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

ANT310-R

Build a data mesh with AWS Lake Formation and AWS Glue

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Agenda

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Common data lake challenges we hear from our customers

"Finding the data I need is too difficult"

"I just want to get access to the data I need"

"Difficult to meet all requirements across differing business units"

"I wish to focus on innovating with data, not on maintaining and administering a data lake"

"My data science team should easily find the datasets they seek and have the ability to share them with others"

"My team needs to own datasets, pipelines, and repositories that are isolated from other teams"

"Why doesn't our organization treat data as a product?"

"Current data architecture is complex and monolithic and slow to change"

"If I share data, I've lost control"

"There is a mismatch between executive leadership goals and business line deliverables and incentives"

"Our internal policies on what can be shared are unclear and there is lack of incentive to share"

"Need to create a model to support sharing from both producers and consumers of data"

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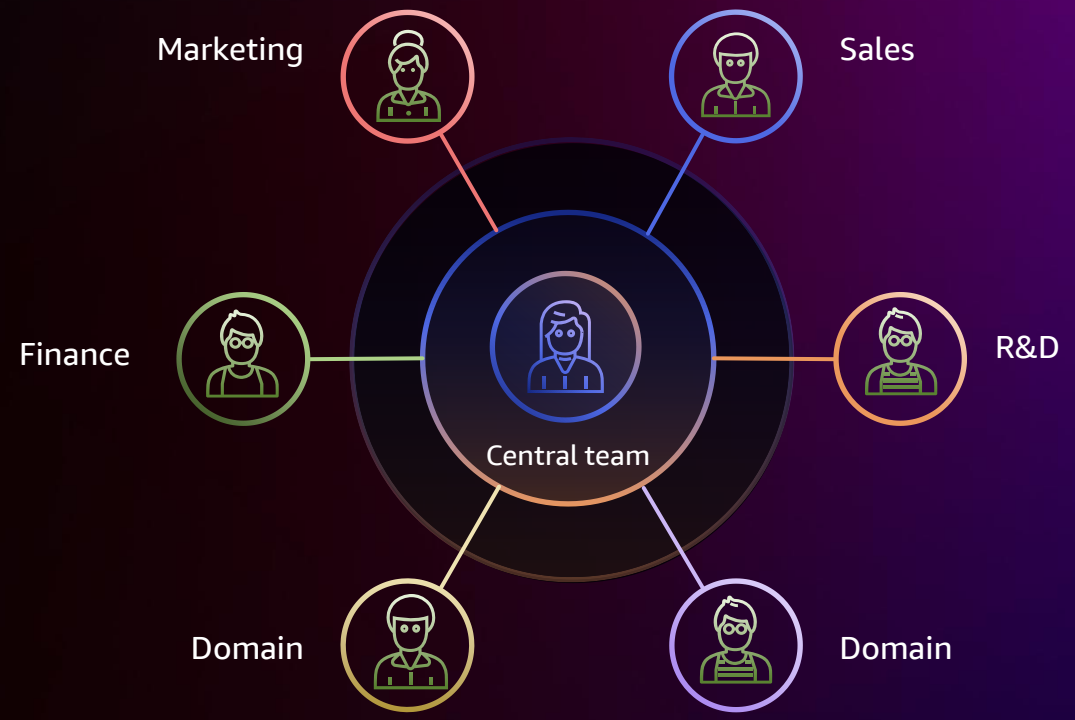
Centralized solution challenges

- Central data team becomes the bottleneck
- Fail to scale data consumers
- Unable to discover and consume the data
- No central data governance
- Lack of data auditability



