1

Getting Started

- Introducing Speed Net 4.0
- Installing Speed Net 4.0

CHAPTER 1

Introducing Speed Net 4.0

Whether you are an RBC company, an independent property owner who monitors their residents water usage or a private contractor who installs the SpeedRead Technologies AMR system, chances are you will need to access the Regional Concentrator's data base. You might need information on the installation or you may need a monthly download to perform your billing cycle.

Speed Net 4.0 allows you to make that connection to the data collector and analyze the concentrator information as if you are standing at the concentrator performing simple task. Speed Net 4.0 lets you perform system analysis and performance reports on demand.

What you can do with Speed Net

Some common uses of Speed Net include:

Perform System Maintenance

- Analyze system performance results that will give you information on receptions and transmissions.
- Look for alerts based on Exception parameters that you set for HIGH consumption and LOW consumption.
- Update system information remotely using a serial cable connected directly to the Data Collector* or using a remote modem interface.

Analyze consumer reading information:

- Your customer service representatives can perform analysis on consumer's consumption while the consumer is on the phone, eliminating the need for customer call backs.
- Your customer service department can view historical reading data that may show years of consumption, including information on leak detection, over consumption alerts and transmitter events.

** Computer used to collect reading data*

Download reading information and export it to your billing system.

- Create export templates to import reading information in to your billing software.
- Create reading and consumption reports that include TXT, HTML or XML formats.
- Export Consumer data, including consumer identification records as well as location data.
- Auto Export reading information on a Daily, Weekly or Monthly basis.

CHAPTER 2

Installing Speed Net 4.0

Installation procedures may vary slightly depending on your PC and your work environment. This chapter focuses on installing from the supplied installation CD. If your requirements involve custom configuration or multi seats license then some topics discussed in this chapter may not apply to you. When in doubt, contact your system administrator or SpeedRead Technologies for guidance.

This chapter contains the following:

- Preparing for installation
- Installing Speed Net 4.0
- Installing Pervasive SQL 8.5
- Updating Speed Net 4.0
- Uninstalling Speed Net 4.0

Preparing for Installation

Before you install Speed Net, make sure that your computer meets the system requirements. You should also review any additional information or Read Me files that you are directed to from the CD package, which may have last minute details you may need to know about.

System Requirements

Speed Net runs on Windows 2000, Windows XP Home Edition and Windows XP Professional Edition and requires at a minimum, these resources to function properly.

Minimum System Requirements

600 MHz Pentium II or Higher Processor
128 MB RAM
150 MB available hard disk space (for program files only)
Monitor with a minimum resolution of 1024 x 768
CD- ROM
USB Port
Modem with an Analog Phone line

DIRECT CONNECT REQUIREMENTS
Serial Port (Com Port) or USB to serial Adaptor Cable

Depending on the amount of data to be stored for analysis the user should include at least 20 to 40 gig hard drive space for storage of reading data.

Installing Speed Net

The installation process will install Speed Net 4.0. The Speed Net software application operates using two additional software products, Magic and Pervasive SQL. Both of these products are installed as part of the overall Speed Net installation.

WARNING: Turn off all Anti Virus and Spy ware Software before you continue.

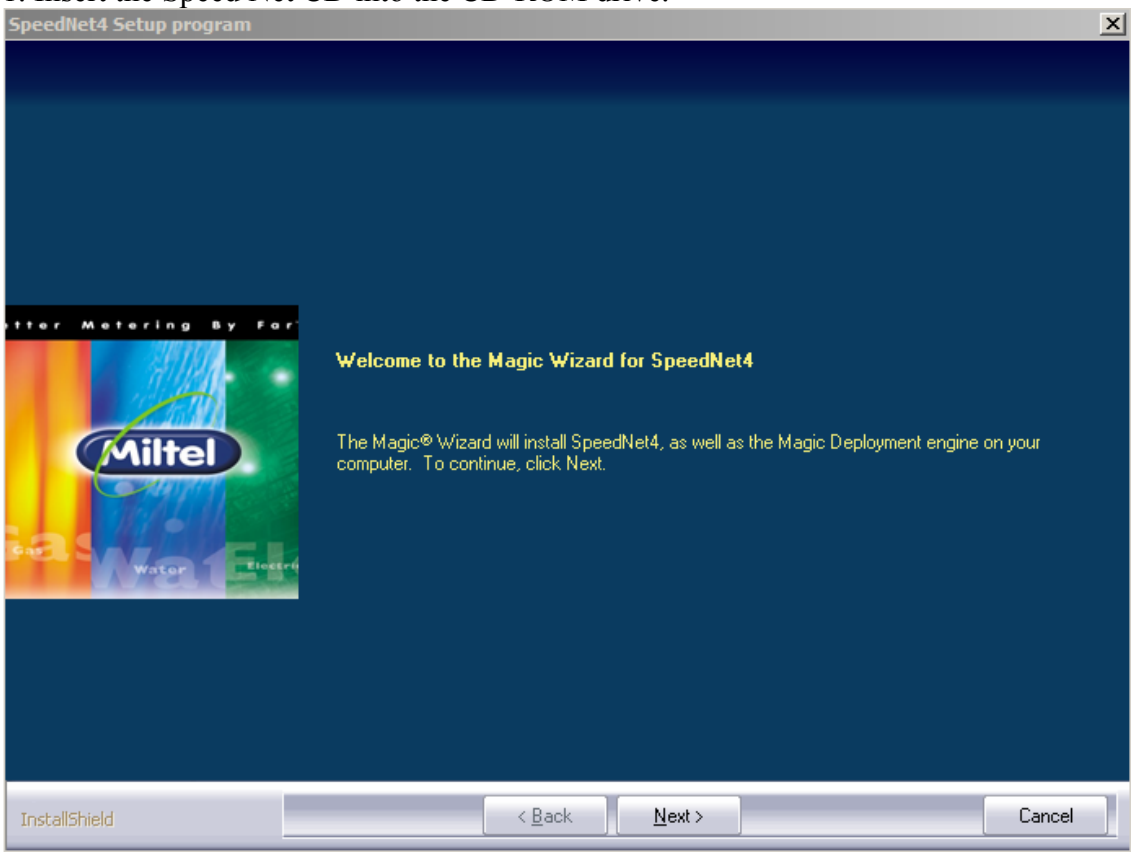
Follow this procedure when installing Speed Net from the installation CD. You can install Speed Net on only one PC.

If the installation screen does not appear automatically after you insert the Speed Net CD, run the setup program manually.

1. Right Click Start and then Explore
2. Right Click the CD drive with the Speed Net CD
3. Double Click on the SETUP.exe program and follow the steps below

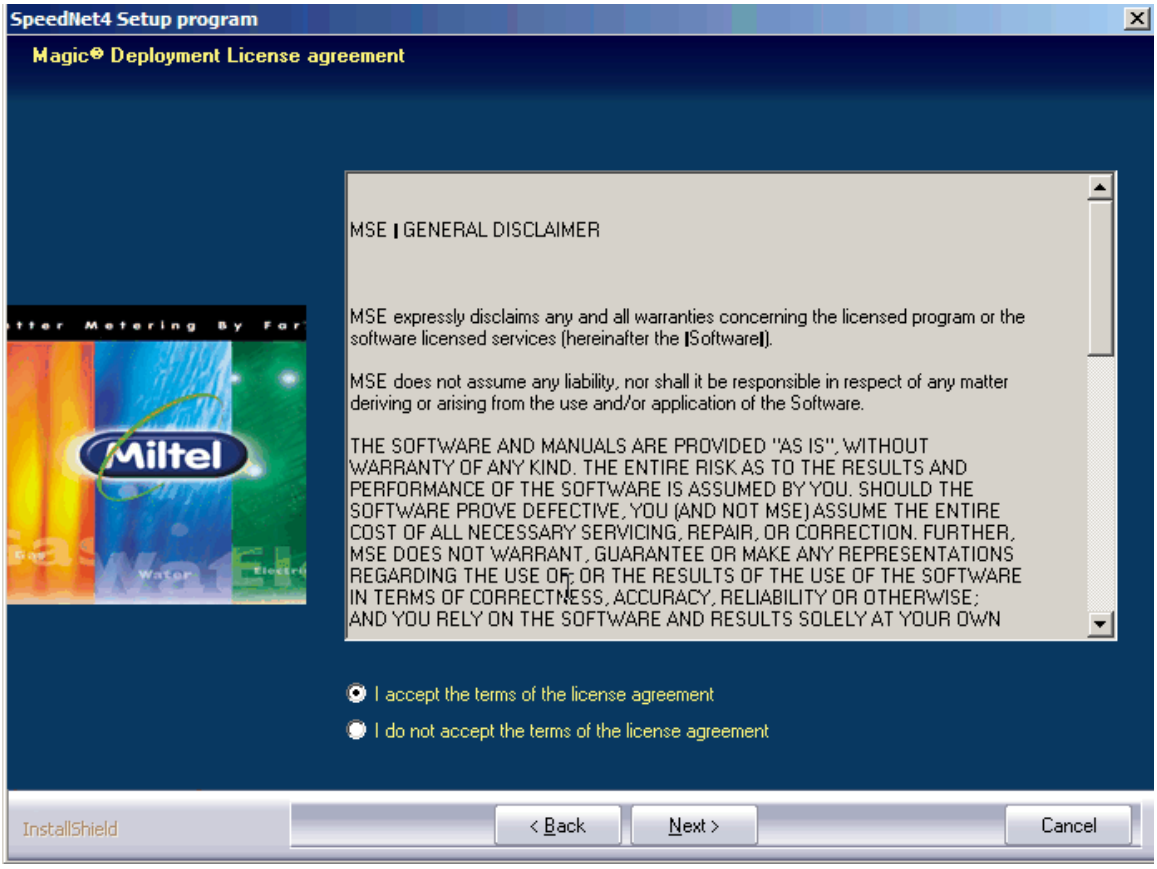
To Install Speed Net

1. Insert the Speed Net CD into the CD-ROM drive.



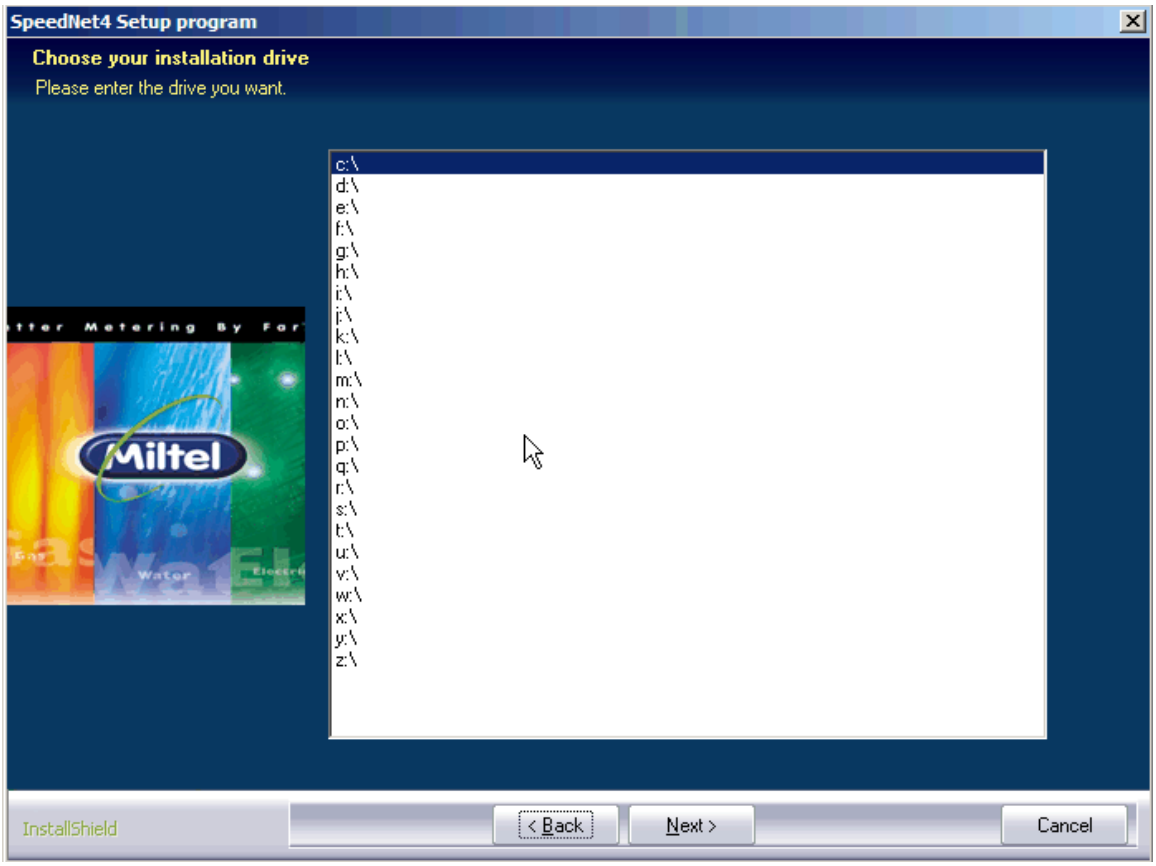
2. On the Speed Net installation Screen Click **Next,** or Click **Cancel** to terminate the installation.

3. At the Magic Deployment License Agreement, accept the terms of the Magic Deployment License Agreement. Selecting the **"I do not accept"** option will terminate the install process when you click **Next.**

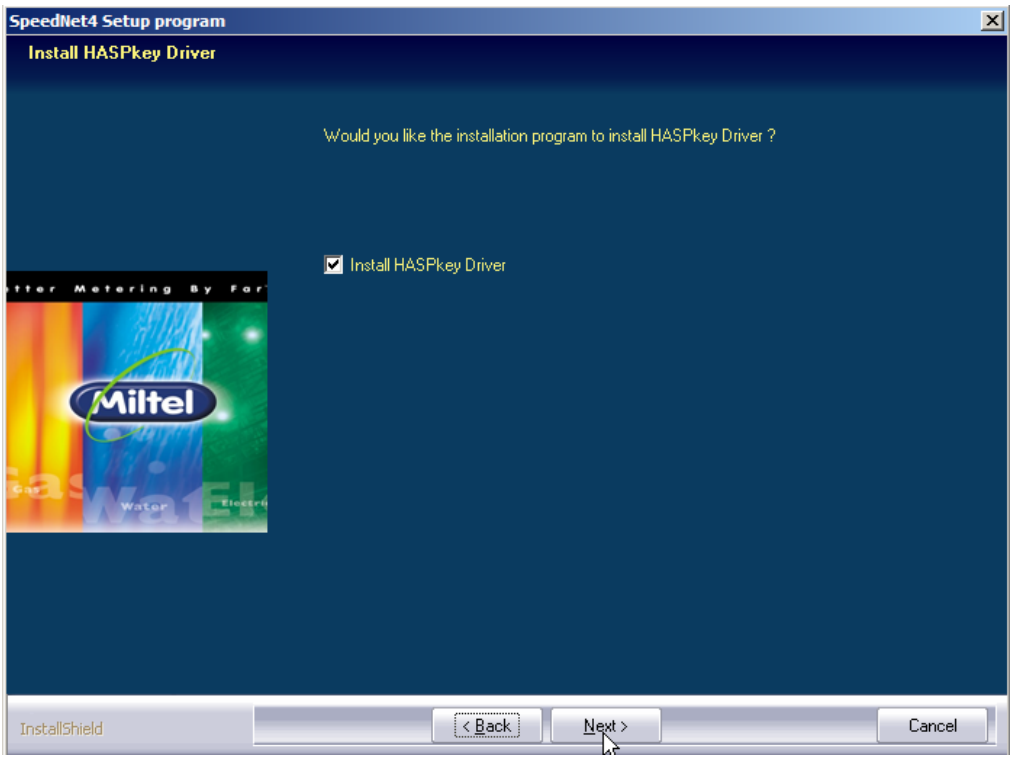


4. Click **Next** to continue.

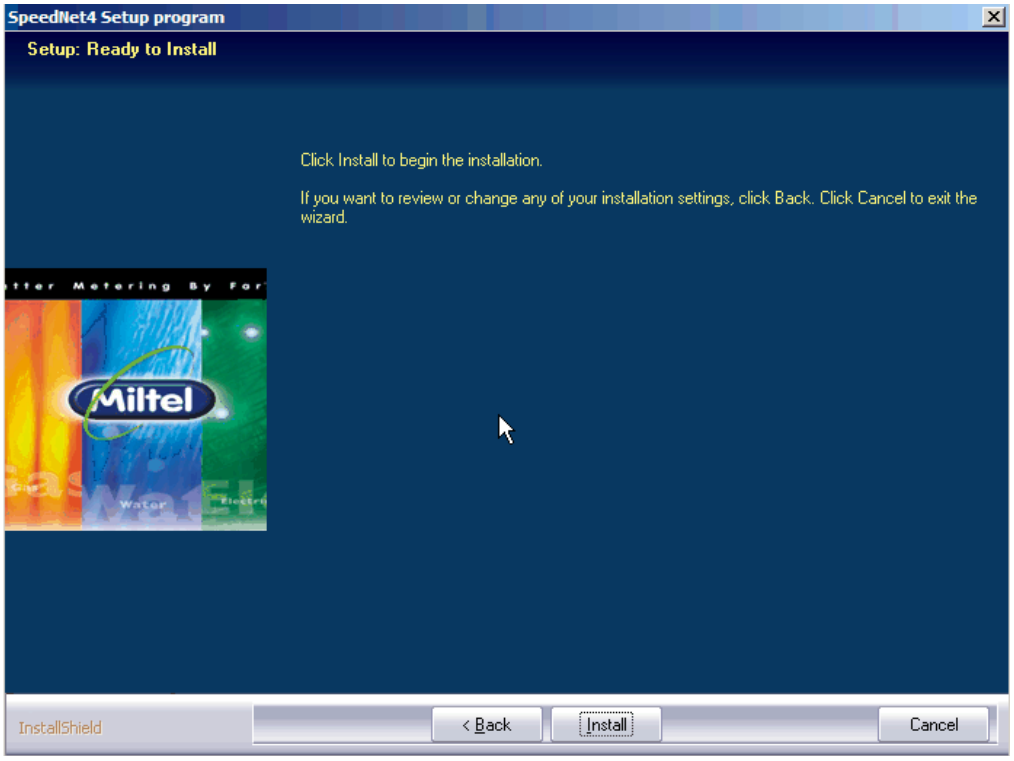
5. At the following screen you must select the drive were you wish to have the software installed to. *Make sure that you have the proper rights to install to network drives.*



6. Select the Drive Letter for the installation and click **Next**.

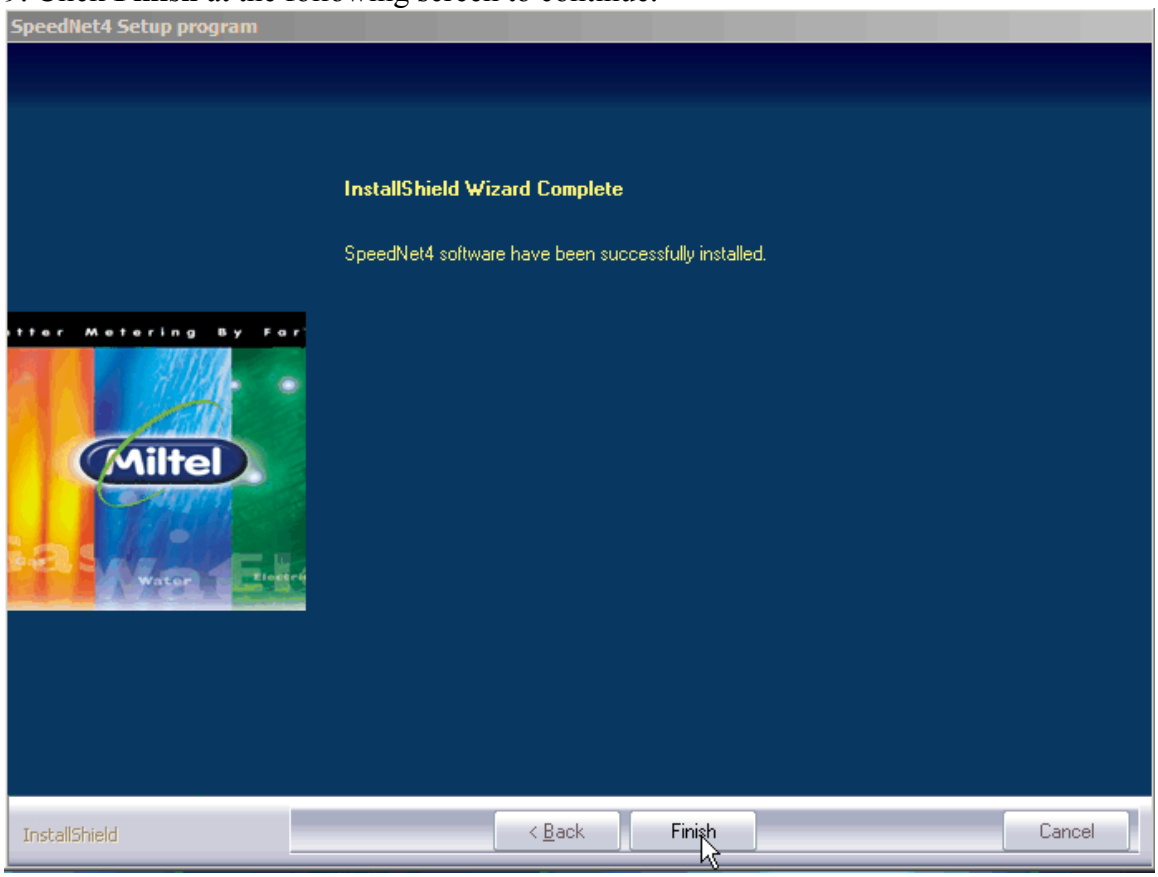


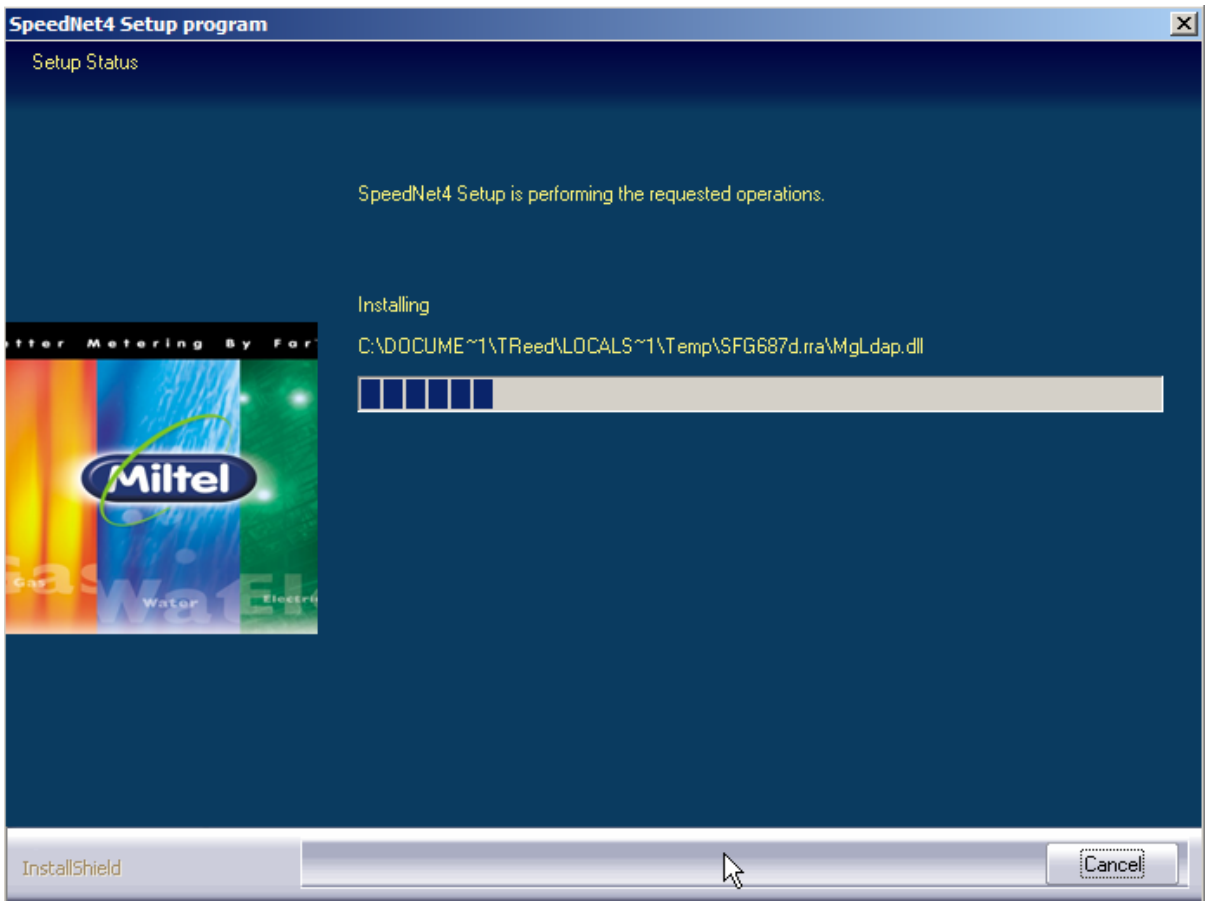
7. Place a **Check** in the box to install the HASP key Driver, and then Click **Next**



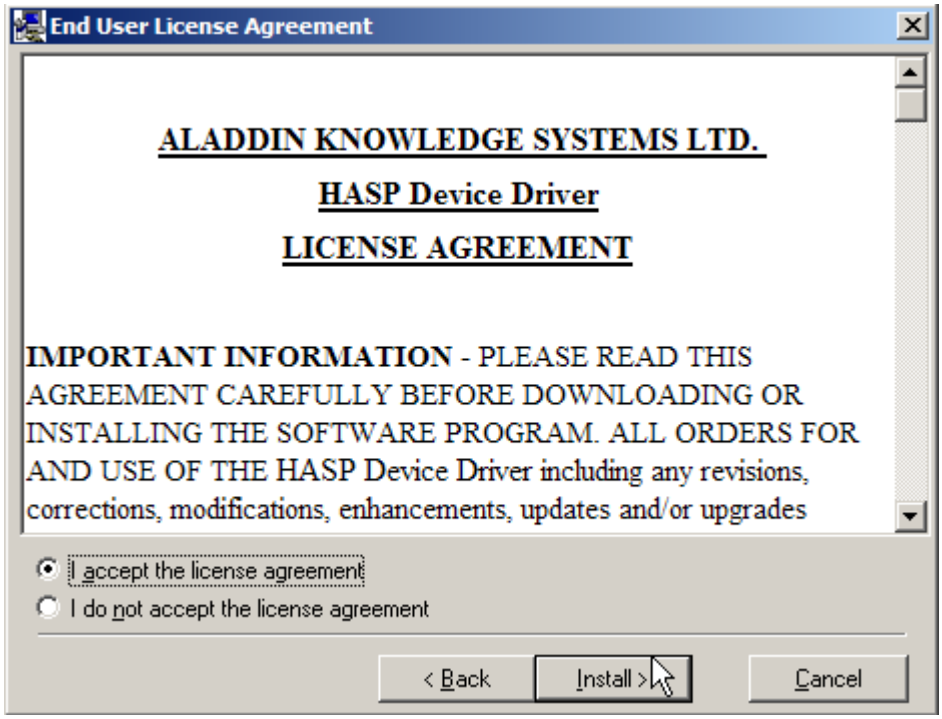
8. Click **Install** to proceed with the installation.

9. Click **Finish** at the following screen to continue.



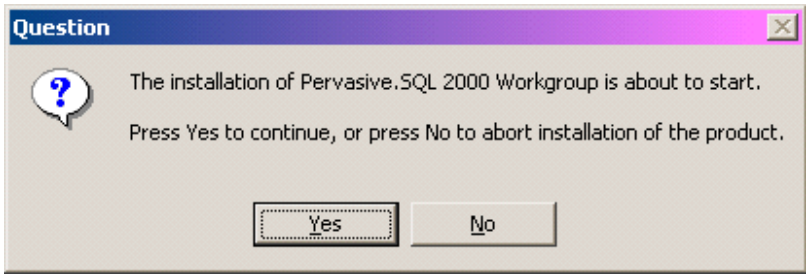


10. The program will start the installation process shown above.



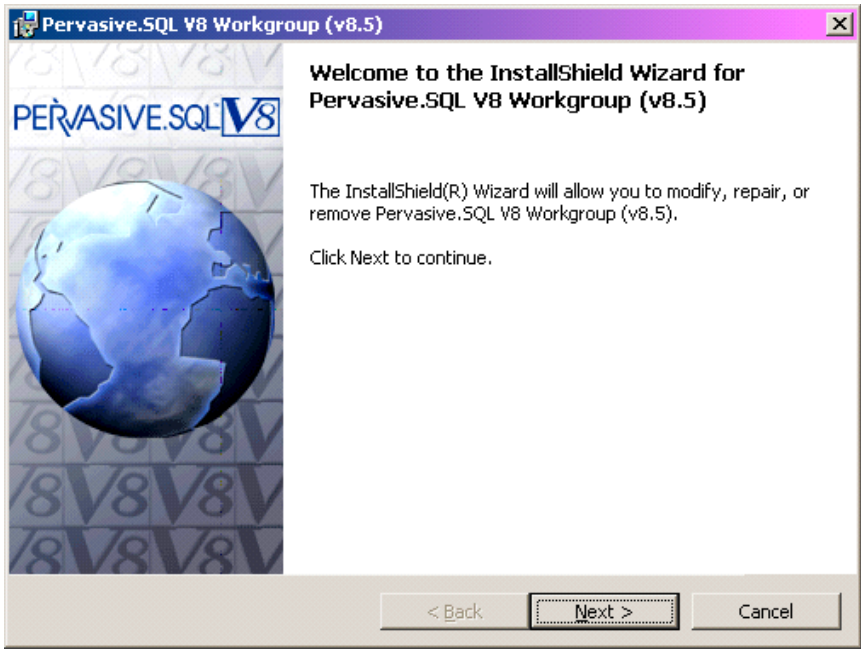
Continuing the installation process

Following the completed installation of Speed Net and the Magic Deployment module, the following screen will appear.



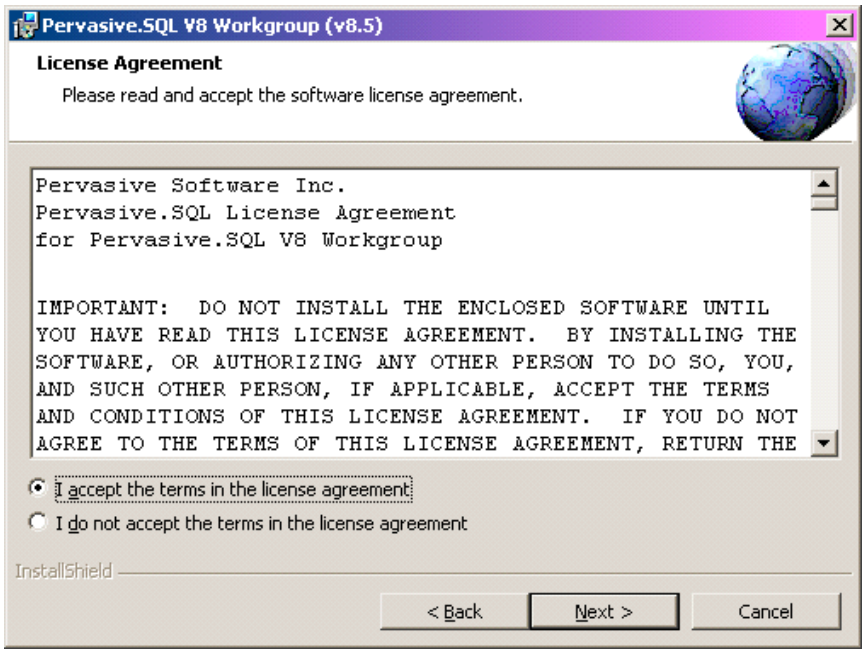
1. Click **Yes** to continue the installation, Click **No** to terminate this part of the installation.

2. On the following screen click **Next.** Click **Cancel** to terminate the **installation.**

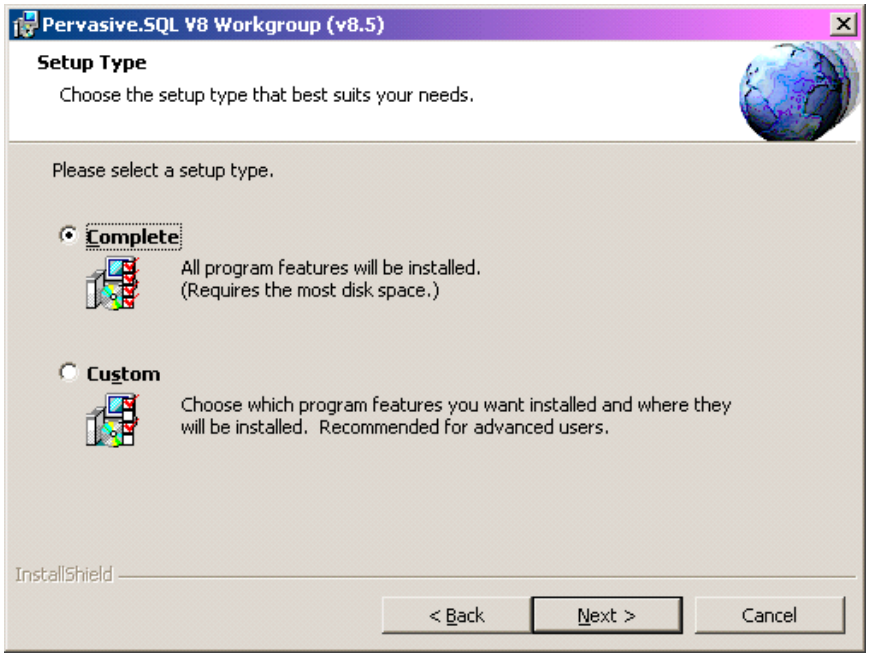


3. The installation procedure will display the Pervasive SQL License agreement. Review the terms of the license agreement.

4. Accept the term of the license agreement. Click **Next** to continue.

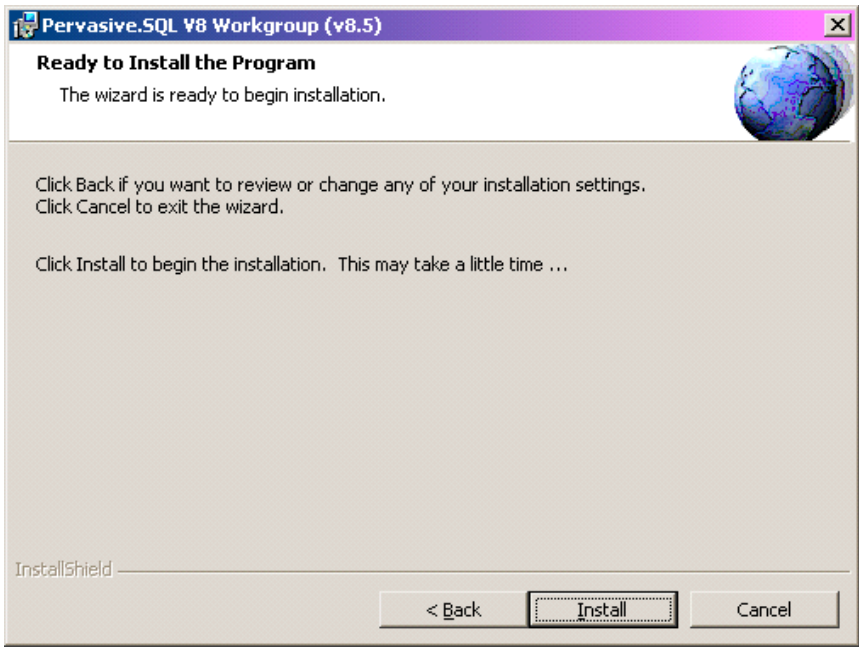


5. At the following screen select **Complete** as the installation option.

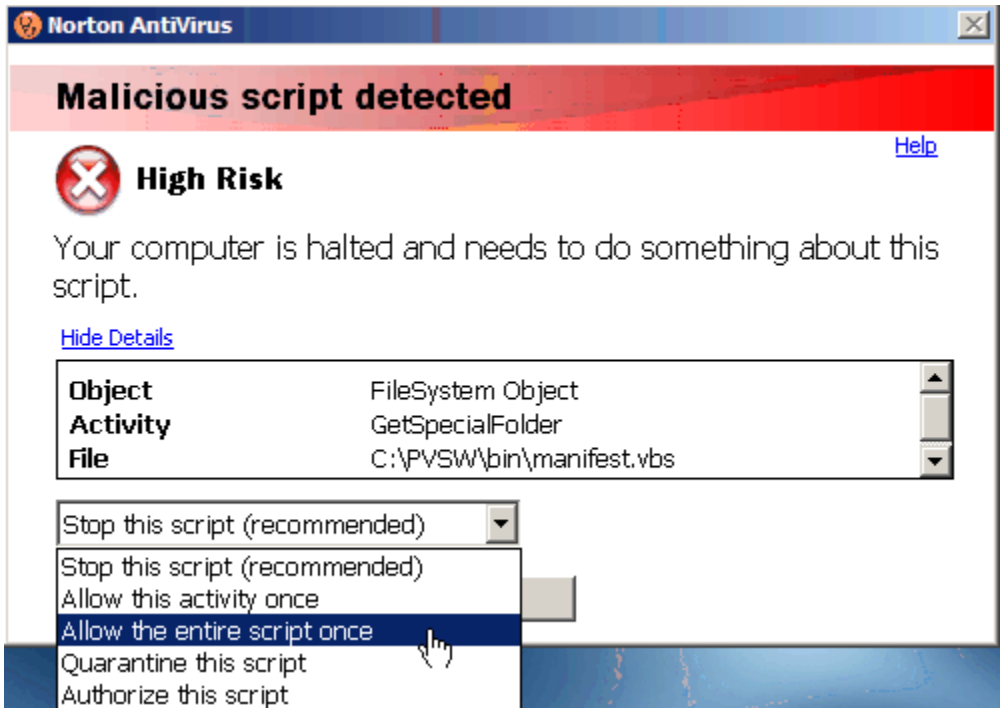


6. Click **Next** to continue.

7. Click **Install** on the following screen to continue.

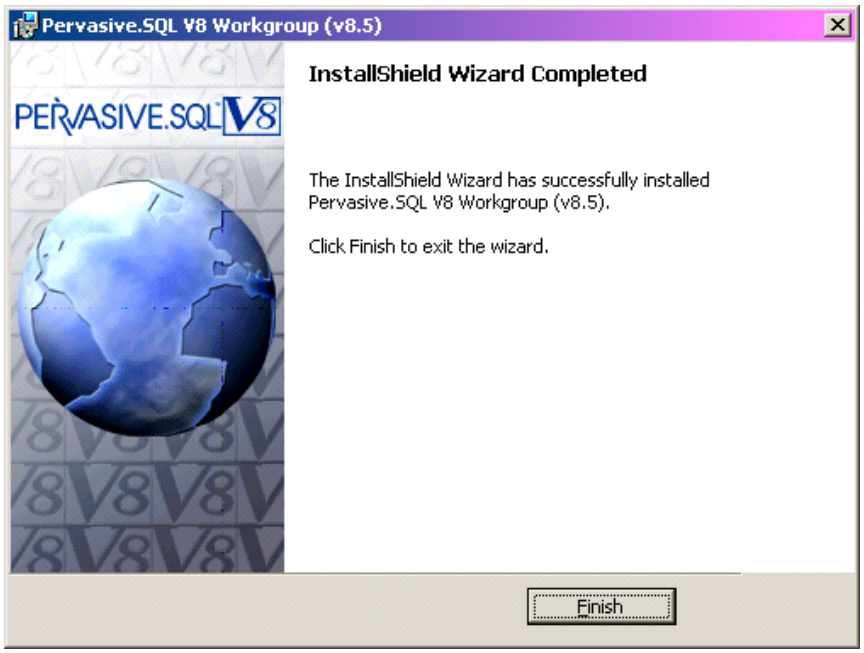


8. Before the completion of the Pervasive SQL installation the following screen may appear if you did not turn off your Anti Virus and/or Spyware Software.



9. Select “Allow the entire script once” to proceed.

WARNING: Failure to select the proper recommended action may cause the Pervasive SQL software to not run correctly.



10. Click **Finish** to complete this part of the installation.

Pervasive SQL Registration

After completion of Speed Net, Magic Deployment and the Pervasive SQL data base the following registration screen will appear. Follow the steps to register Pervasive SQL using the online or off line procedure.

It is not a requirement to register Pervasive at this time.

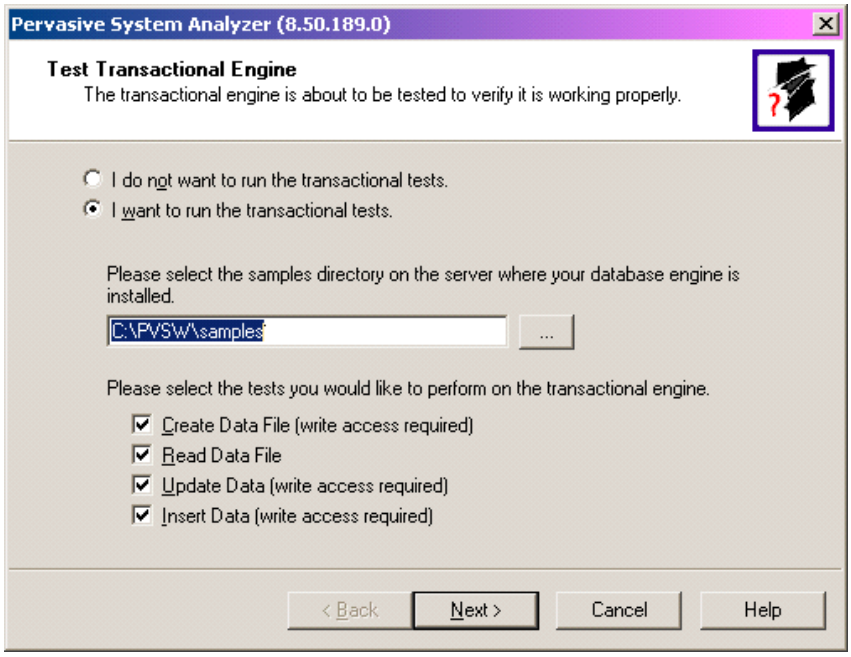
CLICK on the "**X"** to close the window.

Pervasive System Analyzer

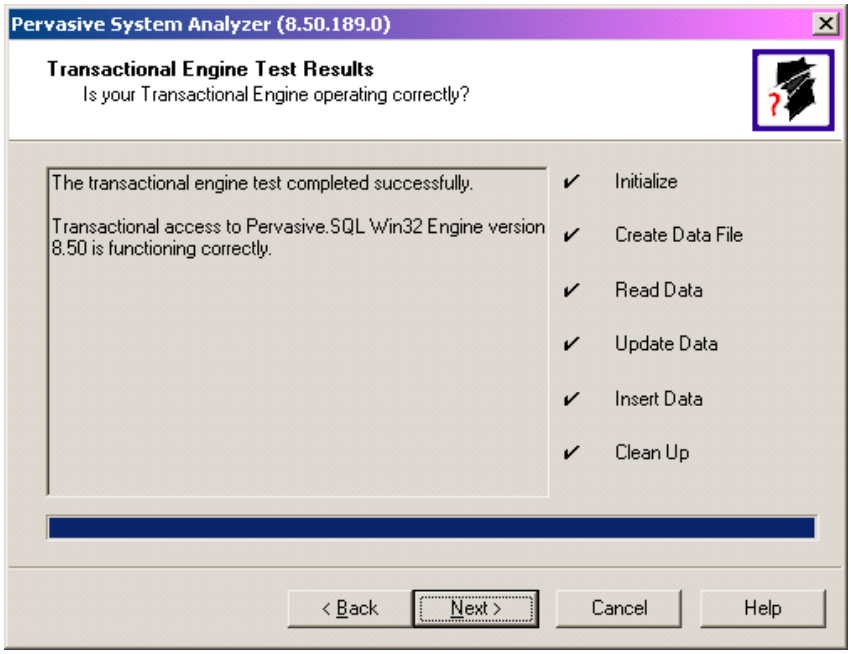
After the completing the Pervasive SQL installation and registration is completed, Pervasive will run a series of simple test to verify that the installation of Pervasive was successful. **It is highly recommended that you run these test.**

If you wish to bypass the test then select the **"I do not want to run the transactional test"** and click **Next** or just click **Cancel.**

1. At the following screen select **" I want to run the transactional tests**"

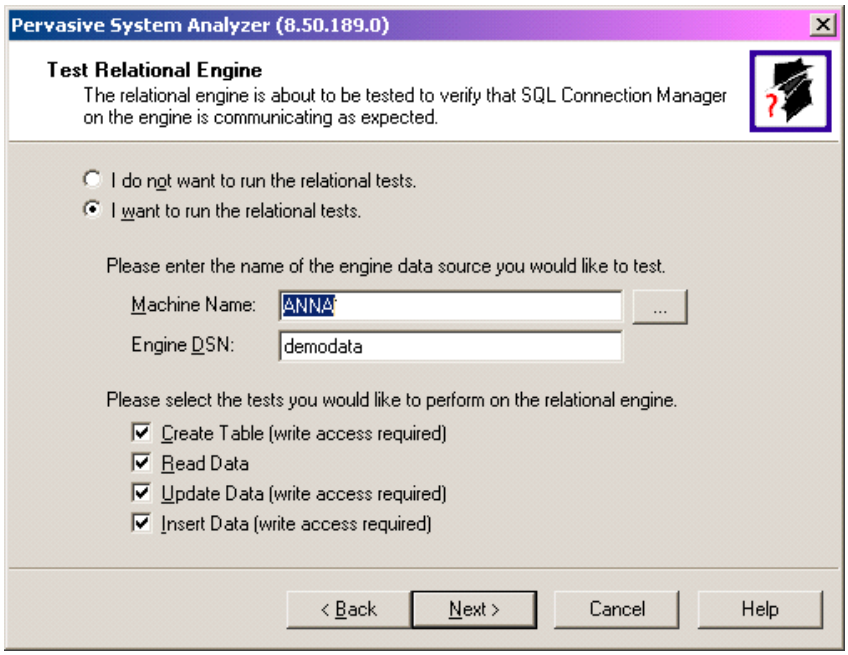


2. Click **Next** to continue. If you wish to bypass the test click **Cancel.**



3. After completion of the transactional test. Click **Next** to continue.

Pervasive will complete the first set of test and then open the following window to run the Relational Test. Select **" I want to run the relational test"** and click **Next** to continue. If you wish to bypass the test **Select** the **"I do not want to run the relational test"**.



4. Click **Next** to run the relational test or click **Cancel** to end the test.

5. At the following window click **Finish** to complete the test process and end the install program.

Completing the Installation –Manually Installing the Security Key

The following steps should be used if you have to reload the HASP drivers.

The installation of Speed Net 4.0 requires the user to install the HASP USB security device drivers. Failure to complete this part of the installation will prevent the software from running correctly.

1. Insert the USB security key into an available USB slot on the PC.

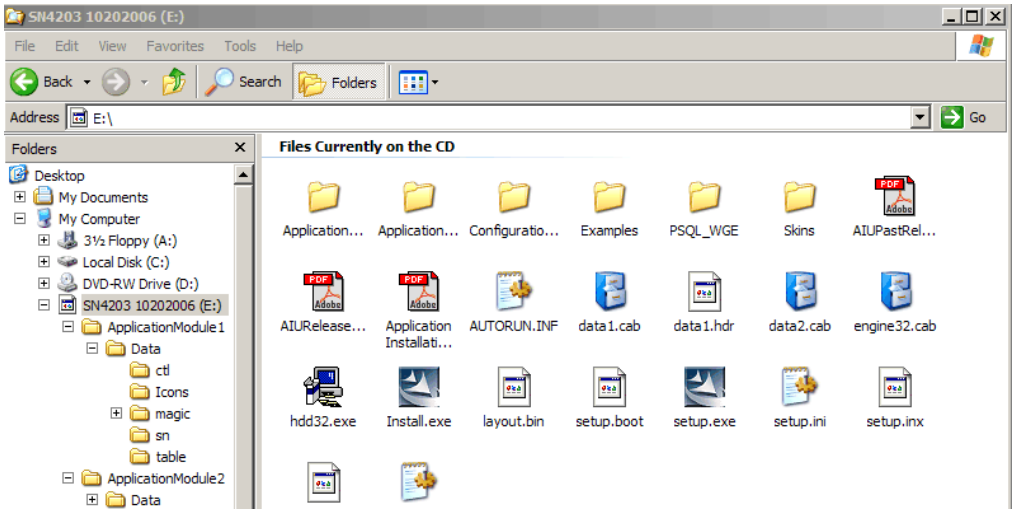
2. Windows should detect the security key and alert you that new hardware has been found.

