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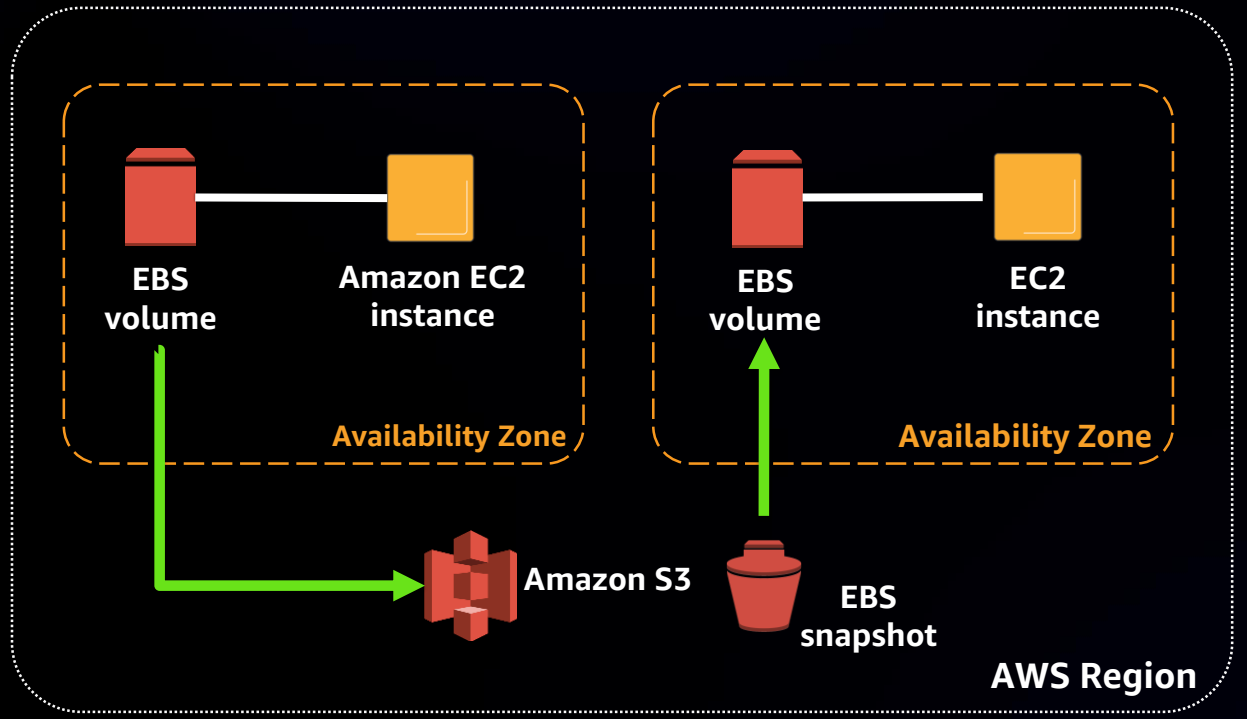
Data protection with Amazon EBS snapshots and Amazon DLM

AJ Park
Senior Technical Product Manager, Amazon EBS
Amazon Web Services

Kirill Davydychev
Senior Storage Solutions Architect
Amazon Web Services

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Introduction to EBS snapshots



- Point-in-time backup of modified volume blocks
- Subsequent snapshots are incremental
- Crash-consistent snapshots to easily restore from hardware failures

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Common customer use cases

1) Save cost by automating lifecycle of EBS snapshots and EBS-backed Amazon Machine Images (AMIs)

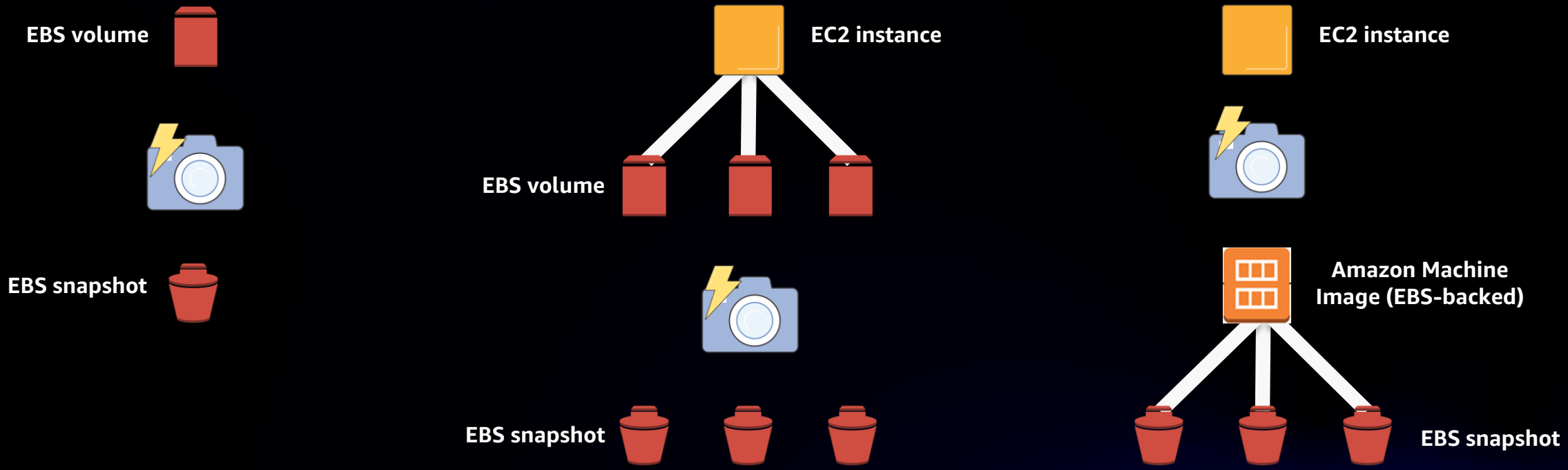
2) Protect my data by automatically copying snapshots to a separate account or region

3) Automate AMI management and distribution across Regions

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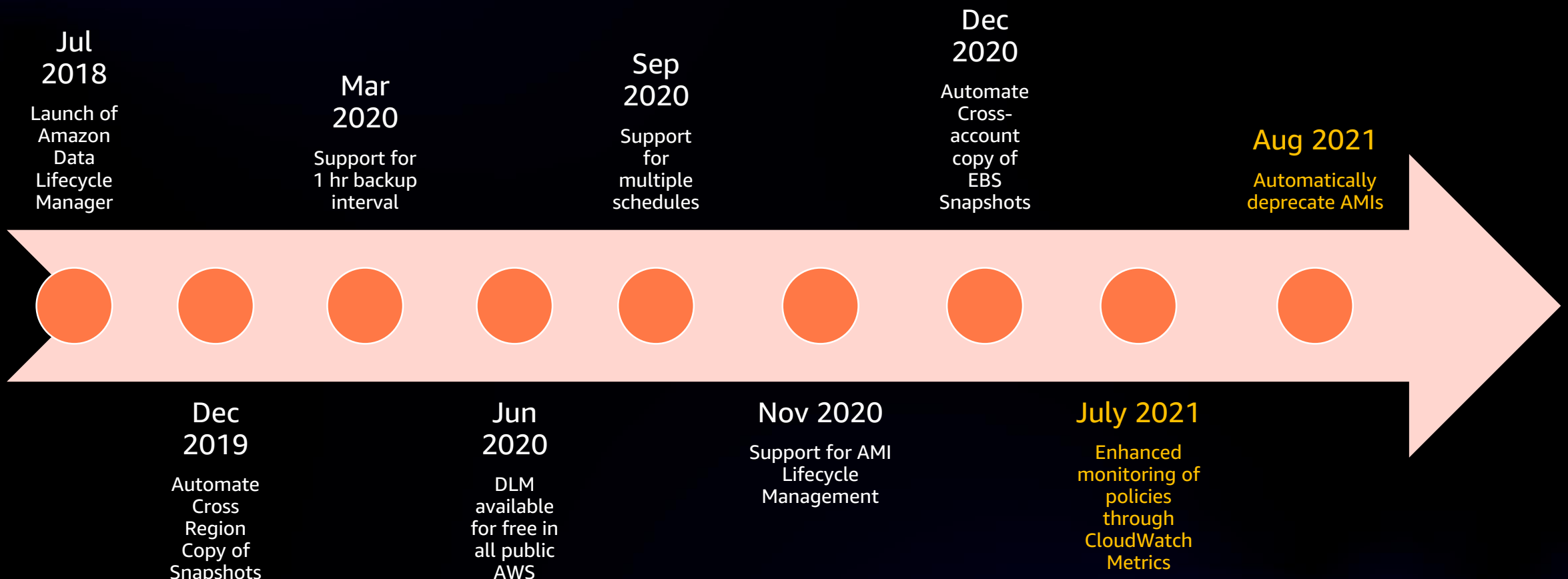
Amazon Data Lifecycle Manager

