

PTC MKS Toolkit Product Family

Ease integration of UNIX, Linux and Windows-based computers and improve productivity, flexibility and power when developing or administering on Microsoft® Windows® platforms

In its many forms, PTC MKS Toolkit enables running your Unix scripts unmodified using our 300-award winning utilities, and to migrate Unix source code virtually unmodified to Windows using the 2700 standards-based POSIX, UNIX and X11 APIs we provide. If you need an X Server, pair up PTC MKS Toolkit for Developers and PTC X/Server in PTC MKS Toolkit for Interoperability. The combination of the PTC MKS Toolkit UNIX APIs and the command-line development environment on Microsoft® Windows® reduces the complexity of a port from UNIX to Windows.

With PTC MKS Toolkit, reduce the immediate need for cross-platform training and maximize the programming expertise of UNIX developers.

Benefits of PTC MKS Toolkit for Developers:

- Lower Total Cost of Ownership
- Leverage investments in UNIX and Windows
- A Native Windows Architecture
- Automation and Task Scheduling

- Securely Access and Administer Remote Systems
- Effortless Control over the Quality of your System Configuration

PTC MKS Toolkit for Developers also accelerates personal performance on the Microsoft® Windows® platform by including Windows specific tools to:

- Unify and automate software builds across UNIX and Windows
- Connect to remote UNIX and Windows machines
- Access or update Windows users and groups
- Accounts, permissions, security information, and local or remote registry entries
- Query a database for information to be processed in batch mode

Issues of interoperability also affect development for the Web, as companies blend together UNIX and Windows Web servers. PTC MKS Toolkit for Developers has high performance text utilities and specialized Web development tools that

are ideal for maintaining HTML and all aspects of Web sites.

Lower Total Cost of Ownership

Instead of choosing between Windows and UNIX, most IT organizations are opting for a mix of the two operating systems, with many larger organizations using Windows as an add-on to their enterprise-wide backroom strategy. To decrease the total cost of ownership (TCO) of their business, these companies need a single suite of tools that can help their teams be more productive.

"...I keep using MKS Toolkit, in preference to Cygwin or Microsoft's Subsystem for UNIX-based applications, because MKS allows use of Windows native file names in all contexts. This tremendously facilitates true "mixed-mode" development environments."

Nearspace

Leverage Investments in UNIX and Windows

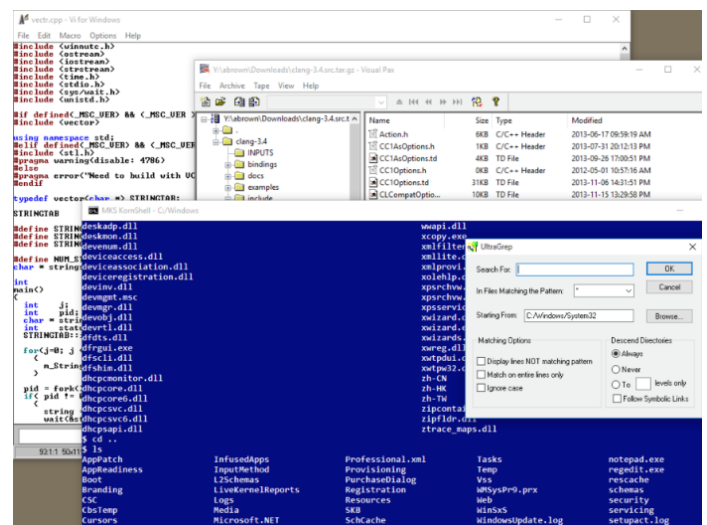
PTC MKS Toolkit's numerous UNIX shell environments, including KornShell, bash and CShell, provide the ability to seamlessly port advanced UNIX scripts to the Windows environment.

POSIX compliant file and text manipulation tools like **vi**, **grep**, and **find** simplify the interoperability initiative within an organization. PTC MKS Toolkit for

Developers enables IT staff to easily and efficiently establish, maintain and customize their organization's Windows network and user environment.

A Native Windows Architecture

The ability to control Windows applications, interact with the latest technologies and improve team and inter-team communication is key to successful application development, saving valuable time and enhancing program capabilities. Tuned for multibyte/Unicode characters and 64-bit Windows systems, PTC provides support for the newest, most powerful systems, around the world. PTC MKS Toolkit for Developers is developed on top of the native Windows subsystem allowing all the utilities to truly interact with any application or process running in the operating environment. Further, PTC MKS Toolkit allows you to interact with Microsoft mail, database and Internet/ Intranet technologies.