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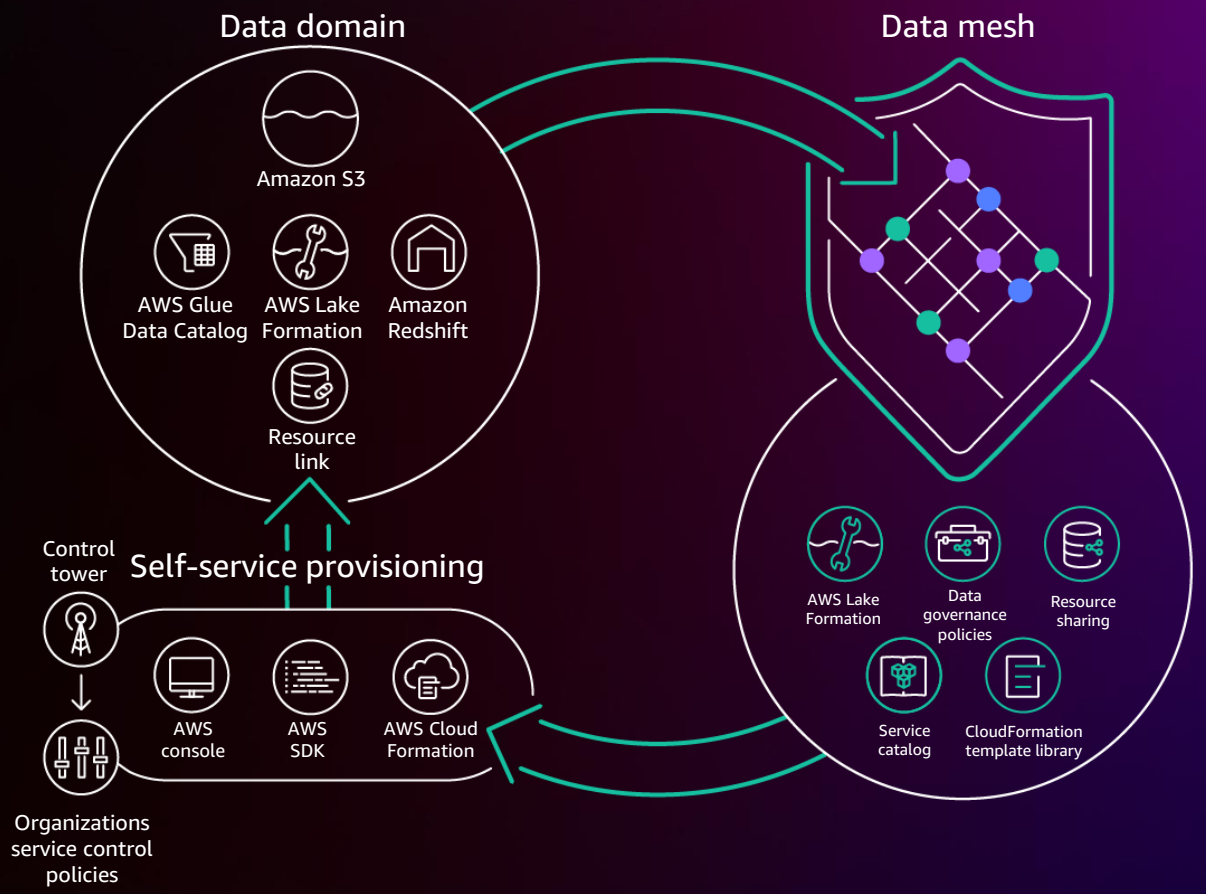
Why data mesh?

