## nClouds

nClouds | AWS Case Studies

### **Benefits Summary**

6Connex

Faster scalability

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Lower cost



Improved reliability and QoS



Focus on the business

## About 6Connex

6Connex sought a best-practices infrastructure on AWS to bolster its CloudAnalytics advanced supply chain analytics platform. It aimed to establish a modern, well-architected infrastructure and required expert assistance to implement and maintain it.

It planned to leverage AWS's reliability and security features and nClouds' DevOps and MSP services to optimize its AWS hosting. This approach was designed to navigate resource constraints and ensure a wellmanaged, cost-effective cloud solution.

#### Industry

Online events

**Location** Pleasanton, California

**Featured Services** Managed Services, Cloud Infrastructure, 24/7 Support

#### CHALLENGE

## Building Reliable, Scalable Infrastructure in the Cloud to Meet QoS Requirements

6Connex designs innovative marketing, sales, recruitment, training, and HR communications tools to help businesses transform big ideas into real-world results. The company's software platform offers a fully customizable, secure, and reliable solution for a variety of applications, including virtual events and environments for career fairs, employee onboarding, user conferences, and corporate universities.

Initially, 6Connex delivered its services by leveraging an on-premises infrastructure, which created various challenges for the company:

- High infrastructure maintenance costs
- Inability to meet customers' demands for reliability and quality of service
- Limited ability to scale up and down based on the size of virtual events, impacting profitability

To address these issues, 6Connex started looking for a solution that would enable it to redesign its infrastructure for better performance. Given the nature of its business, zero downtime of production environments was a central requirement, as its key promise to clients was reliability and quality of service related to virtual events. 6Connex's new infrastructure also needed to have the ability to scale up and down, as required, to maximize profitability.





# Why AWS and nClouds with MSP Services

An AWS representative referred 6Connex to nClouds to help the company assess and improve its infrastructure. 6Connex was impressed with nClouds' DevOps, MSP services, and MSP and asked nClouds to perform an AWS Well-Architected Framework Review (WAFR) of its CloudAnalytics supply chain planning platform. Based on the WAFR findings and recommendations, 6Connex asked nClouds to work on items in its DevOps improvement roadmap,

proactively identify and remediate issues, support the development team, and regularly communicate with product stakeholders.



## The Solution Stack Includes Additional Essential Tools and Services

- **Jenkins** An open-source automation server used to build automated deployment pipelines
- **Chef** A configuration management tool that integrates with OpsWorks to turn infrastructure into code
- Icinga An open-source computer system and network monitoring application
- NGINX A high-performance HTTP server and reverse proxy and IMAP/POP3 proxy server
- Apache Tomcat An application server that executes Java servlets and renders Java Server Page pages
- ActiveMQ A powerful open source messaging and Integration Patterns server
- NFS A client/server application for viewing and updating files on a remote computer
- **Redis** An in-memory data structure store, used as a database, cache, and message broker
- Node.js An open-source, cross-platform JavaScript run-time environment for executing JavaScript code server-side

## 6Connex's New Infrastructure Leverages the Following AWS Services

- AWS Code Suite Provides a collection of fully managed continuous integration and continuous delivery (CI/CD) services enabled by AWS
- **AWS CloudFormation** Enables the 6Connex team to run infrastructure as code and deploy AWS services in multiple configurations
- Amazon ElastiCache (Memcached) A web service for setting up, managing, and scaling cache environments in the cloud
- AWS OpsWorks A fully managed service providing managed instances of Chef to automate the deployment pipeline
- Amazon S3 An object storage for storing and retrieving data from 6Connex applications
- Amazon RDS (MySQL) A relational database service for setting up, operating, and scaling MySQL relational databases in the cloud
- Amazon EC2 Services that are part of the environment run on Amazon EC2 instances and organized using AWS instance tags
- Route 53 A highly available and scalable DNS cloud service for handling domain registration and routing users' internet requests to 6Connex applications
- Amazon CloudFront A web service that speeds up distribution of static and dynamic web content to 6Connex users
- Amazon VPC Enables the 6Connex team to launch AWS resources into a virtual network
- Elastic Load Balancing Automatically distributes incoming application traffic across Amazon EC2 instances, containers, and IP addresses

## nClouds Solution Architecture for 6Connex

The new design provides continuous integration capabilities and gives developers the ability to deploy easily without concerns for infrastructure stability or services availability—with the added benefit to scale up and down on demand to reduce costs. The solution helps 6Connex deliver increased uptime and stability of its application with a self-healing infrastructure and provides the ability to recover from any outages quickly and efficiently.





#### **BENEFITS**

Teaming with nClouds, 6Connex moved from an on-premises infrastructure to a highly adaptable, scalable, and effective infrastructure in the cloud.

The project has yielded numerous benefits:



#### **Faster Scalability**

6Connex now has an infrastructure that can scale up and down within minutes instead of hours.



#### **Lower Cost**

6Connex's current cloud infrastructure costs are a fraction of its previous onpremises costs.



#### Improved Reliability and QoS

Building its new platform on a cloudbased, modern infrastructure with AWS improved performance, reliability, and overall quality of service.



#### **Focus on the Business**

Leveraging services like RDS and ElastiCache reduced operational tasks such as backing up and setting up read replicas, giving the 6Connex team more time to focus on delivering business value to customers.

### 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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