“The enhanced Vi and Vii features give our people the ability to customize their development environment, the way they like it. It is a comfort to know that we can transfer and manipulate files to and from remote UNIX and Windows systems, with the confidence that our data are secured and-if necessary- encrypted.”

Steven Krauer Project Manager, ELSNET the
European Network in Human Language
Technologies

Securely Access and Administer Remote Systems

By having PTC MKS Toolkit on each of your servers, you can connect to your network machines from anywhere else on your network or via a dialup line to perform administration tasks. In a mixed UNIX and Windows environment, you will be able to access applications on your UNIX servers, directly from your Windows desktops without ever leaving your desk.

- Remote access to legacy systems through **telnet**, **rsh**, **rexec**.
- Secure shell client/service as well as other secure utilities (**scp**, **sftp**). When you need sshd interactive interoperability windows-to-windows or windows-to-Unix – only the best will do”. MKS Toolkit has proper **tty** terminal mapping to allow Windows console apps to run remotely.

- Remote shell, **rlogind** and **rexecd** services, for remote access to Windows systems
- Remote utilities (**rsh**, **rexec**, **rcp**, **rlogin**) for accessing other UNIX and Windows machines
- Visual SFTP –graphical application to transfer and manipulate files to/from/on remote UNIX/Windows systems

Effortless Control over the Quality of your System Configuration

A significant number of System Administrators are fluent in the UNIX environment, so utilities that are UNIX-based and follow the UNIX philosophy, yet operate in the Windows environment, can easily leverage the skills of these people on the Windows platform.

Harness the power of UNIX on Windows:

PTC MKS Toolkit for Developers contains hundreds of authentic UNIX utilities such as **df**, **du**, and **ls**, as well as **ksh**, **csch**, and **bash** shells. Therefore, you can immediately start using your UNIX skills and scripts on Windows

- Administer both Windows and UNIX systems using the Interoperability capabilities such as password synchronization and remote utilities and daemons

- Use UNIX commands to perform file backups across multiple platforms

UNIX system administrators will appreciate a set of familiar commands on Windows and UNIX-style command-line utilities for interacting with Windows features. Windows system administrators will appreciate the increased flexibility of traditional UNIX command-line tools in their Windows environment. Mail administration, file management, registry editing, server management, the powerful vi editor, are only a few of the many features of PTC MKS Toolkit products.

Streamline your administrative workload:

- Use automated scripts to:
 - Improve manageability of Windows in large installations by populating and managing registry entries en-masse
 - Administer user accounts in batch (e.g., after a reorganization or a merger), instead of one by one
 - Perform repetitive tasks on large numbers of machines
- Manage Windows environments with standardized tools and scripts that also work in UNIX and Linux environments
 - Easily perform other common tasks that may be difficult to do using standard Windows facilities
 - Add users and groups
 - Control services
 - Perform complex file searches
 - Copy permissions
 - Do UNIX-compatible backups
 - Move data and files between machines
 - Remotely administer systems
 - Clone a system file tree or document tree
 - Copy a standard user setup to a new user account
- Using powerful UNIX commands such as **awk**, supplemented with our KornShell's **dlg** dialog building utility, you can get all the information

PTC MKS Toolkit for Developers Features

- 400+ UNIX and Windows command-line utilities (full POSIX.2 specification)
- A wide selection of command environments, (KornShell, CShell, bash, Tclsh) offering greater control, flexibility, and a wider range of functionality than the traditional Windows Command Prompt
- Access remote UNIX, Linux, and Windows systems with Secure Shell utilities (**secsh/secshd**, **scp**, **sftp**), Remote Shell utilities (**rsh/rshd**, **rexec/rexecd**, **rlogin/rlogind**, **rcp**), **telnetd**, and **xterm**

