Architecture Diagrams

Telecom Charging (OCS/CHF) on AWS Outposts

Telecom Charging (OCS/CHF) on AWS Outposts : Architecture Diagrams

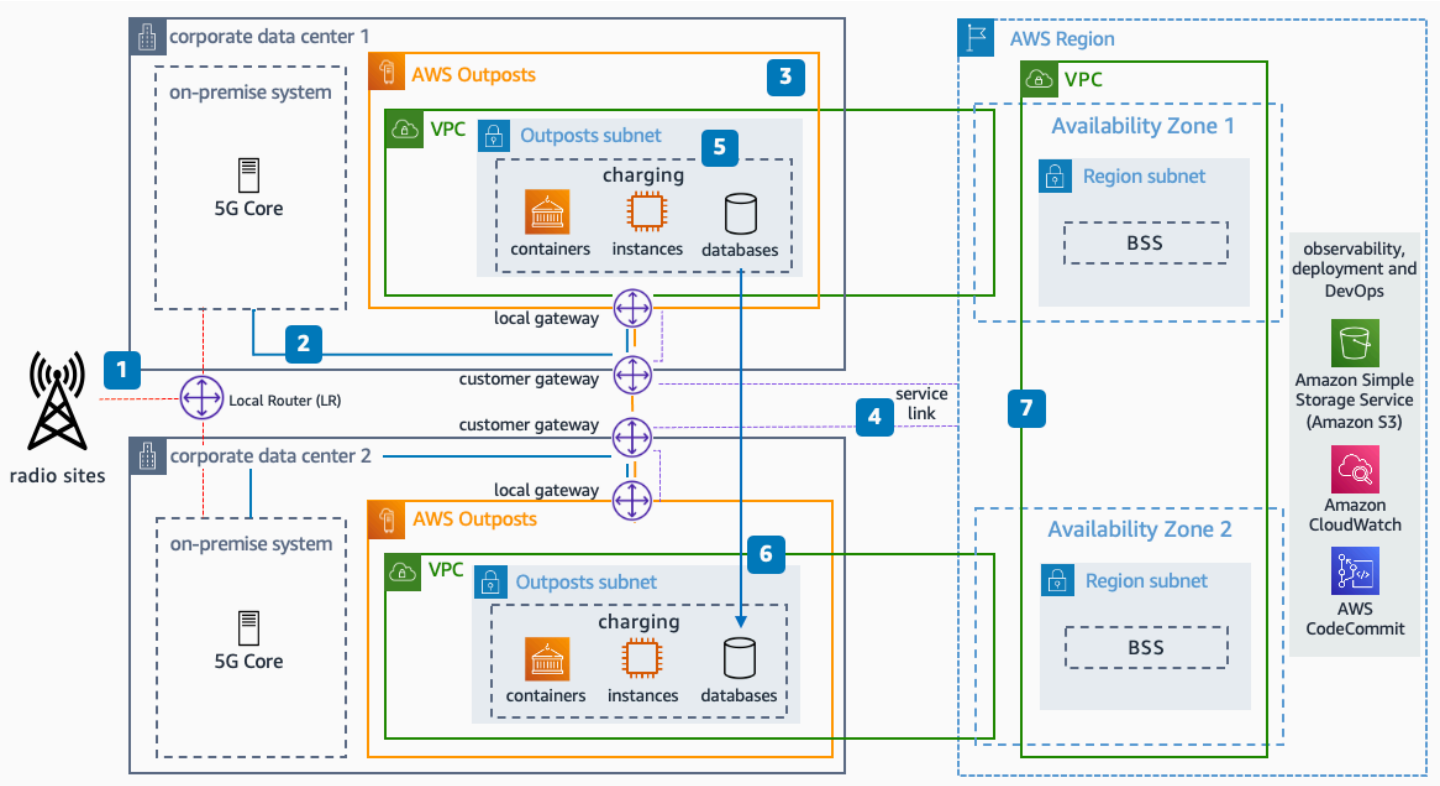
Table of Contents

Telecom Charging (OCS/CHF) on AWS Outposts

Publication date: **December 15, 2022 (Diagram history)**

This architecture enables you to deploy a fully automated, resilient, low latency, and highly available Telecom Online Charging System (OCS) / Charging Function (CHF) on AWS Outposts to run in the country of (or close to) the operator core network in cases of country data residency regulations or low latency requirements.

Telecom Charging (OCS/CHF) on AWS Outposts Diagram



1. 4G/5G network devices connect through the Radio Access Network (RAN) to the Communication Service Provider (CSP) data center.
2. The core network integrates with the OCS/CHF on the local network through the outpost's local gateway.
3. For resiliency and high availability, two logical **AWS Outposts** racks are installed in two different, physically isolated sites, and homed to different Availability Zones in the parent AWS Region.
4. A service link connects the outpost to the home AWS Region. The service link is used for both management of **AWS Outposts** and intra-Virtual Private Cloud (VPC) traffic between the AWS

Region and **AWS Outposts**. The service link can use the customer's existing internet connection or **AWS Direct Connect**.

5. Online charging can be deployed on **Amazon Elastic Kubernetes Service** (Amazon EKS) and **Amazon Elastic Compute Cloud** (Amazon EC2) instances running on **AWS Outposts**. Charging can run in active-active mode on the two **AWS Outposts**.
6. Vendor-supported databases run on **Amazon EC2** with near real-time replication to support high availability.
7. Applications that run on **AWS Outposts** can securely connect with other applications running in the AWS Region such as the Business Support System (BSS), and can use a broad set of services in the AWS Region such as **Amazon CloudWatch** and **AWS CodeCommit**.

Download editable diagram

To customize this reference architecture diagram based on your business needs, download the ZIP file which contains an editable PowerPoint.

Create a free AWS account

Sign up now

Sign up for an AWS account. New accounts include 12 months of AWS Free Tier access, including the use of Amazon EC2, Amazon S3, and Amazon DynamoDB.

Further reading

For additional information, refer to

- AWS Architecture Icons
- AWS Architecture Center
- AWS Well-Architected

Diagram history

To be notified about updates to this reference architecture diagram, subscribe to the RSS feed.

Change	Description	Date
Initial publication	Reference architecture diagram first published.	December 15, 2022

Note

To subscribe to RSS updates, you must have an RSS plugin enabled for the browser you are using.