AWS re:Invent

ANT305

Cross-region and -account architectures with Amazon Kinesis and Amazon MSK

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Agenda

Problem overview

Amazon MSK challenges

Amazon MSK solutions

Amazon Kinesis challenges

Amazon Kinesis solutions

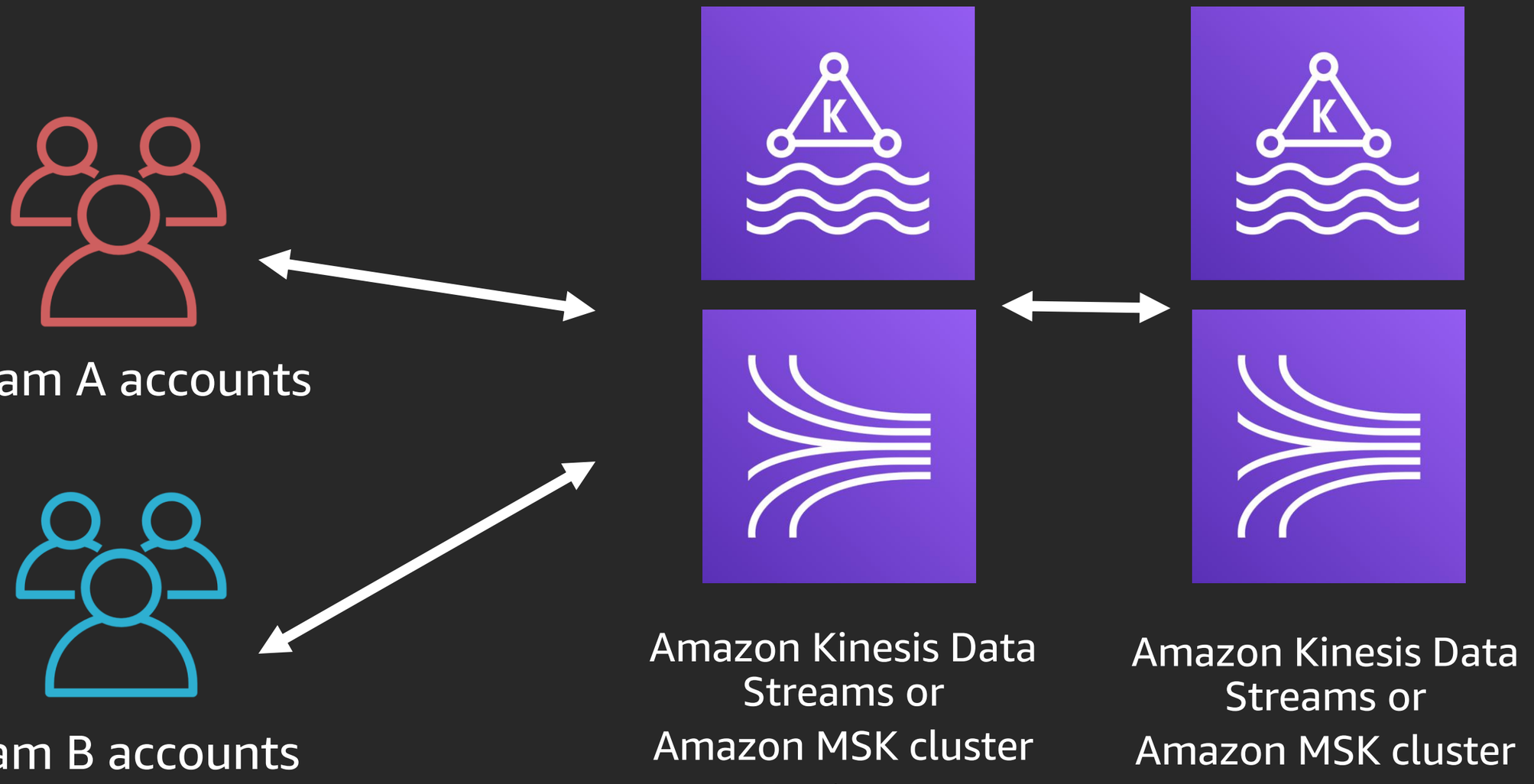
Q&A and discussion



Related breakouts

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ANT316	Choosing the right service for your data streaming needs
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ANT409	Getting started with streaming data and Amazon Kinesis
ANT410	Getting started with Amazon MSK
ANT415	Learn how to quickly ingest data into Amazon S3

