–

Step-by-step walkthrough for Microsoft Azure Integration with Jenkins

**Jenkins Advance**

PREPARED BY:

PREPARED FOR:

**Version:** 1.0  
**Department:** Architect Department  
**Delivery:** End of Month

Table of Contents

[**1.** Lab Summary 2](#_Toc210068835)

[2. Stage 1: Configure Jenkins with Azure CLI Plugin 3](#_Toc210068836)

[3. Stage 2: Configure Security & Credentials 4](#_Toc210068837)

[4. Stage 3: Create FreeStyle Project (Create VM) 7](#_Toc210068838)

[5. Stage 4: Create FreeStyle Project (Delete VM) 12](#_Toc210068839)

[6. Define Jenkins Pipeline 16](#_Toc210068840)

# Lab Summary

**This lab walks you through configuring Jenkins with the Azure CLI plugin, securing credentials, creating a Freestyle or Pipeline job, and defining a working pipeline to provision a VM in Azure.**

# Stage 1: Configure Jenkins with Azure CLI Plugin

**Steps**

1. Go to **Manage Jenkins → Manage Plugins → Available**.
2. Search for **Azure CLI** and install the plugin.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

1. Restart Jenkins (if required).
2. Verify plugin installation:  
   Go to **Manage Jenkins → Configure System** and ensure **Azure CLI** options are available.

A screenshot of a computer

AI-generated content may be incorrect.

# Stage 2: Configure Security & Credentials

1. Add credentials in Jenkins:
   * Go to **Manage Jenkins → Credentials → Global credentials (unrestricted)** → **Add Credentials**.

A screenshot of a computer

AI-generated content may be incorrect.

* + Select **Microsoft Azure Service Principal**.

A screenshot of a computer

AI-generated content may be incorrect.

* + Fill in Subscription ID, Client ID, Client Secret, Tenant ID.

client\_id         = "76d3056e-1da2-4b5c-b055-1d674064bdd2"

client\_secret     = "oOO8Q~nKxDJIqwcSmGk3V97hRKd-sf-ARpIepcJi"

subscription\_id   = "d5f5198e-d19e-4e8b-83d1-f8c080acf8fe" #

tenant\_id         = "df28c44c-39ef-499f-bdf4-3fc2656e6d00"

A screenshot of a computer

AI-generated content may be incorrect.

* + Save and note the **Credential ID** (example: c12c1bc8-fef0-4687-81fb-64bd14904c66).



# Stage 3: Create FreeStyle Project (Create VM)

* Go to Jenkins dashboard → **New Item** → Select **Freestyle project**.

A screenshot of a computer

AI-generated content may be incorrect.

* In the **Environment** Select **Secret Txt or Field**

A screenshot of a computer

AI-generated content may be incorrect.

* In the **Binding** Select **Microsoft Azure Service Principal**

A screenshot of a computer

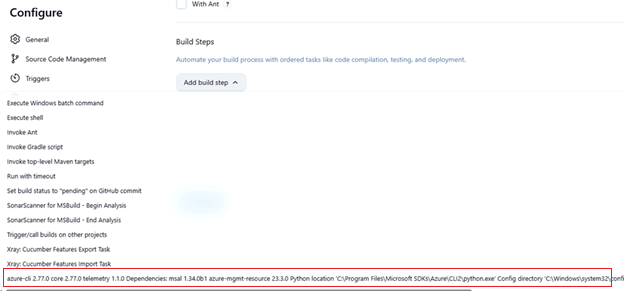
AI-generated content may be incorrect.

* It should be automatically show all variable

A screenshot of a computer

AI-generated content may be incorrect.

* Add Build Steps , select **azure-cli**



* Select **Service Principal**

A screenshot of a computer

AI-generated content may be incorrect.

* Type Below command

az vm create --resource-group "AZ-400" --name "myVM" --image "Win2016Datacenter" --admin-username "Demouser" --admin-password "Demouser@123" --location eastus

A screenshot of a computer

AI-generated content may be incorrect.

