Snowball and Direct Connect



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Overview



Amazon Direct Connect

- What is it?
- When to use it

The Snowball device family

- Snowball and Snowmobile
- Snowball Edge

Use cases



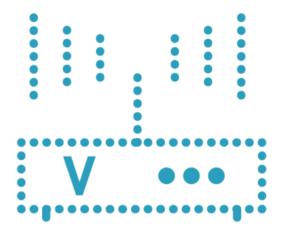
Amazon Direct Connect



What is Direct Connect?



Dedicated network connection



Virtual Interfaces to AWS services



Bypassing ISPs in network path



Example Partners

CenturyLink AT&T Many others, Cologix dependent on region



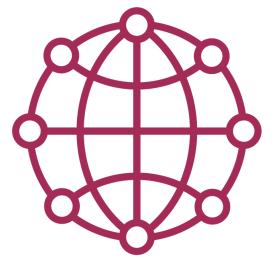
Configuration Options







Access VPC in the same region



Access any region public endpoints



Potential Benefits of Direct Connect



Potentially reduce network costs vs ISP



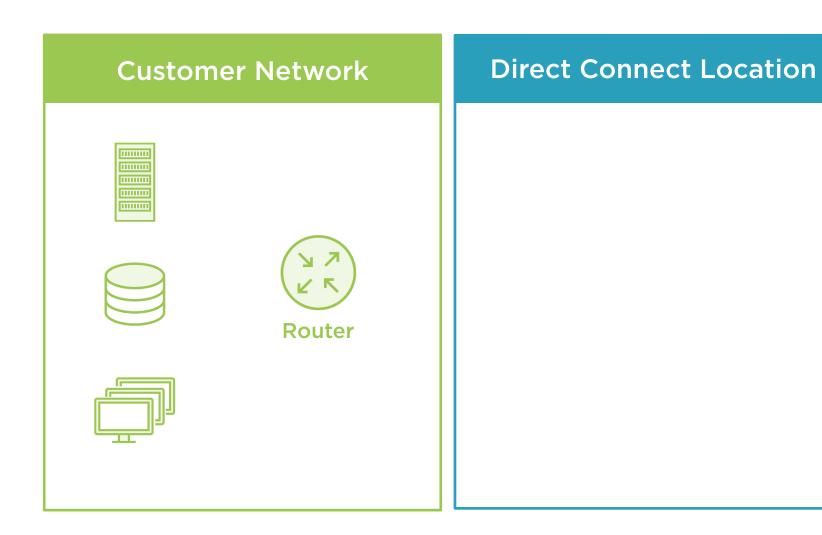
Direct Connect data transfer billed lower by AWS

