

SATELLITE AND THE CLOUD: THE EDGE OF SPACE

Unifying Cloud, Space & Edge: Building a Seamless Data Foundation for AI Driven Innovation

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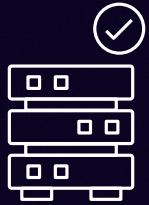
AWS



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Customers want the same experience

FROM THE CLOUD, ON PREMISES, TO THE EDGE



Secure, reliable, and
high-performance
infrastructure



Ownership model
and operational
consistency



Services
and APIs

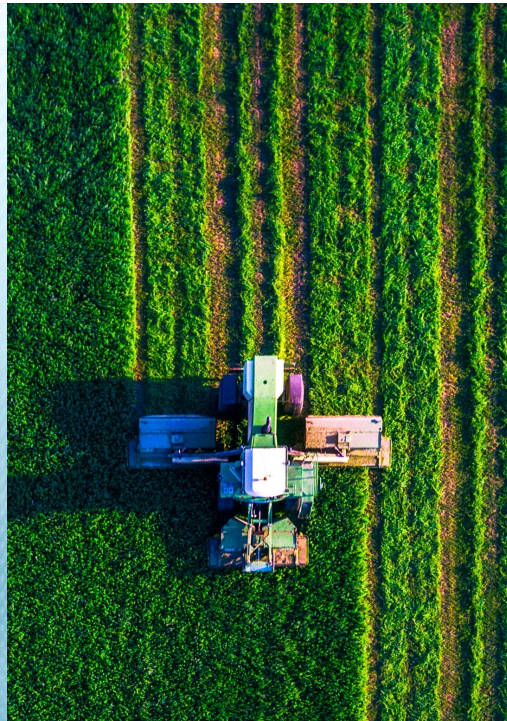
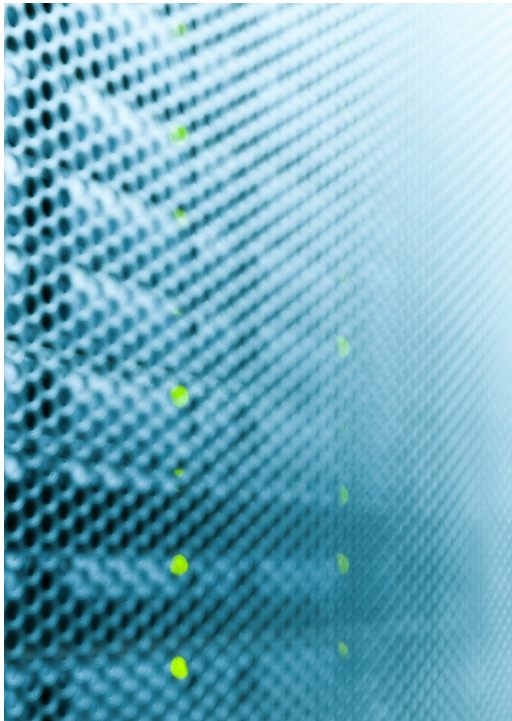


Tools for automation,
deployments, and
security controls



Pace
of innovation





Migration and modernization

Local data processing

Data residency

Low latency

Applications that are difficult to move to the cloud due to system interdependencies, size constraints, and location

Data-intensive workloads that can't be easily migrated to the cloud due to cost, size, bandwidth, or timing constraints

Workloads impacted by data security, data sovereignty, and geopolitical regulations can require businesses to store data in a specific country, state, or municipality

Applications that require real-time access to data with minimal delays to ensure applications are as responsive and accessible as possible



Cloud Continuum: AWS wherever you need it

← Same infrastructure, services, APIs, and tools for a consistent experience →

REGIONS



AWS Regions
AWS GovCloud
AWS European
Sovereign Cloud
(announced)