* Save the project and Run **Build Now**

A screenshot of a computer

AI-generated content may be incorrect.

* Console output should show successful

A close-up of a computer screen

AI-generated content may be incorrect.

* Check Azure Portal for VM

A screenshot of a chat

AI-generated content may be incorrect.

# Stage 4: Create FreeStyle Project (Delete VM)

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

az vm delete --resource-group "AZ-400" --name myVM –yes

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

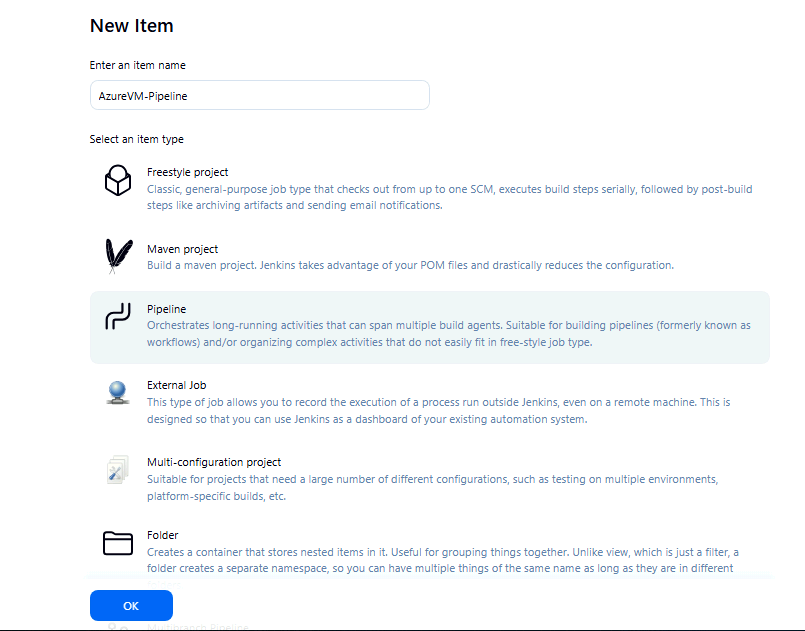
A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a chat

AI-generated content may be incorrect.

# Define Jenkins Pipeline



pipeline {

    agent any

    environment {

        RESOURCE\_GROUP = "AZ-400"

        VM\_NAME = "myVM"

        IMAGE = "Win2016Datacenter"

        ADMIN\_USERNAME = "Demouser"

        ADMIN\_PASSWORD = "Demouser@123"

        LOCATION = "eastus"

    }

    stages {

        stage('Login to Azure') {

            steps {

                azureCLI(

                    principalCredentialId: 'c12c1bc8-fef0-4687-81fb-64bd14904c66',

                    commands: [

                        [script: 'echo Logged in to Azure successfully'],

                        [script: 'az account show']

                    ]

                )

            }

        }

        stage('Create VM') {

            steps {

                azureCLI(

                    principalCredentialId: 'c12c1bc8-fef0-4687-81fb-64bd14904c66',

                    commands: [

                        [script: "echo Creating VM..."],

                        [script: "az vm create --resource-group ${RESOURCE\_GROUP} --name ${VM\_NAME} --image ${IMAGE} --admin-username ${ADMIN\_USERNAME} --admin-password ${ADMIN\_PASSWORD} --location ${LOCATION}"]

                    ]

                )

            }

        }

        stage('Show VM Info') {

            steps {

                azureCLI(

                    principalCredentialId: 'c12c1bc8-fef0-4687-81fb-64bd14904c66',

                    commands: [

                        [script: "az vm show --resource-group ${RESOURCE\_GROUP} --name ${VM\_NAME} -d -o table"]

                    ]

                )

            }

        }

    }

    post {

        success {

            echo 'Azure VM created successfully!'

        }

        failure {

            echo 'Failed to create Azure VM. Check logs.'

        }

    }

}

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.