

## Surveyor Requirements

### OPERATING SYSTEM COMPATIBILITY

**Surveyor Client** resides on the network's client PCs. A copy of this program is required on every client whose power management will be monitored and enforced by Surveyor. It initiates all communication activities, "checking in" with Surveyor Server for updates to profiles and to upload power state and power consumption statistics to the administrative center. Surveyor Client exhibits a full range of functionality with client PCs running Windows 2000™ (any version), Windows XP™ (any version), Windows 98™ First and Second Editions, and Windows Me™. Windows 95™ clients are supported to the extent that they can be scheduled for automatic shut down through the interface, or that they can be driven to a suspend state on command, but they do not support delay times for the introduction and use of low-power states. Windows NT™ clients are supported to the extent that they can be scheduled for automatic shut down through the interface, but they have no native low-power states. NT clients can be used when the conditions below under "Surveyor Client on Windows NT" below are met.

**Surveyor Server** is used by the person responsible for setting and monitoring the power management properties of the network's PCs. This person can be an IT administrator, an energy and facilities administrator, or anyone else who has administrative rights on the Surveyor Server machine. Surveyor Server manages settings, communications, and information reports between client groups and the clients themselves. Surveyor Server is supported on Windows 2000™ Professional, Server, and Advanced Server, Windows XP™ Professional, and Windows NT™ 4.0 SP5 Workstation and Server.

### NETWORK COMPATIBILITY

Surveyor runs on Windows NT or Novell network domains.

**Communication:** Both client and server require at least Windows Sockets 1.1 and communicate with each other over TCP/IP. The client always initiates the connection, so it must either have the server's IP address or access to a DNS server to resolve the server's name. The TCP port used is configurable on both server and client. The average client will communicate with the server once each day to report power usage, unless this feature has been turned off. In addition, each time a client is turned on it re-syncs with the server, checking for updates to the current profile. Finally, whenever the profile is changed on the server it is proactively sent to all clients in the group. In any event, the largest message to transfer between client and server is less than 1K bytes, and this occurs when a profile is sent to a client.

**Connections:** While a client is running and awake, it maintains an open connection to the server. This allows changes and commands on the server to be immediately sent to the client. The client sends information to the server only when required, however, such as when reporting power usage and when the client connects to the server following client boot-up. This happens once per day or once per client boot-up. A client opens a connection to the server when it first starts up. If the client goes to sleep, it drops its connection. While the connection is open, data is sent only when required.

### FOR MORE INFORMATION

See the Surveyor Tech Specs in the "Technical Resources" section of the Verdiem web site for additional information and specifications.