METRO AREAS & TELCO NETWORKS



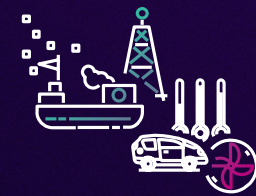
Amazon CloudFront
AWS Local Zones
AWS Wavelength

ON PREMISES



AWS Outposts
AWS Dedicated Local Zones
Amazon EKS Hybrid Nodes
Amazon ECS Anywhere

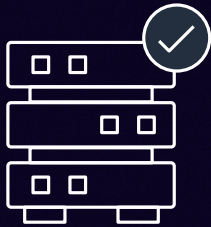
FAR EDGE



AWS Snowball
Amazon EKS Anywhere
AWS IoT



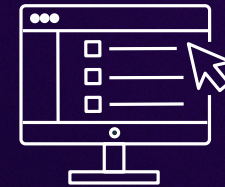
AWS Outposts: Bringing AWS on premises



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

Virtualized Satcom

- Reduced physical footprint at teleport locations
- Scale FPGA-based resources at the edge or in the cloud
- Maintain low latency edge processing with consolidated operations

<https://www.c21-virtual.com/the-hts-roundtable-2024>
Agile Satcom Ground Systems with AWS



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Hybrid cloud migrations

- Low-latency access to on-premises operational systems and databases
- Enable migration of latency-sensitive workloads to the cloud
- Integrate with enterprise data foundations



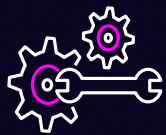
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Architecting for data security on hybrid cloud



Identify
compliance
posture



Define and
implement
policies



AWS Regions



AWS Outposts



AWS Local Zones



AWS Dedicated
Local Zones



AWS Control Tower
landing zone



AWS Organizations –
service control policy (SCP)



AWS Config



AWS Identity and Access
Management (IAM)



AWS Cloud WAN

Your Data Powers Business Innovation

If your data is on AWS, you can accelerate innovation with AI



Data lake



Analytics



Real-time
streaming



Databases



Search

Realizing value from existing data sources

- Mission Operations Systems

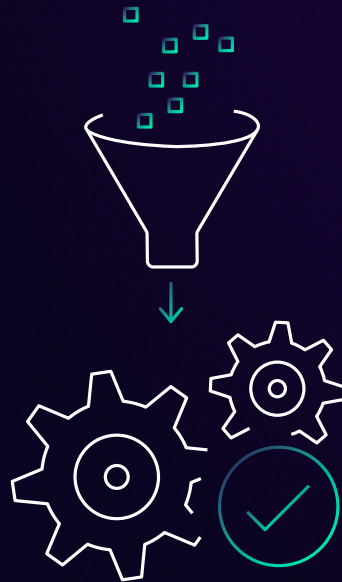
- Flight Dynamics
- Mission Planning
- Command & Control
- Payload Processing
- Tasking

- Edge Capabilities

- Antenna Systems
- Network Connectivity

- Enterprise Repositories

- CRM systems
- ERP systems



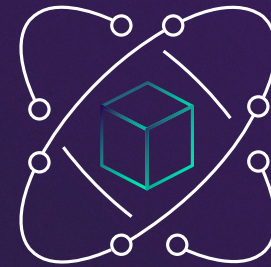
Simplified data pipelines enable faster time to market



