AWS Solutions Implementations

Vetted, end-to-end reference implementations with automatic deployment into the AWS Cloud

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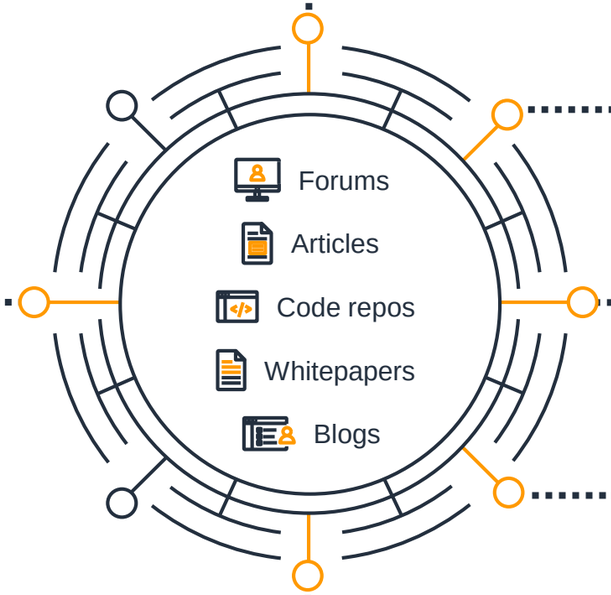
AWS Well-Architected Team

The challenge

ENGINEER STARTING A NEW PROJECT

GATHERING INFORMATION ON THE INTERNET

TRYING TO ACCURATELY TRANSLATE THE FINDS



Effort to ensure best practices are followed

Effort to optimize

Difficulty translating a diagram into working architecture

Configuration details often missing

Often not updated as new best practices are available

aws

AWS Solutions Implementations

Vetted reference architecture, available for
self-deployment via the AWS Solutions Library

Detailed architecture diagram	Full Deployment Guide	One-click and manual deployment options	Downloadable source code

aws.amazon.com/solutions/implementations

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KEY BENEFITS

AWS Solutions Implementations

Secure, reliable, performance-efficient, and cost-optimized

All Implementations are reviewed by AWS Architects

Ready-to-deploy into your AWS Account

Fully customizable and extendible

Well-architected

aws.amazon.com/solutions/implementations

How do you self-deploy an AWS Solutions Implementation?

Use the launch button from a specific Implementation's landing page

OR

Download the CloudFormation template and deploy the Implementation manually

OR

Copy the solution from the AWS Service Catalog Getting Started Library into your product portfolios for deployment through Service Catalog

