
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

HYB201-L

# AWS wherever you need it


Wayne Duso
Vice President Storage, Hybrid-Edge, and Data Services
Amazon Web Services

Jan Hofmeyr
VP EC2,
Edge Services
Amazon Web Services

Priyanka Jindal
AWS Principal Product Manager, Technical
Amazon Web Services

Shane Sweeney
Senior Vice President of Technology
FanDuel



aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS wherever you need it

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.


RHINO-RACK
aws
DISASTER RESPONSE
aws
VIRGINIA
KOONS
KOONS




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS wherever you need it

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Customers want the benefits of the cloud anywhere they need it

Infrastructure, services, tools and experiences – in the cloud, on premises, and at the edge



aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# ...but they face **challenges** with solutions today

Inconsistent tools and experiences make it difficult to build, deploy, and operate at the edge



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# To support the applications they need

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



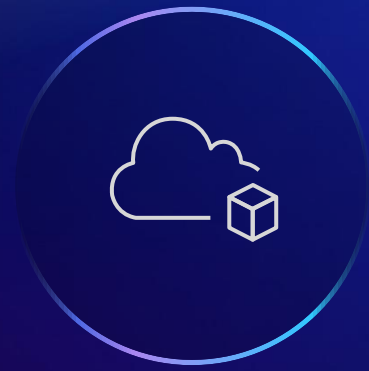
Low latency



Local data processing



Data residency



Migration and modernization

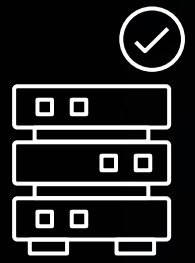
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Customers want the same experience

ACROSS ON PREMISES, THE EDGE, AND THE CLOUD

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS extends the cloud to the edge



Reliable, secure, and high-performance infrastructure



Ownership model and operational consistency



Services and APIs



Tools for automation, deployments, and security controls



Pace of innovation

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS wherever you need it

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

REGIONS



METRO AREAS & TELCO NETWORKS



ON PREMISES



REMOTE & LIMITED CONNECTIVITY LOCATIONS



SMART DEVICES



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



# Regions

Location and consistency matter

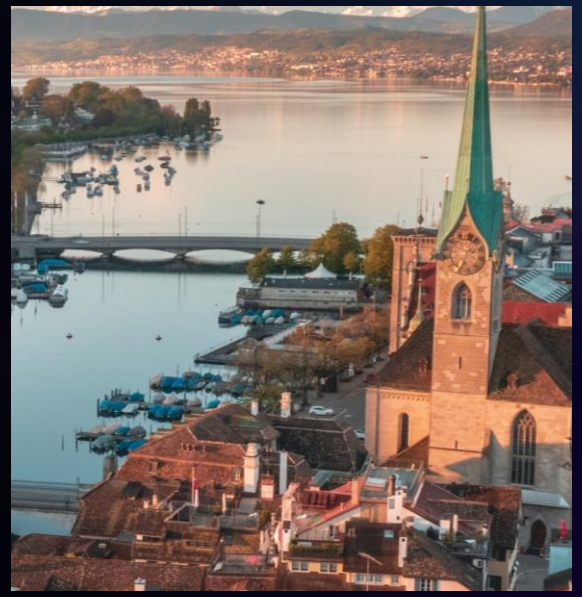
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



