WinPM.Net 3.2
Commissioning Guide
The use of unauthorized parts in the repair of the equipment or tampering by unqualified personnel will result in dangerous conditions that can cause death, serious injury or property damage.

PLEASE READ
WinPM.Net can be configured to send commands to devices automatically. WinPM.Net can be used to manually send commands to devices and to reconfigure the settings of devices.

IMPORTANT
The information contained herein is general in nature and not intended for specific application purposes. It does not relieve the user of responsibility to use sound practices in application, installation, operation, and maintenance of the equipment purchased. Siemens reserves the right to make changes at any time without notice or obligations. Should conflict arise between the general information contained in this publication and the contents of drawings or supplementary material or both, the latter shall take precedence.

QUALIFIED PERSONNEL
For the purposes of this manual and product labels, “qualified personnel” is one who is familiar with the installation, construction, or operation of the equipment and the hazards involved. In addition, s/he has the following qualifications:
(a) is trained and authorized to energize, de-energize, clear, ground, and tag circuits and equipment in accordance with established safety practices.
(b) is trained in the proper care and use of protective gear equipment such as rubber gloves, hard hat, safety glasses or face shields, flash clothing, etc., in accordance with established safety procedures.
(c) is trained in rendering first aid.

SUMMARY
These instructions do not purport to cover all details or variations in equipment, nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser’s purposes, the matter should be referred to the local Siemens Energy & Automation, Inc. sales office. THE CONTENTS OF THIS INSTRUCTION MANUAL SHALL NOT BECOME PART OF OR MODIFY ANY PRIOR OR EXISTING AGREEMENT, COMMITMENT OR RELATIONSHIP. THE SALES CONTRACT CONTAINS ALL OBLIGATIONS OF SIEMENS ENERGY & AUTOMATION, INC. THE WARRANTY CONTAINED IN THE CONTRACT BETWEEN THE PARTIES IS THE SOLE WARRANTY OF SIEMENS ENERGY & AUTOMATION, INC. ACCESS, ISGS, Isolated Multi-Drop, S7-I/O, SBwin, SAMMS-LV, SAMMS-MV, SEAbus, SIEServe, Static Trip III, Wisdom, and WinPM are trademark, Sensitrip and Sentron are registered trademarks of Siemens Energy & Automation, Inc. SIEMENS is a registered trademark of Siemens AG. Windows is a trademark of Microsoft Corporation. ION is a registered trademark of Power Measurement. All other product names mentioned herein are used for identification purposes only and may be the trademarks or registered trademarks of their respective companies.
Contents

Introduction ........................................................................... 7
  ◆ Types of Installation ....................................................... 7

Step 1: Determine Your Network Needs .................. 8
  ◆ Primary Server System Requirements ....................... 8
  ◆ Primary Server Software Requirements .................... 9
    WinPM.Net Client Requirements ................................. 9
    Database Server Requirements ................................. 9
    Secondary Server Requirements ............................... 9
  ◆ WinPM.Net Client Licensing ......................................... 10
    Client Types ............................................................. 10
  ◆ WinPM.Net Administrator Server Permissions .......... 10

Step 2: Set Up the SQL Server Database .......... 11
  Additional Setup/Prerequisites ...................................... 11

Step 3: Prepare the Primary Server .................. 12
  ◆ Server Configuration Guidelines ............................... 12
  ◆ Microsoft Procedures .............................................. 13

Step 4: Install WinPM.Net ............................................ 14
  ◆ Upgrading WinPM.Net Software ............................. 14
    Upgrade System Hardware and Software .................... 14
    Back Up Information ............................................... 14
    Disable/Remove Unnecessary Software ...................... 15
    Update All SQL Server Instances ............................... 15
  ◆ Run the WinPM.Net Installer ...................................... 15
    Create Local Primary Server Groups ......................... 16
    Review the WinPM.Net Database Manager .................. 16
    Enabling WebReach After Primary Install .................... 16

Step 5: Review Security Highlights .................. 16
  Firewall Configuration .............................................. 17

Step 6: Install WinPM.Net Clients .................. 18
Introduction

This guide contains information to help you plan, design and build your WinPM.Net system, incorporating best practices and factory-recommended procedures to reduce the need for ongoing support and improve the reliability of your installation.