Treats existing data platforms as independent domains

Improves data governance

Establishes a central mechanism for data discovery

Provides self-service data sharing features



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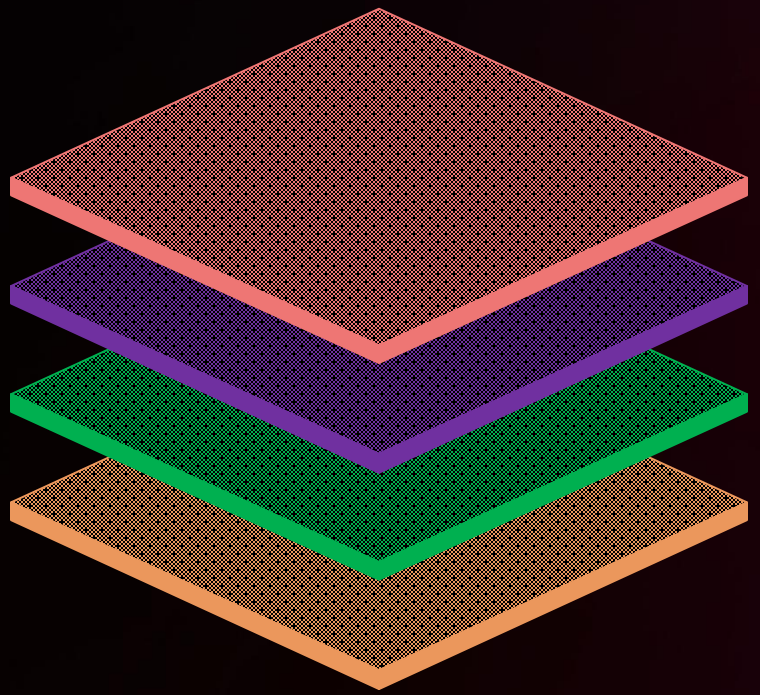
Data mesh – Four core principles

Data owner

Data domain ownership

Data steward

Federated computational governance



Data engineer

Data as a product

Data consumer

Self-serve sharing

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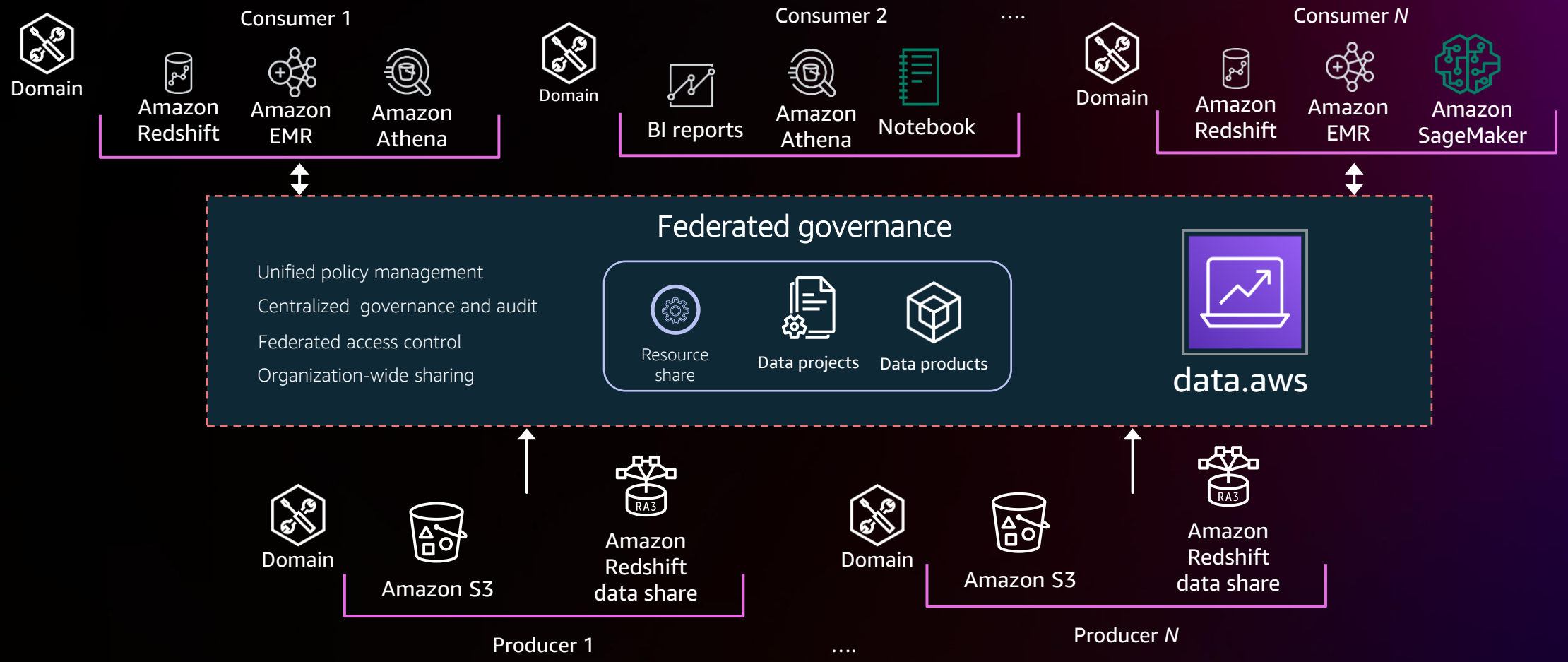
Data mesh architecture

