



Architecture diagrams for telecommunications

# Deploying 5G Core on AWS



# Deploying 5G Core on AWS: Architecture diagrams for telecommunications

Copyright © 2026 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

# Table of Contents

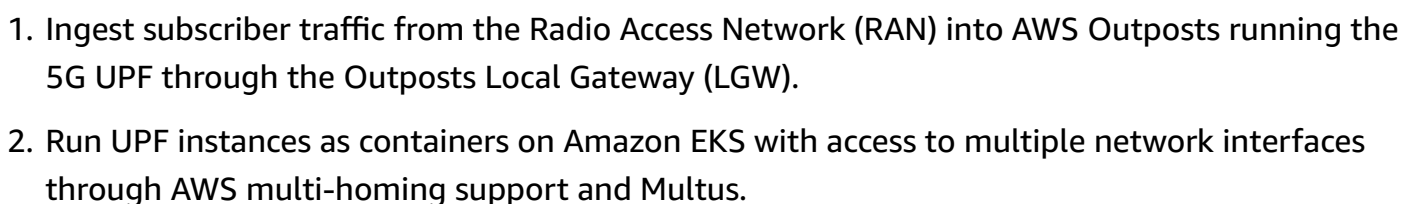
**5G Core** ..... **i**

Deploying 5G Core on AWS diagram ..... 1

Further reading ..... 2

Diagram history ..... 2

## Deploying 5G Core on AWS diagram



3. Configure two subnets on AWS Outposts (for ingress and egress) with routing tables that contain paths to service endpoints and [AWS Transit Gateway](#) for other VPCs.
4. Achieve internet access for mobile subscribers through the local gateway as a default route in the subnet route tables.
5. Separate Service Link traffic from local traffic through virtual LANs (VLANs). This provides connectivity both locally and to AWS Regions.
6. Use [AWS Direct Connect](#) to provide a high-throughput connection to a Amazon VPC on an AWS Region through a public virtual interface.
7. Use the service endpoint to provide direct access to AWS Regional services such as [Amazon Simple Storage Service](#) without traversing the internet.
8. Use AWS Transit Gateway to provide connectivity to other VPCs that perform 5G management and control services.
9. Run orchestration, operational, and business support systems on AWS Regions with direct connectivity to on-premises data centers.

## Further reading

For additional information, see the following resources:

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

## Diagram history

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

| Change                              | Description                                     | Date              |
|-------------------------------------|-------------------------------------------------|-------------------|
| <a href="#">Initial publication</a> | Reference architecture diagram first published. | December 28, 2020 |

** RSS subscription requirement**

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