# **AI/ML Deployment**

Product Code: CNS-INF-A-SVC-DEP-GPT

#### At-a-Glance

Phase: Deploy

The Nutanix Artificial Intelligence Machine Learning (AI/ML) Deployment accelerates the deployment of an AI/ML solution based on a Generative Pre-trained Transformer (GPT) workload on Nutanix Cloud Platform. A highly skilled consultant deploys the AI compute instance and associated prerequisites to use the NCI Cluster for inference. This offer is ideal for the Deploy stage of the Nutanix GPT-in-a-box Solution journey.

## Service Scope

Highly skilled consultants will enable NCM Self-Service in Prism Central, deploy a VM-based blueprint from the NCM Self-Service Marketplace, and configure it for the use case. After the deployment, the consultant will demonstrate the model validation with sample data. The consultant will then create a customized asbuilt document with all configuration details.

This service includes the following activities:

- Review the NCI cluster configuration that runs the AI workload
- Configure NCM Self-Service
- Enable NCM Self-Service in Prism Central
  - o Deploy one Ubuntu blueprint from the NCM Self-Service Marketplace as the Al compute instance, which includes the following:
    - Configure the compute instance with GPU passthrough
    - Install NVIDIA drivers to use the GPU
    - Configure the compute instance with shared storage (NUS Files or Objects) to store a large language model (LLM)
    - Install the LLM prerequisites, including the Nutanix LLM package and Python libraries
- Download model files from the LLM provider and generate the model archive
- Deploy PyTorch serving framework to run the LLM
- Validate LLM with sample data

## Limitations

- Excludes creation or updates to existing design documentation
- Excludes NCI cluster, NUS, and Prism Central deployment.

Note: NCI Cluster Deployment or Expansion Pro Edition is recommended

- For each quantity purchased, deployment is limited to 1 physical site
- NCM Self-Service configuration is limited to 1 blueprint deployment from the NCM Self-Service Marketplace



#### **Supported Hypervisors**

Nutanix AHV

## Prerequisites

 Fully supported and functional on-premises NCI cluster that meets all product requirements for GPTin-a-Box, NUS, Prism Central, NCM Self-Service, and a supported NVIDIA GPU

**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 the requirements for deploying NCM Self-Service, see Calm Prerequisites and Deployment in Calm Administration and Operations 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.

• Completed Pre-Install Questionnaire

#### **Required Product Licenses**

- Nutanix Cloud Infrastructure (NCI) Ultimate Edition
- Nutanix Unified Storage (NUS) Pro Edition

#### Deliverables

- Project Kickoff
- Project Schedule
- Project Status Report(s)

- Deployment
- As-built Guide
- Project Closeout

### Duration

Typically up to 4 days

### **Related Products**

- Nutanix Cloud Infrastructure (NCI)
- Nutanix Unified Storage (NUS)
- Nutanix Cloud Manager (NCM)

#### 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 <a href="https://www.nutanix.com/support-services/consulting-services/terms-and-conditions">https://www.nutanix.com/support-services/consulting-services/terms-and-conditions</a>