

# Database management services to support your organisation

Marion Shanly reveals how WellData supported The University of Exeter in the management of their databases

The University of Exeter is a member of the prestigious Russell Group of research-intensive universities. It offers a wide range of subject areas in a welcoming and international environment.

## Executive Summary

Exeter University were in need of a stable and reliable SQL Server and Oracle solution for the management of their databases.

The challenge was two-fold:

1. Exeter wanted to avoid cost increases over the term of the contract while guaranteeing a better service that could ensure 24/7/365 support.
2. The geographical position of the University made it extremely challenging to find teams with suitable skills.

That's when the University looked for an alternative solution: moving the day-to-day management of their databases to a fully managed service.

## Challenges

### Cost of 24/7/365 database management

Exeter University relies on a database estate consisting of Oracle, SQL Server and MySQL for their daily operation; due to the complexity of this estate the University had to employ a minimum of three full-time Database Administrators (DBAs) to ensure that the databases were managed 24/7/365.

### Ever-changing technology landscape

In an age when technology is in constant development, the University recognised the critical importance of entrusting their database estate to someone that could ensure the most up-to-date expertise.

### Specific database issues

Exeter University needed a strategic partner to support and develop their database estate for large scale digital transformation.

### One single point of failure

Due to budget pressures, that affect Universities across the country, combined with the Exeter location, finding the right skills was challenging and the University couldn't secure a formal oncall-rota given the limited number of positions combined with the technical complexity in the estate.

### Managed Service

In a search to control costs while ensuring the University could rely on the right level of support and expertise, the Solutions Delivery team started to look for an alternative solution.

A Managed Service was a first-time experience for the University in this area, but the team realised that managed services could be the only way to address the challenges they were facing and decided to embark on a thorough research process to understand the market.

A professional and rigorous approach was used to make sure any future solution would work for the University.

The tender exercise took many months and required a very detailed response from the multiple companies that applied. At the end of the process, Exeter selected WellData as their partner of choice.

*"You now cover out of hours fully for us, although with your proactivity we probably don't need it now."* Development manager

## The Solution

### 24/7/365 database management

Continuous monitoring, with no limit on the amount of advice, interventions or support offered.

- 24/7/365 monitoring, problem resolution, and root-cause analysis
- Proactive health checks
- Continuous operational improvements
- Change requests for design and implementations
- Configuration management
- Backup monitoring
- Capacity planning
- Upgrade and migration planning
- Backup/export on-demand service

### Day-to-day database maintenance

- Performance tuning, high availability testing, and disaster recovery
- Service pack, patching and hot fixing
- Database refresh of development/test installations

## Database implementation services - project basis

- Database upgrades, installation, and configuration
- Schema/table verification
- Database migrations
- Pre-deployment testing
- Deployment to production services
- New database design service
- Log interrogations
- Database decommissioning
- Database licence optimisation
- Provide advice and guidance on migration to the cloud

## Making a concrete difference

On top of the various hurdles in managing day-to-day operations, Exeter University had some very specific issues with the space on their Oracle database.

As WellData's Oracle database administrator for Exeter explains: "Despite having considerable free disk space for archivlogs (Terabytes), the database was configured to use two destinations (i.e. two copies of the same log) and they had set the mandatory directory to a disk that was only 100 Gb in size; critically, this flawed setup stopped the databases on various occasions and it had to be addressed."

WellData solved the issue by calculating the maximum amount of space that the database archivlogs used between two disk backups of the logs during the busiest period. They then allocated a disk 150% bigger than this, adjusting the timing of the backup and clearing old logs in the backup process.

Once the solution was implemented the databases ran without any further intervention or issues.

## A fully dedicated delivery team

- Unlimited access to a service delivery manager
- A primary Oracle DBA and a primary SQL DBA
- A secondary Oracle DBA and secondary SQL DBA
- Ad hoc My SQL support
- Back up from the WellData team

The primary DBA's role is to execute the complete support package on a day-to-day basis, including proactive management, and reactive tasks where necessary.

The secondary DBA is continually briefed and provides continuous coverage whenever required.

## Monitoring services

Specialist monitoring tools are installed to underpin the 24/7 management, with a warning system in place that ensures that, in the unlikely case of an incident, a DBA is allocated the task immediately.

## Unlimited telephone/email advice and incident support

- A 24/7 incident response function to deliver full out of hours advice and support
- Constant communication lines with a WellData employee
- Round-the-clock proactive monitoring

## Aligned SLAs

An SLA framework, which is flexible and adaptable, is designed to respond to changes in the University's business calendar.

## The results

The systems are better maintained and have higher efficiency, resilience and performance.

Exeter University is now able to focus on strategic projects, rather than having to invest time and resources on daily database management.

*"The biggest pleasant surprise has been the realisation that every request is addressed in the space of a few minutes and that there is an expert person at the other end of the phone ready to answer our team queries, any time. A fantastic result."* Assistant Director

## What WellData can do for your organisation

These are some of the services that WellData can offer to support your IT environment. With a proven track record of effective partnerships with organisations across the U.K., we look forward to becoming "part of your IT team".

WellData look forward to working with your organisation and are confident that we can meet your challenges and requirements.

If you have any questions or would like to find out more about how WellData can help you, please feel free to contact our team: [enquiries@welldata.co.uk](mailto:enquiries@welldata.co.uk) or by phone on 0800 389 4051.



Marion Shanly  
Commercial Manager  
WellData Ltd  
Tel: +44 (0)800 389 4051  
[oag@welldata.co.uk](mailto:oag@welldata.co.uk)  
[www.welldata.co.uk](http://www.welldata.co.uk)  
[www.linkedin.com/company/welldata](http://www.linkedin.com/company/welldata)