Operational Excellence 6

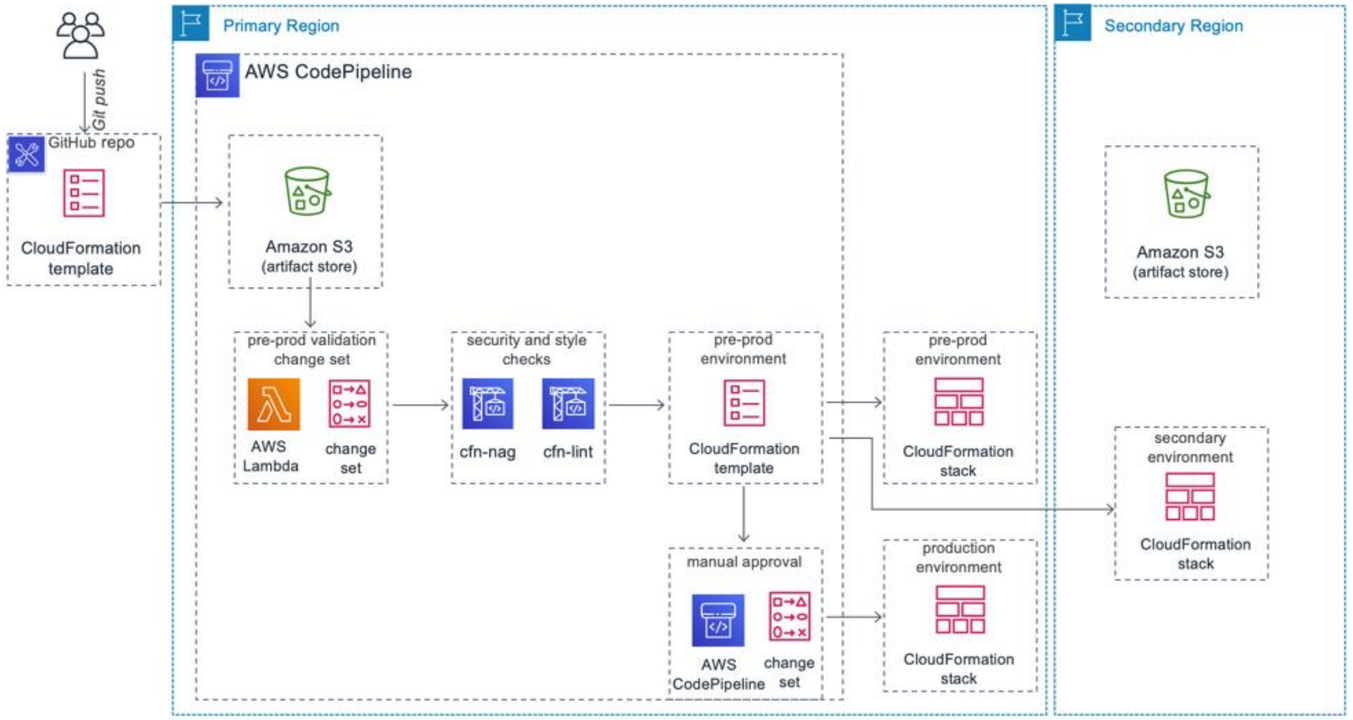
How do you mitigate deployment risks?

aws

Multi-Region Infrastructure Deployment

Overview

The Multi-Region Infrastructure Deployment solution helps make it easier to set up a multi-region architecture and ensure consistency of a workload by automatically validating and deploying AWS CloudFormation stacks into a pre-production and production environment across a primary and secondary AWS Region. This solution automatically provisions and configures AWS CodePipeline to automate the continuous integration/continuous delivery (CI/CD) pipeline for CloudFormation templates in the AWS Cloud.



Key features

- Automation: Build an architecture that automatically validates and deploys AWS CloudFormation stacks into a pre-production and production environment across a primary and secondary AWS Region.
- Validation: Continuously build and test your AWS CloudFormation templates whenever you change them.

aws.amazon.com/solutions/implementations/multi-region-infrastructure-deployment

Security 4

How do you detect and investigate security events?

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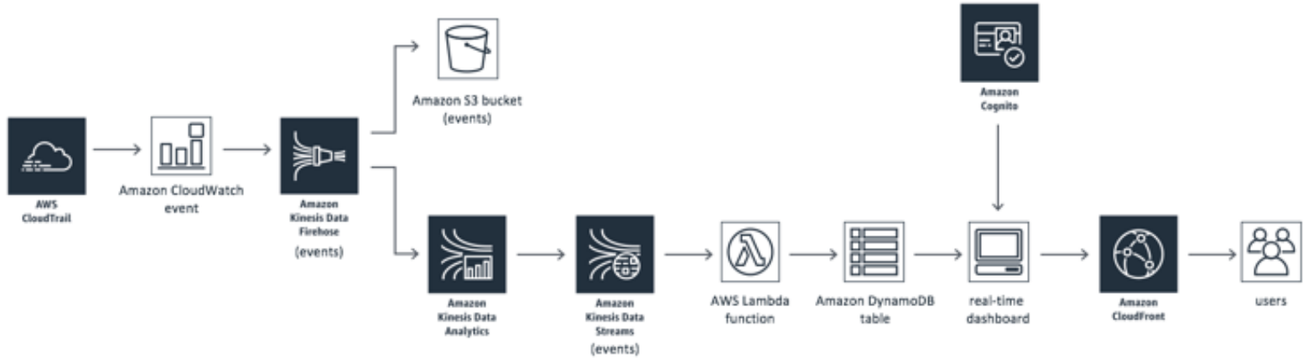
Real-Time Insights on AWS Account Activity

Overview

To help you more easily monitor account activity, AWS offers the Real-Time Insights on AWS Account Activity solution, a reference implementation that automatically provisions and configures the services necessary to record and visualize resource access and usage metrics for your AWS account(s) in real-time. This solution is designed to provide a framework for visualizing access and usage metrics, allowing you to focus on adding new metrics rather than underlying infrastructure operations.