A typical WinPM.Net system consists of a computer or network of computers running WinPM.Net software, and one or more networks of devices (such as basic energy meters, multi-function monitoring/analysis/control devices, and/or intelligent relays). WinPM.Net software is supported on the Microsoft® Windows® Server 2003 operating system.

**NOTE**

This *WinPM.Net Commissioning Guide* is for users who want to prepare and configure their own WinPM.Net server. Fully commissioned WinPM.Net servers are also available — please contact Siemens Energy & Automation for details.

Types of Installation

The simplest type of WinPM.Net installation is a standalone Primary Server, where one computer handles all the functions, data storage and interaction with networked devices.

**Primary Server**

Each WinPM.Net network has one Primary Server. It stores the system configuration and serves logged data to Client computers. The Primary Server can host the WinPM.Net databases, and typically aggregates data from all Secondary Servers (if they exist). Terminal Server connections are supported if your Primary Server machine is set up with Terminal Services.

**Database Server**

You can set up the WinPM.Net database using an existing SQL database in your network (e.g. on a remote computer hosting SQL Server 2005). For this network configuration, you must first complete the Database Server installation before installing the WinPM.Net Primary Server on your network.

**Client**

For a Client installation, specify which WinPM.Net programs you want to install on the client computer. A client computer connects to the Primary Server to access network system data for display, analysis and control functions, as well as reporting and system configuration. Most or all of the processing functions occur at the WinPM.Net Client computer, while the Primary Server manages data and access to it.
Secondary Servers

Secondary Server installations are not common, and used only in exceptional circumstances. For example, an intermediary Secondary Server may be required when a large geographical distance causes unreliable communications between a Primary Server and remote site devices. Secondary Server installations require advanced network configuration. Contact Technical Support if you think you require a Secondary Server.

Step 1: Determine Your Network Needs

WinPM.Net is fully scalable, so make allowances for future expansion when selecting the Primary Server computer. In addition to the different types and quantities of devices you plan to add to the WinPM.Net network, consider also the amount of data storage required. For heavy data logging and retrieval requirements, consider setting up a separate Database Server computer for storing WinPM.Net data.

NOTE

64-bit operating systems such as Windows XP Professional x64 or Windows Server 2003 x64 editions are not supported.

Primary Server System Requirements

The Primary Server computer should be Windows Server 2003 certified, according to the hardware compatibility list on the Microsoft website. Windows XP Professional may be used for standalone Primary Server applications with 1-25 networked devices, and no WinPM.Net Client computers.

<table>
<thead>
<tr>
<th>Number of Devices¹</th>
<th>Number of Clients</th>
<th>Operating System²</th>
<th>Minimum Hardware Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>5 or less</td>
<td>Windows XP Professional or Windows Server 2003</td>
<td>2 GHz CPU, 1 GB RAM, 40 GB disk drive</td>
</tr>
<tr>
<td>26-100</td>
<td>15 or less</td>
<td>Windows Server 2003</td>
<td>2.4 GHz CPU, 2 GB RAM, 2 x 60 GB disk drives</td>
</tr>
<tr>
<td>101-200</td>
<td>15 or less</td>
<td>Windows Server 2003</td>
<td>Dual 2.4 GHz CPUs, 4 GB RAM, 2 x 146 GB storage on SCSI RAID-1</td>
</tr>
</tbody>
</table>

1. This guideline is based on the number of 9510 / 9610 meters in an Ethernet network.
2. Operating system must be a 32-bit system. WinPM.Net is not support on 64-bit systems.

The server should be equipped with a CD-ROM drive and other standard hardware, such as an Ethernet communications port.