Decentralized, light-weight, federated governance across domain-oriented data systems to drive governed sharing



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Related session

ANT336

Building data mesh architectures on AWS

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Today’s workshop

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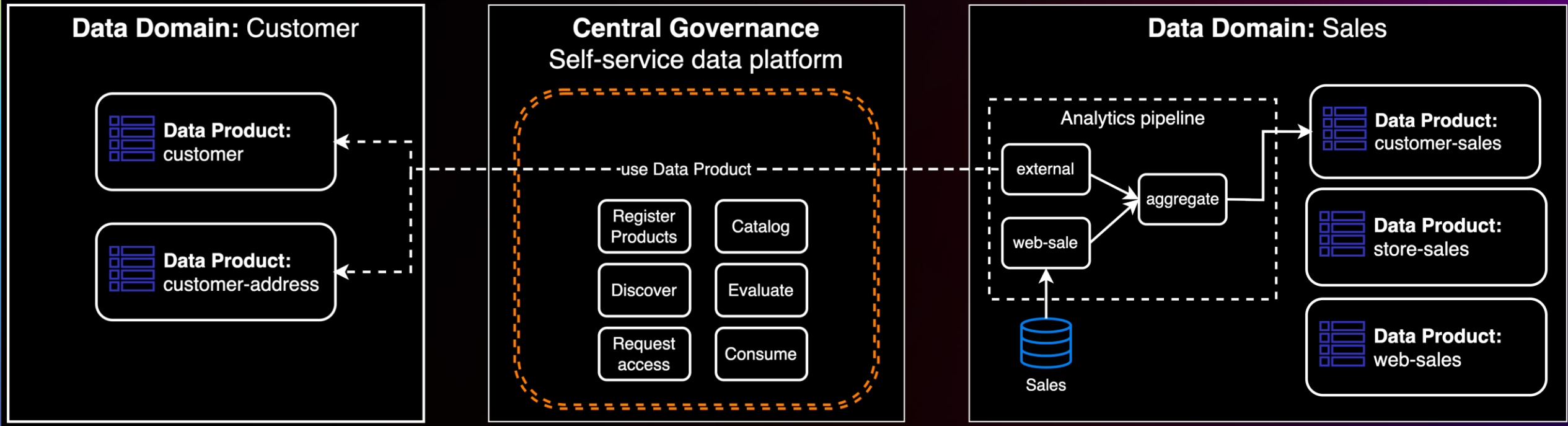
What we will build today