3. Click **Close** and **DO NOT LOAD** the Windows Drivers at this time; follow the steps below to load the correct drivers.

Manually Installing the HASP Security Key device drivers.

If you need to reinstall the HASP key Drivers you may do so by following these steps.

1. Open Windows Explorer to show the contents on the Speed Net CD.



4. Locate the program hdd32.exe and double Click it to start the install process

5. The HASP Security Key driver installation will begin.

6. Click **Next** to continue, click **Cancel** to terminate the installation of the HASP Security Key driver installation.
7. Following the installation of the driver for the HASP security key, click **Finish** at the following screen to finish the installation of Speed Net 4.0

8. Restart the computer to finish the installation process.

2

INTRODUCTION

- Introducing Speed Net 4.0
- General Editing
- Speed Net Menus and Icons
- Creating a Collector

CHAPTER 3

Introduction

The ***Speed Net 4.0*** system is a comprehensive consumption management control system that collects and analyzes data from ***SPEEDREAD'S*** automatic meter reading system. ***SPEEDREAD*** collects data from apartment communities, commercial buildings, condos, marinas and manufactured home communities into local Collectors. These Collectors are PC systems that include local storage as well as communication modems. ***Speed Net 4.0*** contacts these Collectors on demand or on a preset schedule, collecting multiple readings from each meter in the system.

The data retrieved by ***Speed Net 4.0*** from the Collectors are stored in "download layers" or "downloads". Each such download or layer reflects a "snapshot" of the status of the fixed network system at the time of the download. Each such snapshot includes current meter readings, consumption calculations, and transmitter and meter status codes.

The ***Speed Net 4.0*** system enables the monitoring company to maintain a data base of consumption information that is updated on a daily or more frequent basis. The consumption information includes customer record details as well as a history of consumption information. Based upon parameters set by the monitoring company, the system will analyze the information collected and logged in the data base for "events" that should be reviewed by the monitoring company (such as suspected leakage, stopped meters, and so on).

This manual, which is presented in the format of system screen shots and step by step instructions, is intended as a reference guide to assist the user in operating the system for the collection and processing of information from one or more Collectors.

Certain functions defined herein are available only in the ***Speed Net 4.0*** **Premium** edition. Such **Premium** functions are labeled Premium.

Please refer to Chapter 2 of this manual for the ***Speed Net 4.0*** **Installation Instructions**.

Refer to the ***Speed Net 4.0*** **Guide Index** for the documentation of selected system procedures (e.g. Setting up a New Collector, Capturing Meter/Transmitter Data from the Field, Monthly Review Procedure, etc.).

General Editing

In ***Speed Net 4.0,*** movement between screens and selection of functions are generally accomplished through the use of the mouse (by clicking or in some cases double-clicking on a function button or displayed information). In addition to the mouse, certain function keys and control key combinations are active at selected times, and these function keys and control key combinations can oftentimes be utilized instead of the mouse.

In general, the standard mode is Browse mode (indicated by the word Query in the status line at the bottom right of the screen). In order to modify information in ***Speed Net***, the system must be in Modify mode (indicated by the word Modify in the status line). For screens where the only objective is to input information, the system will already be in Modify mode.

To enter Modify mode, there are two alternatives: (1) click on Modify in the Edit menu, or (2) hold down the Ctrl key and press M (Ctrl + M). To revert to Browse (Query) mode: (1) click on Query in the Edit menu, or (2) hold down the Ctrl key and press Q (Ctrl + Q).

In some screens, the option exists to add or delete entries. This can also be accomplished by pressing F3 to delete a line or record (confirmation will be required), or by pressing F4 to create or add a line or record. Once information has been added or edited on the screen, all of the changes made can be cancelled by pressing F2. There is also the ability to "zoom in" on information. For example, on the display of the Consumption report, double-clicking on the AMR No. of a line in the report will zoom in to the consumer record, where all data and history relating to the consumer can be reviewed. This zoom in process can also be accomplished by pressing F5.

Standard editing functions to copy, cut, and paste data are also available via control key combinations as follows: Ctrl + Ins = Copy; Shift + Del = Cut, and Shift + Ins = Paste. To undo the editing, hold down the Alt key and press Backspace (Alt + Backspace).

Three of the most used system functions are available via control key combinations:

Ctrl + F	Find Consumer
Ctrl + D	Display Consumer
Ctrl + V	View Collector

Throughout the system, pressing the Esc key causes the current window to close and returns the system to the previous screen. Refer to Appendix C for a list of function keys and control key combinations.

System Start Up

During the installation of Speed Net 4.0 the install program will install three Speed Net icons on your desk top. Before continuing you must verify the version of Speed Net you are using, FIELD, STANDARD or PREMIUM. You may then delete the two icons that do not pertain to your version.

Insert the HASP Security Key into any available USB Port.

Double click the SPEEDNET icon on your desk top to start the program. The following screen will be displayed.

Speed Net Menus and Icons

Accessing the individual modules is accomplished by clicking on the individual icons or the drop down menu items on the window title bar. See the following screens for details on the menu and icons.

Icon Selection

The following screen shots describe each icon. Activating the module is accomplished by clicking on the icon or using the short cut keys listed with each description.

Find Consumer (Ctrl + F) – Used to perform a global search for a consumer using names or other search parameters.

Display Consumers (Ctrl + D) – Used to list all consumers for the selected data collector

List Consumers – Used to list the consumers for the selected collector, allowing the administrator to edit the consumer's personal and local information.

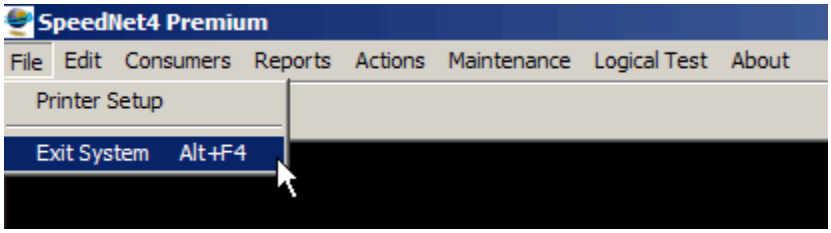
Collector View (Ctrl + V) – This module is used to view the data collector information for analysis. The collector view does not allow access to the consumer information nor does it allow access to the other data. COLLECTOR VIEW is primary module used in the **Speed Tech** version of Speed Net.

Exit (Alt +F4) - Exit the program. The user will be prompted for confirmation before exiting

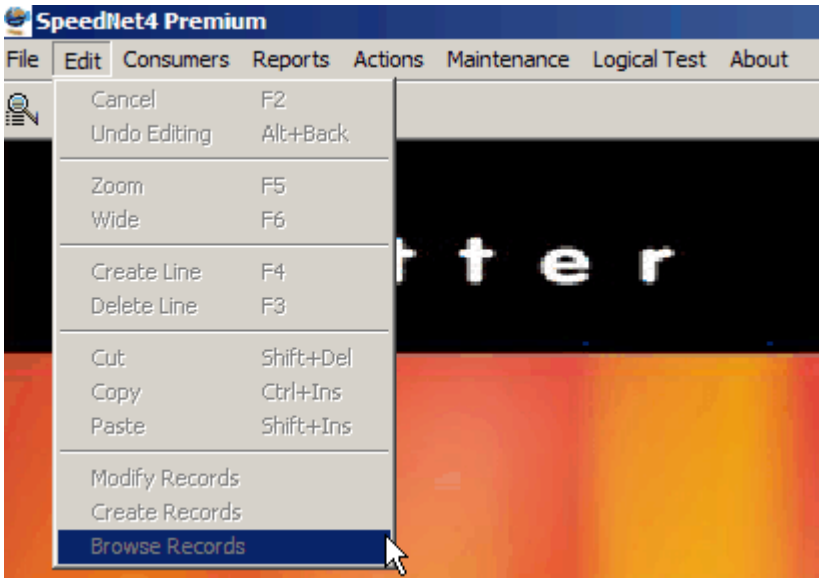
Top Level Menu Items

The top level menu items are designed to give access to the various Speed Net system reports and functions. The user may have access to only those functions and reports that are designed for the individual version the user has purchased the rights to use. The following screen shots show each menu item and describe the basic function of the menu selection. The description also includes short cut keys available to activate menu items.

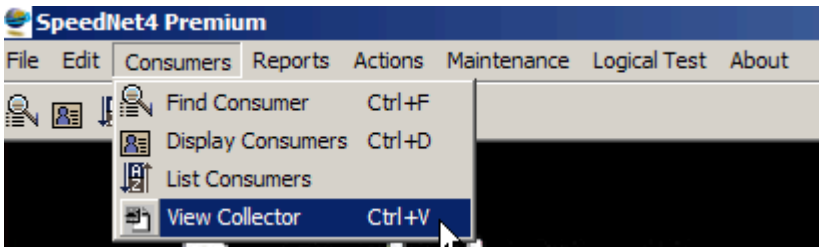
For detailed information on each menu item see the detailed sections on each menu item.



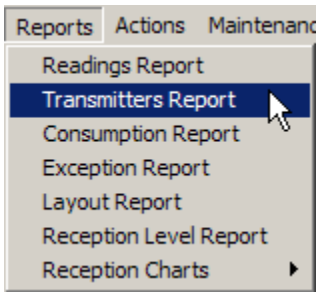
FILE (Alt + F) – Allows the user to access the Printer Setup options and System Exit (Alt + F4).



EDIT (Alt + E) – Allows access to various editing functions for data entry and/or updates. Some options may only be available when a Speed Net Module is active.

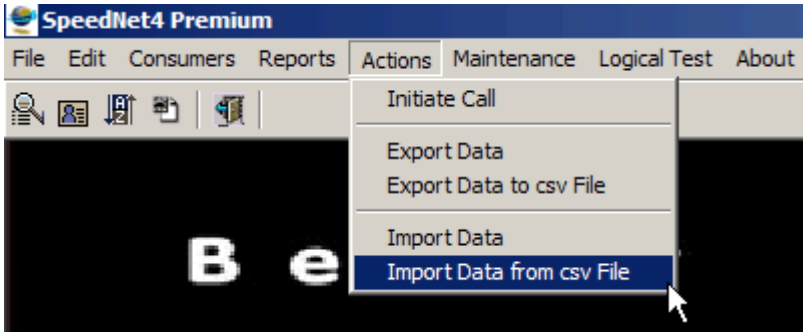


CONSUMERS (Alt + C) – This menu allows access to the same modules that are available from the Icon Menus.



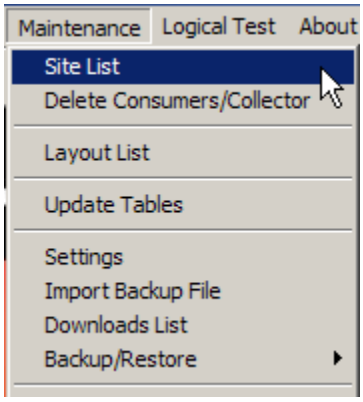
REPORTS (Alt + R) – The menu allows access to all of the report menus. Some of the reports have sub level reports that can be accessed for those reports.

See the section on each report for detailed information for each type of report available. Some reports are only available in the Premium version



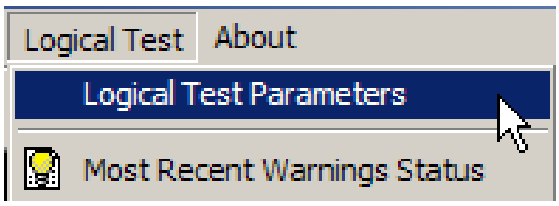
ACTIONS (Alt + A) – The Action menu allows the user to perform certain task that may require the importing or exporting of data to and from Speed Net.

This menu also includes the function to initiate a connection to a data collector.



MAINTENANCE (ALT + M) - The Maintenance menu is used to perform tasks that are associated with system maintenance.

The user can update collectors, add collectors or delete collectors, update System Tables or change some system settings. Some options are only available in the Premium version.



LOGICAL TEST (Alt + L) – The Logical Test menu is only available in the Premium Version of Speed Net. The user can change logical test parameters, perform system analysis based on logical test or get reports on system Exceptions. For details on the Logical Test module please see Chapter 13, Logical Test.

CHAPTER 4

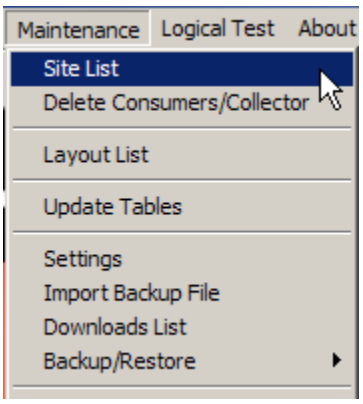
Creating a Data Collector

You are not required to create a Data Collector to use the View Collector Module or to download a collector with a modem or use the Direct Connect method.

Before you can begin using some of the various reports and modules in Speed Net 4 you must first create and download a data collector.

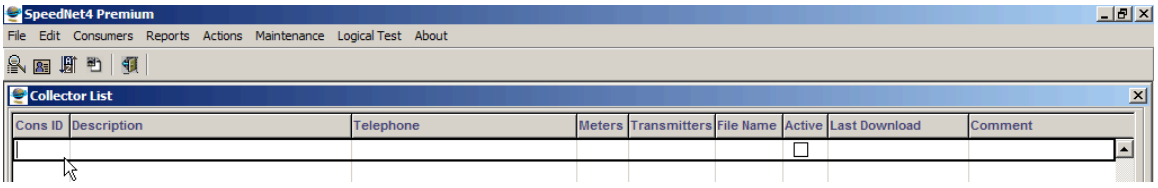
This procedure requires the user to set up the collector information in advance to create the list which also creates the storage files.

Setting up the Data Collector Information- All Versions

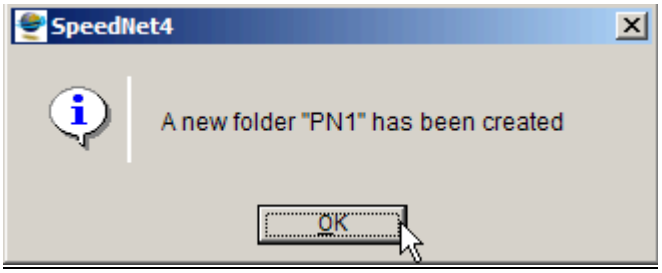


1. Click on **Maintenance** on the top menu item, and then click **Site /Collector List**.

2. The following screen will open.

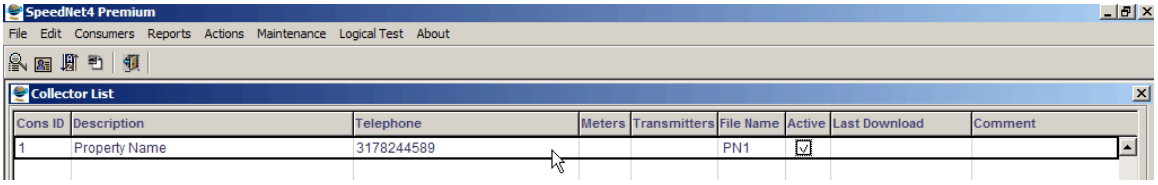


3. Using your mouse click in the field **CONS ID**. If no other collector has been created then enter a 1 for this collector ID. Subsequent collectors should be numbered sequentially.
4. **Press** the **TAB** key, or use the mouse to select the next field, **Description.**
5. Enter a name or location description for this collector. Typical descriptions are the property name or location.
6. **Press** the **TAB** key or use the mouse to select the next field, **Telephone**.
7. Enter the complete telephone number that will be dialed to download this collector. You should also include access numbers (i.e. the number 9) required to access an outside line and any additional codes or numbers that will be required for long distance.
8. **DO NOT** Enter any data in the **Meters Field** at this time.
9. **DO NOT** Enter any data in the **Transmitters Field** at this time.
10. Click **Exit** at the File Name prompt window.
11. Use the mouse to select the field **File Name**.
12. Enter a unique file name for this property. File names **can not exceed** more than three alphanumeric characters. The characters can be either lower case or upper case. You should verify that the file name is unique; otherwise the software may overwrite any existing data you had previously downloaded under the existing file name. Examples of file names: AB1, A12, ABC.
13. Once you have entered the file name and as soon as you leave the field the following message will appear. Click "**OK**" to continue.



14. Press **TAB** or use the mouse to select the next field, **Active.**
15. If you want to place this collector into the active queue for collectors to be called on the automated download times, you must place a check in the Active Box.
16. The last two fields "Last Download" and "Comment" are updated when Speed Net downloads the property.

When you are finished your Collector List should look similar to the screen shown below.



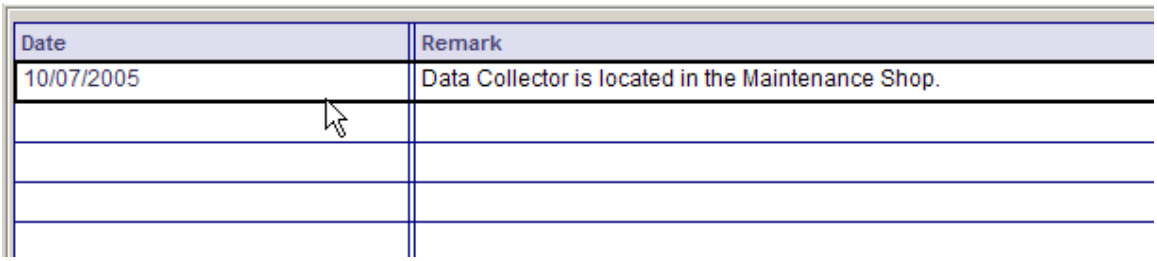
The Collector List – Remarks/Notes Table

The Collector List screen has a Notes Table at the bottom of the screen. This table is used to show the "Collector Info" data. This data is created and uploaded to the collector for retrieval by the end user. This update is detailed in a later section.

The Collector List – Remarks Table can also be used to enter information about the property or site. Typical entries are Data Collector Location, Property Contact info and other information that may be used to maintain the collector.

To use the Notes Table, Click on the first available Field under REMARK. The program will time stamp the entry for you. Enter the information in the field. Only one entry per day is allowed.

Data entered in this table can be used to populate the Collector Info fields for the first time. Only one entry per day is allowed.



For details on how to publish this collector info to a working collector see the section on Maintenance.

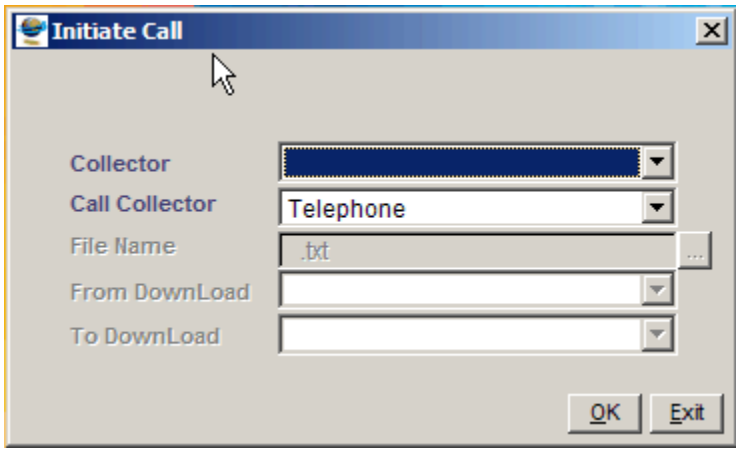
Completing the Data Collector setup

The next steps in the collector setup are to download the initial data file via a modem or using a direct data cable connection or to import an existing file from another source. For this exercise we will use the Telephone download method.

NOTE: The direct data cable connection is only supported with Data Collectors installed or updated to COMMSRV Version 2.08 or later. See Chapter 5 for details on Direct Connections

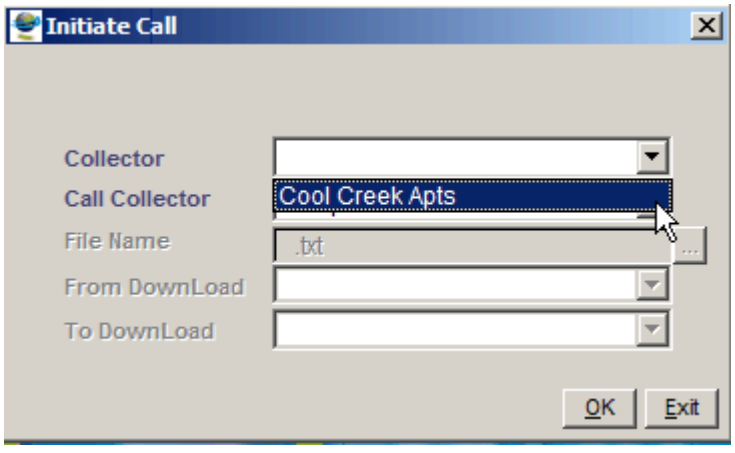
Note: Existing files include older Speed Net files, Files downloaded via collector view, or files that were downloaded via Quick View.

Downloading Via Modem

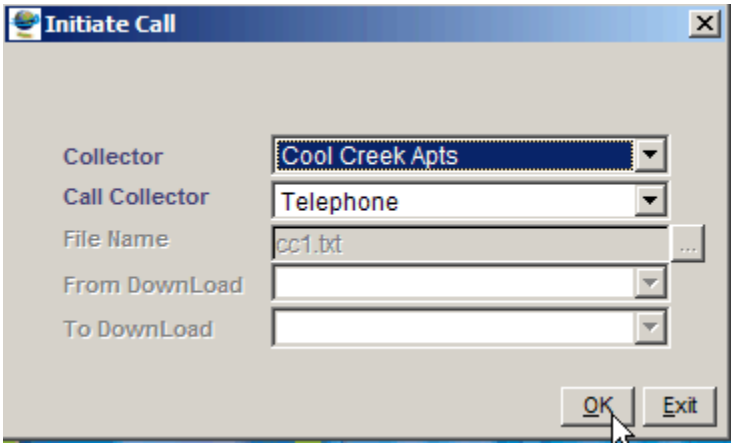


1. On the Top Menu click on **Actions**, then click on **Initiate Call**.

2. The following screen should appear.



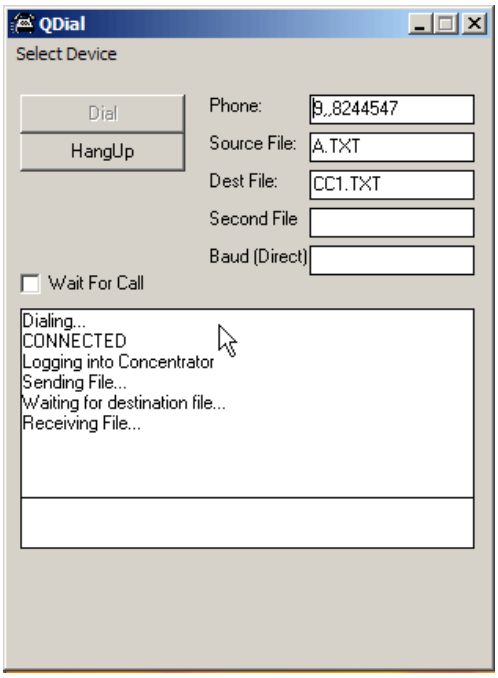
3. Click the Collector drop down menu, and then select the data collector you created in the last section. *See the screen to the left.*



4. If **Telephone** is not listed in the Call Collector field, then click on the drop down menu to select **Telephone**.

Once you have made these selections the Initiate Call window should look like the screen above. At this time the software will automatically place the filename in the File Name window. The From Download and the To Download windows will be blank.

5. Click on **OK** to start the call up procedure or click **Exit** to cancel the download.



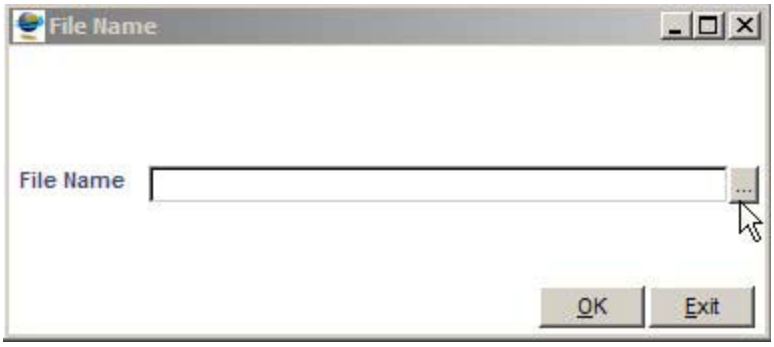
6. Once you start the download process the QDIAL window should open on the upper left side of the screen. *See screen to the left*. At this time you can monitor the download process.

7. At anytime you can terminate the download by clicking on the **Hang Up** button. Otherwise you can monitor the download process.

Finalize the collector creation process

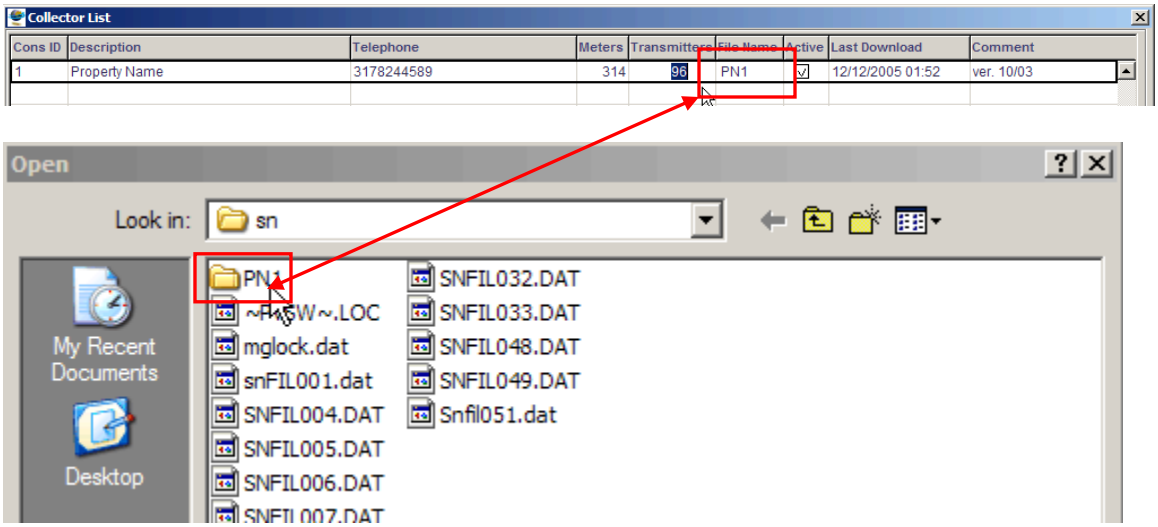
Once the download completes you will need to finalize the collector creation by processing the first download.

1. Click **Maintenance** on the upper menu, and then click **Collector/Site List**.
2. After completing the download the program will place the download date and time in the Last Download field on the data collector you called.
   NOTE: If for any reason the download failed or there is no date in this field then return to the Completing Data Collector setup and repeat the steps.
3. Using the mouse click in the **METERS** field and enter the total number of meters for the data collector. Press **TAB**
4. On the following screen click on the **Browse** button to select the downloaded file from the previous steps.

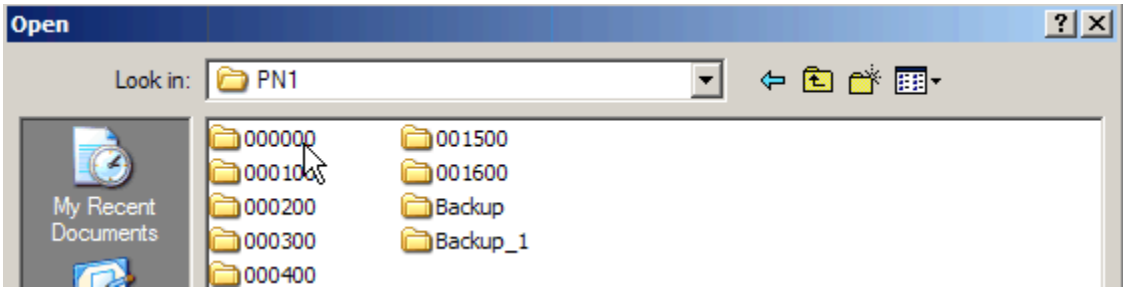


Note: The downloaded reading files are downloaded in layers to the directory file name that you created in the first steps during Create a Data Collector.

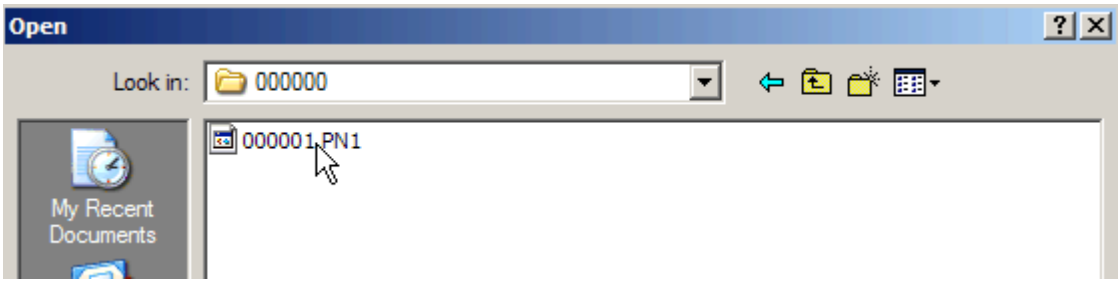
5. Locate the folder that has the same file name prefix you entered when you set up the data collector, see the screens below.



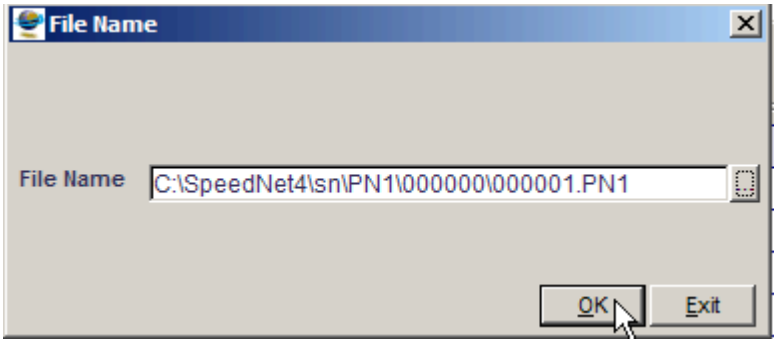
6. Double click the folder to show the sub folders created during the setup process.



7. Double click the “000000” folder to open it.

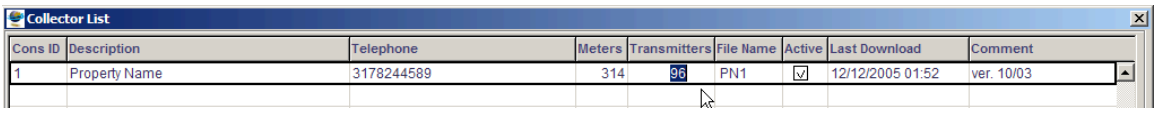


8. Select the first file in the folder and then click **Open**. At the following screen Click OK.



9. Speed Net will now process the existing download to start the creation process for the data collector.
10. The final step in the **Initial Setup** process is to reprocess the data.
11. Click on **Actions** then **Initiate Call.**
12. Select the property from the drop down list.
13. In the Call Collector drop down list select **"Reprocess".**
14. Click **"OK"** and the data will be finalized for the first property.

Once the steps outlined above are finished your Collector List should look similar to the one shown below.



The last two fields in the Collector List should now show some data. The Download Date should show the date of the download and the Comment Field should show the current software version loaded on the data collector.

Each subsequent download will update the Download Date and if the data collector software is updated it will change to the new version.

3

VIEW COLLECTOR

- View Collector
- Downloading with View Collector
- Editing and Uploading files
- View Collector Reports

CHAPTER 5

View Collector

The View Collector Module is a tool that enables the user to quickly and easily download collector data for review and analysis. View Collector is the primary interface used in the **Speed Tech** version of Speed Net 4.0. The module is also usable from within the STANDARD and PREMIUM versions of Speed Net.

View Collector is not only used to evaluate downloads that were retrieved within Speed Net's Standard and Premium versions; it can be used as a download tool for the field technician.

Data that has been downloaded can be reviewed at the level of each meter connection, with the facility to sort the downloaded data according to a number of data parameters. Data may also be analyzed in any one of the download layers that have been previously retrieved by ***Speed Net*** and stored within the ***Speed Net*** data base.

Data may also be compared between any two downloads or between an historical download and one retrieved by telephone connection to the Collector.

Collector data can be exported to text (delimited) HTML, or XML files.

Telephone and Direct Connection

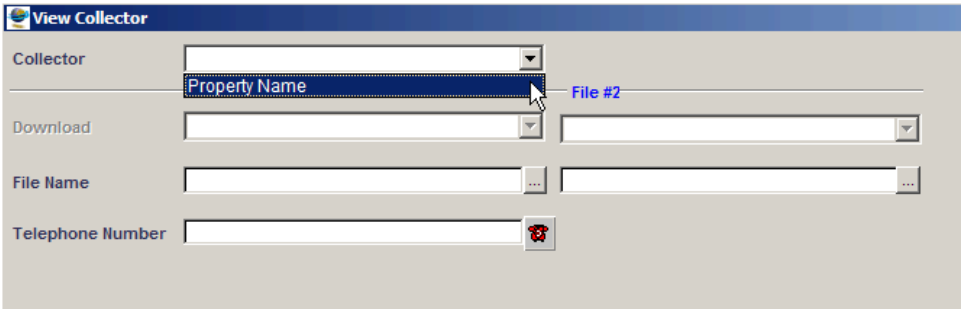
View Collector can be used to retrieve system data including reading data, parameter files, sava.bad files and data+addresses. The technician can use two methods to retrieve this information:

Telephone – By using a standard phone line and dialing into the collector the technician can retrieve the file or perform system maintenance detailed later in this section.

Direct Connect – Using a Null Modem cable which is a standard Serial Cable or a USB to Serial Adaptor Cable, the technician can disconnect the modem cable attach the serial cable and retrieve system data as well as perform system maintenance described in this section. ***This Direct Connection requires that the Data Collector has Version 2.08 or later installed on it.***

Open View Collector

1. Open View Collector by clicking on the **View Collector icon** or selecting the top level menu item **Consumers** and clicking **View Collector**.
2. At the following screen, click on the **Collector drop down list** for the names of the properties and then select the data collector name you want to review.



Reviewing 1 or 2 download files

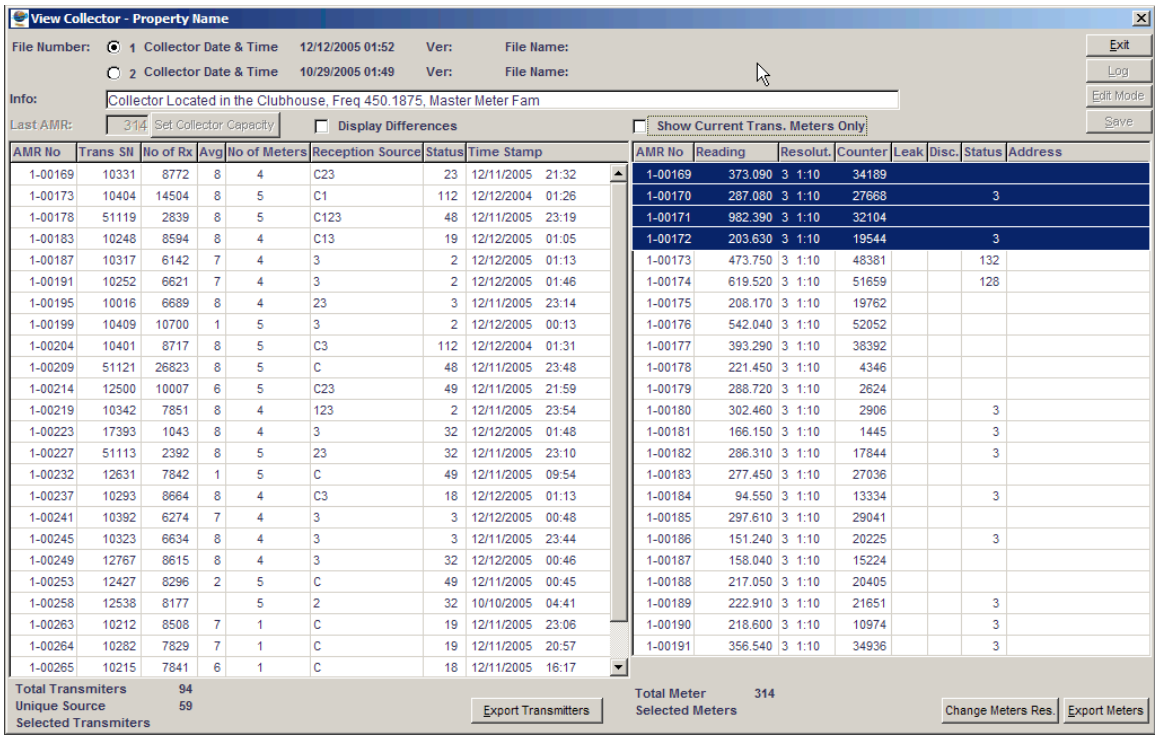
View Collector allows the technician to open two download files simultaneously to analyze the difference in reading information between the download dates. ***Two files are not required to open View Collector and view data.***

The user has the option to open a downloaded file or to review other files that may have been downloaded from Quick View, or other downloaded sources or sava.bad files that were recovered directly from collectors. For this example we will use download files from within View Collector or Speed Net.

3. Click on the **drop down selection** for **File #1** and **select** any of the download dates listed. If all the dates are not shown click on the scroll bar to scroll down.

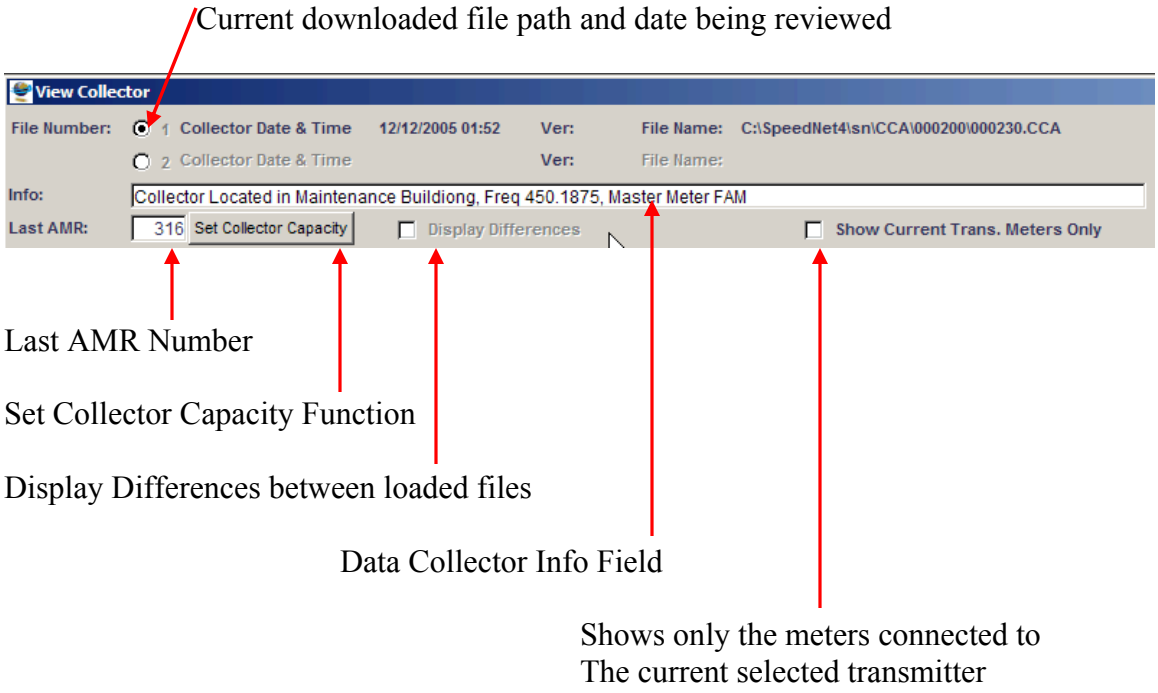
Note: The first file selected should have the most recent date so the comparison analysis is correct.

4. Click on the drop down selection for **File #2** and select any of the downloaded dates listed.
5. Click **OK** to display the View Collector screen as shown below.

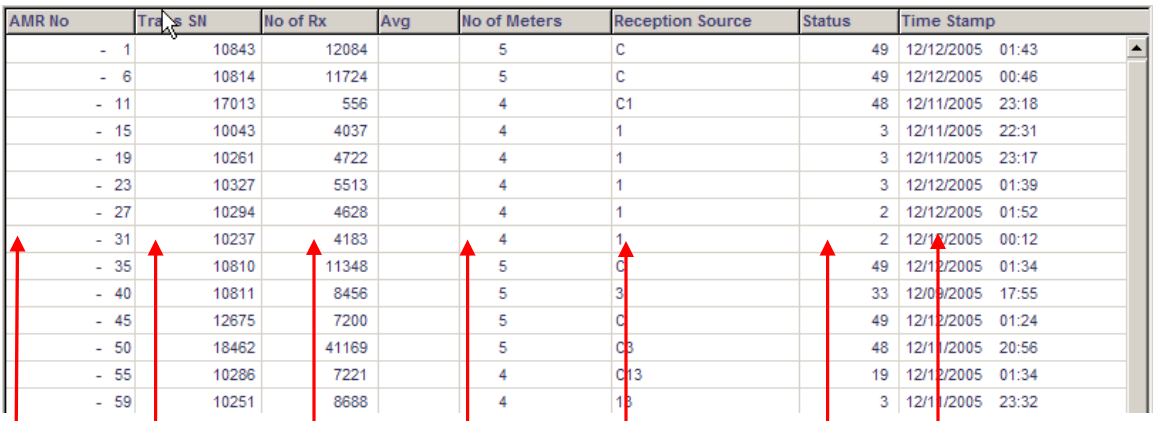

View Collector - Property Name
File Number: 1 Collector Date & Time 12/12/2005 01:52 Ver: File Name:
2 Collector Date & Time 10/29/2005 01:49 Ver: File Name:
Exit
Log
Edit Mode
Save
Info: Collector Located in the Clubhouse, Freq 450.1875, Master Meter Fam
Last AMR: 314 Set Collector Capacity
Display Differences
Show Current Trans. Meters Only
AMR No | Trans SN | No of Rx | Avg | No of Meters | Reception Source | Status | Time Stamp
1-00169 10331 8772 8 4 C23 23 12/11/2005 21:32
1-00173 10404 14504 8 5 C1 112 12/12/2004 01:26
1-00178 51119 2839 8 5 C123 48 12/11/2005 23:19
1-00183 10248 8594 8 4 C13 19 12/12/2005 01:05
1-00187 10317 6142 7 4 3 2 12/12/2005 01:13
1-00191 10252 6621 7 4 3 2 12/12/2005 01:46
1-00195 10016 6689 8 4 23 3 12/11/2005 23:14
1-00199 10409 10700 1 5 3 2 12/12/2005 00:13
1-00204 10401 8717 8 5 C3 112 12/12/2004 01:31
1-00209 51121 26823 8 5 C 48 12/11/2005 23:48
1-00214 12500 10007 6 5 C23 49 12/11/2005 21:59
1-00219 10342 7851 8 4 123 2 12/11/2005 23:54
1-00223 17393 1043 8 4 3 32 12/12/2005 01:48
1-00227 51113 2392 8 5 23 32 12/11/2005 23:10
1-00232 12631 7842 1 5 C 49 12/11/2005 09:54
1-00237 10293 8664 8 4 C3 18 12/12/2005 01:13
1-00241 10392 6274 7 4 3 3 12/12/2005 00:48
1-00245 10323 6634 8 4 3 3 12/11/2005 23:44
1-00249 12767 8615 8 4 3 32 12/12/2005 00:46
1-00253 12427 8296 2 5 C 49 12/11/2005 00:45
1-00258 12538 8177 5 2 32 10/10/2005 04:41
1-00263 10212 8508 7 1 C 19 12/11/2005 23:06
1-00264 10282 7829 7 1 C 19 12/11/2005 20:57
1-00265 10215 7841 6 1 C 18 12/11/2005 16:17
AMR No | Reading | Resolut. | Counter | Leak | Disc. | Status | Address
1-00169 373.090 3 1:10 34189
1-00170 287.080 3 1:10 27668 3
1-00171 982.390 3 1:10 32104
1-00172 203.630 3 1:10 19544 3
1-00173 473.750 3 1:10 48381 132
1-00174 619.520 3 1:10 51659 128
1-00175 208.170 3 1:10 19762
1-00176 542.040 3 1:10 52052
1-00177 393.290 3 1:10 38392
1-00178 221.450 3 1:10 4346
1-00179 288.720 3 1:10 2624
1-00180 302.460 3 1:10 2906 3
1-00181 166.150 3 1:10 1445 3
1-00182 286.310 3 1:10 17844 3
1-00183 277.450 3 1:10 27036
1-00184 94.550 3 1:10 13334 3
1-00185 297.610 3 1:10 29041
1-00186 151.240 3 1:10 20225 3
1-00187 158.040 3 1:10 15224
1-00188 217.050 3 1:10 20405
1-00189 222.910 3 1:10 21651 3
1-00190 218.600 3 1:10 10974 3
1-00191 356.540 3 1:10 34936 3
Total Transmiters 94
Unique Source 59
Selected Transmiters
Export Transmitters
Total Meter 314
Selected Meters
Change Meters Res.
Export Meters

Getting to know the View Collector screen

The View Collector Screen is divided into tables. The left side of the View Collector screen shows the transmitters that have been programmed in the collector. The right side of the View Collector screen shows the utility meters that are installed at the location, including those not connected to transmitters.



Transmitter Data



AMR No	Trans SN	No of Rx	Avg	No of Meters	Reception Source	Status	Time Stamp
- 1	10843	12084		5	C	49	12/12/2005 01:43
- 6	10814	11724		5	C	49	12/12/2005 00:46
- 11	17013	556		4	C1	48	12/11/2005 23:18
- 15	10043	4037		4	1	3	12/11/2005 22:31
- 19	10261	4722		4	1	3	12/11/2005 23:17
- 23	10327	5513		4	1	3	12/12/2005 01:39
- 27	10294	4628		4	1	2	12/12/2005 01:52
- 31	10237	4183		4	1	2	12/12/2005 00:12
- 35	10810	11348		5	C	49	12/12/2005 01:34
- 40	10811	8456		5	3	33	12/09/2005 17:55
- 45	12675	7200		5	C	49	12/12/2005 01:24
- 50	18462	41169		5	C3	48	12/11/2005 20:56
- 55	10286	7221		4	C13	19	12/12/2005 01:34
- 59	10251	8688		4	13	3	12/11/2005 23:32

Time Stamp – Last received reception date and time.

Status – See below for details

Reception Source – This shows the reception source the last time the STx unit was received. Source does not show when 2 file are selected.