Simple, free, automated way to back up data stored on Amazon EC2 instances and EBS volumes by ensuring that snapshots and AMIs are created and deleted on a custom schedule



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DLM Launches



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Amazon Data Lifecycle Manager

Simple, free, automated way to back up data stored on Amazon EC2 instances and EBS volumes by ensuring that snapshots and AMIs are created and deleted on a custom schedule

- Define policies to enforce regular backup schedules
- Policies use tags to identify volumes and instances to back up
- Retain backups for compliance/audit purposes
- Control costs by automatically deleting old backups
- Use IAM to control policy access
- Automatically copy across Regions and accounts and set up retention policies
- No cost to use

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Defining a policy

Outlines all actions that Amazon Data Lifecycle Manager will automate on behalf of the customer

1. Select resource type (for example, EC2 instances, EBS volumes)
2. Input tags of the resources to be targeted
3. Define creation schedule
4. Define retention schedule
5. Enable optional actions, including Cross-Region copy, fast snapshot restore, and copy tags from source

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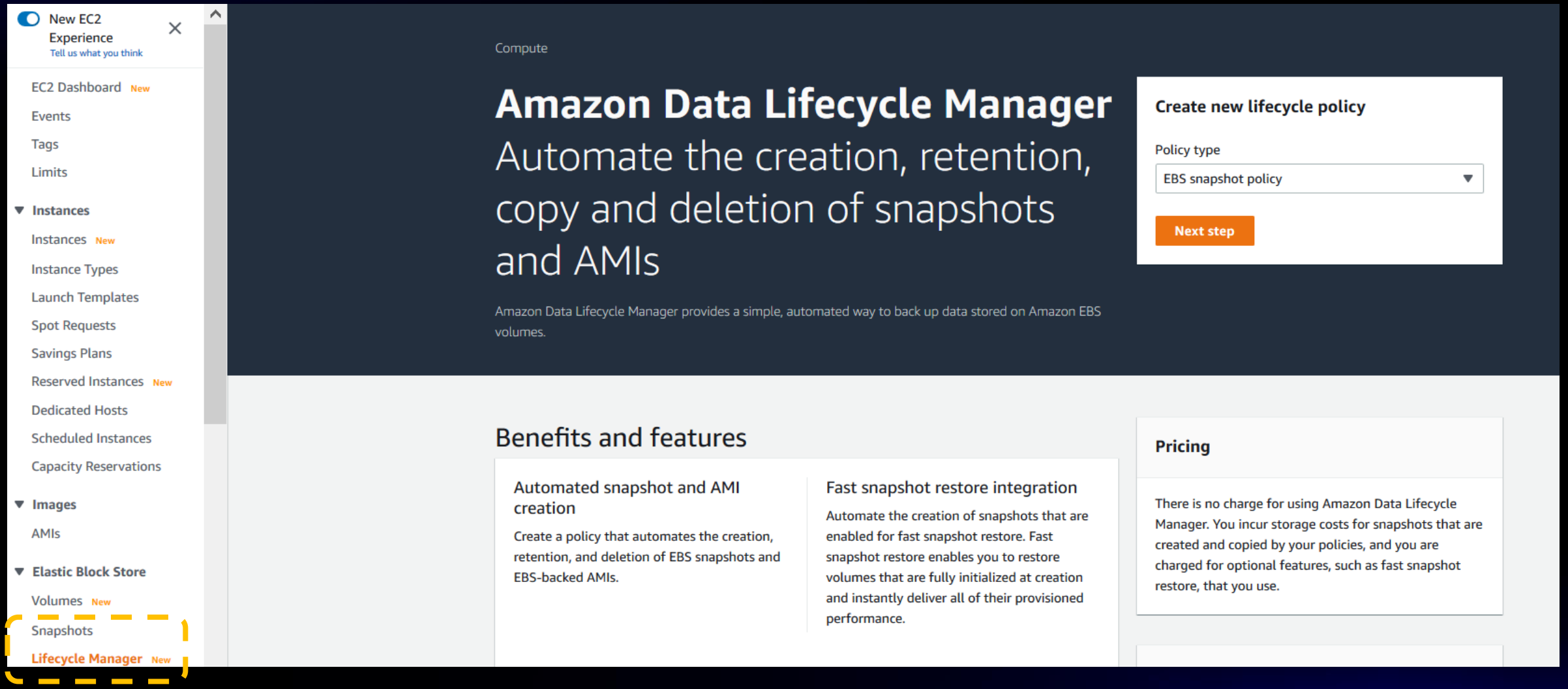
Use case 1: Save cost through automation

Save cost by consistently applying customized policies to back up your EBS volumes based on criticality of data

- Create a single EBS snapshot policy targeting a group of EBS volumes
- Create 3 separate creation and retention schedules based on criticality of data
- Copy monthly backups automatically to another Region as soon as the snapshot is created

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Use case 1: Save cost



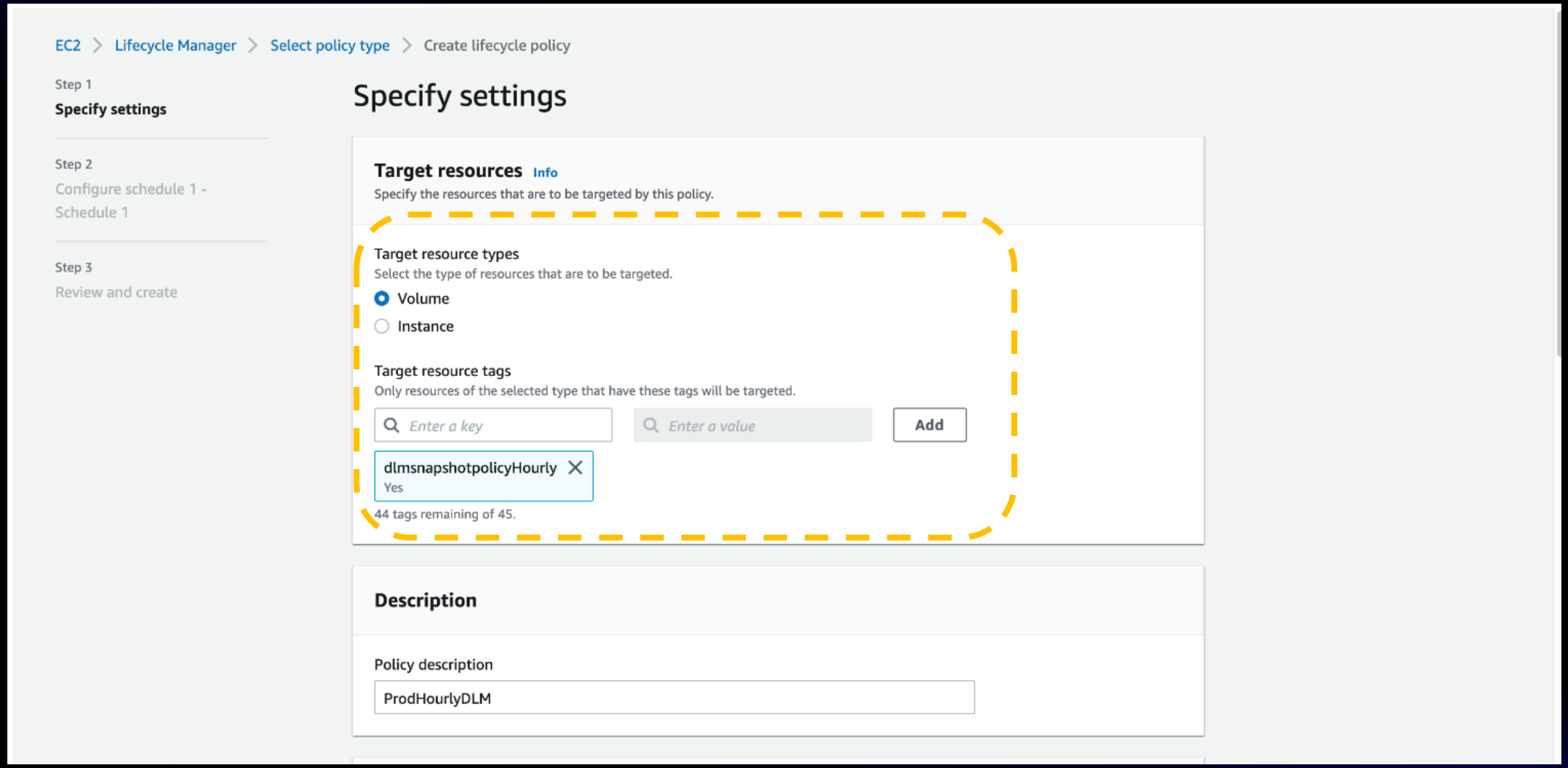
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Use case 1: Save cost