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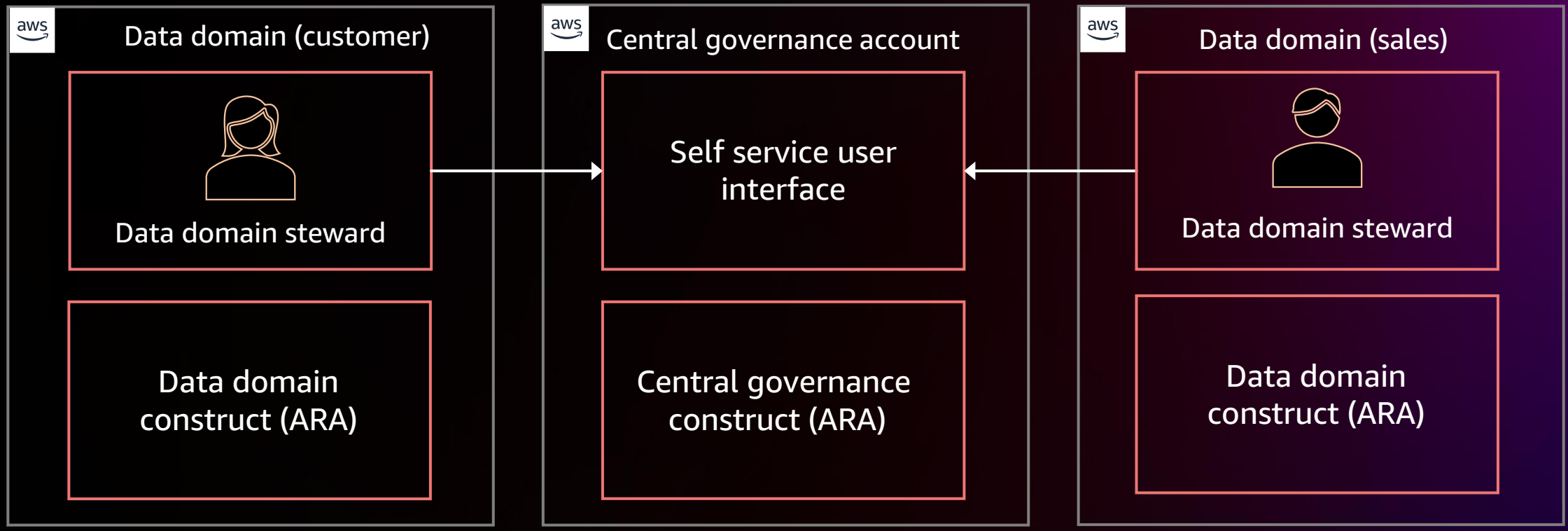
Main building blocks



https://github.com/aws-samples/aws-analytics-reference-architecture

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Workshop setup

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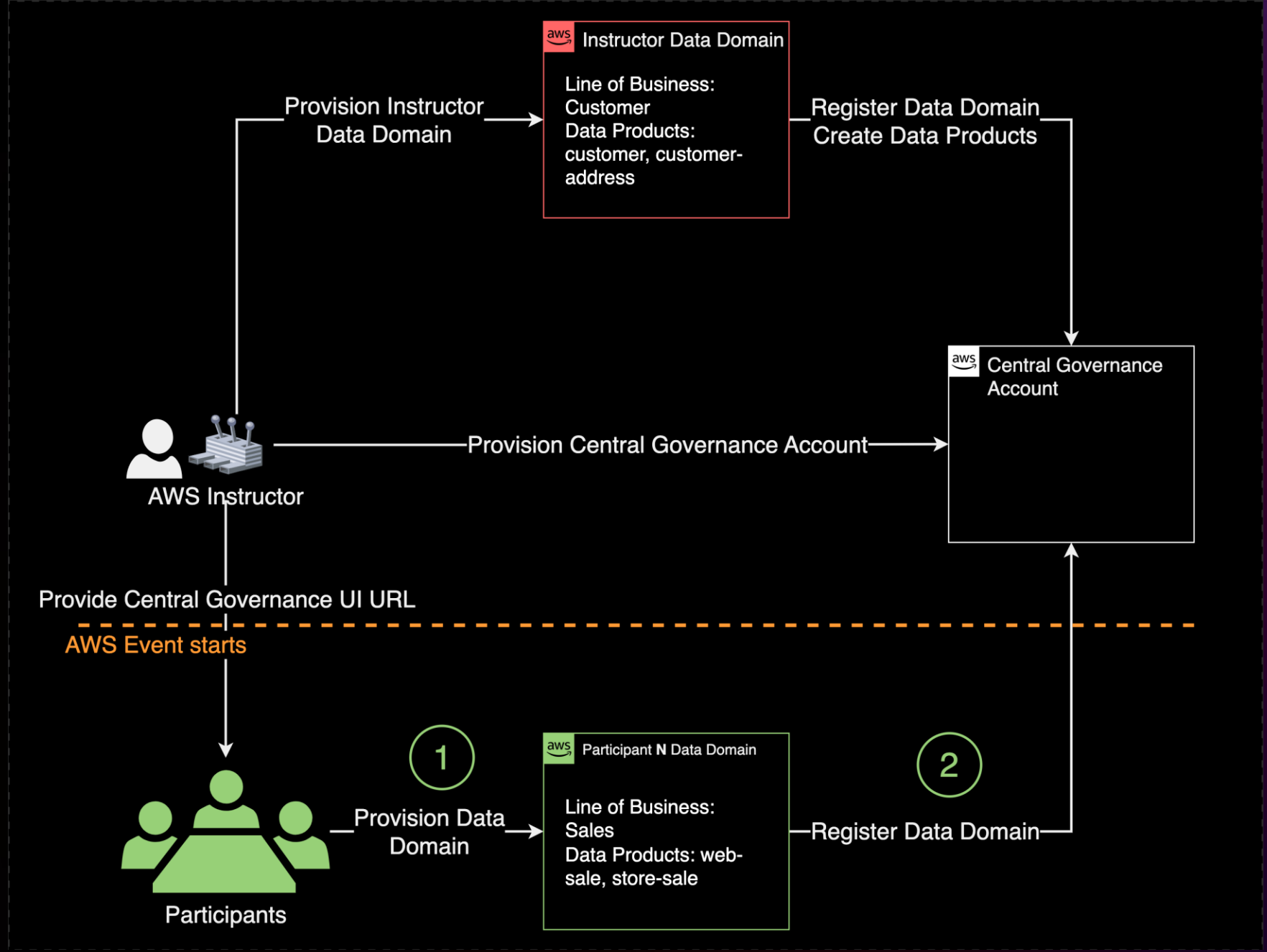

