machine set
- Deploy NKP Platform Applications

### **Enterprise Edition**

The Enterprise Edition is for customers who want to deploy NKP on a supported cloud or on-premises infrastructure provider. It includes NKP Platform Applications and multicluster management capabilities.

The Enterprise Edition includes the following activities:

- Everything in the Advanced Edition
- Deploy a single additional NKP cluster as an attached workload cluster to the initially deployed NKP management cluster) using the same CAPI provisioning method as before
- Configure NKP Workspace and Project
- Configure NKP user interface (UI)-based role-based access control (RBAC)

### Limitations

• Selected CAPI provisioner must support the hardware platform

### **Essential Edition**

- For each quantity purchased, deployment is limited to a single on-premises NCI Cluster or NC2 Cluster in a single physical site
- Cluster API provisioning method limited to the Nutanix infrastructure
- Configure up to 2 storage classes for NUS Volumes
- Configure up to 2 storage classes for NUS Files (optional)
- Configure up to 2 volume snapshot storage classes for NUS Volumes
- Configure up to 1 NKP-supported IdP source for cluster authentication

### **Advanced Edition**

- For each quantity purchased, deployment is limited to a single provider type in a single physical site or cloud region
- Configure up to 1 default storage class based on the CAPI provider method used

Note: If CAPI is on Nutanix infrastructure, the limitations listed above for the Essential edition apply

• Configure up to 1 NKP compute node machine set

### **Enterprise Edition**

• For each quantity purchased, deployment is limited to a single provider type in a single physical site or cloud region

- Configure up to 1 default-provided storage class based on the CAPI provider method used Note: If CAPI is on Nutanix infrastructure, the limitations listed above for the Essential edition apply
- Configure up to 1 NKP Workspace
- Configure up to 2 NKP Projects
- Configure up to 3 NKP out-of-the-box RBAC personas

### **Supported Hypervisors**

Nutanix AHV

### **Supported On-premises Providers**

- Pre-provisioned
- Nutanix Cloud Infrastructure (NCI)
- VMware Cloud Director
- VMware vSphere

### **Supported Public Cloud Providers**

#### **Essential and Advanced Editions**

- Nutanix Cloud Customers (NC2)
- Amazon Web Services (AWS)
- Microsoft Azure
- Amazon Elastic Kubernetes Service (EKS)
- Microsoft Azure Kubernetes Services (AKS)
- Google Kubernetes Engine (GKE)

# **Prerequisites**

Fully supported and functional on-premises NCI cluster or NC2 cluster that meets all product requirements for NKP

Note: For information on the requirements for NCI Clusters, see Field Installation Overview in the Field Installation Guide on the Nutanix Support Portal.

Note: For information on NUS Files prerequisites, see Prerequisites in Nutanix Files User's Guide on the Nutanix Support Portal.

Fully supported and functional on-premises Prism Central instance

Note: For information on the requirements for configuring NCM Intelligent Operations, see Prism Central Installation or Upgrade in Prism Central Infrastructure Guide on the Nutanix Support Portal.

- Customer-provided Design document
- Completed Pre-Install Questionnaire

### **Required Product Licenses**

#### **Essential Edition**

• Nutanix Kubernetes Platform Starter or greater

#### Advanced Edition

• Nutanix Kubernetes Platform Pro or greater

#### **Enterprise Edition**

• Nutanix Kubernetes Platform Ultimate

# Deliverables

Project Kickoff

Project Schedule

Project Status Report(s)

Deployment

As-built Guide

Project Closeout

### Duration

Essential	Advanced	Enterprise
Typically 5 days	Typically 8 Days	Typically 12 days per provider tyer per site

# **Related Products**

- Nutanix Kubernetes Platform (NKP)
- Nutanix Cloud Infrastructure (NCI)
- Nutanix Cloud Clusters (NC2)
- Nutanix Unified Storage (NUS)

#### Terms and Conditions

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