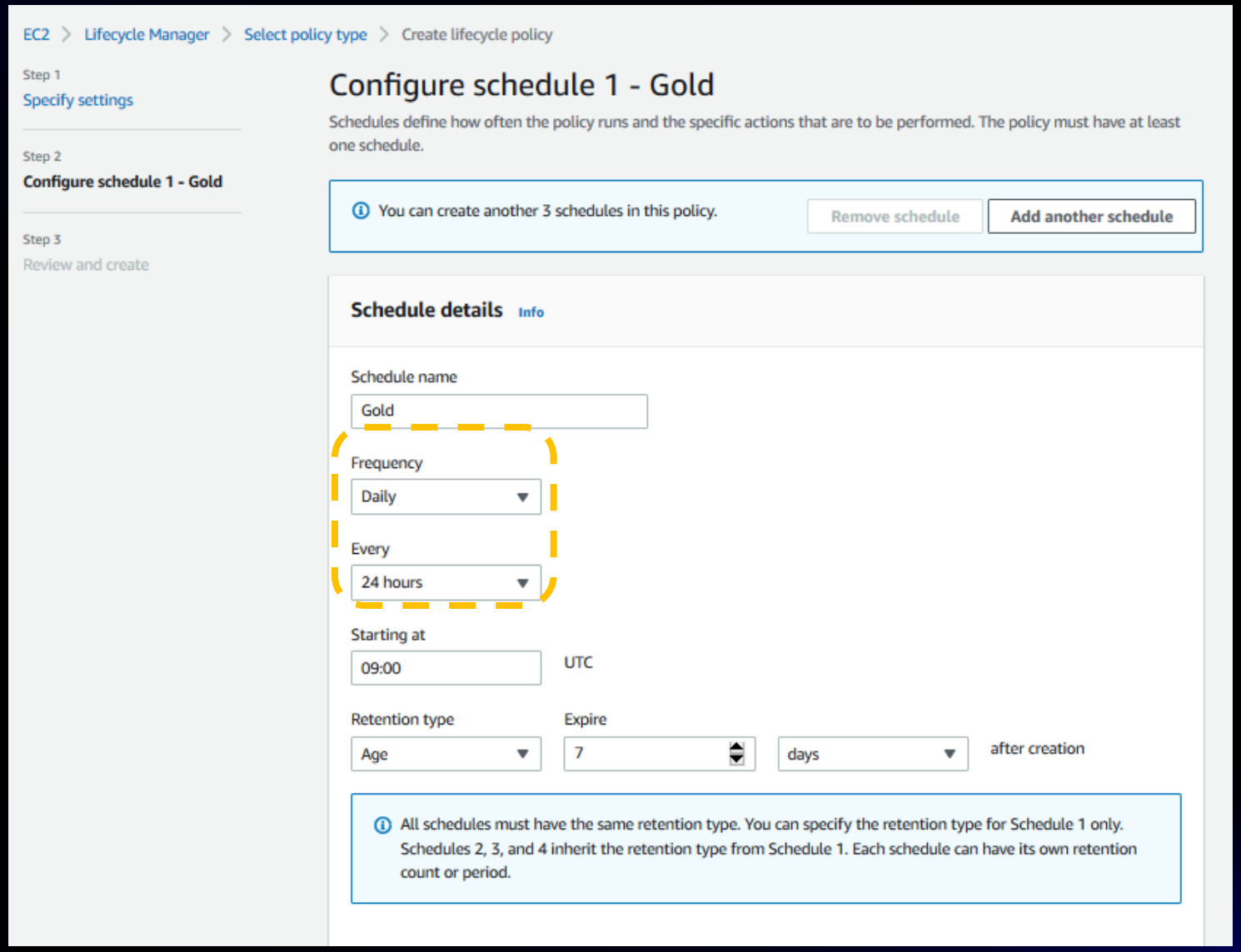
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Use case 1: Save cost



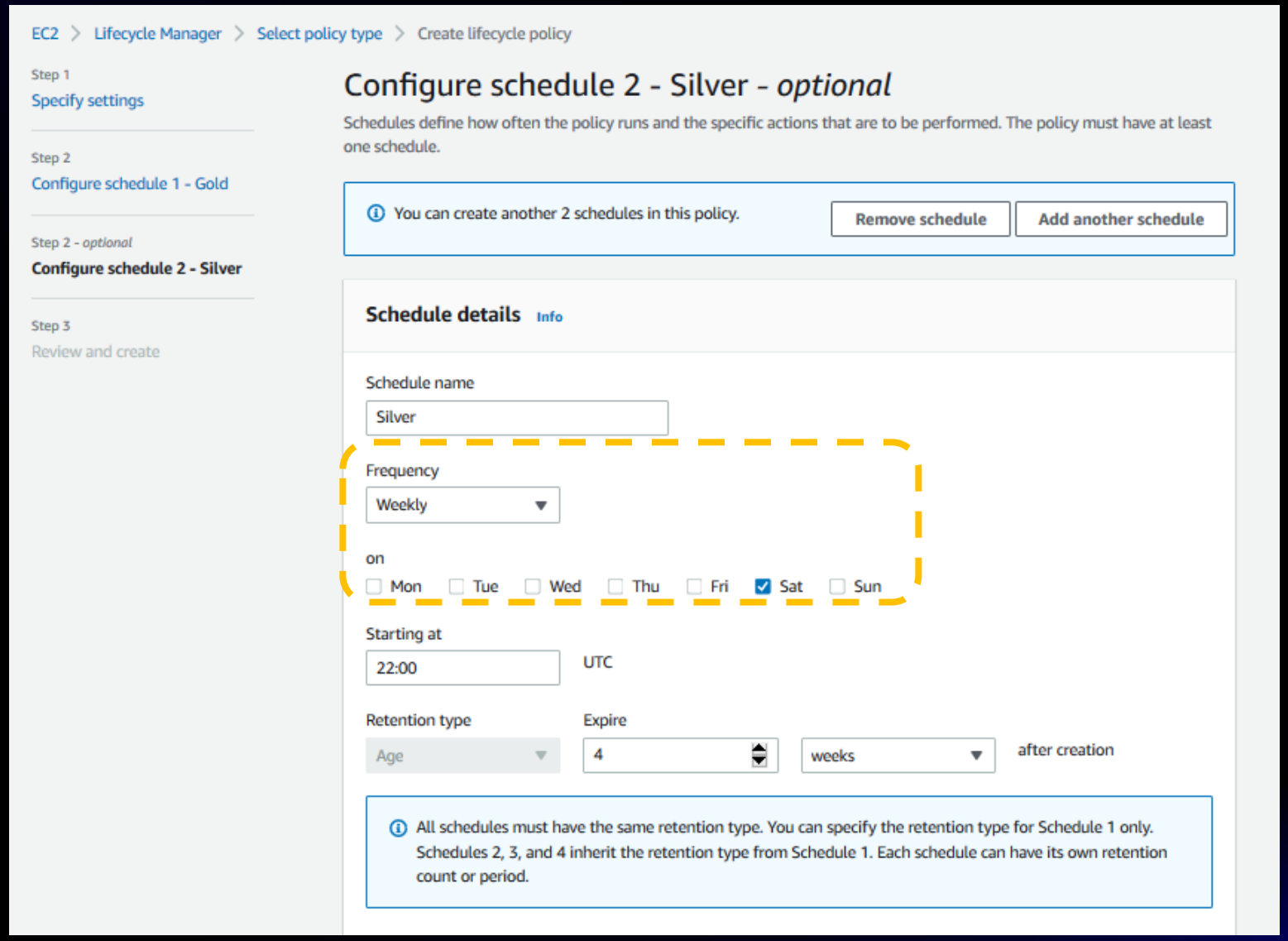
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Use case 1: Save cost