United Arab Emirates



Switzerland



Spain



India

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



# Metro areas and telco networks

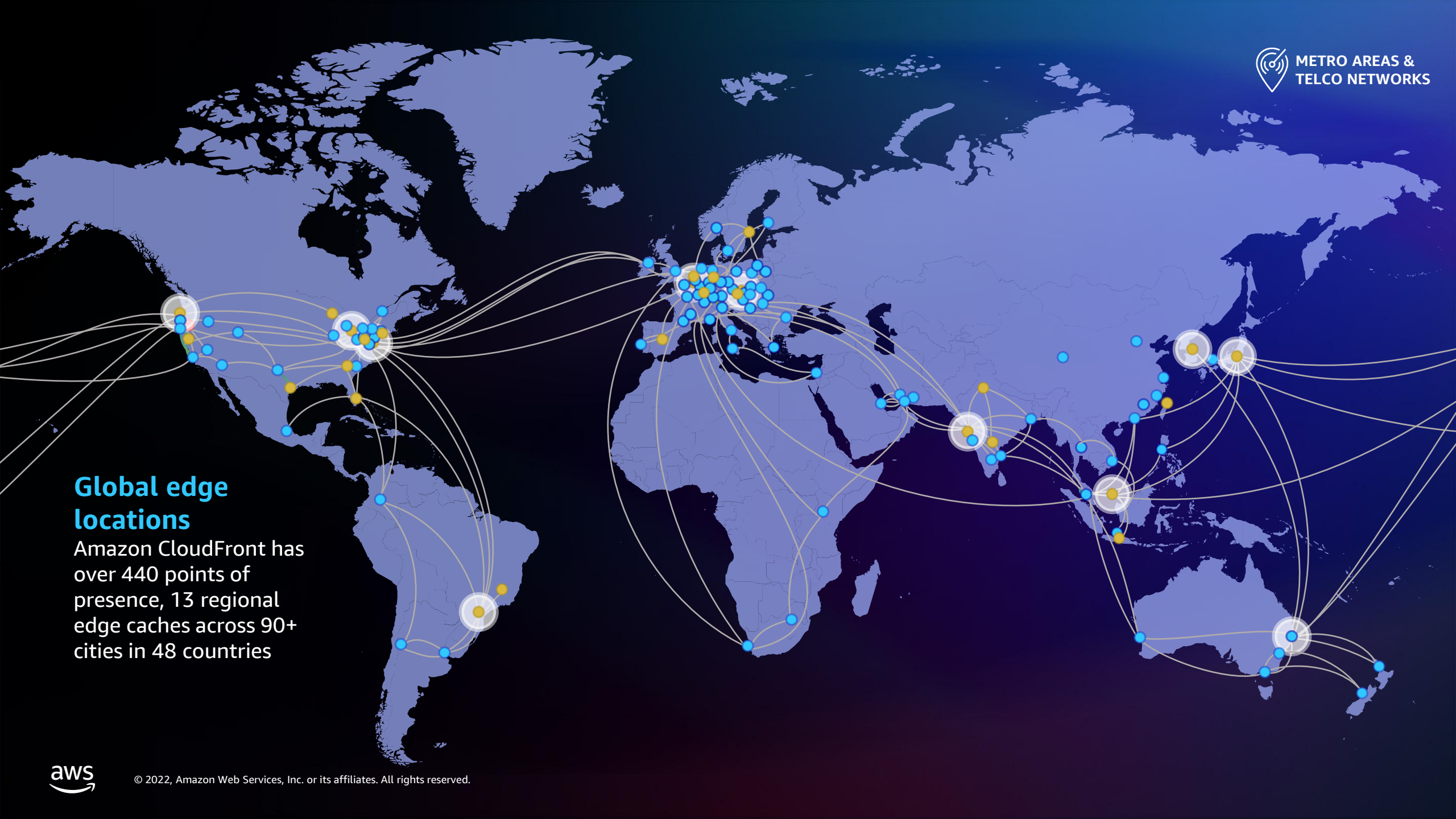
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

METRO AREAS &
TELCO NETWORKS

# Amazon CloudFront

SECURELY DELIVER CONTENT WITH LOW LATENCY AND
HIGH TRANSFER SPEEDS

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




HBO Max wanted to deliver content to customers with high performance and low latency

They added Amazon CloudFront for its high capacity and global footprint as part of its multi content delivery network approach

With CloudFront included in their strategy, HBO Max delivers high-performance live and on-demand content to millions of customers

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

METRO AREAS &
TELCO NETWORKS

# AWS Local Zones

## MEET LATENCY, LOCAL DATA PROCESSING, AND DATA RESIDENCY REQUIREMENTS IN MORE LOCATIONS, WITHOUT DEPLOYING SELF-MANAGED INFRASTRUCTURE

