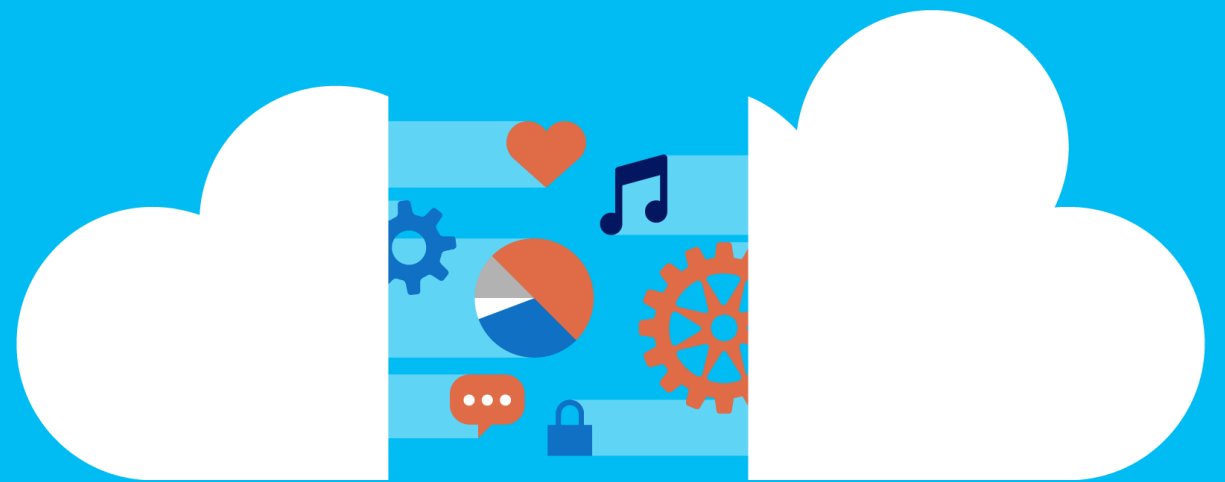


# Hands-on Lab

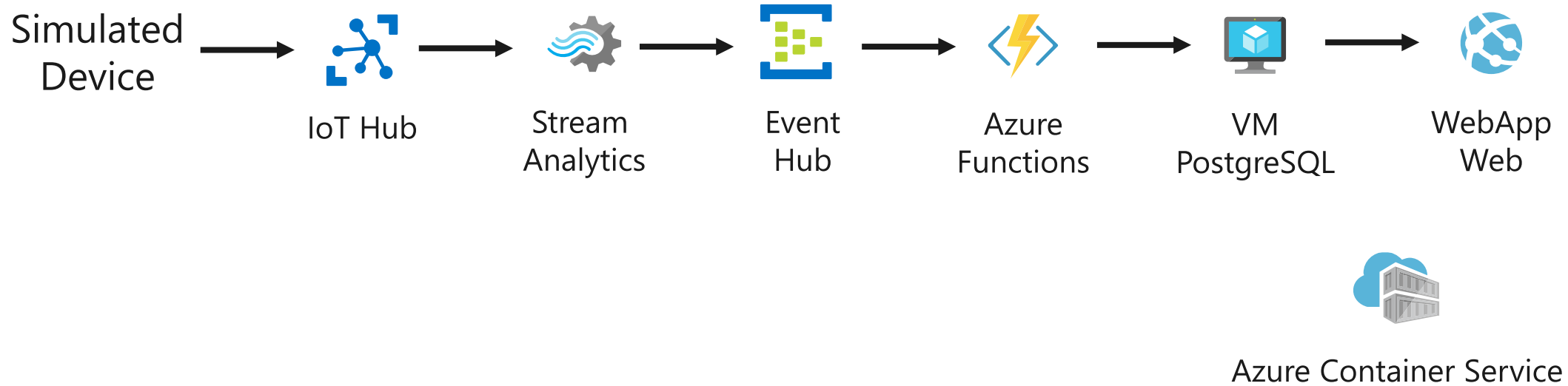


# Hands on list

1. Simulated Device send to Hub and display on Web
2. Develop IoT Edge module and call API
3. Extra: Train Model using Azure Machine Learning and build Devops Pipeline