This solution uses AWS CloudTrail to log account activity, Amazon Kinesis to compute and stream metrics in real-time, and Amazon DynamoDB to durably store the computed data. Metrics are calculated for create, modify, and delete API calls for more than 60 supported AWS services. The solution also features a dashboard that visualizes your account activity in real-time.



Key features

- Real-Time Insights on AWS Account Activity reference implementation
- Real-time dashboard

aws.amazon.com/solutions/implementations/real-time-insights-account-activity

Reliability 1

How do you manage service quotas and constraints?

aws

AWS Limit Monitor

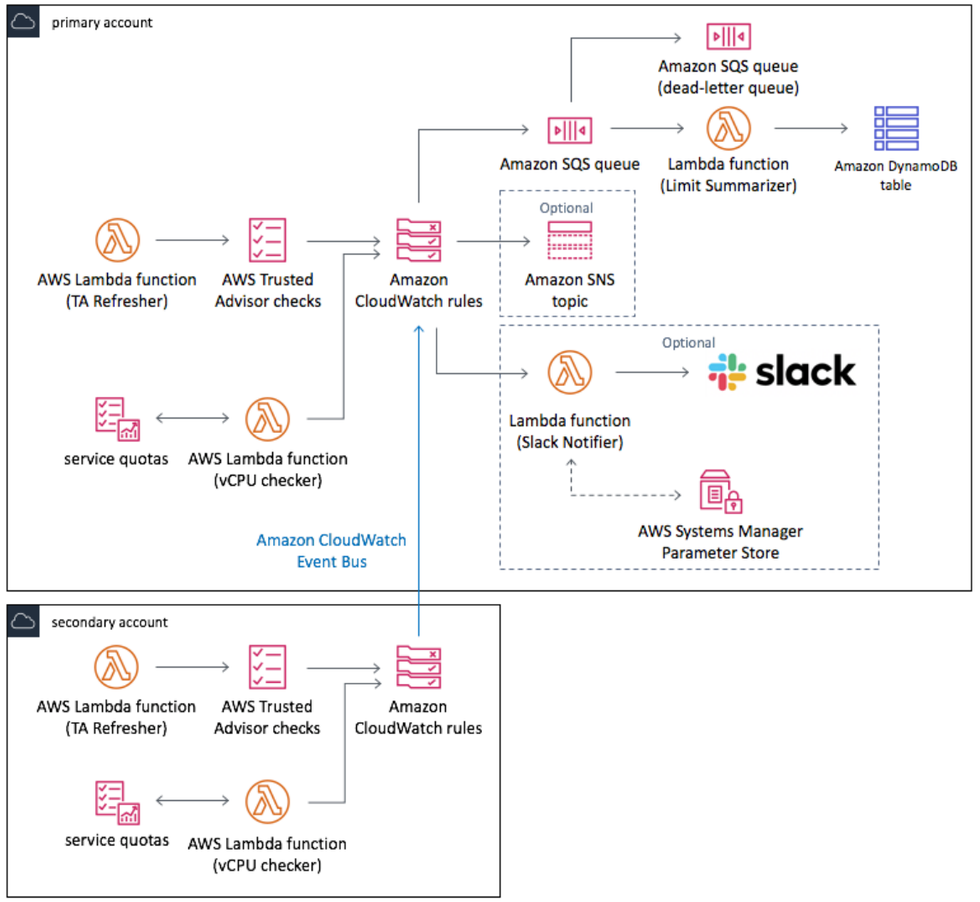
Overview

The AWS Limit Monitor solution automatically provisions the services necessary to proactively track resource usage and send notifications as you approach limits. The solution is easy to deploy and leverages the AWS Trusted Advisor Service Limits checks and Service Quotas to help you display your usage and limits for specific AWS services, and centrally manage your limits.

