AWS re:Invent

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NET217-NEW

Accelerate data transfer to the cloud with AWS Data Transfer Terminal

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aws

AWS Data Transfer Terminal

01 Data generation and uploads

02 Example use cases

03 Easier, flexible ways to upload

04 Experience

05 Benefits

06 Thank you!

Data cycle

Creation & generation → Ingestion → Processing → Storage → Governance → Analytics & insights → Actions

A comprehensive set of services for your data foundation

... and more

Where the data is generated is important
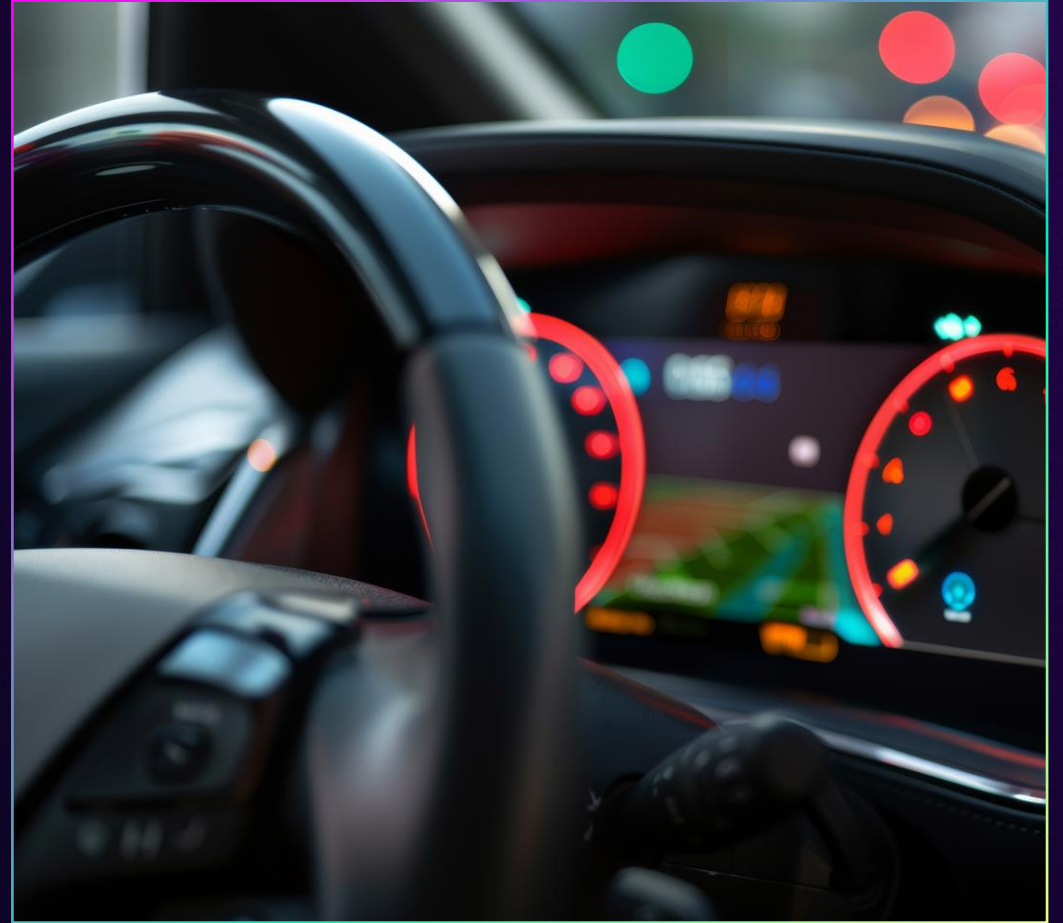
Data center/On premises   vs.   Physical world

Example use case 1: Advanced driver assistance system

Fleets of vehicles generating terabytes of data

In metros around the world

Example use case 2: Media production

Active productions generating terabytes of raw content

In many locations around the world

What are your use cases?