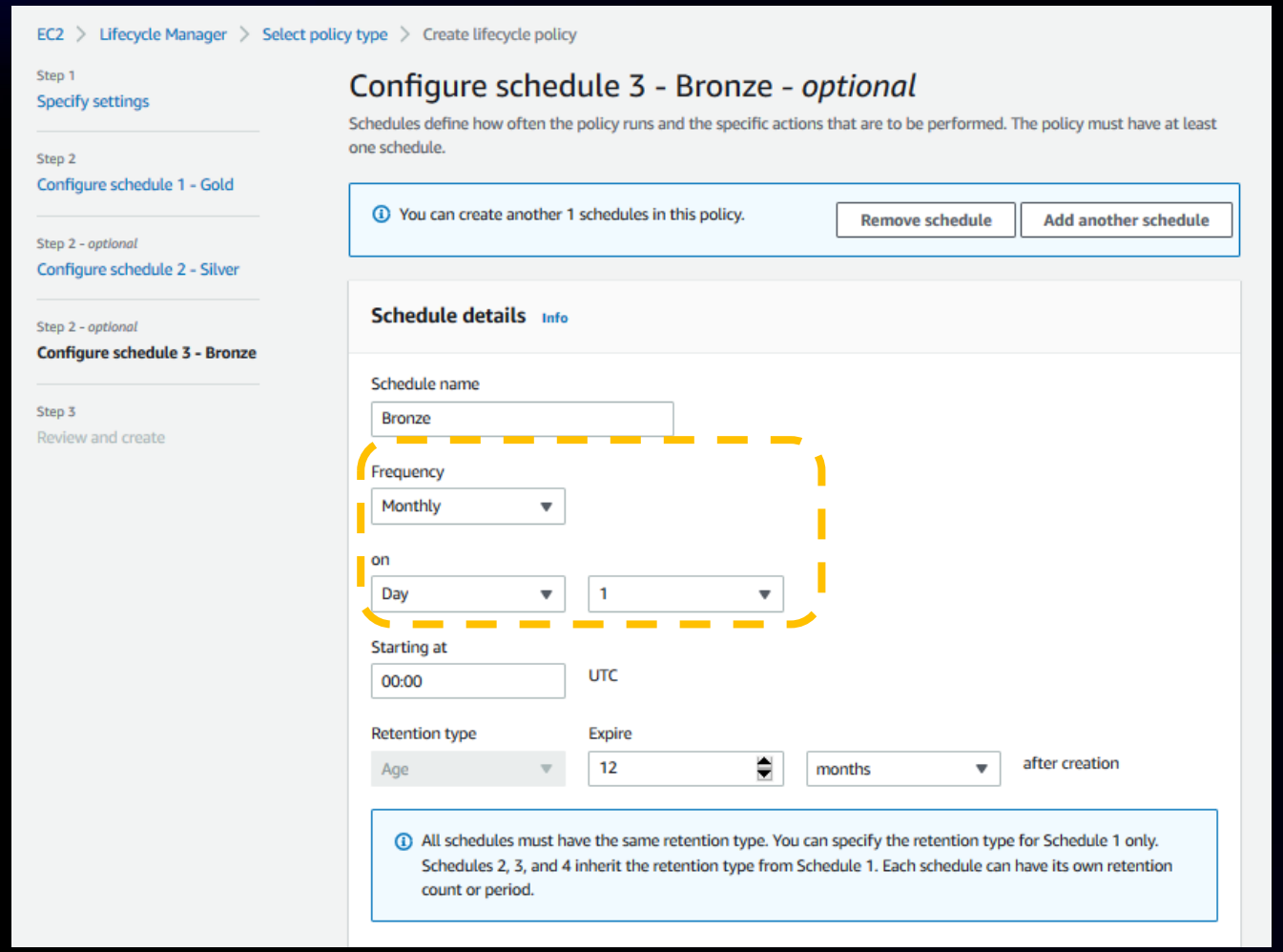
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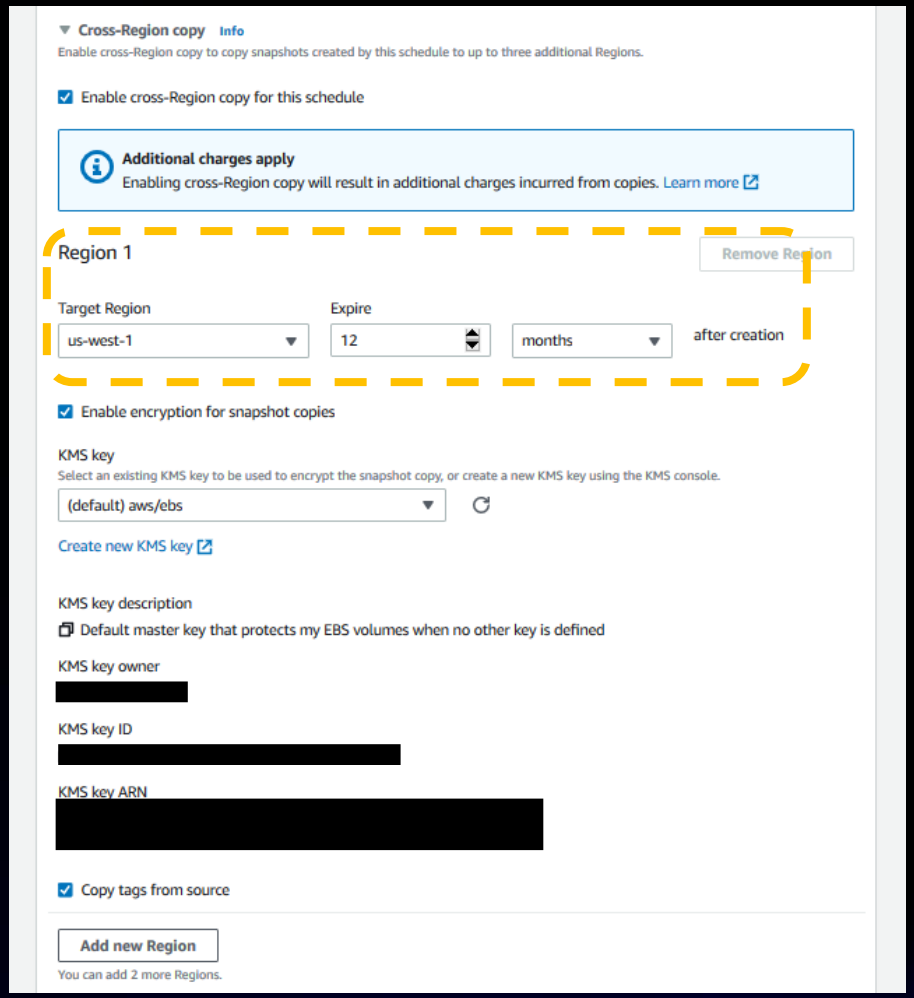
Use case 1: Save cost