With AWS Limit Monitor, you can receive notifications over email or in a Slack channel, enabling you to request limit increases or shut down resources before the limit is reached.

Key features

- AWS Limit Monitor reference implementation
- Notifications via email or Slack



aws.amazon.com/solutions/implementations/limit-monitor

Performance Efficiency 1

How do you select the best performing architecture?

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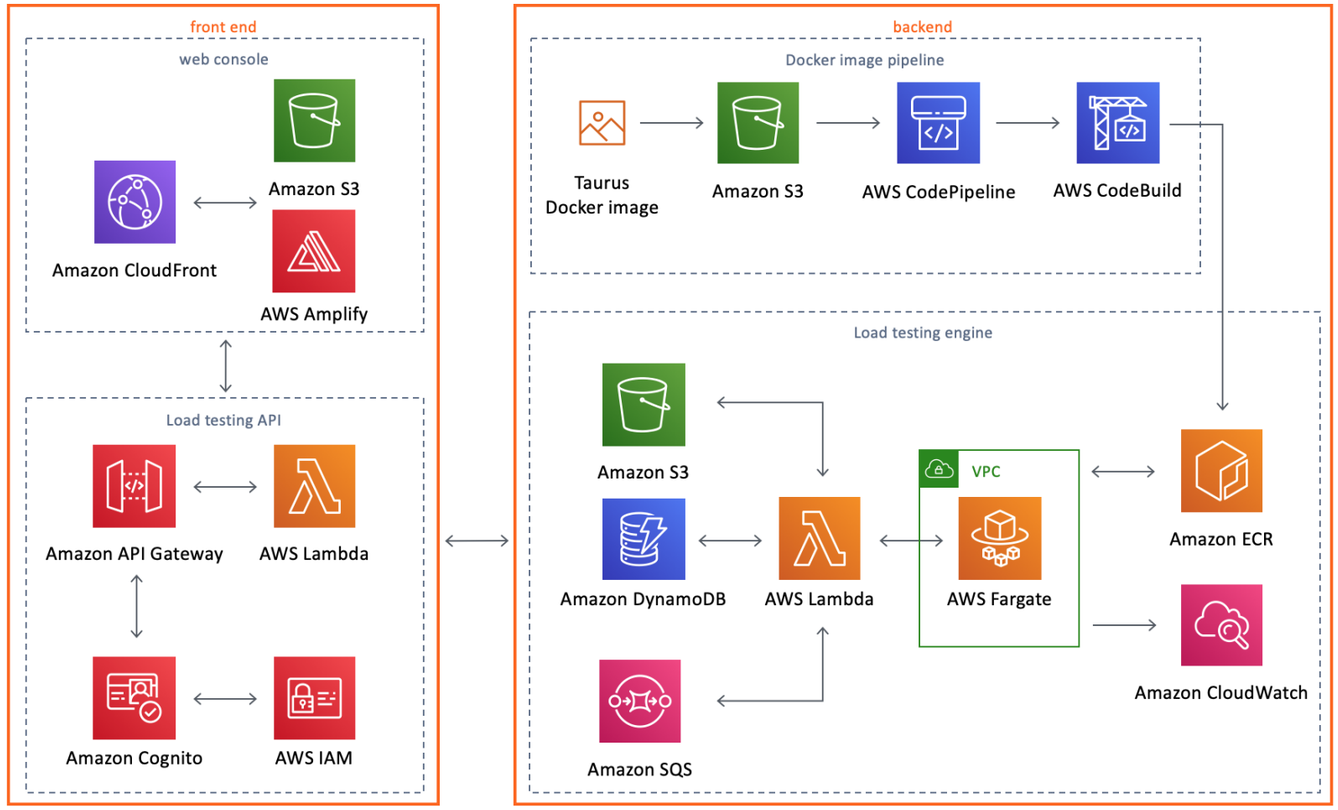
Distributed Load Testing on AWS

Overview

Distributed Load Testing on AWS launches and configures containers running on AWS Fargate to help you easily create and simulate thousands of connected users generating a select number of transactions per second without having to provision servers. With this solution, you can understand how your application will perform at scale and at load, and identify bottlenecks before you release your application.