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Workshop access

Join link: **https://s12d.com/ANT310**

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Getting started with this workshop

- As a participant, you will have access to an AWS account with any optional pre-provisioned infrastructure and IAM policies needed to complete this workshop
- The AWS account will only be available for the duration of this workshop; you will lose access to the account thereafter
- The optional pre-provisioned infrastructure will be deployed to a specific Region; check your workshop content to determine whether other Regions will be used
- Be sure to review the terms and conditions of the event; do not upload any personal or confidential information in the account

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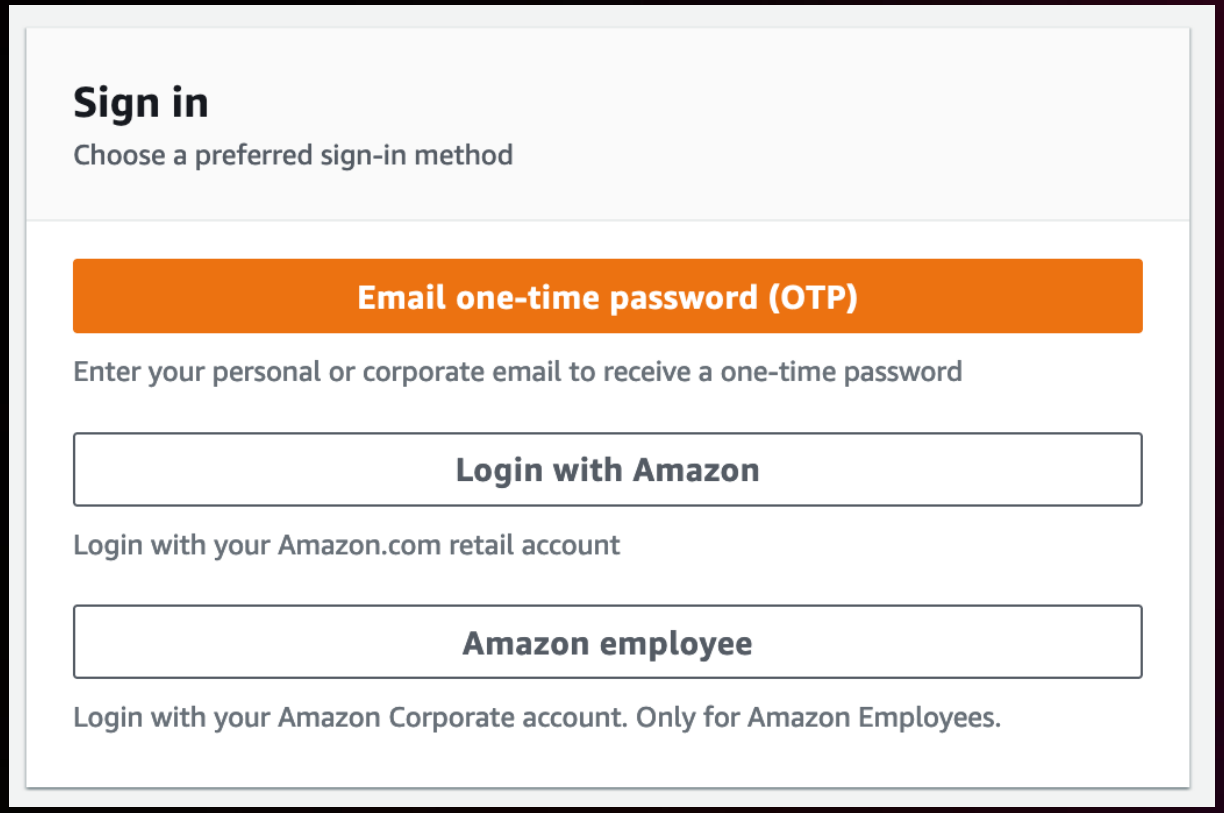
Step 1: Sign-in on your laptop



