

# Case Study

## Skandinavisk Data Center

» Fujitsu's NetCOBOL compiler has proven instrumental in transitioning our business from a mainframe to a server-based environment, allowing us to make significant savings while increasing the flexibility and agility of our organisation «

Robert Elgaard, Chief Technology Officer, SDC



### The Customer

Skandinavisk Data Center (SDC) provides an all-round service for small and medium-sized financial institutions in Scandinavia. Its core business is the development, maintenance, operation and joint purchase of IT solutions for the financial sector. It has a workforce of 428 and its clientele is made up of 137 Danish, Norwegian, Swedish and Faroese financial institutions.

### The Challenge

The IT infrastructure at SDC supports the delivery and management of 5.8 million accounts at 137 Scandinavian banks. The infrastructure was originally hosted on an IBM mainframe, however as the company grew and transactions increased, costs rose. By 2007, SDC was processing 9,500 MIPS and was being charged accordingly by IBM. The company needed to find a solution that would reduce processing costs without compromising performance, security or stability.

*"We wanted to take our core banking solution from the mainframe and host it more cost-effectively in a server-based environment. After an evaluation process, we decided that a .NET platform would be best in terms of cost and functionality,"* explains Robert Elgaard, Chief Technology Officer, SDC. *"The challenge then was to find a way of migrating the applications without disrupting the business."*

SDC discovered that the only true .NET COBOL compiler on the market is Fujitsu NetCOBOL for .NET, which would allow the company to instantly compile 80 per cent of its existing mainframe software. However, with over 12.1 million lines of COBOL code running on the mainframe, it would not be a straightforward task.

*"These are real business critical services we are providing so we can't take time off to perform the migration,"* adds Elgaard. *"We need to find a way in which we could phase the project so as to avoid any system downtime."*

### The Solution

SDC worked with Fujitsu and Microsoft to design a three-stage plan for the successful migration from mainframe to .NET. The first stage was to move application code for 14,000 COBOL programmes from the mainframe and execute it on the .NET platform. The team then worked to migrate 2,500 transactions, such as bill payment, bank transfers and log-on procedures. Finally, the database itself is now in the process of being transferred to the Microsoft Application Platform. This entire journey has taken three years.

#### THE CUSTOMER

Country: Denmark  
Industry: Financial Services  
Founded: 1963  
Employees: 428  
Website: [www.sdc.dk](http://www.sdc.dk)



#### THE CHALLENGE

SDC was faced with the increasing costs associated with mainframe computing. It wanted to find an alternative server-based environment that would reduce expenditure without compromising functionality or performance.

#### THE SOLUTION

SDC used Fujitsu's NetCOBOL compiler to migrate 12.1 million lines of code to a new .NET platform running on 24 Fujitsu PRIMERGY servers.

#### THE BENEFITS

- SDC is now saving €15m every year by replacing the mainframe with the Fujitsu and Microsoft solution
- This represents a reduction in operating costs of 80 per cent
- The solution ensures high availability to support the 20 million transactions performed per day
- The server-based approach allows for better performance and more flexibility, allowing SDC to introduce new services more quickly and easily

*"In March 2009, we began to design and test the solution, which has been running in parallel with the mainframe until the implementation is complete. It's innovative because this is the exact same source code running in a completely different environment," continues Elgaard. "Fujitsu and Microsoft have collaborated to configure the new infrastructure so that it ensures high availability and stability."*

Twenty-four mirrored Fujitsu PRIMERGY RX300 S6 server computers across two sites in Silkeborg are in place to support the solution. By running in parallel with the mainframe, SDC has been able to avoid any disruption to the business and gradually transfer operations from the old environment to the new one. Critical to the success of the project was the calibre of the Fujitsu professionals.

*"The Fujitsu team is absolutely top notch and we were delighted to work with them. They took a collaborative approach to ensure that any issues that arose were dealt with quickly and efficiently which is vital to such a complex project as this," comments Elgaard. "For example, the Fujitsu compiler had never before been exposed to so many transactions and, as a result, it initially struggled. But the Fujitsu team quickly developed a fix to ensure the compiler could handle everything we threw at it."*

With the database almost fully migrated to the new infrastructure, SDC is ready to switch off the mainframe services completely. And the company is already reaping the benefits of the new approach.

## The Benefit

SDC has reduced its operating costs by 80 per cent courtesy of the new Fujitsu-Microsoft solution as it is no longer tied into a tier-one IBM contract. This represents recurrent savings of €15m every year.

*"The solution will pay for itself in less than two years; after that, charges to our customers will decrease dramatically so needless to say they are very happy," says Elgaard. "And these customers were initially sceptical about making the transition. After all, had it not worked, it would have made it impossible for them to do business. That fact that they are so pleased with the new solution is testament to the sterling work done by Fujitsu."*

SDC also enjoys the economies of scale provided by the server-based approach. The stability matches that of the mainframe but the application actually has access to more data power. This makes for better performance and more flexibility.

*"Fujitsu's NetCOBOL compiler has proven instrumental in transitioning our business from a mainframe to a server-based environment, allowing us to make significant savings while increasing the flexibility and agility of our organisation. We are now well positioned to attract new business and introduce new innovations to maintain our competitive edge."*

## About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Over 170,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.5 trillion yen (US\$54 billion) for the fiscal year ended March 31, 2012. For more information: [www.fujitsu.com](http://www.fujitsu.com)

---

## Contact

FUJITSU  
Address: 22 Baker Street, London, W1U 3BW  
Phone: +44 (0) 870 242 7998  
E-mail: [askfujitsu@UK.fujitsu.com](mailto:askfujitsu@UK.fujitsu.com)  
Website: [www.fujitsu.com/UK](http://www.fujitsu.com/UK)  
2012/10/19

© Copyright 2012 Fujitsu, the Fujitsu logo, are trademarks or registered trademarks of Fujitsu Limited in Japan and other countries. Other company, product and service names may be trademarks or registered trademarks of their respective owners. Technical data subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.