Key features

- Easy to Deploy: This solution helps make it easier to simplify testing and reduce time to release by automating functional tests for your applications.
- Visualization: includes an Amazon CloudWatch dashboard that displays the output of all tasks that are part of your automated test in near real time.

aws.amazon.com/solutions/implementations/distributed-load-testing-on-aws

Cost Optimization 1

How do you implement cloud financial management?

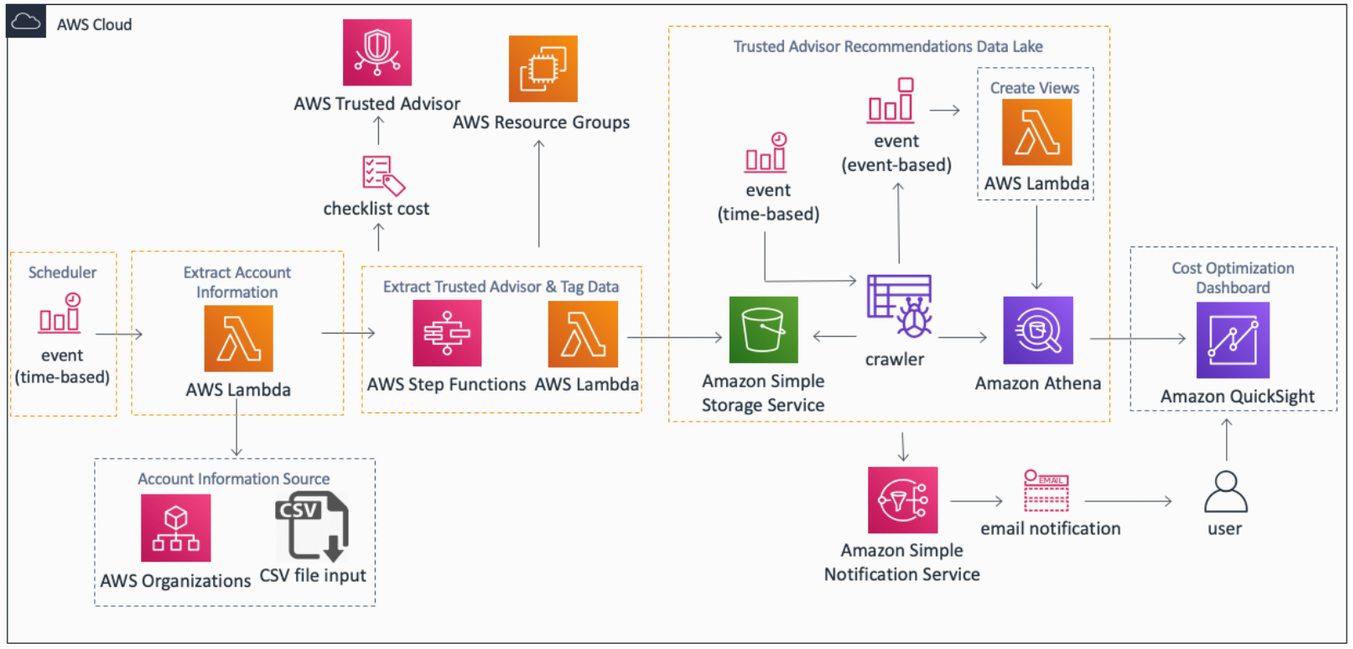
aws

AWS Trusted Advisor Explorer

Overview

The AWS Trusted Advisor Explorer solution automatically provisions the infrastructure necessary to aggregate cost optimization recommendations and actively track cost optimization health across your organization over time. The solution creates a data lake that can be used to create dashboards to visually explore the data. The solution enriches the data with resource tags that further enhance the discovery and filtering capabilities.

The solution leverages AWS Trusted Advisor cost optimization recommendations and AWS Resource Groups tag editor data to build a data lake that can be queried using Amazon Athena and visualized using Amazon QuickSight or any other visualization platform.



