



# Tech Info Library

## MacX: Rootless Windows vs. Rooted Windows

Revised: 4/20/93  
Security: Everyone

MacX: Rootless Windows vs. Rooted Windows

=====

Article Created: 27 July 1990

### Article Change History

-----

04/20/93 - REVIEWED  
• For technical accuracy.

### TOPIC -----

I'm very interested in using MacX to provide nationwide access to a database I'm working on. The software is written for X Window System and (mostly) works using MacX.

I would like to have the Macintosh handle the scrolling of an image that is larger than the window. Ideally, it would be a "rootless" window. If this is possible, I can ship a complete image across the country to a user and still have the user get "excellent" response to scrolling operations. If the program on the "client" side has to do the scrolling, performance will not be acceptable.

Can you help?

### DISCUSSION -----

The only way to do what you want is to use a rooted window in MacX. If you use a rootless window, the client application will be completely responsible for all scrolling, updating, and so on. At that point, the X Window System calls are being mapped onto the Macintosh's Window Manager by MacX, and everything is being handled remotely. This includes using the scroll bars, moving the window, sizing the window, and so on.

If you use a rooted window instead, MacX will handle the bitmap, including the updating and scrolling of images that are bigger than the Macintosh window they are being displayed in.

In this case, the Macintosh window has nothing to do with the X Window System Window Manager being used. Therefore, as long as the entire X Window System image has been drawn in the Macintosh window's GrafPort, MacX will handle the scrolling and updating locally.

Copyright 1990-93 Apple Computer, Inc.

Tech Info Library Article Number:5964