IoT Remote Monitoring – Jump Start Workshop
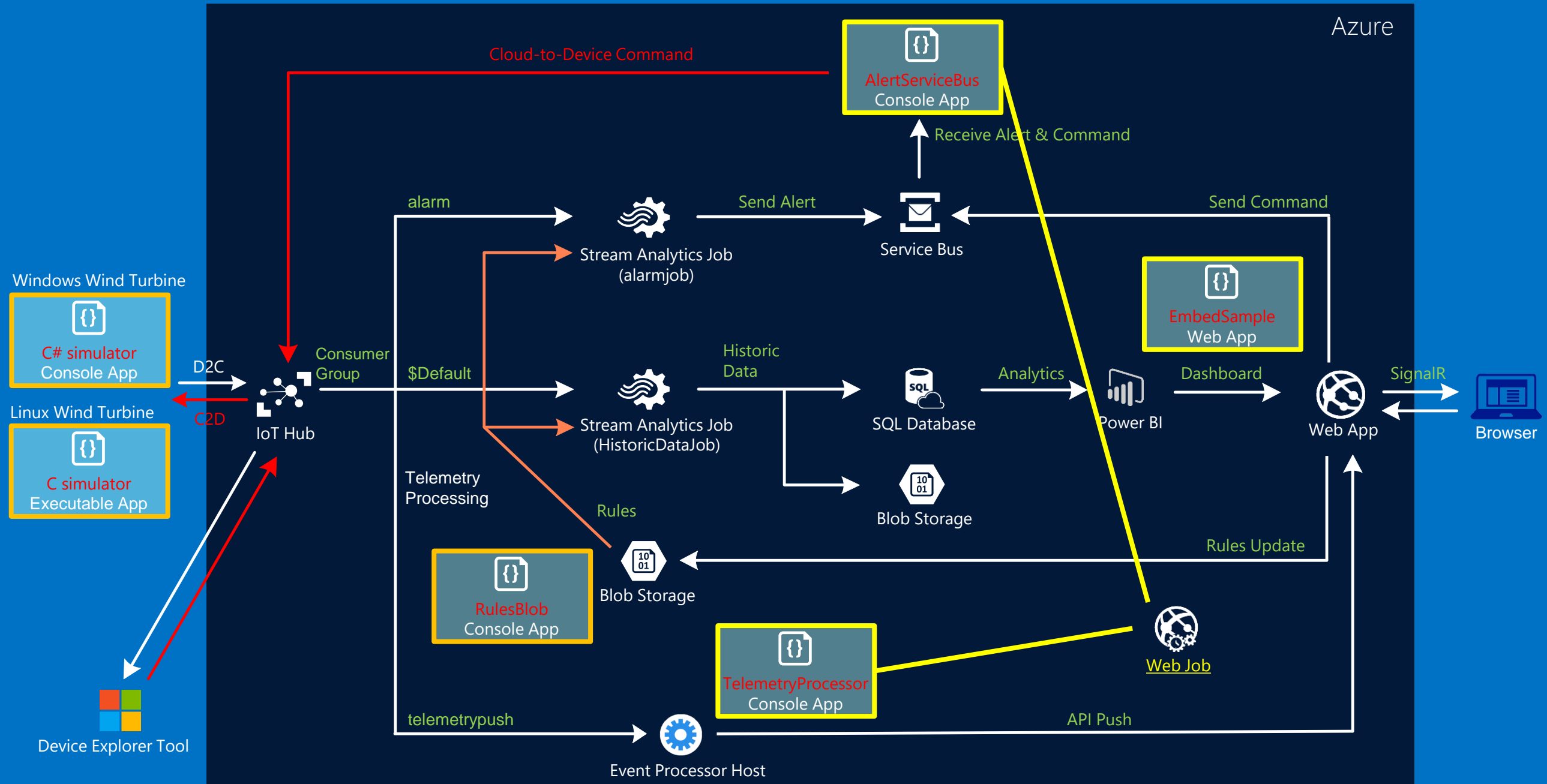
Recap

Microsoft

Architecture

Device

- C# simulator — Windows
- C simulator — Ubuntu VM

D2C → IoT Hub
C2D ← IoT Hub

Cloud-to-Device Command

Azure

Web Job

Control Panel

Data Processing → Stream Analytics

Alarm → Service Bus

Historic Data → SQL Database

Analytics → Power BI

Dashboard → Web App

Rules

Rules Update

Blob Storage

Event Processor Host

Telemetry Push (SignalR)