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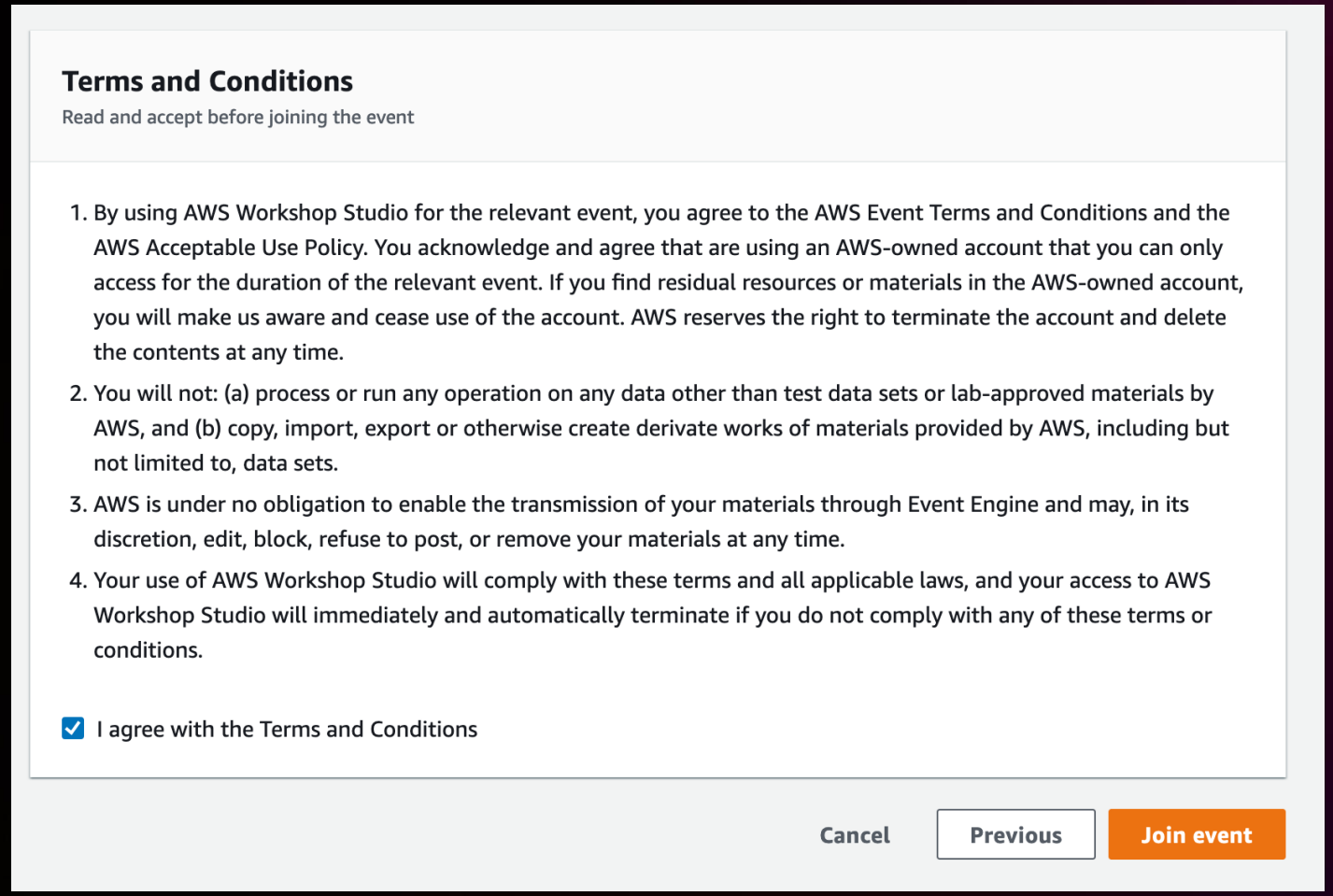
Step 2: Review terms and join event