Consider also a tape backup mechanism and UPS (uninterruptible power supply) system for your server. Install a high-speed graphics adapter and use a 17” or larger monitor to view the WinPM.Net screens.
Primary Server Software Requirements

Before installing WinPM.Net on the Primary Server, certain software, Windows components and services should be installed or enabled.

<table>
<thead>
<tr>
<th>Software or Windows Component Required</th>
<th>WinPM.Net Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Office 2003 Suite</td>
<td>Excel 2003 required for Reporter; Outlook 2003 for emailing reports</td>
</tr>
<tr>
<td>.Net Framework version 2.0</td>
<td>Required by WinPM.Net Installer, this component is automatically installed if it is missing.</td>
</tr>
<tr>
<td>Microsoft Windows IIS (Internet Information Services)</td>
<td>Prerequisite for WebReach component installation (to enable WebReach clients to view Vista screens on a web browser)</td>
</tr>
<tr>
<td>Microsoft Windows 2003 Terminal Services</td>
<td>Terminal server client connections (Remote Desktop connections) to the Primary Server</td>
</tr>
<tr>
<td>Microsoft Internet Explorer 6.0 or higher</td>
<td>WebReach displays Vista screens on this web browser</td>
</tr>
</tbody>
</table>

Use Windows Update service to install the latest security patches and hotfixes from Microsoft.

WinPM.Net Client Requirements

WinPM.Net Clients may be installed on computers running 32-bit Windows XP Professional or Windows Server 2003 operating systems. Microsoft Office 2003 Suite is required to run Reporter and send reports via email.

Database Server Requirements

WinPM.Net can install SQL Server 2005 Express on the Primary Server, and automatically set up the WinPM.Net databases on that computer. However, SQL Server 2005 Express has database size limitations.

For larger database requirements (over 4 GB in size), you can set up SQL Server 2005 Standard Edition on the Primary Server, or on a separate server that is optimized for database disk capacity and performance.

Secondary Server Requirements

Secondary Server hardware and software requirements vary according to different customer application needs. Contact Technical Support for assistance when selecting the Secondary Server computer.
WinPM.Net Client Licensing

One WinPM.Net Client License is required:

- For each computer that accesses the Primary Server to use the WinPM.Net programs installed on it. This applies to each Terminal Server or Remote Desktop Connection.
- For each WinPM.Net Client computer, where the WinPM.Net programs are installed locally.

Client Types

List your WinPM.Net users or user groups, and determine what type of client support is required for each. WinPM.Net supports the following client types:

- WebReach client: A thin client that allows you to view preconfigured Vista display screens and historical data through a Microsoft Internet Explorer browser. No other programs are needed. WinPM.Net Client Licenses are not required for WebReach clients.
- WinPM.Net Client: A rich client that connects to the primary server to access data, but runs WinPM.Net programs installed on the local client computer.
- Terminal Services Client or Remote Desktop Connection: These clients use a different computer to connect to the Primary Server and use the WinPM.Net programs installed on it.

WinPM.Net Administrator Server Permissions

The WinPM.Net system administrator (“WinPM.Net administrator”) is the person responsible for managing the WinPM.Net system, and therefore requires certain administrative permissions on the WinPM.Net server. These permissions are typically granted and set up by your IT (Information Technology) Department. Some of the administrative functions of the WinPM.Net administrator include:

- **Install/uninstall software**
  Software upgrades, WinPM.Net service packs, repair/modify/reinstall software, update operating system components.

- **Reboot the WinPM.Net server**
  A server reboot is typically required after installing or uninstalling WinPM.Net software or service packs.

- **SQL Server setup and maintenance**
  Set up and maintain the SQL Server instance that hosts the WinPM.Net database. Tasks include manual backups, archives, and trims on a live ION database or archived databases.