Problem overview

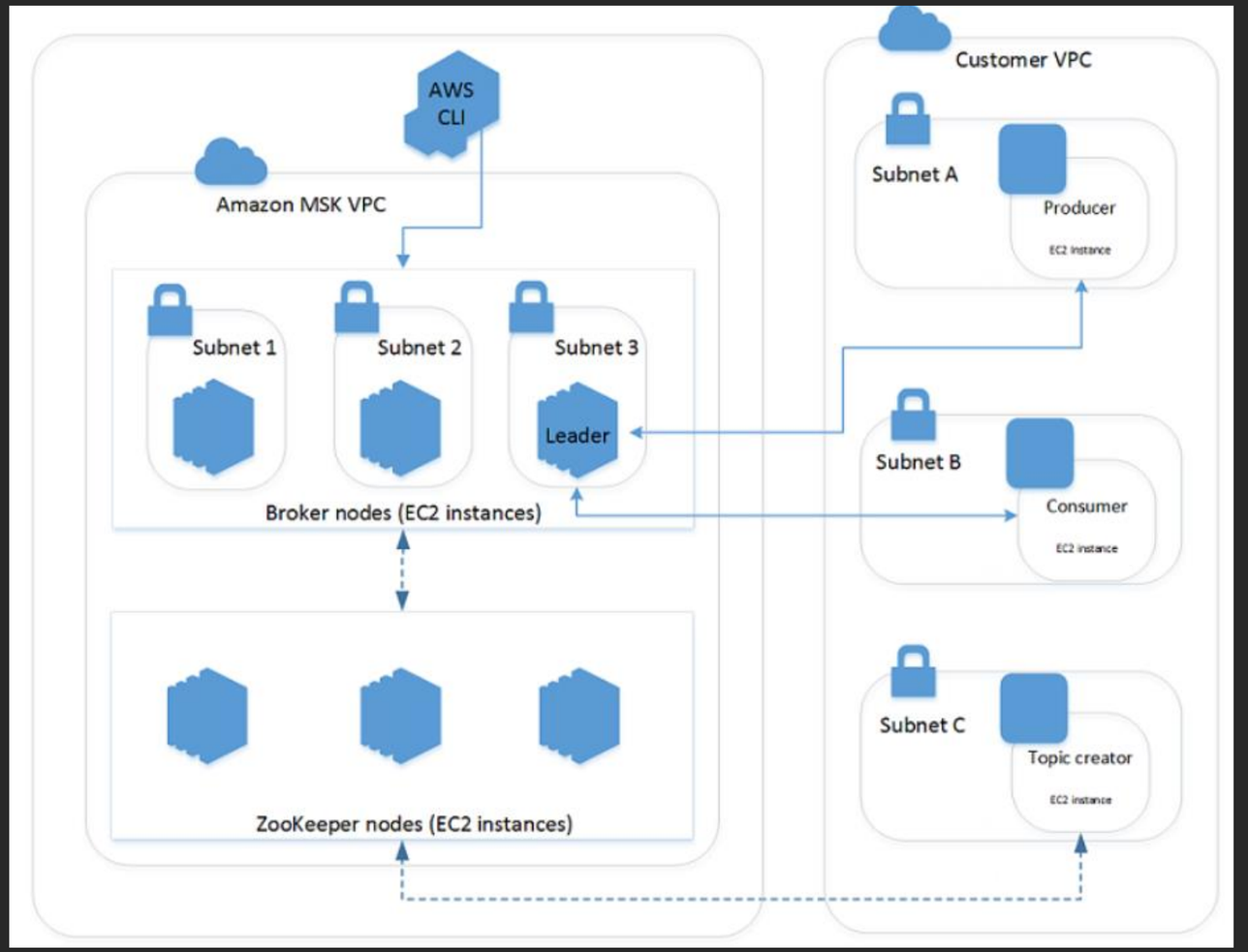


Amazon MSK: Cross-region/-account challenges

Network: Virtual Private Cloud (VPC) access



Amazon VPC



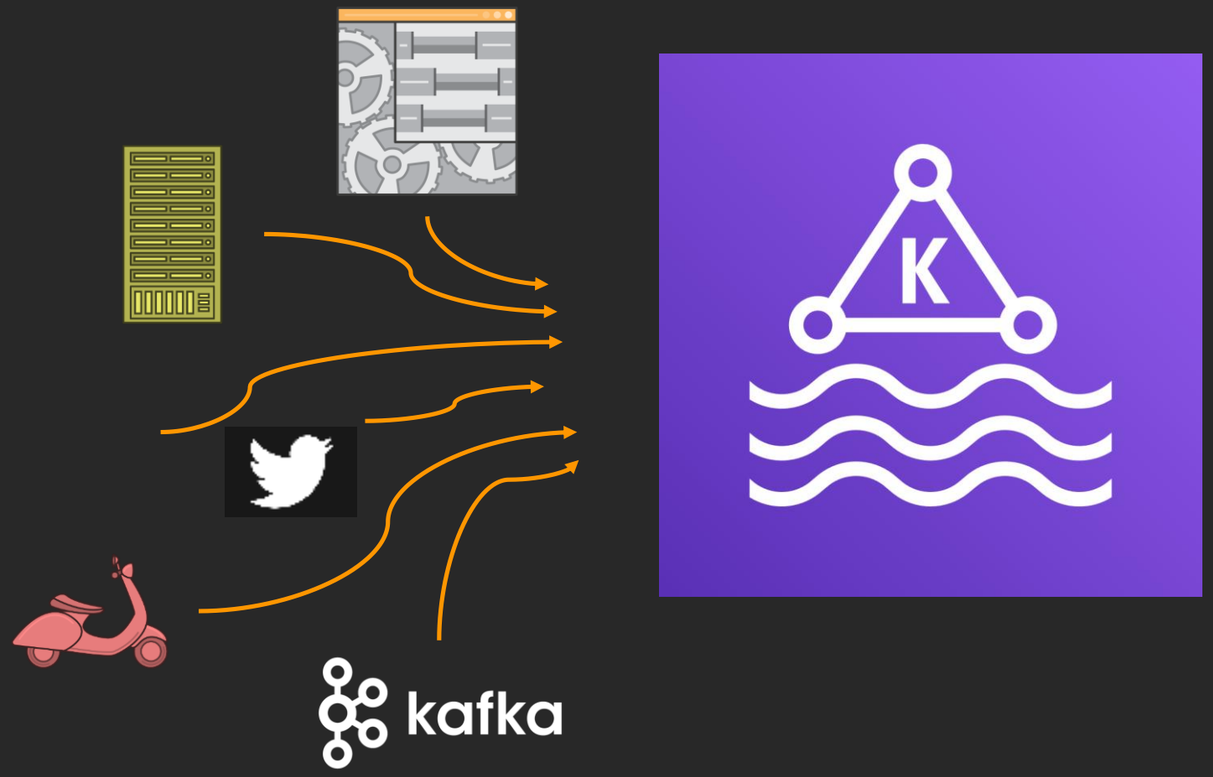
Amazon MSK: Solutions

VPC access

- Peering
- VPN: Site-to-site and client
- AWS Transit Gateway
- AWS Direct Connect
- REST proxy

Multi-region

- Replication using MirrorMaker



Amazon Kinesis: Cross-region/-account challenges

- Authorization of remote accounts
  - Amazon Kinesis Data Firehose
  - Amazon Kinesis Data Analytics
  - AWS Lambda
