

Company Name: **ResMed**

Video Link: <https://www.youtube.com/watch?v=kszaIJEnKPk&list=PLhr1KZpdzukdeX8mQ2qO73bg6UKQHYsHb&index=10>

Solution: **ResMed: Improving Patient Outcomes with Serverless at Scale**

This platform, that helps **patients track** and engage with their **sleep therapy** for conditions like sleep apnea. ResMed moved from an on-premises environment to a fully serverless architecture on AWS.

The solution uses services such as **AWS AppSync** to manage data flow from the patient mobile and website experience, Amazon **Kinesis Video Streams** for IOT data, AWS **Lambda**, Amazon **SNS**, Amazon **DynamoDB**, Amazon **S3** and **CloudFront** to scale globally, improve system performance and provide proactive care notifications.



Customer used mobile app. Communication to AppSync via GraphQL and synchronization happened. Then triggered lambda and read or writes to DynamoDB to perform the business logics.

IOT devices data is captured and publish it to Kinesis and write to DynamoDB via Lambda polar. Based on the business logic, email will trigger in real-time to the user's mobile or push notification via SNS. Static contents like videos/pictures/ language contents are stored in S3. AWS CloudFront helps in the international regional level distribution. It can handle

AWS SERVICES mentioned:

**AWS AppSync** Accelerate application development with serverless GraphQL and Pub/Sub APIs.

<https://aws.amazon.com/appsync/>

**AWS Lambda**: Run code without thinking about servers or clusters. <https://aws.amazon.com/lambda/>

**AWS DynamoDB**: Fast, flexible NoSQL database service for single-digit millisecond performance at any scale.

<https://aws.amazon.com/dynamodb/>

**AWS SNS: Simple Notification Services**: Fully managed pub/sub messaging, SMS, email, and mobile push notifications: <https://aws.amazon.com/sns/>

**Amazon Kinesis** Easily collect, process, and analyze video and data streams in real time.

<https://aws.amazon.com/kinesis/>

**Amazon CloudFront** : Securely deliver content with low latency and high transfer speeds.

<https://aws.amazon.com/cloudfront/>