Direct service integrations to **eliminate ETL**

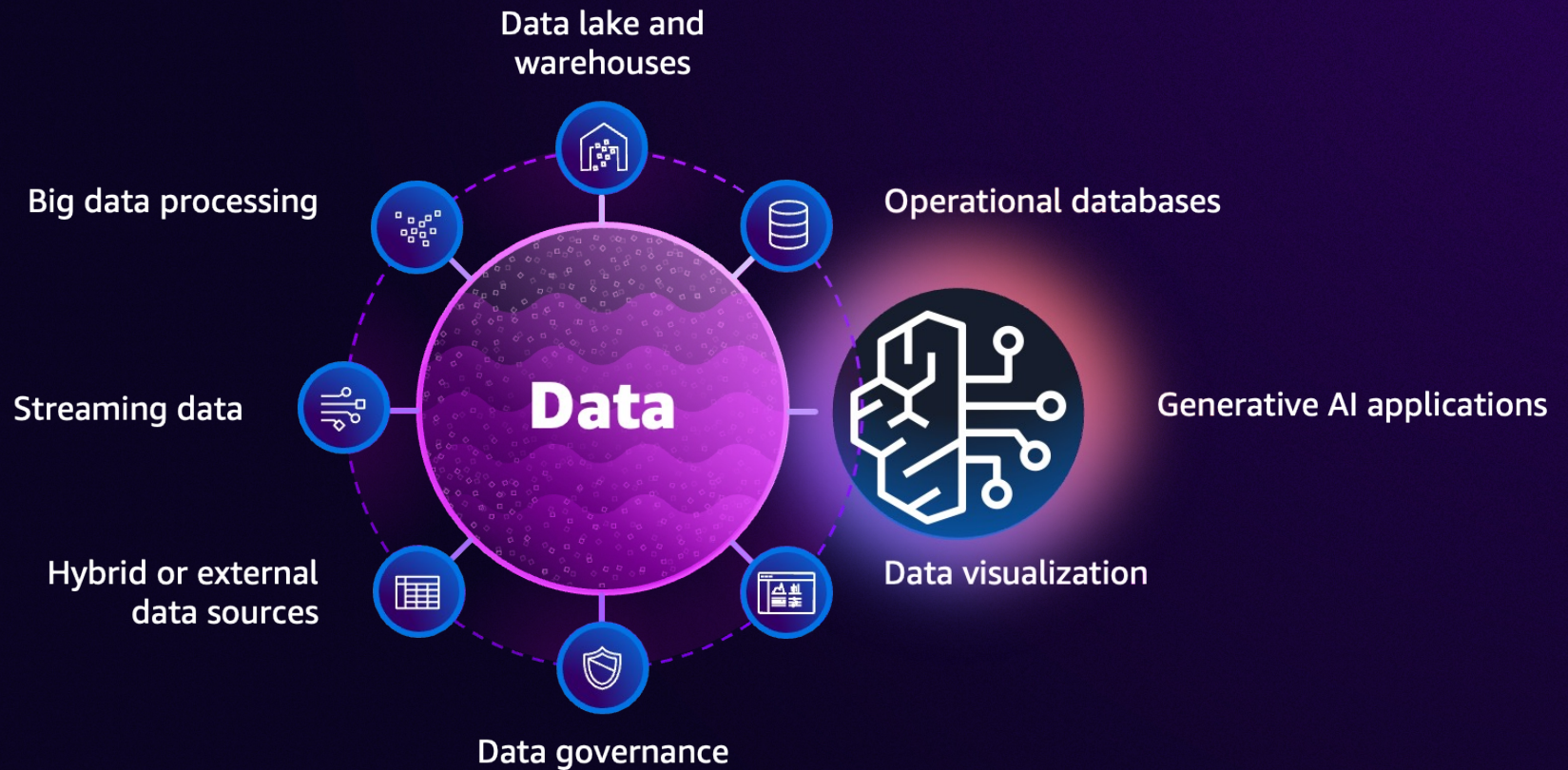


AWS Glue for value-add data transformations and more



Connectors to **hundreds of data sources** and services for partner and third-party data

Leverage data foundations for AI applications



Summary

- Simplify operations for hybrid space systems and networks
 - Common control plane for cloud and edge components
 - Consistent deployment APIs and operational monitoring tools
 - Integrate new technologies and services globally on-demand
- Adopt a modern data strategy for innovation
 - Leverage data sources to create unique customer experiences
 - Incorporate hybrid edge in a comprehensive data foundation
 - Secure AI applications to follow enterprise access controls

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Thank You

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