- PTC MKS Toolkit utilities use Unicode APIs to address multibyte/Unicode characters within file content, file and directory names, pipes, environment variables, console displays, and other areas
- A powerful scheduling interface as well as a suite of command-line utilities (*at*, *batch*, *crontab*, *taskrun*, and *wts*) for automating routine tasks
- Tools and utilities for manipulating HTML content (*htdiff*, *htsplit*, *htstrip*, *url*, *mkurl*)
- Commands to pull or push content from local or remote servers, implement Web CGI scripting, and active Perl scripting (*web*, *mkscgi*, PScript™)
- File system handling commands (*mount*, *umount*) and symbolic link support
- Copy permissions between objects and manipulate Win32 file and user security attributes (*chacl*, *lsacl*, *su*)
- Create and manage users, groups, and permissions on Windows (*userinfo*, *groupinfo*, *member*)
- Tape and archive commands (*tar*, *pax*, *cpio*, *mt*), for creating UNIX-compatible backups
- Compression utilities (*zip*, *unzip*, *gzip*, *gunzip*) to complement the *mkszip* and *uncompress* commands

- Manipulate services, device drivers, Windows domains, and file associations (*service*, *dev*, *domain*, *ftype*)

System Administrator's benefit from PTC MKS Toolkit for Developers too

PTC MKS Toolkit for Developers is also powerful administration suite that gives users the ability to remotely administer systems, perform backups across multiple platforms, and automate repetitive tasks using graphical Windows utilities.

System Administration Benefits of PTC MKS Toolkit for Developers

PTC MKS Toolkit for Developers provides IT organizations with:

- Access and Securely Administer Remote Systems
- System Backup and File Archiving
- Automation and Task Scheduling
- Effortless Control Over the Quality of your System Configuration
- Communication and Process Notification

PTC MKS Toolkit for Developers allows you to increase productivity and automate tasks like:

- Password synchronization
- Setting up new machines

- Cloning a system file or a document tree on local or remote systems
 - Deploying applications throughout the enterprise
 - Distributing data to remote file stores
 - Performing complex file searches
 - Copying permissions between objects from a single desktop
- PTC MKS Toolkit provides a solution that allows for cross platform compatible backups
 - PTC MKS Toolkit provides the ability to script and schedule repetitive backup processes
 - MKS Toolkit allows users to properly determine what data needs to be backed up

System Backup and File Archiving

Hardware failure, virus attacks, theft, and even natural disasters can cause organizations to lose considerable amounts of their most valuable assets, not to mention the loss in employee productivity during the time it takes to restore or recreate the information.

Data loss is a real and significant problem in today's computing environments and can occur for a variety of different reasons. PTC MKS Toolkit for Developers includes all the tools necessary to implement a complete file archiving and backup system.

A good backup solution should be an essential component of any administrative infrastructure. It can minimize down time and preserve the integrity of the data. It is not a matter of if corporations back up their systems, but rather a matter of what data they should back up, what tools they should use to do it, and how they use those tools.

The system back-up component available in MKS Toolkit for Developers provides the means to implement and automate a complete back-up strategy across Windows, UNIX and Linux networks.

Automation and Task Scheduling

In today's busy enterprise, individuals do not usually have the time or the availability to run routine tasks on a regular basis nor do most enterprises desire to have staff dedicated to running such tasks. As a result, there is a strong need to automate repetitive processes so that they can be run without any input from users. At the heart of automating these tasks are scripting and scheduling utilities.

Scripting is an excellent way to solve many computing tasks. PTC MKS Toolkit for Developers ships with many commands and utilities — *awk*, *sed*, *perl*, CShell, KornShell, Graphical KornShell, and more—to allow you to quickly and easily create powerful and robust solutions for your organization.

PTC MKS Toolkit scripts can be written as standalone utilities or combined with other scripts, PTC MKS Toolkit utilities or third-party commands and applications help to automate routine tasks and increase productivity. Issues as simple as searching for and moving files to archiving entire file systems, creating mid-size web applications or prototyping large development efforts can be designed and implemented with PTC MKS Toolkit scripts and utilities.

MKS Toolkit for Developers provides a complete tool set for scripting system administration tasks. It increases the command-line and batch automation capabilities of the Windows environment and decreases downtime by using over 70 commands that aide in Windows administration. Use utilities such as **groupinfo**, **userinfo**, and **member** to help create and maintain a systems user and group environment. The **registry** command allows system administrators to safely and easily manipulate the Windows registry.

