



Success Story



Tecnomatix Technologies, Ltd.

Tecnomatix Provides Lower Total Cost of Ownership by Porting MPM UNIX Application to Microsoft Windows

Industry: Manufacturing Process Management (MPM)

Tecnomatix Technologies, Ltd. (NASDAQ: TCNO) is the driving force in Manufacturing Process Management (MPM) solutions, helping global manufacturers build the best production strategies to succeed in their increasingly complex environments.

Tecnomatix customers include the world's top players in the electronics, automotive and aerospace industries — including companies such as BMW, Fiat, Ford, General Motors, Renault and Volkswagen in automotive; Airbus, Boeing, Lockheed-Martin and Pratt & Whitney in aerospace; and Ericsson, Motorola, Siemens, Solectron, Flextronics and Sanmina-SCI in electronics. Tecnomatix eMPower™ solutions have emerged as the de facto MPM standard, helping companies improve manufacturing processes — cutting costs, increasing quality and accelerating time-to-market.

eM-Workplace (formerly known as ROBCAD) is one of many eMPower products that was developed to help process engineers quickly and easily perform design, simulation and off-line programming of automated workcells. It is now widely used by OEMs, line builders and design houses involved in detailed process design or off-line programming.

“Delivering UNIX-based robotics solutions has contributed to much of our success,” said Marcel Keinan, Director of CAD & Robcad Applications — R&D Group. “However, faced with the increasing demand for PC-based products among our clients, it became apparent that a migration to the Windows platform was necessary.”

Facing the Challenge

Tecnomatix looked at porting eM-Workplace to Linux, but did not want to create a solution that was dedicated to Linux and was not conducive to the common desktop environment. “We wanted eM-Workplace to be available on the engineer's desktop station, in their normal working environment”, said Keinan. Microsoft's Interix solution was also considered and rejected.

Speaking with other organizations that have used MKS Toolkit products, Tecnomatix learned that MKS delivers superior UNIX to Windows porting solutions. MKS is also well known in the community for accomplishing application migration with ease and flexibility.



The Solution

The decision was made to use MKS Toolkit for Enterprise Developers. With the ability to port to the Windows platform, engineers could use the same desktop they were already familiar with, thereby, reducing the Total Cost of Ownership (TCO).

A feasibility study was conducted and completed in four calendar months. In the next four months, 20 million lines of code from the eM-Workplace application were ported. Tecnomatix was able to achieve the migration in eight calendar months and delivered a full product solution to their clients in a Windows environment. This was even more impressive since the code contained very sophisticated UNIX features, such as interprocess communications and shell commands (Korn Shell, C Shell), which requires a high level of UNIX understanding. MKS Toolkit for Enterprise Developers has proven its capability as a fully featured porting tool by handling these more advanced issues.

Thus introducing eM-Workplace for Windows[®], the latest eMPower solution from Tecnomatix. This new product expands the reach of eMPower leadership in robotics design and simulation to MS Windows platforms, providing significantly reduced TCO and increased flexibility for Windows users. Just as with the eM-Workplace for UNIX product, eM-Workplace for Windows imposes no limits on the number of robots that can be simulated, while still performing at peak power and productivity levels.

Business Benefits

Dramatically reducing the TCO is a significant achievement for Tecnomatix clients and was an important factor in delivering eM-Workplace for Windows. Also very important was facilitating user access, with the increased flexibility more licenses are being used as engineers are already trained in the Windows environment.

The final aspect is high mobility; using eM-Workplace on a laptop facilitates activities such as design reviews, support for proposal presentations or robot program downloading at plant and shop floors. In addition, easy communication with other popular Windows applications makes eM-Workplace for Windows a highly available and flexible solution for users everywhere.

“Having the application on a PC it enables our clients to perform more simulations in a virtual manner, without having to go onsite,” commented Keinan. “Saving time and reducing TCO is an essential requirement for our clients.”

MKS was instrumental in helping Tecnomatix complete the migration within such a short timeframe, giving Tecnomatix the ability to maintain their leadership as the driving force in providing MPM solutions and helping their clients succeed in building the best production strategies and reducing their TCO.