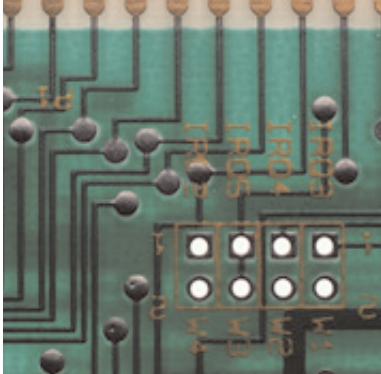




# Eurocopter Deutschland GmbH



## Business Problem:

When replacing their mainframe applications with SAP R3, Eurocopter could not take the time management system with them. The company had to continue renting expensive computer center capacity for the application.

" The project paid for itself in considerably less than a year. This solution has been live for over two years now and we are very satisfied with it. The project involved so few problems we could say it was a shame we didn't have to migrate other programs. "

[Bernhard Gebhart, Applications Manager, Eurocopter in Donauwörth]

# Windows 'Mainframe' Applications: Faster, More Stable and Cost-Effective

## Micro Focus Application and Modernization Approach Moved the Mainframe System to the Agile Windows® Server

### Product Solution

#### Micro Focus Server™

### Overview

In 1997, Eurocopter, the world's largest helicopter manufacturer, used only self-developed mainframe applications for its commercial systems at its Donauwörth and Ottobrunn locations in Germany. Eurocopter, a subsidiary of EADS, had produced numerous applications based on PL1, VSAM, CICS and COBOL, which depicted all of the company's business processes including management, purchasing, materials management, production planning and production control. In fact, everything that could be considered 'ERP' was written internally. The only area that used a third-party product was Human Resources (HR).

The IT environment at Eurocopter had changed fundamentally with the merger of the IT systems used at its two locations at Donauwörth and Ottobrunn, which had formerly been part of MBB. SAP R2 was already used in Ottobrunn and with the merger, the two locations needed to integrate their existing IT systems into SAP R3.

There were several factors for the impetus behind changing this system into standard software; the existing applications no longer met the users' needs and the company did not want to put more effort into making the old applications Y2K compliant. The conversion to SAP began in 1997 and Eurocopter has used only the SAP modules since 2000, with the exception of its HR department.

In addition to Eurocopter's issues involving the software, there were also serious operating costs associated with the outsourcing of the computer center in 1995. Eurocopter wanted to keep benefits associated with the computer center outsourcing, such as the detailed invoice of services (CPU use, memory space, printers, license) while keeping the overall operating costs in line. "This enabled us to control the computer center pricing in a targeted manner," explained Bernhard Gebhart, applications manager, Eurocopter in Donauwörth.

### In-Sourcing with SAP

It was the operating costs of the outsourced computer center that led to a change in the overall computer center outsourcing strategy. With the decision to integrate the systems into SAP R3, the outsourcing decision was turned around. Although not at a mainframe level, separate servers were again set up in Donauwörth for the SAP applications. "We brought the complete IT competence back in-house again – hardware, application, system and network," explained Gebhart. "Since that time, only functions such as user service, user helpdesk and PC installation remain outsourced."

By 2001, the ZINA time management system was the last remaining legacy/COBOL application at Eurocopter. ZINA records the time when employees arrive and leave during the actual chargeable production period. ZINA is a very complex and heavily customized application, and a total of 39 time models are individually aligned to the production capacities. Supplements are calculated automatically, and shift agreements, breaks and holidays have to be considered. All these regulations are linked directly to agreements. After in-depth studies, the department could see that its requirements would not be met by the relevant R3 modules nor by alternative solutions. And to customize again would take another year.

This resulted in an extremely challenging and unacceptable situation to Eurocopter – mainframe operations had to be maintained and computer center capacity rented solely for the ZINA time management system, even after the other mainframe applications had been switched off. The costs were disproportionately high, especially because the company required licenses for CICS, databases, the mainframe operating system and support. "We had to pay for the complete computer center infrastructure even though this environment no longer matched our strategy," explained Gebhart.