Several commands are available to display or manipulate Windows information from the command-line and from scripts such as:

- **service** for Windows managing services
- **dev** command for device driver information

- **domain** command for Windows domain information
- **ftype** to set file type associations in the registry
- **halt** to shutdown Windows
- **pwrmgr** for laptop power management

With the scheduling utilities included with PTC MKS Toolkit for Developers, users can easily set up tasks to run automatically at specific times. Whether a task needs to run at 9:00p.m. that night, every Thursday night at 11:30pm, or every 5 minutes between the hours of 6:00p.m. and 9:00 a.m., administrators can use scripting and scheduling utilities to create an automated solution to handle the situation.

Such automated solutions can include but are not limited to:

- Automating software deployment and updates
- Setting and implementing corporate standards
- Forwarding weekend and off-hours e-mail to your home e-mail address
- Backing up data on a weekly basis

Effortless Control Over the Quality of your System Configuration

A significant number of System Administrators are fluent in the UNIX environment, so utilities that are UNIX-based and follow the UNIX philosophy, yet operate in the Windows environment, can easily

leverage the skills of these people on the Windows platform.

Communication and Process Notification

React before problems get out of hand by integrating automatic notification and communication into automated processes and scripts. The command-line tools included in PTC MKS Toolkit for Developers allow administrators to easily incorporate email, news, and Web communication into their systems, dramatically improving awareness of the state of mission-critical applications.

"...I must say I'm very impressed. Installation was painless, of course. It's nice to have all the different shells available and working so seamlessly with Windows. ... this appears to be a robust, bulletproof UNIX environment for Windows."

Freshsources

No organization today can afford any downtime of their corporate systems as it equates to significant loss of business and lost revenue. Incorporating automated communication into administrative and operational processes provides administrators with peace of mind and Better awareness of system status. PTC MKS Toolkit for Developers Features:

- A wide selection of command environments, (KornShell, CShell, bash, tcsh) offering greater control, flexibility,

and a wider range of functionality than the traditional Windows Command Prompt

- Over 450 UNIX and Windows command-line utilities (full POSIX.2 specification)
- Visual SFTP Explorer extension allowing drag/drop and other file operations through the graphical Windows interface
- Create and manage users, groups, and permissions on Windows (***userinfo, groupinfo, member***)
- Copy permissions between objects and manipulate Win32 file and user security attributes (***chacl, lsacl, su***)
- Start, stop, and query Windows services and processes (***service, ps***)
- SNMP (Simple Network Management Protocol) services and utilities that allow users to control network devices and their functions
- MKS utilities and APIs now support multibyte/Unicode characters within file content, file and directory names, pipes, environment variables, console displays, and other areas
- File system handling commands (***mount, umount***) and symbolic link support
- Clone system file or document tree (***tar, scp, sftp, cp, ls, find***)
- Create and control Windows desktops, shortcuts, and appearances (***desktop, shortcut***)

- Query and manipulate the Windows registry
- Compression utilities (*zip*, *unzip*, *gzip*, *gunzip*) to complement the *mkszip* and *uncompress* commands
- Manipulate device drivers, Windows domains, and file associations (*dev*, *domain*, *ftype*)

PTC MKS Toolkit for Enterprise Developers Benefits

PTC MKS Toolkit for Enterprise Developers is the proven solution for porting robust, mission-critical UNIX/Linux applications to Windows.

PTC MKS Toolkit for Enterprise Developers has all the benefits of PTC MKS Toolkit for Developers plus enables organizations to:

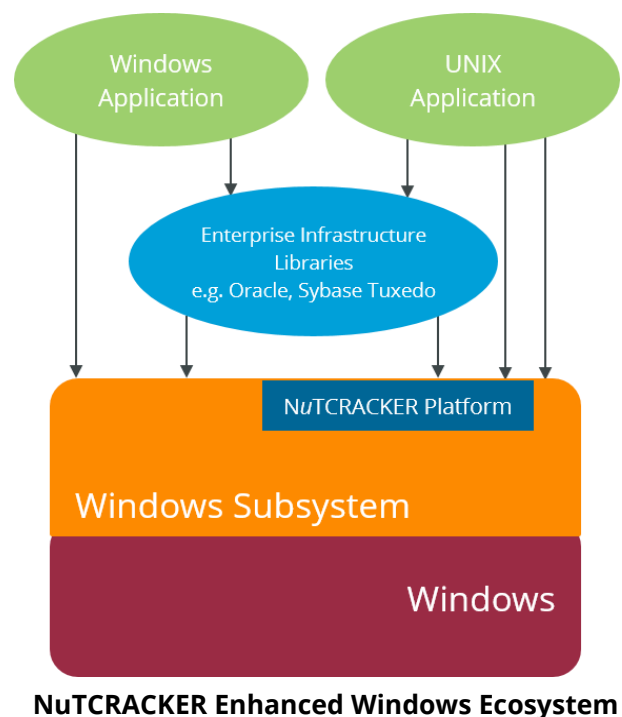
- Reduce Total Cost of Development
- Leverage Existing Investments
- Decrease Time to Market
- Maintain a Single Source Code Baseline
- Evolve Applications to Windows Technologies
- Deploy Throughout the Enterprise
- 64-bit Windows Migration