Key features

- Trusted Advisor Cost Recommendations Across the Organization
- Trusted Advisor Cost Recommendations with Resource Tags
- Cost Optimization Health
- Visualization

aws.amazon.com/solutions/implementations/aws-trusted-advisor-explorer

Bonus Round

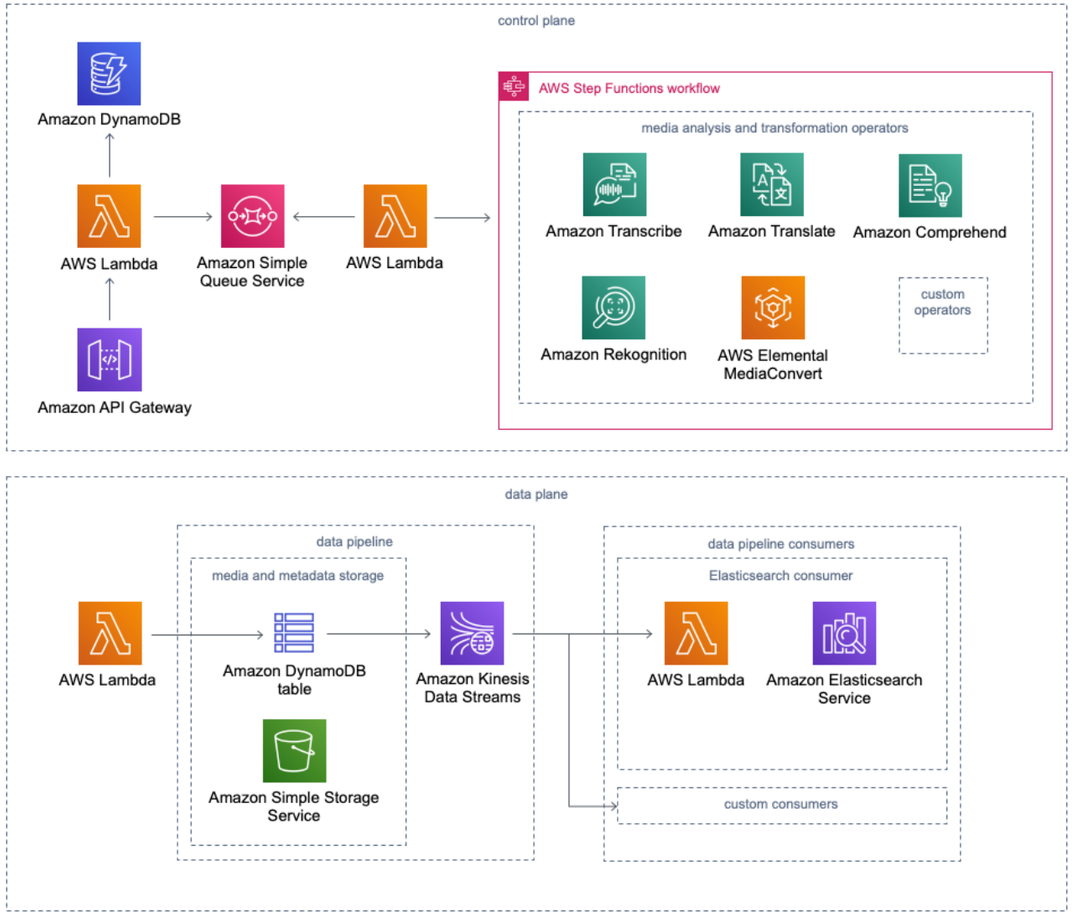
Get started with sentiment analysis

aws

AWS Content Analysis

Overview

The AWS Content Analysis solution helps customers generate meaningful insights through machine learning (ML) generated metadata. With a single serverless application, customers can access AWS-native AI services, select services to apply to their media, and then use insights and metadata to automate manual processes. The solution includes a web-based user interface that customers can use to upload and search their video libraries.



Key features

- Leverage AWS-native AI services
- Interact using a simple web interface
- Leverage the Media Insights Engine (MIE) open source project
- Automate manual processes
- Highly accurate detection and identification

aws.amazon.com/solutions/implementations/aws-content-analysis

Getting started

All of our AWS Solutions Implementations are available at
aws.amazon.com/solutions/implementations

Questions?