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Use case 1: Save cost

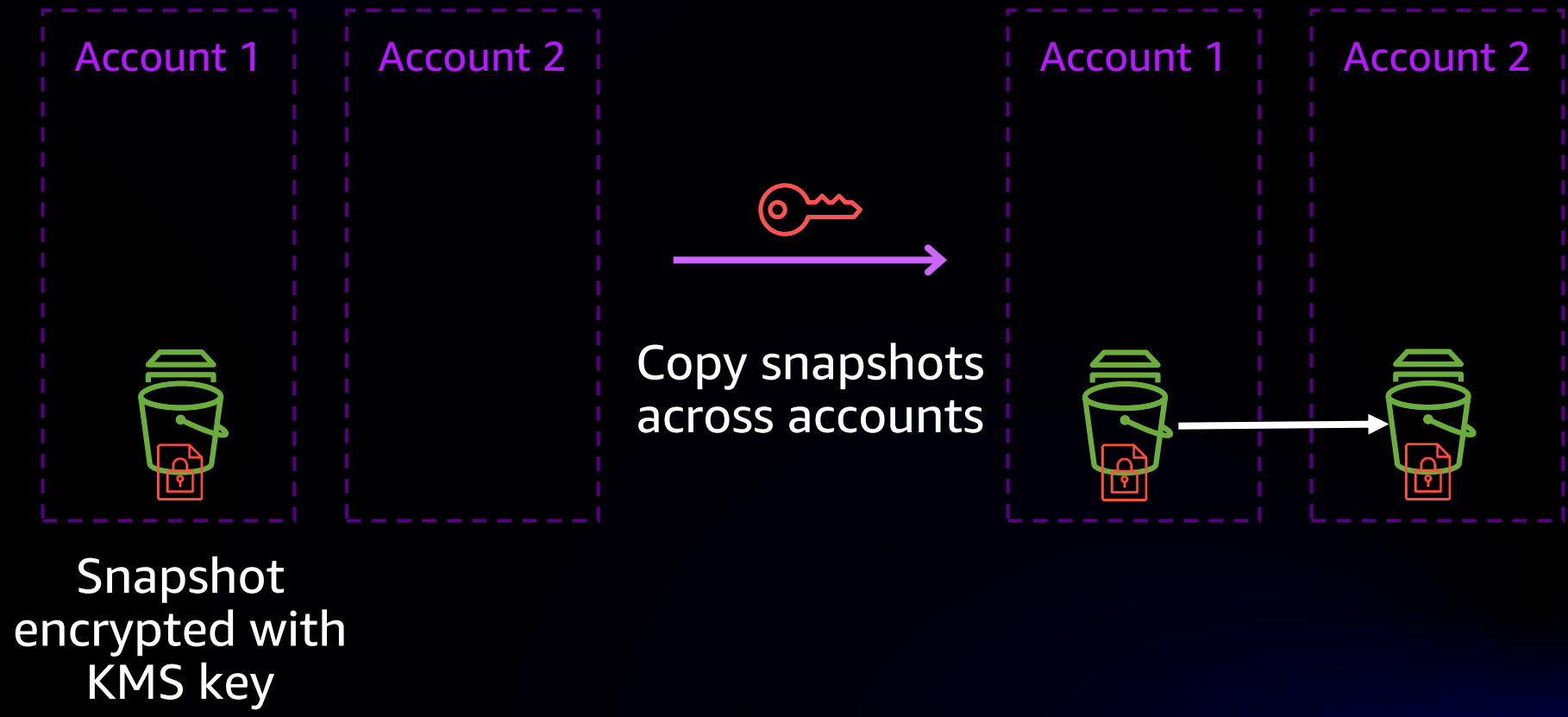




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Use case 2: Protect data across accounts

Protect my data in case my account is compromised, by automatically copying snapshots to a separate account



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Use case 2: Protect data

Source Account

1. Create and share snapshots
2. Share the Customer managed CMK*
3. Complete snapshot sharing setup

Target Account

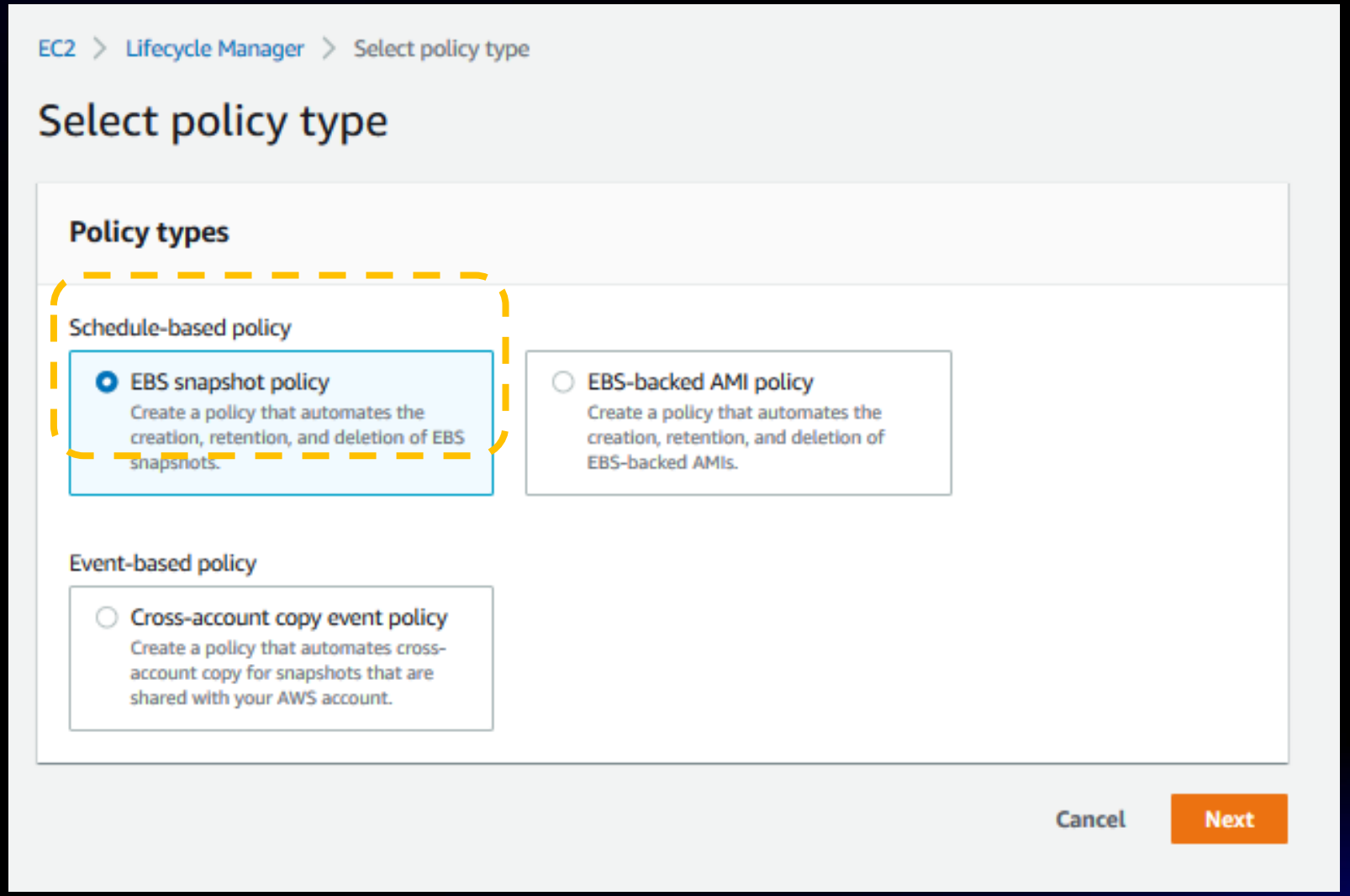
4. Encrypt and copy shared snapshots
5. Allow IAM role to use the shared CMK*
6. Complete snapshot encrypt and copy setup