With over 2700 UNIX APIs and a full command-line development environment, PTC MKS Toolkit for Enterprise Developers is the ultimate in UNIX to Windows migration. No other product can match the full support

for C, C++, and Fortran; for UNIX process management including fork(), signals, alarms, message queues and threads; for file system and security management; and for curses, X, Motif, and OpenGL. And no other product matches PTC MKS Toolkit's access to Windows APIs for Windows integration and interoperability.

Reduce Total Cost of Development

Software compatibility solutions generally have a price, such as high cost, limited functionality, or reduced performance. PTC MKS Toolkit for Enterprise Developers eliminates these problems by running UNIX and Windows based applications together in a tightly integrated, high-performance Windows environment.



For mission-critical applications, the cost of writing and testing new code falls between \$3.90 and \$4.90 per line of code according to International Data Corporation (IDC). PTC MKS Toolkit for Enterprise Developers dramatically reduces the time and cost of migrating existing UNIX code to Windows. For example, an application with 200,000 lines of code can be ported by two developers and will be ready for testing/quality assurance within days.

If, after testing, it is then deployed on 250 Windows Workstations, the total licensing cost for PTC MKS Toolkit for Enterprise Developers will be under \$30,000. The total cost of labor involved in porting and testing might run somewhere between \$50,000 to \$60,000 (mostly for QA). The cost of a rewrite (assuming 100,000 lines of code can be reused) would be somewhere around \$400,000 and probably will take at least ten times longer than with the PTC MKS Toolkit for Enterprise Developers.

The option of re-writing mission-critical systems is more time consuming and costlier. PTC MKS Toolkit for Enterprise Developers allows the reuse of existing source code keeping development costs down considerably.

“Delivering UNIX-based robotics solutions has contributed to much of our success. 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.”

Director of CAD & Robcad Applications R&D
Group, Technomatix

Leverage Existing Investments

PTC MKS Toolkit for Enterprise Developers enables the full utilization of existing UNIX-related in-house resources, including engineers' skills, experience and software source code. This helps preserve high quality applications while lowering costs throughout the development process.

The PTC MKS Toolkit for Enterprise Developers solution offers software developers the ability to recompile and reuse UNIX and Linux source code (C, C++ and Fortran) to produce native Windows executables that look like, act like and interact with other Windows applications. Further, with its intuitive interface and comprehensive set of UNIX utilities, PTC MKS Toolkit for Enterprise Developers makes it easy for UNIX trained developers to quickly become productive in the unfamiliar Windows environment.

Decrease Time to Market

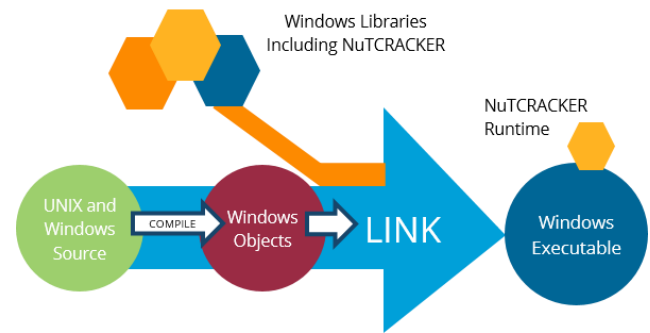
Whether your customers are internal or external, with PTC MKS Toolkit for Enterprise Developers projects can be completed in less than half the expected development time. By re-using in-house experience and resources, businesses can cut costs through the efficient use of PTC MKS Toolkit products. This productivity gain enables developers to include additional features to enhance their products and solutions, allowing corporations to maintain their competitive edge and exceed customer expectations.

Maintain a Single Source Code Baseline

PTC MKS Toolkit for Enterprise Developers makes it possible to maintain a common source code base across both the UNIX/Linux and Windows platforms, which can equate to substantial savings.