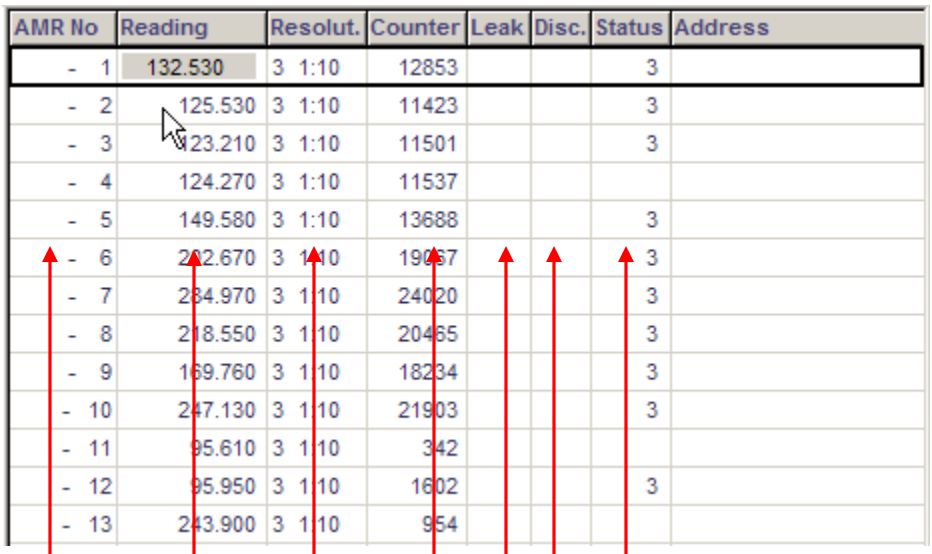
No of Meters – Total number of meters connected directly to this STx unit. This verifies if the STx is a multi port STx unit

No of RX – The number of receptions received at the collector for this STx unit.

Trans SN – The Unique 5 digit Serial Number of the STx unit assigned to the AMR location

AMR No – This is the AMR location were the transmitter is programmed in the data collector. Speed Net automatically assigns the Collector CONS ID to the AMR number to generate a unique AMR # for the SQL data base.

Meter Data



AMR No	Reading	Resolut.	Counter	Leak	Disc.	Status	Address
- 1	132.530	3 1:10	12853			3	
- 2	125.530	3 1:10	11423			3	
- 3	123.210	3 1:10	11501			3	
- 4	124.270	3 1:10	11537				
- 5	149.580	3 1:10	13688			3	
- 6	202.670	3 1:10	19067			3	
- 7	264.970	3 1:10	24020			3	
- 8	218.550	3 1:10	20465			3	
- 9	169.760	3 1:10	18234			3	
- 10	247.130	3 1:10	21903			3	
- 11	95.610	3 1:10	342				
- 12	95.950	3 1:10	1602			3	
- 13	243.900	3 1:10	954				

Status – Hex decimal info

Disc. – Indicates that the meter may be disconnected

Leak - Indicates a possible leak at the meter

Counter – The number of pulses collected from the meter. Encoded meters do not show pulses.

Meter Type – Shows the meter pulse resolution and multiplier.

Reading – The meter reading at the time of this download.

AMR No – This is the AMR location in the system where this meter is connected.

Additional Collector Information

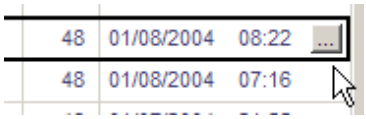
Selected files for viewing, select the file to view by clicking on the radio button.

Select this option box to compare the currently opened collector files you have selected for viewing.

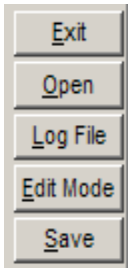
Total Transmitters- tells you the number of installed and programmed transmitters in the collector.

Unique Source – Tells you the number of the Total Transmitters that are being received by unique sources.

Total Meters – The total number of meters that are physically connected to installed STx units.



Browse Selector – Used to compare the two selected files for the AMR #.



Exit – Click to exit the View Collector Module.
Open – Click to close the current file and open another file.
Log File – Click to review the Collector event log.
Edit Mode – Click to place the data file into edit mode.
Save – Click to save the data file after you have made changes to the file for uploading.

Note: Log File, Edit Mode and Save buttons are only available when a collector file is opened using View Collector described in the section below, ***Download Directly with View Collector.***

Analysis and Reports

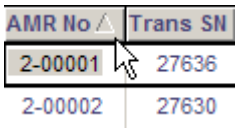
After downloading and selecting the files for viewing, the user has at his disposal various options to analyze the data as well as the ability to generate reports.

Sorting

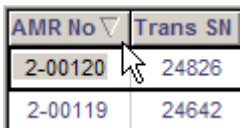
After selecting the files for viewing you can sort the data by clicking on any of the column headings. Clicking the column header the first time will sort the column in ascending order and clicking the second time will sort the column in a descending order.

Both the Transmitter Table and the Meter Reading table can be sorted independently of the other table.

Once sorted, the column header will display a small indicator to show which column the data is sorted by, as well as, the direction of the sort.



Column Sorted Ascending



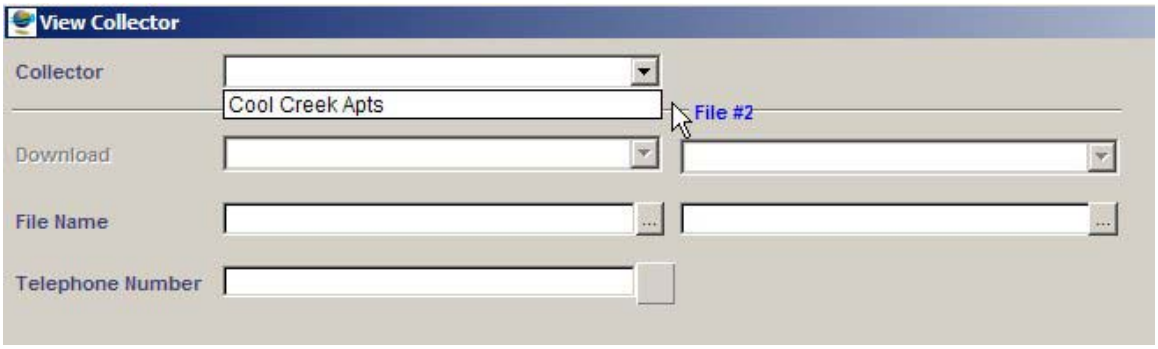
Column Sorted Descending

Viewing two downloaded data files in View Collector

Downloaded data may also be compared between any two downloads or between an historical download and one retrieved by connection to the Collector. This ability allows the user to analyze the data between dates and downloads to compare performance and troubleshoot system problems.

Open View Collector

1. Open View Collector is started by clicking on the **View Collector icon** or selecting the top level menu item **Consumers** and clicking **View Collector**.
2. At the following screen click on the **Collector drop down list** for the property name and then select the data collector you want to review.



3. Click on the drop down selection for **File #1** and select any of the download dates listed. If all the dates are not shown click on the scroll bar to scroll down.
   Note: The first file selected should have the most recent date so the comparison analysis is correct.
4. Click on the drop down selection for **File #2** and select any of the downloaded dates listed.
5. Click **OK** to display the View Collector screen.
6. Once the View Collector Screen is displayed you have the option to click on either one of the files listed and the screen will show the data that corresponds to each download.

Selected files for viewing, select the file to view by clicking on the radio button.

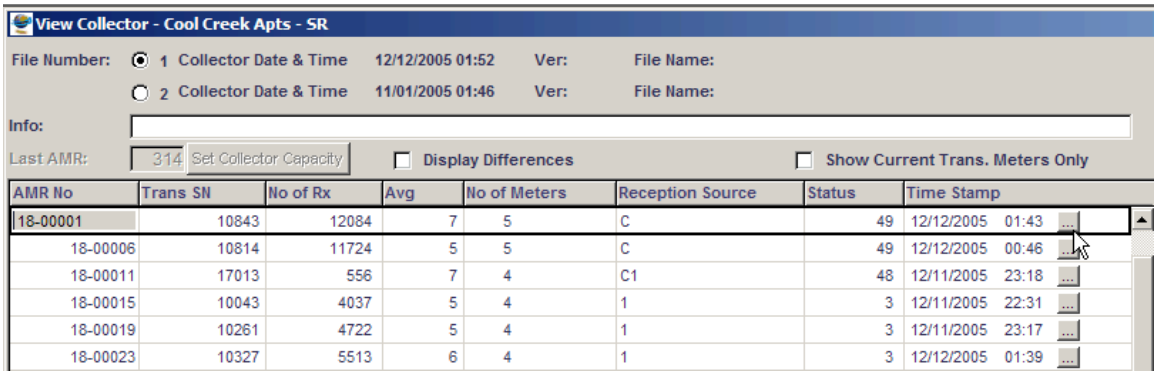
Display Differences

Selecting the **Display Differences** check box will display data comparison differences between the two downloaded files. The type of data that is compared includes

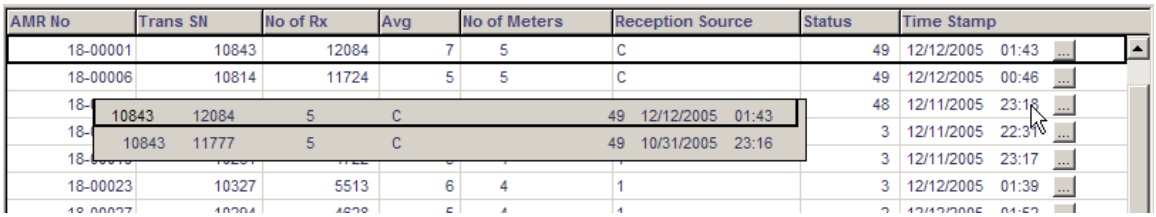
- **Transmitter Serial Numbers** – To see if a new transmitter was installed
- **No of RX** – To compare the number of received transmissions between the dates.
- **Reception Source** – To compare the source of receptions from download to download.
- **Consumption** – The Reading column will show consumption data between the dates of the loaded files.

The user also has the ability to select each individual line and compare the data in a small pop up window for analysis.

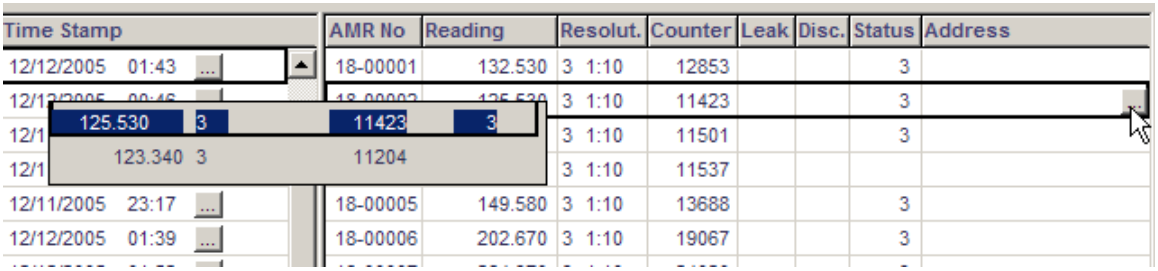
1. With the View Collector window open, click on any of the rows in the Transmitter Table or the Reading Table; see the screen below for reference.
2. Once a row has been selected, a small browse button will appear at the end of the row.



3. Click, on the browse button to open the comparison window for that selected AMR row.
4. The Comparison window will overlay the two downloads, one over the other so you can see the differences between the data.
5. Click anywhere in the table(s) to close the overlay window.



Transmitter Data Table showing the line comparison



Reading Data Table showing the line comparison

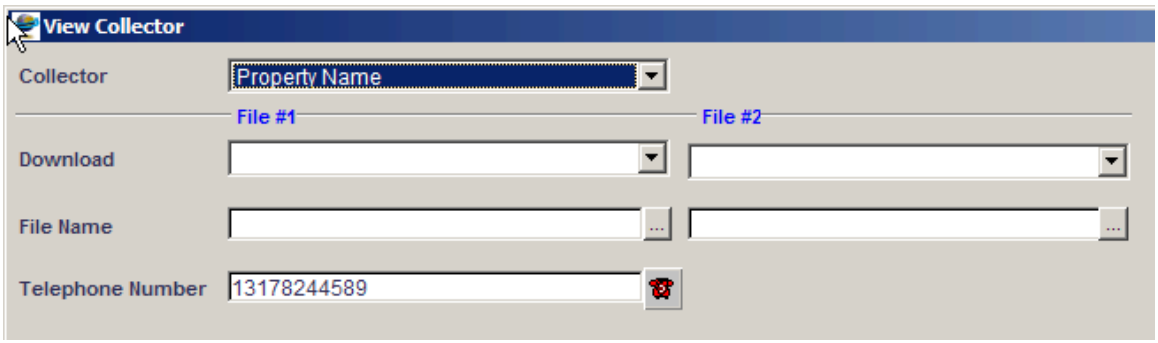
Downloading with a Modem in View Collector using the Collector List

The View Collector module is capable of supporting downloads directly, without the Standard or Premium versions of Speed Net. This ability to download directly is also available within the other modules and the steps are identical.

Downloading in View Collector does not require that the user set up a Collector as described in Chapter 4. Therefore the user may download any SpeedRead collector with the Speed Tech version of Speed Net with =out setting up a collector in the list.

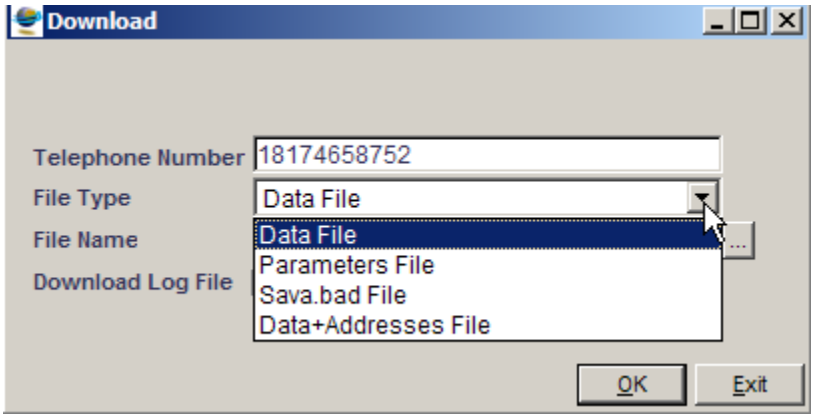
The following steps can be used if the collector has already been set up in the earlier section.

1. Click on the **View Collector** icon or click on the **Consumers** top menu item and select **View Collector**.
2. At the following screen click on the **drop down list for Collector** name and then **select** the data **collector** you want to download. If you have set up the collector as described in Chapter 4, the field Telephone Number will automatically display the phone number you will be calling.



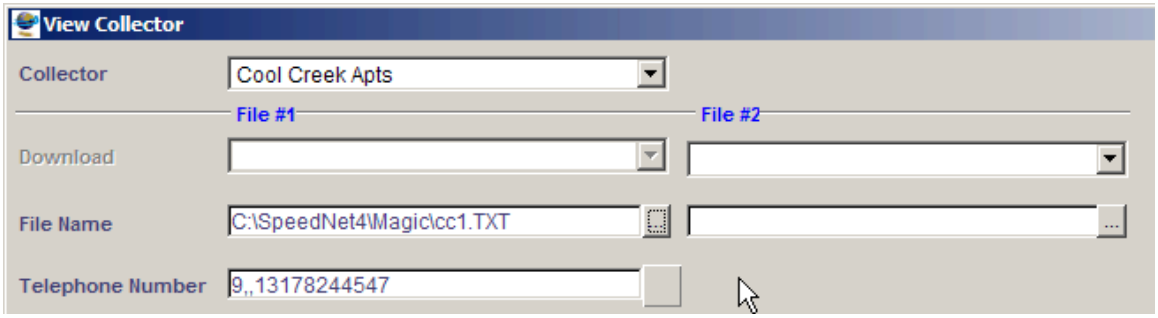
3. Click on the red **Telephone icon** button at the end of the telephone field to proceed. At the following screen you can make temporary changes to the phone number and you can also change the file name for the download.

Note: The default file path is created using the FILE NAME that was created in the Create Collector section. If you do not change the file path then the download will go to the default path as seen in the following screens.



Note: The View Collector module overwrites the download file during the download process. In order to save the downloaded files you should enter a new download name in the File Name field.

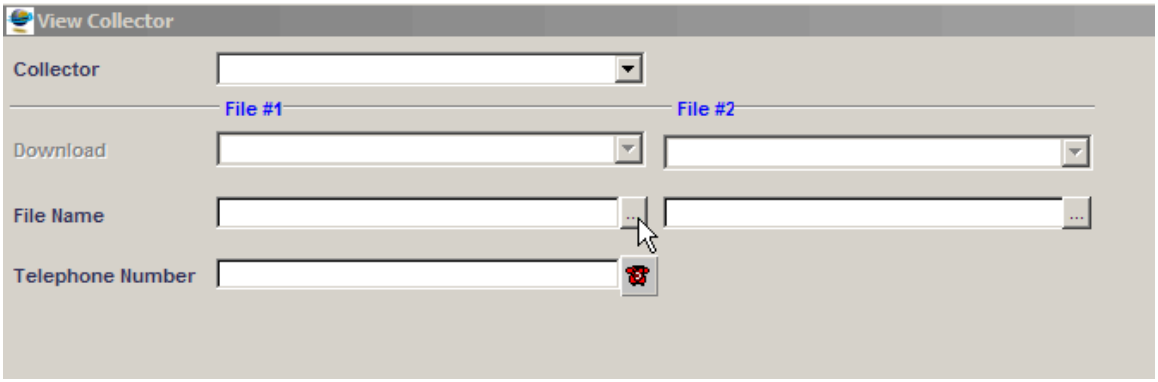
4. Select the Data File from the drop down list to download the data file.
5. Place a Check in the Download Log file check box to download the collector log file for review.
6. Click **OK** to begin the download.
7. After a successful download the following screen will display the file path and name. Click **OK** to open the file for viewing, or you can select another file for two file viewing as described earlier.



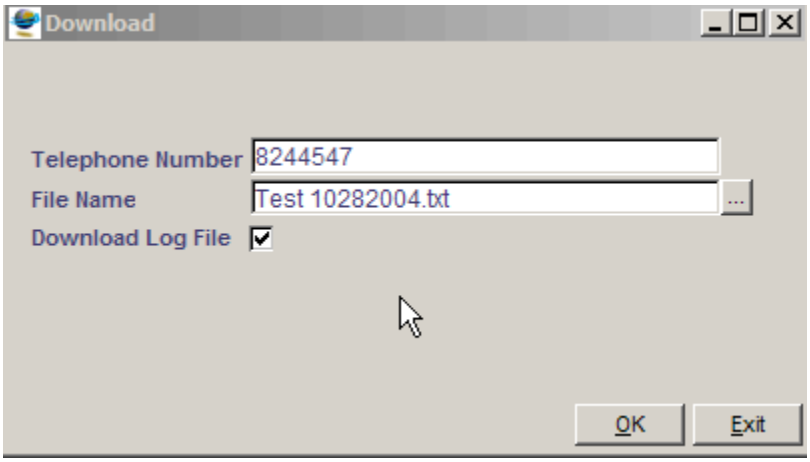
Downloading Directly with a Modem in View Collector

To download directly with View Collector follow the steps below.

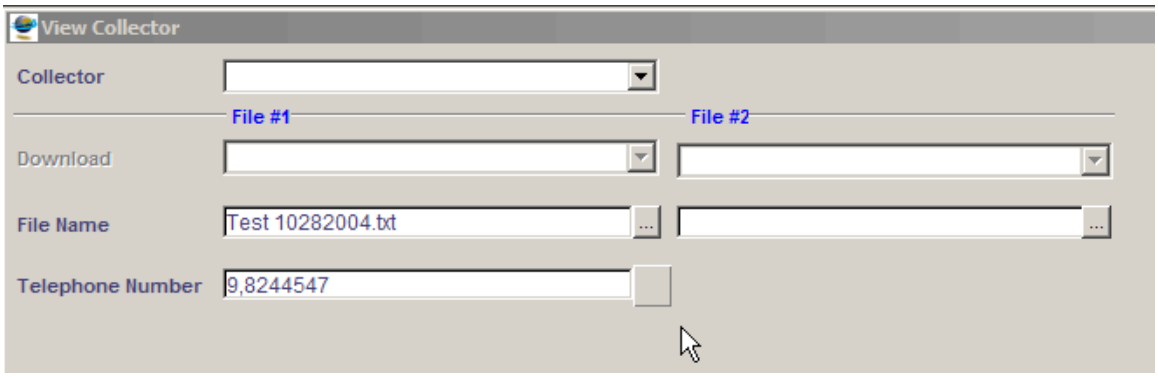
1. Click on the **View Collector** icon or click on the **Consumers** top menu item and select **View Collector**.



2. Click on the red **Telephone icon** button at the end of the telephone field to proceed. At the following screen you can enter the phone number and you can also enter the file name for the download.
   Note: Because you are not downloading using a created collector, the file name is not created.



3. Enter the phone number of the collector you want to call.
4. Enter the file name for the file that is being downloaded.
5. Select the **Download Log File** check box to download the collector log file for review.
6. Click **OK** to begin the download.
7. After a successful download the following screen will display the file path and name. Click **OK** to open the file for viewing, or you can select another file, for two file viewing as described earlier.



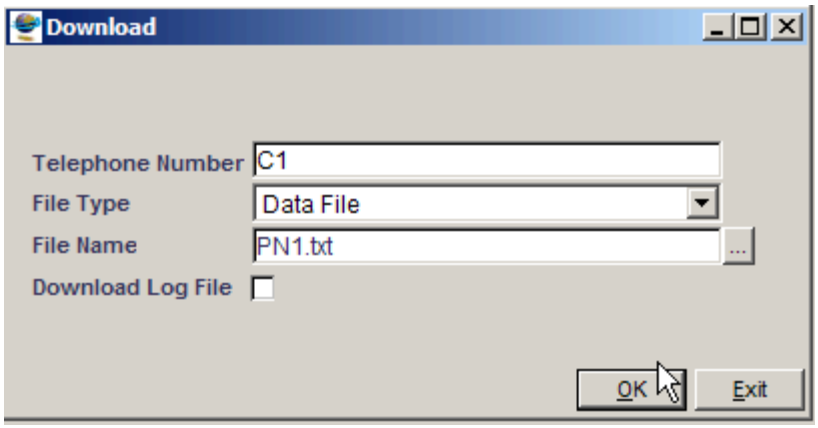
Downloading using Direct Connect using a Data Cable in View Collector

Speed Net Versions 4.1.8.4 and higher have the ability to download directly from the Data Collector using a DB9 Serial cable, **if the Data Collector is running COMMSRV Version 2.08 and higher**.

Connecting to the Collector

1. Start Speed Net and open the View Collector Module.
2. Connect one end of the Data Cable to the Com port or USB to Serial Adaptor on the laptop.
3. Remove the modem cable connection from the Data Collector port.
4. Connect the other end of the data cable to the modem port of the data collector.
5. On the top level menu click on **Consumers** then click **View Collector** to open the View Collector Module.
6. At the following screen click on the **Telephone Icon** at the end of the Telephone field to open the download window.

7. At the Download window shown below enter the com port number that is being used on the laptop. The format should be C1 for Com 1, C2 for Com 2 etc…
8. In the File Type window select **"Data File"** from the drop down list.
9. In the File Name window enter a name for the file. If you want you can select a specific path by clicking on the **Browse** button.
10. Once you have entered the file name you can select **Download Log File** if you want to retrieve the system log file from the collector during the download.
11. Your download screen should look like the one shown below.



12. Click **"OK"** to start the download.
13. You will see the QDIAL window open and the data will transfer to Speed Net.
14. Once the data transfer is complete, click on **OK** to open the file for review. The file will open in the View Collector window as shown earlier.
15. **Once the download is complete disconnect the data cable from the Data Collector and connect the modem cable to the Data Collector.**

Downloading the data through the direct cable connection will automatically open the file in a format that allows you to place it in edit mode.

Downloading Additional Collector Information

Speed Net Version 4.1.8.4 and higher also allows the user to download additional information from the data collector that before was only viewable and edited using another means.

Some of the additional information that can be downloaded includes:

- System Data File
- Parameters File
- Sava.bad File
- Data(Collector Info) and Addresses File

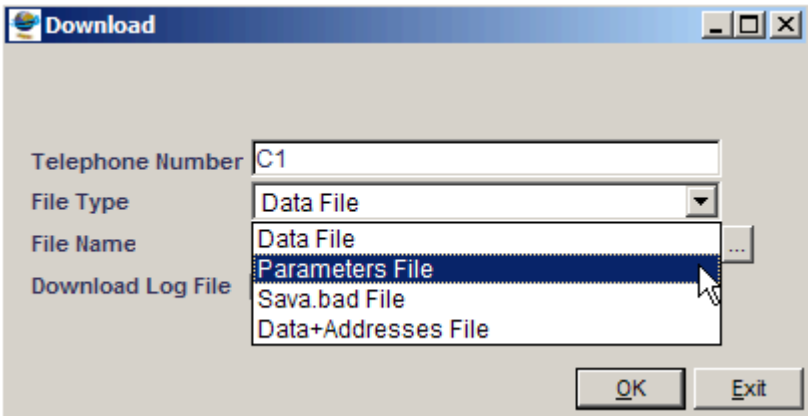
The System Data file retrieval was explained earlier in this section so only the last three files and instructions on how to retrieve them are covered here.

Retrieving the Parameters File

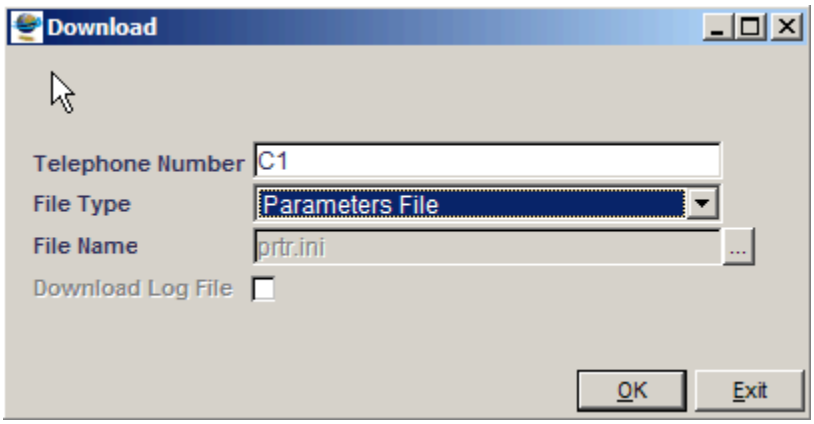
WARNING: Retrieving the parameters file, changing parameter settings and then uploading the file back to the collector may cause the system to become unstable or to stop functioning. These steps should only be performed by experienced technicians or under supervision of SpeedRead Technologies.

The System Parameters file holds system settings that are preset during manufacturing. Only in extreme cases should these files be changed.

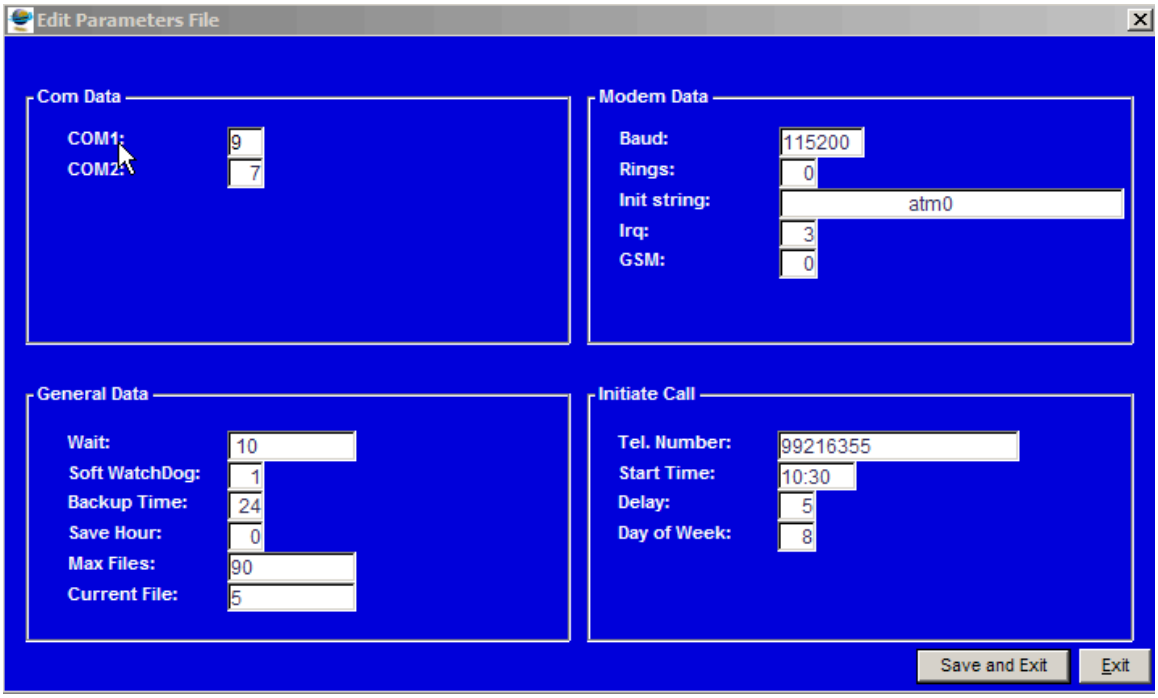
1. Open View Collector by clicking the **View Collector Icon** or selecting it from the Top Menu.
2. Select the collector you are connecting to from the drop down list or click on the **Telephone Icon** to go directly to the **Download** options window.
3. The Download window will open as shown below.
4. If you are using the **Direct Connect** method replace the telephone number and enter the comm. port the cable is connected to on the laptop.



5. In the File Type field select **Parameters File**.
6. The file name is automatically set to prtr.ini and cannot be changed.



7. Click **OK** to start the transfer of the file.
8. After the file is retrieved you can click **OK** to open the parameters file and the file will open as shown below.



9. You can now edit the file by clicking in any of the white fields.
10. After you have updated any of the fields click on **Save and Exit** to save the file.

Edited parameter files must be uploaded as soon as they are edited and saved. Each subsequent Parameter file that is downloaded will overwrite the last file. This function is not changeable and is designed to prevent a corrupt file from another system being uploaded by mistake.

To upload the parameter file go to **Page 63, Uploading the New File** for details on uploading.

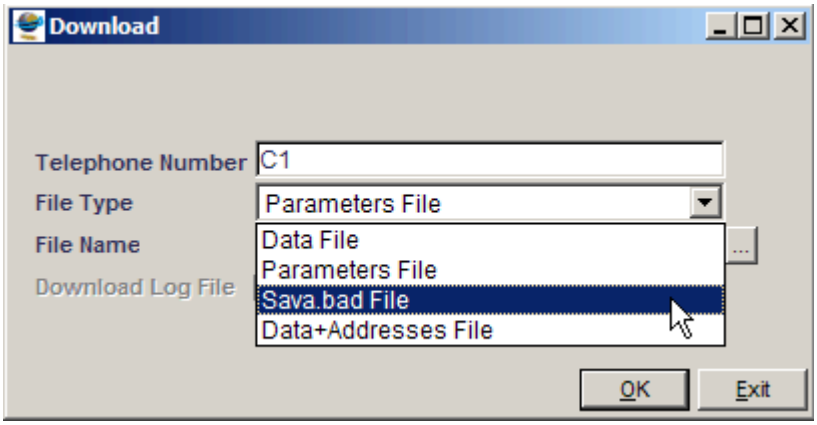
Retrieving a sava.bad file

A system problem may require you to retrieve a file called **sava.bad** to try to restore a system.

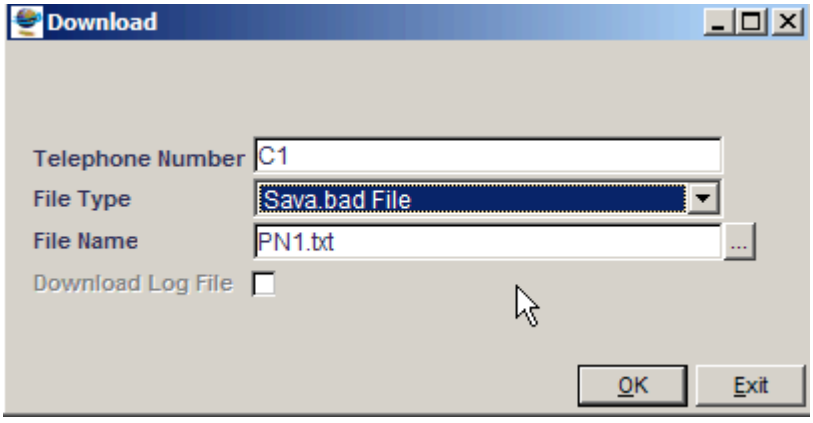
If the system should power off and on several times in a short period the system may suspect that the data file is corrupt. In an effort to keep the system online the software may rename the existing file SAVA.BAD and create a new file to try and restore the system. This function can be initiated by mistake if a technician or someone else times the power off and on several times in a short period.

If this event takes place it may be possible to retrieve the data and restore it, the following steps should be taken to try to retrieve the file.

1. Open View Collector by clicking the **View Collector Icon** or selecting it from the Top Menu.
2. Select the collector you are connecting to from the drop down list or click on the **Telephone Icon** to go directly to the Download Options window.
3. The Download window will open as shown below.
4. If you are using the Direct Connect method replace the telephone number with the correct COM port (i.e. C1, C2 etc…)



5. In the File Type field select **Sava.bad File.**
6. If you selected the Collector from the drop down list the file name is already set.
7. Change the name or enter a file name for the file.



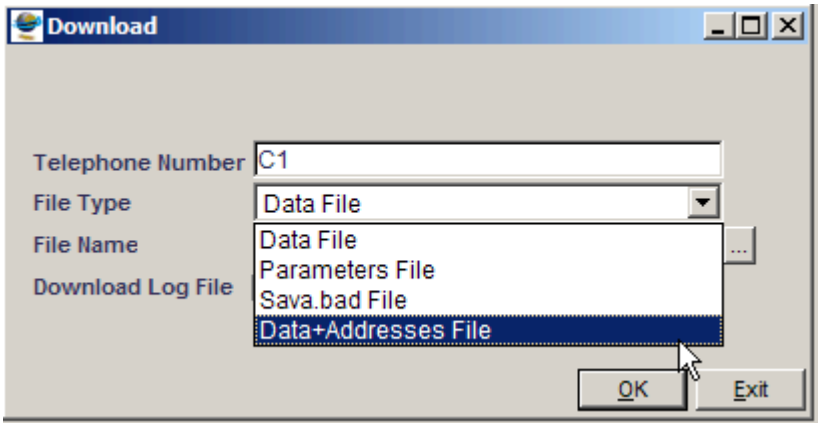
8. Click **OK** to start the transfer of the file.
9. The download will start and when the download is complete you can click on the **OK** button to open the file for review.
10. If the file is intact (Has data) you can then proceed to **Page 63, Upload the New File** to restore the data to the collector.

Downloading Data + Addresses Files

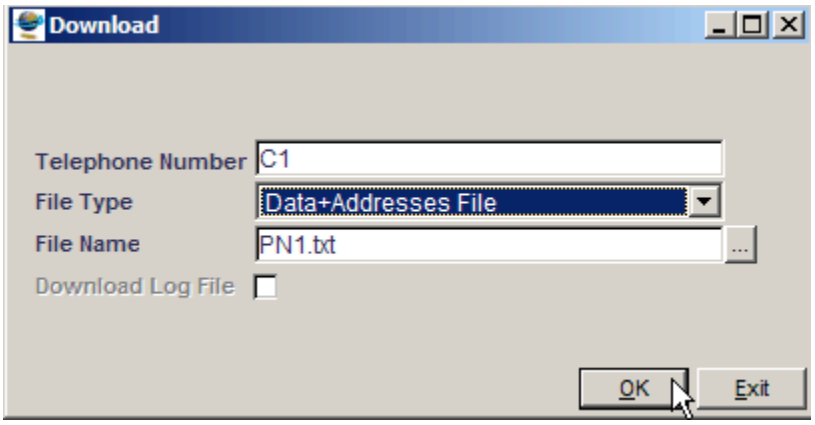
Speed Tech also allows the user to download from the collector a Data File and Addresses in the same download. However the ability to download addresses will only function **if the address data has been uploaded previously.**

To download the Data and Address file follow these steps:

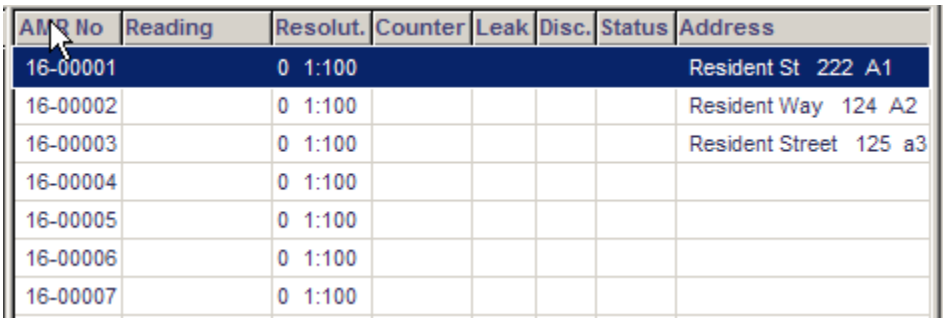
1. Open View Collector by clicking the **View Collector Icon** or selecting it from the Top Menu.
2. Select the collector you are connecting to from the drop down list or click on the **Telephone Icon** to go directly to the Download Options window.
3. Click on the Telephone Icon.
4. The Download window will open as shown below.
5. If you are using the Direct Connect method replace the telephone number with the correct COM port (i.e. C1, C2 etc…)



6. In the File Type drop down list select **Data+Addresses File.**
7. If you selected the Collector from the drop down list the file name is already set.
8. You may use the default name or enter a file name for the file.



9. Click **OK** to start the transfer of the file.
10. The download will start and when the download is complete you can click on the **OK** button to open the file for review.
11. When the file is opened you will see the address data in the View Collector window in the Reading Table. If the address data has not been uploaded to the collector the Address column will be empty.



AMR No	Reading	Resolut.	Counter	Leak	Disc.	Status	Address
16-00001		0 1:100					Resident St 222 A1
16-00002		0 1:100					Resident Way 124 A2
16-00003		0 1:100					Resident Street 125 a3
16-00004		0 1:100					
16-00005		0 1:100					
16-00006		0 1:100					
16-00007		0 1:100					

12. The Address file will be downloaded as part of the File name and can be used to import address data into Speed Net.

Editing a collector file

Speed Tech allows the user to download collector files and edit the information for system maintenance. This ability and function is not without limitations and risk. So that the user completely understands the procedures the following section will walk the user through the edit procedure as well as updating the collector.

WARNING WARNING WARNING WARNING
ONLY SAVA FILES FROM VERSION 2.08 COLLECTORS CAN BE EDITED AND UPLOADED TO DATA COLLECTORS. IF YOU EDIT A FILE AND UPLOAD IT BACK TO A COLELCTOR RUNNING OLDER SOFTWARE THE SYSTEM WILL CRASH AND REQUIRE A FIELD TECHNICIAN TO SEND IT BACK TO SPEEDREAD FOR REPAIRS

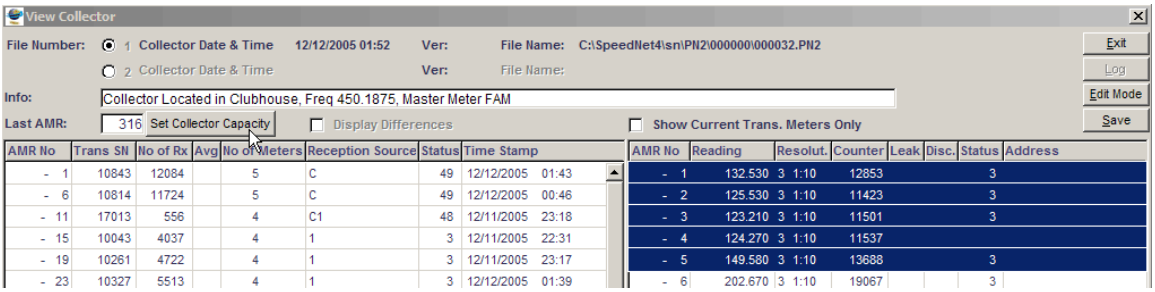
Edit the file opened in the previous step

WARNING: Before proceeding the user should understand the risk and problems that are created by editing collector data files and then uploading the files to a data collector.

This risk may include the corruption of collector data, which may cause the collector to lock up or not function as designed. Changing some data such as the Counter fields may cause the collector to miscalculate the reading data.

If you are unsure of the procedures that are explained in this section then contact an experienced field technician or SpeedRead Technologies for details on how to proceed.

1. Download a collector as described above or open an existing file using the View Collector screen as shown below.



2. Click on the **Edit** icon to place the file in Edit Mode.

Edit/ Change Transmitter Serial Numbers

3. Locate the serial number of the transmitter you wish to edit or change.
4. Click in the transmitter serial number field (**Trans SN**).
5. Enter the new serial number.

Note; The system will not allow you to enter a serial number that already exist. If you try you will get a warning message and the existing serial number will not be changed.

6. Click **Save** to save the change or select another transmitter field to change.

Change / Update a Meter Reading

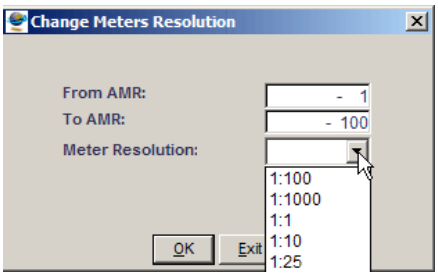
7. Using the same file as above locate the AMR number where you want to change the meter reading for.
8. Click in the meter **Reading** field and enter the meter reading, making sure to enter the decimal point were the comma would go. **Example: 120,500 should be entered as 120.500.**
9. Click **Save** to save the file and close it, or click on the next meter reading field you want to change.

10. After you have made your changes you can click **Save** to save the file. At the prompt enter a new file name and then select Save or Cancel.

Note: Selecting Cancel will close the View Collector Module

Change / Update All Meter Resolutions Globally

11. Download a file as described above and place the file in **Edit** mode.
12. Click on the **Change Meter Res** icon at the bottom of the View Collector screen.
13. At the following screen enter the **From AMR,** number were you want to start the change. (Example: Enter a 1)
14. Press TAB and in the **To AMR** field enter the ending AMR number.(Example: Enter a 10)
15. In the Meter Res. Drop down list select the **Meter Resolution** you want to assign to the selected AMR numbers from above.



16. Click **OK** to make the change.
17. All changes take place immediately.

Change / Update 1 or more Meter Resolutions

18. Download a collector file as detailed above and place the file in **Edit** mode.
19. Locate the AMR number that you want to change the meter resolution for and click in the **Resolut.** field.
20. Enter the meter type ID number from the table below.

0 = 100 Gallons per Pulse
1 = 1,000 Gallons per Pulse
2 = 1 Gallon per Pulse
3 = 10 Gallons per Pulse
4 = .05 Gallons per Pulse
5 = 2 Gallons Per pulse
6 = 5 Gallons per Pulse

7 = 50 Gallons per Pulse
8 = 36 Gallons per Pulse

21. The meter resolution will be updated to the new meter type.

Change / Update Collector Address Fields

Speed Net Version 4.1.8.4 and higher allows the technician and end user to add address information to the Collector. The ability to update address info allows the technician to add or edit Address Info on a download or during a Create New file function.

To edit an address field, download a property as detailed above and place the file in **Edit** mode.

Click on the address field for the AMR number that you want to update the information on and enter your changes. Address fields are limited to 30 characters in length.
Address data is limited to 30 characters in length.
The field format is as follows:
1 to 20 Street Name (20 Characters in length)
21 to 26 Street Number (6 Characters in length
27 to 30 Apartment Number (4 Characters in length)

For additional information on adding or updating address info to the Data Collector see Section 7.

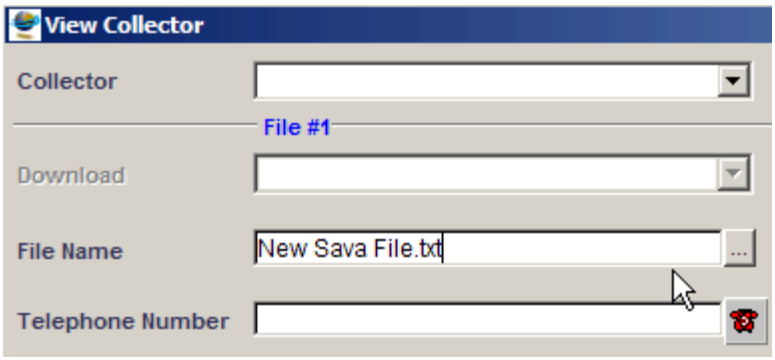
Creating/ Updating/ Expanding a New Collector File

Speed Net Version 4.1.8.4 and higher allows the technician or end user to create a new Sava file form within Speed Net and upload the file to a new data collector with no existing data. This same function allows the system to be expanded by updating a current system with new AMR numbers.

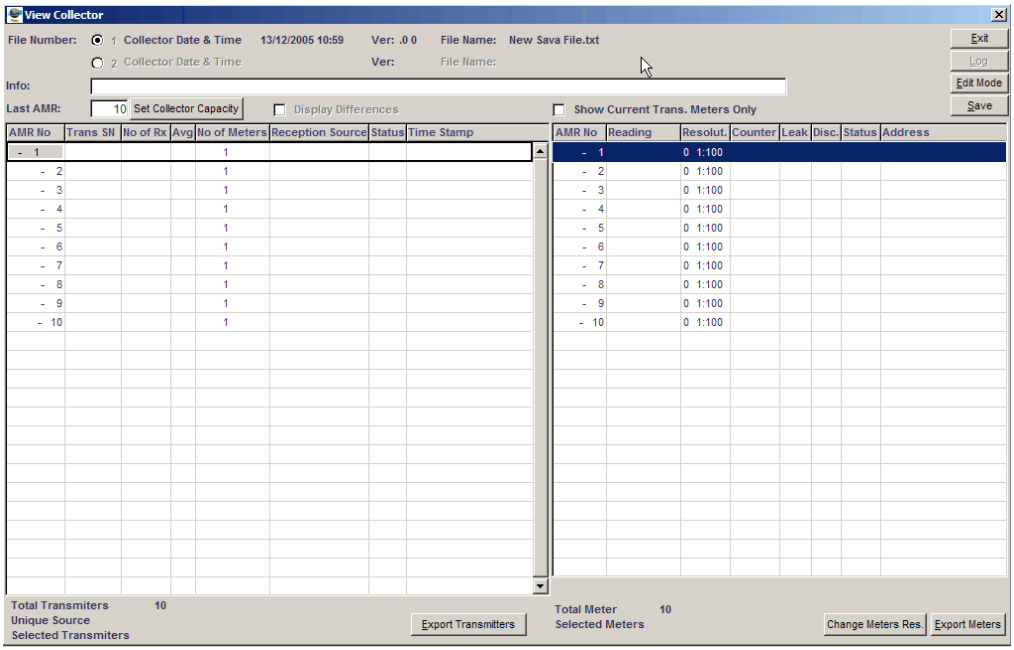
Create a New Collector File

1. Open View Collector by clicking on the View Collector icon or selecting it from the main menu.
2. At the main View Collector screen shown below enter a file name in the first File Name Field. The name **MUST** include the txt extension as shown below.

WARNING: When updating or creating address data with the collector file you MUST leave the default file path set to default. Failure to leave the path set to default will prevent address information from being uploaded correctly.



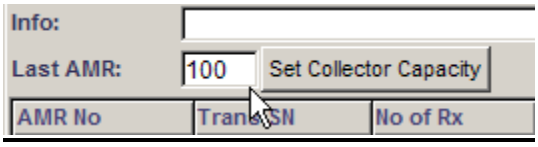
3. Click on **OK** and you will receive a warning, **No Data Found.** Click **OK** and then click **Create New** at the bottom of the View Collector screen.
4. A new View Collector Screen will open with 10 AMR numbers and NO STx numbers. The screen below shows a new file that was created.



5. Click on **Edit** to place the file in **Edit** mode.

Set Collector Capacity

6. The first step is to set the collector meter capacity, or the total number of meters that will be read.
7. Place the mouse cursor in the **Last AMR Box** and enter the number of meters **(Example: Enter 100).**



8. Click on **Set Collector Capacity** button, the collector capacity will change.
9. The default Number of Meters for each AMR will be set to 1.
10. If you enter the number of meter for the AMR to another setting, the file will automatically adjust to accommodate the number of meters.
11. You can now edit or enter transmitter serial numbers.