**NOTE**

If the WinPM.Net database is hosted on a multi-database server, the database administrator can grant Administrator permissions only for specific WinPM.Net databases, while restricting access to the other databases on the server.
Start/stop/modify WinPM.Net services
WinPM.Net services ("WinPM.Net <service name>") need to be stopped or started when commissioning the WinPM.Net server. Some tasks that affect or are affected by WinPM.Net services include:

- ACCESS meter firmware upgrades
- manual backup of ION databases, database creation/modification, or password changes
- database engine upgrades
- modifying the Virtual Processor’s global operating parameters
- adding to/modifying the Modbus network
- troubleshooting (communications)

Start/stop/modify Task Scheduler Service
Start Task Scheduler before setting up SQL Server Express.

Start/stop/modify MSSQL or SQLAgent$ION service
Control the MSSQL Service or SQLAgent$ION Service for problem solving and troubleshooting purposes.

Start/stop/modify other Windows services
Some changes to the WinPM.Net registry require stopping of certain Windows Services, such as IIS.

Modify/create/delete WinPM.Net files and folders
Create/customize/delete Vista diagrams or Designer frameworks. Read/write/modify/remove permissions are required for the WinPM.Net file folders.

FTP site upload/download
Install/uninstall troubleshooting tools (files) from Siemens Energy & Automation Technical Support. An FTP (file transfer protocol) site is the preferred method for delivering these files.

Step 2: Set Up the SQL Server Database
Skip to “Step 3: Prepare the Primary Server” on page 12 if you are setting up your WinPM.Net databases using the SQL Server 2005 Express version that comes with WinPM.Net, or if you already have existing WinPM.Net databases you want to connect to and use.

NOTE
If you are setting up SQL Server 2005 Express, make sure the Task Scheduler service has already been started.

Additional Setup/Prerequisites
This list summarizes additional requirements for SQL Server 2005 (Standard Edition or better). Refer to your SQL Server documentation for details:

- Shut down all services dependent on SQL Server before making changes. This includes any service using ODBC, such as Microsoft Internet Information Services (IIS)
- Shut down Microsoft Windows NT Event Viewer and registry viewers

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• Mixed Mode Authentication needs to be set up on the SQL Server instance for WinPM.Net
• OLE Automation needs to be enabled
• Domain user account(s) need to be set up in SQL Server to communicate with other WinPM.Net clients and servers
• Optional: Set up SQL Server services to startup under a Domain account. This may be required for some systems where the SQL Server is installed on a separate machine from the WinPM.Net software

**NOTE**

Make sure the user credentials for the WinPM.Net administrator are set up with Administrator permissions for the WinPM.Net databases, as outlined in “WinPM.Net Administrator Server Permissions” on page 10.

To set up the WinPM.Net databases on a separate SQL Server installation:

1. Run the WinPM.Net installer.
2. Select **Install Server**, then **Database Server**.
3. Follow the steps as directed by the installation wizard.

WinPM.Net installs three databases, creates two local accounts, and adds numerous stored procedures on the SQL Server computer.

A SQL Server login is automatically set up on its SQL Server instance, named “ION” by default. This login has server Administrator permissions to this SQL Server instance only. The ION login is required for basic WinPM.Net operations like data querying and data logging.

### Step 3: Prepare the Primary Server

Depending on how you are setting up and implementing your WinPM.Net network, certain prerequisites need to be met. You must complete the following before proceeding with the Primary Server installation:

• If you want to enable WebReach support, make sure the Windows IIS (Internet Information Services) component is installed and enabled on the server computer.
• If you have clients that use Terminal Server or Remote Desktop Connection to access WinPM.Net programs on the Primary Server, make sure you install and enable Terminal Services on the server computer.

### Server Configuration Guidelines

1. Assign a computer name for the server.
   Select a computer name that conforms to Windows conventions. A computer name can be up to 15 alphanumeric characters with no blank spaces and must not contain any prohibited characters or symbols such as the following:

   \* + = \* ; < > ? ,
For compatibility reasons, use only letters and numbers, assigning a letter for the first character in the computer name.

