SUCCESS STORY

indium
Make Technology Work

RACKSPACE TO AWS MIGRATION: EAS MAKES TIME FOR WHAT MATTERS MOST TO BUSINESS

REALIZED STREAMLINED OPERATIONS, ENHANCED PERFORMANCE, AND SIMPLIFIED SCALABILITY

PROJECT OVERVIEW

Indium supported the client in migrating their legacy cloud infrastructure from Rackspace to Amazon Web Services (AWS) to gain performance and scalability benefits for global operations. Indium supported in building an interactive dashboard, compatible on both android and iOS, to monitor/track the children's behavioral data. Indium succeeded in this pursuit by rolling out best-in class AWS practices and methodologies.

SOLUTION DELIVERED

Cloud Engineering

CLIENT DOMAIN

Healthcare

KEY HIGHLIGHTS

- Successfully migrated existing application in less than 3 weeks with minimal operational impact

- System-wide improvements in performance with granular control of scalability.

- 90% reduction in operational overhead from manual effort and intervention

ABOUT CLIENT

Early Autism Services (EAS) is a globally recognized Applied Behavior Analysis (ABA) healthcare service provider with global presence in Australia, USA, and India and expanding operations. They provide care and support for Autistic Children through specialized services such as Occupational Therapy, Speech and Language Therapy, Social Skills Groups, Parent/Professional Education Courses, and Telehealth therapy sessions.

BUSINESS CHALLENGES

- Rackspace lacked the global infrastructure and cloud-native features required to power EAS'/Bloom's global ambition – scale and reach millions of autistic kids in Australia & India
- Sluggish application performance hindered the field users from providing first-class care to their clients
- The need for separate installations per organizational unit limited organizational growth
- The maintenance overhead involved in managing the servers took technical resources away from new feature development and roll-out
- There was limited technical support for insurance, audit, and HIPAA compliance processes and that added to a significant operational cost

SOLUTION HIGHLIGHTS

- Indium understood the business goals, current constraints and helped choose the right cloud and devised apposite migration strategy
- The existing application was migrated and validated from Rackspace to AWS using lift-and-shift approach, without straining further an already overloaded team
- CloudEndure was leveraged to migrate the applications and data seamlessly from legacy platform to AWS
- Compatibility challenges between CloudEndure and Rackspace were managed effectively with real-time analysis and fixing of issues

- Deploying a similar software stack allowed the performance advantages of AWS to be leveraged without adding additional development effort
- The web server (NGINX) and backend application (RoR) were hosted on AWS Virtual Private Cloud (VPC). Bastion Host was used to provide secured access to the web server. This setup enhanced security and simplified management
- MySQL was replaced with AWS RDS (MySQL) and Redis with AWS Elasticache (Redis). This accelerated the performance at the system level without application-level changes. Thus, when a dynamic data request is received, Ruby passes that request to AWS RDS (MySQL) and ElastiCache (Redis), and the request result is sent back to the browser
- The e-mail Servicing platform was continued to be hosted on Amazon SES owing to its scalability and protection of sensitive data which made it simple to implement OTP in a secure, HIPPA compliant way
- Comprehensive Monitoring Solutions was enabled
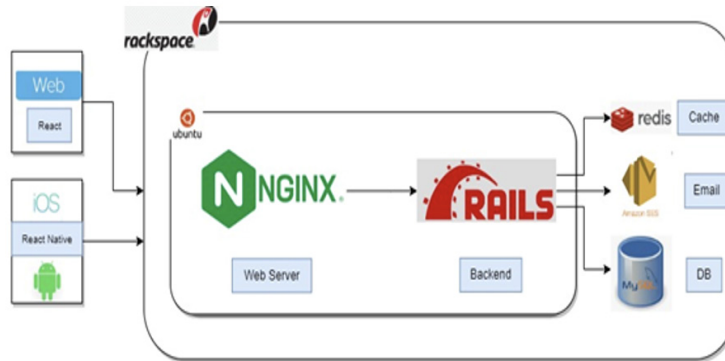- AWS global reach offered the required infrastructure and support for global expansion

EAS ARCHITECTURE (RACKSPACE)

Virtual Private Server: Rackspace   Front-End Technologies: React

Back-End: Ruby on Rails   Database: my SQL

Web Server: NGINX   Cache: Redis

Email service: Amazon SES

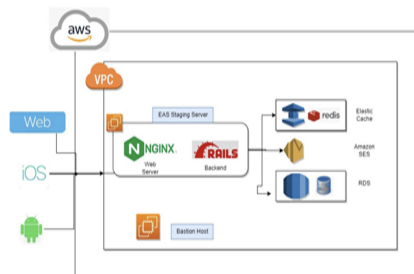**Legacy Architecture - Rackspace**

- A user request (from web browser) is sent to the NGINX.
- If the data request is static, the data is rendered from React app.
- If the data request is dynamic, the request is sent to (Rails - > my SQL/redis) and the data rendered is sent back to the browser.
- 2FA uses Amazon SES for sending the OTP through email.

EAS ARCHITECTURE – CURRENT STATE (MIGRATION TO AMAZON WEB SERVICES)

Virtual Private Cloud: AWS   Front-End Technologies: React

Back-End: Ruby on Rails   Database: RDS

Security Layer: Bastion Host   Web Server: NGINX

Cache: Elastic Cache   Email service: Amazon SES

- A user request (from web browser) is sent to the VPC and then to NGINX.
- If the data request is static, the data is rendered from React app.
- If the data request is dynamic, the request is sent to (Rails - > RDS (my SQL)/Elastic Cache) and the data rendered is sent back to the browser.
- 2FA uses Amazon SES for sending the OTP through email.

BUSINESS OUTCOMES

- Single-system installation maximized resource utilization and lowered operational costs
- 40% cost savings over Rackspace legacy infrastructure
- 90% reduction in manual intervention and maintenance efforts through automation and managed services
- Seamless transition of applications and data from legacy platform to new AWS-based platform

TECH STACK

TESTIMONIALS

"Our working relationship with Indium has been excellent. Communication has been very clear, projects and expectations have been effectively managed, and the teams have been very talented. Thanks to our partnership with Indium, we've been able to expand our operations into India and Australia."

ABOUT INDIUM

Indium is a Digital Engineering Services leader and Full Spectrum Integrator that helps customers embrace and navigate the Cloud-native world with Certainty. With deep expertise across Applications, Data & Analytics, AI, DevOps, Security and Digital Assurance we "Make technology work" and accelerate business value, while adding scale and velocity to customer's digital journey on AWS.

indium
Make Technology Work

USA	INDIA	UK	SINGAPORE
Cupertino | Princeton	Chennai | Bengaluru | Mumbai | Hyderabad	London	Singapore
Toll-free: +1-888-207-5969	Toll-free: 1800-123-1191	Ph: +44 1420 300014	Ph: +65 6812 7888

www.indiumsoftware.com

For Sales Inquiries
sales@indiumsoftware.com

For General Inquiries
info@indiumsoftware.com