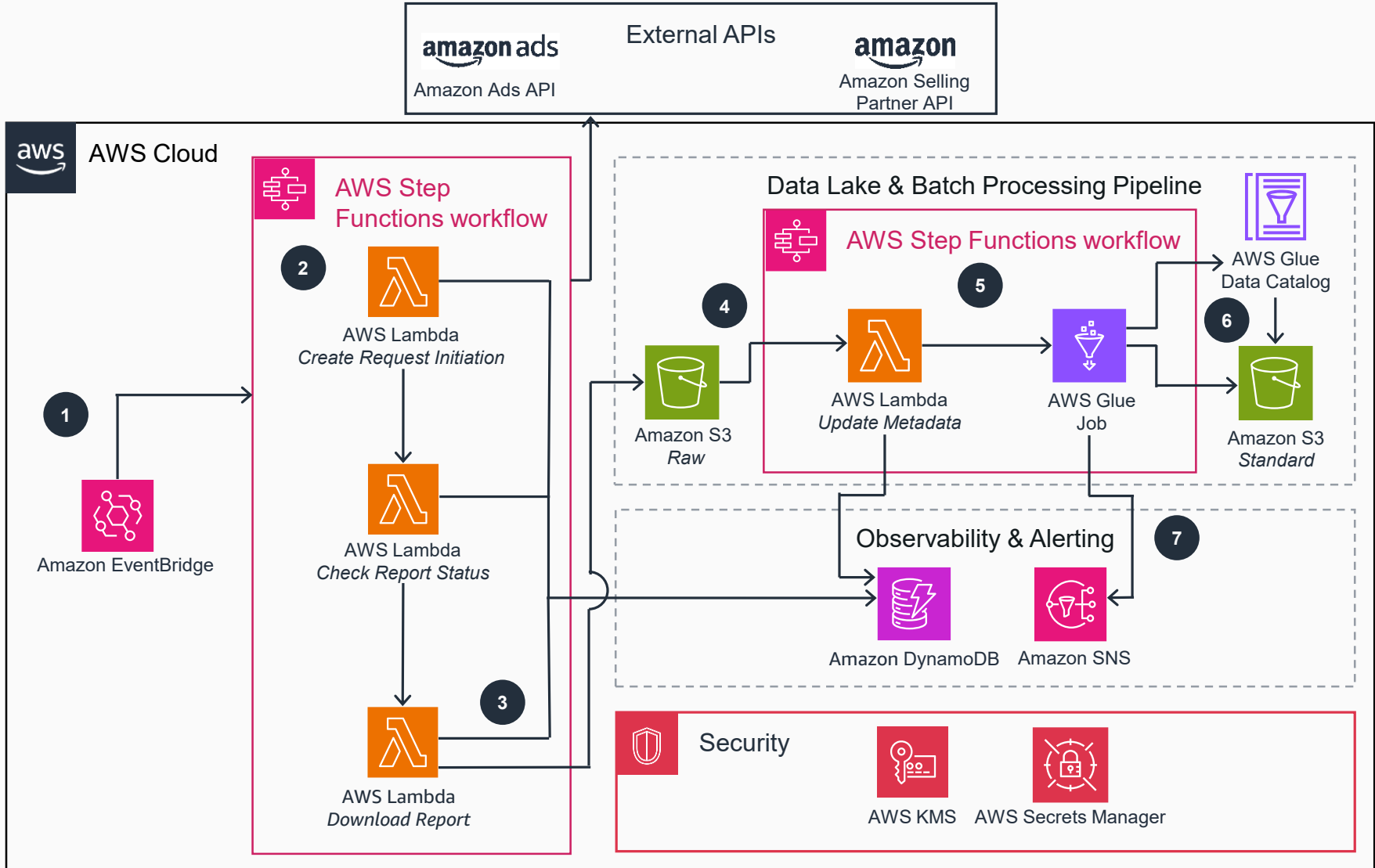


Guidance for Ingesting Amazon Vendor Central and Amazon Ads Data on AWS

This architecture diagram shows data ingestion and integration patterns for the Amazon Ads and Amazon Selling Partner APIs on AWS. Displayed and explained here are Steps 1-5. The next slide explains Steps 6-7.



1 **Amazon EventBridge** is used to schedule a job which starts an **AWS Step Functions** state machine. The state machine processes a series of **AWS Lambda** functions to facilitate the creation of reports.

2 The state machine invokes a **Lambda** function (Create Request Initiation) to create a report request from the Amazon Ads API or Amazon Selling Partner API. API credentials should be stored within **AWS Secrets Manager** and used when making calls to the APIs. The state machine then moves into a series of polling steps, invoking a **Lambda** function (Check Report Status) to check the report request status, before finally downloading the report. The metadata for each report downloaded is stored in **Amazon DynamoDB**.