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



**Buenos Aires, Argentina**



**Copenhagen, Denmark**



**Helsinki, Finland**



**Muscat, Oman**

aws

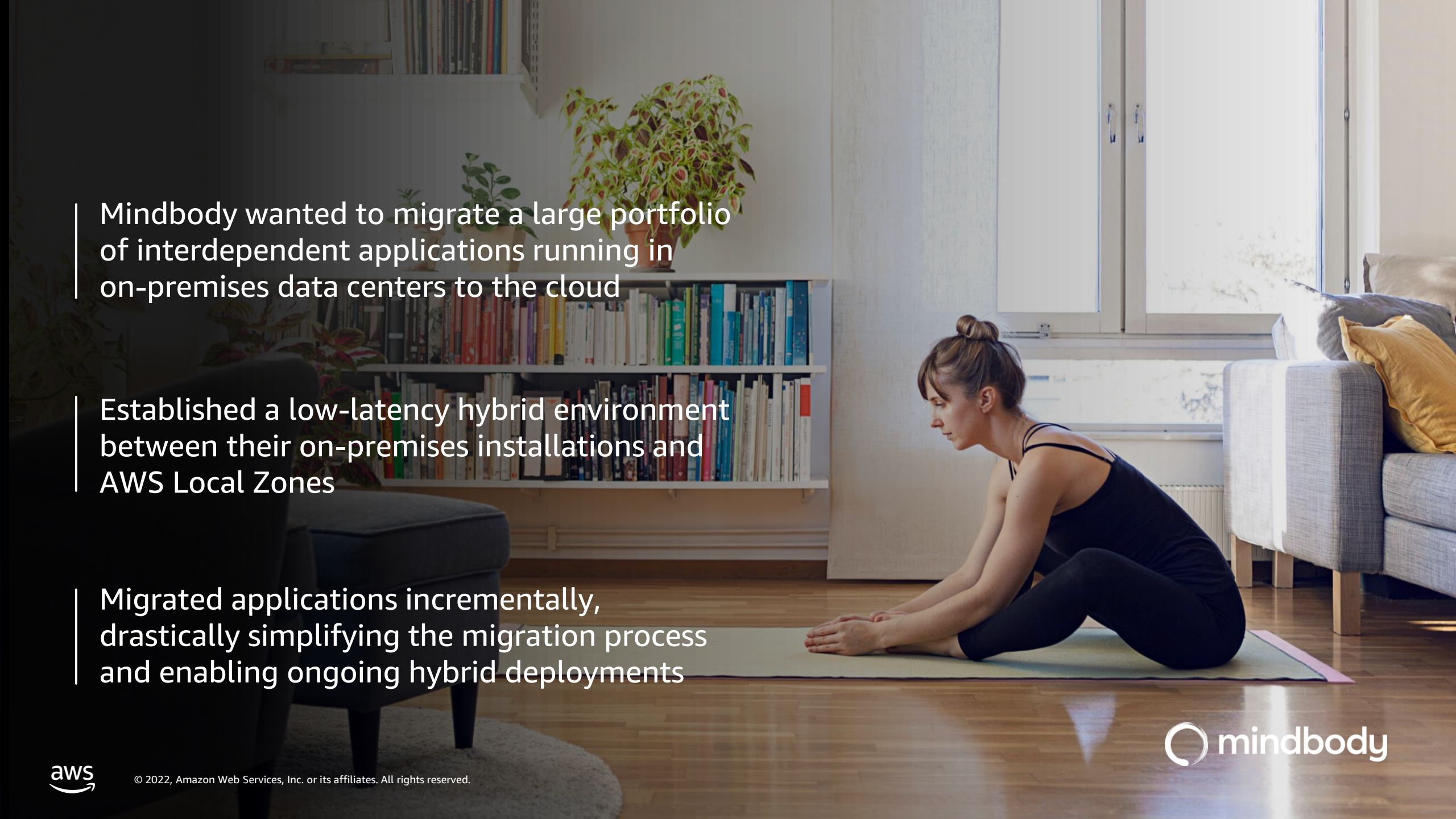
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS Local Zones