* Steps 2 and 5 are not required if sharing and copying unencrypted snapshots

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Use case 2: Protect data

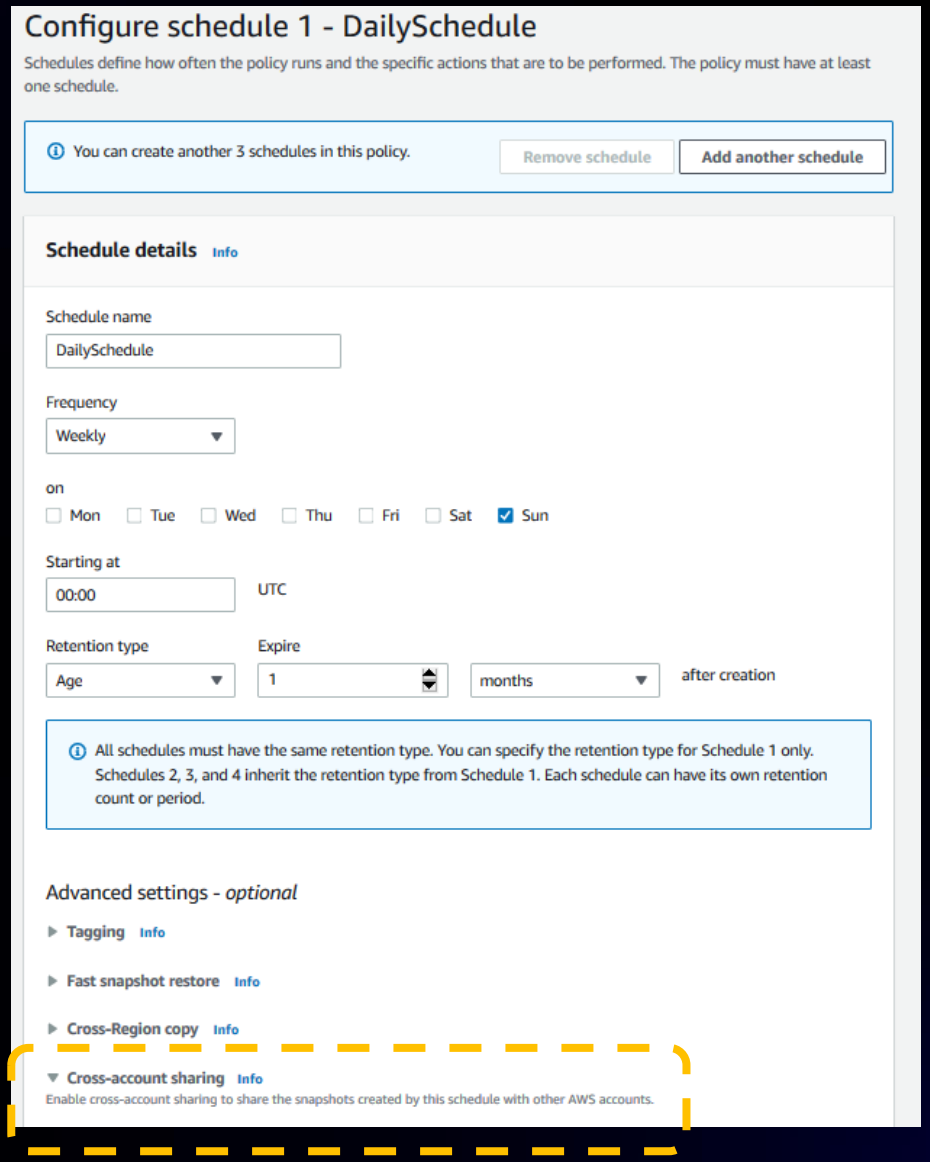
SOURCE ACCOUNT



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Use case 2: Protect data

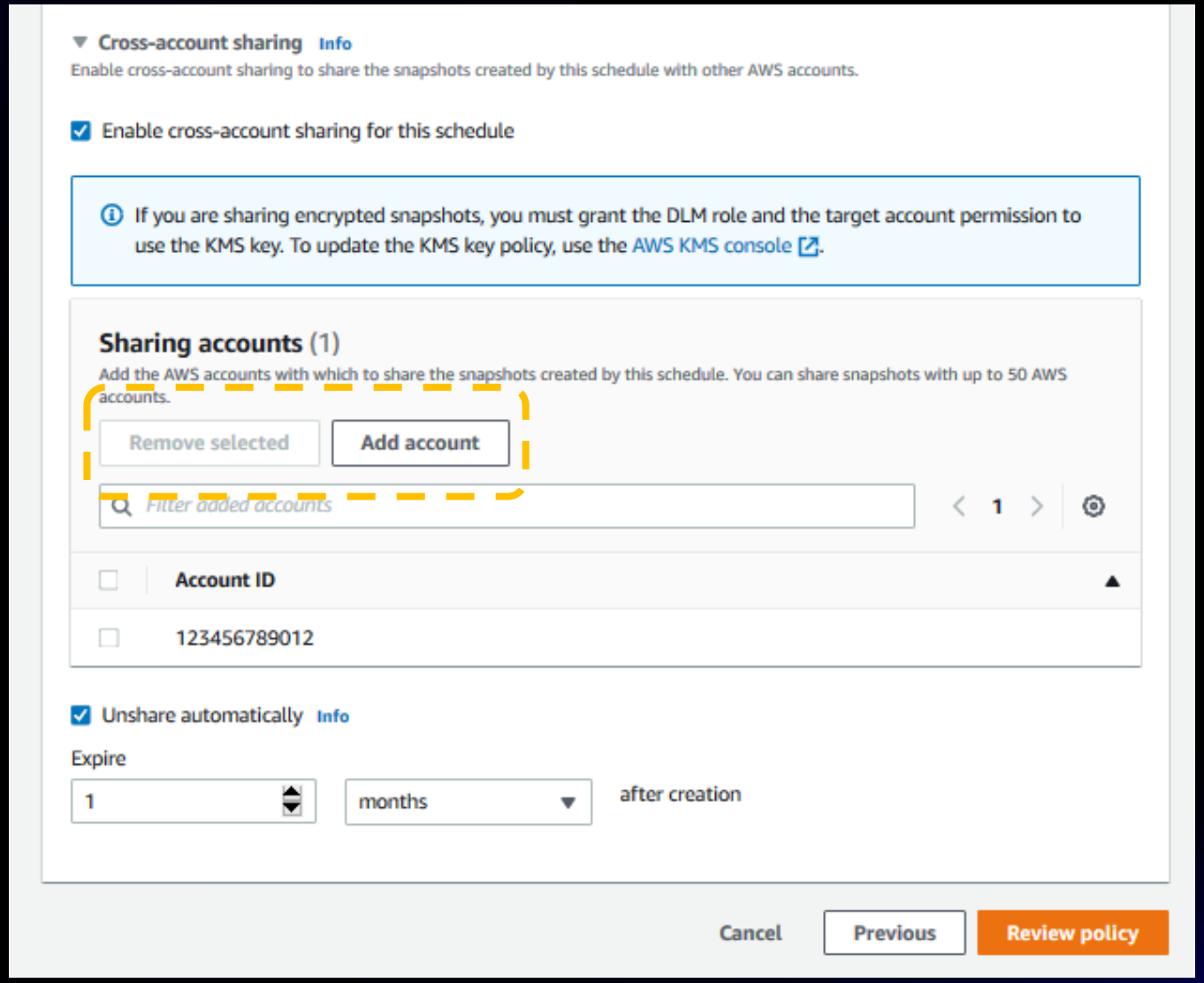
SOURCE ACCOUNT



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Use case 2: Protect data

SOURCE ACCOUNT