Standard-based UNIX tools and APIs allow porting to proceed quickly and with minimal source code changes:

- Support for high performance workstation and server applications with over 2,700 UNIX APIs including: XWindow, Motif, OpenGL, threads, etc.
- UNIX shells and 400+ UNIX utilities to support automated builds and command-line development



PTC NuTCRACKER Porting Process

Software maintenance represents the lion's share of development expenses and using PTC MKS Toolkit for Enterprise Developers takes that into account as well. Having one source code base makes supporting both the old and new environments significantly easier throughout the lifetime of the product.

Evolve Applications to Windows Technologies

PTC MKS Toolkit for Enterprise Developers supports converting UNIX software to componentized objects that can be deployed across UNIX and Windows, integrated with desktop productivity tools (such as Word and Excel), and used from browsers in web enabled applications.

- Integrate with Desktop Applications
- Web Enable Existing UNIX Applications
- Componentize Legacy Business Logic
- Architecture Modernization
- Component Standardization
- Create Distributed Services

- Integrate with Multiple Scripting Hosts
- Reuse Existing User Interface Technology
- Create Language Independent Applications

PTC MKS Toolkit for Enterprise Developers allows you to easily run UNIX applications as native Windows programs that take full advantage of COM, .Net and other Windows constructs.

ELSNET faced this UNIX/Linux to Windows challenge. Their product is a UNIX based system with the front end running on Windows. Rewriting was ruled out because they would need to continue to update both their UNIX and Windows versions with every new release of their product. As a result, they chose to port their application to Windows. The company looked at three porting tools: Microsoft SFU, U/Win, and PTC MKS Toolkit for Enterprise Developers. In the end, they chose PTC MKS Toolkit for Enterprise Developers because it offered the flexibility of using both the UNIX APIs and Windows APIs, an important consideration because the application uses Pro*C for its database calls. Although the primary objective was to benefit the sales team, after ELSNET installed PTC MKS Toolkit for Enterprise Developers, the company realized it had uncovered a host of new business opportunities; it could

market its product to smaller customers who had only Windows environments.

Deploy Throughout the Enterprise

Compare the total costs of development and deployment with products from any of the competitors and you will find PTC MKS Toolkit for Enterprise Developers is the least expensive total solution on the market! This is because the software required to deploy and run ported applications is where you will spend the most money.

With the Application Packaging Wizard and a wide variety of runtime options, PTC MKS Toolkit for Enterprise Developers includes a complete framework for deploying ported UNIX and Linux as well as native Windows cross-platform applications. Available runtime options are:

- PTC NuTCRACKER Workstation: a full UNIX runtime compatibility environment for workstation platforms
- PTC NuTCRACKER Server: the server counterpart of PTC NuTCRACKER Workstation for servers and all machines with more than two processors
- Power User Utilities: a set of UNIX utilities for runtime support of automation and scripting capabilities
- Developer Utilities: a more comprehensive set of UNIX utilities for

advanced support of application automation and scripting capabilities.

- Connectivity Suite: a complete suite of connectivity tools and services providing runtime support for access to and from remote UNIX and Windows systems
- PTC X Server: a full array of X Servers for displaying X Window System based graphical applications. Available in both English and Japanese versions
- 3D OpenGL: for porting high performance OpenGL applications
- XRT PDS Widgets from Quest

64-bit Windows Migration

64-bit Windows operating systems are ideal for applications that require large amounts of memory and high-performance mathematical computation, such as Web caching, data warehousing, complex mechanical design and analysis, scientific applications and research.

PTC MKS Toolkit for Enterprise Developers 64-bit Edition simplifies the migration of 32-bit and 64-bit UNIX applications to 64-bit Windows enabling customers to deploy their UNIX/Linux applications on Extended Architecture (i.e. AMD64/EM64T) based platforms.

PTC NuTCRACKER was the first to address 32-bit Windows and now PTC MKS Toolkit for

Enterprise Developers 64-bit Edition is the ONLY solution for porting robust, mission-critical 32 and 64-bit UNIX/Linux applications to 64-bit Windows.

"IT buyers looking to run their applications on fewer platforms-or to provide a better degree of interoperability between their UNIX/Linux systems and their Windows systems - should definitely evaluate automated migration toolsets .Of these, PTC's MKS Toolkit for Enterprise Developers 64-bit Edition captured our attention because it is the most complete 64-bit migration tool environment that we found - and because it has extremely strong Unix/Linux to Windows 64-bit migration capabilities."