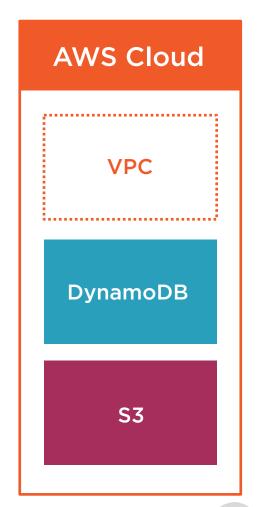


Network consistency – avoid public internet infrastructure



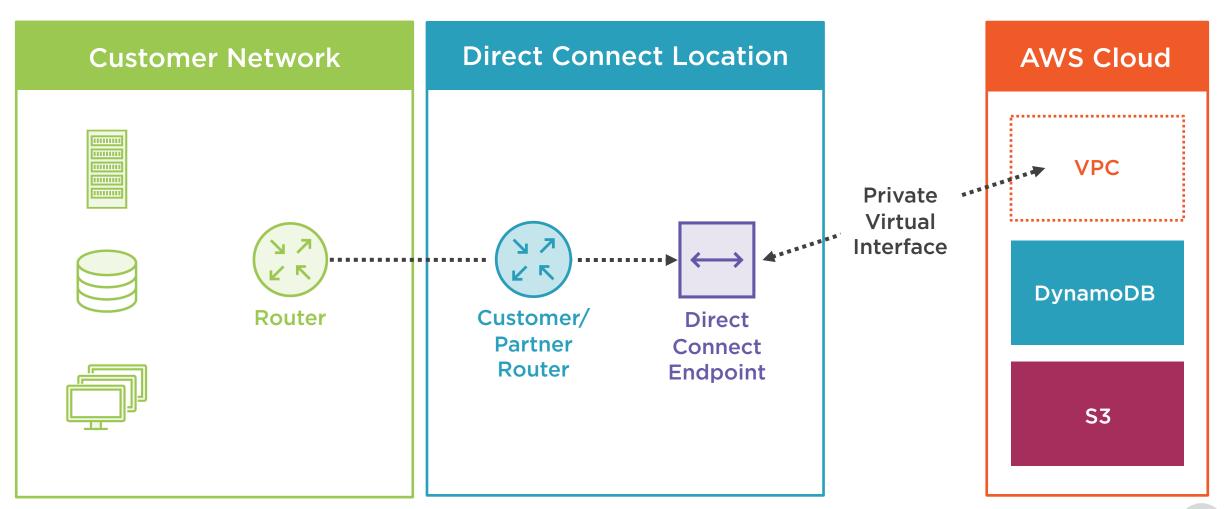
Direct Connect Visualized



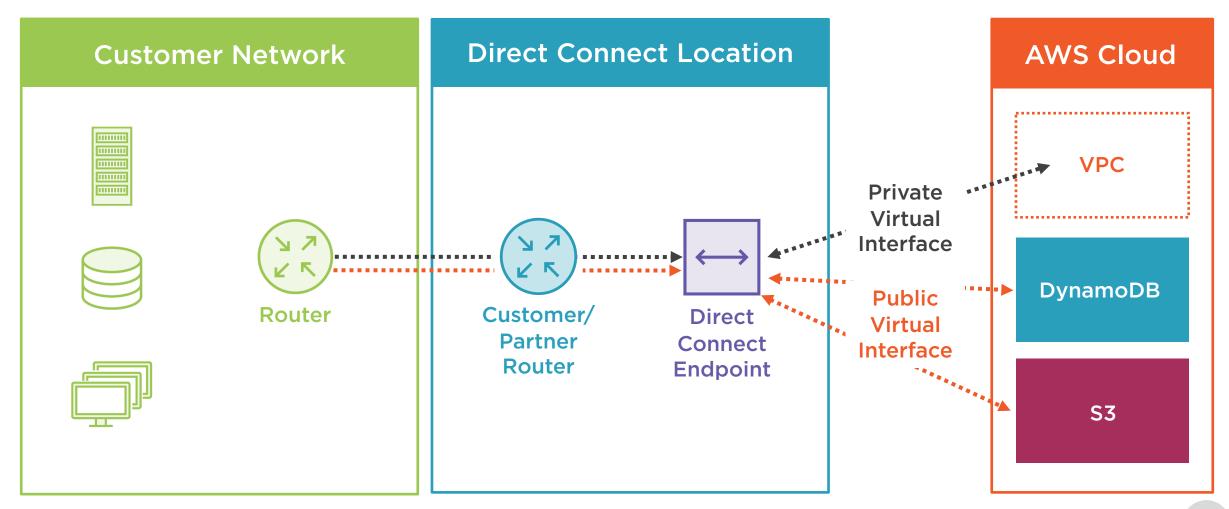




Direct Connect Visualized



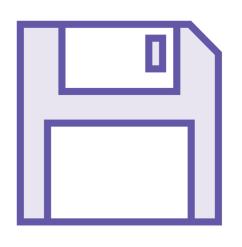
Direct Connect Visualized



The Snow Family



What Are Snowball Devices?



