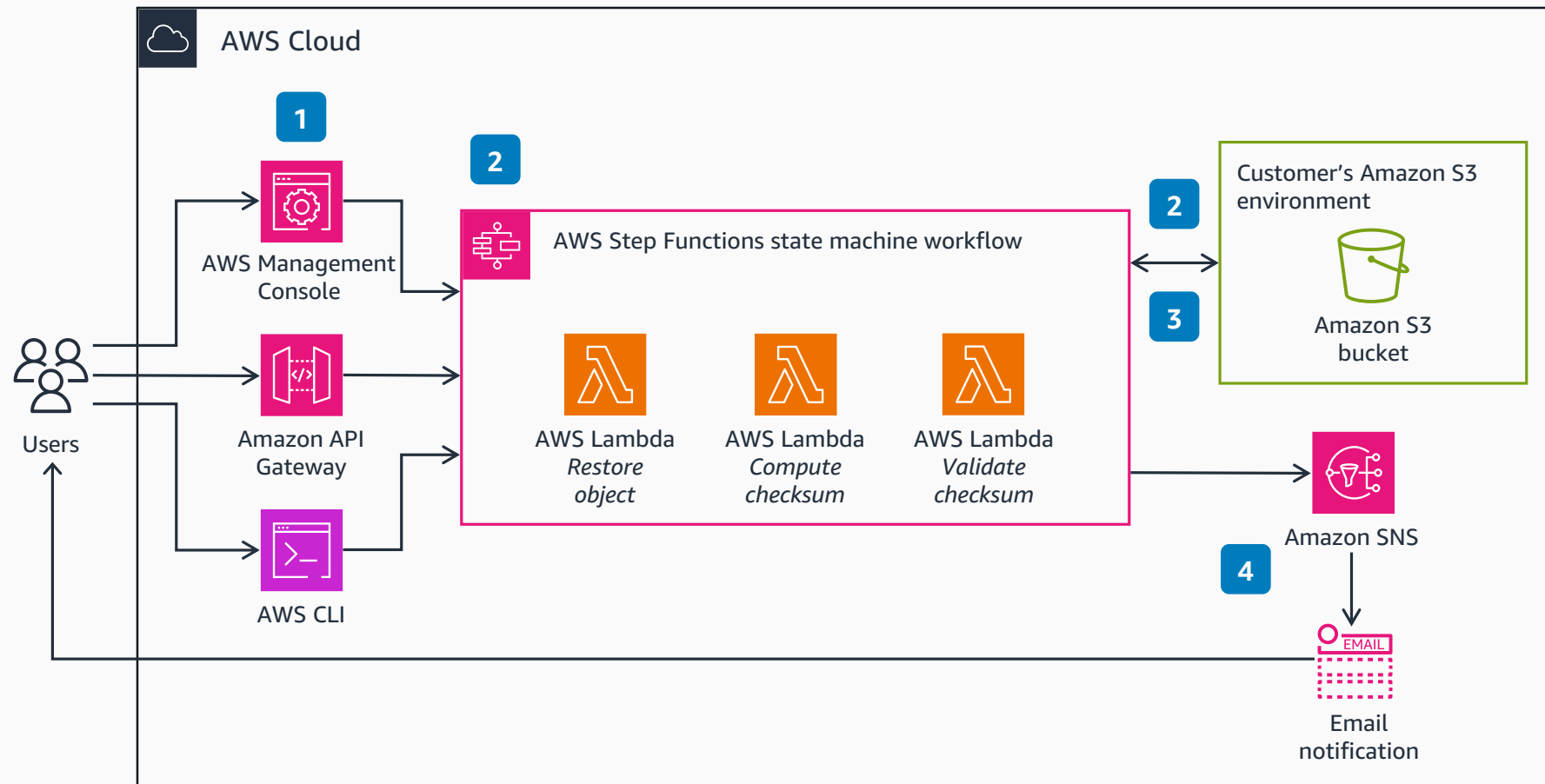


Guidance for Serverless Fixity for Digital Preservation Compliance on AWS

This architecture diagram shows how customers who require an on-demand fixity check process can validate the checksums for compliance and audit requirements.



1 You can start the process for this Guidance by using **AWS Management Console**, **Amazon API Gateway**, or **AWS Command Line Interface (AWS CLI)**.

2 The **AWS Step Functions** state machine workflow uses **AWS Lambda** functions for restoration and compute using an MD5, SHA1, or SHA256 checksum algorithm. It validates objects stored in your **Amazon Simple Storage Service (Amazon S3)** buckets.

3 This Guidance orchestrates the fixity check process in various states. If necessary, the workflow restores the object from **Amazon S3 Glacier** or the **Amazon S3 Glacier Deep Archive**. Then the process incrementally computes the fixity. After the MD5, SHA1, or SHA256 checksum is calculated, it is validated with the original checksum value stored with the object.

4 The results of the fixity check process are sent to an **Amazon Simple Notification Service (Amazon SNS)** topic, which is then sent to subscribers by email notification.

