
AWS
re:Invent

CMP309

AWS Outposts: Bringing the AWS experience on premises

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AWS re:Invent

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Agenda

What is AWS Outposts

Ordering and Installation

How it works

Customer use-cases



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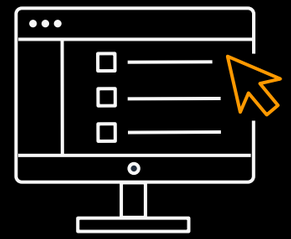
AWS Outposts: bringing AWS on-premises



Same AWS-designed infrastructure as in AWS data centers (built on AWS Nitro System)



Fully managed, monitored, and operated by AWS as if in AWS Regions



Single pane of management in the cloud providing the same APIs and tools as in AWS Regions

What is AWS Outposts

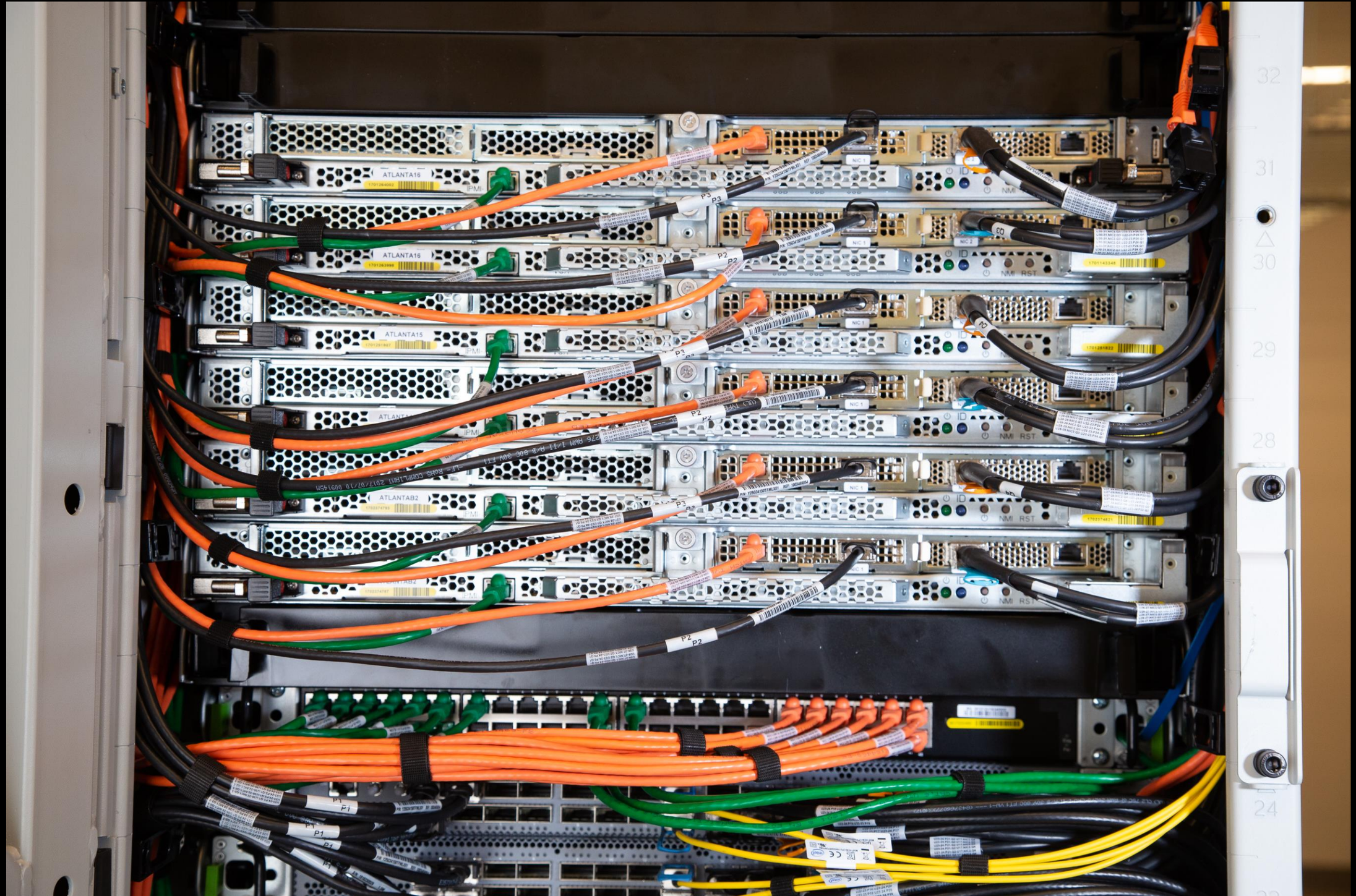
Same AWS control plane

Same Nitro hardware

Same Nitro software

To give you the same AWS experience!