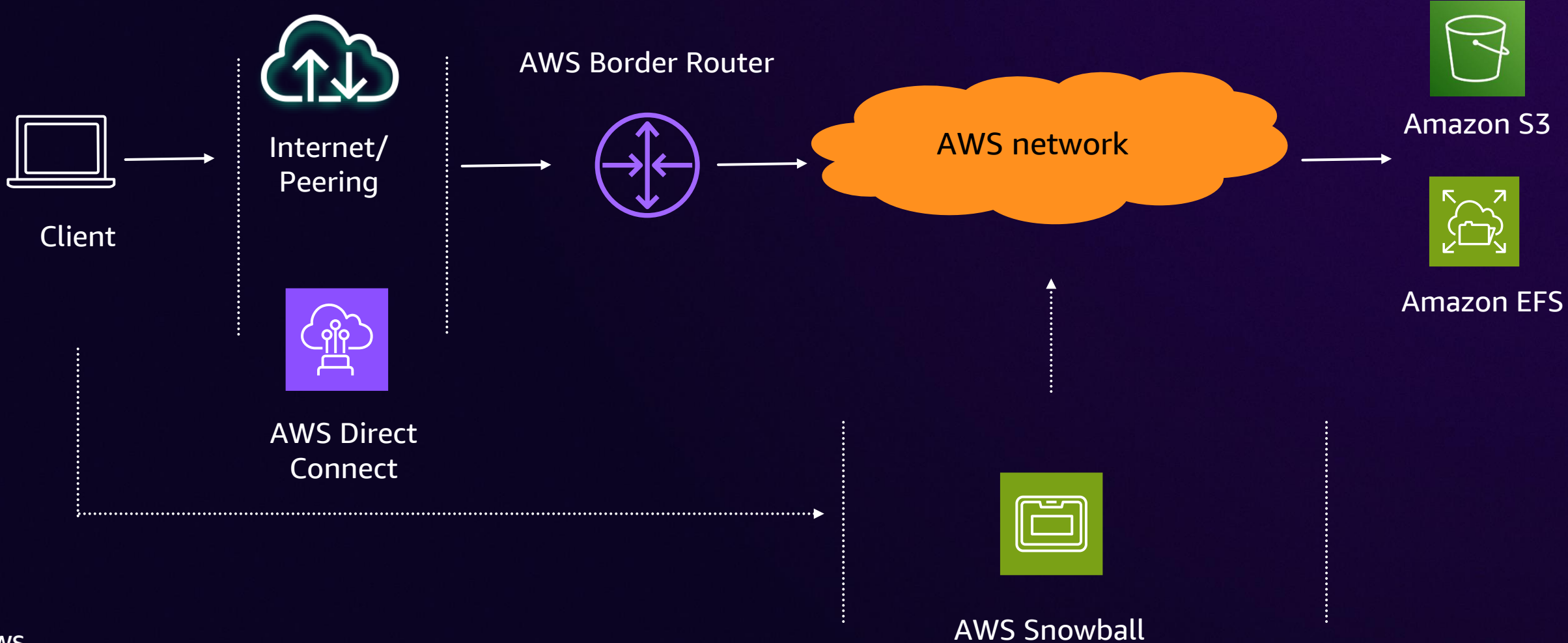Trouble digitizing and harnessing fragmented, siloed, and distributed data

Looking to find ways to securely collect, process, and manage data from device to cloud

Want to deliver innovative and differentiated experiences

Data uploads – Most popular ways

Some concerns

Relying on internet

Unpredictable,
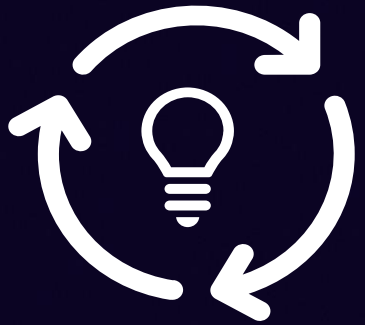slower speeds

Building upload locations

Capital-intensive,
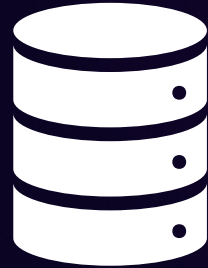limited locations,
long-term
commitments

Shipping data

Logistical overhead,
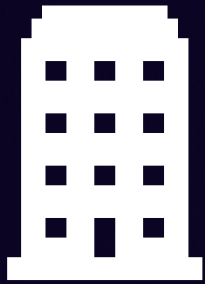time-consuming

Data upload inefficiencies

Data generated

Data stored on discrete device

Delays in getting the data in the cloud can hinder value-added workflows

What is needed?

