

PTC® MKS Toolkit®

Remote Display and Connectivity



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The connectivity components available in the PTC MKS Toolkit products provide you with the means to interactively access remote Windows, UNIX, and Linux machines.

Remote Utilities

All PTC MKS Toolkit products come with remote utilities (`rsh`, `rexec`, `rlogin`, `rcp`) for accessing other UNIX and Windows machines. They also include the server-side components for these utilities (`rshd`, `rexecd`, `telnetd`) so that your Windows machine can accept remote requests.

The `rsh` and `rexec` utilities execute commands on a remote machine. The `rexec` utility is used to execute a single command, while `rsh` creates a shell on the remote machine and executes a command in that shell. These utilities have corresponding Windows services (`rshd` and `rexecd`) that let your Windows machine respond to `rsh` and `rexec` requests from other machines.

The `rconfig`, `grconfig`, and `rsetup` utilities are provided to set-up and configure the remote utilities and services.

In addition, PTC MKS Toolkit products include the `rcp` (remote copy) command for moving files between machines. It uses the same mechanism as `rsh`, so if you can `rsh` to another machine, you can easily copy files. You can even do third-party copies where neither the source nor the target files reside on your machine.

If you need to do more than execute a command on a remote machine or copy a file to or from it, you will want to start a login session on it. Assuming that your `.rhosts` file on that machine has been configured correctly, use the `rlogin` command followed by the name of the machine you want to log in to. For example,

```
rlogin solaris2
```

Using `rlogin`, you can establish a remote session on any machine that is running an `rlogind` service (or daemon). PTC MKS Toolkit includes a `rlogind` service and most UNIX machines run `rlogind` by default.

PTC MKS Toolkit also includes `telnetd`, a telnet service which lets a user on a remote machine connect to your machine in a manner similar to `rlogin`.

Finally, the `xterm` X terminal emulator lets you connect to machines using X windows without the need to run an X server (such as PTC X/Server) on your machine.

Secure Utilities

For environments that require secure and encrypted connections to remote machines, all MKS Toolkit products contain a suite of secure remote utilities (`secsh`, `sftp`, `scp`) and the corresponding server-side components (`secshd`, `sftp-server`).

The secure utilities are intended to replace rlogin and rsh, and provide secure encrypted communications between two untrusted hosts over an insecure network. X11 connections and arbitrary TCP/IP ports can also be forwarded over the secure channel.

The secure X11 feature of secsh allows you to run graphical X based applications through the secure transport. sftp is an interactive file transfer program, similar to ftp, which performs all file copy operations over the encrypted secsh transport.

Finally, there is Visual SFTP. Visual SFTP is a powerful Windows Explorer extension that lets you easily drag and drop files through a secure connection just as easily as you would on your local network. Seamlessly integrated with Windows Explorer, Visual SFTP lets you open one or multiple connections and transfer or manipulate files found on remote Windows, UNIX/Linux, or any other system that supports the SSH protocol.

Graphical Tools

PTC X/Server offers an X server for displaying X Window System-based graphical applications, including OpenGL and Motif applications, on Windows.

Fully network-capable, MKS X/Server can display applications on Windows from a UNIX host, and is bundled with PTC MKS Toolkit for Interoperability and PTC MKS Toolkit for Enterprise Developers. PTC X/Server is also available as an add-on to all other PTC MKS Toolkit products. A Japanese version of PTC X/Server is also available.

As discussed previously, all PTC MKS Toolkit products also contain xterm (and kterm for Japanese users).