2. Partition the computer’s hard drive.

Separating the operating system from data storage is a precautionary step to preserve data in case the operating system becomes unstable.

The following example shows how a Primary Server with two physical hard drives (40GB, 80GB) can be partitioned. This serves only as a guideline — make adjustments to fit your needs:

<table>
<thead>
<tr>
<th>Partition</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>“System” (C: )</td>
<td>15 GB</td>
<td>Contains the operating system, and all the Windows system files. This partition should have enough free space for operating system upgrades and defragmentation tasks.</td>
</tr>
<tr>
<td>“Application” (D: )</td>
<td>25 GB</td>
<td>Contains WinPM.Net programs and other third-party applications. Since this is not a system partition, you can increase its size when a new physical drive is added.</td>
</tr>
<tr>
<td>“Data” (E: )</td>
<td>80 GB</td>
<td>Contains database files only. Since databases can grow significantly over time, assign the “Data” partition to the entire second physical hard drive.</td>
</tr>
</tbody>
</table>

1. All partitions are NTFS file system type.

**Remapping the CD-ROM Drive Letter**

You can use Disk Management (in the Computer Management console) to remap the CD-ROM to another drive letter, for example, “Z”.

**Microsoft Procedures**

The remaining configuration steps for the server involve installation of specific Microsoft components (such as IIS, for enabling the WebReach feature of WinPM.Net). Refer to your Microsoft Windows documentation or online help for detailed instructions.

1. Install and configure the Microsoft Loopback Adapter. This provides redundancy and helps keep WinPM.Net running if the server’s network interface card (NIC) loses connection. By default, the loopback adapter automatically obtains a non-routable IP address. This is the recommended setting. Refer to the “IP Routing Table” topic in your Microsoft Windows documentation if you want to manually configure the non-routable IP address.

2. Use **Manage Your Server** (Control Panel> Administrative Tools> Manage Your Server) to add the Application Server Role (IIS, ASP.NET). To enable the WebReach feature, install these required IIS components: Common Files, Internet Information Services Manager, and World Wide Web Service. Enable the other IIS components that your organization may require.

**NOTE**

IIS 6.0 is fully locked down by default. Use IIS Manager to enable or control IIS functionality.
3. Install the Terminal Server component if Terminal Server or Remote Desktop Connection to the WinPM.Net Primary Server is required (for the purpose of using its installed WinPM.Net programs). Refer to the “Terminal Server Licensing Overview” topic in your Microsoft Windows documentation to learn about Terminal Server Licence requirements.

4. Configure Terminal Services if it is installed. Perform typical setup such as ending a disconnected or stale session, and installing programs.

Step 4: Install WinPM.Net

Make sure your computer meets the requirements and guidelines outlined in this Commissioning Guide before installing WinPM.Net.

The WinPM.Net Installer installs certain Microsoft components. Refer to the Installer help for a list of these prerequisite components.

**NOTE**

WinPM.Net 3.2 and higher versions support TAPI modem drivers for Windows (WinModems). If you plan to use them in your WinPM.Net network, you can install and configure the WinModems prior to installing WinPM.Net. Additional WinModem information is available in the WinPM.Net help.

Upgrading WinPM.Net Software

The WinPM.Net 3.2 Installer creates the new installation folder hierarchy, then copies and pastes all the configuration files and customizations from the previous version. The installer then installs all the new software components and files, without overwriting the custom files that were copied from the previous version.

For diagnostic purposes, all registry entries from previous WinPM.Net versions are preserved after the upgrade — the setup log file contains a list of registry settings that were copied from the previous version. All custom registry settings are applied to the new installation. Custom Virtual Processor and Log Inserter services are also preserved.

Upgrade System Hardware and Software

Before you upgrade, make sure that the minimum hardware and software requirements for running WinPM.Net are still met.