Clabby Analytics

PTC MKS Toolkit for Enterprise Developers Features

- Over 2700 UNIX APIs including X11R7.4, Motif 2.1, OpenGL, and XView
- 400+ UNIX and Windows command line utilities (full POSIX.2 specification)
- Full support for multibyte/Unicode characters within file content, file and directory names, pipes, environment variables, console displays, and other areas
- An integrated command line build environment including utilities such as **ar, cc, c++, ld, clang, clang++, lld-ld, make, lex/yacc,** and **flex/bison**. Our

command line morphing, fully tailorable and documented scripting grammar in cc/ld tools, allows anyone to wrap one command line tool like Microsoft Visual C++'s *cl.exe* to make it look like another program *cc* in this case. Hence *cc -g* can be mapped to *cl -Zi*. cc/ld (POSIX and some gcc extensions) wrappers exist for Microsoft Visual C++, Microsoft Linker, Absoft FORTRAN (f77 and f90 wrappers) and a full NuTCRACKER port of clang/llvm where source is less standards oriented and uses GCC extensions.

- Process management: *fork()*, *exec()*, signals
- POSIX, DCE, and Solaris threads
- Real time application support from the Single UNIX Specification V3 such as Message Queues Memory Locks, and Barriers
- File System handling: *mount()*, *umount()*, *symlink()*
- IPC and Networking: sockets (including UNIX domain sockets), shared memory, message queues, semaphores, and FIFOs
- UNIX to Windows file and user security mapping
- UNIX to Windows file path and file system mapping, including devices such as */dev/null* and */dev/lp*
- Curses and terminal handling
- A fully network capable X Server, for displaying both local and remote X Windows applications
- Access remote UNIX, Linux, and Windows systems with Secure Shell utilities (*secsh/secshd*, *scp*, *sftp*),
- Remote Shell utilities (*rsh/rshd*, *rexec/rexecd*, *rlogin*, *rcp*) a Telnet service (*telnetd*), and *xterm*
- A powerful scheduling interface as well as a suite of command line utilities (*at*, *batch*, *crontab*, *taskrun*, and *wts*) for automating routine tasks

In a Nutshell

PTC MKS Toolkit dramatically improves the compatibility between Microsoft® Windows® and UNIX environments; built on a solid foundation of robust tools and engines that have been optimized for building best-of-breed system administration and development solutions. PTC MKS Toolkit for Developers provides a comprehensive suite of UNIX and Windows utilities for Windows, including Windows 10, is fully aware of newer capabilities, and kept up-to-date with the rapidly-changing Window environment using manifests for on-demand elevation and api conformance, enabling developers and system managers to more effectively customize, control, and automate software development and administrative processes.

Whether administering a Windows environment or one that mixes Windows and UNIX systems, PTC MKS Toolkit Developers provides consistent set of tools allows organizations to effectively manage their network environment.

PTC MKS Toolkit for Enterprise Developers provides the ability to reduce maintenance costs by utilizing a single source base, leveraging existing investments in UNIX source and expertise, and significantly reducing development and deployment time.

	For Developers	For Interoperability	For Professional Developers	For Professional Developers 64-bit Edition	For Enterprise Developers	For Enterprise Developers 64-bit Edition
UNIX and Windows Utilities	✓	✓	✓	✓	✓	✓
Developer Tools	✓	✓	✓	✓	✓	✓
Connectivity Suite (Single connection)	✓					
Connectivity Suite (Multiple connection)		✓	✓	✓	✓	✓
PTC X/Server		✓			✓	✓
PTC NuTCRACKER 32-bit SDK			✓		✓	
PTC NuTCRACKER 64-bit SDK				✓		✓
X11 SDK					✓	✓
OpenGL SDK					✓	✓
PTC NuTCRACKER Workstation	✓	✓	✓	✓	✓	✓

Select from several available PTC MKS Toolkit product options

Learn more about PTC MKS Toolkit by visiting: <http://www.ptc.com/developer-tools/mks-toolkit>

Request an evaluation copy of PTC MKS Toolkit by visiting: <https://www.ptc.com/products/developer-tools/mks-toolkit/contact-sales>

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DS-PTC MKS Toolkit