Guidance for Automated Deletion of Vault Archives in Amazon S3 Glacier

This architecture diagram shows an automated serverless workflow to delete all archives in an Amazon S3 Glacier vault.



AWS Reference Architecture

A custom Lambda resource function updates the Amazon S3 Glacier vault notification settings and initiates an inventory job request.
S3 Glacier vault posts a message to an Amazon Simple Notification Service (Amazon SNS) topic when the inventory retrieval job is completed.
The Amazon SNS topic invokes an *Initiate State* Machine Lambda function.
The function initiates the AWS Step Functions workflow and passes the S3 Glacier vault inventory information as input.
The Step Functions workflow orchestrates the process of downloading the inventory, splitting it

The user deploys the template as a stack in the

including custom AWS Lambda resources.

CloudFormation deploys the necessary resources,

AWS CloudFormation console.

process of downloading the inventory, splitting it into smaller chunks, iterating over the chunks, and deleting the archives.

An invoked **Lambda** function downloads the inventory to the **Amazon Simple Storage Service** (Amazon S3) bucket.

A Lambda function uses AWS Glue and Amazon Athena to query and split the large inventory manifest into smaller chunks, which are then fed into the Map state of the **Step Functions** workflow.

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The Map state of the **Step Functions** workflow iterates over each chunk of the inventory manifest. It invokes a **Delete Archives AWS Lambda** function to submit a delete request for each archive.



Upon successful completion of the workflow, an email notification is sent to the email address provided by the user.



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