Entering Address Information

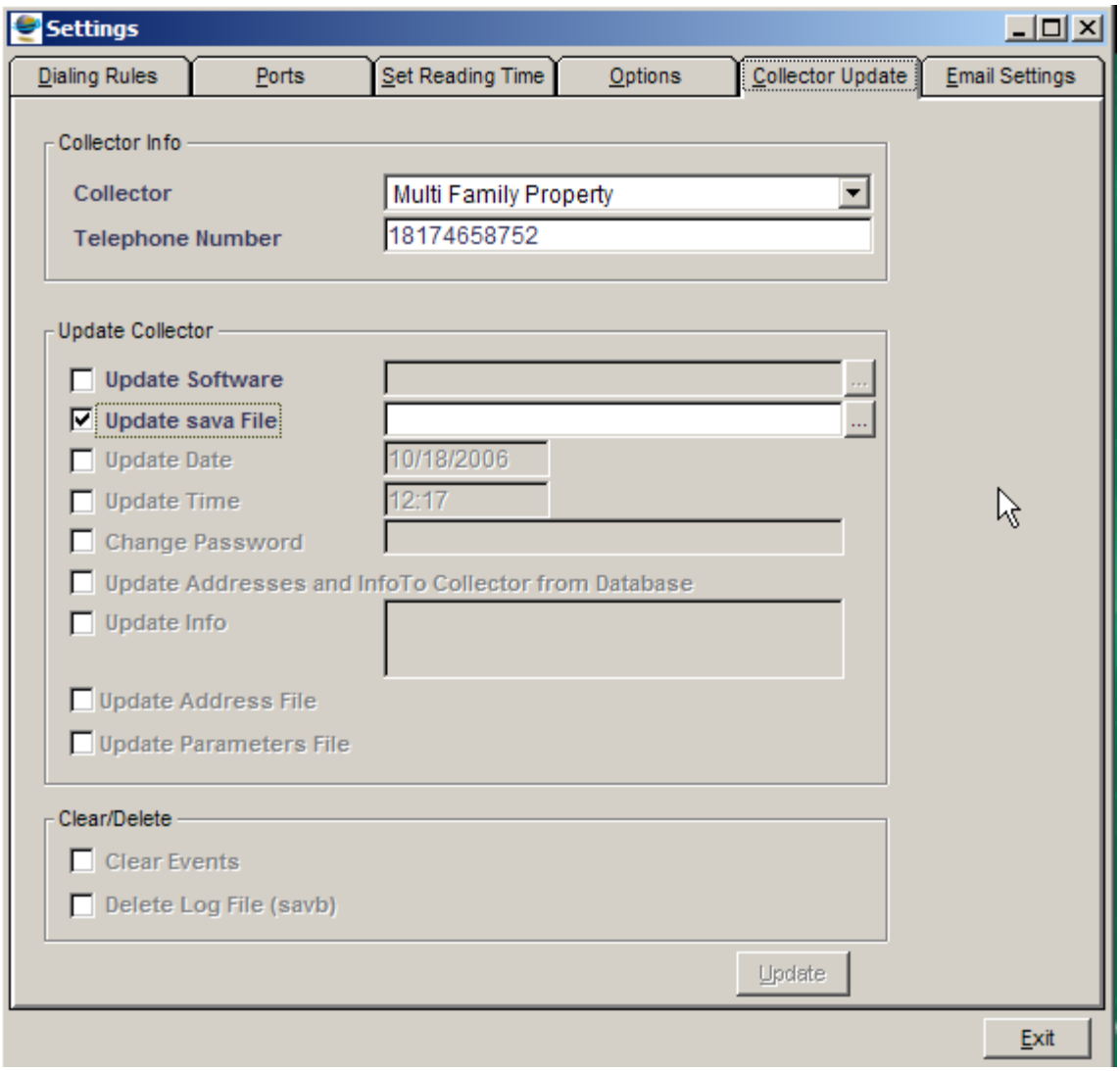
The address fields located in the Reading Table can be added during the creation of the collector file. This data is stored in a separate file called address.dat and is created each time you create or edit the address file opened in View Collector mode. Because of these limitations the file should be uploaded as soon as it is created to prevent loss of data.
Address data is limited to 30 characters in length.
The field format is as follows:
1 to 20 Street Name
21 to 26 Street Number
27 to 30 Apartment Number

1. After you have created a collector file, as outlined in the previous section, click in the **Address** field for the first AMR number.
2. Enter the information in a format that is easily defined and once you have entered the first AMR press the down arrow or click in the next field.
3. After you have updated all the fields, click save to save the file.
4. Update the information immediately to prevent any data loss.
5. See **Uploading the New File** in the next section or go to Part 7 for details.

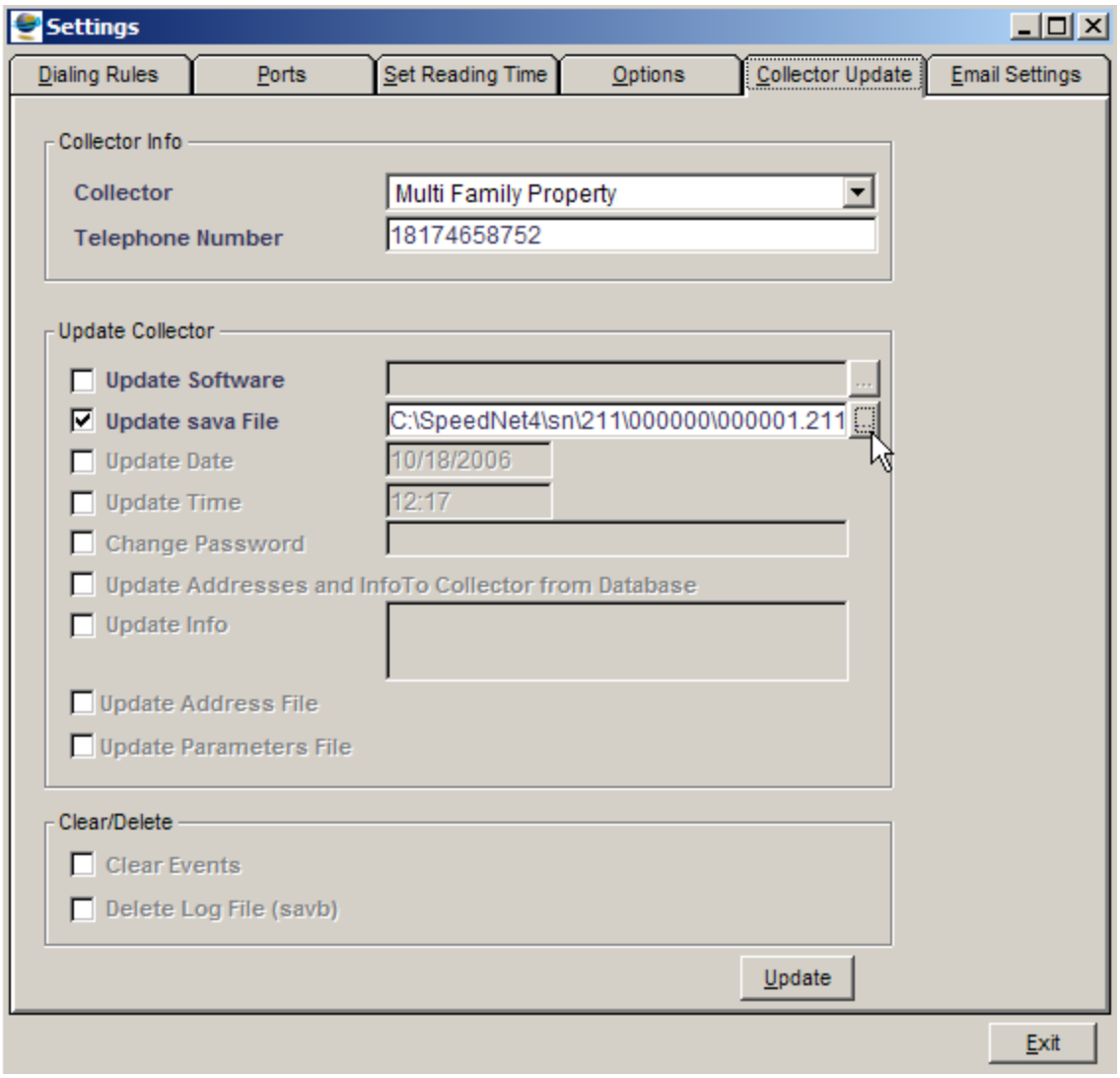
Uploading the New File

After making changes to the collector file the following steps will allow you to upload the file to a new collector or update the information to the data collector you downloaded in the previous steps in this section.

1. On the upper level menu items click on **Maintenance**, and then select **Settings.**
2. At the following screen, click on the **Collector Update** tab.
3. Click on the **Collector** drop down list and select the **collector** you are updating.



4. The phone number is automatically entered from the collector list.
5. If you are using the data cable connection, disconnect the modem and connect the data cable to the modem port.
6. Change the phone number to the com port you will be using.
7. Click in the **Check Box** for the **Update Sava File.**
8. In the file name field enter the **complete file name and path** or click on the **Browse** button and select the file you edited in the section above.



Note: If your file was saved to another folder or path then locate the file using the explore window that opens.

9. Click on **Update** to start the Upload procedure.

After clicking on Update several windows will open and then close as the file is zipped and prepared for transfer. The QDIAL window will also open and the download will proceed.

After completion you should receive a message that the download was completed. Click **OK** to close the window.

After the download is finished you should download the collector to verify the changes did take effect.

Additional Upload Options

Speed Net allows the user to change or update other system settings in addition to the ability to edit and upload data files. The following options are available and the procedures are identical to those listed above.

Update Software:
WARNING: Updating system software to the wrong version may cause system components to fail or cause the system to stop operating. For information on updating system software contact SpeedRead.

This allows the user to update system software remotely. This option can be performed at the same time the data file is updated.

1. Select the **Collector** from the drop down list.
2. If you are using the **Direct Connect** method change the phone number to the Com port the cable is connected to (i.e. C1, C2 etc…)
3. Click on the **Browse** button at the end of field to locate and select the software file that you are sending to the collector.
4. Click on **Update** to send the file to the collector.
5. The system will open several windows and then QDIAL will open to transfer the file.
6. After the download is completed download the property and check the **Comments** field in the **Collector List** to verify the system was updated.

Update Date:

Updates the collector systems date remotely. This date is taken form the current PC date or it can be manually changed by the user.

1. Select **Update Date**
2. Click in the **Update Date** field to change it. If you are using the default date continue.
3. Click the **Update** button at the bottom.
4. Speed Net will call the collector and change the date to the current Speed Net Pc date.

Update Time:

Updates the collector systems time remotely. The time is taken off the current PC time or it can be manually changed by the user.

1. Select **Update Time.**
2. Click in the time field to change it. If you are using the default time continue.
3. Click the **Update** button at the bottom.

4. Speed Net will call the collector and change the time to the current Speed Net Pc time.

Change Password:
This function allows the user to change the password for all data collectors. For details on this function please contact SpeedRead.

Update Address and Info to Collector from Database:

This update function will update the current address info entered in the data base to the collector. This eliminates the user from having to enter the info line by line in View Collector.

1. Enter address info into the Data Base using the manual method or by importing the data into the data base. For details on importing data into the data base see **Chapter 14.**
2. Select the **Collector** from the drop down list.
3. The Info field will show any current collector info that has been entered or retrieved from the property.
4. If you want to update or change the current collector info see the section on Collector List.
5. Select the **Update Addresses and Info from Database** check box.
6. Click the **Update** button on the bottom.

Update Info:
This procedure updates new collector info to the data collector. The field next to this option shows the current collector info that was retrieved on the last systems download or was entered using Option 1 below.

There are several ways that the Collector Info file can be changed then updated with new information.

OPTION #1: DIRECTLY IN COLLECTOR LIST

1. Open **Collector List** and click on the last remarks entry. If the entry has current collector info and you want to update it, select the field and change the data.
2. If there is no existing data in the last remark field, then you can add new data for the Collector.
3. After you make your changes close the Collector List and your changes are saved.

OPTION #2: USING THE INFO FIELD IN UPDATE COLLECTOR MODULE

1. Click in **Maintenance**, then **Settings** to open the **Settings Options**.
2. Click the **Update Collector** tab.
3. From the drop down list select the **Collector** you want to update the info on.
4. The **Info** field will select the current info data.
5. Click in the Info Field and make changes to the data.

UPDATE THE INFO TO THE COLLECTOR

1. In the **Update Collector** tab select the **Update Addresses and Info to Collector From Database**.
2. Or Select **Update Info**
3. Click on the **Update** button at the bottom.

Update Address File:

This will update the address file created in the **View Collector Create New** file function. This function should be performed directly after the View Collector module is used to create or edit a collector files address fields.

1. Select the Collector you are updating from the drop down list.
2. If you are using the Direct Connect change the telephone number to the Comport the data cable is connected to (i.e. C1, C2 etc…)
3. Select the **Update Address Info** by clicking in the **Check Box.**
4. Click on the **Update** button at the bottom.

Update Parameters File:
This will update the parameters file that was downloaded and edited.

WARNING: Updating a changed parameter file with the wrong settings may cause the system to fail or to not operate as designed.

Clear Events:
Selecting this option will clear all transmitter and reading events at the collector level. This function works the same as issuing an "F8" command at the collector.

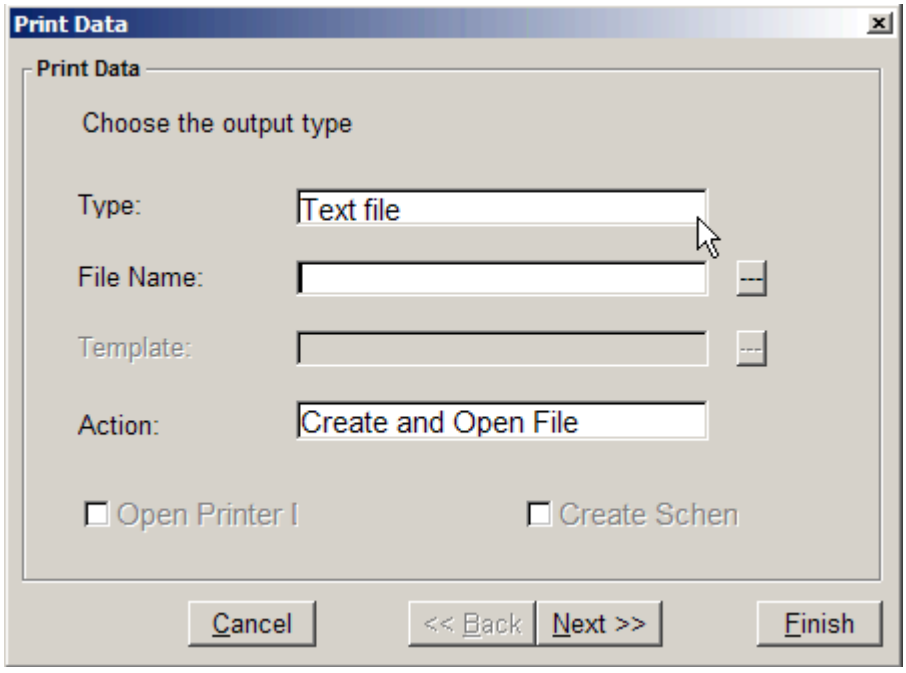
Delete Log File:
Selecting this option allows the user to remotely delete the System Events Log file. This file is used to record system events such as power outages and system updates. If there are no significant events that need recorded or monitored then this file should be deleted periodically.

View Collector – Reports and Data Exporting

The View Collector has the ability to create reports for the Transmitter Table data or the Reading Table data. The user has several options when creating the reports and can make these selections at the time the reports are generated

The parameters for generating a **Transmitter Table** report or **Reading Table** report are the same. In the following example a **Transmitter Table** report is used.

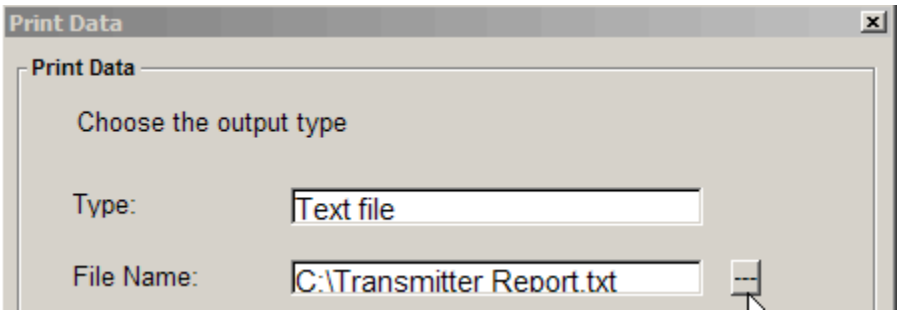
1. Click on the Report button on the lower part of the transmitter table.
2. At the following screen the user has several options that they can select to control the output format of the report.



3. Click on the **Type** field and a selection option will allow you to select the type of file you want to create. Your options include:

    - **Text file** – A simple text file that can be created using comma delimited or other text identifiers.
    - **HTML file** – A report that is generated in HTML format that can be reviewed in a browser window or exported to a web site.
    - **XML file** – A report that is generated using XML for use on a web site that allows use of the data for structured documents and data.

4. Click on **Text file** to select it as the output type for this exercise.
5. Click in the **File Name** field and enter the path and name for the file or as an option click on the **Browse Button** and select the path and name where you wish to download the file. Include in the full path, the name and the file extension for the file.



6. Click in the **Action** field to select the file creation process you would like for your file. Your selections include:

    - **Create File** – Creates the file and stores the file at the selected path you entered.
    - **Create and Open File** – Creates the file and opens it for viewing, in the format that it was created in. A **Text File** is opened in Notepad and HTML and XML are opened in the default browser window. Once the file is created and opened in its format, you will have the option to print it using the default print option in the window.
    - **Create and Print File** – Creates the file and prints it with the default printer. Select the OPEN PRINTER check box to open the printer dialog window to select another printer or change the printer layout.

7. In the Action field select the **Create and Open File** option for this exercise.
8. Click **Next** to go to the column selection window.

Column Selection

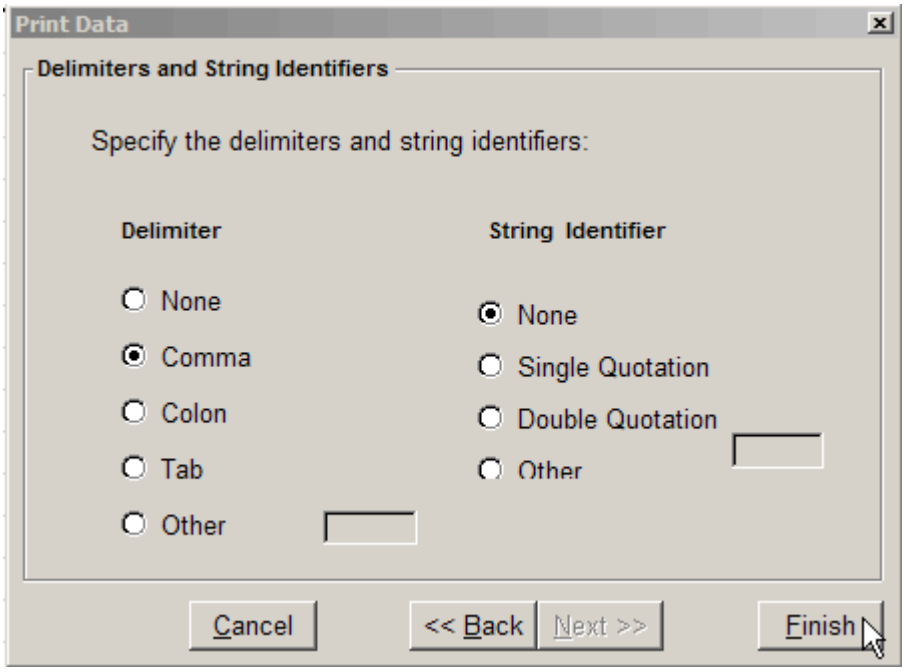
The View Collector reports options will allow the user to customize each report so that only the data required is output to the file. This ability to customize reports allows the user to change the column default print order or exclude a column completely from the report output file.

To change the column order or exclude a column from the output file click on any of the rows.

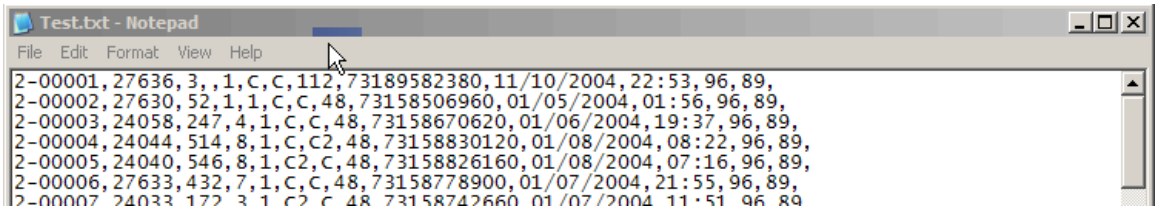
9. To change a columns output order, select the row and then enter the new column number. All other columns orders will be changed as well.
10. To exclude a column from the output file, click on a row to select it, and then enter '**0**' as the column order.
11. Click **Next** to advance to the Delimiters and String Identifiers selection window.

12. At the following screen you can select the delimiter or string identifier required for your file output formats.

Note: String Identifiers are used to separate data fields for importing into other formats. An example is the use of commas as a delimiter in CSV files or comma delimited formats. You should consult your software vendor or your IT departments for supported formats that may be required for your use.



13. Select Comma as the Delimiter and None as the String Identifier, then click **Finish** to create and open the file. Your results should be similar to the example below, depending on the download files you selected at the beginning of this section.



14. You can now use the window menu items to print the report.

4

CONSUMER MODULES

- Introduction to the Consumer Modules
- Getting to know the Display Consumer Screen
- Find Consumers
- Display Consumers
- Premium List Consumers

CHAPTER 6

Introduction to Consumer Modules

The Speed Net SQL data base is designed so that consumer information can be entered or imported from an external source and then Speed Net can be used as a stand alone customer service rep support module.

For additional information on importing data see Section 6, Chapter 10.

In this section you will be introduced to the three Consumer Modules as well as look at the reports and information each is capable of generating for use.

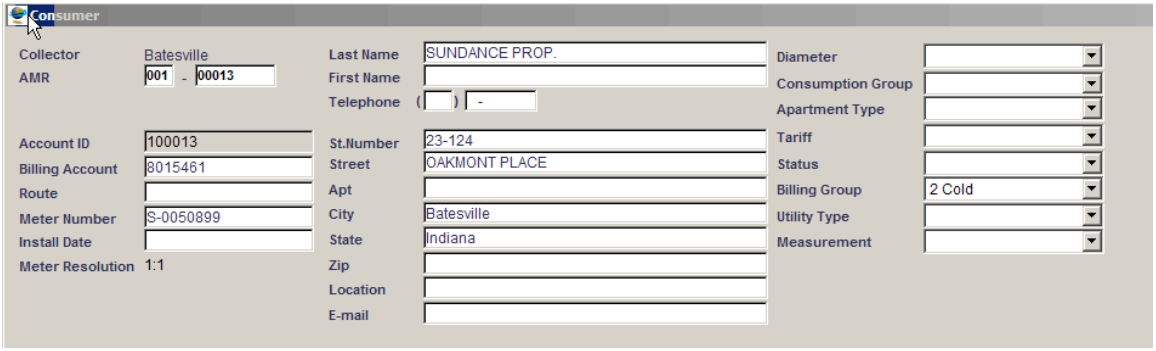
What you can do with the Consumer Modules

The consumer modules are designed to work as stand alone consumer information and support package that allows the customer service representative to analyze consumer utility usage and generate reports based on that consumer's usage. Some of the things the user can do:

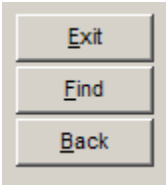
- Examine and compare the reading data for any of the consumers downloads in the system. Depending on the data, this may allow analysis of reading data for several years.
- Generate usage graphs that will show details on the consumer's usage patterns.
- Look for and analyze any Alerts that may have been generated for the consumer.
- Generate individual consumption reports for the consumers reading data.
- If you have the Premium version of Speed Net the List Consumers module will allow you to update and consumer information globally.

Getting to know the Display Consumer screen

The following section details the Display Consumer screen and the options available to you once you have selected a consumer's data to review. Most of the data fields are self explanatory and should need no explanation. Those fields that are unique are described below.



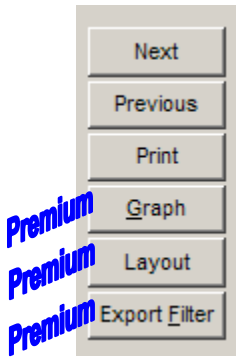
AMR – The AMR number is generated by combining the CONS ID that is entered when the Collector is created and the internal AMR address at the data collector. This combination generates a unique number from 6 to 8 characters in length.
Account ID Number – This is the number that is created and can be edited. **Download Date** – This is the date and time the collector was last called.
Reading – Meter Reading on the download date.
Consumption – The consumption between the last two downloads in the system.
Pulse Counter – The number of pulses collected by the STx unit since it was connected to the meter. *Note: If the meter is encoded there is no data here.*
Trans. Date – The last date and time the STx unit was received at the collector.
Rx – The total number of received transmissions since the STx unit was programmed in the system.
Tx – The total transmissions of the STx since it was turned on.
Source – Last transmission reception source. *C = Collector 1 to 8 = Repeater No.*
Exception – If an Exception or reading event is detected then this field will show **"Alert'** to notify the user. Click on the **Alert** to open the Alert window**.**



Exit – Exits this module and returns you to the Main Screen.

Find – Clears the data fields and returns you to the Find Consumer screen.

Back – Goes back one screen



Next – Advances you to the next Consumer

Previous – Goes back one Consumer

Print – window to print a consumer's reading data

Graph – Opens the graph display for the consumer's data.

Layout – Opens the layout table for this consumer.

Export Filter - Opens the Export Filter Dialog

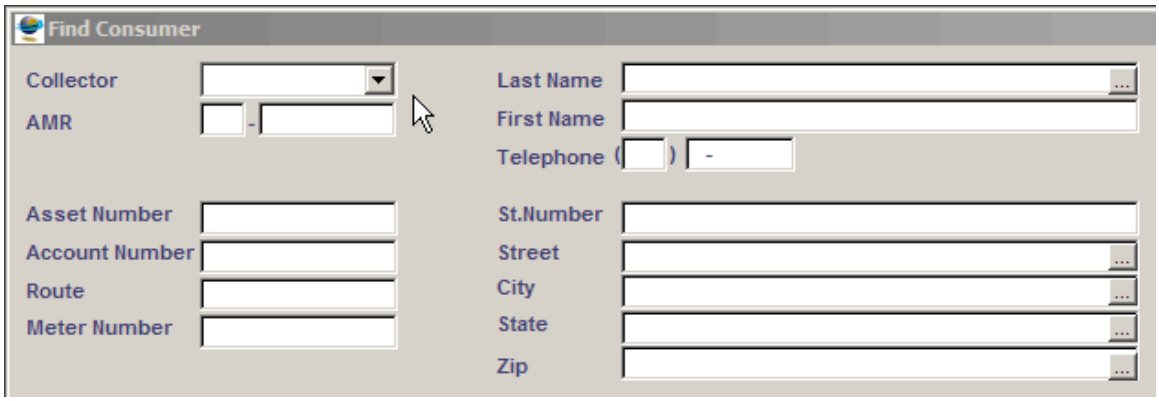
See the Section 7, Chapter 13 for Layout List description and procedures.

CHAPTER 7

Find Consumer

The Find Consumer Module is used to search for consumers using search parameters. To start Find Consumer click on the **Find Consumer Icon** or click on the upper menu item **Consumers** and then click **Find Consumers**.

On the screen below you will have several options to begin your search. The following steps will allow you to refine your options for quicker searches.

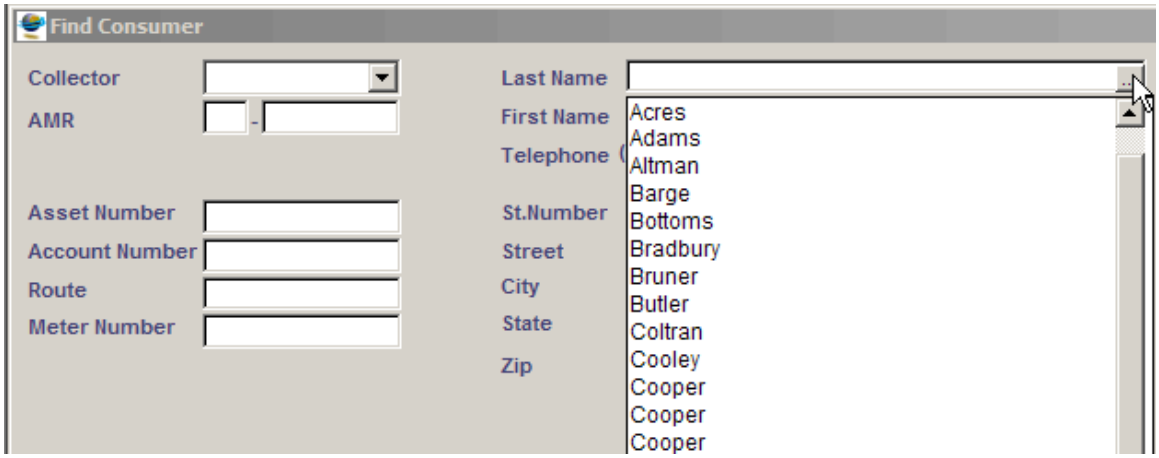


Note: If you select the drop down option on Collector, you can select the collector that you wish to limit your search to. This may help in speeding up your search.

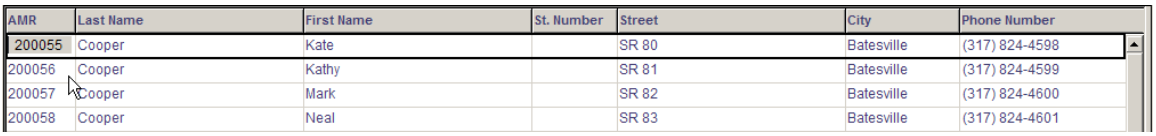
Using the Browse Buttons

Clicking on any of the Browse buttons on Last Name, Street, City, State or Zip will open a drop down selection window so you can select the data to search on. See the screen below for an example of a search by Last Name.

1. Click on the **Browse** button for Last Name.
2. Click to select the name you are searching for, and then click on **Find** to search.
3. At the following screen, click on any of the names that will refine the search for just those consumers with the name you clicked on. The next screen shows a refined search by Last Name of "Cooper".

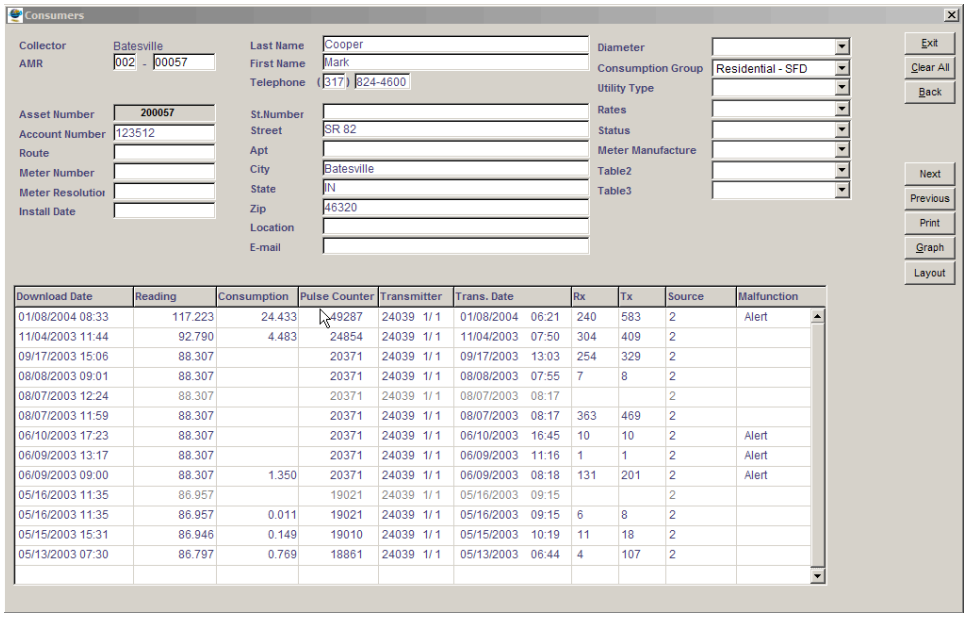


4. On the screen below, if you **Double** click on any of the AMR number Fields the Display Consumers screen will then open for review. See an example on the next page.



AMR	Last Name	First Name	St. Number	Street	City	Phone Number
200055	Cooper	Kate		SR 80	Batesville	(317) 824-4598
200056	Cooper	Kathy		SR 81	Batesville	(317) 824-4599
200057	Cooper	Mark		SR 82	Batesville	(317) 824-4600
200058	Cooper	Neal		SR 83	Batesville	(317) 824-4601

5. The following is an example of the Consumer Data Screen that is opened when you **Double** click on a search name.



Entering Search Parameters

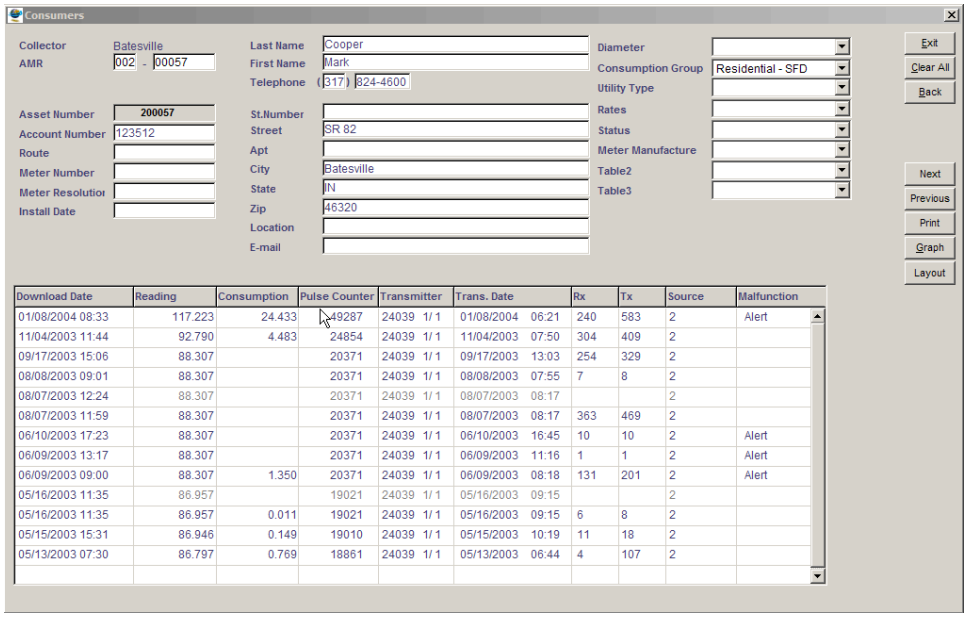
The Find Consumer Module will allow you to search for a consumer based on search parameters that you enter in any of the fields. This search option will allow you to refine your search to just those parameters that you may know. An example is a refined search using a meter serial number or a specific phone number.

1. To enter a specific search parameter click in any of the fields you wish to search on.
2. Enter the search data you want to find. As an example, enter the Last Name you want to search for.
   Note: It is best to enter the exact data to search for or the returned data may be a close comparison of the search parameters.
3. Some search parameters may be used using a single character as the search parameter. An example would be if you are searching for a the Last Name "Smith" you could enter just an "S" in the Last Name search field and all consumers with a last name that starts with "S' would be selected.
4. Click on **Find.**

CHAPTER 8

Display Consumers

After entering your search parameters or initiating a search by clicking on the browse buttons, the Display Consumers Screen will open allowing you to review the consumer's data. For information on this screen please see the Chapter 6, "Getting to Know the Display Consumer Screen".

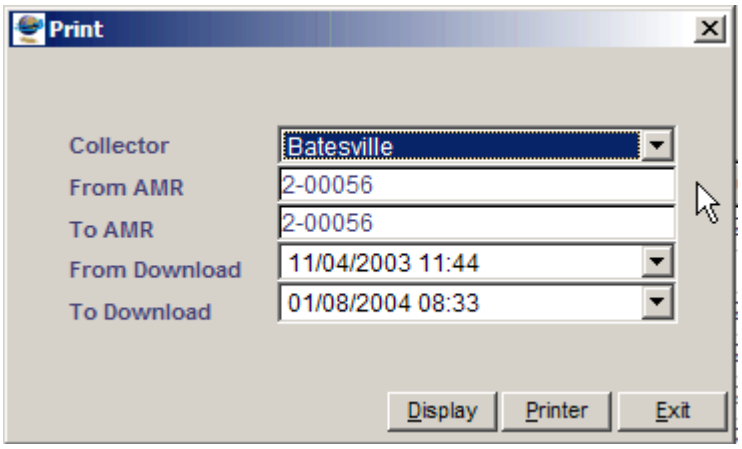


Printing the Consumers Data

Once the Display Consumer screen is opened, you can print a report based on the consumer's consumption data.

1. Click on **Print**, and the following screen will open for you to make a selection.

Note: When you click the print option Speed Net will by default, select the last two downloads for the report. If you wish to select download dates other than these dates then you may make that selection now.



You also have an option to select the AMR numbers you wish to use for the report. This will allow you to print several reports or a report on all the consumers in the collector, based on the parameters you set in the From Download and To Download fields.

2. Click in the **From AMR** field and enter the starting AMR Number.
3. Click in the **To AMR** field and enter the starting AMR Number.
4. Click on the **From Download** field and select any date from the drop down list

Note: The first From Download date must be before the To Download date. Otherwise the report may not correctly show the data to print.

5. Click on the **To Download** field and select any date from the drop down list.
6. Click on **Display** to open a print preview of the report, you can then select another printer. When you are in the print preview window you will also have an option to review the report and to also proceed with the printing.
7. Click on **File**, then **Exit** to close the print preview window and return to the selection screen.

Modifying the Consumers Information

Once the consumer screen has been opened, the user has the ability to change the consumer's data on selected fields.

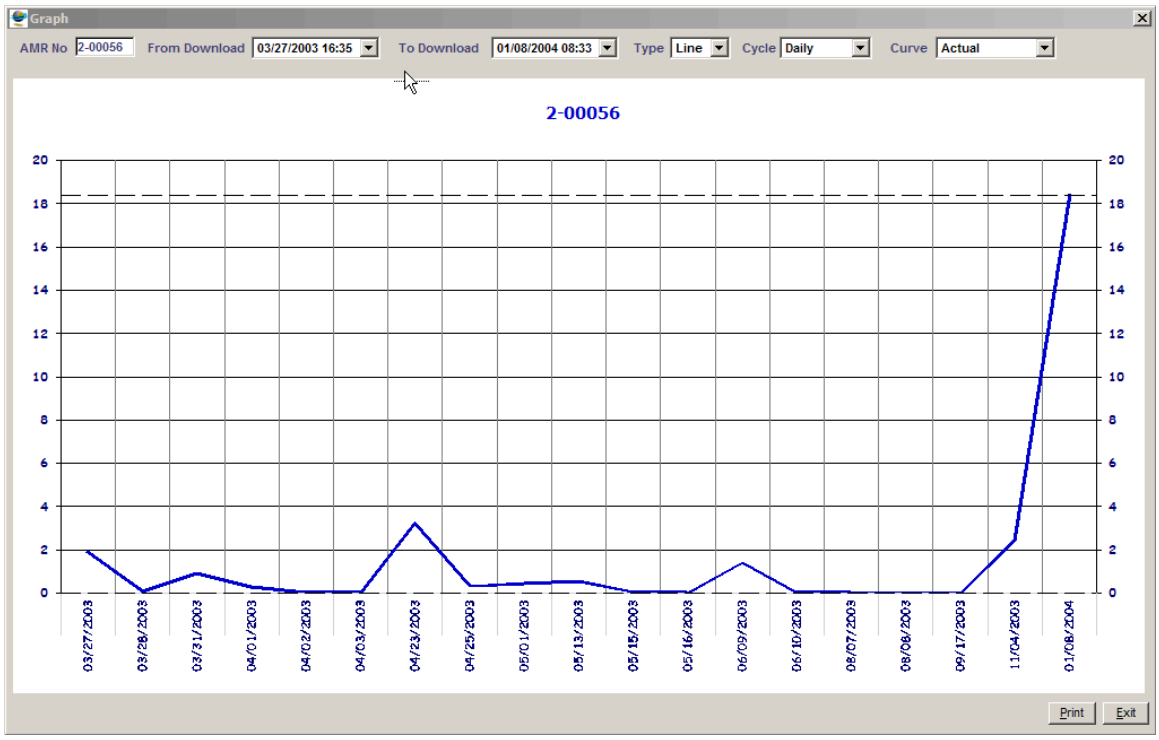
To Modify the Consumers Data

On the Upper Menu - Click **Edit** and then click **Modify** to place the data base in Modify Mode.

Premium Using Graph

The Display Consumer module allows you to review the consumer's information in a graph. This graph option allows the user to see actual usage patterns with several styles of graphs, Bar, Line or Area charts.

To open a graph preview click, **Graph** while you have the Display Consumer module open. The following screen which is a Line graph, will allow you to make changes to your selection or to refine your parameters for more details.



You may now change some of the parameters to alter the graphs results. These selections are made by Clicking on the selection fields. Some of the parameters that you can alter include the following:

From Download and To Download – You can change the default **From Download** and **To Download** dates by clicking on the fields and selecting any dates in the drop down fields.
Type – You have the option to select three different graphs styles Bar, Line or Area. Changing the selection will take effect immediately.

Cycle – This option allows you to select the type of cycle you want to review the data in. Choosing the option will allow you to fine tune the graph information for better results. The options are:

Daily – Combines all readings and consumption data for the same day on one line of data.
Download – Each download is shown as a single line of data. This increases the number of lines of data but allows the user to see consumption patterns over hours instead of days.
Weekly – Combines all reading data for weekly periods as one line of data.
Monthly – Combines data on a monthly scale.

Curve – This option allows you to use actual data or to use Smoothing. Smoothing allows the system to adjust the usage patterns when there are large gaps in the data. This allows for a more realistic representation of the usage patterns.

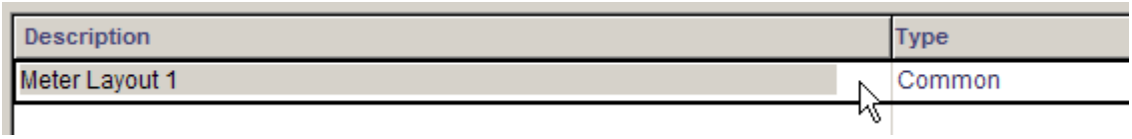
However when ever possible the user should use Actual data if it is available.

You can print the graph by clicking **Print** in the Graph preview window.

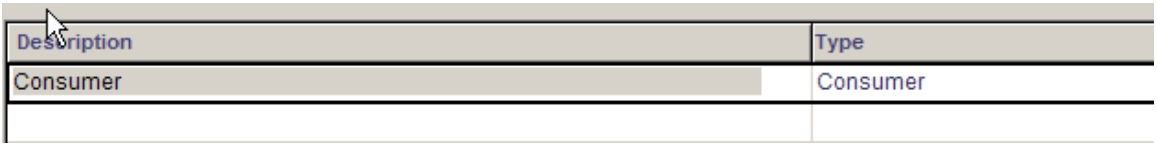
Click **Exit** to close the Graph preview window and return to the Display Consumer window.

Premium *Using Layout*

Click on Layout to see if the current Consumer is listed in any Meter Layout. Once you click on Layout the screen will show current meter layout settings as shown below.



The screen shows a meter assigned to Meter Layout 1 and is in the Common Meter layout.



This screen shows a consumer assigned to the Consumer Meters in the Layout.

Premium Using Export Filter

What is an Export Filter?

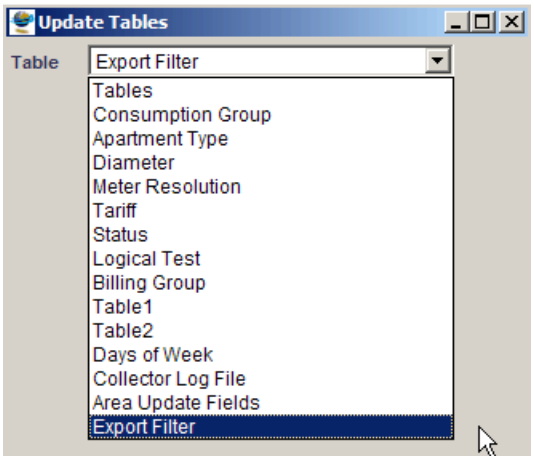
Export filters can be used to analyze data more efficiently as well as allow the exporting of only certain customers who may need to be billed. These filters can be used on any export and can also be used in conjunction with each other.

To create an Export filter you can use either of the two tables:

Billing Group
Export Filter

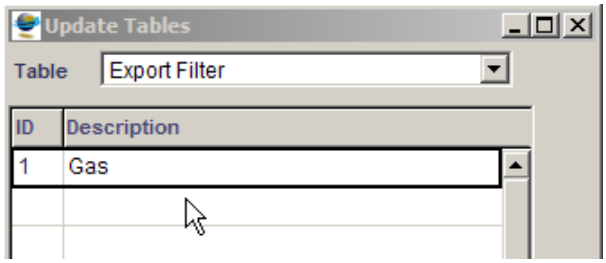
Creating an Export Filter

1. Click on Maintenance and then Update Tables



2. At the following screen select Export Filter form the drop down Menu

3. In the first Field enter a "1" and then Press Tab to go to the description field.
4. For this example enter “Gas” as an export filter. Your screen should look like the one shown below.



You have created an Export Filter that will use GAS as the Filter.

Assigning the Filter to a Consumer.

There are several ways to assign a filter to a consumer or group of consumers. One way to assign a filter is to use the Import Data from CSV to change or add the consumer. You can also change individual consumers by opening Display Consumers and then editing the consumer information. For details on how to modify consumer information see the section on Display Consumers.

If you are running the Premium version of Speed Net is to use the List Consumers Module to change the data. For more information on this module see the next Chapter.

CHAPTER 9

Premium

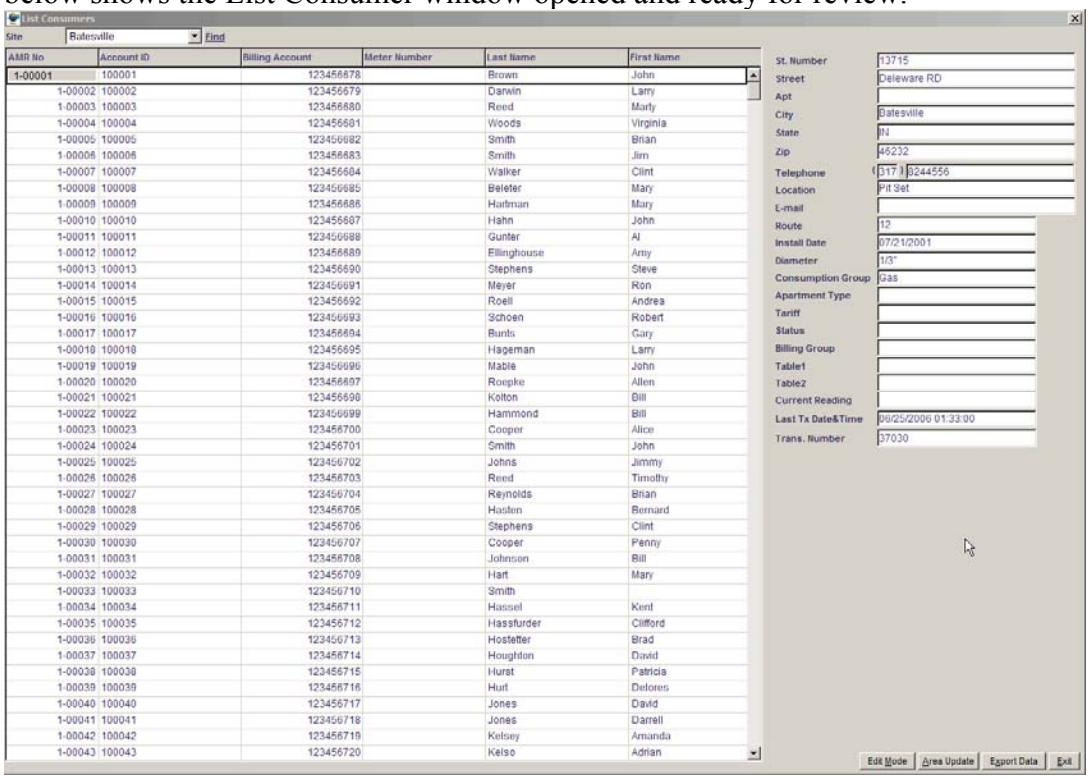
List Consumers

The List Consumers module is designed to help administer the consumer's identification data more efficiently. The module also allows the user to replicate consumer information across the entire data base for a property, eliminating the need to import data from external sources.