Device Explorer Tool
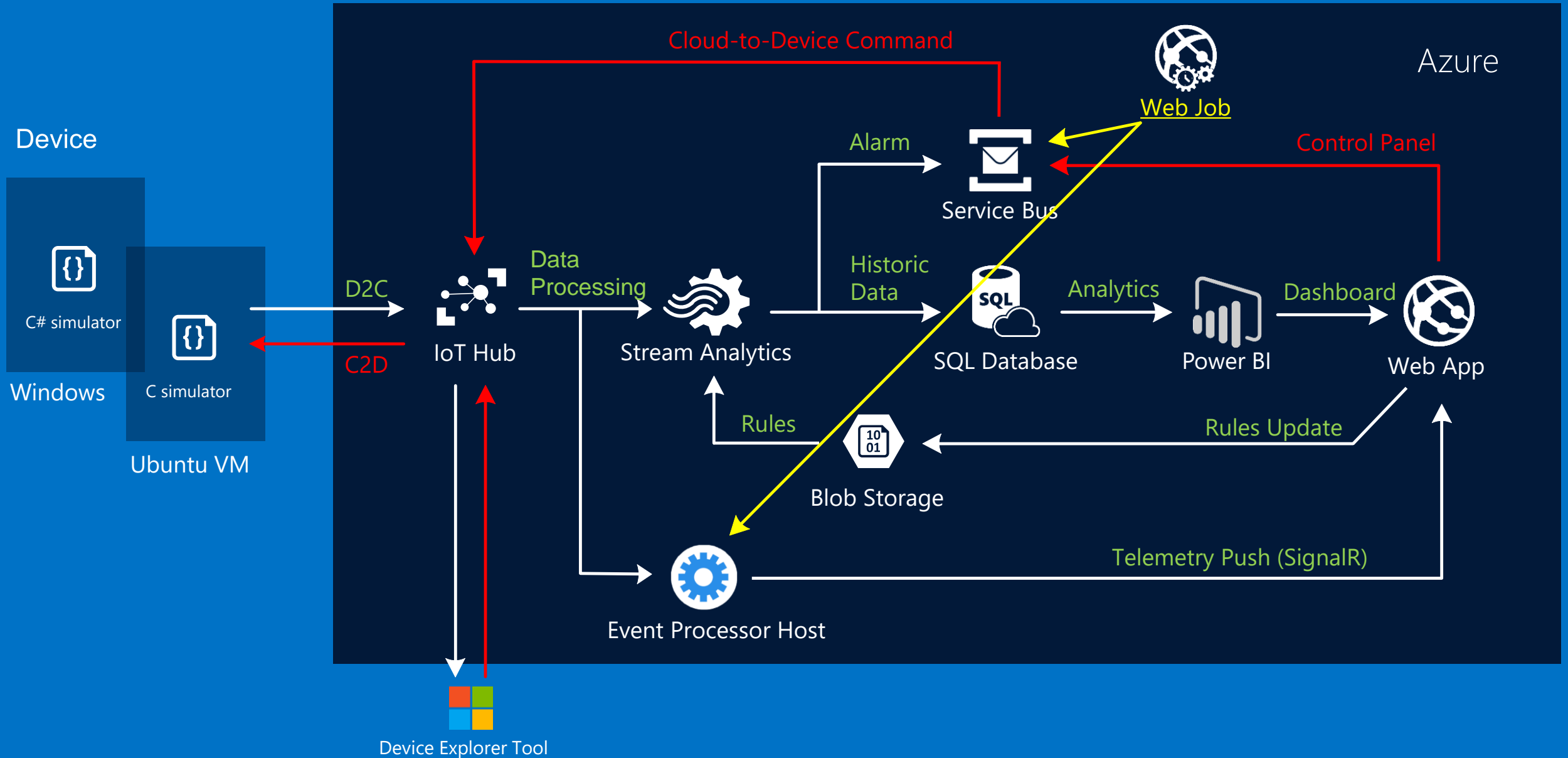
Developer Services

- Visual Studio Team Services
- Azure DevTest Labs*
- VS Application Insights*
- HockeyApp
- Developer Tools

Management & Security

- Azure Portal
- Scheduler
- Automation
- Log Analytics
- Key Vault
- Security Center*

Compute

- Virtual Machines
- Virtual Machine Scale Sets
- Cloud Services
- Batch
- RemoteApp
- Service Fabric
- Azure Container Service

Web & Mobile

- Web Apps
- Mobile Apps
- Logic Apps*
- API Apps
- API Management
- Notification Hubs
- Mobile Engagement
- Functions*

Data & Storage

- SQL Database
- DocumentDB
- Redis Cache
- Storage: Blobs, Tables, Queues, Files and Disks
- StorSimple
- Search
- SQL Data Warehouse*
- SQL Server Stretch Database*

Analytics

- Data Lake Analytics*
- Data Lake Store*
- HDInsight
- Machine Learning
- Stream Analytics
- Data Factory
- Data Catalog
- Power BI Embedded*

Internet of Things & Intelligence

- Azure IoT Suite
- Azure IoT Hub
- Event Hubs
- Cortana Intelligence Suite
- Cognitive Services*

Media & CDN

- Media Services
- Content Delivery Network

Identity & Access Management

- Azure Active Directory
- B2C*
- Domain Services*
- Multi-Factor Authentication

Hybrid Integration

- BizTalk Services
- Service Bus
- Backup
- Site Recovery

Networking

- Virtual Network
- ExpressRoute
- Traffic Manager
- Load Balancer
- Azure DNS*
- VPN Gateway
- Application Gateway

Pricing

https://azure.microsoft.com/zh-tw/pricing/calculator/

Online resources

- GitHub repo
  - Azure IoT SDKs https://github.com/Azure/azure-iot-sdks
  - Device Explorer https://github.com/Azure/azure-iot-sdk-csharp/tree/master/tools/DeviceExplorer
  - IoT Jumpstart Workshop https://github.com/walkerlin-msft/iot-workshop-remote-monitoring
- Azure IoT Hub
  - Device Twins https://docs.microsoft.com/zh-tw/azure/iot-hub/iot-hub-devguide-device-twins
  - Developer guide https://docs.microsoft.com/zh-tw/azure/iot-hub/iot-hub-devguide
  - Device-to-Cloud communications guidance https://docs.microsoft.com/zh-tw/azure/iot-hub/iot-hub-devguide-d2c-guidance
  - Cloud-to-Device communications guidance https://docs.microsoft.com/zh-tw/azure/iot-hub/iot-hub-devguide-c2d-guidance
- Azure
  - Azure Info Hub https://azureinfohub.azurewebsites.net/
  - Interactive Azure Platform Overview https://azureplatform.azurewebsites.net/en-us/

THANK YOU

AND

Fight Together!

Need your feedback!

https://aka.ms/aug2017-survey