ATLANTA16
ATLANTA16
ATLANTA15
ATLANTAB2



Ordering

Create a Site



- ✓Location
- ✓Power Requirements
- ✓Network Configuration
- ✓Weight Requirements

Ordering

Create a Site



- ✓Location
- ✓Power Requirements
- ✓Network Configuration
- ✓Weight Requirements

Select an Outpost



Compute &

Amazon Elastic Block Store (EBS)

Most Nitro instances available

Contact us for new configurations

Ordering

Create a Site



- ✓Location
- ✓Power Requirements
- ✓Network Configuration
- ✓Weight Requirements

Select an Outpost



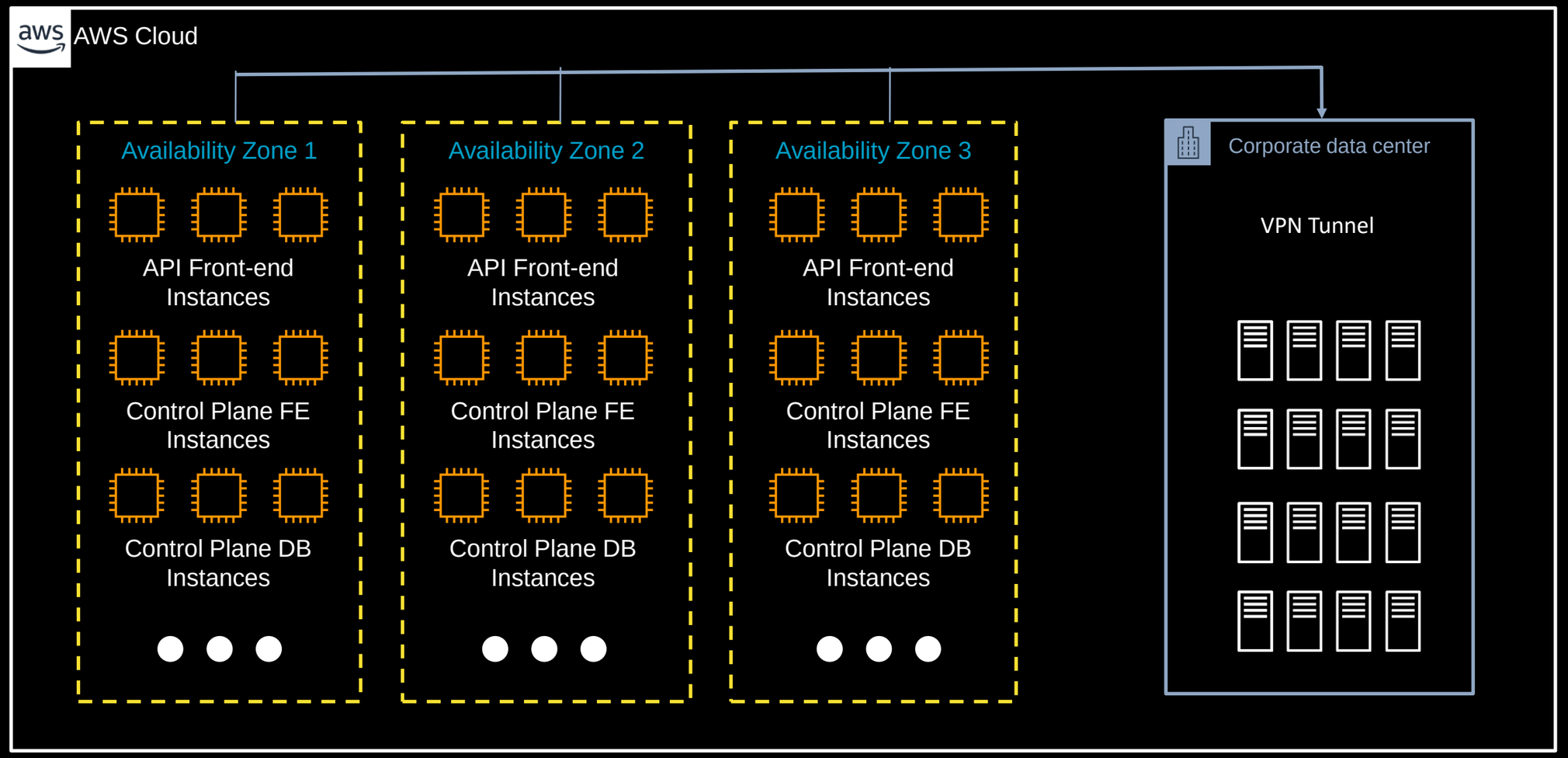
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Submit Order