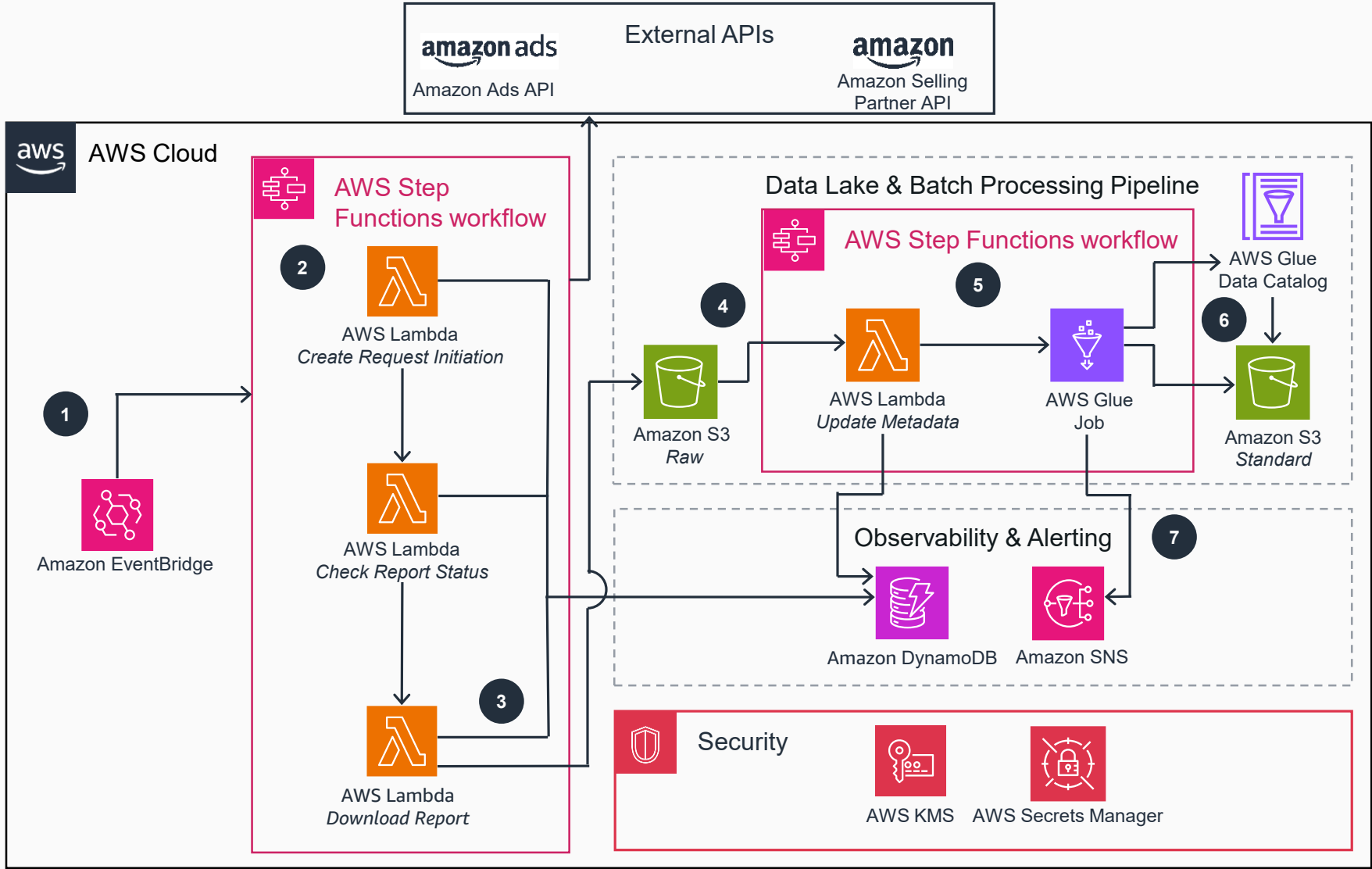
3 The **Lambda** function (Download Report) writes the report into a raw **Amazon Simple Storage Service (Amazon S3)** bucket with a prefix which contains the specific report type and report date. **Lambda** uses **AWS Key Management Service (AWS KMS)**, managed by AWS, to encrypt the reports as they're written to the **Amazon S3** bucket.

4 A **Step Functions** state machine is invoked by notifications from **Amazon S3** objects as they're inserted into the bucket. When no more objects are received after a given time, the data transformation **Step Functions** state machine starts and invokes a **Lambda** function.

5 A **Lambda** function (Update Metadata) stores the task token for **Step Functions** initiation ID in the **DynamoDB** table. Data is processed utilizing an **AWS Glue** job to read the data from the raw **Amazon S3** bucket, and transformed to a usable format.

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This architecture diagram shows data ingestion and integration patterns for the Amazon Ads and Amazon Selling Partner APIs on AWS. Displayed and explained here are Steps 1-5. The next slide explains Steps 6-7.



- 6 The **AWS Glue** job writes the transformed data to the standard **Amazon S3** bucket along with **AWS Glue** Data Catalog metadata. The **AWS KMS** Customer Managed Key (CMK) is used to encrypt the bucket contents and the **AWS Glue** metadata.
- 7 **Amazon Simple Notification Service (Amazon SNS)** is used to send notifications as new data is transformed into the standard **Amazon S3** bucket.