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Use case 2: Protect data

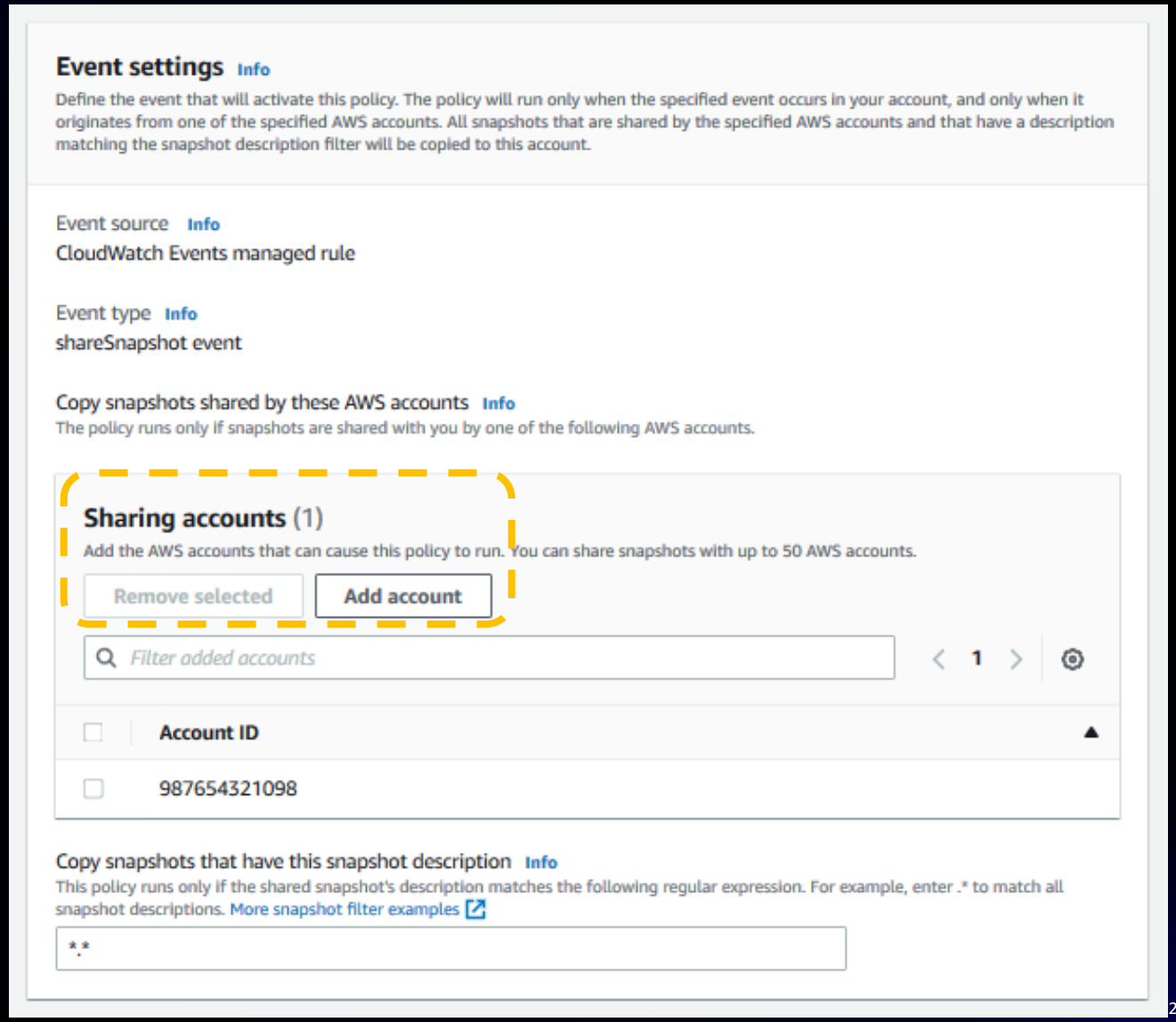
TARGET ACCOUNT



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Use case 2: Protect data

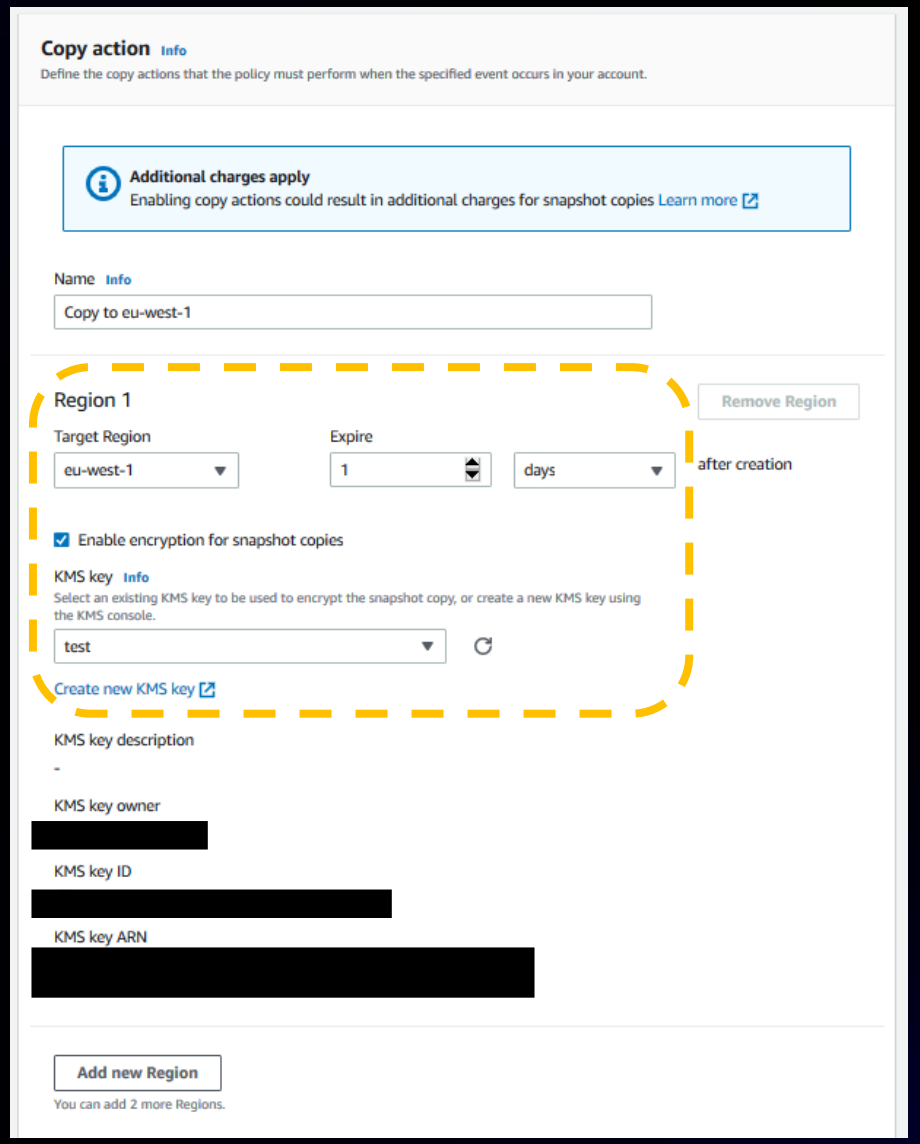
TARGET ACCOUNT



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Use case 2: Protect data

TARGET ACCOUNT



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Use case 3: Automate AMI management and distribution across Regions