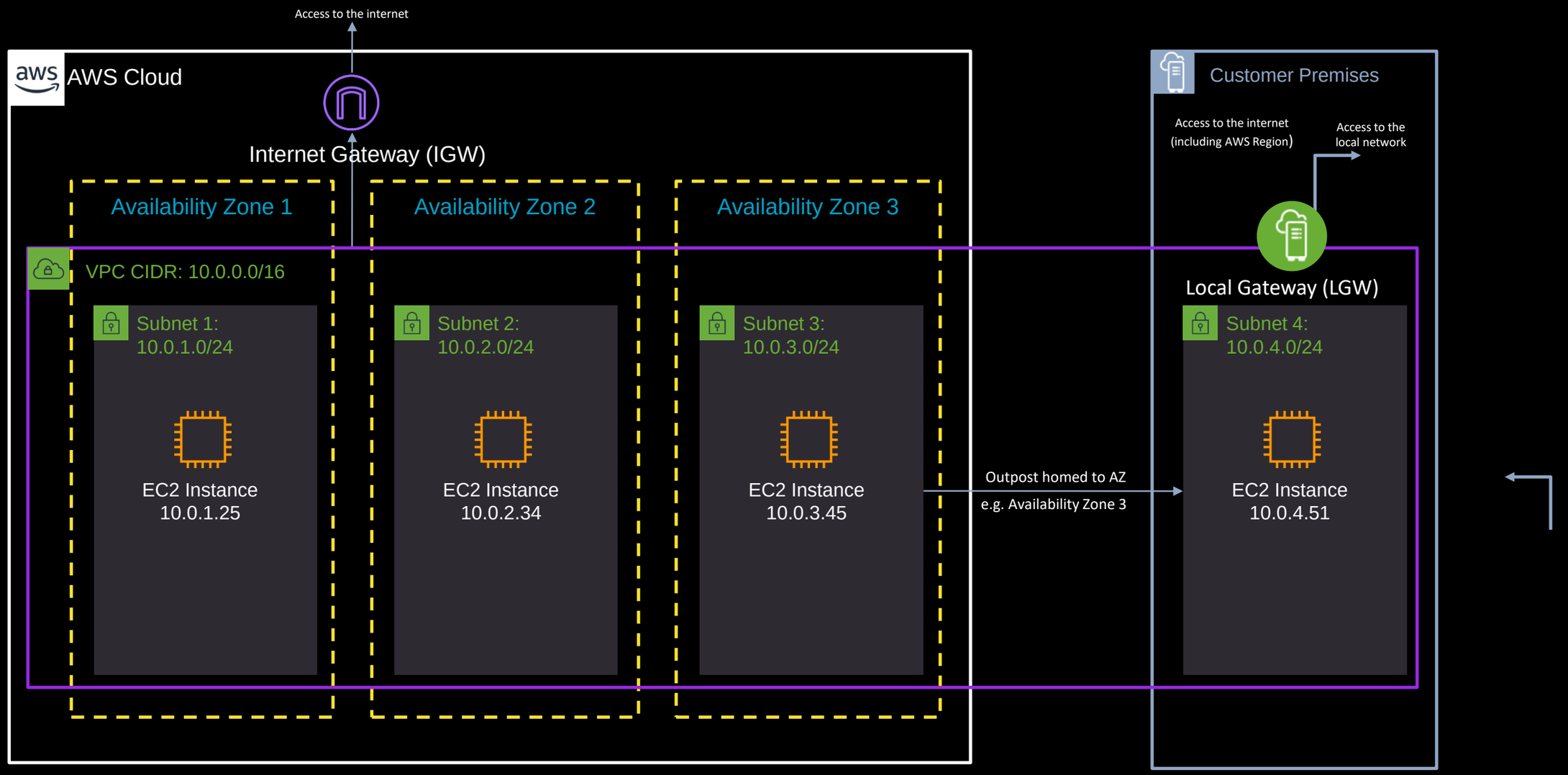


Installation team will contact you

How Outposts Works

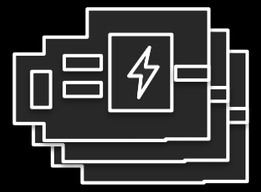


Networking with Outposts



Nitro

Nitro Cards



VPC Networking

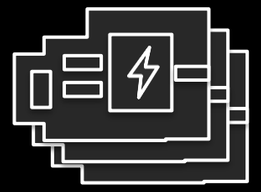
Amazon Elastic Block Store (Amazon EBS)

