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# CENTRALIZATION VS. DECENTRALIZATION OF APPLICATION SOFTWARE

**Whichever way the IT department chooses, the result should never lose sight of the user.**



Historically, information technology departments have cycled between centralized and decentralized application software distribution, although modular program design and enterprise management software may break that cycle. Meanwhile, IT departments that want to manage the distribution and configuration of software across their networks are searching for an acceptable balance of control, reliability, and speed. Distributing application files on individual PCs maximizes network performance, but makes it much more difficult to enforce configuration standards and maintain control. Placing application files in a few central locations gives an IT department significant control over software configuration but may degrade network performance and lead to user dissatisfaction.

As the components and software in corporate networks become increasingly complex, simplification of their management and administration becomes essential. The network-attached PC has a high cost of ownership; *CIO Magazine* has estimated the cost to be \$10,000 per desktop per year [3, 4]. The costs of a network-attached PC mostly cover maintenance, not installation or actually buy-

ing the equipment. These costs can be cut by reducing the number of hours spent on network administration tasks like implementing new software, distributing new software versions, applying patches, and troubleshooting problems with the individual software applications installed on each workstation.

Centralization of application software is one