Automate deregistration of my EBS-backed Amazon Machine Images (AMIs) and deletion of supporting snapshots

- Create an EBS-backed AMI policy targeting a group of EC2 instances
- Create a single schedule to create AMIs on a weekly basis
- Deregister the AMI after 3 months
- Delete its underlying EBS snapshots

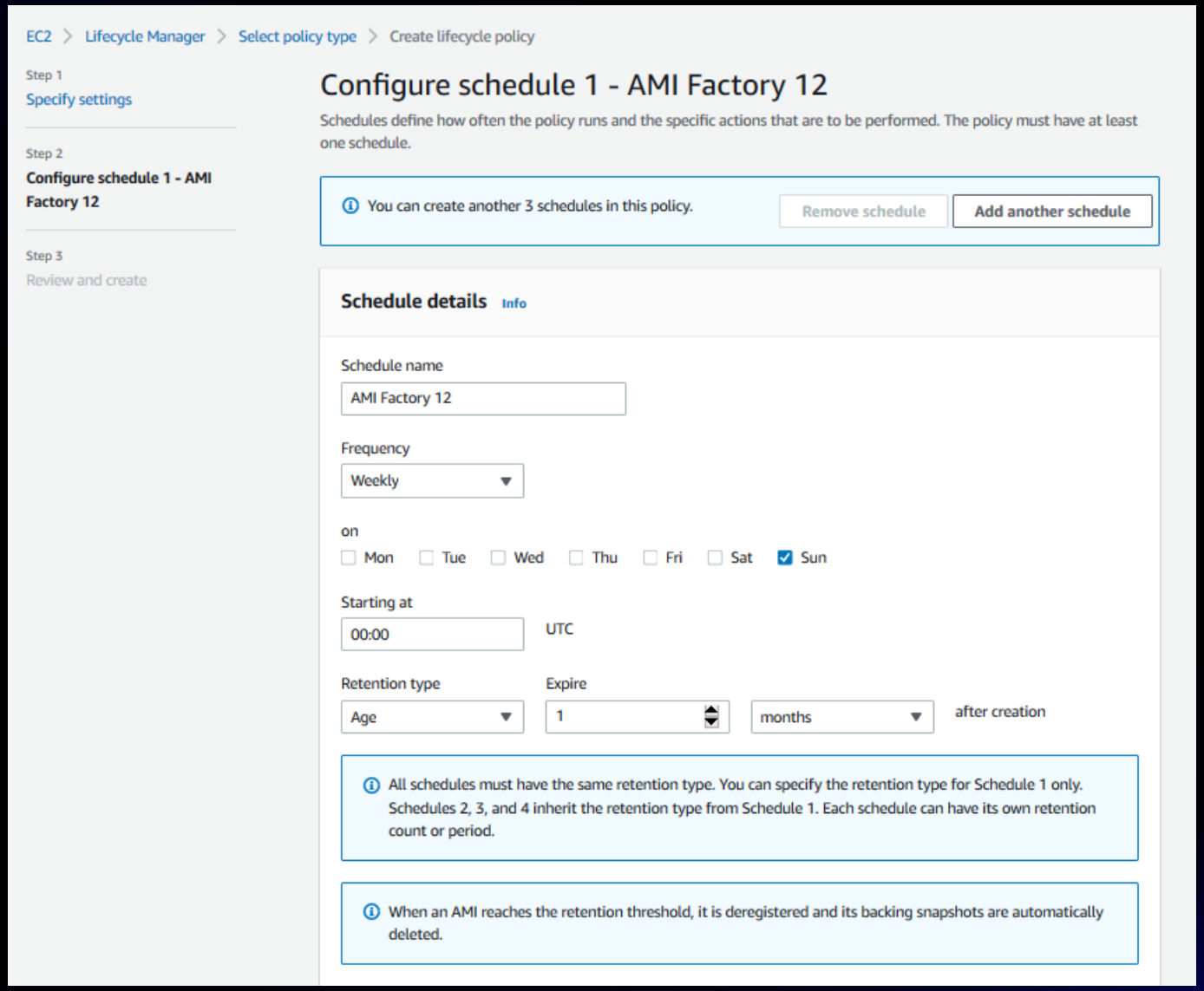
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Use case 3: Automate AMI management



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Use case 3: Automate AMI management

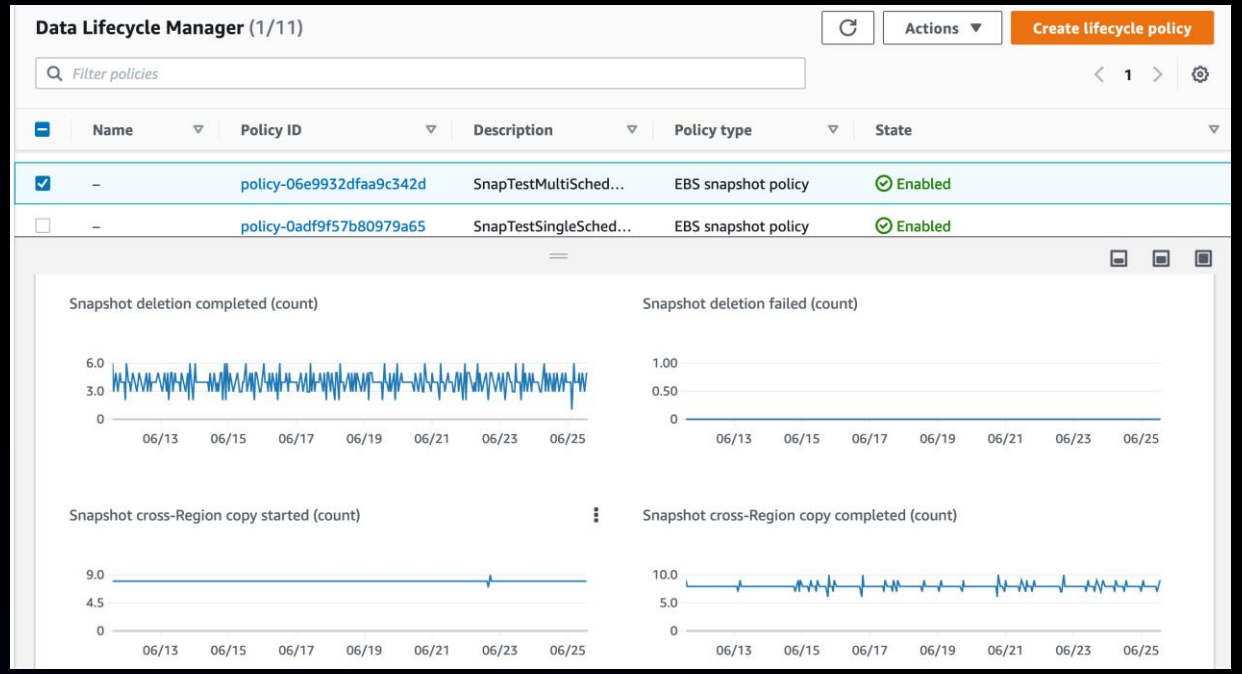


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Enhanced monitoring of policies

Monitor your policies using CloudWatch metrics

- Track the number of resources targeted each time a policy is run
- Monitor when your snapshots and AMIs are created
- Set up alarm and be notified of failures



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AMI lifecycle management

Ensure EBS-backed Amazon Machine Images (AMIs) are created and cleaned up regularly to keep their storage costs under control

- Automate retention and clean up of EBS-backed AMIs
- Control costs by automatically deleting snapshots of deregistered AMIs
- Enhance security by automatically deprecating outdated images

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Thank you!

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