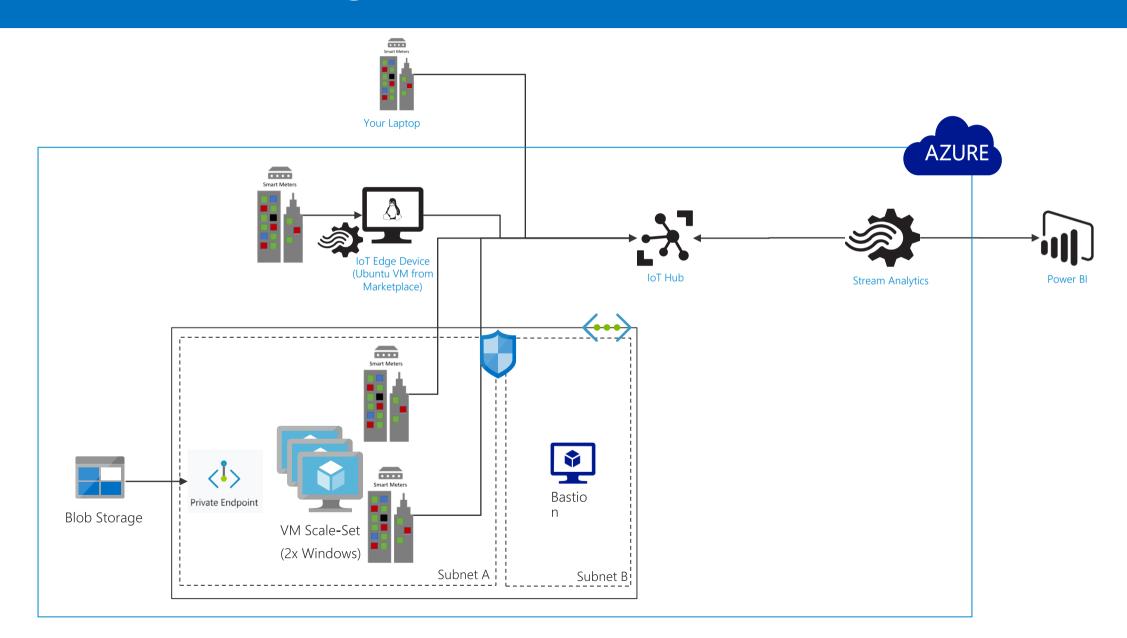
## Prerequisites

Install Guide	
Computer with Windows 10 and active Azure Subscription	
Task 1: Install Visual Studio	<u>Visual Studio 2019</u>
	Version 16.4+
Task 2: Install Visual Studio Code	Download Visual Studio Code
	Azure IoT Tools (vsciot-vscode.azure-iot-tools) by Microsoft
	C# for Visual Studio Code (ms-vscode.csharp) by Microsoft
Task 3: Install Azure CLI	Install Azure CLI 2.0
	Get started with Azure CLI 2.0
	az extension addname azure-cli-iot-ext
Task 4: Install Service Bus Explorer	https://github.com/paolosalvatori/ServiceBusExplorer/releases
Task 5: Install PowerBI Desktop	https://www.microsoft.com/en-us/p/power-bi-desktop/9ntxr16hnw1t?activetab=pivot:overviewtab
Task 5: Windows OpenSSH Client	Add-WindowsCapability -Online -Name OpenSSH.Client

## High Level Architecture



## Hands On Lab Options

## Advanced Labs - PaaS

Get the <u>unfinshed</u> code:

https://github.com/microsoft/MCW-Internet-of-Things/tree/master/Hands-on%20lab/lab-files/starter-project

Get the finished code:

https://github.com/dschenzer/internetofthingscloudworkshop/tree/master/Hands-on%20lab/lab-files/starter-project

- Create a Smart Meter Simulator, Connect to IoT Hub, Visualize Data
  - Link: <a href="https://github.com/dschenzer/internetofthingscloudworkshop/blob/master/Hands-on%20lab/HOL%20step-by-step%20-%20Internet%20of%20Things.md">https://github.com/dschenzer/internetofthingscloudworkshop/blob/master/Hands-on%20lab/HOL%20step-by-step%20-%20Internet%20of%20Things.md</a>
  - Exercise 1: IoT Hub provisioning
  - Exercise 2: Completing the Smart Meter Simulator
  - Exercise 3: Hot path data processing with Stream Analytics
- Deploy and IoT Edge Device with Modules

Link: <a href="https://microsoftlearning.github.io/AZ-220-Microsoft-Azure-IoT-Developer/Instructions/Labs/LAB">https://microsoftlearning.github.io/AZ-220-Microsoft-Azure-IoT-Developer/Instructions/Labs/LAB</a> AK 11-introduction-to-azure-iot-edge.html

Advanced with Transparent Gateway (certificate validation required):

https://microsoftlearning.github.io/AZ-220-Microsoft-Azure-IoT-Developer/Instructions/Labs/LAB\_AK\_12-setup-an-iot-edge-gateway.html

- 2 Create virtual machine scale set
  - https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/quick-create-portal#create-virtual-machine-scale-set Install applications in virtual machine

https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/tutorial-install-apps-powershell