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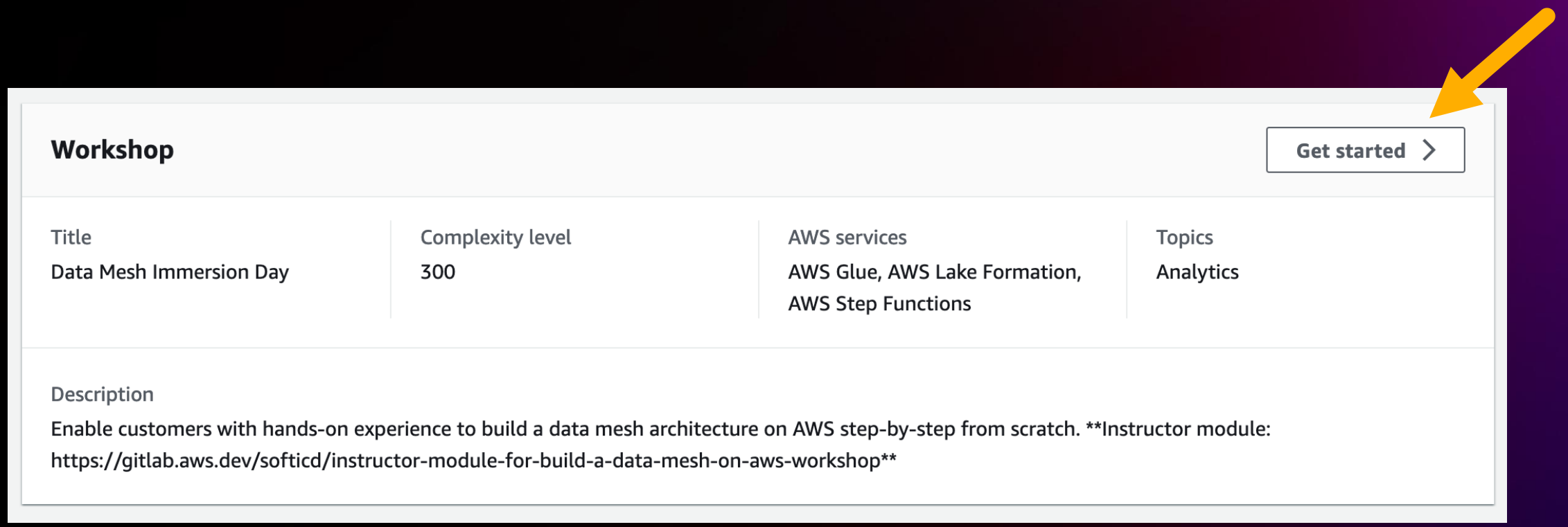
Step 3: Get started with the workshop



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Have fun building data mesh on AWS!

Join link: **https://s12d.com/ANT310**

Workshop details: **https://s12d.com/ANT310-teams**

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Resources

Workshop link:
https://s12d.com/data-mesh-workshop

Blog post:
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