axcess.io

CASE STUDY

solution that can generate 100s of millions of iot events every month.

ABOUT AXCESS.IO

AXCESS.IO is a niche provider of Managed Cloud Services to businesses worldwide and has served an ever-growing number of clients since its inception. In a relatively short period, AXCESS.IO has quickly become a niche consulting firm specializing in Cloud Advisory, Cloud Managed Services, and DevOps Automation.

ABOUT RD OVERSEAS

RD Overseas Is a well-recognized professional manufacturer of high-quality car accessories. Established in 1999, RD has been making driving more secure, convenient, and entertaining for millions of customers for more than two decades. All of the company's systems and operations are certified under ISO 9001 certification since 2006.

As part of their commitment to delivering the highest-quality service to their extensive customer base, RD has its customer care department available 24 hours a day, seven days a week.

THE CHALLENGE

RD is building a vehicle tracking system for the Indian market. They need a solution that can scale to 100s of thousand devices in a very short amount of time. This can potentially generate 100s of millions of IoT events every month.

They also intend to provide a solution to different markets and segments, which requires very high velocity in software delivery.

OUR SOLUTION

We built an AWS Serverless solution to handle the volume using services like AWSlambda, API Gateway, AWS IoT gateway. Most of the codes are run through AWSlambda in this solution.

We configured AWS DevOps solution using AWS CodePIpeline, CodeCommit, CodeBild, and CodeDeploy to deliver the software releases in a very automated fashion. We configured the AWS pipeline to trigger activities based on the workflow configured.

Here is the workflow:

- ✓ The customer creates the backlog story in JIRA.

- ✓ The developers commit software changes in the AWS CodeCommit.

- ✓ Any commit generates AWS CloudWatch logs, which in turn generates AWS notifications. There are different topics configured for different repositories.

- ✓ Respective code pipeline is activated, which in turn triggers the build followed by automated tests. The CodeBuild creates the build artifact and pushes it to AWS S3.

- ✓ On successful execution of the automated test, the code was deployed in AWSLambda.

- ✓ The customer is notified of successful deployment through an email configured through SNS Notifications.
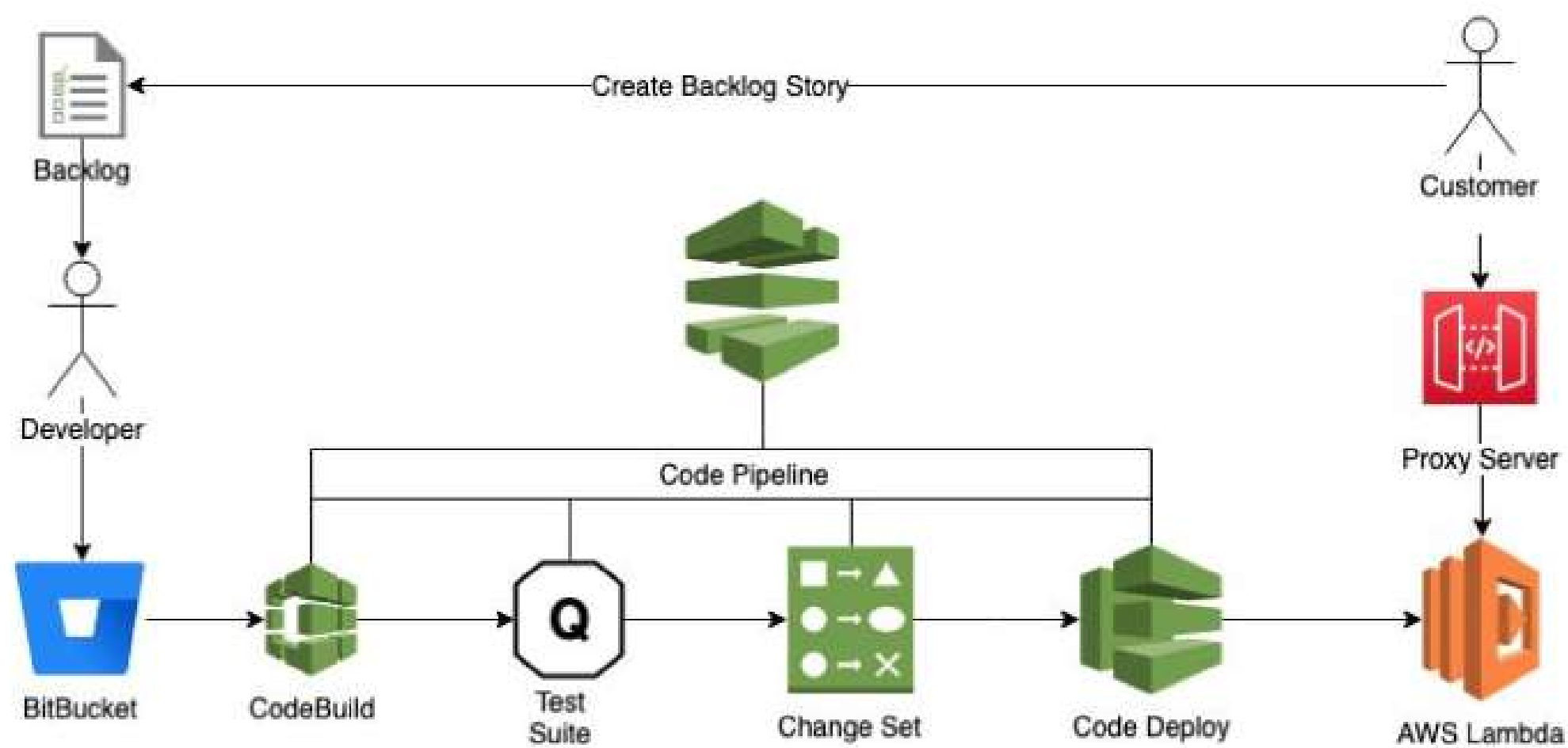
NOTE

Build stages used input as well as output artifacts to resolve and store theAmazon S3 artifact bucket. To make this process even more efficient, we used a pipeline, which zips and shares the files to respective locations.

AWS CodeCommit

We used AWS CodeCommit, a managed Source CodeControl System, as code provider in AWS Pipelined. We configured CloudWatch logs for any check-in, which in turn raised SNS notifications. Code pipeline was triggered on the notifications to trigger the build through AWS CodePIpeline workflow.

AWS CodeBuild

We configured AWS CodeBuild as a build provider in the AWS code pipeline. This builds the software and creates the artifacts for deployment into different environments. Build Artifacts are pushed into AWS S3, which is picked up by AWS CodeDeploy during deployments.

AWS CloudFormation

AWS CloudFormation was used to maintain stacks code. Any change would trigger the change in the stack. This, not only programmatically provisions AWS resources, but also maintains the stock details in simple readable text files.

NOTE

No third-party application or solution was used in the process.

THE FINAL OUTCOME

RD Overseas Pvt. Ltd. can now execute multiple deployments each day with minimal interruptions to their operations.