On-demand

Simple, flexible,
anytime, anywhere

Complete control

No shipping, minimal
logistical constraints

Accelerated upload

Safe, secure, reliable,
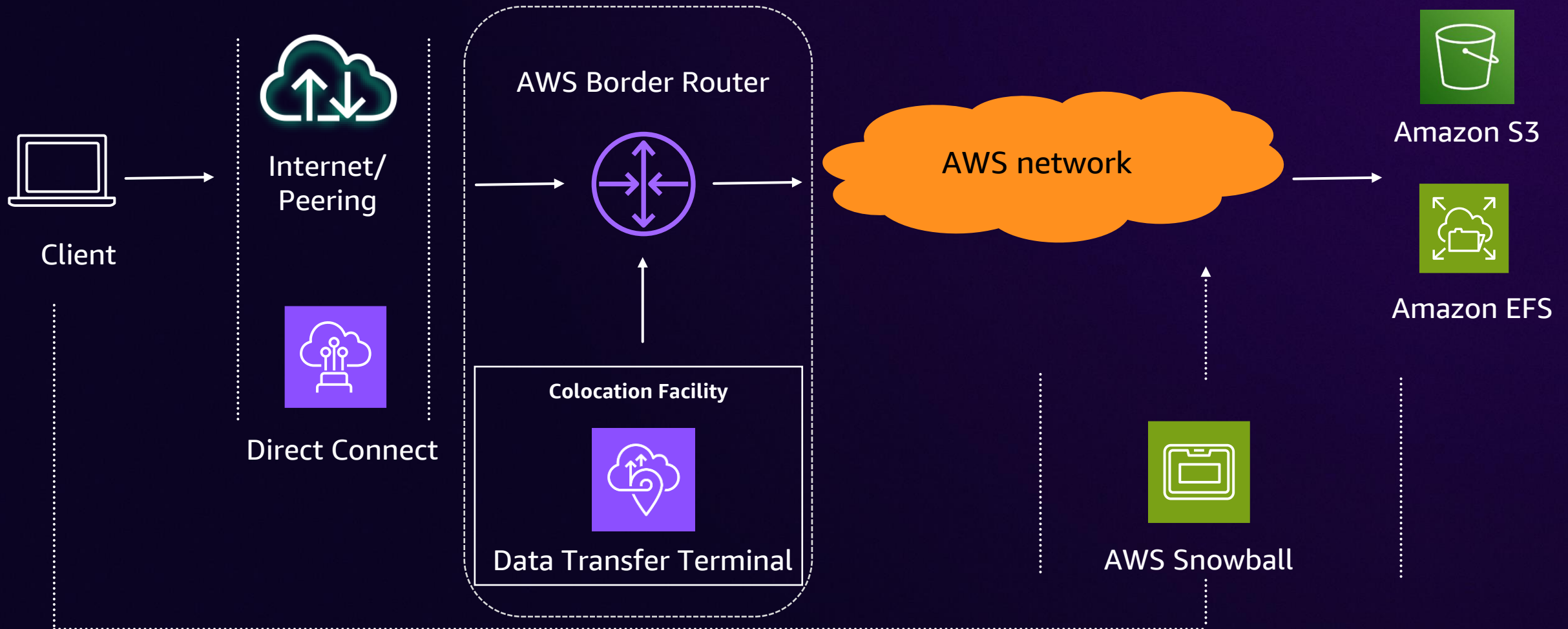high speed

AWS Global Infrastructure

AWS REGIONS, EDGE LOCATIONS, AND THE GLOBAL BACKBONE

AWS NETWORK BACKBONE

- Redundant 400 Gbps links
- 245+ Countries & Territories
- Between all Regions, Local Zones, and Edge Locations

