Overview
SYSPRO ERP software is designed to address industry-specific challenges for manufacturers and distributors. With a history of nearly 40 years, SYSPRO has a 98 percent customer-retention rate, one of the highest in the industry, with its 15,000 global customers.

Challenge
Since the mid 1980s, SYSPRO has relied on COBOL and Micro Focus for the development and deployment of its ERP solution. The product and its user interface underwent continual improvement and from the late 1990s, SYSPRO used Micro Focus Net Express to deploy its product to the global customer base.

Russell Hollick, Chief Software Architect for SYSPRO, explains the need for a more modern development environment: “Net Express served us extremely well but we are conscious that a new generation of developers does not perceive COBOL as modern and cutting-edge. At SYSPRO we have a development internship and so every year young people join our team of 110 developers and software testers. It’s important for us to remain relevant and a modern development environment is a crucial part of that. So, when we heard about Micro Focus Visual COBOL, we were very interested to understand what it might offer us.”

This coincided with SYSPRO wanting to offer 64 bit support within its ERP solution. Installation of licenses and application setup was regularly a challenge across their customer base and SYSPRO were looking to simplify the overall installation process for their customers.

Solution
An in-depth look at Visual COBOL through a Micro Focus-hosted workshop gave SYSPRO the confidence it needed, as Hollick comments: “The Visual COBOL IDE was so good that we decided to change our development processes and start using Visual COBOL as a code editor.

SYSPRO used Micro Focus Net Express to deploy its product to the global customer base.

At a Glance

■ Industry
Software and Technology

■ Location
South Africa

■ Challenge
SYSPRO needed to ensure they could attract new developer talent to support the future of their market leading ERP solution. They were looking to use industry standard tooling to complement agile software development practices and help on-board new developers unfamiliar with COBOL more easily.

■ Products and Services
Visual COBOL for Visual Studio
COBOL Server
Net Express
Server for COBOL

■ Results
+ Up to 30 percent improvement in development productivity
+ Ability to on-board new developers more quickly and easily
+ 30 percent improvement in application performance
+ Simplified application install and setup for customers
while still using Net Express to deploy our product to customers. It was a real game changer when we took all 10.5 million lines of code and compiled it with Visual COBOL. Having run it through our automated testing system, used to test our core business logic, we needed to change about 50 lines of code.

SYSPRO also stress tested the Visual COBOL compiled application under high load, using a benchmarking application in a multi-threaded environment. The tests went very well and showed a 30 percent throughput and performance improvement overall which will be welcomed by SYSPRO customers when the new version goes into general release.

Introducing Visual COBOL into an established development team was a pleasant surprise for Hollick: “We couldn’t believe how quickly everyone picked up on the Visual COBOL potential. Even our Microsoft .NET developers were able to use Visual COBOL within a matter of days as it integrates into their existing development tools. And, the time it takes to on-board new development interns went from many months to just a few weeks.”

It gave SYSPRO the opportunity to implement a hybrid development and project management model, leveraging lots of agile elements. This enables the team to be more responsive to changing business requirements and deliver new features up to 30 percent faster. SYSPRO also likes that Visual COBOL offers additional integration opportunities, such as with Microsoft TFS, used as source code control solution. Finally, deployment is made easier as Visual COBOL is embedded into the SYSPRO product, simplifying the install process and saving on support and services.

Results
A full Visual COBOL version (development and deployment) of the SYSPRO solution is in community preview and receiving very favourable feedback from customers and partners. The improved development productivity has given SYSPRO the bandwidth to deliver a dual-interface product with full 64-bit platform support. The company can provide the classic Windows interface, and a web interface which can be accessed from any browser, phone, tablet, or PC. This is all designed to give the customer choice and to future-proof the solution.

Hollick is clear on the benefits: “Our product is mission-critical for our customers and our priority is always to ensure it works. The development environment is key to this and the choice for Visual COBOL was not taken lightly at all. Having seen the development productivity and performance improvements we now know it was the right decision for us.”

He concludes: “Visual COBOL has enabled us to bridge the skills gap and engage with a younger generation of developers, who are now excited about COBOL and view it as a career development opportunity. We have been delighted with the support from Micro Focus in this important time for us.”