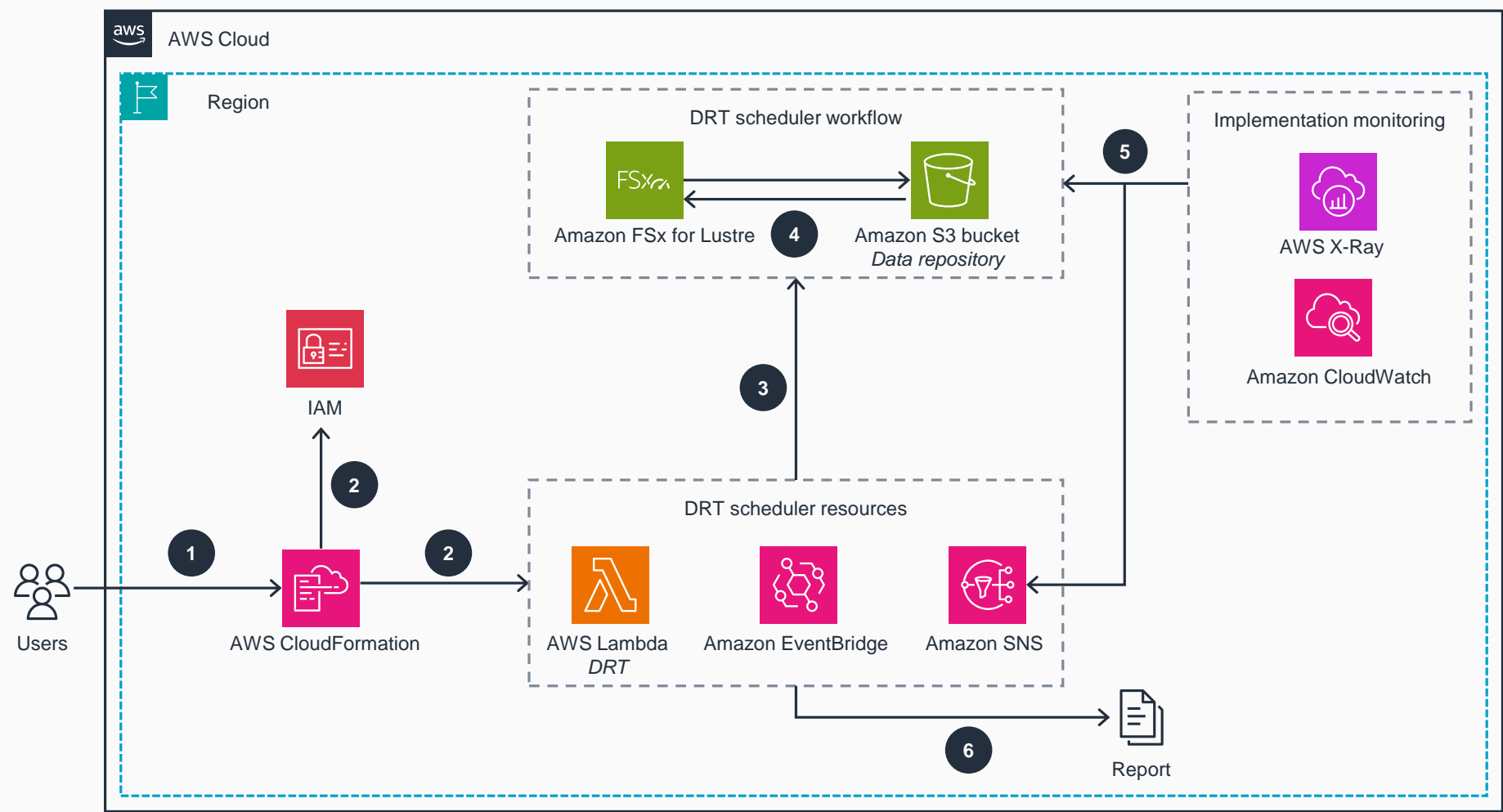


# Guidance for Automating Data Repository Task Schedules with Amazon FSx for Lustre

This architecture diagram shows how to automate data synchronization between Amazon FSx for Lustre file systems and Amazon Simple Storage Service (Amazon S3) data repositories.



- 1 Deploy this Guidance using **AWS CloudFormation** by creating a stack through the **AWS Management Console**.
- 2 **CloudFormation** deploys resources, including **AWS Lambda**, **AWS Identity and Access Management (IAM)**, **Amazon EventBridge**, and **Amazon Simple Notification Service (Amazon SNS)**.
- 3 Based upon your configuration when launching the **CloudFormation** template, the cron-based **EventBridge** schedule launches the data repository task (DRT) using the previously deployed **Lambda** function.
- 4 The created DRT performs defined operations between the **Amazon FSx for Lustre** file system and its linked **Amazon Simple Storage Service (Amazon S3)** data repository.
- 5 **AWS X-Ray** and **Amazon CloudWatch** monitor the implementation of the **Lambda DRT** function. Alarms send email notifications using **Amazon SNS** if errors are detected.
- 6 Upon completion, the **Lambda** function creates a completion report. This is stored at the location specified by the value of the **TaskCompletionReportPath** parameter for the **CloudFormation** stack.