Back Up Information

Before upgrading, back up the ..\config and ..\Database folders in your WinPM.Net directory (e.g. by copying them to another folder in the hard drive, or copying them to a removable storage device). To copy the ..\Database folder, you must first stop the MSSQL$ION service and its dependent services ("ION" is the default name for the SQL Server 2005 Standard or Express/MSDE instance).

You can save your custom shortcuts from a previous WinPM.Net installation. Custom arguments can be used for automatic logon, or to open a specific
Vista diagram upon startup. Copy the custom shortcuts to a safe location before upgrading. Then after the upgrade, you can copy them back.

**Disable/Remove Unnecessary Software**

You can disable or remove obsolete WinPM.Net software components and services, as listed below:

- Disable the MSDE 7.0 service (i.e. stop and set to manual)
- Uninstall the old version of Database Manager
- Uninstall Sybase SQL Anywhere (if you no longer need to access the Sybase SQL Anywhere data)

**Update All SQL Server Instances**

Apply the latest SQL Server service pack to all instances of SQL Server in your network before upgrading WinPM.Net.

**Run the WinPM.Net Installer**

Perform the WinPM.Net installation on the local server computer. Remote installation is not recommended.

1. Insert the WinPM.Net CD in the CD-ROM drive. The auto-start program begins and displays the first screen.

   **NOTE**

   Some computers have the CD-ROM auto-run feature disabled. If this is the case, use Windows Explorer to navigate to the CD-ROM drive letter and double-click setup.exe

2. The first set of screens comprise the pre-installer, which allows you to select and set the options for the WinPM.Net installation wizard.

3. After you have set your installation options, the WinPM.Net Welcome screen displays. The installation wizard guides you through the setup process. If you need more information regarding any screen, click the Help button.

4. The final wizard screen prompts you to reboot the computer to complete the installation. After the reboot, the WinPM.Net Installer sets up all the components needed to run WinPM.Net for the first time.

After completing the Primary Server setup, you can start setting up user groups and database maintenance schedules.
Create Local Primary Server Groups

Create the following local groups on the WinPM.Net server and grant access as follows:

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Access to WinPM.Net\SYSTEM</th>
<th>Access to WinPM.Net\CONFIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>WinPM.Net_Administrators</td>
<td>Full Control</td>
<td>Full Control</td>
</tr>
<tr>
<td>WinPM.Net_Users</td>
<td>Read</td>
<td>Change</td>
</tr>
</tbody>
</table>

Refer to the WinPM.Net help for procedures on adding users.

**NOTE**

The LocalSystem account must belong to the WinPM.Net Administrators group; the LocalSystem account requires read/write access to the system and config directories in order to run the WinPM.Net services.

Review the WinPM.Net Database Manager

The Database Manager has preconfigured schedules for performing backups, archives, and trims on your WinPM.Net databases. Review these schedules and make any modifications you require. Refer to the Database Management topic in WinPM.Net help.

Enabling WebReach After Primary Install

WebReach is automatically installed if the WinPM.Net Installer detects IIS on the computer.

If IIS is installed after the WinPM.Net installation, you can add the WebReach component using the Windows Add/Remove Programs utility.

**Installing WebReach after WinPM.Net is installed**

Use Add/Remove Programs (in Control Panel) and select WinPM.Net to start the Repair/Modify process. Follow the directions to install WebReach.

**Virtual Root Name**

The virtual root name is the directory name, used in an address (preceded by a forward slash, “/” ), which corresponds to a physical directory on the web server where Microsoft's Internet Information Services (IIS) is installed (e.g. http://10.1.0.0/ION or http://localhost/ION).

Step 5: Review Security Highlights

This section outlines specific security considerations after the WinPM.Net installation:

**Default DBA/SQL database passwords for SQL**

The default user identification and password for some of the database accounts need to be preserved for the proper operation of WinPM.Net.
Contact Siemens Energy & Automation Technical Support for details before attempting to modify user IDs and passwords.

**NTFS and Share permissions on the WinPM.Net directory**

All share permissions are automatically set to “Read” permissions for the Everyone group; this includes the WinPM.Net share (WinPM_Net).

