**ENV\_CAI\_IaCSetupModernization\_STD\_001**

**DEPLOYMENT GUIDE**

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# Overview

This deployment guide provides information on how to execute pipeline for provisioning the resources of IaC Setup Modernization SKU.

Bicep file can be deployed using YAML pipeline

**Resources** that will get deployed while executing this SKU are-

1. Log Analytics workspace
2. Application Insights
3. Availability test
4. Virtual Network
5. Network Security Group
6. SQL server
7. SQL database
8. Logic App (2)
9. Storage Account
10. Key Vault
11. App Service Plan
12. App service (2)
13. App service slot
14. Private Endpoint (3)
15. Private DNS Zone
16. Network Interface (3)

**Dependency**-

* Virtual Network is dependent on Network Security Group.
* SQL Server is dependent on Virtual Network.
* Web App is dependent on Virtual Network, Application Insights, App Service Plan and Key Vault.
* Logic App is dependent on Web App.
* Application Insight is dependent on Log Analytics Workspace.
* Key Vault is dependent on Virtual Network and Storage Account.
* Private DNS is dependent on Virtual Network, Key Vault, Private DNS, Storage Account and SQL Server.
* Availability Test is dependent on Application Insight.

**Note**

**While adding auditing settings to sql server, we got to know that there is a limitation on this property when storage account is configured behind firewall. So, we are considering the storage account configuration over all networks.**

# Pre-requisites

YAML pipeline variables should have following values-

1. Deployment name
2. Environment
3. Location
4. Location short name
5. Prefix
6. SQL server SID
7. Subscription Id

Note-

**Service Principal needs to have Contributor level access on subscription level.**

# Deployment Steps

## YAML Pipeline

1. Need to configure a YAML Pipeline in Azure DevOps
2. Pipelines -> New Pipeline -> Select **Azure Repo Git YAML**
3. Select a repository where the code has been placed
4. Select **Existing Azure Pipelines YAML file**
5. Specify the branch and Path
6. Provide the value for all the variables

Please find below the details on variables passed for YAML Pipeline-

|  |  |  |
| --- | --- | --- |
| **Parameters** | **Type** | **Description** |
| environment | string- **Mandatory** | Environment to Deploy. Allowed values are {dev, test, prod}. Based on this Input, the environment resources configuration. |
| subscriptionid | string- **Mandatory** | Subscription ID Details |
| prefix | string- **Mandatory** | Resource Prefix, using which resource Names get formed. |
| sqlServerSId | string-  **Mandatory** | SID(Object Id) of sql server administrator |
| locationShortName | string- **Mandatory** | Short name of location. |
| location | string- **Mandatory** | Location of resource group |
| deploymentName | string- **Mandatory** | Name for the deployment |

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application

Description automatically generatedIn the pipeline use Service Connection for connecting to Azure-

**For creating Service Connection please do refer the below link-**

[Create an Azure AD app and service principal in the portal - Microsoft identity platform | Microsoft Docs](https://docs.microsoft.com/en-us/azure/active-directory/develop/howto-create-service-principal-portal)