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

** Some services only available in select Local Zones*



Mindbody wanted to migrate a large portfolio of interdependent applications running in on-premises data centers to the cloud

Established a low-latency hybrid environment between their on-premises installations and AWS Local Zones

Migrated applications incrementally, drastically simplifying the migration process and enabling ongoing hybrid deployments

mindbody

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

METRO AREAS &
TELCO NETWORKS

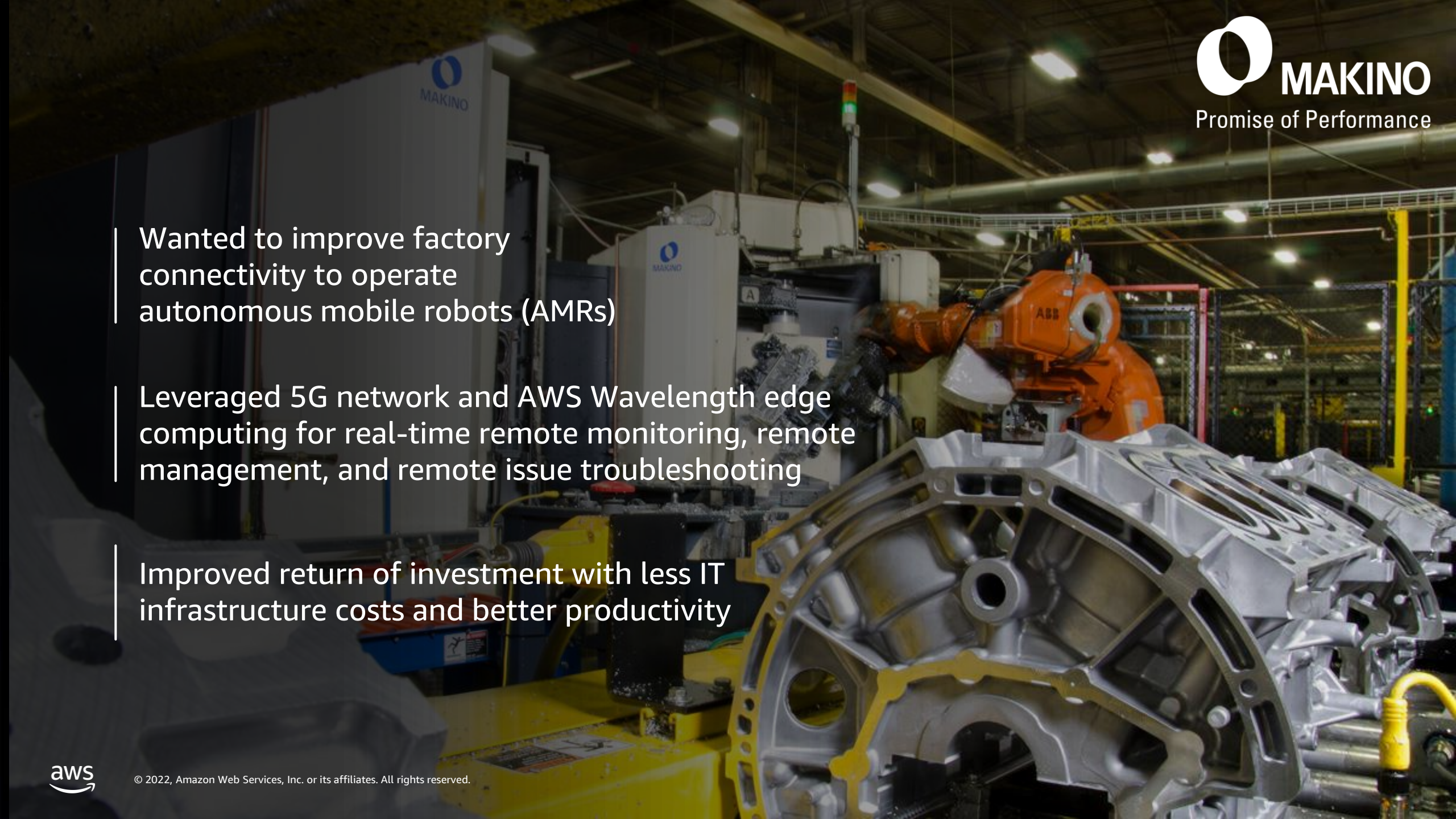
# AWS Wavelength

## RUN LATENCY-SENSITIVE APPLICATIONS AT THE 5G EDGE USING AWS INFRASTRUCTURE AND SERVICES

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




- Wanted to improve factory connectivity to operate autonomous mobile robots (AMRs)
- Leveraged 5G network and AWS Wavelength edge computing for real-time remote monitoring, remote management, and remote issue troubleshooting