Data uploads – A new possibility

Client

Internet/
Peering

Direct Connect

AWS Border Router

Colocation Facility

Data Transfer Terminal

AWS network

AWS Snowball

Amazon S3

Amazon EFS

AWS Data Transfer Terminal
is an accelerated bulk data upload service

Safe and secure physical location

Reservable and on-demand

Bring your storage system

Connect to the AWS network

Upload data to AWS endpoints at speeds
up to 400 Gbps

AWS Global Infrastructure

AWS REGIONS, EDGE LOCATIONS, AND THE GLOBAL BACKBONE
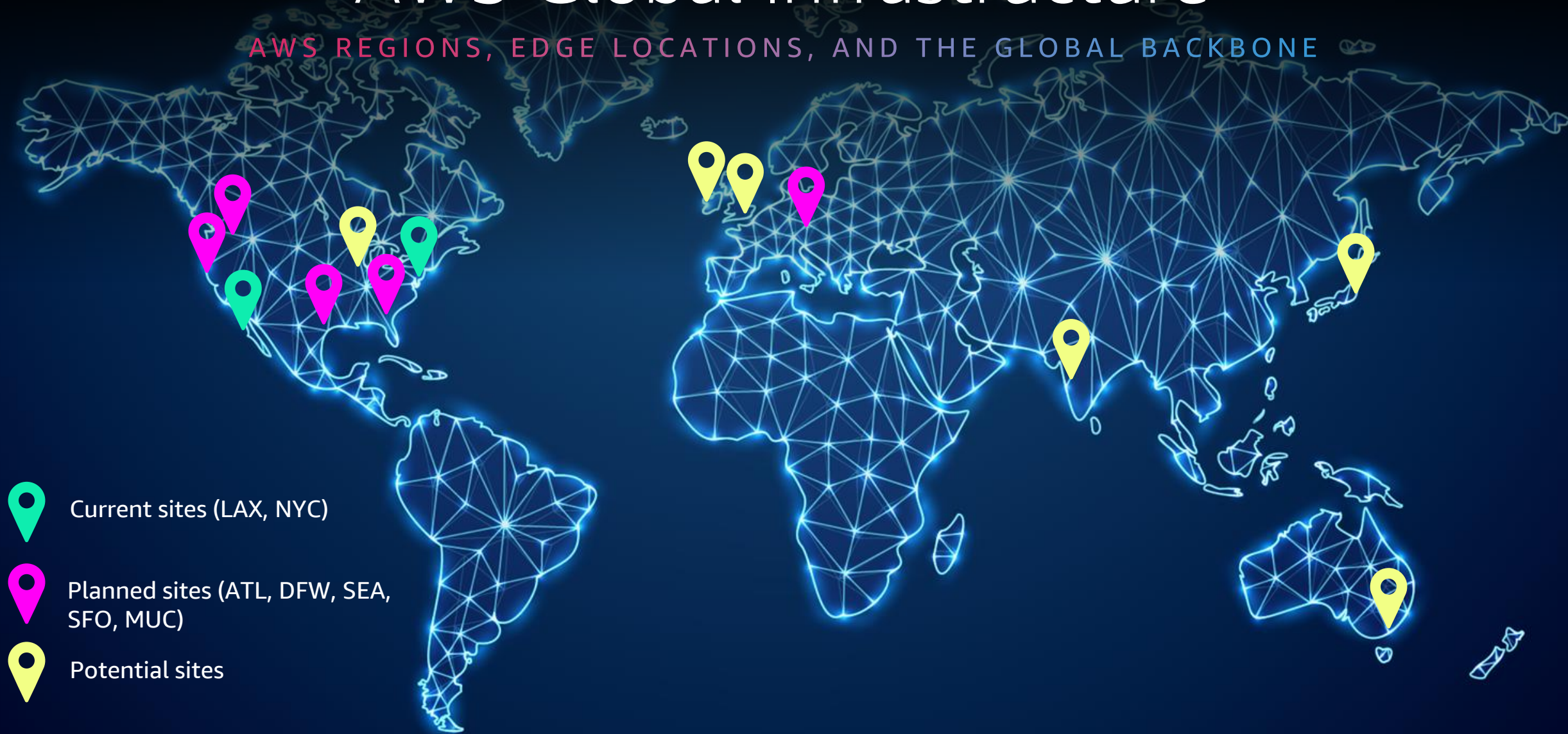
Current sites (LAX, NYC)