"We had to pay for the complete mainframe computer center infrastructure [before migration] even though this environment no longer matched our strategy."

### Mainframe Applications on the PC

After unsuccessful attempts to move the time management application from the mainframe to a client/server architecture, the only solution that remained was to run the application unchanged, on a PC system that emulates a mainframe.

Originally, Micro Focus only supported this concept for the development of mainframe applications on Windows, not deployment. Companies could save expensive mainframe resources during software development and, when development and testing were completed, COBOL source code was simply sent to the mainframe and compiled again.

With the rapid increase in PC hardware performance this concept became a reality for live operation. When an increasing number of users wanted to deploy their mainframe applications, Micro Focus responded by extending its technology to support the deployment of mainframe processes, in production, on the PC platform.

"At the start we did not believe that depicting a mainframe on another platform would actually work in live operation," reported Gebhart. "But when the application provider, Unilog, managed to migrate one of our host programs onto a laptop, in front of us in a single afternoon, we decided to try it out."

Eurocopter moved ZINA time management system to a standard Windows server with support from Unilog and Micro Focus. In technical terms, recompiling COBOL code was all that was required and a program converted the data from EBCDIC to ASCII automatically. Most importantly, it did not require any changes to the application since it runs 'one-to-one' on the new platform.

There are currently no problems regarding stability and performance. The application has become more stable and efficient and whereas before there were three to four production issues per month, such issues now only occur three to four times a year. Previously, batch runs to process the accounts transactions took around two hours on the mainframe. This work is now completed within half an hour on a small Windows server used exclusively to deploy this single critical application.

The most significant aspect of the migration is the operational efficiency that has fully met Eurocopter's expectations. The investment for licenses, the new Windows server, consulting and application conversion total less than €50,000 and on-going maintenance costs are under €9,000 annually.

### Technical Solution

Micro Focus supplied Eurocopter with development products and a version of its Micro Focus Server that supported the migration of the ZINA application, developed in COBOL and utilizing CICS, to Windows. Eurocopter developers now use Micro Focus tools to develop, test and operate the 'mainframe' application on Windows. Micro Focus products were also used to transfer all the COBOL programs of the time management application to a Windows server. CICS settings were also defined and sample scripts produced. Transferring the stock data and parameterisation occurred by converting the files on the mainframe and then transferring them using Micro Focus products before being deployed on Micro Focus Server.

Eurocopter had automated all the batch jobs, if manual intervention is required the internal mail system is used. The functions of the Micro Focus products substantially facilitate handling the complete application, and the processing and response times are much shorter on the PC than in the mainframe environment. In addition, no end-user training was required because the application interface was not modified.

"The performance achieved these days by 'Wintel' systems is causing the IT world to think again. Companies can achieve enormous cost savings by porting mainframe applications to the PC platform. But it is essential that the software really can be transferred one-to-one and Micro Focus Server ensures this capability. The project we carried out with Unilog at Eurocopter fully met the expectations of everybody involved," said Bernhard Gölit, Head of Micro Focus' Munich office.

## About Eurocopter

Eurocopter is a wholly-owned subsidiary of EADS. EADS is a global leader in aerospace, defense and related services. In 2003, EADS generated revenues of 30.1 billion and employed a workforce of more than 100,000. The EADS Group includes the aircraft manufacturer Airbus, the world's largest helicopter supplier Eurocopter and the joint venture MBDA, the second-largest missile producer in the global market. EADS is the major partner in the Eurofighter consortium, is the prime contractor for the Ariane launcher, develops the A400M military transport aircraft and is the largest industrial partner for the European satellite navigation system Galileo.

## About Micro Focus

Micro Focus provides innovative software that helps companies to dramatically improve the business value of their enterprise applications. Micro Focus Enterprise Application Modernization software enables customers' business applications to respond rapidly to market changes and embrace modern architecture. For more information, please visit [www.microfocus.com](http://www.microfocus.com).

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