- Improved return of investment with less IT infrastructure costs and better productivity

aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



# On premises

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

ON PREMISES

# AWS Outposts Family



## Outposts rack

Bring the same AWS APIs, services, and features to virtually any data center or co-location space



## Outposts servers

Run Outposts in locations with limited space or smaller capacity requirements

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS Outposts




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




# Local clusters for Amazon EKS on Outposts



## Highly available

Stability and continued operations, even during network disconnects



## Consistent

Use familiar Amazon EKS APIs, console, and tools for a consistent hybrid Kubernetes experience



## Fully managed

Time-consuming Kubernetes operations fully managed by AWS

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# How AWS supports FanDuel with hybrid cloud services

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

REGIONS



METRO AREAS & TELCO NETWORKS



ON PREMISES



REMOTE & LIMITED CONNECTIVITY LOCATIONS



SMART DEVICES



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



# Remote & limited connectivity locations

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



REMOTE & LIMITED
CONNECTIVITY LOCATIONS

# AWS Snow Family

PHYSICAL DEVICES TO AGGREGATE AND PROCESS DATA
IN RUGGED EDGE LOCATIONS, THEN TRANSFER TO AWS

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

REMOTE & LIMITED CONNECTIVITY LOCATIONS

# AWS Snow Family



## AWS Snowcone

Compact and portable device, purpose-built for use outside of a traditional data center



## AWS Snowball Edge

Compact and portable device, purpose-built for use outside of a traditional data center

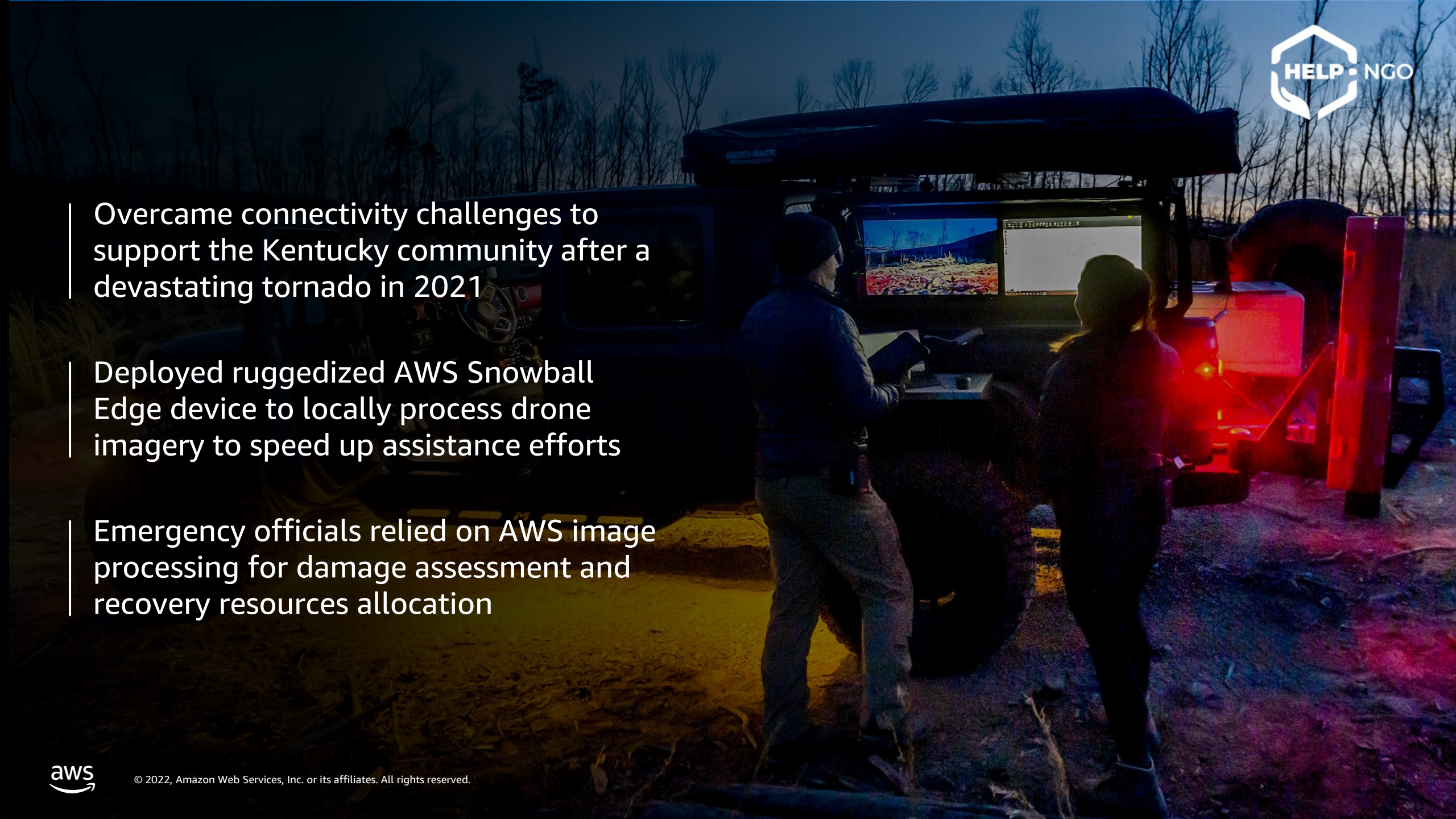
**Available for clustering, scaling, and connectivity**