The information available for review and modification is identical to the data on the Display Consumer screens.

To open List Consumers, click on the **List Consumer Icon** or click on the upper Menu Consumers, then click on **List Consumers**.

You now have two options to begin – You can click on the drop down box and select the collector that you wish to view or you can **double**-click on **Find** next to the selection window to go to the very first Consumer listed in the system, regardless of the Collector. The second option will provide access to **ALL** consumers in the system. The screen below shows the List Consumer window opened and ready for review.



The left side of the screen shows the consumer identification information while the right side shows the consumers location information.

Searching using Consumer Information

The user can search the current consumer's records by Clicking in the requested field and entering the information to search for. An example would be a search by AMR number.

1. Click or use the **Tab** key to enter any AMR field and start entering an AMR #. After entering the entire AMR number, the table will search and position the record on the first line of the table.
2. You can now reenter another AMR number or select a different field to search on.

Note: Entering a series of numbers or letters that do not exist will not issue a warning. The table's data will remain unchanged and after you have entered the maximum number of characters the field can hold, you may receive a beep from the system.

Editing the Consumers Information

List Consumers allows the user to edit the current consumer data. These changes to the consumer's data can be made on an individual selected record or the data changes can be made on **all records** in the selected collector's data.

All data that is listed on the List Consumers screen can be changed, including the ASSET number. The user should keep in mind that changing some data may exclude the consumer from certain Logical Test and / or Layout List that they have been assigned to.

Note: The user should verify that the changes they make on a global scale are for a selected collector so that changes are not made to other collectors by mistake.

Editing a Single Consumers Data

To change any of the consumer's data click **Edit Mode** to place the Pervasive data base in Modify mode. This can be verified by the word "Modify" at the lower right on the status line.

Once in **"Modify"** mode, any of the field's data can now be changed by clicking on it or using the **TAB** key to tab into the field.

Fields with the drop-down selectors will open a drop down menu of selectable items.

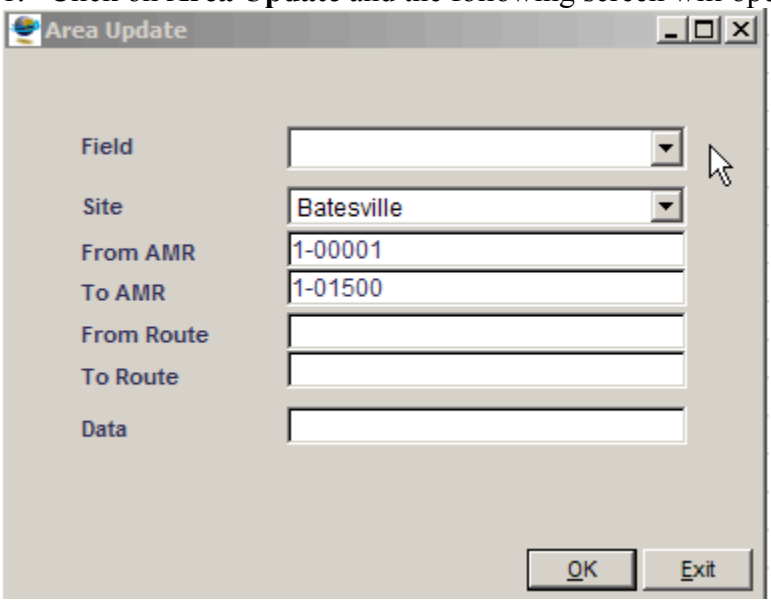
Making Global Changes to Consumers Local Information Data

The List Consumers Module allows the user to make Global Changes to all of the consumer's location information or to just the location information of the collector that has been selected. This ability to make global changes eliminates the need to import data from external sources, and can be applied to ALL CONSUMERS location information data in the data base.

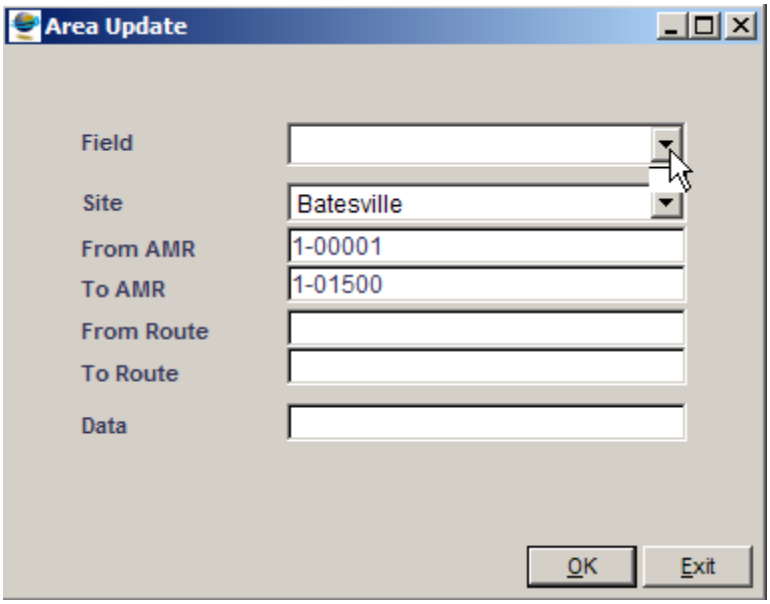
Note: You can not make global changes to the Consumer Identification data.

To make a global change to location information data fields:

1. Click on **Area Update** and the following screen will open.



2. Click on the **"Field"** drop-down box to open the selection window.



3. Click on the **Field** name you wish to make the change to.
4. You now have the option to use the default Collector that is listed or you can click on the **Collector** field to select another collector.
5. If you wish to make the changes to only a series of AMR numbers you can click on the **From AMR** field and enter the **Starting AMR** number where you wish the data changes to start.

Note: AMR # formats should be entered without the "-".

6. Click the **To AMR** field to enter the **Ending AMR** point for the data changes.
7. Click the **"Data"** field and enter the data you wish to use to replace the current data field with. Enter the data exactly how you wish to have it viewed in the field once the update takes place.
8. Click **OK** to make the changes.
9. You will need to select another field to verify the data changes are completed and that they appear the way you entered the data.

Note: If the changes do not appear as desired then follow the steps above to update the fields again.

List Consumers- Printing and Exporting Data

You can use the Print Option to create and/or print the List Consumers information. This procedure is the same as the Print Options available in other Speed Net Modules.

1. Click on **Print** to open the Print Window.
2. Click on the **Type** drop-down selector to select the type of file you want to create or print. Examples include Text, HTML or XML.
3. Click on the **File Name "Browse"** button to enter the name and path of the file.
4. Click on the **Action** Field to select the Action you wish to take, Create File, Create and Open File or Create and Print File.
5. Click **Next** to open the Column Selection window.

6. Make any Column Order changes you desire or enter "0" to omit a column from the output file.
   Note: You do not have the option of selecting the columns or column orders for the Consumers Identification Data.
7. Click **Next**
8. At the Delimiters and String Identifiers window make your selections by clicking on the radio buttons.
9. Click **Finish.**

Depending on your selection in #4 above, Speed Net will open the file for preview or it will submit the file to the printer.

5

REPORTS

- Introduction to Reports
- Readings Report
- Transmitters Report
- Consumption Report
- Premium Exception Reports
- Premium Layout Reports
- Premium Reception Level Report
- Premium Reception Charts Report

CHAPTER 10

Reports

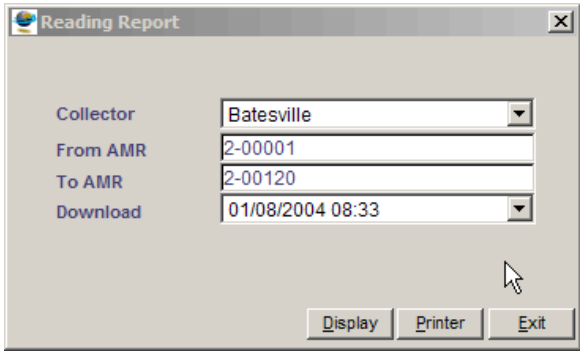
A variety of system reports are available. For most reports, the data to be included in the report can be selected in a number of ways. Each report can be displayed to the screen, or the report can be output to a printer.

Reports that are displayed to the screen are organized in tabular format. The report lines can be re-sorted according to the ascending or descending order of the data in any single column of the tabular report. Thus, in the Consumption Report, for example, clicking on the heading of the column entitled "Street" will sort the report in ascending street name sequence. Clicking again on the column heading will sort the records in descending street name sequence.

The report data thus displayed in tabular format can be exported to a text file, an HTML file, or an XML file. The fields (tabular columns) to be included in the export file and their order can be specified by the user.

The Readings Report

1. Open the Readings Report by clicking **Reports,** from the upper level menu, then clicking on **Readings Report** from menu list.



2. At the following Dialog Box, Click on the **Collector** drops-down box to open the selection window for the Collector.

3. Select the Collector from the list.

Note: After selection of the collector the entire range of AMR numbers for that collector will be set in the From and To AMR fields.

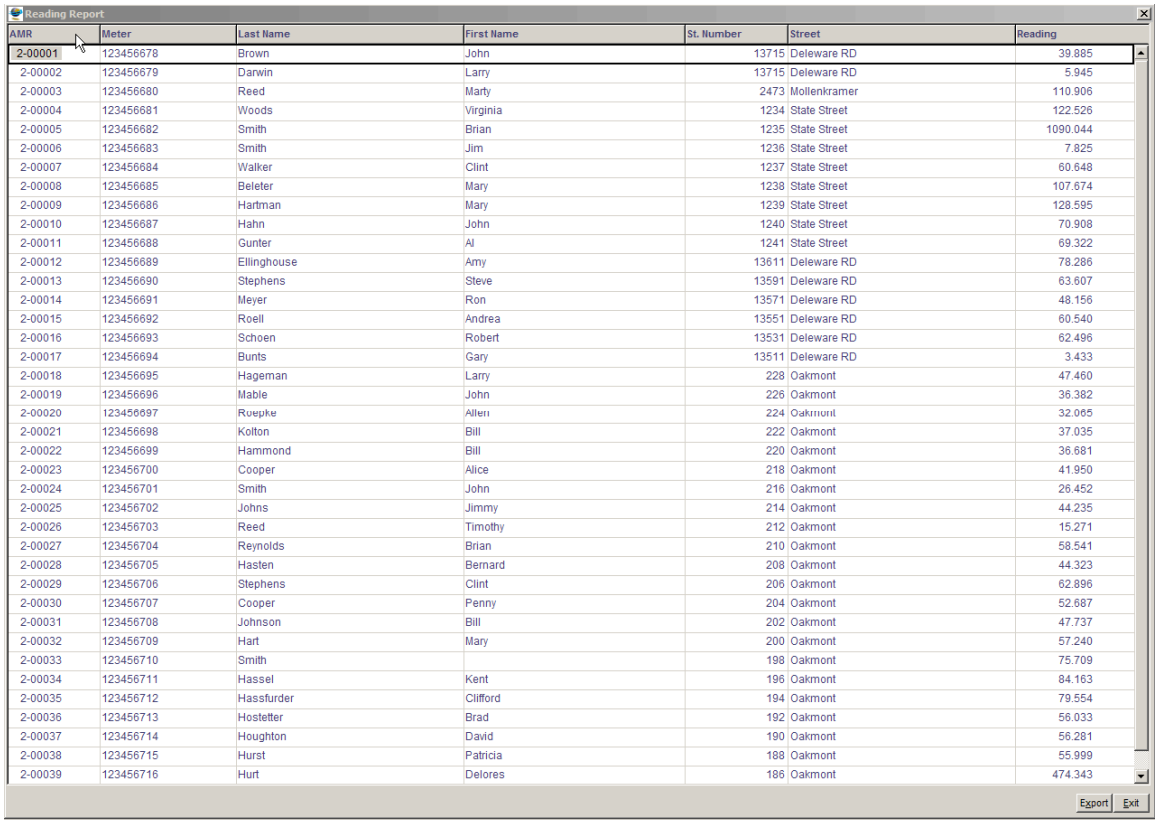
4. If you wish to select a range of AMR numbers for the report click in the **To or From AMR** field and enter the AMR starting and ending numbers.

5. Click on the **Download drop-down menu** to select the download file you wish to use for this report. The report options will default to the most recent download file.
6. After making your selections you may select the type of report by clicking on one of the following action buttons:
   Display – Opens the report for display only, you can not Print from this window, but you can export the reading report data.
   Print – Opens the Report in a Print Preview Window. You can now select additional Print Options for printing the report.
   Exit – Exit the report window and return to the main screen.

Display Reading Report

Selecting Display at the Option window will open a window similar to the one below.

You now have the option click on **Export** to export the data to another format or click on **Exit**. Selecting **Exit** will return you to the Reading Report Selection window.



AMR	Meter	Last Name	First Name	St. Number	Street	Reading
2-00001	123456678	Brown	John	13715	Deleware RD	39.885
2-00002	123456679	Darwin	Larry	13715	Deleware RD	5.945
2-00003	123456680	Reed	Marty	2473	Mollenkramer	110.906
2-00004	123456681	Woods	Virginia	1234	State Street	122.526
2-00005	123456682	Smith	Brian	1235	State Street	1090.044
2-00006	123456683	Smith	Jim	1236	State Street	7.825
2-00007	123456684	Walker	Clint	1237	State Street	60.648
2-00008	123456685	Beleter	Mary	1238	State Street	107.674
2-00009	123456686	Hartman	Mary	1239	State Street	128.595
2-00010	123456687	Hahn	John	1240	State Street	70.908
2-00011	123456688	Gunter	Al	1241	State Street	69.322
2-00012	123456689	Ellinghouse	Amy	13611	Deleware RD	78.286
2-00013	123456690	Stephens	Steve	13591	Deleware RD	63.607
2-00014	123456691	Meyer	Ron	13571	Deleware RD	48.156
2-00015	123456692	Roell	Andrea	13551	Deleware RD	60.540
2-00016	123456693	Schoen	Robert	13531	Deleware RD	62.496
2-00017	123456694	Bunts	Gary	13511	Deleware RD	3.433
2-00018	123456695	Hageman	Larry	228	Oakmont	47.460
2-00019	123456696	Mable	John	226	Oakmont	36.382
2-00020	123456697	Ruepke	Allen	224	Oakmont	32.065
2-00021	123456698	Kolton	Bill	222	Oakmont	37.035
2-00022	123456699	Hammond	Bill	220	Oakmont	36.681
2-00023	123456700	Cooper	Alice	218	Oakmont	41.950
2-00024	123456701	Smith	John	216	Oakmont	26.452
2-00025	123456702	Johns	Jimmy	214	Oakmont	44.235
2-00026	123456703	Reed	Timothy	212	Oakmont	15.271
2-00027	123456704	Reynolds	Brian	210	Oakmont	58.541
2-00028	123456705	Hasten	Bernard	208	Oakmont	44.323
2-00029	123456706	Stephens	Clint	206	Oakmont	62.896
2-00030	123456707	Cooper	Penny	204	Oakmont	52.687
2-00031	123456708	Johnson	Bill	202	Oakmont	47.737
2-00032	123456709	Hart	Mary	200	Oakmont	57.240
2-00033	123456710	Smith		198	Oakmont	75.709
2-00034	123456711	Hassel	Kent	196	Oakmont	84.163
2-00035	123456712	Hassfurder	Clifford	194	Oakmont	79.554
2-00036	123456713	Hostetter	Brad	192	Oakmont	56.033
2-00037	123456714	Houghton	David	190	Oakmont	56.281
2-00038	123456715	Hurst	Patricia	188	Oakmont	55.999
2-00039	123456716	Hurt	Delores	186	Oakmont	474.343

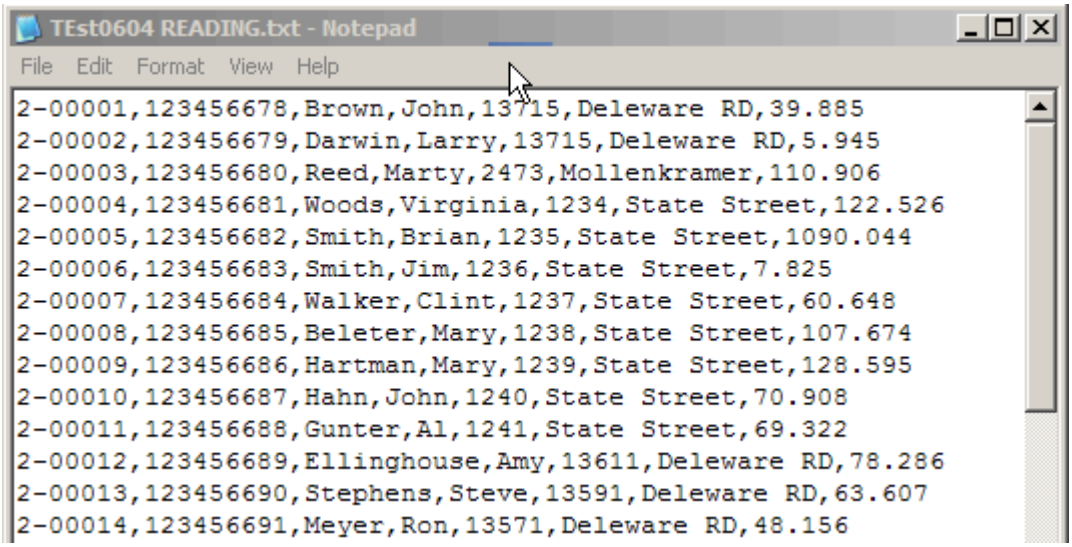
To export the current Reading Report, click **Export** to open the Print Data options selection window.

Exporting the Readings Report

You can use the Export Option to create and export the Reading Report information. This procedure is the same as the Export Options available in the other modules discussed earlier.

1. Click on **Export** to open the Print Data window.
2. Click on the **Type** drop-down selector to select the type of file you want to create or print, examples are Text, HTML or XML.
3. Click on the File Name **Browse** button to enter the name and path of the file.
4. Click on the **Action** Field to select the Action you wish to take, Create File, Create and Open File or Create and Print File.
5. Click **Next** to open the Column Selection window. Make any column order changes you desire or enter "0" to omit a column from the output file.
   Note: You do not have the option of selecting the columns or column orders for the Consumers Identification Data.
6. Click **Next.**
7. At the Delimiters and String Identifiers window make your selections by clicking on the radio buttons.
8. Click **Finish.**

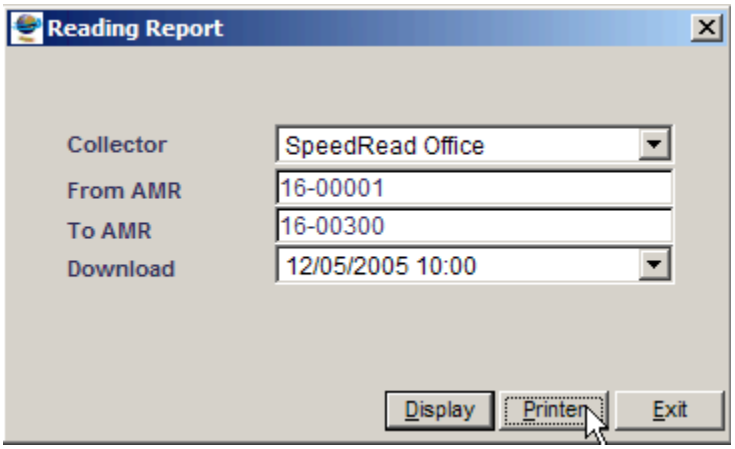
The reading report will then be output to a format that was selected above. Depending on your selections in #5 your report may look similar to the one shown below.



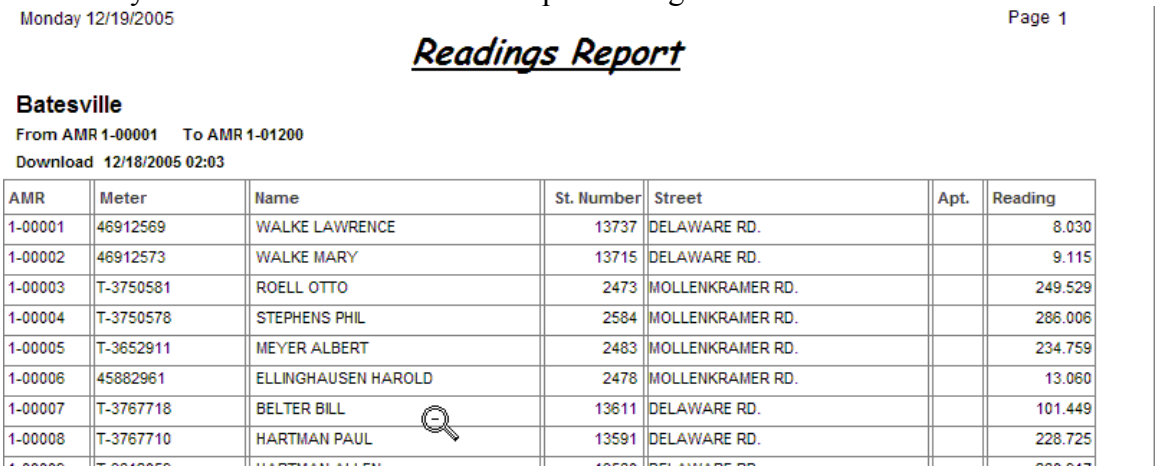
Printing the Readings Report

After making your selections as described above in Reading Report you have the option to print the data to hard copy.

1. Click **Printer** at the following screen to open the PRINT DIALOG window.



2. At the Print Dialog Window make any changes that may be required.
3. Click **Print** to proceed.
4. The Reading Report will be opened and presented in a preview window that will allow you to review the results before proceeding.


Monday 12/19/2005 Page 1

Readings Report

Batesville

From AMR 1-00001 To AMR 1-01200

Download 12/18/2005 02:03

AMR	Meter	Name	St. Number	Street	Apt.	Reading
1-00001	46912569	WALKE LAWRENCE	13737	DELAWARE RD.		8.030
1-00002	46912573	WALKE MARY	13715	DELAWARE RD.		9.115
1-00003	T-3750581	ROELL OTTO	2473	MOLLENKRAMER RD.		249.529
1-00004	T-3750578	STEPHENS PHIL	2584	MOLLENKRAMER RD.		286.006
1-00005	T-3652911	MEYER ALBERT	2483	MOLLENKRAMER RD.		234.759
1-00006	45882961	ELLINGHAUSEN HAROLD	2478	MOLLENKRAMER RD.		13.060
1-00007	T-3767718	BELTER BILL	13611	DELAWARE RD.		101.449
1-00008	T-3767710	HARTMAN PAUL	13591	DELAWARE RD.		228.725

You can now use the View Menu to preview the print output or close the window to return to the Reading Report Selection window

5. To print the document click on the printer Icon or click **File** then click **Print.**
   Note: Clicking print at this point will not allow you to select another printer or choose additional printer options.

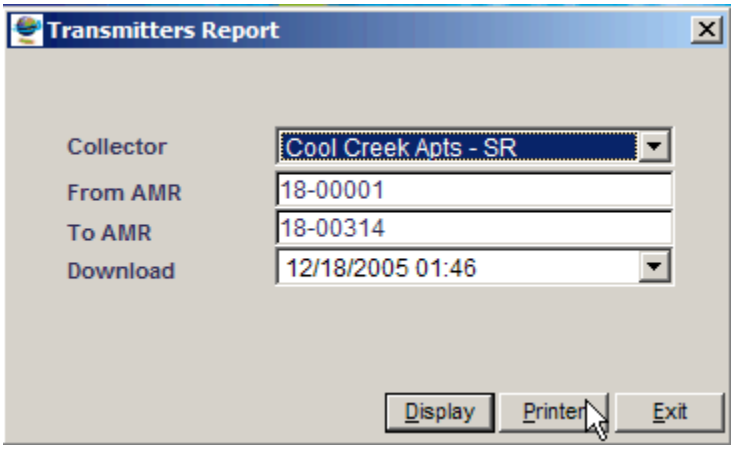
The Transmitter Report

The Speed Net Transmitter Report is designed to give information regarding transmitter dates only. The report does not give any additional meter readings or consumption data.

Output for the Consumption Report is identical to that outlined in the Readings Report section above.

To open a Transmitter Report:

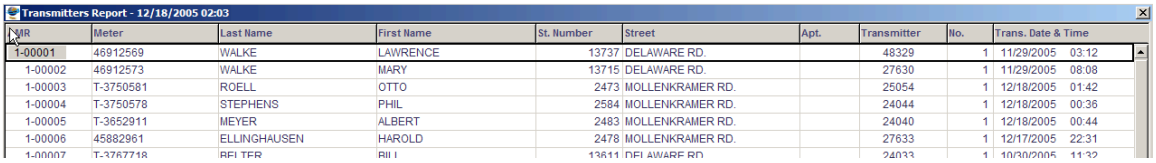
1. Open the Transmitter Report by clicking **Reports**, then clicking **Transmitter Report** from the upper level Menu list.
2. At the following dialog box, click on the **Collector drop-down box** to open the selection window for the Collector.



3. **Select** the Collector from the list.
   Note: After selection of the collector the entire range of AMR numbers for that collector will be set in the From and To AMR fields.
4. If you wish to select a range of AMR numbers for the report click in the **To** or **From AMR** field and enter the AMR starting and ending numbers.
5. Click on the **Download drop-down menu** to select the download file you wish to use for this report.
   Note: The report options will default to the two most recent download files.
6. After making your selections you may select the type of output file to create by clicking on one of the following action buttons:
   Display – Opens the report for display only, you can not Print from this window, but you can export the reading report data.
   Print – Opens the Print Options window so that you may make additional selections for printing the report.
   Exit – Exit the report window and return to the main screen.

Display Transmitter Report

Selecting Display at the Option window will open a window similar to the one below.



Transmitters Report - 12/18/2005 02:03

MR	Meter	Last Name	First Name	St. Number	Street	Apt.	Transmitter	No.	Trans. Date & Time
1-00001	46912569	WALKE	LAWRENCE	13737	DELAWARE RD.		48329	1	11/29/2005 03:12
1-00002	46912573	WALKE	MARY	13715	DELAWARE RD.		27630	1	11/29/2005 08:08
1-00003	T-3750581	ROELL	OTTO	2473	MOLLENKRAMER RD.		25054	1	12/18/2005 01:42
1-00004	T-3750578	STEPHENS	PHIL	2584	MOLLENKRAMER RD.		24044	1	12/18/2005 00:36
1-00005	T-3652911	MEYER	ALBERT	2483	MOLLENKRAMER RD.		24040	1	12/18/2005 00:44
1-00006	45882961	ELLINGHAUSEN	HAROLD	2478	MOLLENKRAMER RD.		27633	1	12/17/2005 22:31
1-00007	T-3767718	BELTER	BILL	13611	DELAWARE RD.		24033	1	10/30/2005 11:32

You now have the option to Select **Export** or **Exit**. Selecting **Exit** will return you to the Consumption Report selection window.

Exporting the Transmitter Report

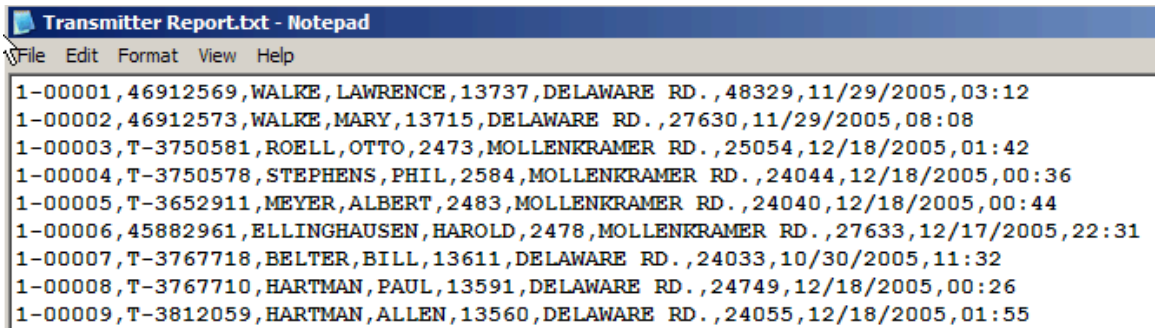
You can use the Export Option to create and export the Transmitter Report information. This procedure is the same as the Export Options available in the other modules discussed earlier.

1. Click on **Export** to open the Print Data window.
2. Click on the **Type drop-down selector** to select the type of file you want to create or print, examples are Text, HTML or XML.
3. Click on the File Name Browse button to enter the name and path of the file.
4. Click on the **Action Field** to select the action you wish to take, Create File, Create and Open File or Create and Print File.
5. Click **Next** to open the Column Selection window. Make any column order changes you desire or enter "0" to omit a column from the output file.
   Note: You do not have the option of selecting the columns or column orders for the Consumers Identification Data.
6. Click **Next.**
9. At the Delimiters and String Identifiers window make your selections by clicking on the radio buttons.
10. Click **Finish.**

The consumption report will then be output to a format that was selected above. Depending on your selections in #5 your report may look similar to the ones shown below.

AMR	Meter Number	Last Name	First Name	St. Number	Street	Transmitter	No	Trans. Date	Trans. Time
1-00001	46912569	WALKE	LAWRENCE	13737	DELAWARE RD.	48329	1	11/29/2005	03:12
1-00002	46912573	WALKE	MARY	13715	DELAWARE RD.	27630	1	11/29/2005	08:08
1-00003	T-3750581	ROELL	OTTO	2473	MOLLENKRAMER RD.	25054	1	12/18/2005	01:42
1-00004	T-3750578	STEPHENS	PHIL	2584	MOLLENKRAMER RD.	24044	1	12/18/2005	00:36

Transmitter Report HTML Format



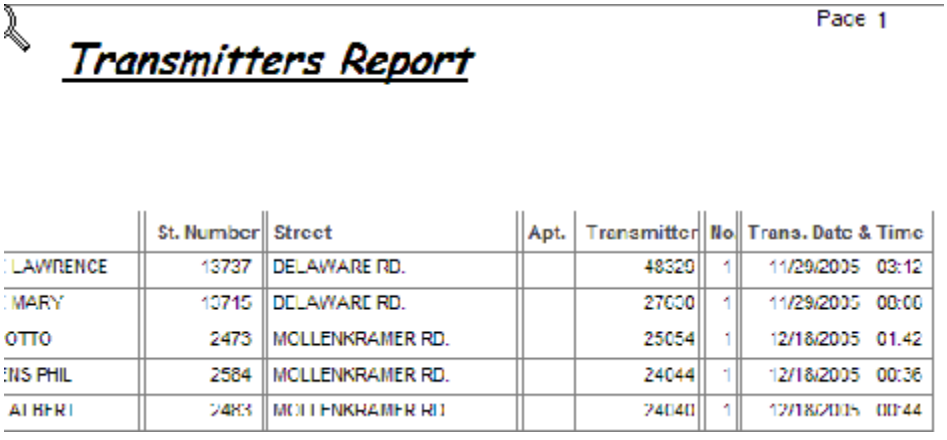
Transmitter Report TEXT CSV Format

Print Transmitter Report

To output the Transmitter Report to a printed copy,

1. Click **Printer** at the Transmitter Report selection window. The Printer Option Window will open to allow you to make changes to the printer layout.
2. Click **Print** and the Transmitter Report will open to a Print Preview window.
3. At the Print Preview window you may make selections to view the report or click on **File Print** to print a hard copy of the report.
4. Click **Exit** to return to the Reading Report selection window.

Below is an example of a Transmitter Report in the Preview Mode.



The Consumption Report

The Speed Net Consumption Report is designed to give a report of Consumption Data or usage on any two selected download dates selected from the download files.

Output for the Consumption Report is identical to that outlined in the Readings Report section above.

To open a Consumption Report:

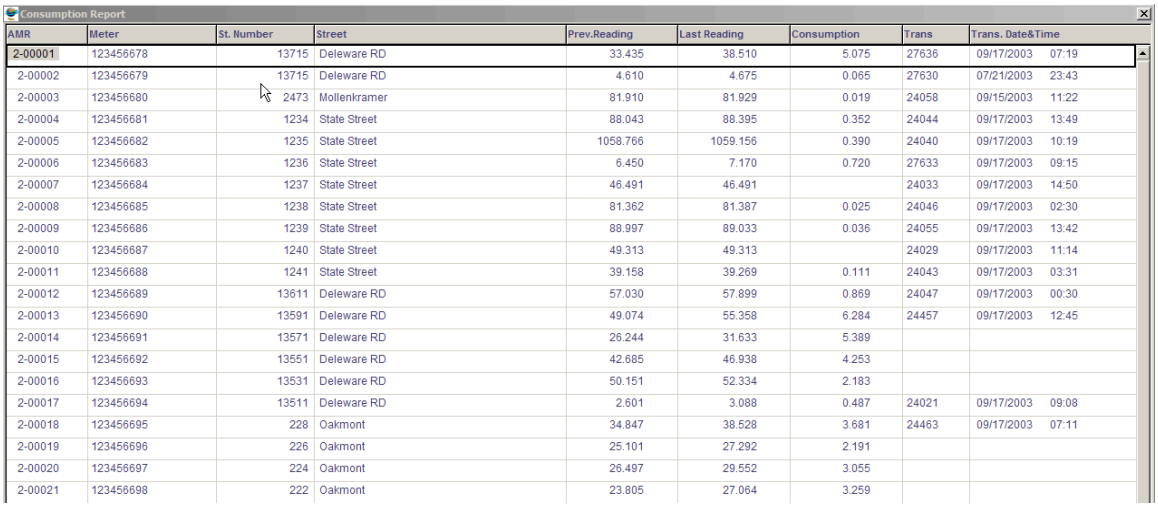
1. Open the Consumption Report by clicking **Reports**, then clicking **Consumption Report** from the upper level Menu list.
2. At the following dialog box, click on the **Collector drop-down box** to open the selection window for the Collector.
3. **Select** the Collector from the list.
   Note: After selection of the collector the entire range of AMR numbers for that collector will be set in the From and To AMR fields.
4. If you wish to select a range of AMR numbers for the report click in the **To** or **From AMR** field and enter the AMR starting and ending numbers.
5. Click on the **Download drop-down menu** to select the download file you wish to use for this report.
   Note: The report options will default to the two most recent download files.
6. After making your selections you may select the type of output file to create by clicking on one of the following action buttons:

Display – Opens the report for display only, you can not Print from this window, but you can export the reading report data.
Print – Opens the Print Options window so that you may make additional selections for printing the report.
Exit – Exit the report window and return to the main screen.

Display Consumption Report

Selecting Display at the Option window will open a window similar to the one below.

You now have the option to Select **Export** or **Exit**. Selecting **Exit** will return you to the Consumption Report selection window.



Consumption Report

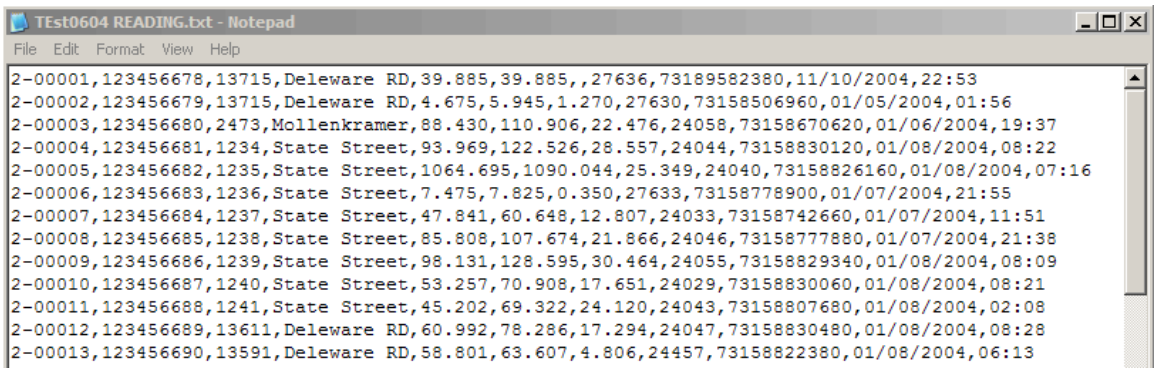
AMR	Meter	St. Number	Street	Prev.Reading	Last Reading	Consumption	Trans	Trans. Date&Time
2-00001	123456678	13715	Deleware RD	33.435	38.510	5.075	27636	09/17/2003 07:19
2-00002	123456679	13715	Deleware RD	4.610	4.675	0.065	27630	07/21/2003 23:43
2-00003	123456680	2473	Mollenkramer	81.910	81.929	0.019	24058	09/15/2003 11:22
2-00004	123456681	1234	State Street	88.043	88.395	0.352	24044	09/17/2003 13:49
2-00005	123456682	1235	State Street	1058.766	1059.156	0.390	24040	09/17/2003 10:19
2-00006	123456683	1236	State Street	6.450	7.170	0.720	27633	09/17/2003 09:15
2-00007	123456684	1237	State Street	46.491	46.491		24033	09/17/2003 14:50
2-00008	123456685	1238	State Street	81.362	81.387	0.025	24046	09/17/2003 02:30
2-00009	123456686	1239	State Street	88.997	89.033	0.036	24055	09/17/2003 13:42
2-00010	123456687	1240	State Street	49.313	49.313		24029	09/17/2003 11:14
2-00011	123456688	1241	State Street	39.158	39.269	0.111	24043	09/17/2003 03:31
2-00012	123456689	13611	Deleware RD	57.030	57.899	0.869	24047	09/17/2003 00:30
2-00013	123456690	13591	Deleware RD	49.074	55.358	6.284	24457	09/17/2003 12:45
2-00014	123456691	13571	Deleware RD	26.244	31.633	5.389		
2-00015	123456692	13551	Deleware RD	42.685	46.938	4.253		
2-00016	123456693	13531	Deleware RD	50.151	52.334	2.183		
2-00017	123456694	13511	Deleware RD	2.601	3.088	0.487	24021	09/17/2003 09:08
2-00018	123456695	228	Oakmont	34.847	38.528	3.681	24463	09/17/2003 07:11
2-00019	123456696	226	Oakmont	25.101	27.292	2.191		
2-00020	123456697	224	Oakmont	26.497	29.552	3.055		
2-00021	123456698	222	Oakmont	23.805	27.064	3.259		

Exporting the Consumption Report

You can use the Export Option to create and export the Consumption Report information. This procedure is the same as the Export Options available in the other modules discussed earlier.

1. Click on **Export** to open the Print Data window.
2. Click on the **Type drop-down selector** to select the type of file you want to create or print, examples are Text, HTML or XML.
3. Click on the File Name Browse button to enter the name and path of the file.
4. Click on the **Action Field** to select the action you wish to take, Create File, Create and Open File or Create and Print File.
5. Click **Next** to open the Column Selection window. Make any column order changes you desire or enter "0" to omit a column from the output file.
   Note: You do not have the option of selecting the columns or column orders for the Consumers Identification Data.
6. Click **Next.**
7. At the Delimiters and String Identifiers window make your selections by clicking on the radio buttons.
8. Click **Finish.**

The consumption report will then be output to a format that was selected above. Depending on your selections in #5 your report may look similar to the one shown below.



Print Consumption Report

To output the Reading Report to a printed copy,

11. Click **Printer** at the Reading Report selection window. The Printer Option Window will open to allow you to make changes to the printer layout.
12. Click **Print** and the Reading Report will open to a Print Preview window.
13. At the Print Preview window you may make selections to view the report or click on **File Print** to print a hard copy of the report.
14. Click **Exit** to return to the Reading Report selection window.

Below is an example of a Consumption Report in the Preview Mode.

Tuesday 24 August 2004 Page1

Consumption Report

Batesville

From Download 06/09/2003 09:00 **To Download** 09/17/2003 15:06

From AMR 2-00001 **To AMR** 2-00120

AMR	Meter	St. Number	Street	Prev.Reading	Last Reading	Consumption	Trans	Trans. Date&Time
2-00001	123456678	13715	Deleware RD	33.435	38.510	5.075	27636	09/17/2003 07:19
2-00002	123456679	13715	Deleware RD	4.610	4.675	0.065	27630	07/21/2003 23:43
2-00003	123456680	2473	Mollenkramer	81.910	81.929	0.019	24058	09/15/2003 11:22
2-00004	123456681	1234	State Street	88.043	88.395	0.352	24044	09/17/2003 13:49
2-00005	123456682	1235	State Street	1058.766	1059.156	0.390	24040	09/17/2003 10:19
2-00006	123456683	1236	State Street	6.450	7.170	0.720	27633	09/17/2003 09:15
2-00007	123456684	1237	State Street	46.491	46.491		24033	09/17/2003 14:50
2-00008	123456685	1238	State Street	81.362	81.387	0.025	24046	09/17/2003 02:30
2-00009	123456686	1239	State Street	88.997	89.033	0.036	24055	09/17/2003 13:42
2-00010	123456687	1240	State Street	49.313	49.313		24029	09/17/2003 11:14
2-00011	123456688	1241	State Street	39.158	39.269	0.111	24043	09/17/2003 03:31
2-00012	123456689	13611	Deleware RD	57.030	57.899	0.869	24047	09/17/2003 00:30
2-00013	123456690	13591	Deleware RD	49.074	55.358	6.284	24457	09/17/2003 12:45
2-00014	123456691	13571	Deleware RD	26.244	31.633	5.389		
2-00015	123456692	13551	Deleware RD	42.685	46.938	4.253		
2-00016	123456693	13531	Deleware RD	50.151	52.334	2.183		
2-00017	123456694	13511	Deleware RD	2.601	3.088	0.487	24021	09/17/2003 09:08
2-00018	123456695	228	Oakmont	34.847	38.528	3.681	24463	09/17/2003 07:11

CHAPTER 11

Premium

Exception Reports

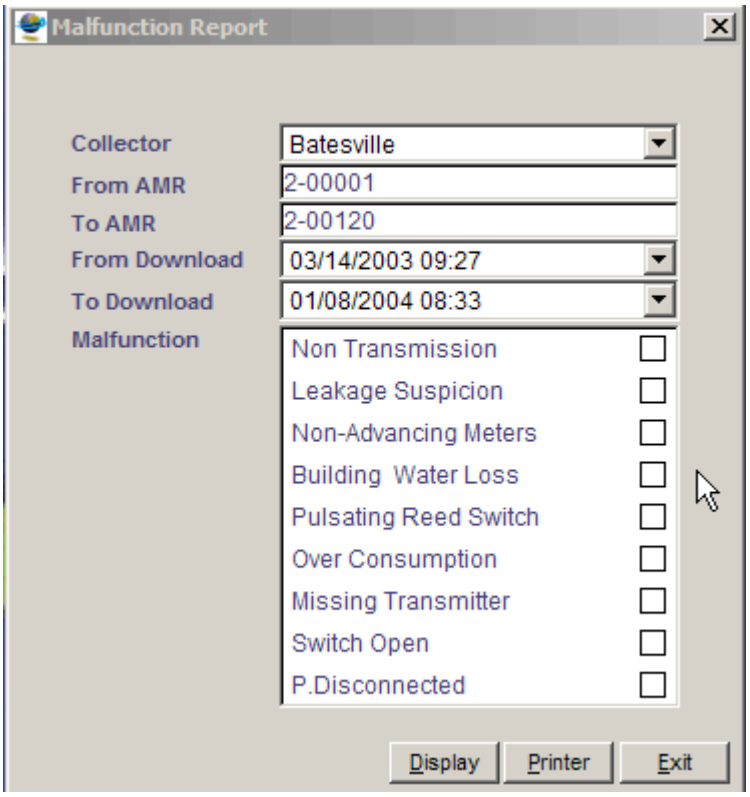
The Speed Net Exception Reports Module is designed to generate reports based on normal system Exceptions. In some cases the Exception results may require that all downloaded data be reprocessed to update Exception settings and parameters. For additional details on Exceptions and Logical test parameters please see Chapter 14, Logical Test.

NOTE: This module is only available in the Premium version of Speed Net.

The Exception Report

To generate a report start by clicking on **Reports**, then select **Exception Reports** from the menu. At the following screen you will have the option to make selections on the type of Exceptions you want the report for.

1. Open the Exception Report by clicking **Reports,** from the upper level menu, and then click **Exception Report** from menu list.



2. At the following Dialog Box, click on the **Collector** drop-down box to open the selection window for the Collector.

3. Select the Collector from the list.

Note: After selection of the collector the entire range of AMR numbers for that collector will be set in the From and To AMR fields.

4. If you wish to select a range of AMR numbers for the report click in the **To or from AMR** field and enter the AMR starting and ending numbers.

Note: You may need to select another From Download date other than the default date selected to generate results for the report.

5. Click on the **From Download drop-down menu** to select the first download file you wish to use for this report. The report options will default to the most recent download file.
6. Click on the **To Download drop-down menu** to select the ending date for the report
7. After making these selections you may now select the Exception type you want the Exception report to search for. Exceptions results may be based on additional parameters and the current default parameters may not generate any results for the report.

Exception Descriptions:

Non – Transmission – Shows all days that the Transmitter(s) did not check into the system.

Leakage Suspicion – Leakage suspicion is based on internal transmitter functions and may not be activated on all transmitters. Leakage suspicion is designed to detect constant movement of the meter.

Non – Advancing Meters –This Exception will generate a report of meters that do not show the required consumption in a set number of days. These consumption parameters are set in the Logical Test Module.

Building Water Loss – Building water loss is determined by setup of Layouts with in the system. Layout is set in the Layout Module in the Maintenance menu and the parameters are set in the Logical Test Module. See Section 7, Chapter 13 "Layout List".

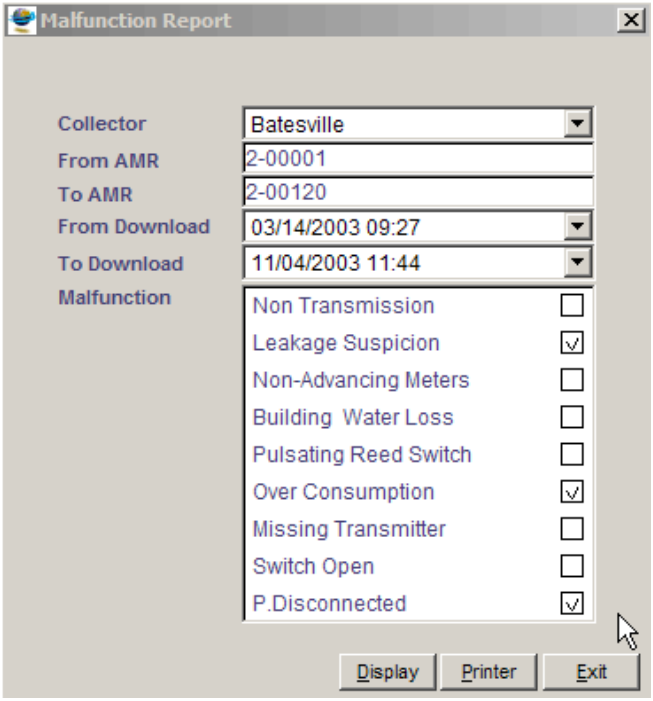
Pulsating Read Switch – Pulsating read switch Exceptions are based off internal transmitter settings and are designed to detect possible read switch bouncing or double pulses. This may not be present on all transmitters.

