Deployment steps:

1. **Infrastructure setup (Steps to be executed by Admin of the subscription):**

**Step 1: AKS Setup:**

* 1. Download and open the setup.sh script from deployment->AKSTemplate->script from DevOps repository.
  2. Update the variables in setup.sh script.
  3. Open a terminal from a managed machine (local machine and install to Azure CLI extension if not already present)

Or use a terminal from Azure ML of the training infrastructure setup, access this via VSCode on local machine (preferred)

* 1. Execute az login to authenticate to Azure CLI.
  2. Execute setup.sh command.

**Step 2: Go live infrastructure setup:**

* 1. Execute the go live pipeline from DevOps for below updates in existing RG:
     1. Install Function App for Go live Events.
     2. Install Storage account for Go live data flow.
     3. Configurations updates in Web App, AKS and Go Live Function App

**Step 3: User Role addition:**

|  |  |  |
| --- | --- | --- |
| **Source Resource or identity** | **Target resource** | **Role** |
| Go live Function App | ACR | Reader, ACRPull |
| Go live Function App | Go Live Storage account | Contributor, Storage blob data contributor |
| Go live Function App | Streaming data storage account | Storage blob data reader |
| Go live Function App | AML | Azure Data Scientist |
| Go live Function App | Key Vault Access Policies | Get, Set |
| AKS User managed identity created in Step 1 | ACR | Contributor, ACRPull |
| AKS User managed identity created in Step 1 | Go Live Storage account | Reader, Storage blob data contributor |
| AKS User managed identity created in Step 1 | AML | Azure Data Scientist |
| AKS User managed identity created in Step 1 | Key Vault Access Policies | Get, Set |

**Step 4: Add keys in key vault for notification:**

* 1. **functionAppMasterKey**: This the master key of GoliveFunctionApp

To obtain the key there are two ways:

* + 1. Access Function App from UI and get the key from “App Keys” option.
    2. Azure CLI: [Reference](https://learn.microsoft.com/en-us/cli/azure/functionapp/keys?view=azure-cli-latest)
  1. Secrets for credentials for Email notification:
     1. **mailpassword**
     2. **mailusername**
  2. Keys for API Manager

Format of secret name for api key: (API name in smallcase + key)

e.g.: solcastkey

* 1. Key for Go live Storage account.

Format of secret name for storage account key: (Account name in smallcase + key)

e.g.: streamingmasterdatakey

* 1. Key for streaming data Storage account

Format of secret name for storage account key: (Account name in smallcase + key)

e.g.: streamingmasterdatakey

**Step 5:** Update Connection strings in Go Live Function App for blob triggers

* 1. **Name of setting:** STREAMINGDATASTORAGE

Value: Connection string of streaming data storage account

* 1. **Name:** GOLIVEDATASTORAGE

Value: Connection string of go live storage account

*Note: Infrastructure setup is one time activity and has to be done by the admin or owner of the subscription.*

1. **Configurations selection:** Select the configurations for deployment from Go Live Screen on Workflow UI
2. **Release build for Function App and AKS**
   1. Update API Manager for any new API or any custom handling of input data from API.
   2. Check in the updated code in DevOps
   3. Update SP ([golive].[usp\_updatePredictionSchedule] ) for prediction schedule -> In the database
3. **Release code for the specific model:**
   1. Map the code from DevOps Repository
   2. Update default configurations in config file in utilities folder in the mapped repository, use the values for pod identity and identity name from Step #1
   3. Use the execution command generated from Go Live UI for deployment using the same terminal used to setup AKS in #1

**NOTE: All the settings need to be reviewed as per the security constraints from customer.**