nClouds | AWS Case Studies

Nevro

nClouds and AWS Deliver Observability and Reliability for Nevro, Enhancing Chronic Pain Relief Solutions

Benefits Summary

Enhanced Application Visibility and Centralized Dashboard

Improved Uptime and Application Reliability

Managed IT Services for SRE and DevOps

About the Customer

Nevro, a rapidly expanding medical device company established in 2006, is dedicated to providing lasting relief to patients suffering from chronic pain. Their flagship product, HFX, is a small implantable device that safely and effectively reduces pain and improves patients' quality of life.

Industry

Healthcare, Healthtech, Health Diagnostics, Pharmaceutical

Location

USA

Featured Services

Application / Infrastructure Modernization, Data & Analytics, Managed Services, Migration

Service Page Links

- **Migration and Modernization Services**
- **Managed Services**

Challenge

Need for proper SRE, monitoring system, and support for DevOps

As Nevro experienced rapid growth, they recognized the need for a robust Site Reliability Engineering (SRE) and monitoring system. They required a solution to ensure the reliability and availability of their services and to support their internal DevOps team for seamless operations. A core requirement was to improve observability to gain deep insights into their systems and applications.

Why AWS and nClouds

AnClouds, 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, Nevro 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.

Nevro 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, Nevro 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 Nevro, providing a comprehensive solution for all its challenges and needs.

Strategy and solution

nClouds' Solution Architecture for Nevro

To address Nevro's technical and business challenges, nClouds utilized AWS and third-party services to provide a comprehensive solution, including AWS ElasticBeanstalk, 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.
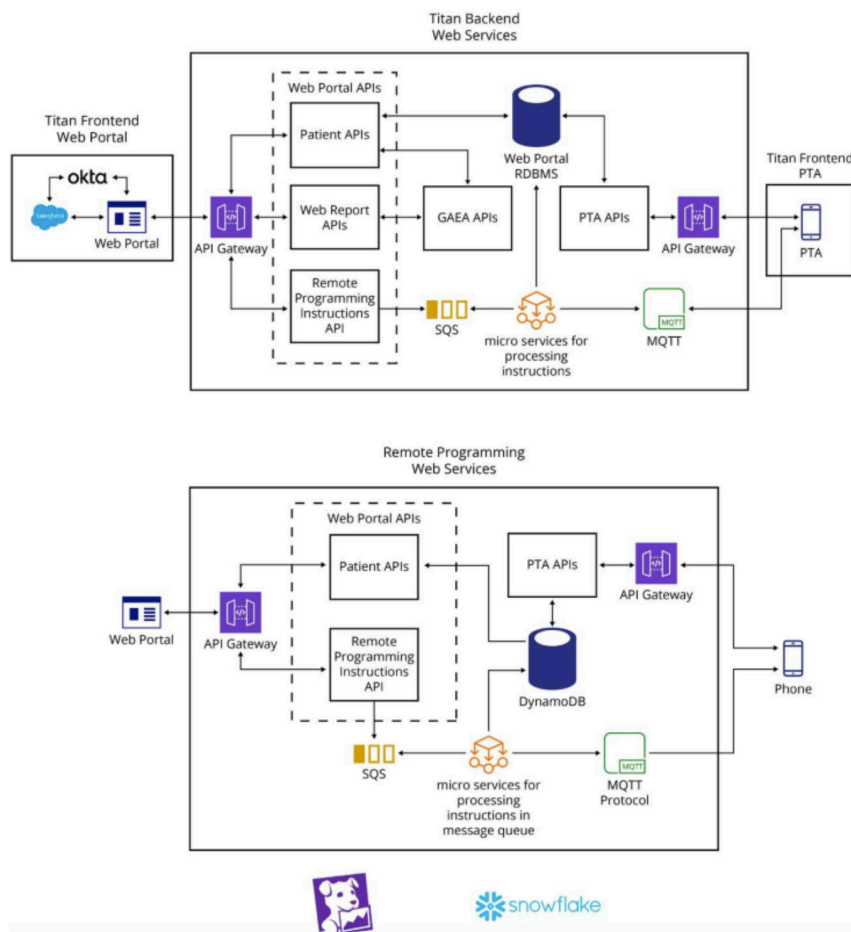
Windows Containers

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 Nevro 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.

Results and Benefits

Increased Business Efficiency

The collaboration between nClouds and Nevro, leveraging the power of AWS, delivered significant benefits and enhanced business efficiency, with observability playing a central role:

Enhanced Application Visibility and Centralized Dashboard: nClouds collaborated with Nevro to implement a centralized dashboard, leveraging tools such as Datadog, to provide real-time visibility into their applications and infrastructure. This improved system visibility and enabled data-driven decision-making.

Improved Uptime and Application Reliability: The implementation of automated processes for infrastructure deployment, testing, and monitoring, driven by the insights gained through enhanced observability, contributed to increased system uptime and application reliability.

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

Through its strategic partnership with nClouds and the adoption of AWS, with a strong focus on observability, Nevro successfully transformed its operations, achieving enhanced reliability, improved efficiency, and greater scalability. This collaboration empowered Nevro to focus on its core mission of providing innovative pain relief solutions, ultimately improving the lives of patients. nClouds' expertise and AWS's robust platform proved to be the ideal combination, delivering a comprehensive solution that met Nevro's unique challenges and positioned them for continued success in the dynamic healthcare industry.

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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