README

This package is designed to demonstrate the Continuous Deliver and Deployment of an application to a NonStop Server through the nsdevops\_cd\_quickstart. Before going through this README, refer section called "Continuous Deployment Setup" at page no 12 and "Continuous Deployment starter kit" at page no 26 from the document named “HPE Nonstop Server-Modern DevOps-Instructions-for-CI-CD-Setup”

# Package Details

## Sample application called Bankapp Application (bankapp-1.0.jar)

This is a java based simple server application. It takes a port number as input and waits on it listening for requests from the client application. Once a connection request is made by the client, the server connects to the client and exchanges messages.

The client application is also a java based application which is used to test Server application deployment. This application takes port number as input on which server application is listening.

This application needs to be available on artifact repository such as Sonatype Nexus and details about this needs to be updated in bankapp.yml playbook nexus.yml file and Jenkins pipeline. The directory “application” contains this executable jar file which contains both Server and Client applications.

Sources used to build this jar file are also provided in src directory for both Server and Client.

Note: This application is developed only for Continuous delivery and deployment. Do not use for other phases like check style and static analysis.

## Ansible Artifacts

Ansible artifacts used for this are available at folder “Ansible artifacts/BankApp”. Following are the details on each artifact used in this sample demo.

|  |  |
| --- | --- |
| **Name of the artifact** | **Description** |
| Sample playbook called bankapp.yml | Ansible playbook contains the set of tasks which will be executed for each user like Dev, QA and Production. This tasks includes downloading an application, delivering an application, creation of a pathway environment on a NonStop Server and deploying an application in this environment. Playbook uses configuration YML files and calls pdmi Ansible role provided by NSMF1.1 for Pathmon, Pathway and Serverclass actions. |
| Configuration YML files | Configuration YML interface used by developer are available at directory called dev. Configuration YML interface used by QA are available at directory called qa. Configuration YML interface used by production are available at directory called production. Please update the parameter values in these files as appropriate. |
| Inventory files | Since Ansible works for multiple managed nodes or hosts in your infrastructure at a same time, using a list or a group of lists of hosts is known as inventory file. By default it uses /etc/Ansible/hosts file. Inventory file used by Developer, QA and Production users are available at inventory directory. You need to make appropriate changes in these files as per your NonStop node. Please update host name for NonStop Server and NonStop user name as appropriate. |
| vars | This directory contains parameters used by bankapp.yml. Make the necessary changes as per your need. |
| nexus.yml | This is an Ansible vault file. Ansible Vault can encrypt any structured data file used by Ansible. This file includes security parameters and their values used by bankapp.yml to access nexus repository. It has username, password and url to the nexus repository. For the usage of vault file, follow below steps:   1. Create this file by executing the following ansible command - ansible-vault create nexus.yml Note - While creating a vault file, it would prompt for a new password as vault is password protected file. 2. Enter the following parameters in a vault file, edit values given in angular brackets as per your requirement and save the file.   username: <user name>  password: <password>  repository\_url: "https://<ip:port>/repository/maven-releases/"   1. Copy this file at “Ansible artifacts/BankApp” folder. 2. To edit this file use the following command   ansible-vault edit nexus.yml  For more details on this feature, please refer at this <https://docs.ansible.com/ansible/2.9/user_guide/vault.html> |

# References

## Refer the following sections from the document named "HPE Nonstop Server-Modern DevOps-Instructions-for-CI-CD-Setup"

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| **Topic** | **Section and Page Number** |
| Setup and installation | "Requisite Hardware and Software" at page no 12 "Installation on NonStop Server (Managed Node)" at page no 12  “Installation on Linux Server” (Controller Node) at page no 13  “Pre-requisites software” at page no 26 |
| Usage of the Starter Kit | "Using the Starter Kit" at page no 26 |
| Working with Jenkins Pipelines | "Pipelines in Jenkins" at page no 10 |
| Jenkins Job Setup and Pipeline for Application Release and Deployment Pipeline | "Jenkins Job Setup and Pipeline Script" at page no 27 |