



nClouds | AWS Case Studies

Medical Device Company

Benefits Summary



Better application visibility and centralized dashboard



Improved uptime and application reliability



Managed IT services for SRE and DevOps

About the Company

This company aims to help patients suffering from chronic pain achieve lasting relief. Its flagship product is a device that safely works inside patients' bodies to significantly reduce pain and restore quality of life.

Industry

Health Care, Healthtech, Health Diagnostics, Pharmaceutical

Location

United States

Featured Services

Managed Services, Data & Analytics, Migration, Application Modernization.

CHALLENGE

Need for Proper SRE, Monitoring System, and Support for DevOps

As it grew, this company needed to establish a proper Site Reliability Engineering (SRE) and monitoring system to ensure the reliability and availability of its services. Additionally, the company needed to support its internal DevOps team to ensure smooth operations.



The company found nClouds to be the perfect partner, as nClouds was capable of delivering the **essential guidance and assistance required to devise and execute a solution** that fulfilled its unique needs.



Why AWS and nClouds

nClouds, a Premier Tier Services Partner and Well-Architected Partner in the AWS Partner Network, possesses vast experience and knowledge in constructing and administering intricate cloud environments on AWS.



As a result, the company found nClouds to be the perfect partner, as it was capable of delivering the essential guidance and assistance required to devise and execute a solution that fulfilled its unique needs.

The medical device company wanted to improve its observability capabilities to better monitor its systems and applications for any issues and gain insights into performance. It needed help with automating its infrastructure deployment and management using Terraform to improve efficiency and reduce the risk of errors. Finally, the medical device company needed help with managing its Windows environments on AWS Elastic Beanstalk.

Overall, the combination of AWS and nClouds' expertise and experience made them an ideal choice for this company, providing a comprehensive solution for all its challenges and needs.

SOLUTIONS

nClouds' Solution Architecture for the Medical Device Company

To address the client's technical and business challenges, nClouds utilized AWS and third-party services to provide a comprehensive solution, including AWS Elastic Beanstalk, Windows Containers, Datadog, and AWS Application Load Balancer (AWS ALB).

AWS Elastic Beanstalk

With AWS Elastic Beanstalk, the client can quickly deploy and manage its web applications, including its pain management software, without needing to worry about the underlying infrastructure. Elastic Beanstalk provides an environment for developing and testing applications and then automatically deploys them to the appropriate servers. This means that the client can easily scale its application up or down as needed to meet changing demand.

Windows Containers

Windows Containers help the client achieve greater flexibility, scalability, and security in its application infrastructure, enabling it to better meet the needs of its customers and business requirements. This tool allowed the client to package its Windows-based applications and dependencies into containers that can be deployed on AWS. By migrating to containers, the client was enabled to modernize its web portal.

Datadog

Datadog helps the client ensure its applications and infrastructure are performing optimally while allowing the company to identify and address issues quickly and efficiently. As a monitoring and analytics tool, Datadog allows the client to monitor the performance of its software applications and the infrastructure on which its applications run.

AWS Application Load Balancer (AWS ALB)

AWS Application Load Balancer (ALB) is a service that provides the client with a highly available and scalable infrastructure that can handle large amounts of traffic while ensuring the security and reliability of its applications. AWS ALB helps with load balancing, autoscaling, and advanced routing capabilities.

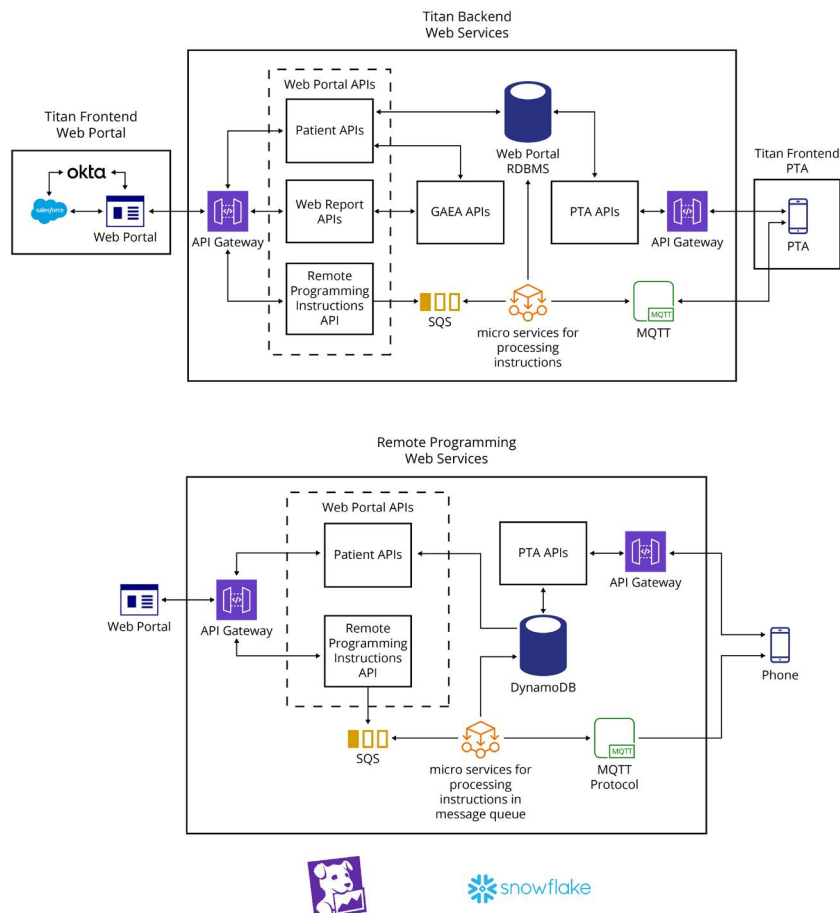
The Company Leverages Amazon Services

- **AWS Application Load Balancer (AWS ALB)** – Provides a way to support content-based routing and applications that run in containers
- **AWS Elastic Beanstalk** – Provides a service for the client to quickly deploy, manage, and monitor its web applications
- **Amazon Simple Storage Service (S3)** – Provides object storage through a web service interface

The Company's Solution Stack Includes Additional, Essential Third-Party Tools

- **Datadog** – A monitoring and analytics tool to determine performance metrics and event monitoring for infrastructure and cloud services and monitor services such as servers, databases, and tools
- **Terraform** – Enables the client to safely and predictably create, change, and improve infrastructure
- **Scalr** – Helps nClouds and the client deploy IT resources using infrastructure as code while maintaining policies around cost, security, and compliance
- **Windows Containers** – Enables the client to run Windows-based applications in lightweight, isolated environments

High-Level Architecture Diagram



BENEFITS

Increased Business Efficiency

Teaming with the company, nClouds was able to bring several key benefits through AWS that increased business efficiency and solved its challenges.



Better Application Visibility and Centralized Dashboard



nClouds helped the company by setting up a centralized dashboard that allowed the company to monitor its applications and infrastructure in real time, which provided better visibility into its systems and enabled the client's team to make informed decisions based on the data.

Improved Uptime and Application Reliability



nClouds implemented automated processes for infrastructure deployment, testing, and monitoring to ensure its systems were always up and running.

Managed IT Services for SRE and DevOps



nClouds managed and maintained the client's infrastructure, allowing the company's site reliability engineering (SRE) and DevOps teams to focus on improving their applications and working on new releases.

About nClouds

nClouds is a certified, award-winning provider of AWS and DevOps consulting and implementation services. We partner with our customers as extensions of their teams to build and manage modern infrastructure solutions that deliver innovation faster. We leap beyond the status quo.

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