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS Snow Family




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




- Overcame connectivity challenges to support the Kentucky community after a devastating tornado in 2021
- Deployed ruggedized AWS Snowball Edge device to locally process drone imagery to speed up assistance efforts
- Emergency officials relied on AWS image processing for damage assessment and recovery resources allocation

aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



# Smart devices

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Source: IoT Analytics. State of IoT 2022, May 2022, https://iot-analytics.com/number-connected-iot-devices/




# AWS for IoT

SECURE SOLUTIONS TO CONNECT, MANAGE, AND ANALYZE DATA FOR IOT WORKLOADS

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

SMART DEVICES



## Foundational services

A broad and deep set of cloud services to help customers create custom IoT applications with the highest security, flexibility, and control



## Purpose-built IoT services

Services that accelerate and simplify the time to build secure, reliable, and scalable IoT applications for specific industries and use cases



## Vetted solutions

Ready-to-deploy code and configurations and customizable architectural guidance, built by AWS and AWS Partners

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




# Purpose-built IoT services



## AWS IoT SiteWise

Collect, organize, and analyze data from industrial equipment at scale



## AWS IoT TwinMaker

Optimize operations by easily creating digital twins of real-world systems



## AWS IoT FleetWise

Collect, transform, and transfer vehicle data to the cloud in near real-time



## AWS IoT RoboRunner

Build applications that help robot fleets work together seamlessly

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




JOHN DEERE

# Growing the business with precision agriculture

# Improving factory operations with digital twins

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

REGIONS



METRO AREAS & TELCO NETWORKS



ON PREMISES



REMOTE AND DISCONNECTED EDGE



SMART DEVICES



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# 5G workloads on AWS

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Public 5G

Private 5G

MEC

REGIONS



METRO AREAS & TELCO NETWORKS



ON PREMISES



REMOTE AND DISCONNECTED EDGE



SMART DEVICES



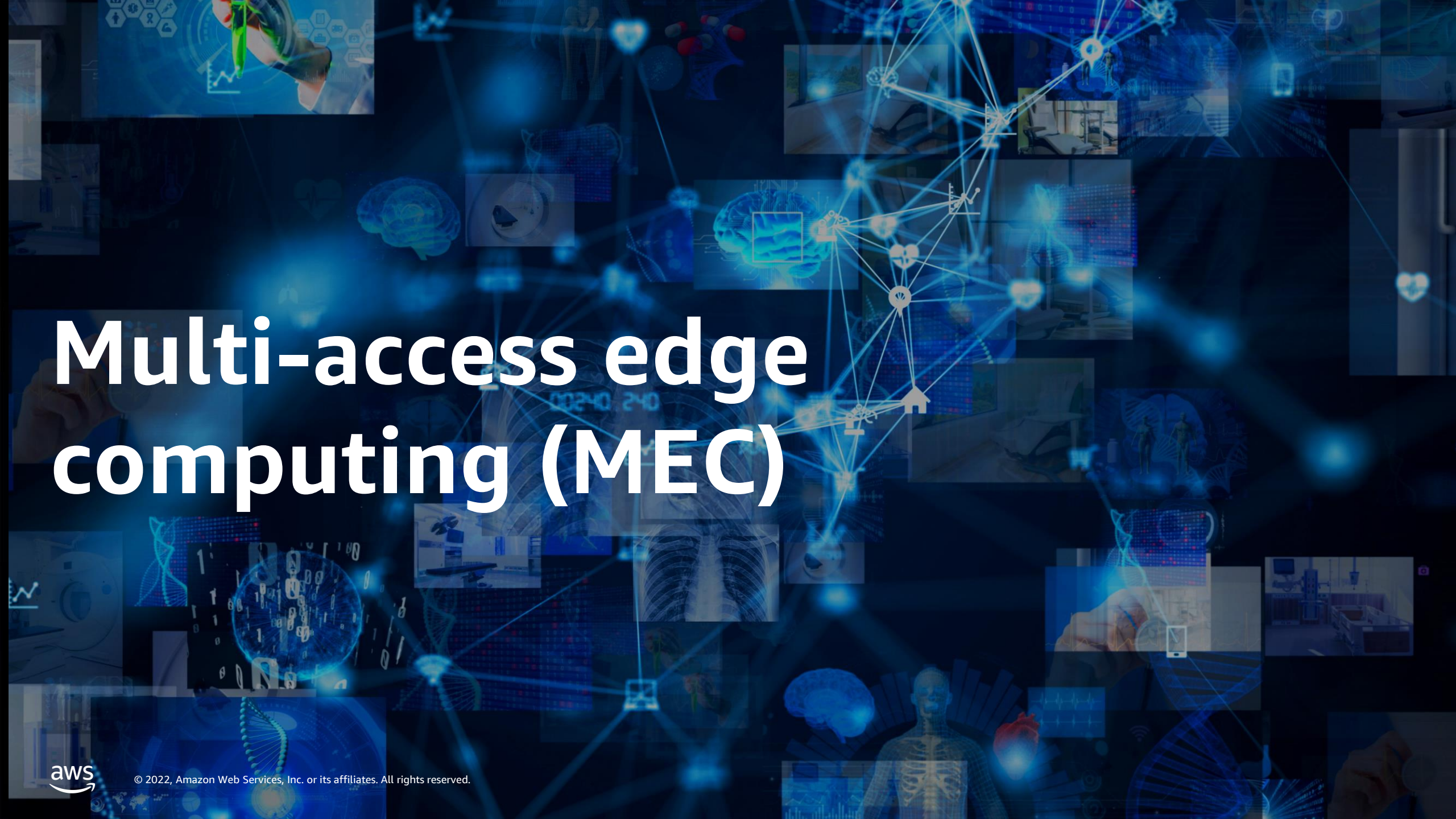
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.




© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



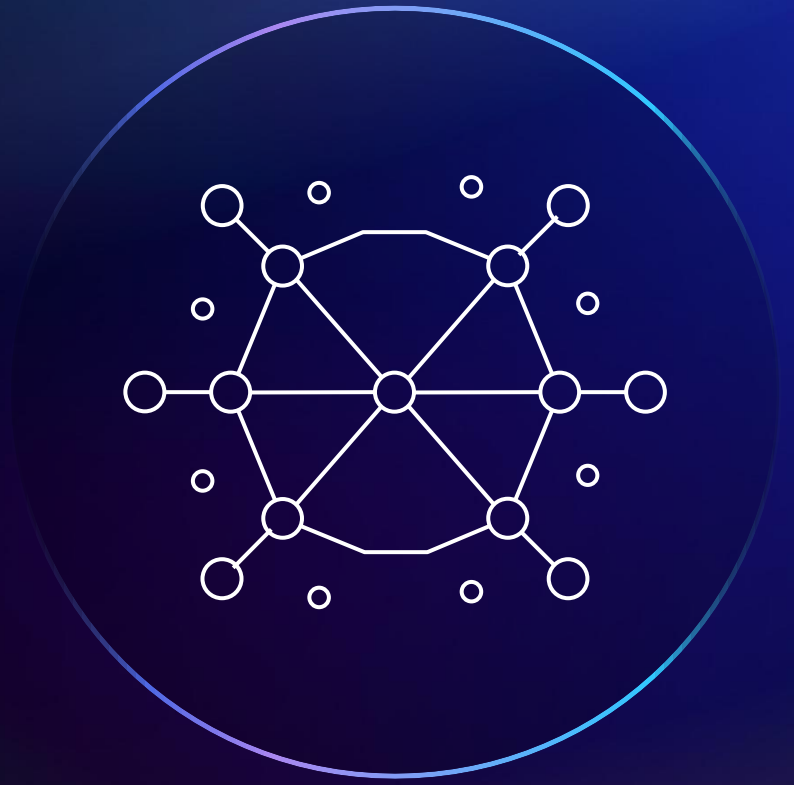
# Multi-access edge computing (MEC)

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# AWS helps customers speed innovation at the edge

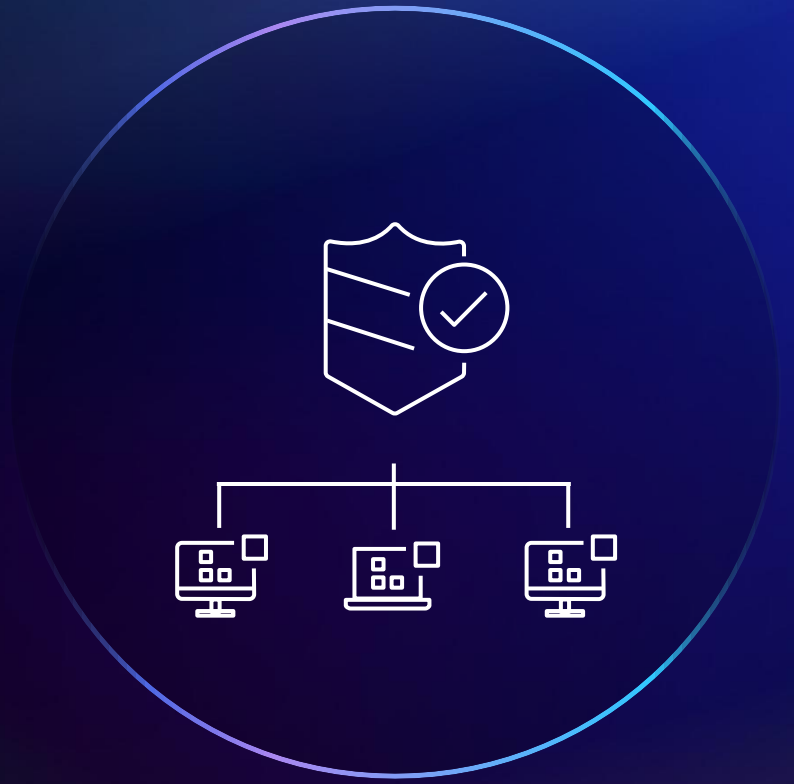
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Accelerate innovation with the broadest and deepest set of capabilities



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Create a truly consistent and secure experience across all environments



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Optimize applications with experienced partners and the best support



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Hybrid cloud and edge computing customers




aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

# Thank you!



Please complete the session survey in the **mobile app**

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.