



greenko

Real time IOT Data Analytics



greenko

ABOUT CLIENT

One of the India's leading Renewable Energy company, replacing fossil fuels with integrated decarbonized energy and grid assets enabling sustainable and affordable energy, with a net installed capacity of 7.2 GWdc across 15 States in India.



BUSINESS USE CASE //

- To Setup a cloud based, highly available and scalable platform for real time data ingestion and operational monitoring of renewable energy assets

SOLUTION OVERVIEW //

- We implemented a highly secure and scalable Data Pipe on AWS.
- Utilized AWS IOT Greengrass to collect data from IOT devices.
- Utilized AWS IOT core to ensure devices are connected, Amazon Kinesis data streams to collect the streaming IOT data, EMR for ETL jobs and Grafana for reporting and dashboarding.



SOLUTION ARCHITECTURE

Data Sources:

OEM-SCADA connected to edge gateway device Kepware.

Databases:

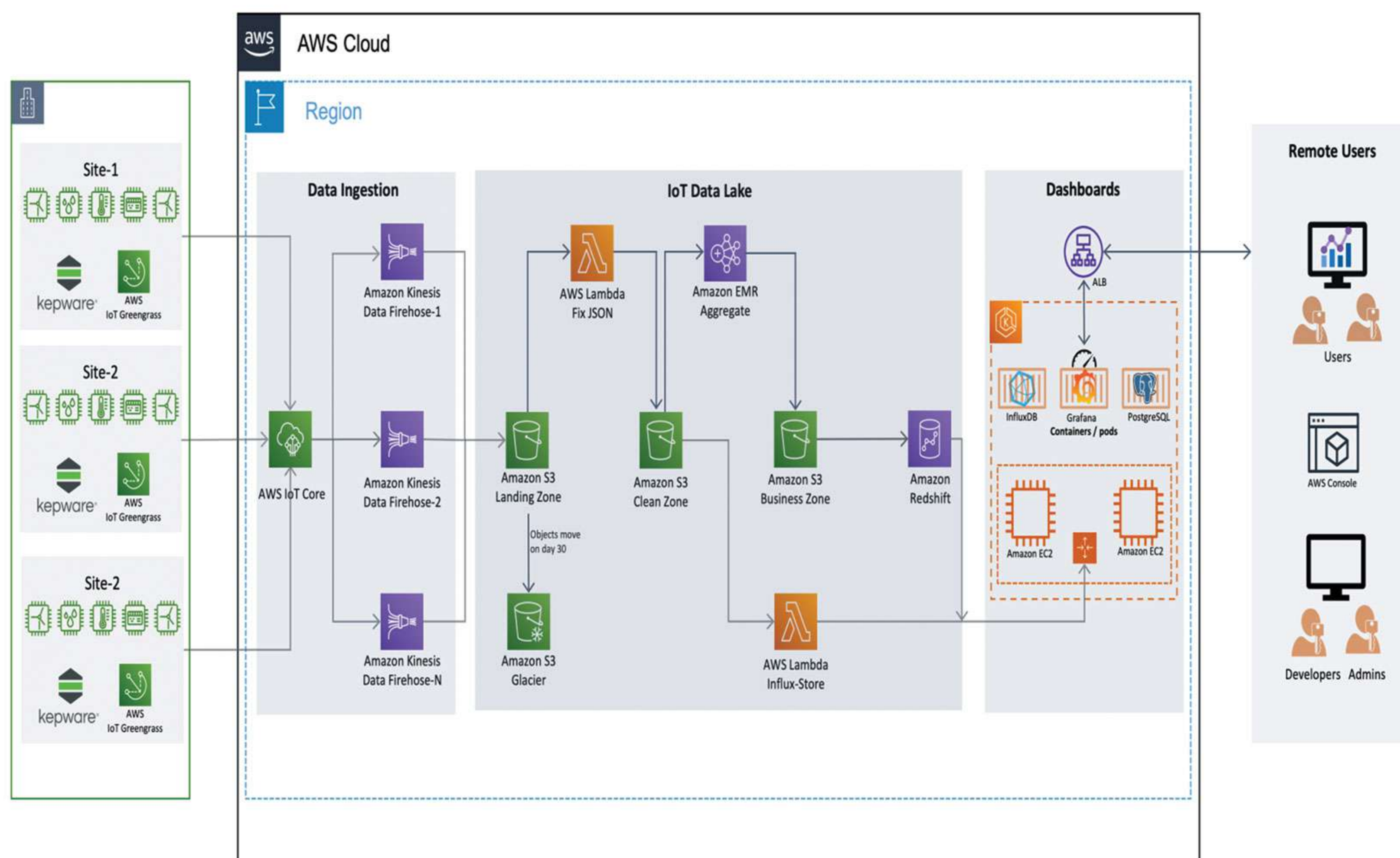
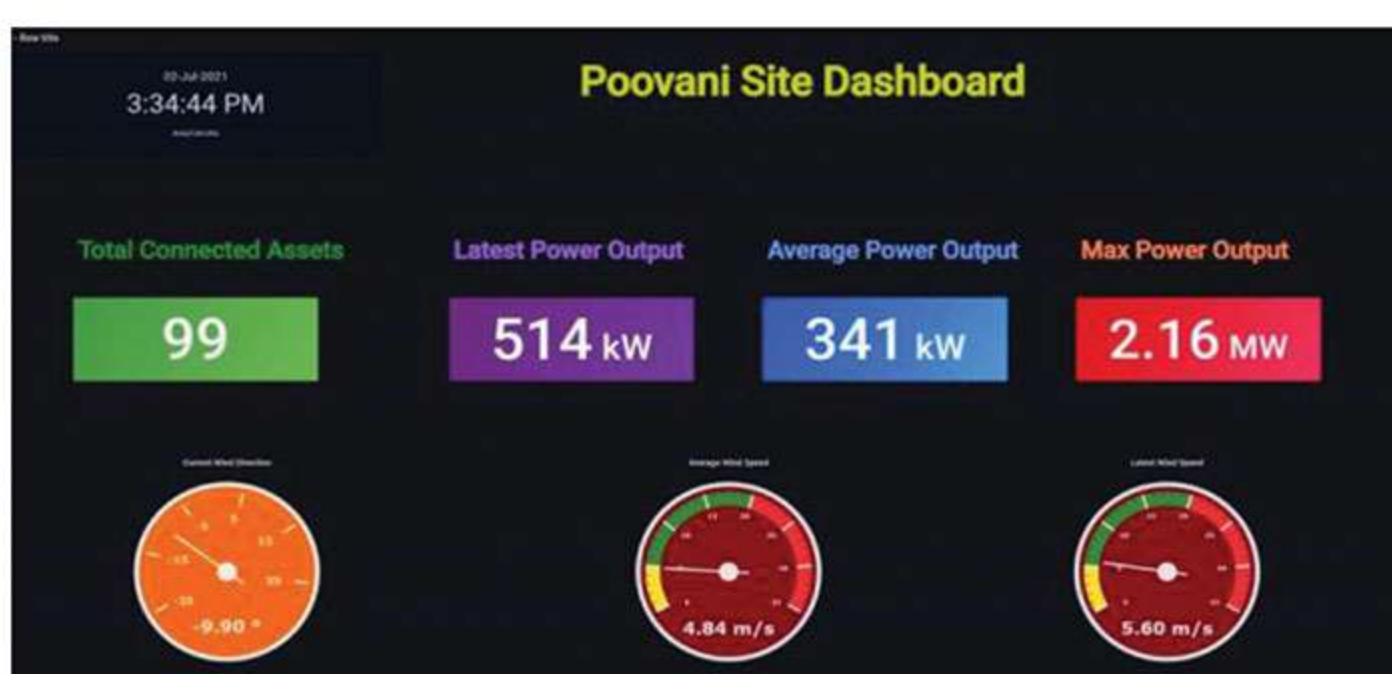
InfluxDB

Data Volume:

Ingest data from 100 wind turbines at a rate of 58,000 tags per hour with a dashboard refresh rate of 1 minute. Processing volume of 300 MB per min

Data Type:

JSON, Parquet



BUSINESS BENEFITS

- A highly available and scalable IOT data lake
- A live operational dashboard with a latency of 1 minute and this gives complete business operations visibility which accelerate business decisions
- Complete server solution with little to no infrastructure to manage
- Secure connectivity from edge to the cloud



// ABOUT **LOCUZ**

Locuz is a Security led digital transformation partner with our Innovation & Engineering hubs in Hyderabad, India. Our lineage has been building some of the largest and most complex systems across the globe which were not just technology projects, but touched people. Be it setting up complete infrastructure for the Moon Mission or building a Tsunami warning system or be it one of the largest Axle Manufacturer and their 800+ workloads moved to the cloud, We have dealt with business problems of different scales. Cyber Security has been a big part of solving these problems and hence it became part of our DNA and is fundamental to all our solutions.