

Rapyder supported in creating a fault resistant and scalable setup

Introduction

Arihant Electricals is an engineering and manufacturing business that is enthusiastic about technology. They specialise in the design, development, and production of goods and services for a variety of industries, including those related to the production of electronic goods, railways, the military, the aerospace industry, automation, process, renewable energy, electric vehicles, and electrical and machine panels.

Business Need

They required to handle the data that field-based IoT smart bulb sensors are gathering. The objective was to safely gather this data and process it for later use, such as anomaly warnings, recurring reports, and visualisation for various team members.

» **Industry**
IT industry

» **AWS Services**

IoT core, S3, Kinesis, IoT analytics, Lambda, SES, Quicksight, VPC, NAT Gateway, Clouwatch, Cloudtrail, Kinesis Firehose, KMS, IAM, DynamoDB



Implementation

- » AWS A/c Setup with Billing configurations & alarms.
- » Design & Setup IAM Rules, Group and Users. AWS Network & Infra Setup.
- » Setting up the AWS environments as mentioned in the architecture description.
- » Technology & Tools Stack that would be deployed to various AWS Services as per need.
- » Security in terms of firewall, access would be restricted as per the individual application or component owners.
- » Backup of critical data in S3 bucket, encryption of data will be done.
- » Setup and Monitoring of AWS Infra using AWS CloudWatch.

Reaping Rewards

- » Access to an AWS workspace gives you access to a solid implementation of a secure policy to handle IoT devices.
- » The implementation of OTA updates for the sensors can be controlled remotely.
- » Timely reports and anomaly alert systems let consumers better diagnose and fix their equipment.
- » Continuous data analysis and processing for device data was made possible via stream analytics.
- » By storing the data in a NoSQL database, the setup became more fault resistant and scalable.
- » Low latency communication between the server and the device.

- » The implementation of IAM and policies guarantees supple control over the devices and actions attainable through those devices.
- » Automated data retention policies that can be used to relocate idle data and reduce costs.

