**Azure DR Document**

**Submitted to**

**Recordent**

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# Architecture Diagram

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# Engineers Involved in the Implementation

|  |  |
| --- | --- |
| **Deployment Engineer name** | **Deployment Engineer Email ID** |
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# Implementation

## AZURE AUTOMATION

Azure Automation delivers a cloud-based automation and configuration service that supports consistent management across your Azure and non-Azure environments. It comprises process automation, configuration management, update management, shared capabilities, and heterogeneous features. Automation gives you complete control during deployment, operations, and decommissioning of workloads and resources.

## Azure DevOps

DevOps Code Pipeline is a fully managed continuous delivery service that helps you automate your release pipelines for fast and reliable application and infrastructure updates. Every time the code changes, code pipelines automate the build, test, and deploy phases of the release process based on the release model you define. It enables you to rapidly and reliably deliver features and updates.With DevOps Code Pipeline.

Setup Build Pipeline in Azure DevOps

1. Sign-in to your **Azure DevOps** organization and go to your project.
2. Go to Pipelines, and then select **new pipeline**.
3. Click on **Use the classic edit** and Select the Source **Azure Repo Git**, **Team Project**,**Repository**, **Default branch for manual and scheduled builds** and click on **Continue** and select empty job.
4. Click on (+) icon next to agent job to add task and select **Terraform Tool Installer** and configure the following.
5. Provide Display name.
6. Provide terraform version.
7. Click on (+) icon next to agent job to add another task and select **Command line**.
8. Provide Display name as terraform Scripts.
9. In script, please provide terraform commands.
10. **terraform Init.**
11. **terraform validate.**
12. **terraform plan.**
13. **terraform apply -auto-approve**.
14. Under Advance, Select the Working Directory file terraform scripts path.
15. Click on (+) icon next to agent job to add another task and select **Azure PowerShell**.
16. Provide Display name.
17. In Azure Subscription, Select the Azure Subscription (or) Create a new service Connection for Subscription which you’re using, and you can use service Connection name.
18. On Script type, Select the Script File path option.
19. Select PowerShell Script file in Script Path.
20. Under PowerShell version options, Select PowerShell Versions.
21. Save and Triger the Pipeline.

## AZURE DR SERVICES AUTOMATION

Xencia implemented a Terraform script to deploy Azure Services & PowerShell Script for restore App services and Its configurations on DR regions during the DR. Later Xencia configured an Azure DevOps Pipeline with the above script for one-click deployment of DR.

Automation scripts include following activities.

* Creating and Restoring Backendapps and Buyerapps App Services.
* Creating Static web apps service.
* Creating Azure Cache for Redis service.
* Creating Power BI Embedded service.
* To update any terraform variables names of services. We can go to the terraform.tfvars file and edit the variable names for terraform script.
* To update any variable names for PowerShell script. We can go to the Variables.ps1 file and edit the variable names for PowerShell script.

# Annexture

## DR Automations with DevOps

## AZURE REPO

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## Build Pipeline

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# Validation & Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SI.NO | VM Name | Deployment type | Deployment By Customer | Validation Engineer |
| 1 | DR Scripts and CICD PIPELINES | New Deployment | Yes | Govardhan |
| 2 |  |  |  |  |

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# Implementation Signoff

The activities identified above has been completed and accepted.

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| --- | --- |
| For **Xencia Technology Solutions Pvt Ltd**    Authorised Signatory  Mohammed Ikram  Senior Cloud Solution Architect | For Recordent Solutions Pvt Ltd.  Authorised Signatory |