



Architecture diagrams for power and utilities

Advanced Distribution Management System on AWS



Advanced Distribution Management System on AWS: Architecture diagrams for power and utilities

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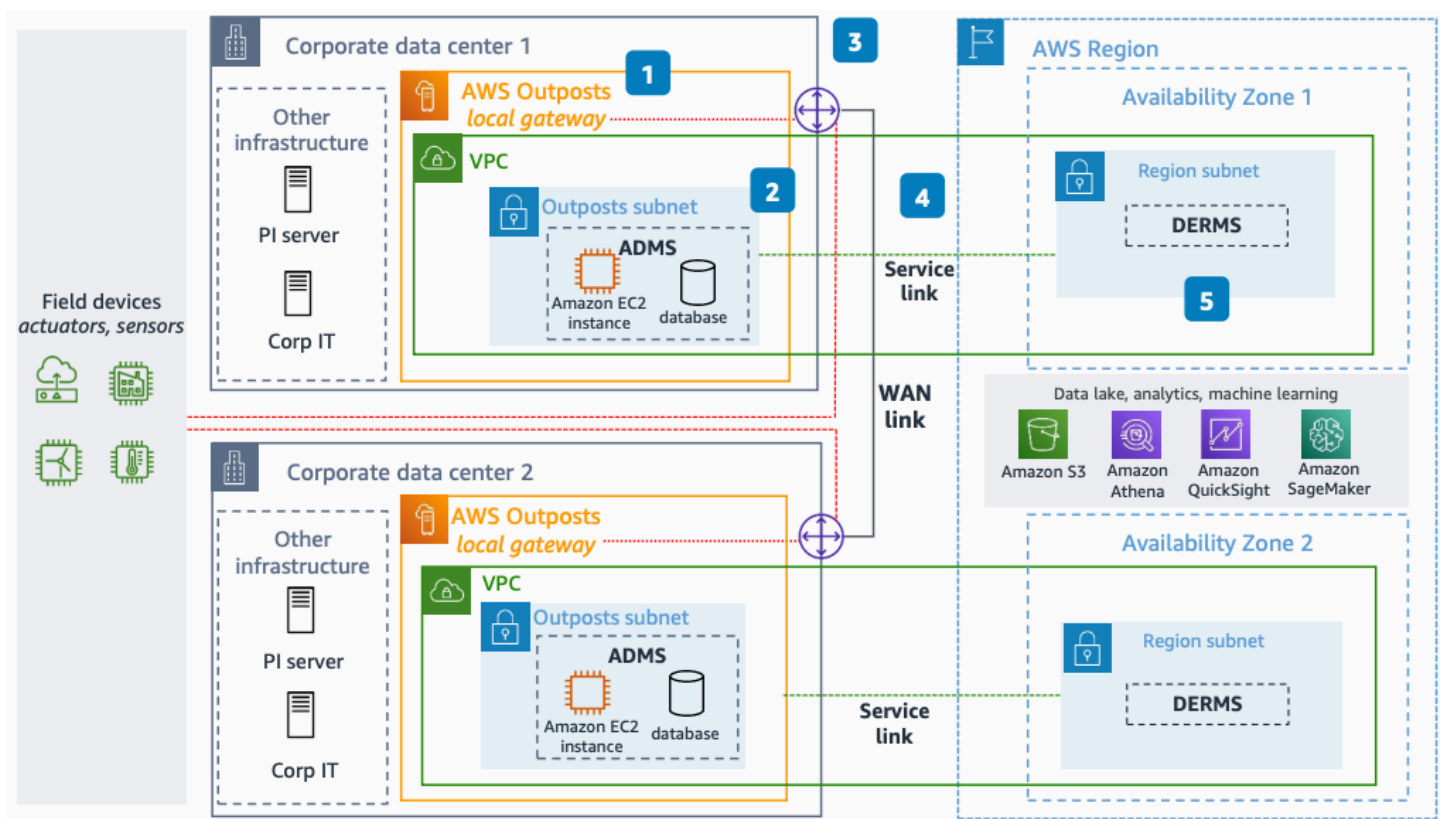
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Advanced Distribution Management System on AWS

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With this architecture, you can deploy an advanced distribution management system (ADMS) on [AWS Outposts](#). The system is fully automated, resilient, and highly available. The solution meets low-latency, data residency, and local data processing requirements. It also connects to AWS Regional services for analytics and machine learning (ML).

Advanced Distribution Management System diagram



The following steps describe the deployment topology and connectivity for this architecture:

1. Install two AWS Outposts racks in different physically isolated sites for a resilient and highly available setup. Home each rack to a different Availability Zone in the parent AWS Region.
2. Deploy multiple ADMS applications on [Amazon Elastic Compute Cloud](#) instances running on AWS Outposts inside your data center. Use a purpose-built AWS database or deploy a vendor-supported database on Amazon EC2.

3. Connect the ADMS application to on-premises applications in the OT network and to field devices such as sensors and actuators. Use a low-latency local network through the Outposts local gateway.
4. Connect the Outpost to the home AWS Region through a service link for management of the AWS Outposts instance and intra-VPC traffic. Use your existing internet connection or [AWS Direct Connect](#).
5. Connect applications running on AWS Outposts securely to other applications running in the AWS Region, such as a Distributed Energy Resource Management System (DERMS). Use services in the AWS Region such as [Amazon Simple Storage Service](#), [Amazon Athena](#), [Amazon Quick Sight](#), and [Amazon SageMaker AI](#) for data analytics and ML use cases.

Further reading

For additional information, see the following resources:

- [AWS Architecture Icons](#)
- [AWS Architecture Center](#)
- [AWS Well-Architected](#)

Diagram history

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