Instance Storage

System Controller

Nitro

Nitro Cards



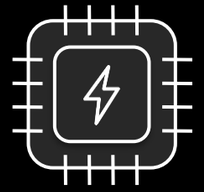
VPC Networking

Amazon Elastic Block Store (Amazon EBS)

Instance Storage

System Controller

Nitro Security Chip



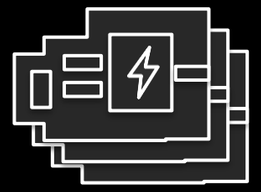
Integrated into motherboard

Protects hardware resources

Hardware Root of Trust

Nitro

Nitro Cards



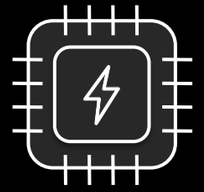
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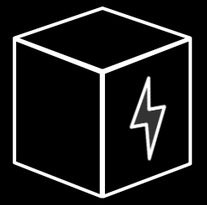


Integrated into motherboard

Protects hardware resources

Hardware Root of Trust

Nitro Hypervisor



Lightweight hypervisor

Memory and CPU allocation

Bare Metal-like performance

Nitro Security Key

All data is encrypted at rest in Nitro

Key material is wrapped to external key stored in removable device

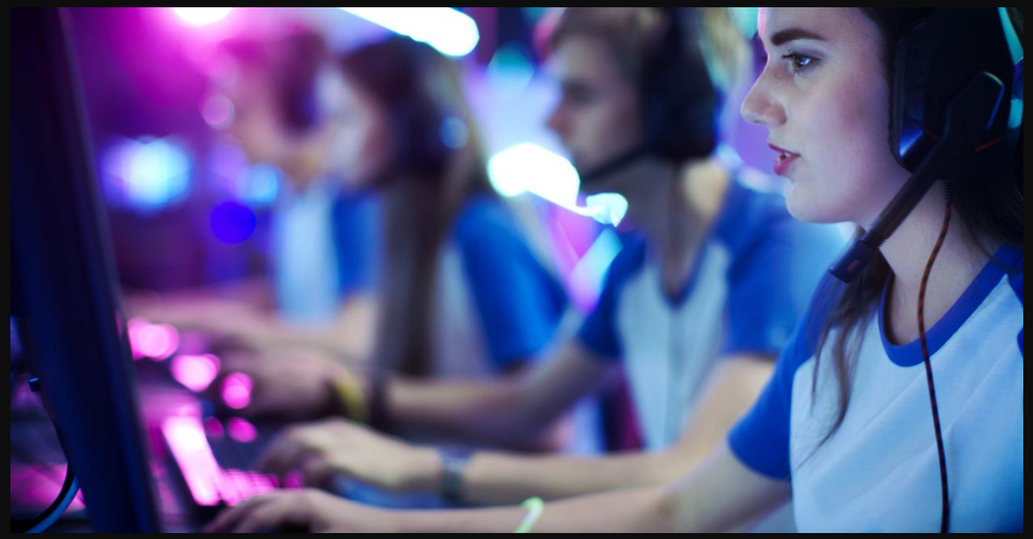
Destroying the device is equivalent to destroying the data



Low-latency gaming anywhere

GAMING

Publisher of competitive mobile and PC online games with global data center operations and games engaging 100 million+ monthly players



CHALLENGE

Launch new online competitive game under tight timelines

SOLUTION

Outposts provides low-latency compute and storage services

BUSINESS OUTCOME

Delivered consistent, low-latency gaming experience globally

The customer is seeing dramatic latency improvements in locations where games are running on AWS Outposts. This provides a meaningfully more responsive experience for gamers while enabling the company's developers to build and deploy games using familiar AWS APIs and tools.

Hybrid cloud as bridge to all-in on AWS

MORNINGSTAR®



The challenge

- Multi-year cloud migration journey with goal of being all-in on AWS
- Provide low-latency, real-time investment research and insights
- Eliminate overhead associated with managing and monitoring different platforms for on-premises and cloud workloads

The solution

- AWS Outposts on premises running VMs and containerized workloads
- Truly consistent hybrid experience with fully managed and monitored AWS services both on-premises and in the cloud

Business outcome

- “Lift and shift”: build once, run on premises, and seamlessly migrate to AWS Region when ready
- Accelerate adoption of AWS across development teams
- Improved business operations and end user satisfaction

“As we continue to modernize our data collection and software, we want to create a containerized hybrid infrastructure and easily deploy using AWS services. With AWS Outposts, we can build once and run applications on-premises and easily migrate our applications to an AWS Region where possible. Ultimately, this allows us to accelerate the adoption of cloud technologies within our development teams, keep up with accelerating business and customer needs, and support our long-term journey to the cloud.” - James Rhodes, Chief Technology Officer, Morningstar Inc.

Thank you!



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