



CLIENT

Australian Red Cross

INDUSTRY

Public Sector Government, NGO,
Charitable Services

BUSINESS NEED

Australian Red Cross needed to migrate their data from outdated on-prem servers to virtual machines in the cloud. They were eager to move away from outdated hardware in order to achieve high availability and disaster recovery.

SOLUTION

Pythian analysed existing infrastructure and implemented database consolidation, database upgrades, and migration to the cloud.

TECHNOLOGIES

Microsoft SQL Server Data Migration Assistant for SQL 2016, Microsoft PowerShell for backup management, Microsoft PowerShell for interacting with AWS S3, AWS EC2, and AWS Identity Access Management.

RESULTS

Significant return on investment resulting from Pythian engagement, including reduced licensing costs, consolidated and stabilised servers, and increase in overall processing speed.

PYTHIAN MAKES CRITICAL APPLICATIONS HIGHLY AVAILABLE AND RELIABLE ON THE CLOUD FOR AUSTRALIAN RED CROSS

Australian Red Cross, a leading humanitarian aid and community services charity and an auxiliary to the Australian government, was in need of a significant data platform migration. The hardware they were using was outdated, so they needed to consolidate their applications and data from older servers onto virtual machines in the cloud. This project would provide significant cost benefits by helping to convert capital expenditure outlays (Capex) into operational expenditure (Opex), and would result in highly reliable, highly available databases for their critical applications.

BUSINESS NEED

Australian Red Cross needed to ensure high availability for their critical systems that perform transaction processing of data for all major services—including services for donors, volunteers, students and clients—while reducing operational costs. And the best way to meet this goal was to take advantage of the lower operational costs and high availability capabilities afforded by the cloud.

Because the organization had already adopted AWS as their platform of choice, they needed an experienced SQL partner that could expertly move their applications and databases to virtual machines (VMs) on AWS EC2. The right partner would ensure they had a stable environment, while achieving higher database availability, converting Capex to Opex, and enabling faster deployment of applications for scalability.

The Red Cross chose Pythian because of their extensive practical experience with the latest database technologies, including SQL Server and AWS, and their existing track record of maintaining reliable, scalable and stable cloud environments. Gaining this stability would enable them to take advantage of features and functionality to maximise use of technologies being deployed.



“ Pythian offered multidisciplinary resources and a market-leading consumption-based, flexible services offering that allowed us to maximise the use of time. Their model meant that we paid only for the time we used, yet had access to top experts with very deep technical expertise when we needed it.”

Danijel Andric, Technical Services Manager, Australian Red Cross

SOLUTION

Australian Red Cross’s Enterprise IT Applications team initiated this project to upgrade and migrate critical business applications and their associated databases to the cloud. The primary platform to be migrated was the Pivotal CRM (customer relationship management) system; followed by the data warehouse, content management systems, HR, and utility databases.

The organisation’s enterprise applications were already running on and are certified to run on Microsoft SQL Server. The Red Cross already had a direct link to AWS data center in Australia, which made data transfer easier to stay with AWS over other cloud providers.

SQL databases were upgraded from 2005 and 2008 instances into SQL 2016 and standardised across the board, which resulted in a performance improvement out of the box, better access to data and newer features, and better security. Pythian took advantage of AWS Availability Zones to configure database servers across different geographic locations to ensure high availability of critical data.

Pythian also helped them create a separate, more reliable and cost-effective user acceptance testing environment.

Pythian was able to bring together resources with expertise in database management, project management and cloud consulting. And through Pythian’s managed services for SRE Windows offering, The Red Cross had 24/7 access to site reliability engineering resources through a unique follow the sun model.

Pythian reviewed and documented client business and technical requirements and expected benefits. They then analysed existing infrastructure and developed database consolidation, upgrade and a strategy for migrating to the cloud. Finally Pythian implemented the strategy into operations.

Pythian provided these services to ensure optimal performance of the new AWS environment:

- Provided EC2 configuration
- Advised on storage, technology and power requirements



“ Pythian provided technical leadership on this project—they always came through with thoughtful and timely recommendations. Our experience with Pythian across the board—technical delivery, project management, customer success and delivery services—has been very positive and their contribution to project success has been extremely valuable. We have been pleasantly surprised at the general stability of the new infrastructure—it has exceeded expectations.”

Murray Wand, Enterprise Applications Manager, Australian Red Cross

- Performed installation, configuration and migration (with client team) of SQL 2016 in a high-availability environment on AWS
- Performed installation, configuration and migration of Reporting Services in AWS
- Created PowerShell scripting to take SQL backups to Amazon S3
- Implemented new SQL 2016 features (e.g., Resource Governor for Disk IOPS)
- Project managed the build to specifications, consolidation, upgrade and migration
- Provisioned Business As Usual services including ongoing monitoring, maintenance and management

RESULT

Australian Red Cross has experienced a significant return on investment as a result of the work done by Pythian’s SRE and SQL teams in the form of reduced licensing costs, consolidated and stabilised servers, higher availability of data for their critical applications and increased general processing speed.

Since the new cloud platforms has been in place, the Red Cross has been enjoying measurable cost savings. They have also experienced critical benefits such as stability and general speed of processing, which has created a more positive experience for users of their business applications.

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ABOUT PYTHIAN

Founded in 1997, Pythian is a global IT company that helps businesses adopt disruptive technologies to advance innovation and increase agility. Our consulting, implementation and managed services solutions help businesses realize value from their data assets, accelerate software delivery and enjoy more reliable, scalable IT systems.

Pythian’s elite global teams of technology-enabled experts have access to nearly 20 years of searchable documented work, allowing them to solve problems and implement solutions more efficiently and with better results.

Our clients are businesses whose IT systems drive their revenues. They include SaaS, media, gaming, financial services and e-commerce companies around the world.

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