Over Consumption – Over consumption is determined by parameters set in the Logical Test Module. The Exception will generate a report of meters that have exceeded the consumption parameters set for a set number of days.

Missing Transmitter – This Exception is used to search for transmitters that are missing or that have not been installed in the system.

Switch Open – This Exception will generate a list of meters where the read switch was in an open position the last time the transmitter checked in. It may not be present on all transmitters.

P. Disconnected – This Exception is designed to generate a report that shows possible disconnected transmitter / meters in the system. The ability to detect disconnection from the meter is an internal function of the transmitter as well as the type of meter that is used. It may not be available on all transmitters.

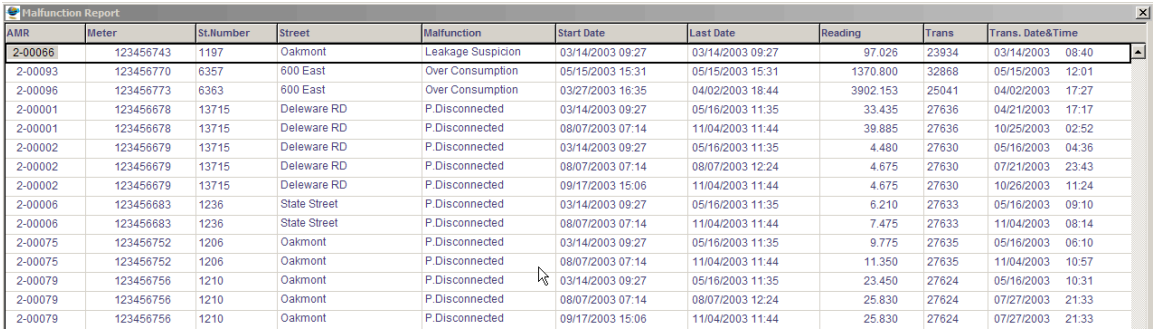


8. You may now select an Exception or multiple Exceptions by clicking on the boxes by each of the descriptions.
   The screen shows that Leak Suspicion, Over Consumption and P.Disconnected selected for the report.

After making your selections you have the option to generate a Display or Print out the results.

Display the Exception Report

Click on **Display**, to open the report for review. The results should look similar to screen below.


Malfunction Report

AMR	Meter	St.Number	Street	Malfunction	Start Date	Last Date	Reading	Trans	Trans. Date&Time
2-00066	123456743	1197	Oakmont	Leakage Suspicion	03/14/2003 09:27	03/14/2003 09:27	97.026	23934	03/14/2003 08:40
2-00093	123456770	6357	600 East	Over Consumption	05/15/2003 15:31	05/15/2003 15:31	1370.800	32868	05/15/2003 12:01
2-00096	123456773	6363	600 East	Over Consumption	03/27/2003 16:35	04/02/2003 18:44	3902.153	25041	04/02/2003 17:27
2-00001	123456678	13715	Deleware RD	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	33.435	27636	04/21/2003 17:17
2-00001	123456678	13715	Deleware RD	P.Disconnected	08/07/2003 07:14	11/04/2003 11:44	39.885	27636	10/25/2003 02:52
2-00002	123456679	13715	Deleware RD	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	4.480	27630	05/16/2003 04:36
2-00002	123456679	13715	Deleware RD	P.Disconnected	08/07/2003 07:14	08/07/2003 12:24	4.675	27630	07/21/2003 23:43
2-00002	123456679	13715	Deleware RD	P.Disconnected	09/17/2003 15:06	11/04/2003 11:44	4.675	27630	10/26/2003 11:24
2-00006	123456683	1236	State Street	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	6.210	27633	05/16/2003 09:10
2-00006	123456683	1236	State Street	P.Disconnected	08/07/2003 07:14	11/04/2003 11:44	7.475	27633	11/04/2003 08:14
2-00075	123456752	1206	Oakmont	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	9.775	27635	05/16/2003 06:10
2-00075	123456752	1206	Oakmont	P.Disconnected	08/07/2003 07:14	11/04/2003 11:44	11.350	27635	11/04/2003 10:57
2-00079	123456756	1210	Oakmont	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	23.450	27624	05/16/2003 10:31
2-00079	123456756	1210	Oakmont	P.Disconnected	08/07/2003 07:14	08/07/2003 12:24	25.830	27624	07/27/2003 21:33
2-00079	123456756	1210	Oakmont	P.Disconnected	09/17/2003 15:06	11/04/2003 11:44	25.830	27624	07/27/2003 21:33

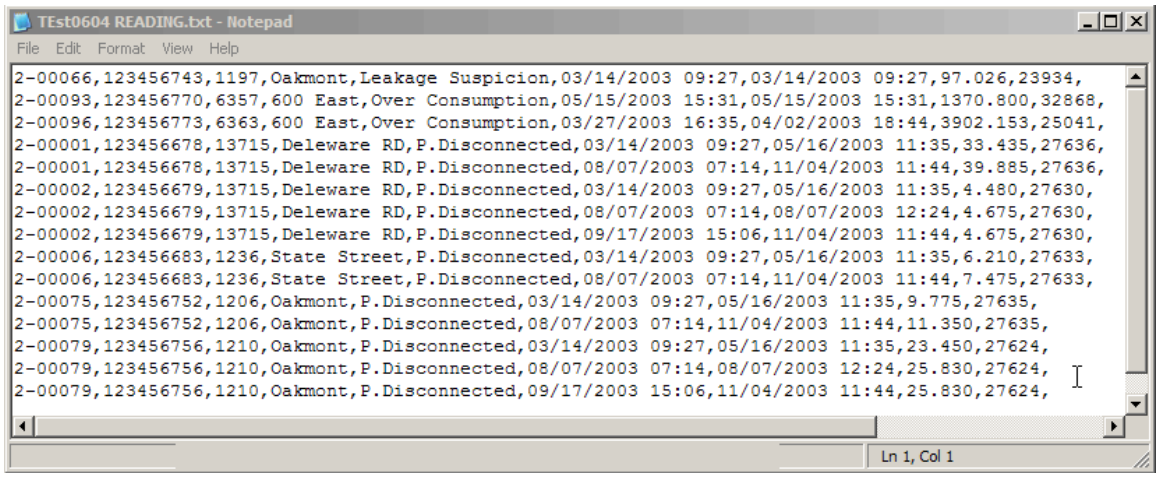
You may now click on **Export** to output the data to an export file or you can click **on Exit**, to return to the Exception Selection window.

Exporting the Exception Report

You can use the Export Option to create and export the Exception Report information. This procedure is the same as the Export Options available in the other modules discussed earlier.

7. Click on **Export** to open the Print Data window.
8. Click on the **Type** drop-down selector to select the type of file you want to create or print, examples are Text, HTML or XML.
9. Click on the File Name **Browse** button to enter the name and path of the file.
10. Click on the **Action** Field to select the Action you wish to take, Create File, Create and Open File or Create and Print File.
11. Click **Next** to open the Column Selection window. Make any column order changes you desire or enter "0" to omit a column from the output file.
12. Click **Next.**
13. At the Delimiters and String Identifiers window make your selections by clicking on the radio buttons.
14. Click **Finish.**

The Exception report will then be output to a format that was selected above. Depending on your selections in #5 your report may look similar to the one shown below.



You may now select the window menu to print the report or exit this preview and return to the Exception Report Display window.

Print a Exception Report

To output the Exception Report to a printed copy:

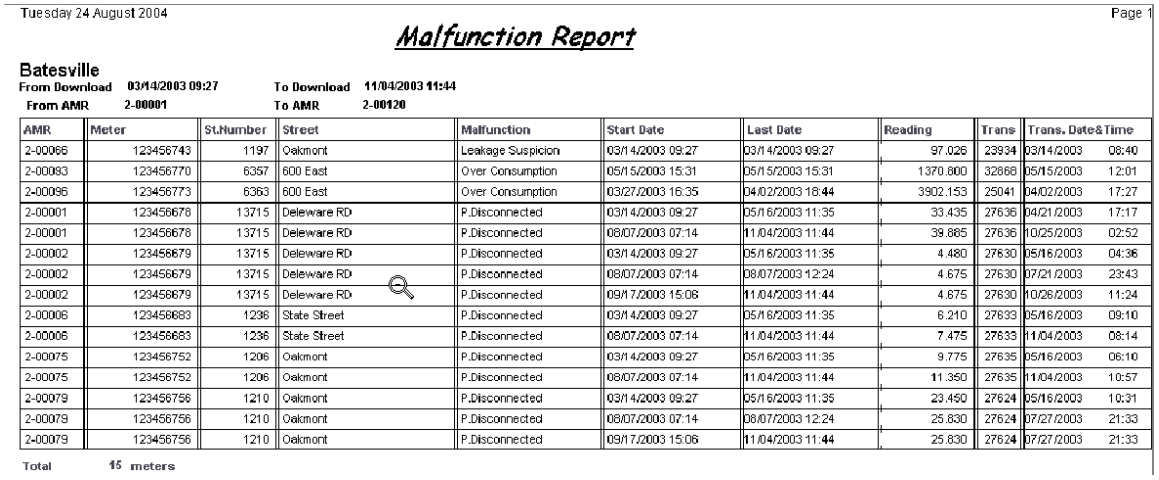
1. Click on **Printer** at the Reading Report selection window. The Printer Option Window will open to allow you to make changes to the printer layout.

2. Click **Print** and the Exception Report will open to a Print Preview window.

3. At the Print Preview window you may make selections to view the report or click **on File Print** to print a hard copy of the report.

4. Click **File,** and then click **Exit** to return to the Exception Report selection window.

Below is an example of an Exception Report in the Preview Mode.



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Malfunction Report

Batesville

From Download 03/14/2003 09:27 **To Download** 11/04/2003 11:44
From AMR 2-00001 **To AMR** 2-00120

AMR	Meter	St.Number	Street	Malfunction	Start Date	Last Date	Reading	Trans	Trans. Date&Time
2-00066	123456743	1197	Oakmont	Leakage Suspicion	03/14/2003 09:27	03/14/2003 09:27	97.026	23934	03/14/2003 08:40
2-00093	123456770	6357	600 East	Over Consumption	05/15/2003 15:31	05/15/2003 15:31	1370.800	32868	05/15/2003 12:01
2-00096	123456773	6363	600 East	Over Consumption	03/27/2003 16:35	04/02/2003 18:44	3902.153	25041	04/02/2003 17:27
2-00001	123456678	13715	Deleware RD	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	33.435	27636	04/21/2003 17:17
2-00001	123456678	13715	Deleware RD	P.Disconnected	08/07/2003 07:14	11/04/2003 11:44	39.885	27636	10/25/2003 02:52
2-00002	123456679	13715	Deleware RD	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	4.480	27630	05/16/2003 04:36
2-00002	123456679	13715	Deleware RD	P.Disconnected	08/07/2003 07:14	08/07/2003 12:24	4.675	27630	07/21/2003 23:43
2-00002	123456679	13715	Deleware RD	P.Disconnected	09/17/2003 15:06	11/04/2003 11:44	4.675	27630	10/26/2003 11:24
2-00006	123456683	1236	State Street	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	6.210	27633	05/16/2003 09:10
2-00006	123456683	1236	State Street	P.Disconnected	08/07/2003 07:14	11/04/2003 11:44	7.475	27633	11/04/2003 08:14
2-00075	123456752	1206	Oakmont	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	9.775	27635	05/16/2003 06:10
2-00075	123456752	1206	Oakmont	P.Disconnected	08/07/2003 07:14	11/04/2003 11:44	11.350	27635	11/04/2003 10:57
2-00079	123456756	1210	Oakmont	P.Disconnected	03/14/2003 09:27	05/16/2003 11:35	23.450	27624	05/16/2003 10:31
2-00079	123456756	1210	Oakmont	P.Disconnected	08/07/2003 07:14	08/07/2003 12:24	25.830	27624	07/27/2003 21:33
2-00079	123456756	1210	Oakmont	P.Disconnected	09/17/2003 15:06	11/04/2003 11:44	25.830	27624	07/27/2003 21:33

Total 15 meters

CHAPTER 12

Reception Reports

Speed Net Premium Version offers a whole range of reports designed specifically for analysis on system receptions and transmissions from the transmitters. These reports will give the user detailed reports and charts that show the total number of transmission attempts by the transmitters as well as details on the receptions of each of the infrastructure devices such as repeaters.

The reports will work best with a series of downloads over a period of weeks or months. Using the reports with periodic downloads will generate unusual data results.

Reception Level Report Detailed

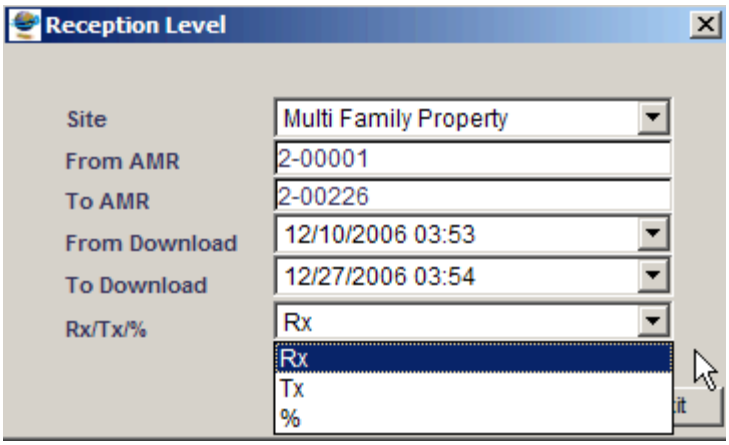
The Reception Source Report Detailed report is designed to show each reception source recorded for each transmitter for the download files indicated in the selection screen. The report will show days missed as well as multiply receptions sources for each individual transmitter.

To create a Reception Level Report;

1. Click on **Reports** then Click on Reception Level Report.
2. Click on the **Collector drop-down menu** to select the collector for the report.
3. If you wish to have the report for a series of AMR numbers you may click **on the To and From AMR fields** and enter the AMR numbers.
4. You may use the default download date or click on the **Download drop-down fiel**d to select any of the dates in the data base.

Note: The default download selection is for the last 8 downloads.

5. You may now select what type of report you want to view. There are three types: RX (Receptions) TX (Transmissions) and % (A percentage of transmissions to receptions).



6. After selecting your output parameters Click OK.
7. You may now select Printer or Display to preview the Report.

Opening the Display Consumer Module

If needed you can inspect the consumer's data in detail by clicking on any of the **AMR # fields to select it**, and then **Double** click **the AMR field** to open the Display Consumer Module for that consumer you have selected.

Display the Reception Level Report

After making your selections for the report parameters you have the options as with all reports to output the data to a screen display and then export the data.

Most of the data on the screen is self explanatory. The number in each of the date's columns will show either the number of Receptions of the STx unit, or the number of Transmissions of the STx unit between the dates.

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Reception Level Report

%

Batesville

From Download 05/24/2006 01:44 To Download 06/25/2006 01:53
From AMR 1-00001 To AMR 1-01500

AMR	St. Number	Street	Trans	05/24/2006	05/26/2006	05/27/2006	05/28/2006	05/29/2006	05/30/2006	06/08/2006	06/22/2006	06/24/2006	06/25/20
1-00090	6351	600 East	24861	70	74	67	100	78	78	65	69	67	78
1-00091	6353	600 East	28989	61	75	75	63	86	63	57	59	79	50
1-00093	6357	600 East	25076	66	59	44	53	65	54	63	64	68	71
1-00094	6359	600 East	24752	53	68	48	80	75	33	57	57	56	59
1-00095	6361	600 East	33216	76	65	86	56	100	67	80	66	65	88
1-00096	6363	600 East	25041	85	91	69	89	90	85	90	88	88	85
1-00097	6365	600 East	55223	64	55	100	67	75	89	68	71	59	63
1-00098	6367	600 East	24969	66	79	69	74	74	85	73	71	70	80
1-00099	6369	600 East	29014	73	79	60	100	56	75	84	79	79	56
1-00100	6371	600 East	33331	57	73	75	86	88	86	67	81	64	60
1-00101	1212	Oakmont	32478	42	69	59	79	69	75	54	60	55	68
1-00102	1214	Oakmont	24608	66	46	45	46	58	62	69	63	75	64
1-00103	1216	Oakmont	24620	63	52	89	50	67	88	57	60	65	61
1-00104	1218	Oakmont	25039	65	66	75	74	76	76	65	73	84	78
1-00105	1220	Oakmont	24644	62	48	66	65	65	69	60	69	66	60
1-00106	1222	Oakmont	25044	74	75	80	89	90	79	76	81	84	89

Thursday 12/28/2006 Page 3

Reception Level Report

Rx

Batesville

From Download 05/24/2006 01:44 To Download 06/25/2006 01:53
From AMR 1-00001 To AMR 1-01500

AMR	St. Number	Street	Trans	05/24/2006	05/26/2006	05/27/2006	05/28/2006	05/29/2006	05/30/2006	06/08/2006	06/22/2006	06/24/2006	06/25/20
1-00090	6351	600 East	24861	124	14	6	9	7	7	53	88	12	7
1-00091	6353	600 East	28989	68	12	6	5	6	5	39	64	11	5
1-00093	6357	600 East	25076	232	29	40	41	30	30	144	232	48	10
1-00094	6359	600 East	24752	311	13	12	12	6	3	88	238	35	17
1-00095	6361	600 East	33216	83	11	6	5	8	2	60	71	11	7
1-00096	6363	600 East	25041	296	60	9	65	45	17	357	374	30	11
1-00097	6365	600 East	55223	102	11	8	6	6	8	52	84	10	5
1-00098	6367	600 East	24969	387	41	101	35	40	22	360	575	43	55
1-00099	6369	600 East	29014	84	11	6	7	5	6	59	88	11	5
1-00100	6371	600 East	33331	60	11	6	6	7	6	45	83	9	3
1-00101	1212	Oakmont	32478	439	22	10	11	11	15	133	209	28	17
1-00102	1214	Oakmont	24608	134	12	5	6	7	8	72	98	15	9
1-00103	1216	Oakmont	24620	93	12	8	5	6	7	73	166	32	14
1-00104	1218	Oakmont	25039	166	57	9	20	13	29	107	236	16	69
1-00105	1220	Oakmont	24644	344	62	37	33	22	18	319	321	63	27
1-00106	1222	Oakmont	25044	366	61	8	8	9	44	228	274	16	8

Exporting the Reception Level Report

You can use the Export Option to create and export the Reception Level Report information. This procedure is the same as the Export Options available in the other modules discussed earlier.

1. Click on **Export** to open the Print Data window.
2. Click on the **Type** drop-down selector to select the type of file you want to create or print Text, HTML or XML.

3. Click on the File Name **Browse** button to enter the name and path of the file.
4. Click on the **Action** Field to select the Action you wish to take, Create File, Create and Open File or Create and Print File.
5. Click **Next** to open the Column Selection window. Make any column order changes you desire or enter "0" to omit a column from the output file.
6. Click **Next.**
7. At the Delimiters and String Identifiers window make your selections by clicking on the radio buttons.
8. Click **Finish.**

The reception report will then be output to a format that was selected above.

Print the Reception Level Report

To output the Reception Level Report to a printed copy:

1. Click **Printer** at the Reception Level Report selection window. The Printer Option Window will open to allow you to make changes to the printer layout.

2. Click **Print** and the Reception Level Report will open to a Print Preview window.

3. At the Print Preview window you may make selections to view the report or click **on File Print** to print a hard copy of the report.

4. Click **File,** and then click **Exit** to return to the Reception Level Report selection window.

Reception Level Charts

The reports menu also allows the user to create charts based on the Reception Levels. These charts are designed to give a visual picture of the reception coverage of all reception devices that are currently installed in the system.

There are two charts available:

Level – This chart will detail all receptions received at the data collector regardless of actual reception source. It will detail the number of STx units that have been received with in an hourly break down.

Source – The Source chart is used to chart receptions on each device. The results of the chart will show each device and the number of STx units received by the device, with a break down for unique receptions.

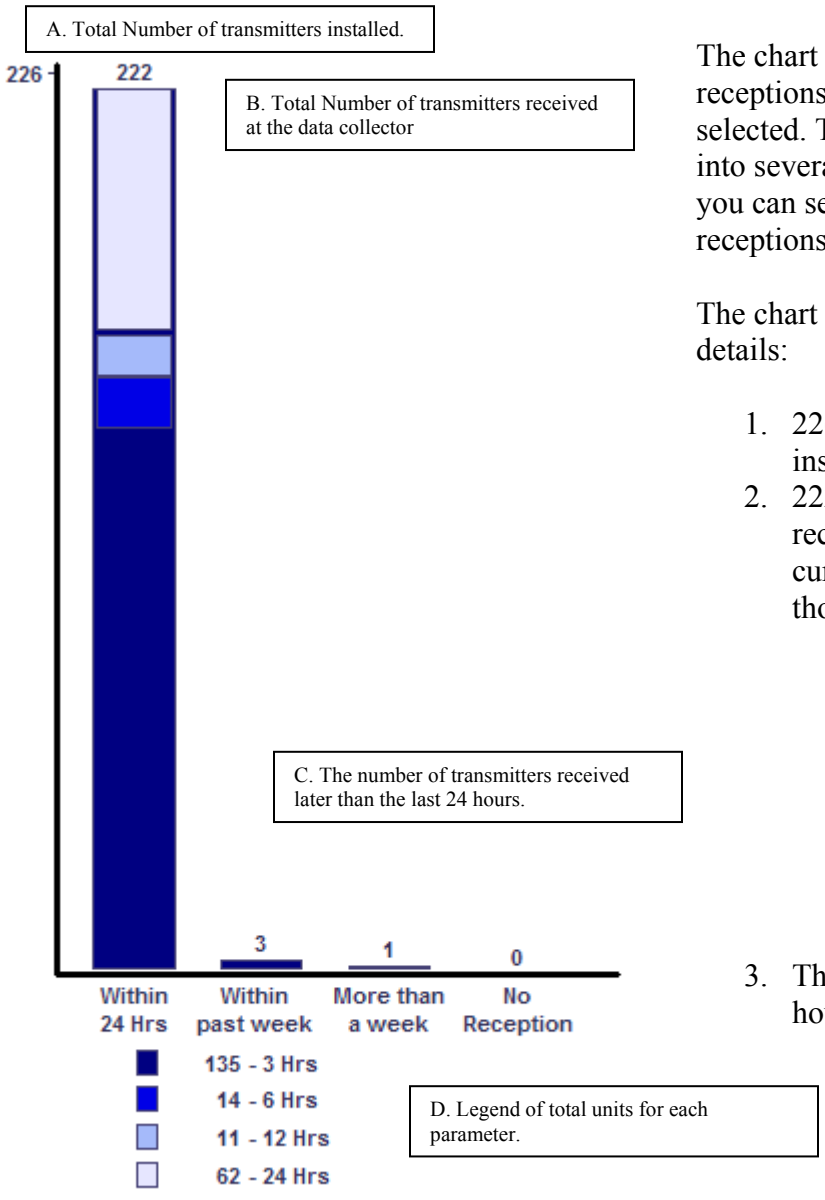
Create a Reception Chart

1. Click on **Reports**, then place the mouse cursor over Reception Charts.
2. When the sub menu appears click on **Level or Source**.

3. At the following screen click on the **Collector drop-down field** to select the collector to be used for the report.
4. The "To and From" AMR numbers will default to all AMR numbers in the system for the data collector selected above. If you wish to change the To AMR and From AMR locations, click the required field and enter the AMR numbers.
5. Click on the **Download drop-down list** and **Select** any dates that are listed, or leave the default date selected.
6. Click on **Print** to open the chart for viewing.

The following screens show a Reception Level Chart and a Reception Level Source. The results you get may differ depending on the collector and downloads you select for your report.

RECEPTION LEVEL CHART



The chart at the left shows all receptions for the download selected. The results are divided into several chart sections so that you can see clearly the level of receptions.

The chart shows the following details:

1. 226 – Transmitters installed
2. 222 –Transmitters received within the current 24 hour period, of those-
    a. 135- within the last 3 hrs.
    b. 14- within the last 6 hrs.
    c. 11- within the last 12 hrs.
    d. 62 within the last 24
3. There are 4 later than 24 hours.

6

ACTIONS

- Introduction to Actions
- Initiate Call
- Export Data
- Export Data to CSV File
- Import Data
- Import Data From CSV File

CHAPTER 13

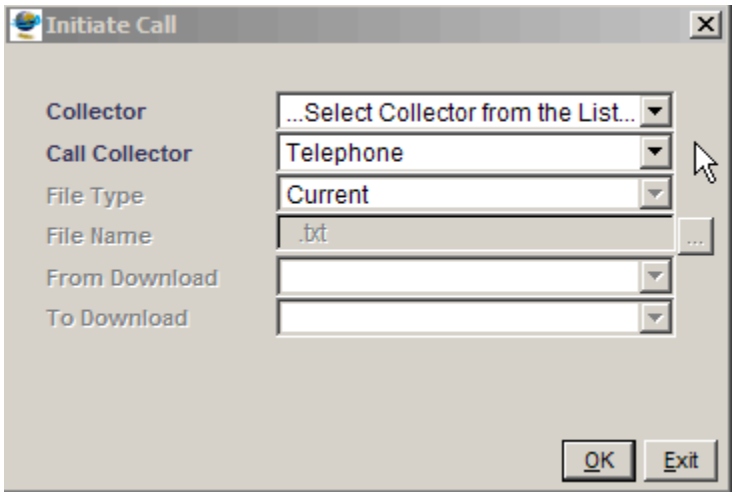
Introduction to Actions

The Actions menu item has several Modules that will allow the user the ability to import and export consumer information. These import and export functions can be very detailed and may require several practice sessions to master.

The Actions menu also has the module Initiate Call, which is the primary connection interface used to retrieve collector information. The Initiate call function was discussed in Chapter 4, Creating a Data Collector. It is discussed in further detail in this Section.

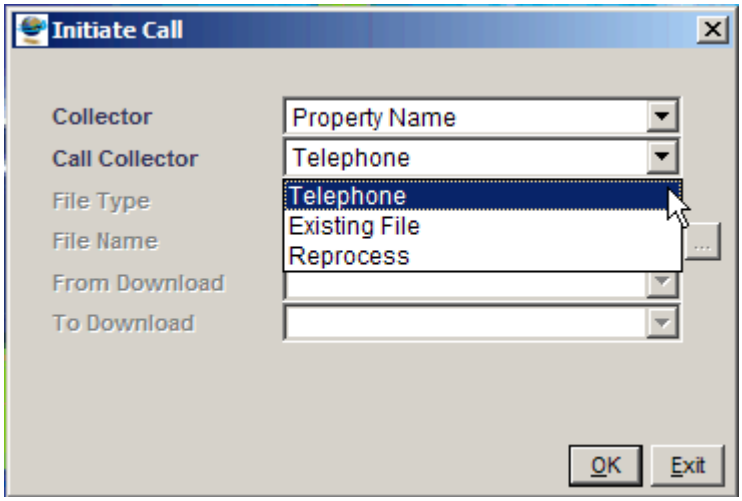
Initiate Call

Initiate Call is the primary connection interface used to download data collectors either via modem or using an existing file.



1. On the Top Menu Items click on **Actions**, then click on **Initiate Call**.

2. The following screen should appear.



3. Click the **Collector drop down menu**, and then select the data collector you created in the last section. See the screen to the left.

Selecting the Call Collector Interface

The next step in the call collector module requires you to select the interface or Call Collector action you want to perform. There are three selections you can make:

Telephone – This interface is used for a download via a phone connection. The user must know the access phone number to the collector and must have previously set up a Collector as described in Chapter 4.

Existing File – This interface can be used during the collector creation process or to import existing files that may have been downloaded from another source such as Quick View or another Speed Net system.

Reprocess – This interface is used to reprocess existing collector files. This Reprocess procedure is used to update information across all downloads and is used for several reasons.

The Reprocess interface is ran after a collector has been updated with additional AMR numbers and subsequent transmitters and meters. This "Reprocessing" is designed to show all installed components on all downloads, even if the first download in the system is a year old.

Reprocessing is also required after Logical Parameters are set or reset. The Reprocessing allows the new parameters to be initiated for.

Some examples of Reprocessing are:

System Update Example

A system is being built out over a 2 year period. The first year 100 units are installed.
The second year the installation of an additional 100 units takes place. After the installation is completed and after the first download with the additional units is completed, a Reprocess is ran on all the files.

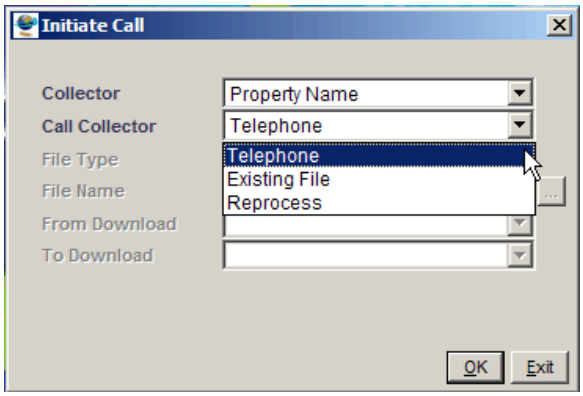
This Reprocessing will then show 200 Meters on all downloads, regardless of the dates of the downloads were completed on.

Logical Test Parameters Have Been Changed Example

The user decides to change several of the Logical Test Parameters, such as lowering the Non-Advancing Meters criteria from 1000 Gallons in 7 Days to 1000 Gallons in 5 Days.

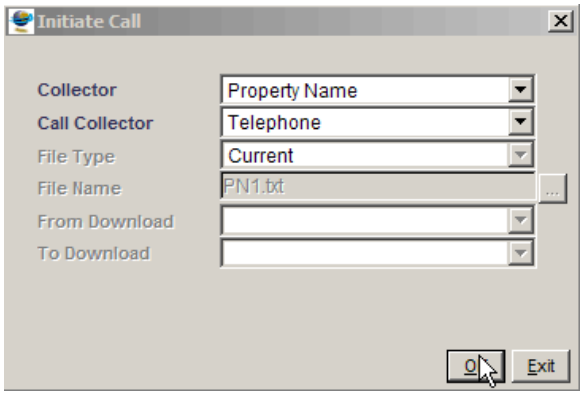
Once the Logical test Parameters are changed you should run a Reprocess on the existing collector to recalculate the results. This Reprocessing will then show alerts based on the new parameters.

Initiate a Call Using a Telephone Line



4. If Telephone is not listed in the Call Collector field, then click on the **drop down menu** and select **Telephone**.

5. Once you have made these selections the Initiate Call window should look like the screen below.



6. At this time the software will automatically place the download filename in the File Name window. The From Download and the To Download windows will be blank.

7. Click on **OK** to start the call up procedure or click **Exit** to cancel the download.

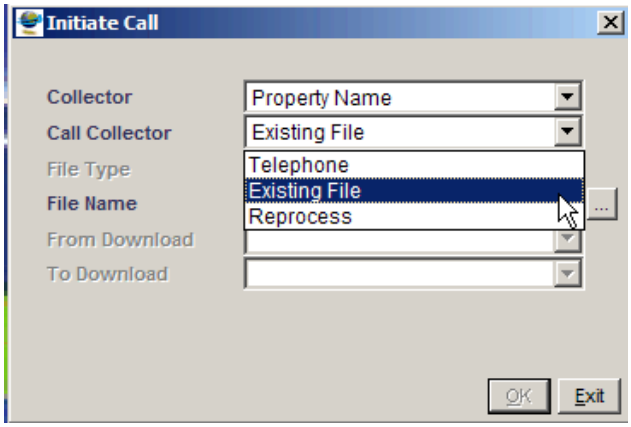
8. Once you start the download process the QDIAL window should open on the upper left side of the screen. At this time you can monitor the download process.

9. At anytime you can terminate the download by clicking on the **Hang Up** button. Otherwise you can monitor the download process.

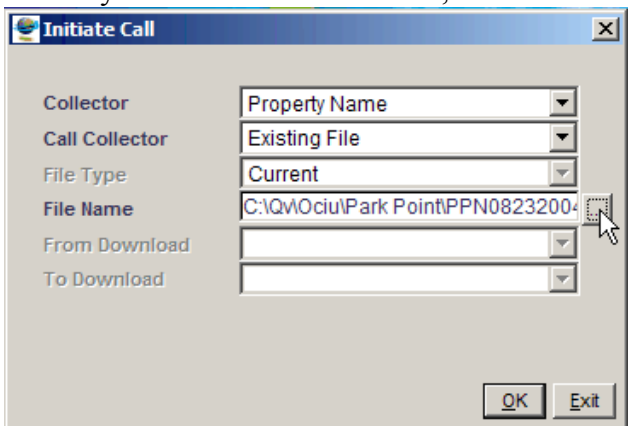
Note: Once the download has completed you may see several windows open and close on the main screen. This is a normal procedure that the software goes through to verify the data.

Initiate Call – Using an Existing File

1. On the Top Menu Items click on **Actions**, then click on **Initiate Call**.
2. Click the **Collector drop down menu**, and then select the data collector you wish to connect to.



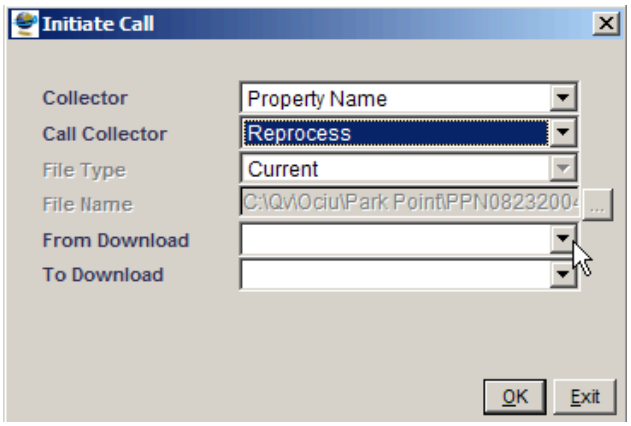
3. Click on the **Call Collector field**, and then select **Existing File.**
4. Click on the **Browse button** to open the File Selection window.
5. Once you locate the existing file you want to use for the process, Click on the file you want to use to select it, and then click **Open**.



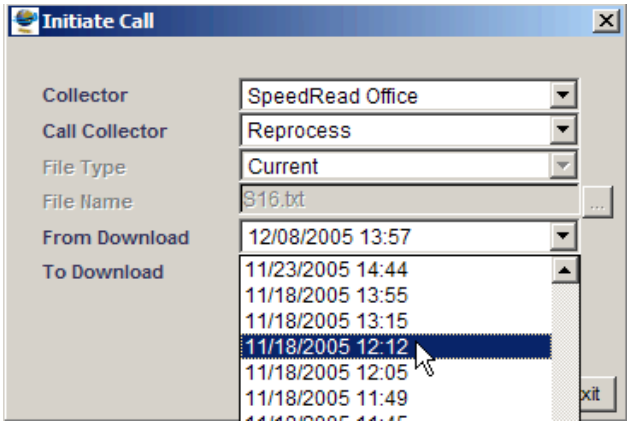
6. Once the file is selected your Initiate Call window should look similar to this one.
7. Click **OK** to process the existing file.
8. Once the file is processed, the Initiate Call screen will close and return you to the main window.

Initiate a Call using - Reprocessing

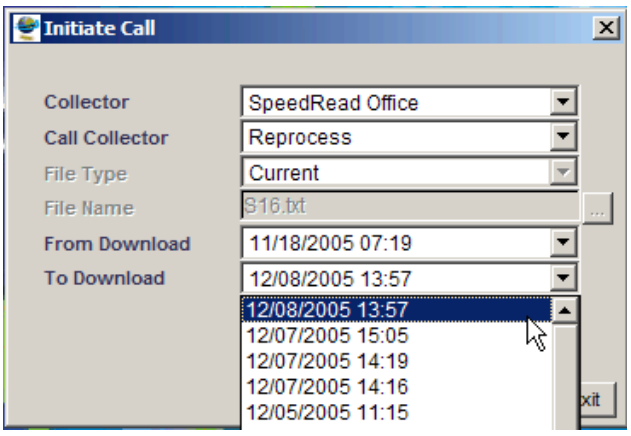
1. On the Top Menu Items click on **Actions**, then click on **Initiate Call**.
2. The following screen should appear.
3. Click the **Collector drop down menu**, and then select the data collector you created in the last section. See the screen to the left.
4. Click on **the Call Collector field** and then select **Reprocess.**
5. Once you have made these selections the Initiate Call window should look like the screen below.



6. At this time the software will automatically place the filename in the File Name window. The From Download and the To Download windows will show the last download for the collector.



7. You must now select the From and To Download files that you want to Reprocess. Click on the **From Download** drop-down field and select the very first download in the selection window.



8. Click on the **To Download** drop-down menu and select the last download from the selection.
Note: It is recommended that you reprocess all download files when completing a Reprocess interface.

9. Click on **OK** to start the Reprocess.
Note: Depending on the number of downloads in the data base the Reprocess procedure may take several minutes.

10. Once completed the **Initiate Call Window** will close and return you to the main window.

11. Open the **Collector List** to see if the Property Download dates were updated.

CHAPTER 14

Importing and Exporting Data

Speed Net is designed to allow easy import of consumer's data from other sources and easy export of consumer data including meter reading information to external sources. These import and export capabilities were designed to replace the requirements from earlier software that required the user to maintain a download template file. Although this software download worked it was limited in the type of data that could be retrieved and exported for external billing software requirements.

The following sections will detail certain import and export functions and the limitations of each. The user may find that the best training tool for this module may be trial and error.

Import and Export File Types

There are several file type options available to the user when selecting to import or export data. If you are unsure of the file type and field requirements that you may require for your importing or exporting files, then you should contact your Billing Software support or your IT department for additional details.

Fixed Width

Fixed width files use a set length of characters in each data field. These data fields may be predetermined by the import capabilities of your billing software and in return the export capabilities of you software or billing system. The example below shows a fixed width data field requirement for a billing software import.

FIELD	START	END	LENGTH	JUSTIFY
Meter ID	1	20	20	Left
Account ID	21	40	20	Left
Reading	41	49	9	Right
Read Date(mmddyyyy)	50	57	8	
Read Time(hhmmss)	58	63	6	
Note Number	64	67	4	Left
Compound Meter	68	68	1	

From examining these requirements you can determine that the entire length of this line of data would be 68 characters long. If you used this as a test for setting up a file for

export you would have a line that would look similar to the one below. The first line is used to show the placement of the character and would not be visible in the final output file.
Note: The"|" is used to show were that field of data stops, and is not printed in the actual file.

