



Survey on Cloud Monitoring System Using IOT

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ABSTRACT

Cloud Based Iot Monitor System . In this project we will monitor aws resources like ec2 and see if they are exceeding their data as per our policy/alarm . if cloud resources are taking more data from our limit we can get alert by our Iot device . this can be improved a lot further by adding more new features We can create .py (python script) to check all the activity in cloud and based upon that we can send signals to Iot device using Api Also to alert our Iot device we can use AWS features like cloudwatch and Lambda . to detect event and notify . also we will see cloud architecture and how it works with Iot device Cloud computing is the next phase in the advancement of internet-based computing, and it allows information technology capabilities to be used as a service. As smart devices move beyond cloud infrastructure environments, the Internet of Things can improve efficiency, performance and throughput.

Introduction

In Cloud Services, sometimes our services exceed the expected level and there is a certain leak of Api keys and a leak of bucket data. Data security also has your concerns about cloud protection. Iot-based system can be used to get instant information. Using both Iot with cloud we can effectively monitor our cloud for any activity . We can also use cloud to monitor our Iot device . using dual side connection we can create Cloud-Iot architecture . in this project we plan to connect Iot and cloud via Api and using cloud resources. Cloud computing is the next step in the growth of internet-based computing. It enables the delivery of information and communication technology (ICT) services over a network. In the cloud infrastructure, Iot can benefit from increased efficiency, efficiency, and payload. Iot is very concerned with challenges from a dynamic and shared environment. Iot is a broad category that combines a variety of flexible and unconventional devices with limited storage, power supplies, and performance capabilities. These barriers create barriers and distractions in the development of Iot systems, and cover complex issues such as compatibility, efficiency, full functionality, and availability. One of the most promising ways to integrate with Iot is to overcome such limitations is cloud computing.

Survey Motivation and Methods

It is always possible that our resources exceed an expected measure when using cloud services . Apart from the leakage of API keys and bucket data , there is also a concern about data security in cloud services . Iot built systems can be used to get alerts in real time by using both Iot and cloud services .

- Iot is primarily focused on the challenges of securing a dynamic and shared environment. It is a broad category comprised of a variety of adaptable and unusual Devices with limited storage, power, and performance requirements and impedance to the development of Iot systems, and they cover complex issues such as compatibility, efficiency, full functionality, and availability. One of the most promising ways to integrate with Iot to overcome such limitations is to use cloud computing. Both Cloud and Iot can work together in syncing to perform automation tasks.
- The cloud consists of different types of platforms such as IaaS (Infrastructure as a Service), PaaS (Platform as a Service), FaaS (Function as a Service) and SaaS (Software as a Service).
- A cloud-based Iot platform is largely a PaaS platform. Combining Iot with cloud platforms results in an accessible, scalable, and resilient solution that can successfully handle large volumes of data and can store and process many Devices. The combination is not without its shortcomings, as there are limits to throughput and query efficiency

Survey Outcome

Iot and cloud together can create improved ecosystem in which both can enhance each other unique features connected wirelessly for effective

Communication. We can tackle security problems by making our system more robust and efficient in cloud. To detect activities on cloud system (aws) we can use aws Cloudwatch and lambda to detect and send signal to our Iot device by using Api. To control Iot with cloudData collected from Iot devices must be protected during transmission and processing in order to gain business insights and to take action based on them.

Conclusion

We conclude that Iot and cloud working together can create a unique ecosystem. And will lead to more evolving technologies. Cloud implementation and cloud integration is essential also we must take note of any challenges in configuring Iot and cloud both. Therefore, in the future we can communicate more easily and seamlessly between them.

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