**Minikube Local Setup for [Repository Name][DRAFTS]**

This document outlines the steps for setting up a local Kubernetes environment using Minikube to develop and test the application in the [Repository Name] repository.

**Prerequisites**

* **Local Machine:** Ensure your machine meets the minimum requirements for running Minikube (see <https://minikube.sigs.k8s.io/docs/start/>).
* **Visual Studio Professional:** Required for compiling the device v2 source code application.
* **Azure CLI (AZ CLI):** Used for interacting with Azure resources.
* **PowerShell:** Used for running scripts and interacting with Minikube.
* **Docker:** Container runtime environment for building and running containerized applications.
* **.NET Core SDK:** Required for building the .NET 6 application.

**Installation**

1. **Minikube:**
   * Install Minikube from your organization's app portal.
   * Verify the installation by running minikube version in your terminal.
2. **Dependencies:**
   * Install the remaining dependencies (Docker, .NET Core SDK, AZ CLI) using their respective installation methods. Refer to their official documentation for detailed instructions.
3. **PowerShell Script and Deployment Configuration:**
   * The document mentions a PowerShell script (azurites-deployment.yaml) for deployment.
   * The specific implementation details of this script and YAML file are not provided here.
   * Consult the provided script and YAML file for understanding their functionalities.

**Building and Deploying the Application**

1. **Compile Source Code:**
   * Open the [Repository Name] project in Visual Studio Professional.
   * Build the device v2 source code application to generate artifacts.
2. **Create Docker Image:**
   * Use the generated artifacts to create a Docker image.
   * The specific steps for building the image might involve navigating to the devicev2.functions\bin\release\net6.0 directory and running docker build ..
3. **Certificate Issues:**
   * The document mentions encountering certificate issues during the process.
   * The specific steps taken to resolve these issues (obtaining and adding certificates) are not detailed here.
   * Consult your team or refer to relevant documentation for handling certificate issues with Minikube.
4. **Configuration Changes:**
   * The document outlines several configuration changes made to various files (helm charts, deployment YAML) to address encountered issues:
     + Set localimage to true in the Helm chart.
     + Comment out the nodeSelector section in the deployment YAML.
     + Update the version to the latest in the chart.yaml file.
     + Enable ingress to true in the values.yaml file.
   * These changes likely address issues related to using local images, resource placement, Helm chart version compatibility, and enabling ingress controller for routing external traffic.

**Debugging Steps**

The document mentions checking the bin folder of the release and running docker build . from the devicev2.functions\bin\release\net6.0 directory. This suggests troubleshooting related to the Docker image building process.

**Note:**

* This document provides a high-level overview based on the information provided.
* Specific implementation details of scripts and configuration files are not included.
* Consult the provided script, YAML files, and your team for a more comprehensive understanding of the setup process.

For further assistance, refer to the official documentation for Minikube, Docker, Helm, and Azure CLI.