Planned sites (ATL, DFW, SEA, SFO, MUC)

Potential sites
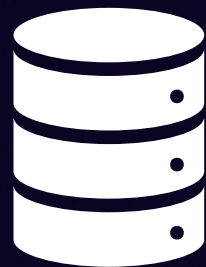
The experience

How AWS Data Transfer Terminal works

Reservation by process owner → **Confirmation & details**

Data creation → **Physical store** → **Any operator** → **Direct access to AWS network, i.e. Data Transfer Terminal** → **Uploaded data accessible via AWS Cloud**

Console: AWS Data Transfer Terminal

Console: Create transfer teams

Console: View facilities

Console: Create a reservation

Console: Create a reservation 2

What to bring

Valid government-issued identification

Storage appliance

Peripherals, such as portable monitor, mouse, keyboards

100G LR4 optics

Onsite access

Review site-specific access instructions

Reservation and identity validation

Access granted

Escort to the Data Transfer Terminal room

What to expect

Safe, secure, empty room with desk & chair

Pair of fiber-optic cables

How to begin upload

Review documentation to maximize throughput

Connect storage appliance to fiber-optic cables using 100G LR4 optics

Connect peripherals, such as portable monitor, mouse for accessing storage appliance

2 X Public IP addresses (including IPv6) allocated via DHCP

DNS resolution enabled
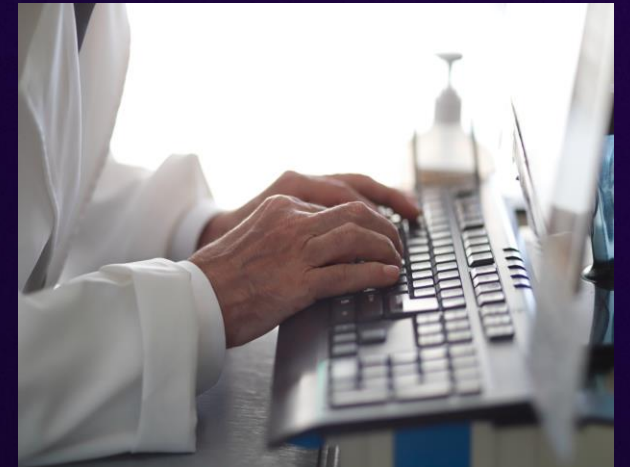
Authenticate credentials (such as Amazon S3) and begin upload

Benefits of AWS Data Transfer Terminal

Faster data upload

Decreased time to market

Complete control

Decreased security risk and data loss
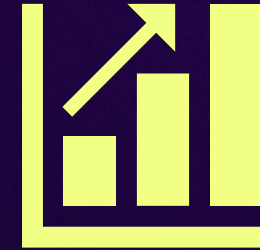
Better data

Improved data quality

Customer testimonials

"AWS Data Transfer Terminal empowers Rivian to expedite the development of its Autonomy feature roadmap. It enables us to process and train models on collected data approximately three times faster than current methods. Crucially, the data stays under Rivian's control, eliminating the need to ship SSDs. This capability is vital to our data collection initiatives as we expand internationally."

James Philbin
VP of Autonomy & AI, Rivian Automotive

"

At SUBARU, we operate test vehicles globally to collect driving environment data to enhance the quality and performance of our EyeSight system. Previously, we had to physically transport media containing massive amounts of test driving data to our office and upload it to the server before developers could access the data. By leveraging Data Transfer Terminal, we can now share data without physically transporting media to the office, providing developers with more options for accessing the data. Additionally, Data Transfer Terminal offers secure test data sharing at speeds approximately ten times faster than before. This has not only accelerated our development process but also enhanced data security. Furthermore, it has transformed the way data creators and developers work, enabling remote collaboration and contributing to our workplace innovation efforts.

"

Takashi Kanai
Deputy Chief of SUBARU Lab

Calls to action

1. Visit us on the re:Invent expo floor for a live demo; there are team members onsite to answer questions

2. Visit the AWS Data Transfer Terminal webpage

3. Review our documentation

4. Discuss with your account team

Thank you!

Please complete the session survey in the mobile app

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