

severalnines

LIFE AND DEATH

AND DATABASE

HIGH AVAILABILITY



### THE ROYAL NATIONAL ORTHOPAEDIC HOSPITAL

- Industry: Healthcare
- Location: United Kingdom
- Data Center: 2

### USE CASE

A mission critical application migrating from SQL Server to PostgreSQL

### WHY SEVERALNINES

Severalnines offered full ops database automation to deploy, manage and monitor PostgreSQL database for high availability and faster restoration in case disaster strikes.

### INTRODUCTION

The Royal National Orthopaedic Hospital (RNOH) was founded in 1905 and is the largest specialist orthopaedic hospital in the UK treating more than 120,000 neuro-musculoskeletal patients yearly. RNOH is regarded as a leader in the field of orthopaedics both in the UK and world-wide. It provides the most comprehensive range of neuro-musculoskeletal complex conditions, including acute spinal injury, complex bone tumour treatment, orthopaedic medicine and specialist rehabilitation for chronic back pain.

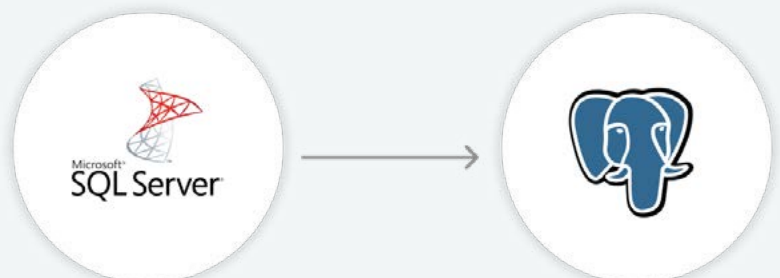
### CHALLENGE

As the leading orthopaedic healthcare centre, RNOH treats local and referral patients from other countries to treat complex or rare conditions. RNOH uses many locally hosted applications to deliver quality health care services to its customers. The clinical web application system is one of these applications and is frequently used by RNOH nurses and doctors to record daily clinical data transactions. This clinical web application is architected on an open source technology stack with PostgreSQL as its backend database.

**“Severalnines provided full peace of mind with managing a highly available PostgreSQL cluster.”**

The majority of RNOH clinical applications worked on SQL Server and were managed by a highly technical team to ensure minimal system downtime. Managing this infrastructure involved high overhead cost on administrative tasks and costly software licensing. Adopting open source technology for their clinical web application was their first move to reduce the growing overhead cost and improve the system reliability.

Although the RNOH IT team had good experience with SQL Server, they had less experience when it came to operating



PostgreSQL in production, let alone deploying and managing PostgreSQL clusters for high performance and availability. The team had a hands-on approach to manage the database, including manually recovering from failures and home grown backup scripts which were not very reliable.

RNOH required a way to automate the management and operations of the database. This would eliminate the need to have a dedicated resource to look after the database and ensure maximum uptime. This move would not only save the resource overhead cost, but it would ensure a speedy, reliable restoration and minimize downtime and risk, which is crucial for any system in the healthcare industry.

## SOLUTION

Having identified their problems in managing PostgreSQL efficiently, the RNOH IT team started their search for PostgreSQL experts in the market and found ClusterControl by Severalnines. ClusterControl was a perfect fit for their requirements; a fully automated ops management system with support for highly available deployments, advanced monitoring

features, and automated backup & restore.

In just six months, the RNOH team, together with Severalnines support, completed the deployment, data migration from SQL Server, and implementation of operational procedures for PostgreSQL with ClusterControl.

With ClusterControl, they were able to remove many mundane tasks from their limited resources while still having full peace of mind on their guarantee of 99.99% service uptime for their internal customers and patients.

## WHY SEVERALNINES?

- **Full Ops Database Automation for PostgreSQL:** With ClusterControl, you don't need to have a dedicated DBA to administer the open source database technology. ClusterControl helped RNOH to deploy, configure replication, achieve high availability, and monitor PostgreSQL with the resources they had.
- **Automated Recovery and Support for High Availability:** RNOH required a solution which guaranteed high availability and an automated and speedy recovery process to minimize any downtime. This is key to support the mission critical processes and prevent data loss.

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“Many of our applications that we use to deliver care to our patients rely on **database backends** that we host locally. Most of these systems are **mission critical** and **uptime is of utmost importance**, as is reliable backup and restoration processes to **prevent data loss**.”

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# ClusterControl

The only database management system you'll ever need to take control of your open source database lifecycle.

[Learn More](#)

