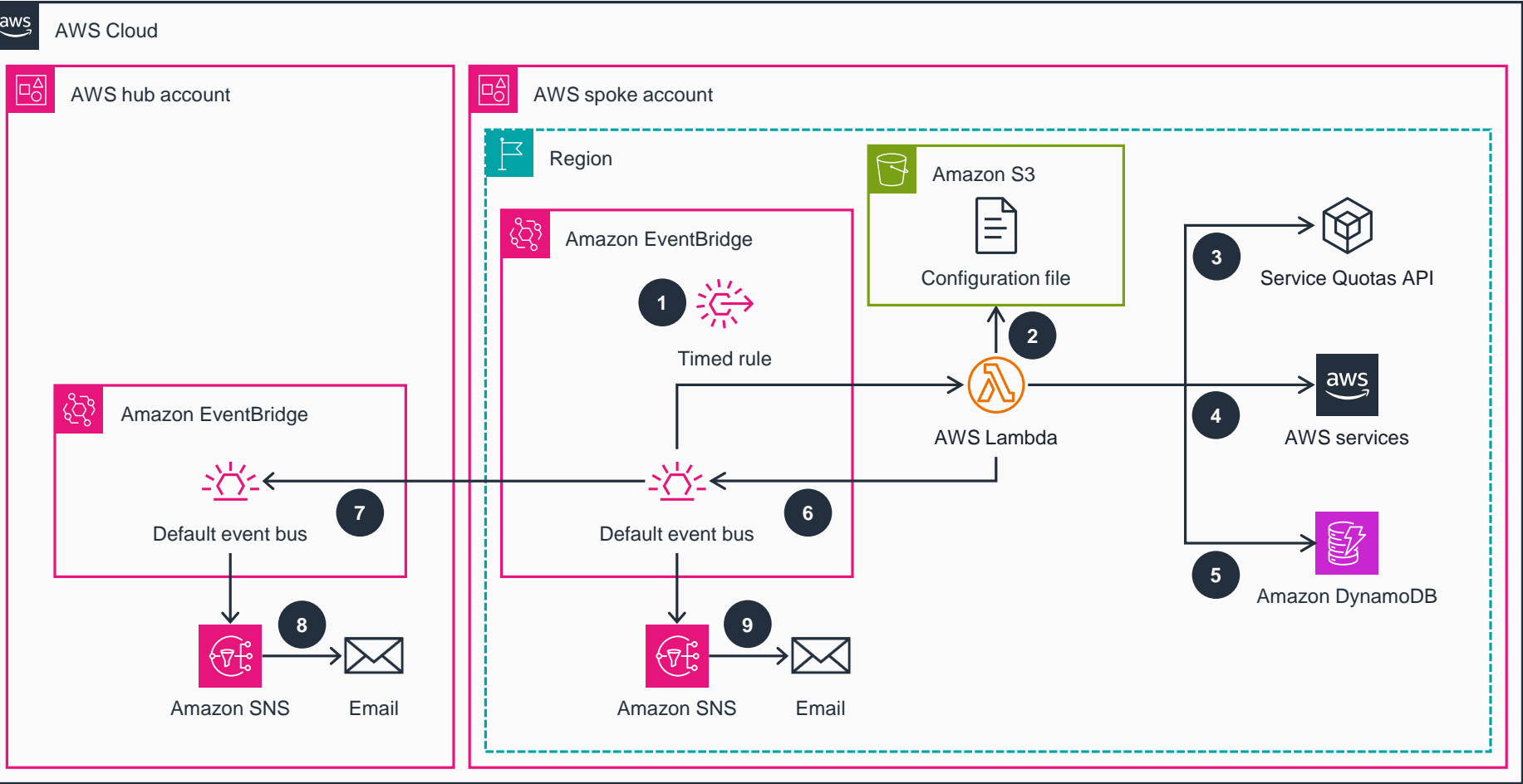# Guidance for Automating Service Quota Management on AWS

This architecture diagram shows how to set up an event-driven automation that pulls AWS service quotas and notifies you of your quota utilization.

AWS Cloud

AWS hub account

AWS spoke account

Region

Amazon EventBridge

Amazon S3 — Configuration file

1 Timed rule

2

Service Quotas API **3**

AWS Lambda

AWS services **4**

Amazon DynamoDB **5**

Amazon EventBridge

Default event bus **7**

Default event bus **6**

Amazon SNS **8** Email

Amazon SNS **9** Email

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1 In the spoke account, an **Amazon EventBridge** rule running on a time schedule invokes an **AWS Lambda** function.

2 The **Lambda** function reads the configuration file from the specified **Amazon Simple Storage Service (Amazon S3)** bucket to identify the quotas to monitor.

3 The **Lambda** function queries the Service Quotas API to fetch current quota values for the specified services and regions.

4 The **Lambda** function makes API calls to the AWS services that are being monitored to determine the quota usage data.

5 The **Lambda** function stores the quota usage data in an **Amazon DynamoDB** table for tracking and analysis.

6 The **Lambda** function compares the retrieved quota usage against the configured thresholds. If any quota exceeds its threshold, the **Lambda** function generates a custom event and sends it to the event bus.

7 **EventBridge** uses cross-account integration to send the custom event to the event bus in the hub account.

8 **EventBridge** sends a message to the **Amazon Simple Notification Service (Amazon SNS)** topic using an event rule and invokes an email notification.

9 In a single account deployment, the event bus in the spoke account sends the custom event directly to the **Amazon SNS** topic in the same account to invoke an email notification.

AWS Reference Architecture