

# MKS INTEROPERABILITY

---

## How Much Interoperability Do You Want?

So you're thinking of bringing Microsoft® Windows® into your UNIX® environment. Well you are not alone. According to research by International Data Corporation (IDC), a leading industry analyst firm, global companies have invested in 1.5 million Windows server licenses.

Over the past few years, working in a heterogeneous environment has become the norm rather than the exception. Your decision lies not with whether to integrate UNIX and Windows but rather how and to what extent do you integrate these two environments. More specifically, you must ask yourself a few questions with respect to interoperability:

1. Do you simply want these systems to talk to each other? *Accessibility.*
2. Do you want seamless integration between UNIX and Windows applications? *Interoperability.*
3. Do you want users to have the same level of functionality with your enterprise applications? *Portability.*
4. Do you want to merge these applications with your Windows systems? *Integration.*
5. Do you want to exploit the new technology (i.e. COM, Java, etc) of other Windows applications and move forward into the future? *Modernization.*

And what do each of these degrees of interoperability involve?

### Application Accessibility

The first stage of UNIX/Windows interoperability is the ability to access your UNIX applications and file systems from a Windows environment. This means making use of such technologies as network file sharing (NFS) and file transfer protocols (FTP) so users can move files quickly and easily between platforms. Another facet to application accessibility is just that, accessing UNIX applications from your Windows desktop. You can easily achieve the accessibility level of interoperability by utilizing Secure Shell (SSH) capabilities for the character based scripts and applications, and the MKS X/Server for X Windows display technology for more graphic intensive applications.

### True UNIX to Windows Interoperability

In a world of heterogeneous IT environments, the need for a high-performance, transparent PC X server that delivers seamless integration between the Windows desktop and the UNIX/Linux server is critical. MKS X/Server is designed to be the ideal solution for interoperability of PCs and UNIX/Linux systems, and provides the usability and flexibility that users as well as enterprise system administrators require. MKS X/Server is a full 32-bit X server that operates on the Windows Vista, Windows Server 2003, Windows XP, and Windows 2000 platforms and a native Extended Architecture 64 bit X Server on Windows Vista x64 Edition, Windows 2003 x64 Edition and Windows XP x64 Edition.

### Application Portability

Suppose you require more than the ability to access and run UNIX applications through Windows systems. Suppose you want to offer to your users, whether they are internal to your organization or external prospects and clients, a native Windows version of your application. Now you are talking about application portability, actually bringing your UNIX code into Windows. More importantly, you will want to maintain a single source base for both the UNIX and Windows versions of your software. In order to do this, you need the UNIX APIs, headers, and other

# MKS INTEROPERABILITY

---

components that will allow your code to operate under today's Windows systems. On the other side of application portability is the need for tools that allow you to run scripts and script-based applications from the UNIX world. This ability to operate in a shell environment (be it a Korn Shell, C Shell, or some other shell type) is an essential component to application portability.

## **Application Integration**

Each of the operating systems, Windows and UNIX, has its own unique strengths. The ability to capitalize on those strengths, within your environment and applications, is paramount to achieving this level of interoperability within your organization. The Windows security model, user and group structures, and most importantly, interaction with the abundance of third party applications available for 64-Bit Windows are examples of natural integration points within the environment. In addition to the porting solutions you will require in moving applications to Windows, you will also need these tools to easily integrate the various APIs of these applications and the operating system itself.

## **Application Modernization**

At the apex of UNIX/Windows interoperability is not only the ability to build mission-critical Windows components from existing UNIX code, and not only integrate those components with current technologies, but also update, interact and embed these components in the infrastructures of tomorrow. COM, HTML and the Internet, and Java are taking the IT world by storm. You need the ability within your software and within your software development tools to completely integrate in the 64-Bit Windows world, as well as branch out and use these dynamic constructs in order to carry your organization and your enterprise applications forward.

Each organization has its own distinct set of criteria for its information systems and you will have to decide how far to delve into interoperability, both now and in the future. There are a number of solutions available but you must consider complexity, productivity, and cost issues involved with any choice you make. All you can do is remain informed on the issues and the solutions to help you make the right choice for your organization.

## **Interoperability Solutions from MKS**

MKS Software is the leading provider of Windows automation tools for system administration and development in a pure Windows or mixed UNIX/Linux and Windows environment. Under its widely known MKS Toolkit brand, the Interoperability division of MKS provides UNIX-Windows co-existence and system administration that significantly cut development and administrative costs and reduce time to market, while enabling enhanced performance. With the newest offering, MKS X/Server, organizations with mixed UNIX/Linux and Windows environments, now have solutions for compatibility, connectivity or interoperability.

For more information on MKS Interoperability products, please visit us at:

<http://www.mkssoftware.com/products/tk/>

