## Puzzle for January 11, 2002

This comes from a Microsoft web page entitled "Linux Myths." What do you think about Microsoft's criticisms of Linux? Specifically, does this argument demonstrate whether Windows is more secure than Linux, or vice versa, or neither?

Myth: Linux is more secure than Windows NT.

Reality: Linux Security Model Is Weak

All systems are vulnerable to security issues, however it's important to note that Linux uses the same security model as the original UNIX implementations—a model that was not designed from the ground up to be secure.

- Linux only provides access controls for files and directories. In contrast, every object in Windows NT, from files
  to operating system data structures, has an access control list and its use can be regulated as appropriate. Linux
  security is all-or-nothing. Administrators cannot delegate administrative privileges: a user who needs any administrative capability must be made a full administrator, which compromises best security practices. In contrast,
  Windows NT allows an administrator to delegate privileges at an exceptionally fine-grained level.
- Linux has not supported key security accreditation standards. Every member of the Windows NT family since Windows NT 3.5 has been evaluated at either a C2 level under the U.S. Government's evaluation process or at a C2-equivalent level under the British Government's ITSEC process. In contrast, no Linux products are listed on the U.S. Government's evaluated product list.
- Linux system administrators must spend huge amounts of time understanding the latest Linux bugs and determining what to do about them. This is made complex due to the fact that there isn't a central location for security issues to be reported and fixed. In contrast Microsoft provides a single security repository for notification and fixes of security related issues.
- Configuring Linux security requires an administrator to be an expert in the intricacies of the operating system
  and how components interact. Misconfigure any part of the operating system and the system could be vulnerable
  to attack. Windows NT security is easy to set up and administer with tools such as the Security Configuration
  Editor.