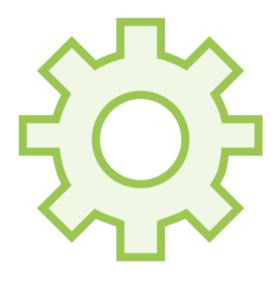


Retiring



Snowmobile

100PB Storage



Snowball Edge

50TB - 80TB Storage 32GB-208GB RAM



Snowball Edge Devices

Onboard compute capacity

EC2 and S3 compatible endpoints

Onboard Lambda functions



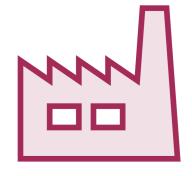
Examples for Using Snowball Edge



IoT Sensor Stream Capture



Long distance travel

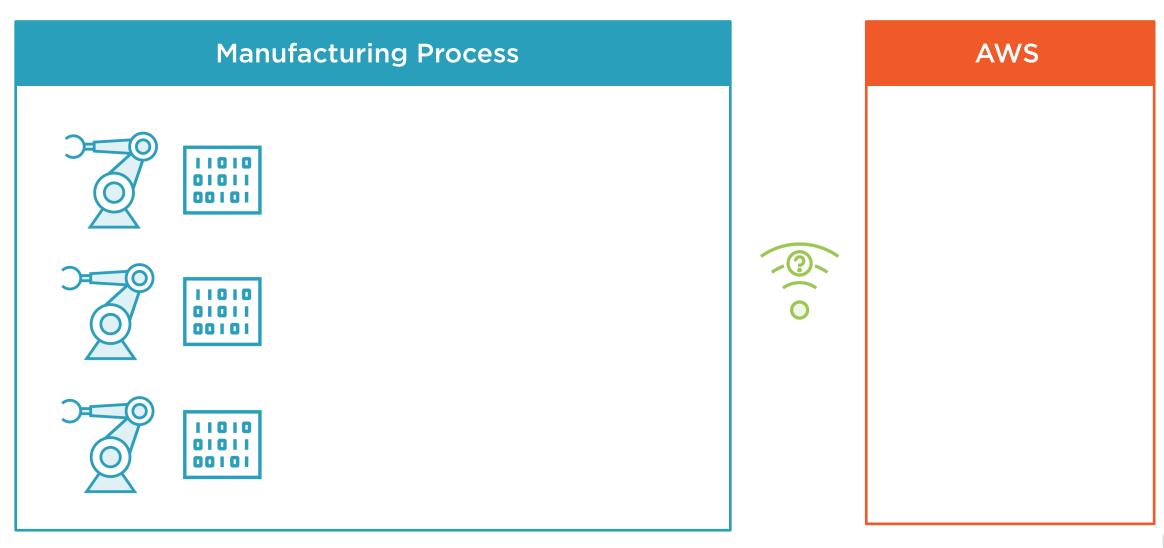


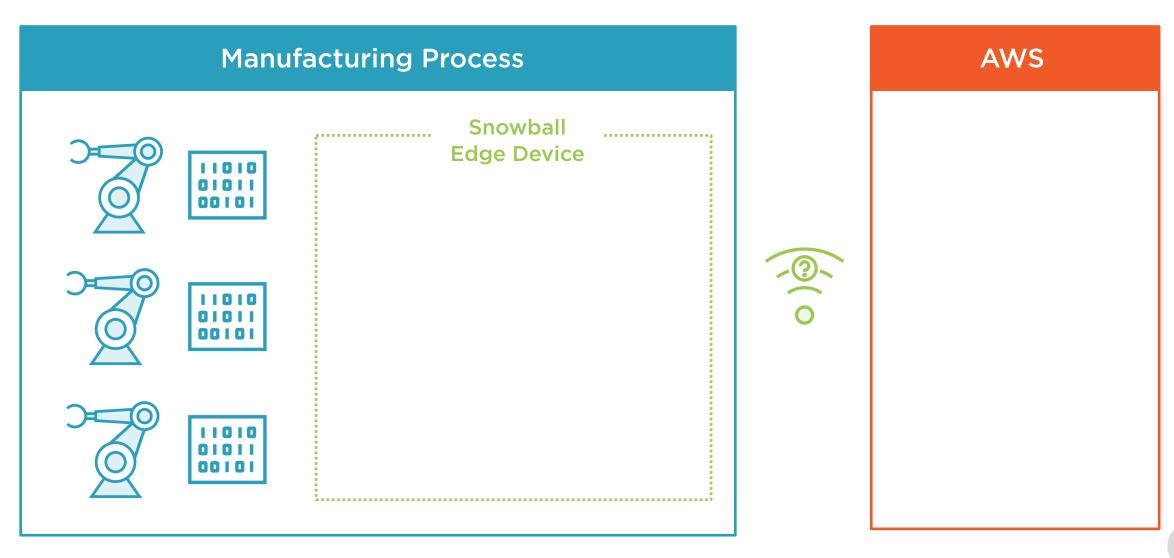
Manufacturing

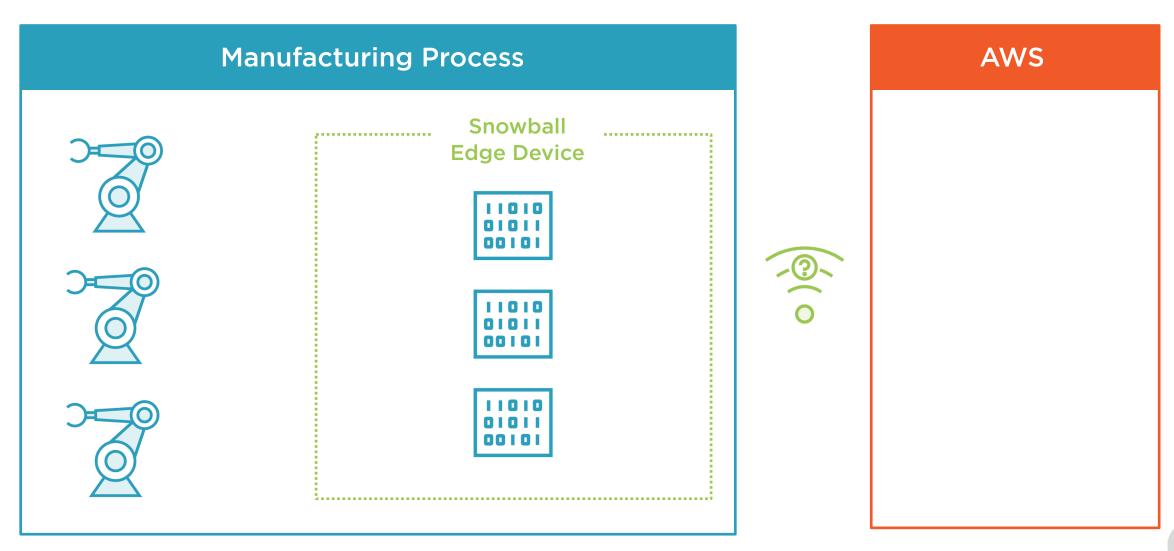


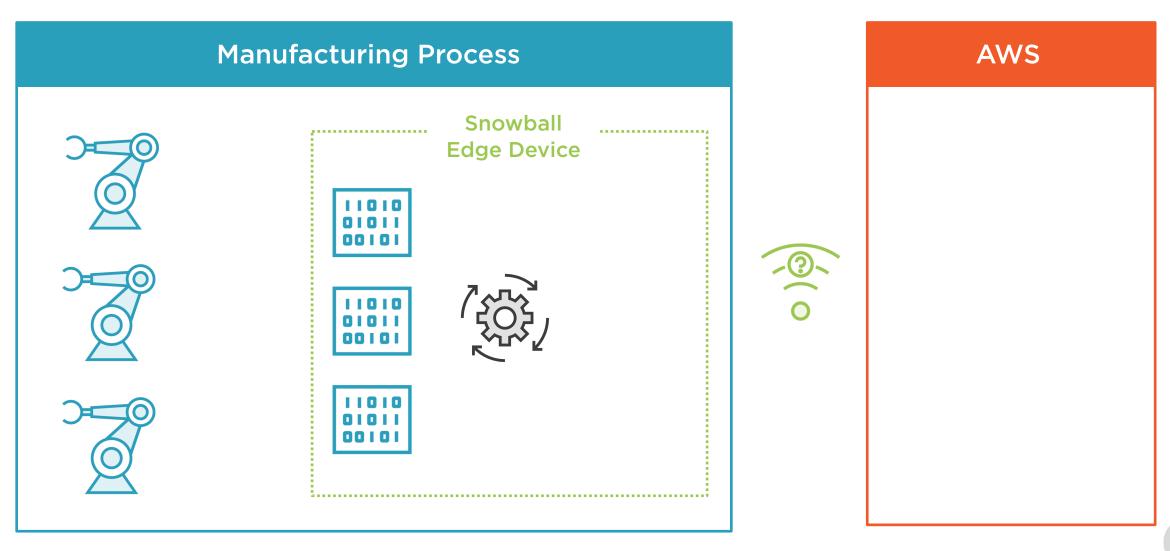
Poor connectivity situations

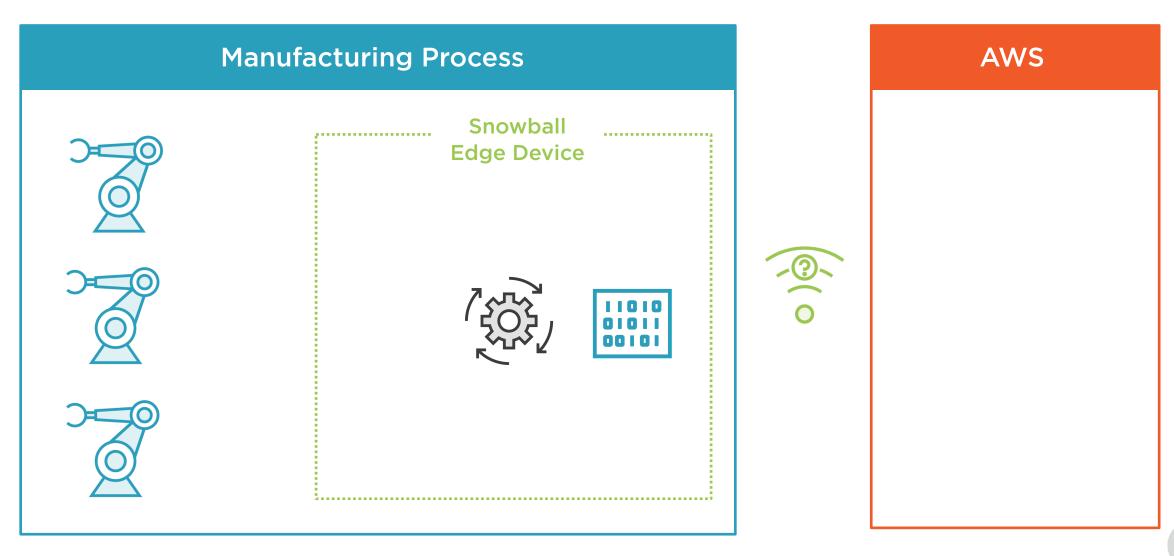


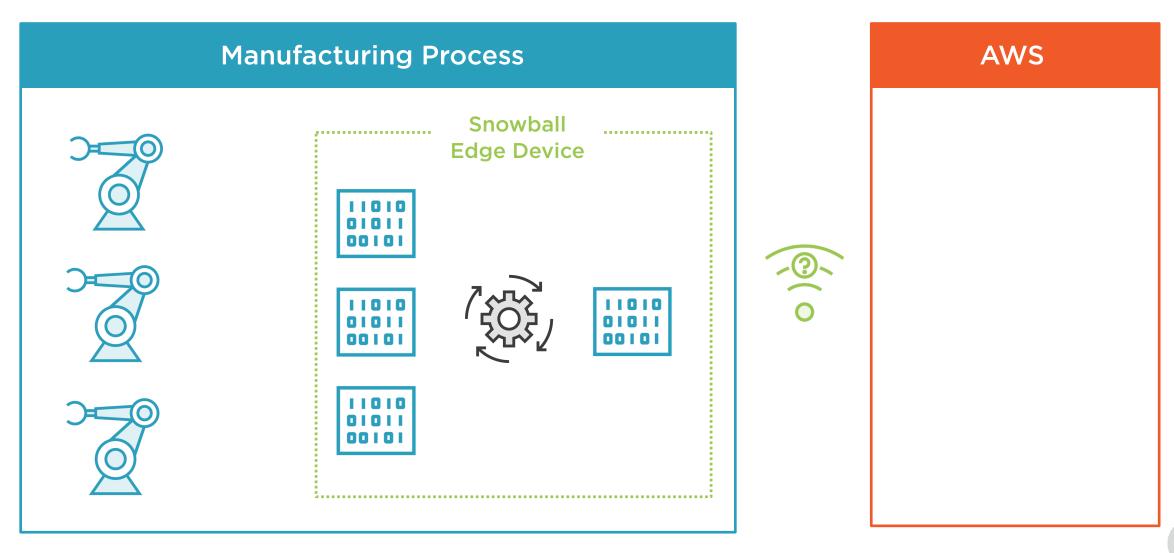