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789
Meter Id Here      |Account ID Here    |Reading |Date   |Time |Note
```

As can be seen by this example if your account ID numbers are greater than 20 characters they would not fit in the required field. During the export they would be truncated to the 20 character length.

These types of problems are inherited with fixed width, so planning ahead will eliminate these types of problems.

Delimited

Delimited files which are often know as Tab Delimited and Comma Delimited use an identifier to determine were data fields start and stop. This is a fairly common file exporting type and the format is used extensively through out Speed Net when using any export feature from within a module. The example below is a comma delimited text file. The field order is as follows:

First Name, Last Name, Address, City, State, Zip, Meter Reading

John, Doe, 1234 Address, City, IN, 12345, 0012345
Mary, Parker, 22344 Address, City, IN, 12222, 0123456
Jimmy, Jones, 1233 Address, City, IN, 12345, 00001230

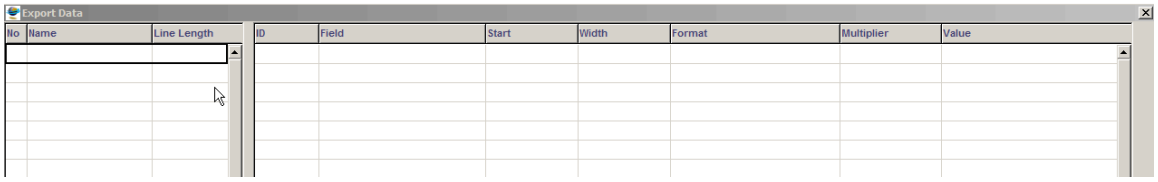
As can be seen by this example delimited files are much easier to maintain and to use. Please keep in mind that some devices such as Hand Held Computers may store data in only a fixed width field.

Exporting Data

The Export Data capabilities in Speed Net allow the user to create multiple export file templates, including multiple templates for the same collector. The following steps will take you through the Template Line Creation process to create a simple fixed width out put file. For additional details on more elaborate export files see the appendix at the end of the manual.

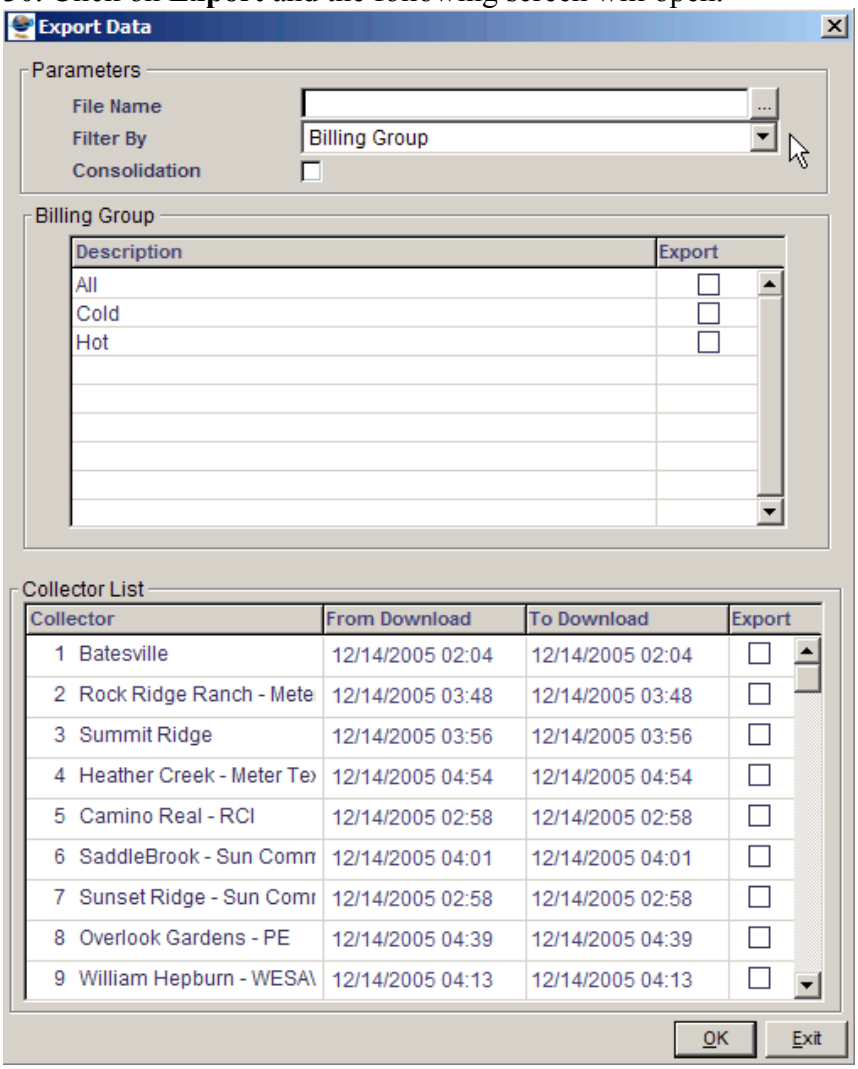
To export data for an external fixed width source:

1. Click on **Actions**, and then click **Import Data**. The following screen will open:



2. The screen is divided into two tables. The left table is used to list the created template lines. The right side will show the template line formatting and layout.
3. Click on **the first field named "No" in the Left table** and **enter the number 1** for this template.
4. **Press Tab to the Next Field** and **enter Test Template** as a name for this template.
5. **Line Length is not required so skip adding it.**
6. **Press Tab** again and you should enter the ID field in the Right Table. **Enter 1 for this Field ID number.**
7. **Press Tab again** and in the Field drop-down selection screen **select AMR.**
8. **Press Tab** to advance to the Start field and **enter the number 1**. This will be the location where the AMR number will first appear on the line.
9. **Press Tab** to advance to the Width Field and **enter the number 8**. *All AMR numbers in Speed Net are 8 characters in length.* The Multiplier Field will be set to 1.000, do not change it.
10. **Press Tab** and you will advance to the Format Field, **Enter the number 8**. For now leave the Value Field blank.
11. **Press the down arrow** to advance to the next line.
12. **Enter the number 2** for this ID.
13. **Press Tab**, and advance to the Field selection. Click on the **drop-down menu** and **select the Reading Date**.
14. **Press Tab** and in the Start Field **enter the Number 9**. This is the next character spot after the AMR number.
15. **Press Tab** and in the Width Field **enter the number 8**. This will be the length of the date on the output file.
16. **Press Tab** and in the Format Field **enter MM/DD/YY**, in upper case.
17. **Press the down Arrow** to advance to the next line.

18. **Enter the number 3** for this ID.
19. **Press Tab** and advance to Field selection. Click the **drop-down menu** and then **select the Trans.Date** as the Field.
20. **Press Tab** and in the Start Field **enter 18**, this will place the Tran.Date 2 spaces after the Reading Date.
21. **Press Tab** and in the Width field **enter 10.**
22. **Press Tab** and in the Format Field **enter MM/DD/YYYY.**
23. **Press the down arrow** to advance to the next line.
24. **Enter the number 4** for this ID.
25. **Press Tab** and in the Field selection, click **the drop-down menu** and **select Reading.**
26. **Press Tab** and in the Start Field **enter the number 30**, this will place the Reading Data, 1 character after the Tran.Date.
27. **Press Tab** and in the Width Field **enter 9.**
28. **Press Tab** and in the Format Field **enter 9.**
29. Leave the other fields as they are.
30. Click on **Export** and the following screen will open.



31. In the Parameters section Click in the File Name Field and enter a file name for the export file being created. You may also click on the Browse box to open an Explorer window and place the export file to a specified path.
32. Leave the Filter By selection set to Billing Group. *Later sections will discuss export options.*
33. If you have any description created in the Billing Group are make sure none are selected.
34. In the Collector List Section Place a check mark in the Export check box for the property or properties you want to export data from.

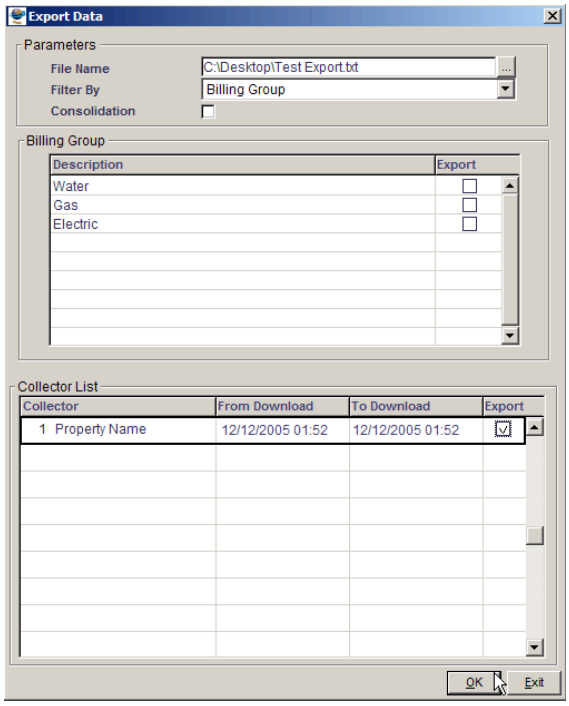
When exporting data the user can select multiple properties to export from at the same time. Exporting data in this manner will create 1 large file with all exported data.

To perform a global export file you would select each property you want to export data form. Please keep in mind that this file may become quite large and may take a long time to create.

Selecting the Download Dates for the Data

The current version of Speed Net allows the user to export multiple days of data that can be exported at a time. An example is the creation of an export file that has 30 days of reading data**.**

As you may imagine selecting Multiple Properties and then selecting multiple days of data can and will create very large files. Therefore the user should use this feature understanding the file sizes created.

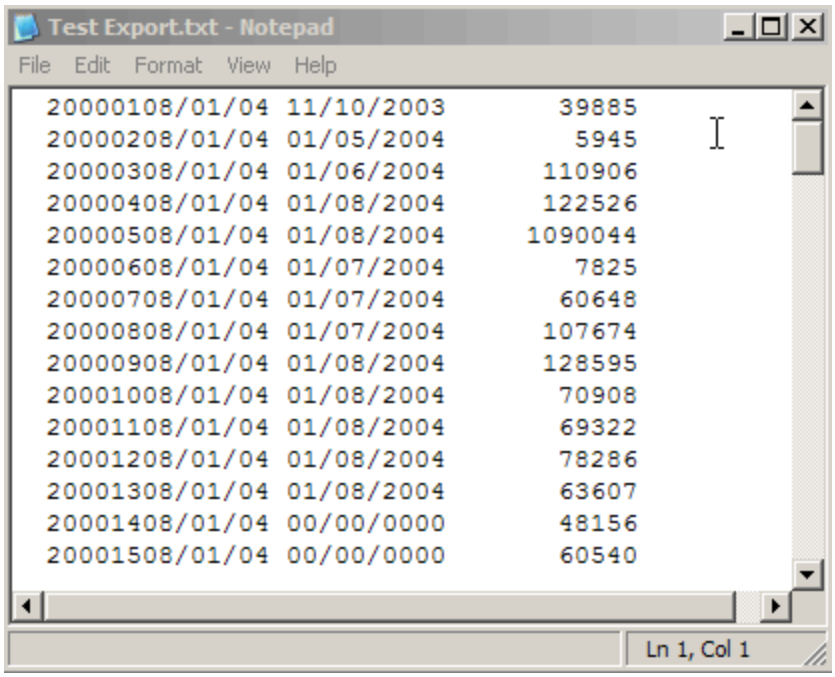


1. For this exercise leave the default download dates selected.

2. When finished your screen should look similar to the one below.

3. Click **OK** ***to start the export.***

The file will be created and placed at the path in number 17 above. An example of the file is below. Your results may differ depending on the readings and dates you have in the system.



Consolidating Readings

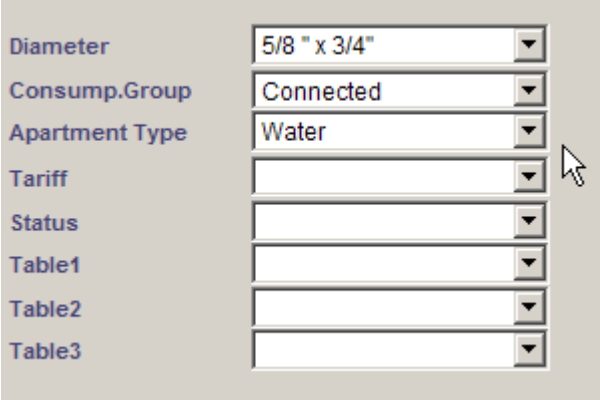
In some installations there may be multiple utility meters that are being read by the SpeedRead AMR system for each consumer. These multiple utility meters may be a combination of water, gas and electric or they may be multiple meters of the same type. In some cases, the billing software used may require that the meter readings be placed on one line in some order. This consolidation of meter readings is not typical of the required data fields usually required for billing software, but when required Speed Net can create an export file of this type.
Note: The Consolidate Readings Function is only available in standard export mode. It is not available in Export to CSV File.

The procedure to complete the export is identical to that listed above in Exporting Data; however there are certain parameters that must be set to complete the consolidation.

The first requirement is that the Consumer **must have the same account number assigned to each of the consumers meter readings.** The current SpeedRead AMR system assigns an AMR number to each meter location. An example is that a consumer with three (3) utility meters would have AMR # 1, 2 and 3 assigned to each meter respectively.

The user would have to insure that the consumers same Account Number is assigned to all of these AMR numbers. The screen below is an example of a consumer that has three meters assigned to them.
Note that all three Consumer Fields are the same and that all three names are the same.

AMR No	Asset Number	Consumer	Meter Number	Last Name	First Name
2-00001	200001	121396	123456678	Brown	John
2-00002	200002	121396	123456679	Brown	John
2-00003	200003	121396	123456680	Brown	John



Once the account number requirements are met, then the user must assign the meter type to the Apartment Field in the consumer's location information.

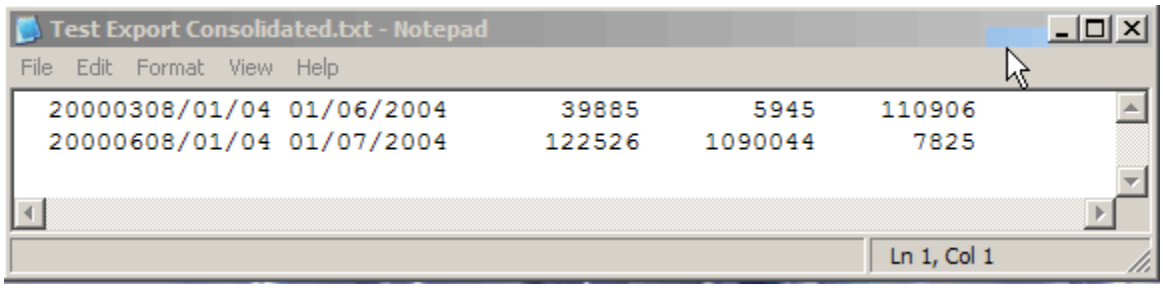
Note: For details on setting up meter types in the tables see Chapter 13.

After all the above requirements are met then the user will set up an export file, but will then assign a field for each meter type. The screen below shows an export template set up for three meter readings per line. You will notice that there are now three extra fields for the readings: Gas Reading, Water Reading and Electricity Reading. The multiplier has also been set to 1000.000

ID	Field	Start	Width	Format	Multiplier
1	AMR	1	8	8	1.000
2	Reading Date	9	8	MM/DD/YY	
3	Trans.Date	18	10	MM/DD/YYYY	
4	Gas Reading	30	10	10	1000.000
5	Water Reading	41	10	10	1000.000
6	Electricity Reading	51	10	10	1000.000

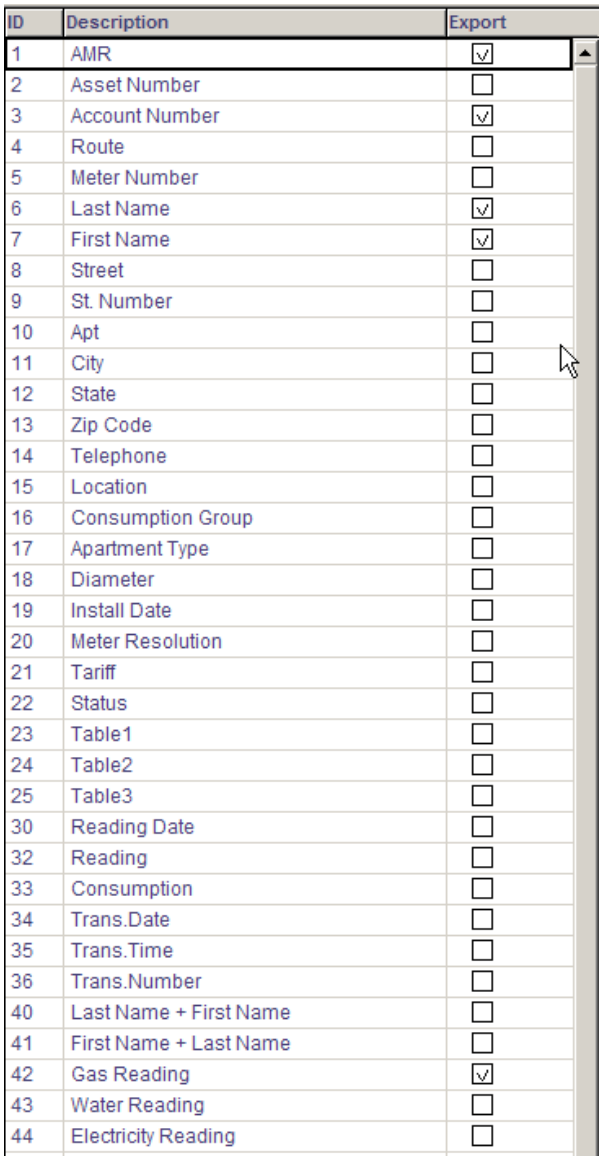
After the user has set the consumers information up and then created the template format similar to the one above. Then at the Export Parameters screen below, click in the **consolidated** box to have the readings consolidated on one line. Click **Export** to create the file.

The screen below shows an export file created using the parameters set above. Your results may differ depending on the parameters and setup you use.



Export Data to CSV File

The Speed Net export file options include the ability to export the data to an Excel CSV file. As discussed earlier, CSV files are typically a delimited file that uses commas to separate the data. For details on file types see the Import and Export File Types presented earlier in this chapter.



ID	Description	Export
1	AMR	☑
2	Asset Number	☐
3	Account Number	☑
4	Route	☐
5	Meter Number	☐
6	Last Name	☑
7	First Name	☑
8	Street	☐
9	St. Number	☐
10	Apt	☐
11	City	☐
12	State	☐
13	Zip Code	☐
14	Telephone	☐
15	Location	☐
16	Consumption Group	☐
17	Apartment Type	☐
18	Diameter	☐
19	Install Date	☐
20	Meter Resolution	☐
21	Tariff	☐
22	Status	☐
23	Table1	☐
24	Table2	☐
25	Table3	☐
30	Reading Date	☐
32	Reading	☐
33	Consumption	☐
34	Trans.Date	☐
35	Trans.Time	☐
36	Trans.Number	☐
40	Last Name + First Name	☐
41	First Name + Last Name	☐
42	Gas Reading	☑
43	Water Reading	☐
44	Electricity Reading	☐

1. To export data using Export Data to CSV File, click on **Actions**, then click **Export Data to CSV File**. At the following screen select the fields you want to export.
2. After you make your selections, click **Export** to continue or click **Exit** to return to the Main Screen.
3. At the Export Data screen enter the information as you did in the last section **Export Data** with fixed width
4. In the Parameters section Click in the **File Name Field** and enter a file name for the export file being created. You may also click on the Browse box to open an Explorer window and place the export file to a specified path.
5. Leave the Filter By selection set to Billing Group. *Later sections will discuss export options.*
6. If you have any description created in the Billing Group are make sure none are selected.
7. In the Collector List Section Place a check mark in the Export check box for the property or properties you want to export data from.
8. Click **OK**.

The output file will be created using the file path you entered at number 4 above.

Auto Export Settings

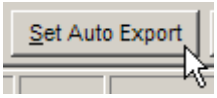
Speed Net 4.0 allows the user to set Auto Export Functions. This feature will automate the export function so that it is done unattended. **This function only works with the Export Data Module and does not work with Export Data to CSV Module.**

The way the module works after you create the setup is that periodically each day the system will check the Auto Export files and if they are not created it will create them.

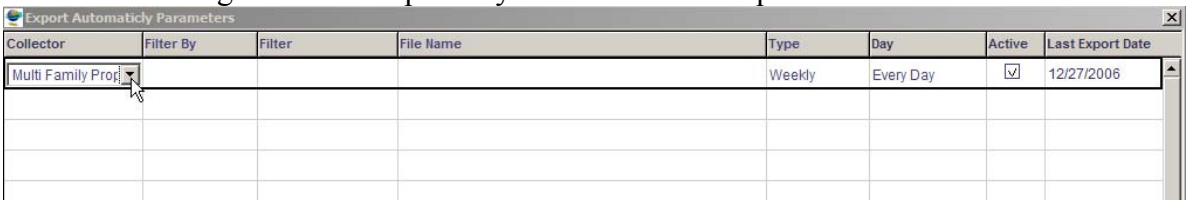
Each individual property must be set up separately.

Open Auto Export

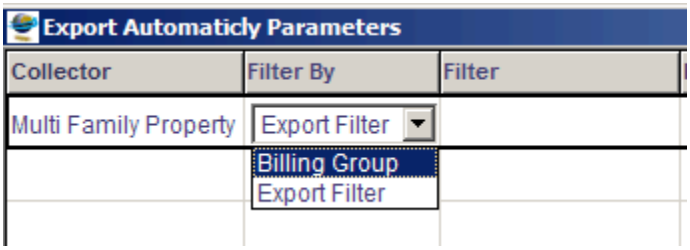
1. Click on **Actions** and then Select **Export Data**.
2. Select the Template you want to use for the export
3. Click on **Auto Export** at the lower right.



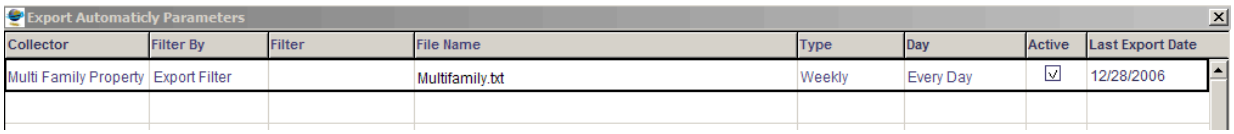
4. The following screen will open so you can enter the required information.



5. In the Collector Field Click on the **drop down list** and select the **Collector** you are setting up.
6. If you are using a Filter, then click in the **Export Filter by Field** to select the **Filter**.



7. If you wish to **filter** by additional Filters, Click on the second **Filter** Field.
8. You can now set the file name and path. Click in the **File Name** field and enter the File Name. Make sure to include the complete file path if you want the file to be saved to another directory. The screen below shows a completed Auto Export Setup.
9. Select when you want the file created- **Weekly or Monthly**
10. Select the day you want it created if you selected **Weekly** above.
11. Place a **Check Mark** in the Active Box



*NOTE: The complete File Path **MUST ALREADY BE CREATED** for it to save to the path. Speed Net will not create folders.*

*NOTE: When you create the file name, Speed net will automatically add the current system days date to the file name to make sure it is unique and does not get overwritten. In the case below the file will end up as **MultiFamily2006-12-28.txt***

You can test your Auto Export Settings by, closing Auto Export Module window, and pressing **CTRL+F9**. You will need to check the path and folder you set up in the Auto Export settings.

If you want to test the Auto Export functions again you must delete the last created file.

Importing Data

Importing Data into Speed Net can also be accomplished by using Fixed Width text files that are generated from external sources such as billing software or property management software, or using CSV files from external sources. Regardless of the source data the steps to complete the import are the same.

Importing Fixed Width Data

To complete a fixed width import, the user must first create the file or have access to a fixed width data file that was created from an external source. Fixed width files fall under the description in Import and Export File Types discussed earlier.

1. To create a fixed width import template start by clicking on **Actions**, then click Import Data.
2. At the following screen define the data fields you are going to import.
3. After selecting the data field, click on **Export**.
4. At the Parameters Screen select the **Collector** from the drop-down menu.
5. Click the **Browse button** on the File Name field and select the file you will be using. This data file must have the same data field lengths that you defined in #2.
6. In the Import By field select **Asset Number** or **AMR Number**.
7. Click **Import** to start the process.
8. The Parameters window will close after the process completed and return you to the Import Data selection screen.
9. After the Import Process has completed you should check the consumer files for the selected collector to verify that all the data was imported correctly.

Importing Data From a CSV File

Importing data from a CSV file like the Exporting Data to a CSV file is much simpler and eliminates the need for the creation of an Export and Import Template.

Issues and Considerations when Importing Data from a CSV File.

When importing several columns of data, the data columns must be in the same location as those you select in the Import Data From CSV File selection screen. Failure to verify the data column placements may result in data being placed in the wrong consumer fields. Although this can be corrected with a new import it may create analysis issues if not corrected.

Another issue that must be considered is if you try to Import Data into the drop-down selection fields in the consumer location information. These fields which consist of Consumption Group and Diameter are imported using the field code within the table. For details on the Field Codes for tables see the Next Section and Chapters on Maintenance and Tables.

Also each field has a set number of characters available for use. Importing data that exceeds these field lengths may cause the data to be truncated.

Import A CSV File

Before starting you must first create a CSV file that will be used to store the data to import. This can be a CSV file that was created as an output from another source or it can be an Excel CSV file that was created with data. For this exercise we will use an Excel CSV file.

Creating the CSV file layout

All CSV files must have the AMR number in the first column of data, this column is used to place the imported data to the correct collector. Placing the wrong AMR number in this field will place all the data to the wrong collector.

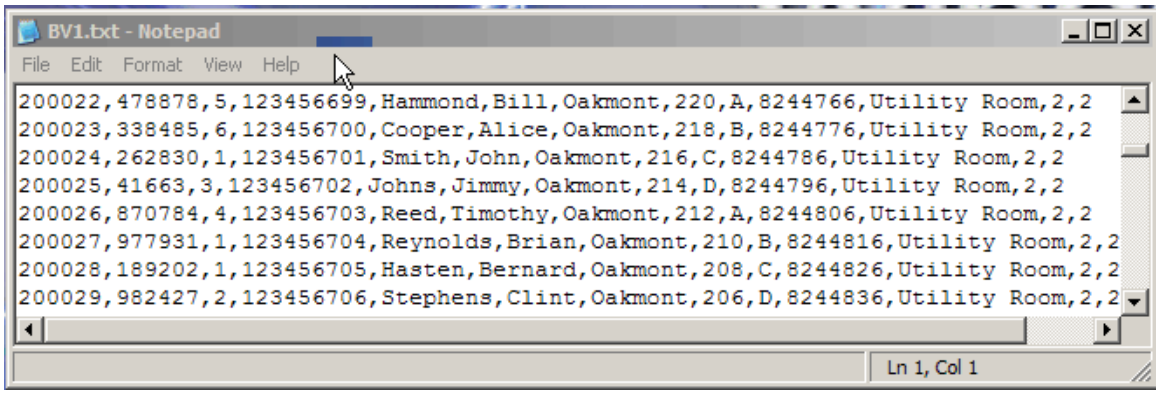
After the first column is created with the AMR number you should create the remaining columns with the data required. The two screens below show an Excel file and a comma delimited text file with data ready to import.

Excel CSV File Example

1	2	3	4	5	6	7	8	9	10	11	12	13
200018	213142	1	123456695	Hageman	Larry	Oakmont	228	A	8244726	Utility Room	2	2
200019	317429	1	123456696	Mable	John	Oakmont	226	B	8244736	Utility Room	1	2
200020	228882	2	123456697	Roepke	Allen	Oakmont	224	C	8244746	Utility Room	1	2
200021	993817	3	123456698	Kolton	Bill	Oakmont	222	D	8244756	Utility Room	2	2
200022	478878	5	123456699	Hammond	Bill	Oakmont	220	A	8244766	Utility Room	2	2
200023	338485	6	123456700	Cooper	Alice	Oakmont	218	B	8244776	Utility Room	2	2
200024	262830	1	123456701	Smith	John	Oakmont	216	C	8244786	Utility Room	2	2
200025	41663	3	123456702	Johns	Jimmy	Oakmont	214	D	8244796	Utility Room	2	2
200026	870784	4	123456703	Reed	Timothy	Oakmont	212	A	8244806	Utility Room	2	2
200027	977931	1	123456704	Reynolds	Brian	Oakmont	210	B	8244816	Utility Room	2	2
200028	189202	1	123456705	Hasten	Bernard	Oakmont	208	C	8244826	Utility Room	2	2

The Field Column Names are as follows: 1 - AMR#, 2 - Account Number, 3 - Route Number, 4 - Meter Number, 5 - Last Name, 6 - First Name, 7 - Street Name, 8 - Street Number, 9 - Apt Number, 10 - Phone Number, 11 - Location, 12 - Consumption Group ID Number, 13 - Diameter ID Number.

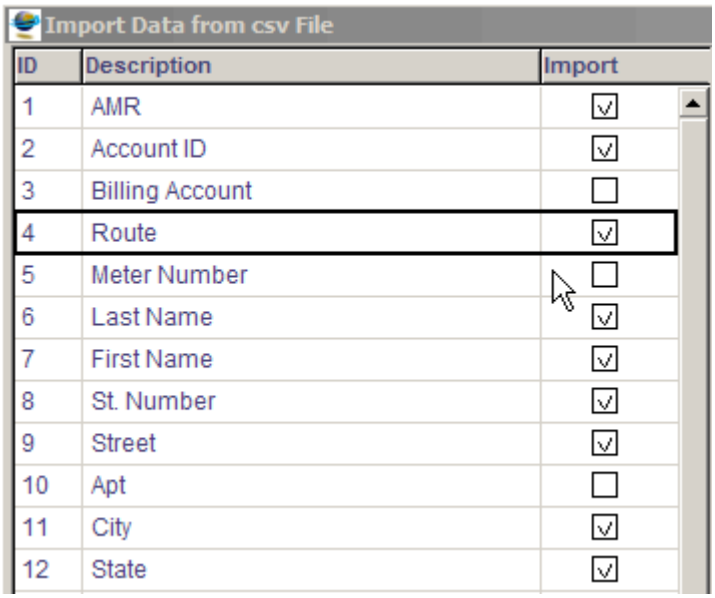
Text Comma Delimited Example



The field column names are identical to the Excel CSV file.

Review of the two screen shots shows that the data is identical, the only difference is the BV1.txt file shows the comma placement between the data fields. Both files will work for importing.

Importing the Data



1. Click on **Actions**, then click **Import Data From CSV File**.

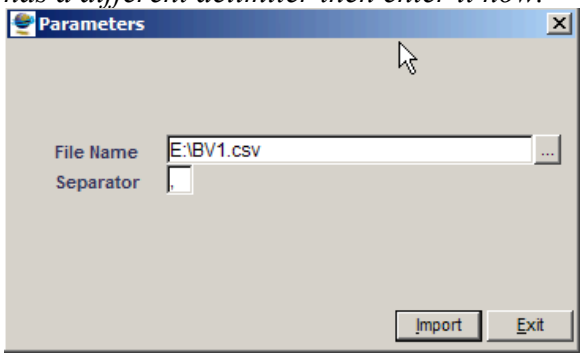
2. At the following screen you will need to select the data fields listed in the import file that you are using.

3. Select the fields by clicking the **Check Box** on each field. In this example you will need to select the fields listed under Excel CSV File *Example: AMR#, Account ID, Billing Account, Route, Meter Number etc…*

4. After you have selected your fields that match the columns in the import file, click **Import** or click **Open Last File if you are using an existing file you have used before, or click Exit** to close this screen and return to the main screen.

5. At the Parameters screen enter the File Name you will be using or click on the **Browse window** to locate the import file you will be using. You screen should look similar to the one shown below.

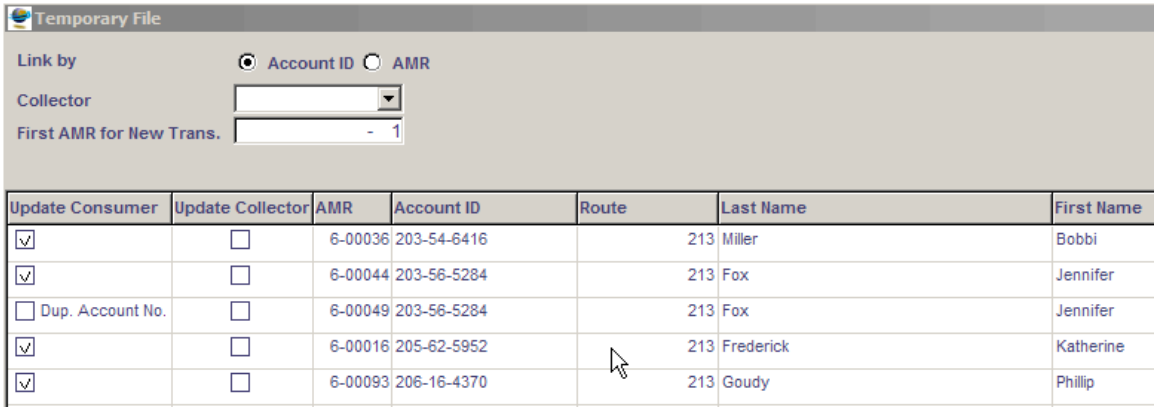
Note: The default setting for the separator is a comma. If the file you are using has a different delimiter then enter it now.



6. After selecting the file name, click on **Import** to start the import process or click **Exit** to close the parameters window and return to the selection window.
7. If you watch the upper left corner of the Parameters screen you will see the data count off as it is imported. Keep in mind that large files may take several minutes to finish this first part.

Once the Import starts you will see a series of numbers scan in the upper left corner of the parameters window. Once the import is finished the Parameters screen will close and the following table will open so that you may verify that the data being imported is being assigned to the correct Speed Net data fields.

If you imported a large number of data fields you may need to use the scroll bars to scroll the data to the right to review all the fields.



If for any reason some data did not import completely, then click **Exit** and repeat the steps above to complete it. If the data still does not appear in the correct fields you will need to check the CSV file you are using has the data in the correct columns that match the selection fields in **Creating a CSV file layout**.

8. Once you are satisfied the data has been aligned to the correct fields in the data base click on the **Link by "AMR"** button. This will insure that the data is imported to the correct property linked by the AMR number on the CSV worksheet and the AMR number in Speed Net.

You may repeat the import process as many times as needed. Each time you can add additional data or change data fields. Please keep in mind that when you add data columns to the import file you must match the selection in the Import Data from CSV File selection window. Failure to match the columns and field selections will result in data imports into the wrong fields.

Click on the **Update Consumers** to import the data into Speed Net.

Once the import is finished you will get a message the update was completed.

Import Considerations and Problems

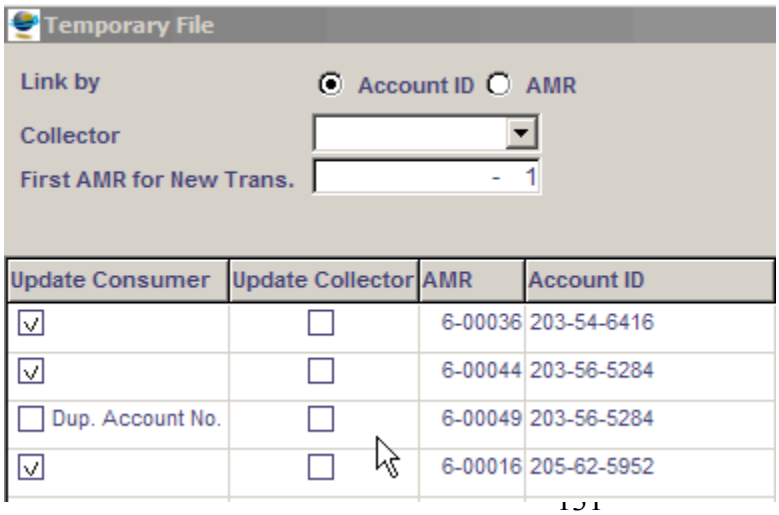
Importing data can sometimes be difficult to the new user and the procedures described in these sections are designed to assist the user in importing data step by step.

Most problems associated with importing are related to the CSV or import file not having the data in the columns in the same order as those listed in the Import Selection screen or the AMR number link being in correct.

The Temporary File that is created during the import process is designed to assist you in this process, allowing you to review the data before the import process is completed.

Account ID:

The Speed Net data base uses a unique number in the Account ID Field. Thus when you are importing this information into Speed Net you must make sure that no account Id numbers are identical. Because this data field is designed this way the import Temporary file below will show you if there are duplicate Account IDs.



The screen to the left shows two AMR # with the same account ID.

Before the import can continue this conflict must be resolved.

Resolving the conflict may require that the user corrects the problem in the CSV file or the user can select one of the Account Id fields and change the Account ID to a unique number or add additional characters to resolve the conflict.

Because of this Unique ID requirement Account ID should only be used when the user understands the requirements.

Edit an Account ID

When the above conflict occurs and the user wishes to change resolve the conflict by editing one of the account numbers the following steps will assist them.

1. With the import Temporary File open scroll down the data to locate the Duplicate Account ID. The import file is sorted in ascending Account ID order to assist you.

2. Click in the Account ID field of the account you want to change and enter the correct account number.

3. After changing the Account ID to a unique number, click in the **Dup. Account No**. check box to show that the conflict has been resolved and include the data in the import.

4. Click the **Update Consumers** button to import the data.

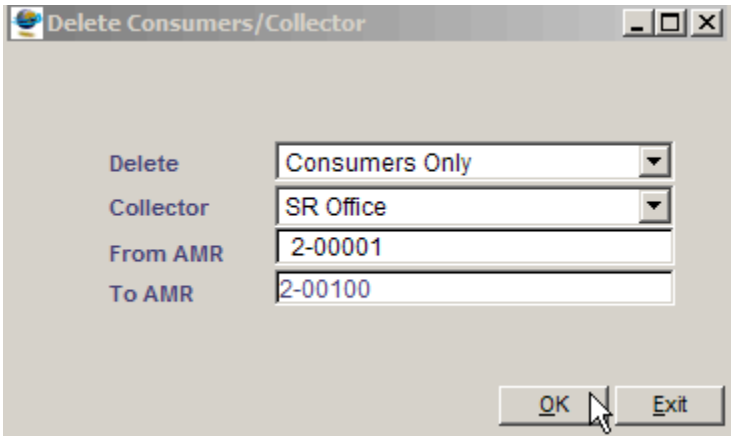
5. Once the import is finished you will get a message the update was completed.

What to do when things go wrong

When importing data sometimes the wrong data is imported into the wrong fields or the user selects the wrong file to process. When this type of import problem occurs it is sometimes easier to delete the consumer information and start again. The following steps will allow you to delete the consumer information but retain the downloaded data.

Deleting Consumer Information

1. On the upper menu click on **Maintenance**, and then select **Delete Consumers/Collector**.
2. At the following screen in the Delete field, select Consumer's and in the Collector field select the collector that has the consumer data you want to delete. After your selection your selection should look like the one below.



3. If your delete process includes only a series of AMR locations in the data collector, you can select the AMR numbers in the **From AMR To AMR** fields.
4. Click **OK** to start the delete process.
5. After the deletion is completed the following message will confirm the process.

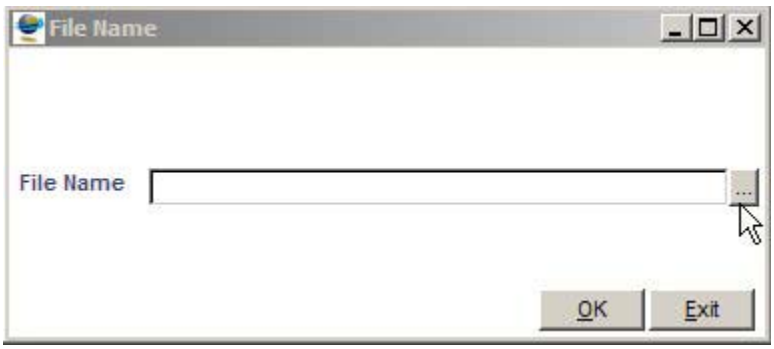
You must now Reprocess the collector data to insure that it is intact. The following steps should be completed before the import process is started again.

6. Click **Ok** to close the confirmation window.
7. At the Confirm Exit window you can click **Ok** to close the program or click **No** to continue.

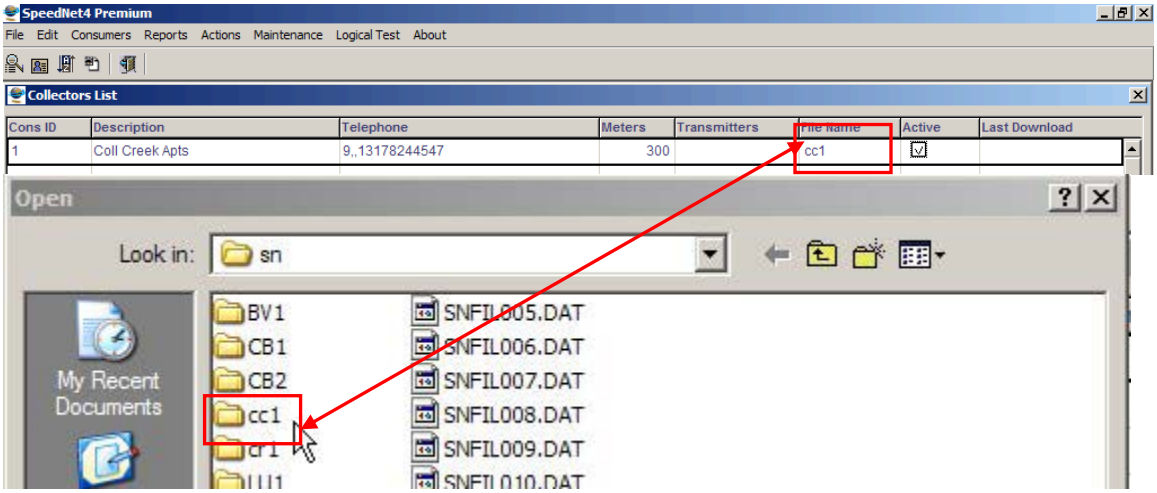
Note: If you select OK you can still continue this process at a later time.

8. After selecting No, click on Maintenance and then select Collector List.
9. At the Collector List table click in the Meters field for the collector you deleted the Consumers for.

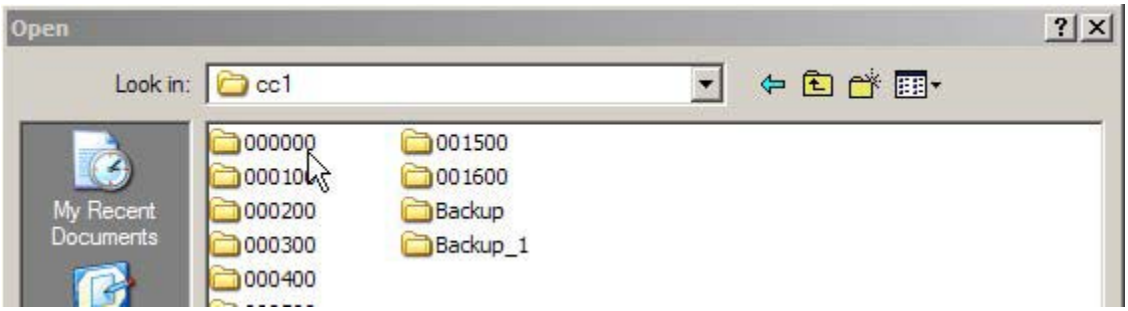
10. At the following screen click the browse button and open the folder that has the data folder for the collector.



11. Double click the folder to show the sub folders created during the setup process.



12. Double click the “000000” folder to open it.



13. Select the last file in the folder and then click **Open**.

14. Speed Net will now reset up the data collector.

The final step in this process requires you to **Reprocess** the existing downloads.

15. On the upper level menu click on Actions, then select Initiate Call.
16. At the **Initiate Call** selection window drop down fields select the collector you want to **Reprocess** the data for.
17. In the Call Collector down field select **Reprocess**.
18. In the From field select the first (oldest) file in the drop down list.
19. In the To field select the newest file in the drop down menu list.
20. Click OK to start the process.

Speed Net will **Reprocess** the data files to complete this Consumer Data deletion process. You may now try the import process again.

7

Maintenance

- Introduction to Maintenance
- Delete Consumers / Collector
- Site or Collector List
- Layout List
- Import Backup File
- Backup / Restore
- Update Tables
- Settings
- Downloads List

CHAPTER 15

Maintenance

As with any software program there are certain maintenance procedures that must be completed, either to keep the program running smoothly or to perform certain housekeeping task. The Speed Net Maintenance menu allows the user to make certain updates or changes to tables, Import backup files and maintain the Layout Table.

Most changes made to the program while in Maintenance take effect immediately and some of these changes are not reversible. Therefore some caution should be considered before you make any changes.

Site or Collector List

Chapter 2 previewed the Collector List when you created your first collector. This section only covers items related to adding and deleting Collectors.

To Add a Collector

Click on the **Add** button at the lower right. The next available row will be highlighted for you to add the Collector information. Follow the steps outlined in Chapter 2 to complete the new collector setup.

To Delete a Collector

1. Click on a row to select a collector.
2. Click on the **Delete** button on the lower right and the Delete Consumers / Collector window will open.
   The default settings will have the Collector name from the row selection you made first, as well as the To and From AMR numbers listed. The check box, Delete Collector will also be selected.
3. If you wish to delete just the consumers that are assigned to the Collector then you must deselect the Delete Collector check box.
   Note: For additional details on deleting just Consumers see the section in this chapter Delete Consumers / Collectors.
4. Click **OK** to delete the collector and all consumers and consumer data assigned to the collector.

Layout List

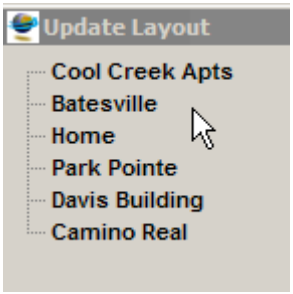
The Layout List module is used to set up what is known as meter layouts or meter grouping. Meter Layouts are used to monitor meter usage with in groups of meters that are supplied by larger meters. An example is the master meter (Common Meters) that feed the individual meters (Consumer Meters) in an apartment community.

This layout or grouping of meters will compare the consumption from the Common Meters selected (Master Meters) to that of the total consumption of the Consumer Meters (Individual Meters) attached to a group.

You can apply several layouts to a collector and each meter can be applied or added to multiple layouts within the collector. Thus a consumer's meter can show up in a total group layout and added again in a building group layout. The only limitation is how the meters are interconnected. **You can not apply layouts across collectors.**

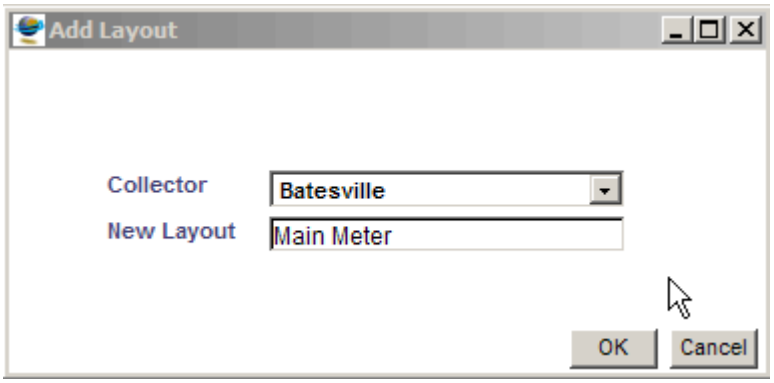
Creating a New Layout

To create a new layout or modify an existing layout:

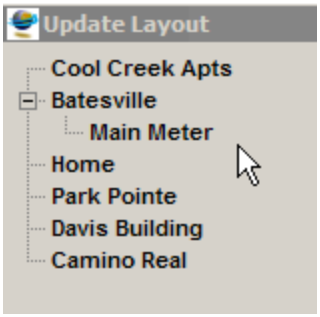


1. Click **Maintenance**, and then click Layout **List**. The screen to the left will appear.

2. Click on any **Data Collector** and then click **Add Layout** at the lower left.



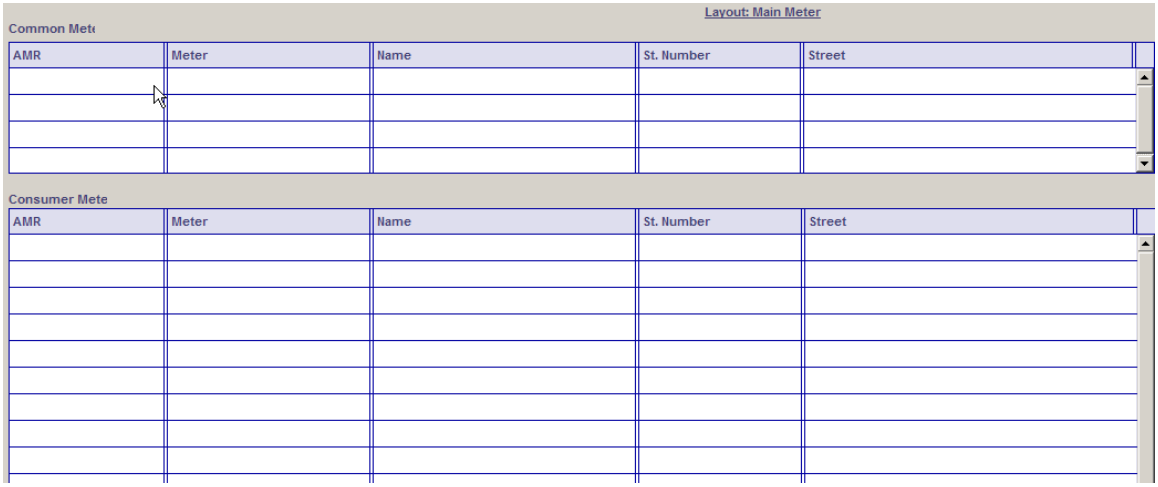
3. At the following screen enter a name for the layout, in this example just enter "Main Meter", and then click **OK**.



4. The Layout screen will now show a new layout named Main Meter listed under the collector you selected in #2. See the example on the left.

You must now add the Common Meters that you want to compare.

5. Click on the **layout named Main Meter** and the following screen will open.



To complete the layout, meters will need to be added to both the Common Meter Table and the Consumer Meter Table.

Adding Meters to the Common Meters Table

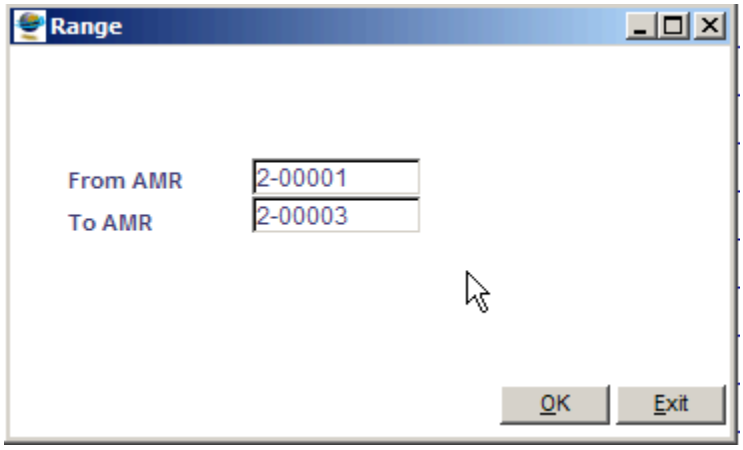
Note: The Common Meters will only show four meter selections at a time to see the additional meters that may be selected, use the scroll bars or select a row and use the down arrows to advance to the other rows.

6. Double click in the **first field of the Common Meter table** and a selection window will open to show you the AMR meter locations for the data collector. Use the scroll bars or arrow keys to scroll through the list to select the meter you want to include.
7. To select a meter in the list click on it to highlight the meter, and then click **OK** or you can double click on the meter to select it. The meter information will then be placed in the first row of the Common Meter table.
8. If you want to add additional meters to the Common Meter table, press the **Down Arrow** to advance to the next row in the Common Meter table. You can now repeat steps 6 and 7 above.

Adding Meters to the Consumer Meter Table

You have two options when adding meters to the Consumers Meter Table.

9. Double click in the **first field of the Consumers Meter Table** and the Selection Window will open. You may now click on the meter you want to add and it will be placed in the field.

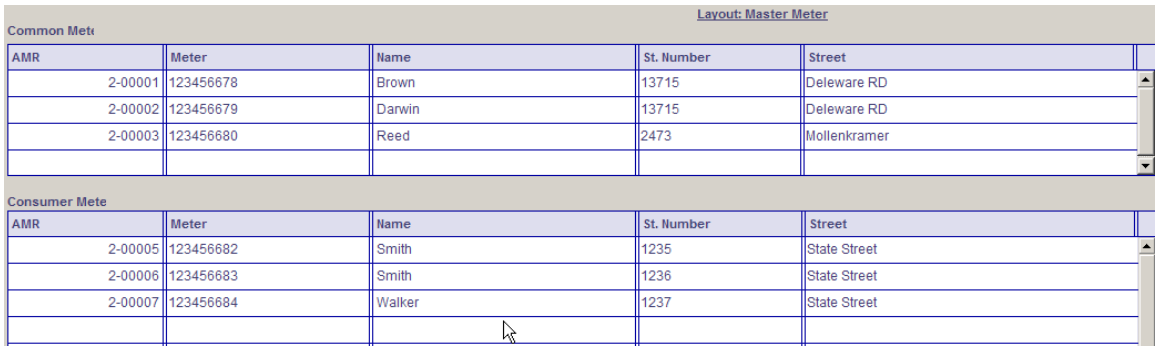


Or you can click on **Range** at the Lower Left of the screen and the following range selection window will open,

10. You can now enter the starting and ending AMR numbers for the meters you want to add to the Consumer Meter table.
Or you can Double Click the From AMR list to open the table to select the starting AMR #. Repeat the process by Double Clicking the To AMR field to select the ending AMR number.

