Azure IoT Hub vs AWS IoT Core

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Brief Context

- Azure IoT Hub and AWS IoT Core are both IoT mediator devices that transfer messages between IoT edge devices and the Cloud platform(SaaS / PaaS)
- Both of these work in conjunction with a cloud service of your choosing and prices for both will be added to your monthly bill for the SaaS or PaaS
- Our purpose is to determine the best choice for our Multi Cloud to Edge project

AWS IOT Core Benefits

- High connectivity
- Many SDK's for various needs
- Scalable and scalability reduces costs
- AI and ML capabilities
- Multiple device qualification partners

AWS IOT Core Drawbacks

- Costly when purchased for small businesses or small requirements
- Complex tools
- Involves a learning curve to configure and setup
- Pricing based on multiple factors:
  - Connectivity (pay per connection)
  - Messaging protocol(HTTP/LoRaWAN/AWS Sidewalk)
  - Registry pricing
  - Rules (pay per operation, eg: AWS Lambda or arithmetic function)
  - Location Solving (pay per operation)

Azure IOT Hub Benefits

- Has an OS for IOT Management
- Multiple tools for edge and device support
- Feature rich: digital twins, OTA updates, etc
- Intuitive interface
- Flexible pricing for small setups and small businesses
- Reliable security system

Azure IOT Hub Drawbacks

- Very few free services for subscribers
- IoT system lacks comprehensive documentation
- Lacks powerful AI & ML capabilities
- Not suitable for analytics

Pricing difference

- AWS
  - Based on connectivity, message protocols, rules used and registry updates
  - More suited to complex tasks
  - Starts from 16,000 messages per dollar
- Azure
  - Based on per unit per month based on number of messages
  - More suited to simple setups
  - Starts from 25,000 messages per dollar for basic settings

Our Recommendation

- We recommend using Azure IoT Hub owing to:
    - Ease of setup
    - Payments based on the number of messages, regardless of protocol used
    - OS to easily manage IoT devices

THANK YOU