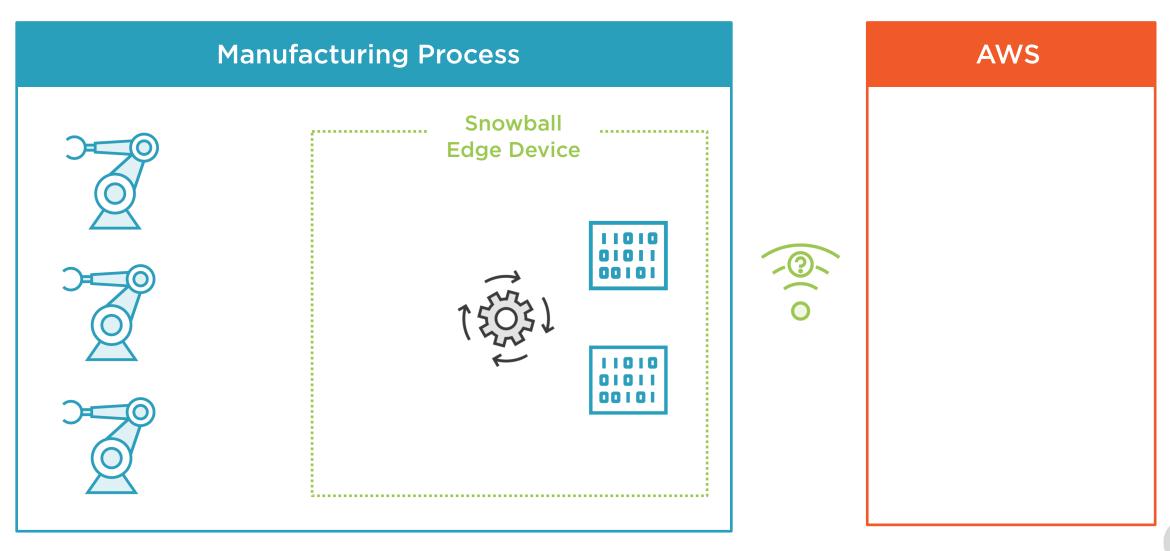


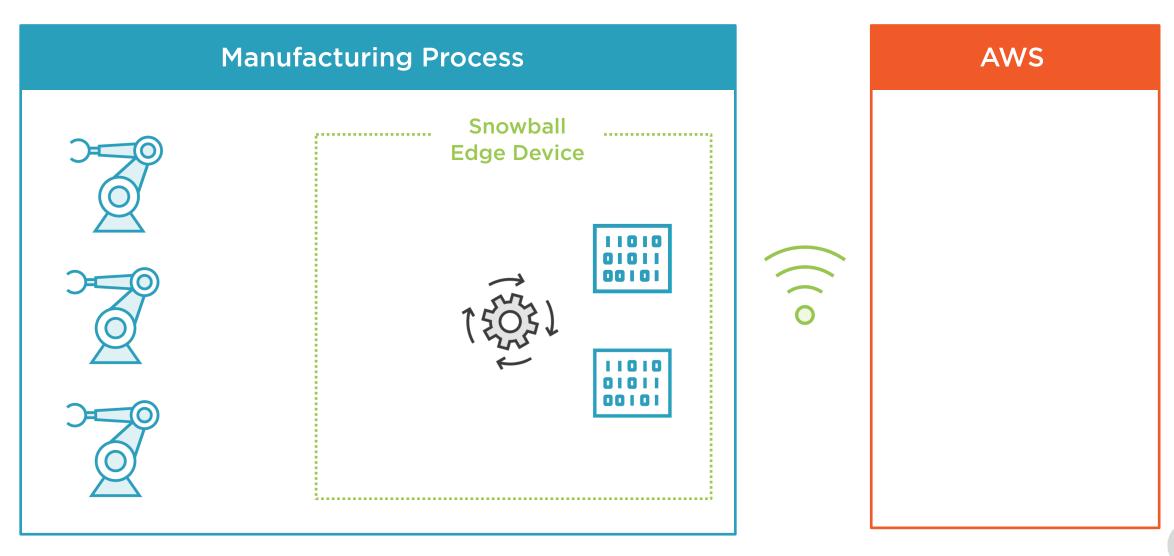


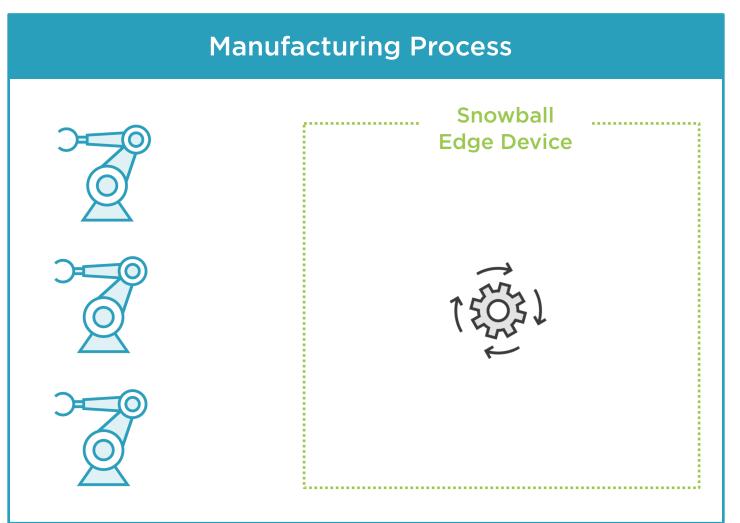




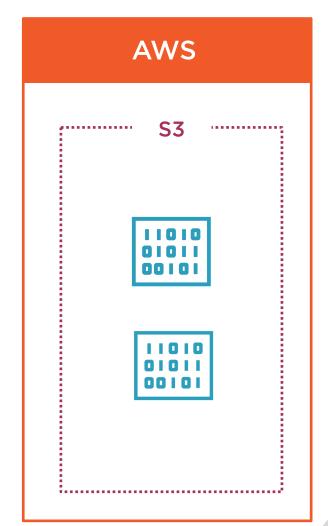














What to Use When?

Snowball Edge



You might not be able to establish a network connection at all



Direct Connect

You want to establish a direct network connection with AWS



Enhance the compute or storage needs of an "at the edge" environment



Enhance on-premises environment with dedicated bandwidth to AWS



You need to transfer large batches of data from distributed locations

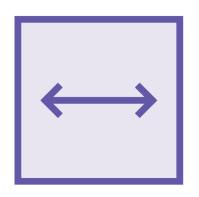


You need to transfer large amounts of data in an ongoing basis



Practice Time!







Snowmobile

225PB of video and image data to transfer into AWS

Direct Connect

Connect to AWS services in VPC without going through the internet

Snowball Edge

Aggregate factory equipment data and send it to AWS



Summary



Amazon Direct Connect

Snowball Edge and Snowmobile

When to use what services





Up next:

AWS Database Migration Service