Note: You can use both methods to add individual meters and then use Range to add a series of meters.

Depending on the number of meters selected in each table your Layout Table will look similar to the one shown below.



You can now create another layout for this Collector or click a **Collector** in the Update Layout window to create a Layout assignment for a different Collector.

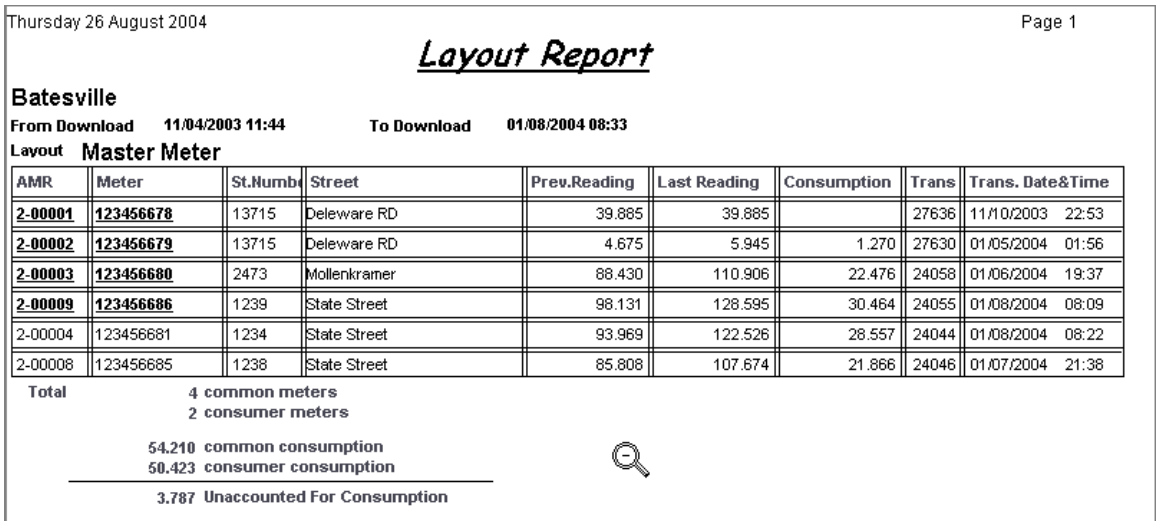
You may now proceed to the printer preview screen or click **Exit** to close the Layout Window to return to the Main Screen

Printing the Layout

1. Click **Print** to proceed to Layout Report options selection window.
2. The Layout Report option window will appear. You may select another Collector at this time or proceed with the Collector already selected.
3. You can also select the layouts you want included in the report. This will generate a printed report on all the layouts for the Collector.
4. You can also change the default downloads that are selected for the layout report. The last two downloads are automatically selected for the report, changing the download dates will give you a layout report showing water loss that may span several days, weeks or even years.
5. After you have made any changes at the selection window click **OK** to open the preview screen.

The following illustration is based off the meter selections for this report. Your results may vary depending on the number of meters selected in each table.

Layout Report



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Layout Report

Batesville

From Download 11/04/2003 11:44 **To Download** 01/08/2004 08:33

Layout Master Meter

AMR	Meter	St.Numb	Street	Prev.Reading	Last Reading	Consumption	Trans	Trans. Date&Time
2-00001	**123456678**	13715	Deleware RD	39.885	39.885		27636	11/10/2003 22:53
2-00002	**123456679**	13715	Deleware RD	4.675	5.945	1.270	27630	01/05/2004 01:56
2-00003	**123456680**	2473	Mollenkramer	88.430	110.906	22.476	24058	01/06/2004 19:37
2-00009	**123456686**	1239	State Street	98.131	128.595	30.464	24055	01/08/2004 08:09
2-00004	123456681	1234	State Street	93.969	122.526	28.557	24044	01/08/2004 08:22
2-00008	123456685	1238	State Street	85.808	107.674	21.866	24046	01/07/2004 21:38

Total

4 common meters
2 consumer meters

54.210 common consumption
50.423 consumer consumption

3.787 Unaccounted For Consumption

The Layout Report above details the following information:

Download Dates – 11/04/2003 through 01/08/2004
Layout Name – Master Meter
There are 4 Common Meters listed, these are the first 4 AMR locations and are in BOLD.
Common Meters Consumption = 54,210 Gallons
There are only two Consumer Meters listed, these are the last 2 AMR locations.
Consumer Meters Consumption = 50423 Gallons

The unaccounted for water loss between the Common Meters and the Consumer Meters = 3,787 Gallons.

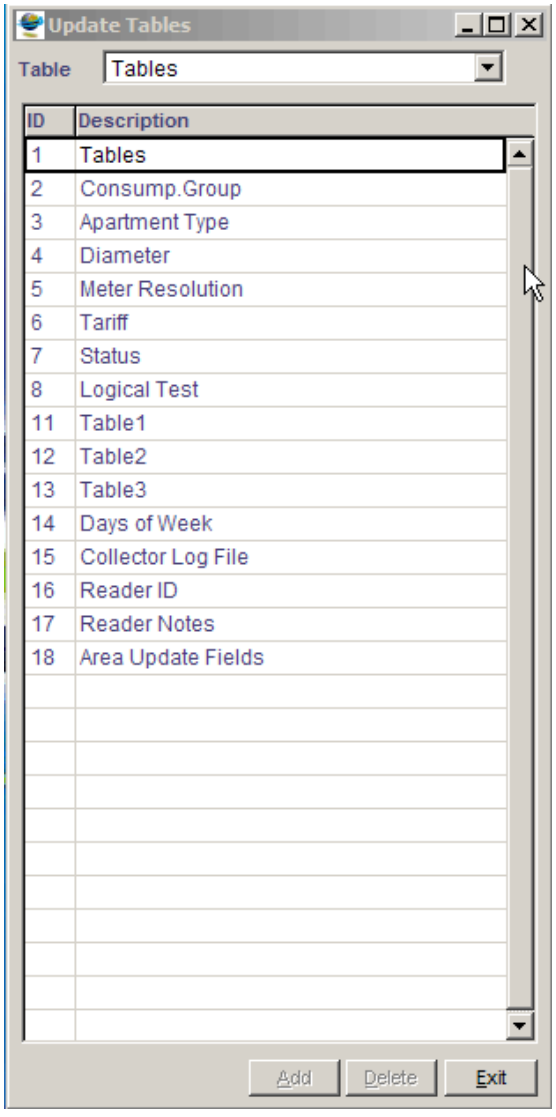
Update Tables

Speed Net allows the users to update the information in the consumer information tables. This ability allows each user to refine the available table selections to their own personal or business preferences. This also allows the user to rename three generic tables to customize the consumer information requirements they may need.

Table List

There are 16 tables that are available within Speed Net; these tables are used to select consumer information. To see a list of tables click on **Maintenance** and then click **Update Tables**. At the following screen click on the **Table drop-down menu** and a complete list of tables will be presented.

For this exercise click on Table, the select the **Tables field** from the drop down menu. The following screen will appear.



The screen to the left shows all the tables available for selecting consumer information. All the tables listed can be renamed.

Note: Please keep in mind that renaming some tables or there data fields, may cause some consumers to be excluded from some logical test parameters.

An example would be the renaming of the connected selection within the Consump.Group to another term. This may cause the consumers who have the Consume. Group / Connected selected, to be excluded from logical test parameters from that point forward.

You can not delete or add tables from the list.

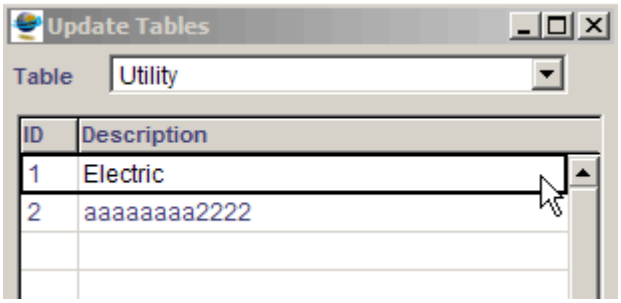
Change a Table Name

The following steps will walk you through the simple steps of renaming Table 2, located at ID number 11.

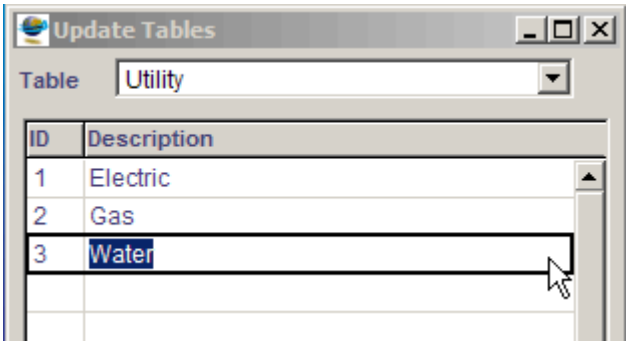
1. Click on the **Table 2 Field** to select it. The name will be highlighted.
2. Type in "Utility".
3. Click **Exit** to close the window.
4. You can now open the Table again by clicking **maintenance** then clicking **Update Tables.**
5. Click on the **drop down menu** and click **Tables** to open the Table screen again. Table 1 at ID number 11 will now have the name Utility.

Change a Table's Fields

1. Click on the **Main Update Tables drop-down menu** and select the Utility table.
2. At the following screen, click on the first ID description, not the ID.
3. Type in Electric



4. When you finish your table should look like the one here.
5. Click on the **second ID description** and type Gas.
6. Now add another selection field, click **Add** at the bottom of the Window.

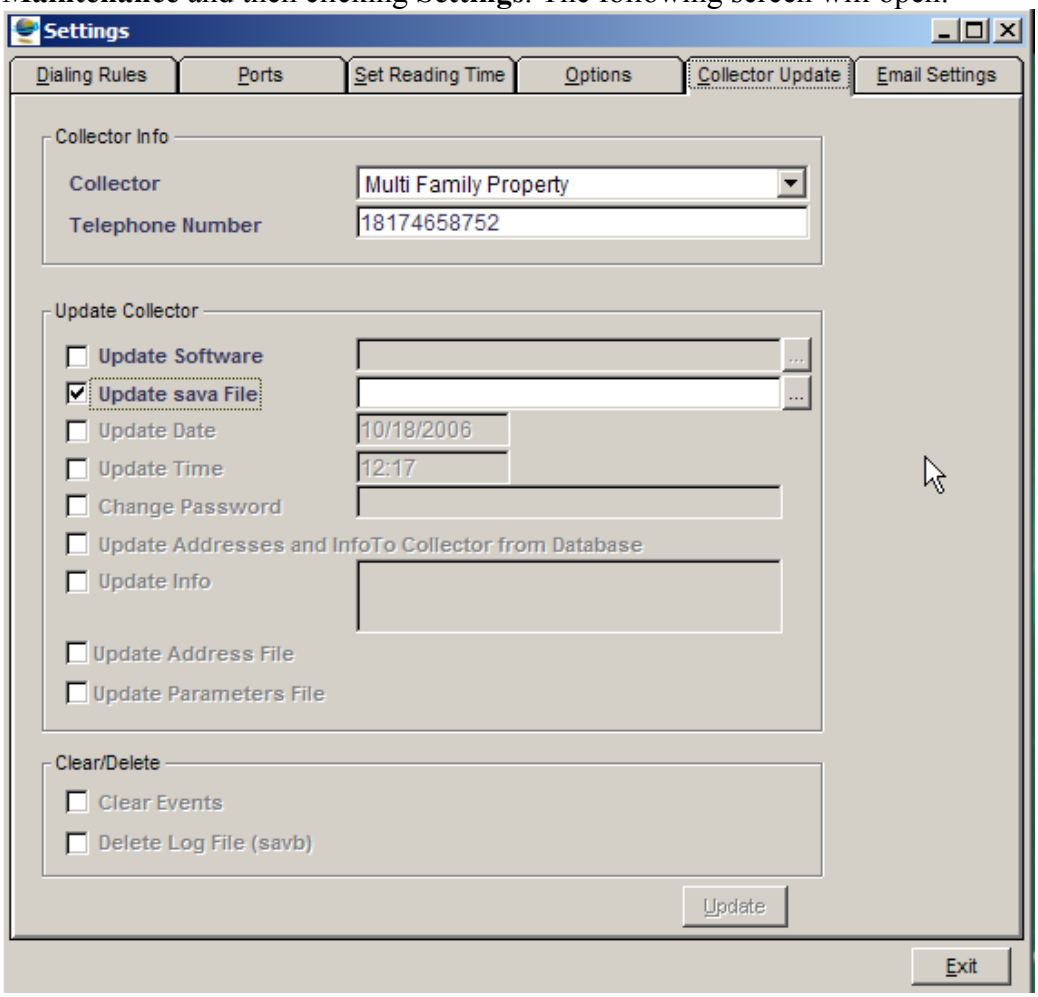


7. Your cursor will be positioned at the next available row.
8. In the ID field type in 3, then press TAB.
9. In the description field type Water. Your table should now look like this.

You may now select another Table to review for change, or click **Exit** to close the Update Table window and return to the main screen.

Settings

The Maintenance Settings Module allows the user to set certain parameters that pertain to system interface as well as some optional settings. You can open Settings by clicking on **Maintenance** and then clicking **Settings**. The following screen will open:



The Settings Module has six(6) tabbed pages that you can select to review or change settings, Dialing Rules, Ports, Set Reading Time, Options, Collector Update and Email. Each Section is detailed below and special attention will be given to the Collector Update Tab.

Dialing Rules

You can set up several different dialing rule options. These dialing rules may be the required numbers needed to dial out from a hotel room or numbers needed to select a modem across a PBX telephone system. You can activate these Dialing Rules when needed so that you do not have to alter the dialing number to get access when on the road.

To set a Dialing Rule:

1. Start by Clicking on the Dialing Rules TAB
2. Click in the **No column** and enter a Number, in this case enter 1.
3. Now press **Tab** and in the Description field enter a description for this rule. For this example enter "Hotel"
4. Press **TAB** and in the Telephone field enter "9, 1".
5. Press **Tab** and place a check mark in the Current box. This will make this dialing rule active.

Once you have selected the Current check box, that dialing rule will be processed every time a Collector is called. In this case the number sequence '9, 1' (the commas are pauses in the dial sequence) will be dialed before the phone number to the Collector.

This setting will allow you to activate a dialing rule thus eliminating the need to change the collector phone numbers when you dial from a remote location.

Only one Dialing Rule can be active at anytime, however you can set as many dialing rules as you need for different locations or phone system requirements.

No of Redial Attempts

The No of Redial Attempts located at the bottom of the Dialing Rules page is used to set the number of call backs the system will perform on a Collector that is set up in the automated reading time queue. A call back is issued if the first dial up attempt fails.

Click on the **drop down menu** and a list from 1 through 10 will appear for you to make the selection. For this case, click on **3**.

From this point forward when ever Speed Net calls a Collector and the first call fails the software will make three more attempts to call. These call attempts will take place one after the other.

If Speed Net fails after these attempts it will move to the next Collector in the sequence.

Set Reading Time

The Set Reading Time page is used to add Collectors to the automated dial up queue. These Collectors will be called in order based on the time set by the user.

To set Collectors to call one after the other then you need to simply set a number of collectors to be called at the same time. If you set six Collectors to be called at 10:00 AM then the automated dial sequence will call the first one then call each of the others in turn, until all six have been called.

Set a Collector up to be called:

1. Click on the **Set Reading Time** Tab to open the page.
2. Click on the **first hour field** and enter a time in Military Format, for this case enter 8 for eight o'clock in the morning. (If you were setting it to 8 PM you would enter 20 for 20:00 hours)
3. Click in the **Day of the Week field** and on the drop-down menu select "**Every Day".**
4. Click in the **Collector Field** and at the drop down menu select the Collector you want to call.

Click in the **Active** check box to place a check mark and activate the dial out time.
Note: Before a Collector will be called automatically you MUST have the Collector set to Active in the Collector List and the Set Reading Time selection for the Collector MUST be set to Active. If either of these fields is not checked the collector WILL NOT be called.

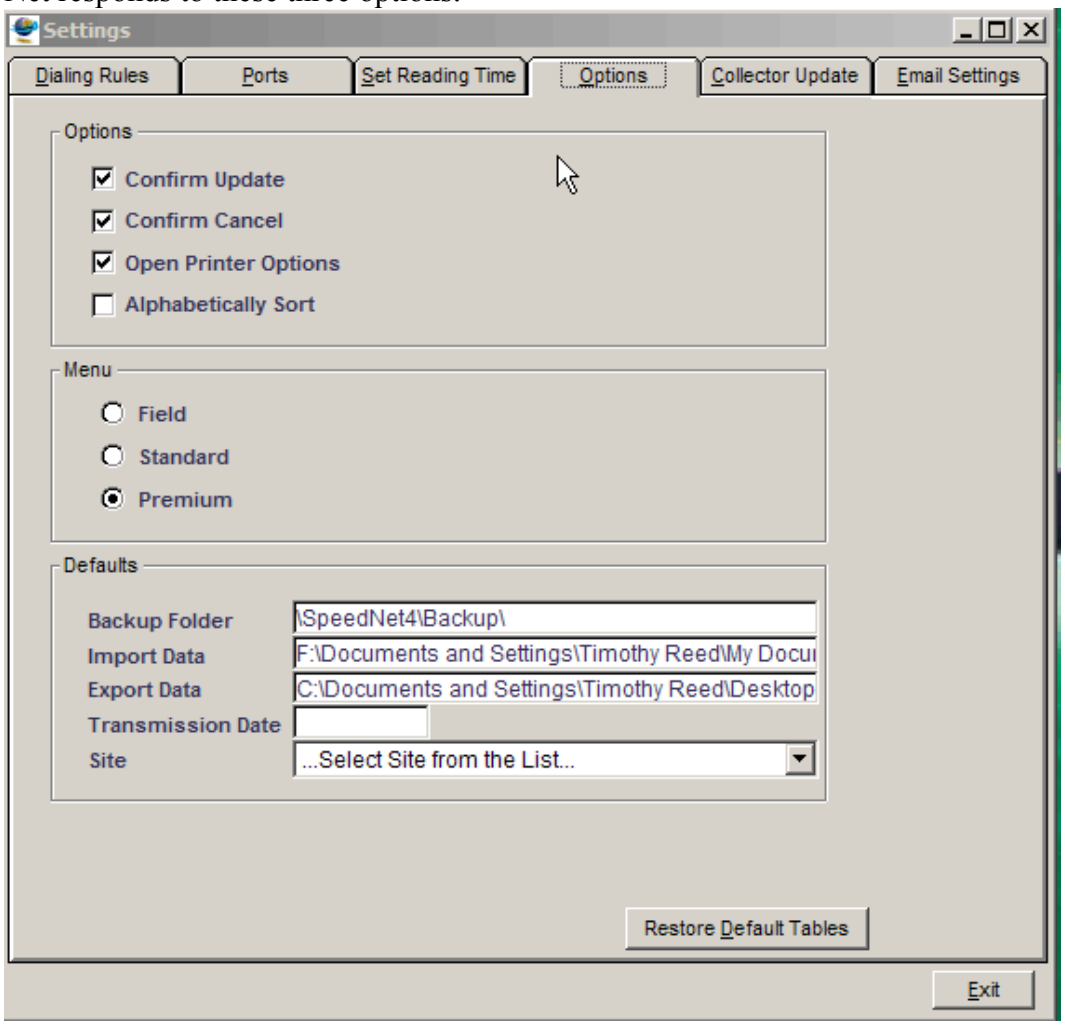
Ports

The ports page is used to set the Speed Net system up for direct downloads to and from a hand held computer. This procedure is used when a handheld is used to retrieve the reading data when a modem connection is not available or when a handheld is used during installation.

For additional details on these setting please contact SpeedRead Technologies.

Options

The options page is used to set three optional parameters that may affect the way Speed Net responds to these three options.



Confirm Update

If this option is selected then when ever a change is made to the data base information the software will ask you to confirm the update before it will proceed. When you are prompted to confirm the changes you will need to select yes to change them.

By default this option is not turned on as it will typically slow down data entry process.

Confirm Cancel

By default this option is turned on. The Confirm Cancel option will prompt you when you cancel certain procedures. This will prevent accidental cancellations of some process before they are completed.

Open Printer Options

By default the Open Printer Options is selected, this option will open the Printer Options window when ever a print job is initiated. This allows the user to select a different printer or set those printer options that they wish to change before the print job begins.

If the Open Printer Options is not selected then print jobs will be submitted automatically to the Default Printer that has been selected in windows.

Alphabetical Sort

This setting will sort the Site / Collector List alphabetically and can be overridden by clicking on a header on the list.

Backup Folder

This is the last file path that was used for a backup. If you have never changed the path then the default path is listed.

Import Data

This is the last Import Data file used to import data into the data base. There is no default path and this path will update after every import.

If you use only one Import Path then this path can be set here

Export Data

This is the last Data File created during an export. There is no default path and this path will update after every import.

If you use only one export path then the default can be set here.

Collector Update

All Collector Updates are performed through the Settings/Collector Update TAB. From this module you can perform many different types of updates and or changes to the data collector.

WARNING WARNING WARNING WARNING
ONLY SAVA FILES FROM VERSION 2.08 COLLECTORS CAN BE EDITED AND UPLOADED TO DATA COLLECTORS. IF YOU EDIT A FILE AND UPLOAD IT BACK TO A COLELCTOR RUNNING OLDER SOFTWARE THE SYSTEM WILL CRASH AND REQUIRE A FIELD TECHNICIAN TO SEND IT BAK TO SPEEDREAD

WARNING: Before proceeding the user should understand the risk and problems that are created by editing collector data files and then uploading the files to a data collector.

This risk may include the corruption of collector data, which may cause the collector to lock up or not function as designed. Changing some data such as the Counter fields may cause the collector to miscalculate the reading data.

If you are unsure of the procedures that are explained in this section then contact an experienced field technician or SpeedRead Technologies for details on how to proceed.

The following steps will help walk you through several scenarios in updating a collector.

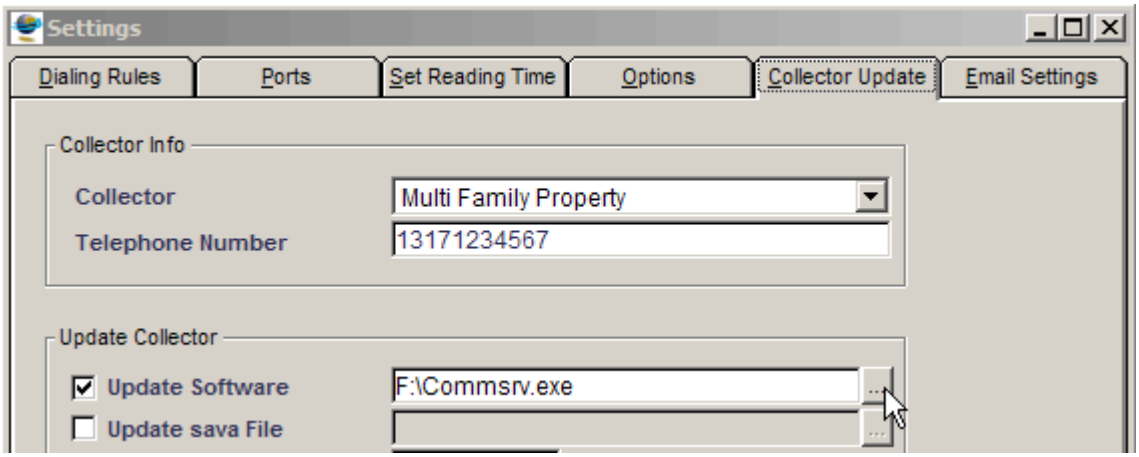
Updating System Software

Start by selecting the Collector **Update TAB**.

1. Click on the **Collector drop down list** select the property you are updating, or you may enter a telephone number in the telephone field.

2. Place a check in the UPDATE SOFWTARE check box.

3. Click on the Browse box at the end of the File Name window and locate the new COMMSRV version you will be updating to the collector. Once you are finished making these selections your screen should look like the one shown below.



4. Click on UPDATE to start the process.

5. Once the process starts, several windows will open and then close as the file is prepared and then sent to the collector.

6. Once the upload is completed then you MUST download the system again to verify the file was received and updated correctly. You can perform this check by downloading the site and checking the Comments section on the Site List.

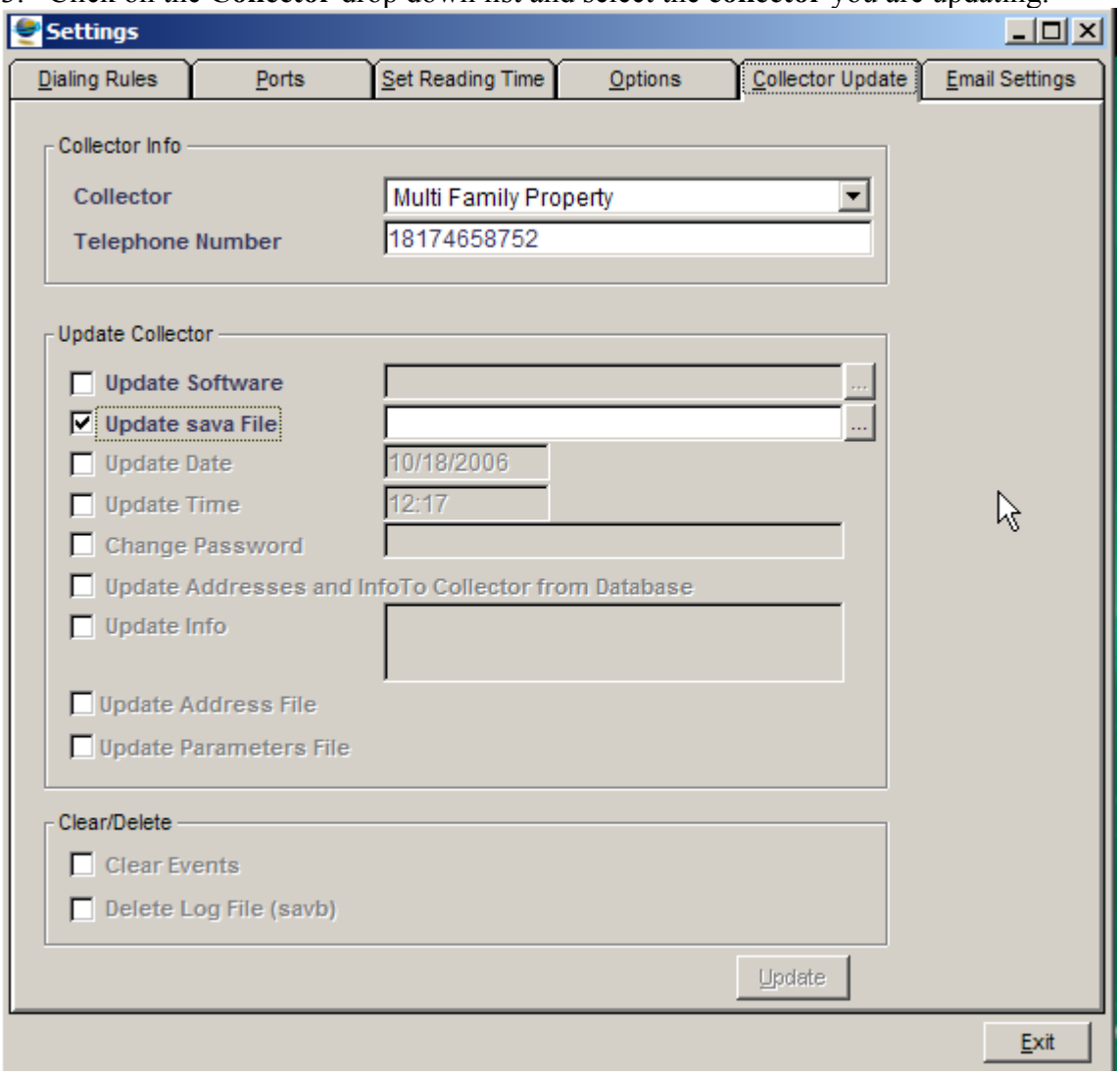
If the download fails you must follow the steps above until it completes.

Updating a System SAVA or Data File

The steps for updating a system SAVA file or data file or identical except instead of selecting a software (Commsrv) file to send you will select a SAVA file from a previous download or a file you may have edited as described in Chapter 6.

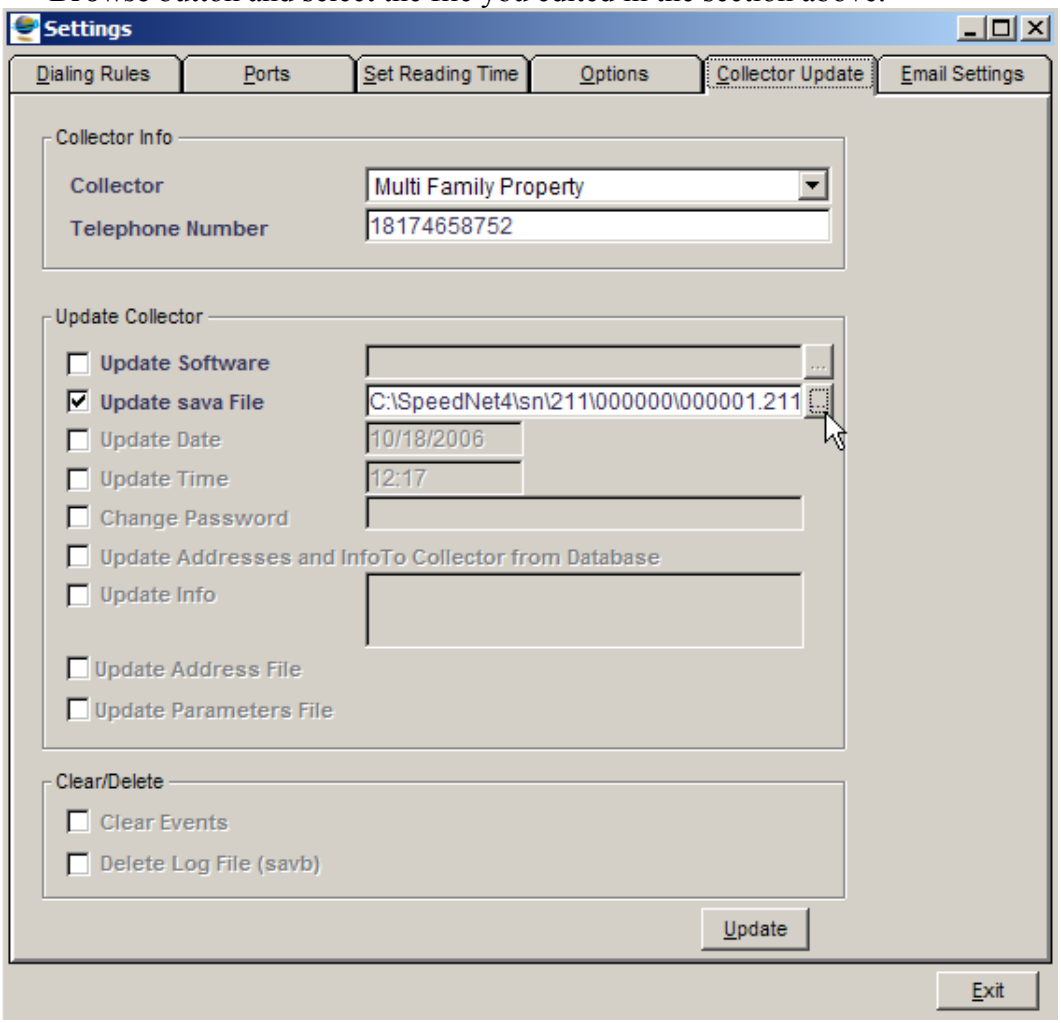
After making changes to the collector file the following steps will allow you to upload the file to a new collector or update the information to the data collector you downloaded in the previous steps in this section.

1. On the upper level menu items click on **Maintenance**, and then select **Settings.**
2. At the following screen, click on the **Collector Update** tab.
3. Click on the **Collector** drop down list and select the **collector** you are updating.



4. The phone number is automatically entered from the collector list.
5. If you are using the data cable connection, disconnect the modem and connect the data cable to the modem port.
6. Change the phone number to the com port you will be using.
7. Click in the **Check Box** for the **Update Sava File.**

8. In the file name field enter the **complete file name and path** or click on the **Browse** button and select the file you edited in the section above.



Note: If your file was saved to another folder or path then locate the file using the explore window that opens

9. Click on **Update** to start the Upload procedure.

After clicking on Update several windows will open and then close as the file is zipped and prepared for transfer. The QDIAL window will also open and the download will proceed.

After completion you should receive a message that the download was completed. Click **OK** to close the window.
After the download is finished you should download the collector to verify the changes did take effect.

Additional Update Collector Tab Functions

Update Date and/or Time

You can also update the collector's system Date and/or Time remotely using the Collector Update Module. The updated time default is taken from the Speed Net PC you are using, if you wish to update another system date and time Click in each field and enter the date and time in the correct format.

1. Start by selecting the Collector Update TAB
2. Place a check mark in the Update Date and/ or the Update Time check boxes.
3. Click on Update and the data collector will be called to update the system date and time.

If you wish to manually enter the correct date and time click in eth fields and change the fields to the format shown.

Change Password

The user has the ability to change the system password so that no other user can download the site.

Before using this function you must first contact SpeedRead Technologies.

Update Addresses and Info to Collector from Speed Net Data Base

This allows the user to update Address Info and Collector Info directly from Speed Net.

To do this the user must have completed one of these steps outlined in earlier sections or do the following:

1. Enter the consumers address info using Display Consumers or import the address info into Speed Net from a CSV or other file. (See the Section on Data Importing fro details)

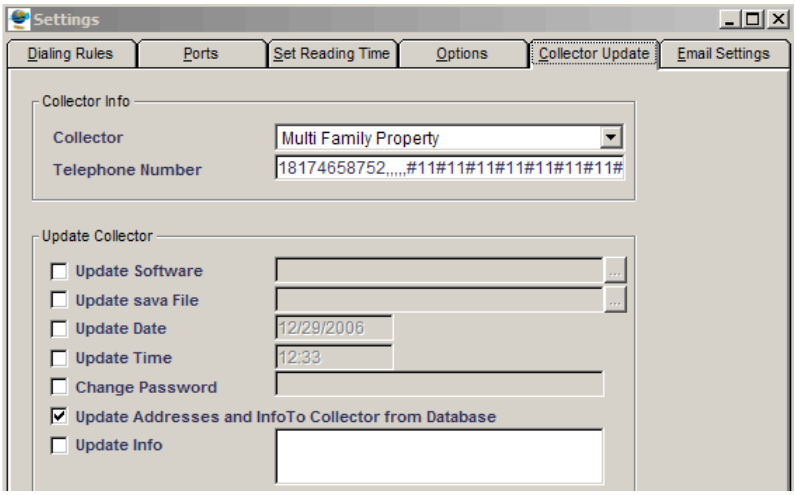
2. Entered Collector Information on the Site / Collector List /Comments Section outlined earlier.

If the user has completed either of these steps then you can update the info by using the following steps.

1. Start by Clicking **Maintenance** then click **Settings** and then click the Collector Update TAB.

2. Select your collector from the drop down menu.

3. Place a check in the **Update Addresses and Info** check box. Your screen should look like the one below.



4. Click on **Update** at the bottom.

The system will be called and if the Address and Collector Info is in the system it will be sent to the collector. You can check to see if this data is correct by downloading the system in View Collector.

Update Info

The Update Info check box allows you to enter Collector Info directly into the field box to the right of the check box and publish it to the collector.

This data field has 200 characters available for use. The type of information you enter here is a decision you should discuss with your staff. The typical info that is published includes the following:

- ✓ Collector Location
- ✓ Site Frequency
- ✓ Repeater Locations
- ✓ Meter Types
- ✓ System Phone Number

NOTE: You can change this info as often as needed. When the system adds a repeater you can change the info to reflect this and update the system with the new Info Data

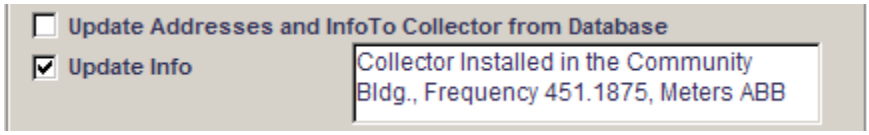
To complete this update follow these steps:

1. Click on Maintenance, then Click Settings and Click on eth Update Collector TAB.

2. Select the property from the drop down list or enter the phone number of the collector.

3. Place a Check mark in the Check Box next to Update Info

4. Click in the data field next to the box and enter the information you wish to publish to the collector. Once you are finished your screen should look like the one below.



5. Click on Update at the bottom and the system will be updated with the info.

Import Back Up File

The Speed Net Maintenance menu has the ability to restore entire Collector data files from archived files. These back up files can be imported from a folder or by using the calendar selection tool when starting the process. This ability allows the use to import data files from the collector or from an external source such as email.

History Data Retrieval

Collector Software Version 2.08 and higher is designed to create a system history data file. The normal HIST.DAT file on a collector is designed to store up to 90 days of reading data files. These files are created each night at midnight and stored in the HIST.DAT file stored on the collector.

The user may as outlined below open up the Import Back Up File module and select the dates he wants to recover. This ability has some limitations as described below:

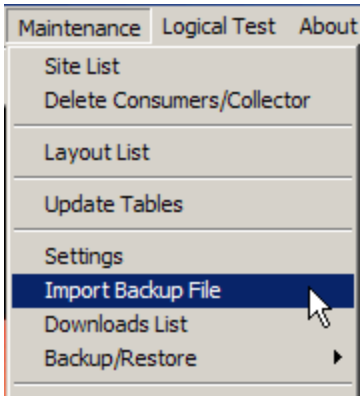
The system will not import data if the system has been downloaded after the dates you select. As an example if you down load the system today and then try to import a file from 7 days prior the file retrieval will fail. You would have to delete all current downloads after the dates you wanted to recover.

If there are gaps in the data the Import Back Up File will fail as it can not import files that do not exist on the collector. An example of this is when the system was off line for a period of days as when you select the dates for they would not exist on the collector. Thus the import will fail.

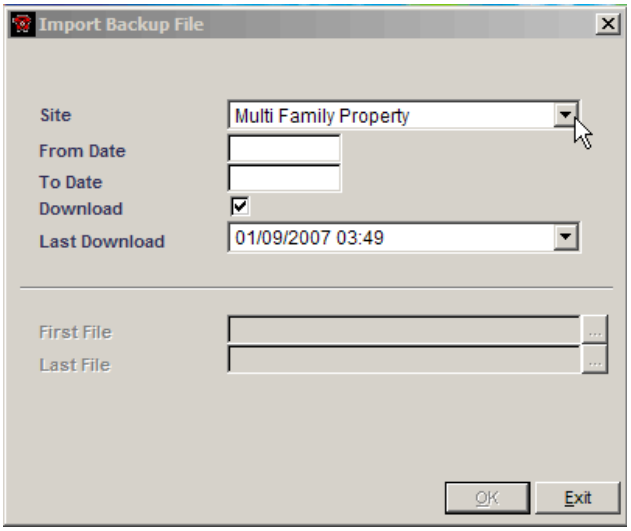
If you suspect that either of these problems exists on the collector then you may want to consider what dates you can import

This process can take a long time to complete as the files have to be unzipped, packaged up, and sent to Speed Net, so plan accordingly.

Retrieving History Data from a Collector



1. Open the Import Back Up File Module by Clicking on **Maintenance** and selecting Import Backup File

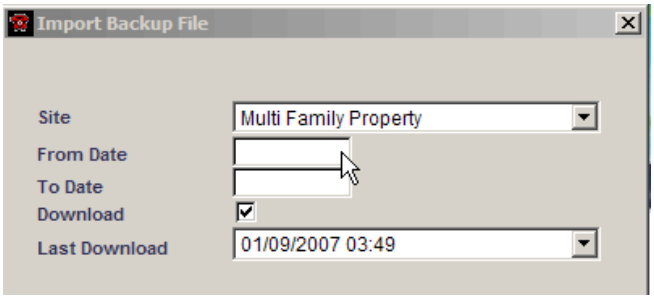


2. The following window will open and you can Click on the Drop Down arrow to select the property you want to call.

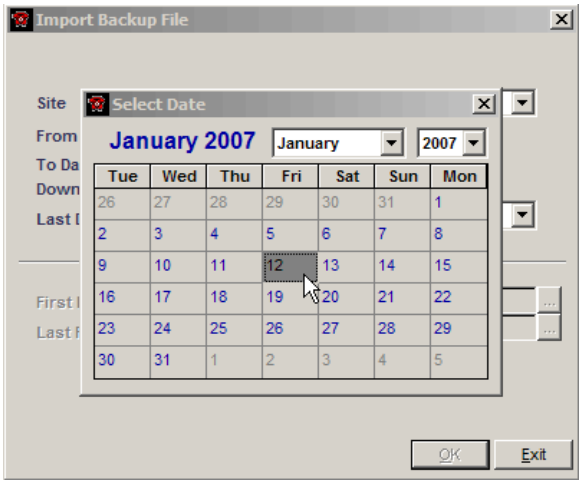
3. Note that if the property has been called recently the "Last Download" window will show the date the system was downloaded.

4. You must now select the dates you want to retrieve from the collector. These dates must before the "Last Download Date" listed and they must also be within the 90 day period of the history data file.

Note: If the system has not been on line for 90 days then it will not have 90 days of data.

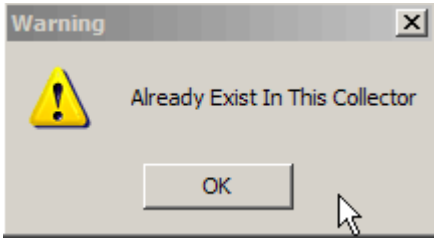


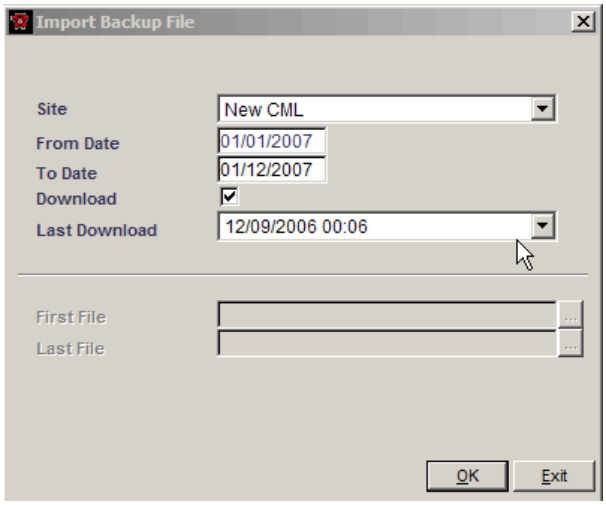
5. Click in the "From Date" Window and the system calendar will open as shown here.



6. Select the first download you want to retrieve by selecting the Month from the drop down list and then clicking on the date.

7. If you select any dates that exist before the **Last Download Date** that is shown then you will receive the following error message. Click **OK** and reselect your dates.





8. Select the last download date by selecting the month and then the date.

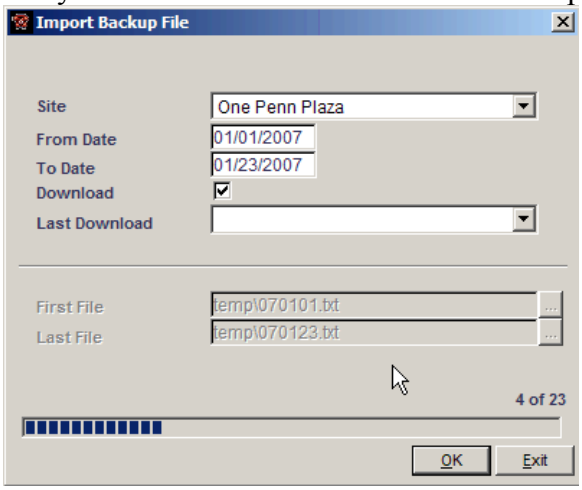
9. Make sure there is a Check in the Download box.

10. Once you are finished, your selection window will look similar to the one shown on the left.

11. You may now Click on **OK** to start the download process.

This process can take several minutes; times depend on the size of the property and the number of days that will be processed. If the system has gaps in eth dates the download may download up to the date were the gap starts, import those reads and then stop the import process.

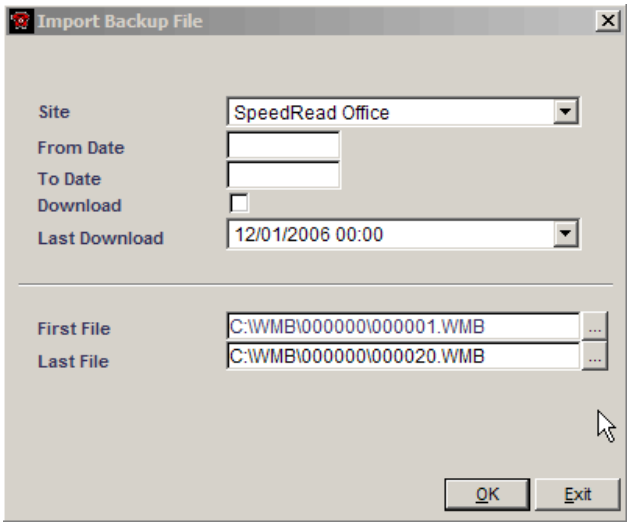
After the download is completed the read files will be imported one after the other and you should see the screen below as this process takes place.



Importing Back Up Files from Existing Files

The process described above can be used to also Import Backup Files from a folder that has sequential downloaded data in it. This process looks at each file in sequence and does not use the Calendar to select the dates. Therefore the user should verify the data is in the correct sequence before he or she starts the process.

1. Open the Import Back Up File Module by Clicking on **Maintenance** and selecting Import Backup File
2. The following window will open and you can Click on the **Drop Down** arrow to select the property you want to call.
3. Note that if the property has been called recently the "Last Download" window will show the date the system was downloaded.
4. Remove the Check from The Download Check box.
5. You must now locate and select the files you want to Import from Backup. Click on the First Download Browse Button and then locate the folder that has the existing files or download you will be importing. Once you have selected these files your Screen should look similar to the one shown here.



6. The import process will start and import the data the same way as the Import Process from the calendar selection did.
7.

Backup and Restore Data Base Information

The user can backup all current data base tables, including consumer information, downloads (not the physical files), tables and any other data base information.

This allows the user to keep backup current system information and restore it at a later date if needed.

Back Up and Restore Limitations

This backup function is not without limitations the following list the files backed up by the Backup and Restore function.

- All downloads and data, **but not the physical files that were retrieved during the download and stored in the SN folders**.
- Consumer's information and data.
- Created Export and Import Templates
- Tables Information
- Collector List
- Maintenance Settings

SN Files and Folders are not backed up and cannot be restored using the Backup and Restore functions. The user should take extra steps to backup these files should they need to be restored.

If these files are backed up the user can restore data using the steps outlined in the previous section.

Back up the Data

1. Click on the Maintenance Menu and select Back Up/Restore and then click on **Backup**.

2. At the following screen enter the path where you want the Backup to be placed. The default path is the **C:\Speednet4\Backup folder**.

3. You can click on the Browse button to locate the path for the backup.

4. Click **OK** to start the backup.

5. A series of windows will open and the backup will begin. Depending on your number of collectors and data the backup may take several minutes.

6. Once completed you will get a prompt telling you the backup was completed.

7. Make a copy of the COMPLETE SN FOLDER.

Restore Data

To restore a previously saved data backup performed above perform the following steps.

1. Move the Backup File created in the steps above to a folder on the new PC.
2. Click on Maintenance Then Backup /Restore and Select Restore Backup.
3. At the following screen make sure the path and folders is the correct Restore Files, Click **OK.**
4. The system will go through the process of restoring the data from the previous backup.
5. Once the restore is completed, click on **Maintenance**, and select **Site List** to verify the data has been restored successfully.
6. Once you have verified the data is restored copy the SN folder from the previous back up into the SN folder for the restore to be completed.

Delete Consumers / Collector

The Delete Consumers and Collector maintenance menus items are used to either delete entire collectors or to delete just the consumer information data that is assigned to the collector.

The Delete Consumers function will delete the consumer information while retaining the downloaded reading files stored in the data base.

The Delete Collector function will delete all collector information including the consumer data.

Delete Collector

The Delete Collector function is discussed in the section Collector List that is at the beginning of this chapter. For details on this function the user should review that section.

Delete Consumers

The Delete Consumers function is designed to delete some or all of just the consumer data assigned to a collector but leave all the reading data intact. This function may be used if the user mistakenly imports data in to the system by mistake during collector setup and wishes to delete all consumer data and start again. This deletion process may also be helpful when training other users to import data.

In any case the process is not reversible so caution should be exercised when performing the procedure.

1. Click **Maintenance** and then click **Delete Consumer / Collector.**
2. At the Delete Consumer / Collector selection screen, click the **drop-down collector field** and then select the Collector that you wish to perform the procedure on.
3. Click the **Delete Collector check box** so that the Collector Data is left intact.
4. If you wish to delete just a set number of the consumers and do not want to delete all the consumers in the data base, enter the starting and ending AMR numbers you want to delete. Otherwise the default selection will include all consumers or AMR number sin the data base.
5. Click **OK** to start the process. After completion of the delete process you will be prompted to Exit the program. Select yes or click **No** to continue.

CHAPTER 16

Premium

Logical Test

The Logical Test Module is where the logical test parameter is set and also allows the user to generate reports based on system Exceptions.

The Logical Test Module is only available in the Premium version of Speed Net and it function is to provide detailed system analysis on these logical test.

Setting Logical Test Parameters

1. Click on the **Upper Level Menu Logical Test**, and then click Logical Test Parameters.
2. At the following screen click on the **Exception drop-down menu** and select one of the three logical tests:
   Non Advancing Meter – Used to set the parameters for meters that show no advancement.
   Building Water Loss – Used to set the parameters for building water loss that is associated with the meter layout tables.
   Over Consumption – Used to set the parameters for consumption that is considered higher than expected.
3. For this example click on **Over Consumption** and the following screen will open.
4. Click the **drop-down menu in Consumption Group** and select Connected. This is the consumption group that will be applied to this parameter. Any consumer that has been not been assigned to this consumption group will be omitted from this logical test.
5. Leave the AMR field blank as we want this parameter to be applied to all AMR numbers.
   Note: You can select a parameter to be applied to a specific AMR only. This allows you to set logical test parameters on a one to one basis if needed.
6. Click in the **Days field** and enter 7 as the number of days.
7. Click in the **Consumption Field** and enter 500, the results will be displayed as 500.00.
8. Now click on the **Check box** to activate the parameter.

The parameter you have set will check all consumers that are assigned to the Connected Consumption Group and will look for any meter that has advanced more that 500 Gallons

in at least 7 days. If it finds an AMR that falls in this category then it will show up in the Exception report.

You can set separate parameter for each type of consumption group you assign. Some examples are setting consumption groups as apartment sizes such as 1 bed rooms or other apartment types. This would allow you to set parameters that would show over consumption in these units only.

Since you can create as many logical parameters as you want each parameter could be set to the consumption pattern you determine as the proper threshold.

Changing Parameters

If you decide to adjust the settings in a logical test parameter you should reprocess the entire collector's downloaded data to compensate for the change in parameters. This reprocessing will evaluate downloads to the new settings and you can then complete a report based on the results.

Premium Most Recent Warning Status

The Most Recent Warning Status is used to get a quick report of Exceptions on the most recent download for the Collector.

Click **Logical Test** and then click **Most Recent Warnings** and the report will be generated for review.

You can get now click on one of the AMR numbers to open the Display Consumer Module to the review that selected Consumer's information and downloads.

Click **Back**, when in you are in the Display Consumer Module to return to the Most Recent Warnings Screen.

Or click **Exit** to return to the Main Screen.

Premium Exception Report

The Exception Report Module was reviewed in the Section 5, Chapter 10. Please refer to that Section for details on Exception Reports.

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