# Experiment #1

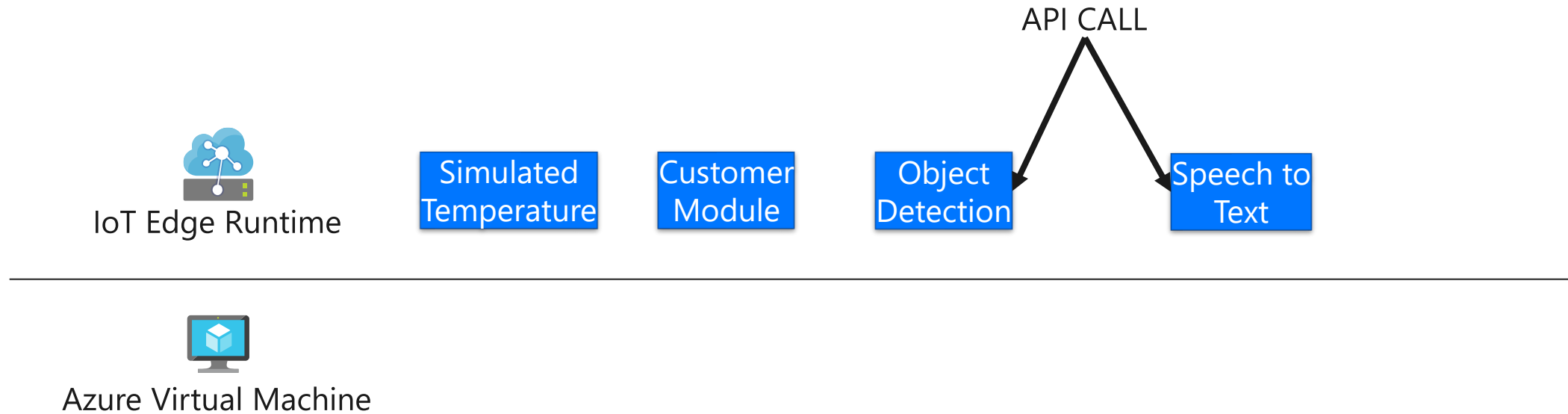
## Overall Architecture



# Reference

1. <https://docs.microsoft.com/zh-cn/azure/iot-hub/>
2. <https://docs.microsoft.com/zh-cn/azure/iot-hub/quickstart-send-telemetry-python>
3. <https://docs.microsoft.com/zh-cn/azure/iot-hub/tutorial-routing>
4. <https://docs.microsoft.com/zh-cn/azure/stream-analytics/stream-analytics-quick-create-portal>
5. <https://docs.microsoft.com/zh-cn/azure/stream-analytics/stream-analytics-stream-analytics-query-patterns>
6. <https://docs.microsoft.com/zh-cn/azure/event-hubs/event-hubs-create>
7. <https://docs.microsoft.com/zh-cn/azure/azure-functions/functions-create-first-function-vs-code>
8. <https://docs.microsoft.com/zh-cn/azure/azure-functions/functions-bindings-event-hubs>
9. <https://docs.microsoft.com/zh-cn/azure/app-service/tutorial-custom-container>

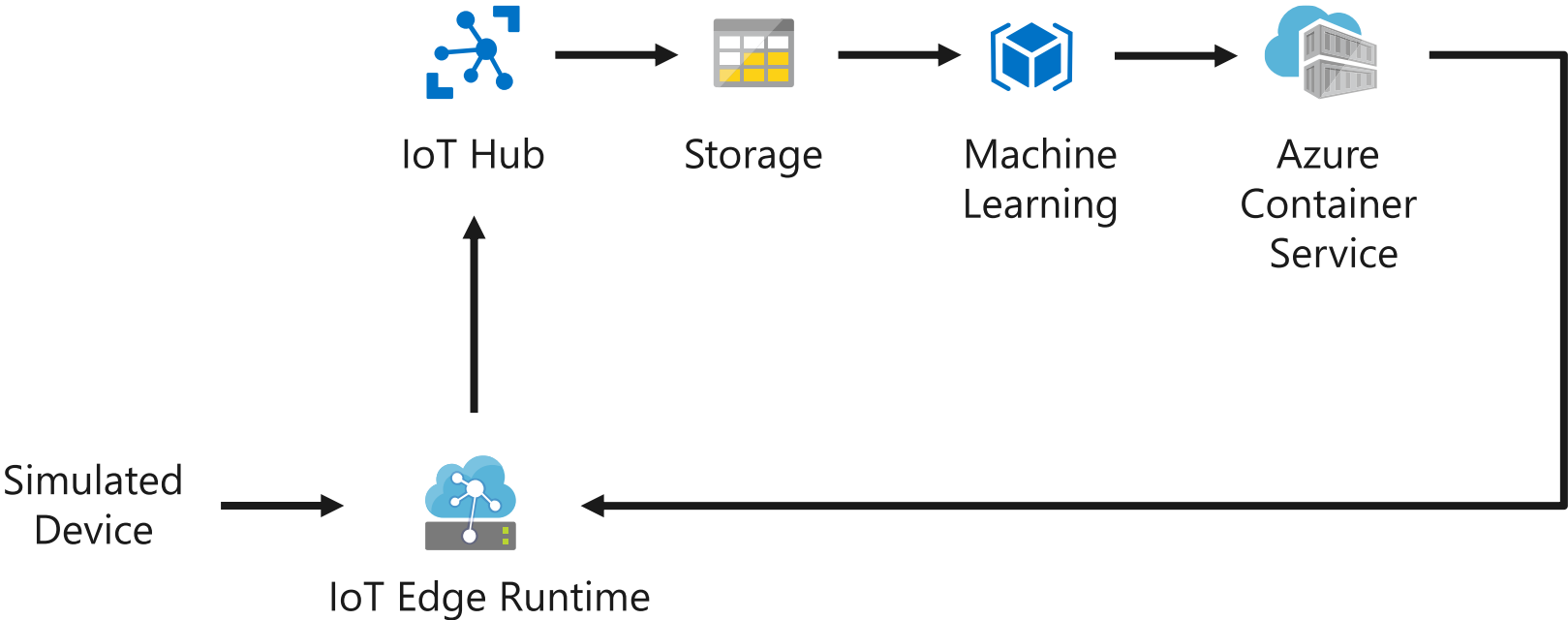
# Experiment #2



# Reference

1. <https://docs.microsoft.com/zh-cn/azure/iot-edge/how-to-install-iot-edge-linux>
2. <https://docs.microsoft.com/zh-cn/azure/cognitive-services/>
3. <https://docs.microsoft.com/zh-cn/azure/container-registry/>
4. <https://github.com/Azure/iotedge/blob/master/doc/BuiltInMetrics.md>
5. <https://labs.iotedge.dev/codelabs/monitor-iotedge/#0>
6. <https://grafana.com/grafana/plugins/grafana-azure-monitor-datasource>

# Experiment #3



# Reference

1. <https://docs.microsoft.com/zh-cn/azure/iot-edge/tutorial-machine-learning-edge-01-intro>