

CASE STUDY

Business Needs

- Send email and SMS notifications to users
- Schedule notifications based on various criteria
- Redesign architecture for cost optimization
- Auto scale based on the load and processing time

Solution

- Created Serverless architecture using lambda
- Lambda functions are scheduled based on business needs
- Auto scaled based on the load
- Configured in a secured VPC cloud
- Used Amazon CloudWatch alarms with Cron expressions to schedule lambda functions

Benefits

- Cost Reduction
- On demand execution based on notification schedule
- Reliable and scalable solution
- Easy maintenance and deployment

Technical

- ASP.NET, C#, JQuery, HTML5/CSS, SQL Server
- AWS Services – Lambda functions, S3, EC2, Cloud Formation, VPC, RDS, SES, SNS, SQS, CloudWatch Alarms, IAM

Serverless Architecture Using Lambda Integration

Client

The client is an MNC IT services company based in **Kuwait**.

For the past 20 years, the organization has grown and established a solid reputation in the business community and with technology partners for developing and deploying dynamic, robust and flexible solutions built on leading edge technologies.

They have several affiliated companies in Kuwait, Dubai and Egypt to strengthen its portfolio of offerings in the regional market.

Solution

OSoft Labs team of AWS experts began with a thorough assessment of the requirement and came up with Lambda based Serverless architecture for sending email and SMS notifications.

Lambda functions can be added, edited or deleted easily and can be scheduled as per the business requirement.

Created CloudWatch alarms with cron expressions to schedule the Lambda functions.

There is no need to worry about the compute resources (instance type) when we design Serverless architecture. Based on the compute required, the system will automatically pick the right instance type required and attach the code to the server for execution.

The solution designed is scalable, reliable as fault tolerance is built into the architecture.

Challenge

Client was developing an application for which the requirement is to send SMS and email notifications on a scheduled basis. These needs to be independent functions as the business logic to retrieve may change over time.

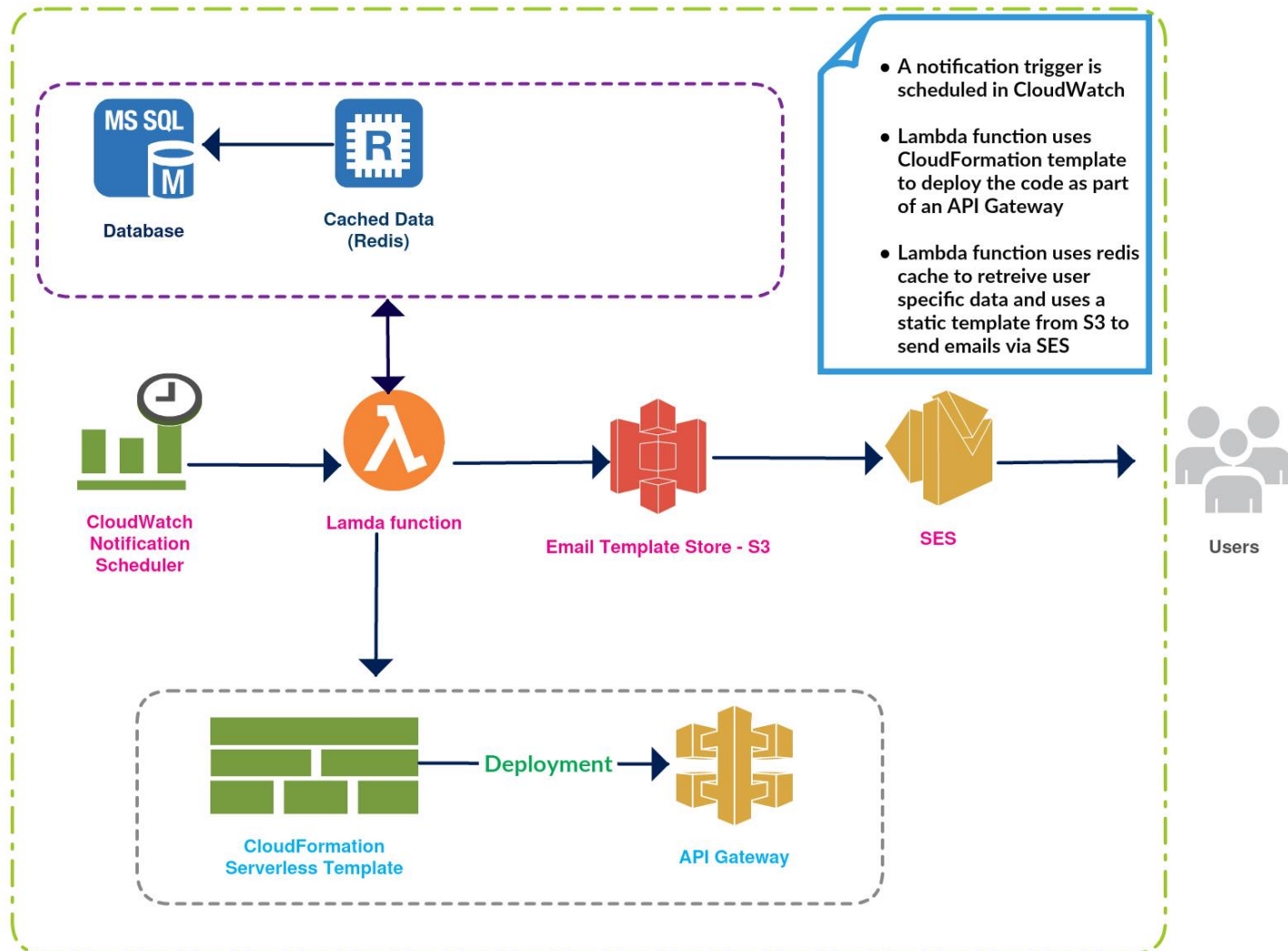
A stand alone on premise notification server was not enough to handle the scalability.

Current notification engine was not reliable and fault tolerant to make sure the email is sent to the recipient.

Emails sent from the local server using SMTP were being pushed to recipient's SPAM folder.

Serverless Architecture Using Lambda Integration

AWS Serverless Architecture



About OSoft Labs

OSoft Labs provides end-to-end IT services for application development, maintenance and support to businesses, using innovative and cost effective solutions. OSoft Labs helps selecting the right technology for the business requirement which has a significant impact on the business growth to help transform and make business functions simpler, faster and better.

Founded in 2012 and head quartered in Hyderabad, India; OSoft Labs is **AWS technology partner** and **ISO 9001:2008** company.

OSoft Labs has been recognized as **“Top 20 most promising cloud computing solutions providers – 2016”** by **CIO Review** magazine in October 2016 special edition.

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