- Cross-region offset tracking
  - Maintaining message order across regions





Amazon Kinesis: Solutions

Cross-account

- IAM authorization patterns
  - Policies
  - AWS STS credential code examples
- Lambda trigger chaining

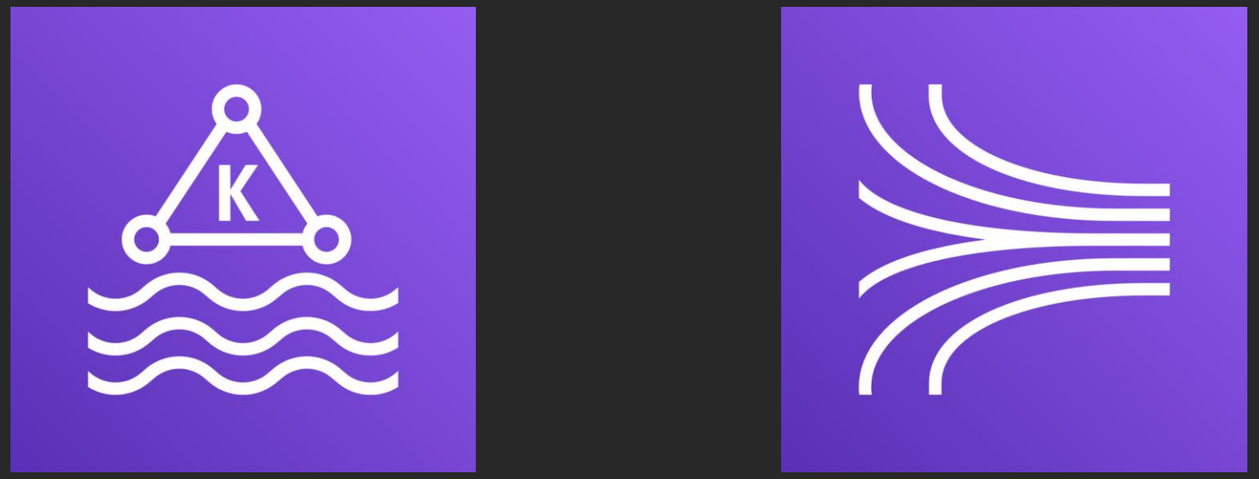
Cross-region

- Timestamping messages
- Managing duplicates on consumers





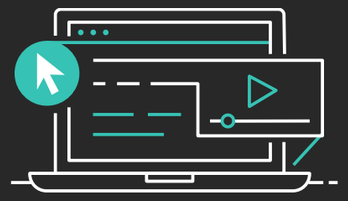
Questions and discussion



Amazon MSK and Amazon Kinesis

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Thank you!

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