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Compare different cloud services that are available for IoT applications (Amazon, Google, Apache, Microsoft etc).

Which one would you use as a data storage in your project?

First, what is an IoT Cloud?

An IoT cloud is a massive network that supports IoT devices and applications. This includes the underlying infrastructure, servers and storage, needed for real-time operations and processing. An IoT cloud also includes the services and standards necessary for connecting, managing, and securing different IoT devices and applications.

(https://www.arm.com/glossary/iot-cloud)

1. AWS IoT Platform

Main features of the AWS IoT Platform are:

- Device management
- Secure gateway for devices
- Authentication and encryption
- Device shadow

Pros

- Good integration with IaaS offering.
- Price dropped over the last six years
- Open and flexible

Cons

- A big learning curve for AWS
- Three outages in the last 2 years
- Not secure for hosting critical enterprise applications

2. Google Cloud's IoT Platform

Google Cloud's IoT Platformprovides features, including:

- Provides huge storage
- Cuts cost for server maintenance
- Business through a fully protected, intelligent, and responsive IoT data
- Efficient and scalable
- Analyze big data

Pros

- Fastest input/output
- Lesser access time
- Provides integration with other Google services

Cons

- Most of the components are Google technologies
- Limited programming language choices

3. Microsoft Azure IoT Suite

Azure IoT Suite provides features like:

- Easy Device Registry.
- Rich Integration with [SAP](), [Salesforce](), Oracle, WebSphere, etc
- Dashboards and visualization
- Real-time streaming

Pros

- Offers third-party services
- Secure and scalable
- High availability

Cons

- Requires management
- Expensive
- No support for bugs

4. IBM Watson IoT Platform

Main features:

- Real-time data exchange
- Secure Communication
- Cognitive systems
- Recently added data sensor and weather data service

Pros

- Process untapped data
- Handle huge quantities of data
- Improve customer services

Cons

- Need a lot of maintenance.
- Takes time for Watson integration
- High switching cost.

(https://dzone.com/articles/10-cloud-platforms-for-internet-of-things-iot)

(https://www.devteam.space/blog/10-best-internet-of-things-iot-cloud-platforms/)

Personally, I would choose Microsoft's Azure because it is something that I used before also, they offer 100$ of services for free for students.