Change the WinPM_Net share permission to Read/Write for users (WinPM.Net Clients) who need to modify files, such as Vista diagrams.

**Allow Active Server Pages and ASP.Net for WebReach functionality**

To enable WebReach functionality, ensure the “Active Server Pages” and “ASP.NET v2.0” IIS web extensions settings are set to “ALLOW”.

**WinPM.Net software security**

Two software user accounts are created by default when WinPM.Net is first installed: “guest” and “supervisor”. The default password is “0” (zero) for both users. These accounts have an access level of Supervisor (highest level, with full access). The WinPM.Net administrator should disable the guest account or change the password for both accounts before deploying the WinPM.Net system to users.

**WinPM.Net services**

WinPM.Net services run under the Local System account, by default. You can change the “Log On As” attribute of a service by specifying the account and password. This is done from the Log On tab when viewing the properties of that service. “Log On As” account must have read/write permissions in the WinPM.Net network.

**Firewall Configuration**

Use the Microsoft knowledgebase to learn about Well Known Ports and Registered Ports required for certain networks.

**WinPM.Net TCP Port Assignments**

Here are the TCP port assignments that WinPM.Net and associated applications or services use to communicate with ACCESS devices, WinPM.Net Clients, and other WinPM.Net servers.

<table>
<thead>
<tr>
<th>Port</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Telnet (used for meter diagnostics)</td>
</tr>
<tr>
<td>25</td>
<td>SMTP (required for MeterM@il)</td>
</tr>
<tr>
<td>502</td>
<td>Modbus TCP</td>
</tr>
<tr>
<td>3721</td>
<td>Ethernet access for the 3720 ACM meter</td>
</tr>
<tr>
<td>7700</td>
<td>ION</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>7701</td>
<td>Modbus RTU</td>
</tr>
<tr>
<td>7800</td>
<td>EtherGate simultaneously through available COM ports</td>
</tr>
<tr>
<td>7801</td>
<td>EtherGate through COM1</td>
</tr>
<tr>
<td>7802</td>
<td>EtherGate through COM2/COM4</td>
</tr>
<tr>
<td>7803</td>
<td>EtherGate through COM3</td>
</tr>
</tbody>
</table>
Some networks may contain devices that require the use of alternate ports (e.g. Modbus devices).

Other Required Ports

<table>
<thead>
<tr>
<th>Port</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>13666</td>
<td>WinPM.Net services use this port. This port is used if a client machine needs to access the Designer and/or Vista components of WinPM.Net.</td>
</tr>
<tr>
<td>1433</td>
<td>The Microsoft Data Engine (MSDE) and Microsoft SQL Server use this port.</td>
</tr>
<tr>
<td>1434</td>
<td>Microsoft SQL Monitor uses this port to identify named database instances.</td>
</tr>
<tr>
<td>3389</td>
<td>Terminal Server uses this port.</td>
</tr>
<tr>
<td>139</td>
<td>NetBIOS and Windows “File and Printer Sharing” use this port.</td>
</tr>
<tr>
<td>80</td>
<td>HTTP (required for WebReach and Internet access) uses this port.</td>
</tr>
</tbody>
</table>

Step 6: Install WinPM.Net Clients

1. Review “WinPM.Net Client Requirements” on page 9 and make sure the client computers meet the requirements.
2. Follow the same guidelines for computer name and drive partitions, as indicated in “Server Configuration Guidelines” on page 12.
3. Make sure the Primary Server’s share folder (“WinPM_Net”) permissions are set to “Full Control” for the Client username or group.
4. Run the WinPM.Net installer, select Install Client, then follow directions on the installation screens. Select which Primary Server to connect to when prompted.

The WinPM.Net server computer must exist on the Local Area Network (LAN). Use Windows Explorer to navigate “My Network Places” and locate the WinPM.Net server. Make sure the WinPM_Net share is visible on this server.