

**Documentation**

# Senstar Sennet & Starcom RTU Guide Version 3.x

# **OSSI**

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# **Intelli-Site**

## **Security Management Software Senstar Sennet & Starcom RTU Guide**

PC Software RTU Interface Guide  
For Windows 7 SP1, 2008 R2 SP1, XP SP3 & 2003 SP2

Version 3.x  
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## Section 1 – Introduction

This section describes the following:

- Overview
- Technical Support Assistance

### **Overview**

The Sennet and Starcom RTUs (Receiver/Transmitter Unit) are the Intelli-Site software representations of a Sennet field devices and Starcom protocols.

The Sennet and Starcom RTUs provide for user configuration of all aspects of the field devices and Starcom protocol:

- Sennet and Starcom general configuration
- Input configuration
- Output configuration
- Alarms configuration

## ***Technical Support Assistance***

### **OSSI Headquarters**

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### **Technical Support**

Technical support is available via Telephone, Fax or Email. Contact OSSI Technical Support 8:00 AM to 5:00 PM Central Standard time. If calling after hours, please leave a detailed voice mail message, and someone will return your call as soon as possible.

E-Mail: [support@ossi-usa.com](mailto:support@ossi-usa.com)

Fax: 262-522-1872 (Attention Technical Support)

Local: 262-522-1870

When calling, please be at the computer prepared to provide the following information:

- Product version number, found by selecting the **About**  button from the Intelli-Site Menu Application Bar.
- Product serial number used for registration.
- The type of computer being used including, operating system, processor type, speed, amount of memory, type of display, etc.
- Exact wording of any messages that appear on the screen.
- What was occurring when the problem was detected?
- What steps have been taken to reproduce the problem?

## Section 2 – Sennet RTU Configuration

This section describes the following Design Mode RTU activities in Intelli-Site.

- Adding a Sennet RTU to the Intelli-Site tree
- Sennet RTU Configuration

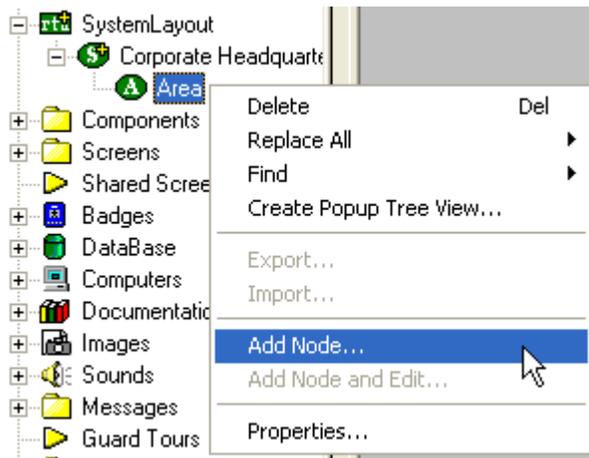
### ***Adding a Sennet RTU to the Intelli-Site Tree***



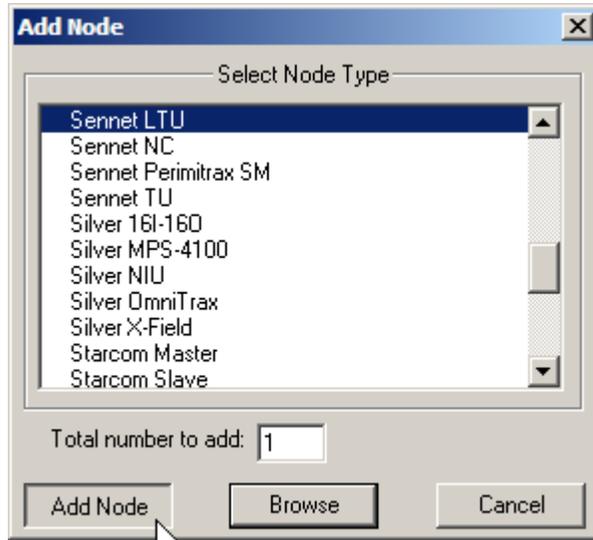
The following section will describe how to add one or more Sennet RTU nodes to the tree. All procedures described in this section are accomplished in Design Mode.

#### **Add an RTU – Procedure**

1. Expand the System Layout Node and Right-Click on an Area. Select **Add Node...** from the Shortcut Menu as shown below:



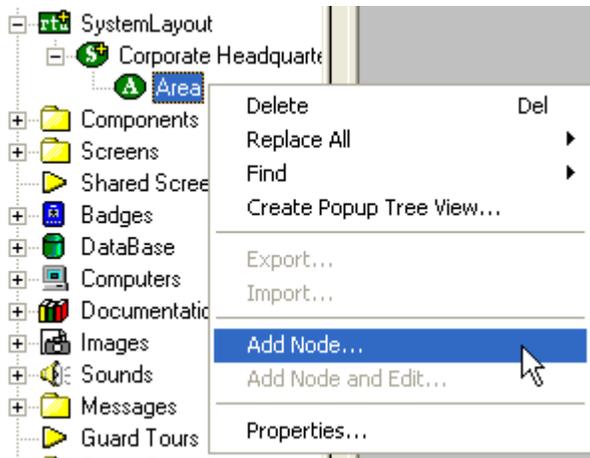
**Note: The total number of RTUs that may be added must not exceed 255 for a given domain.**



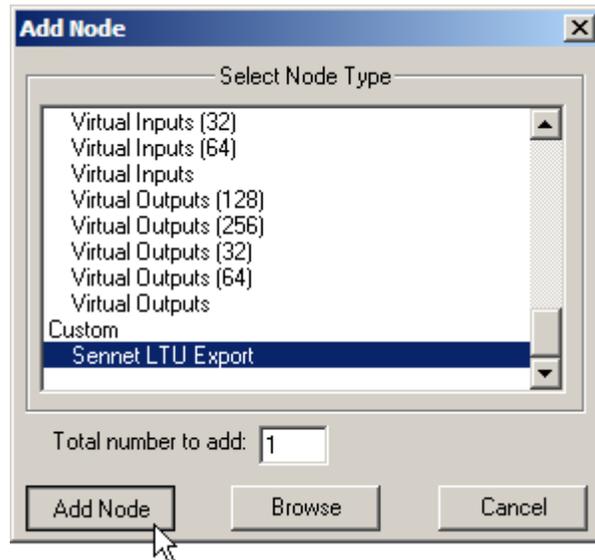
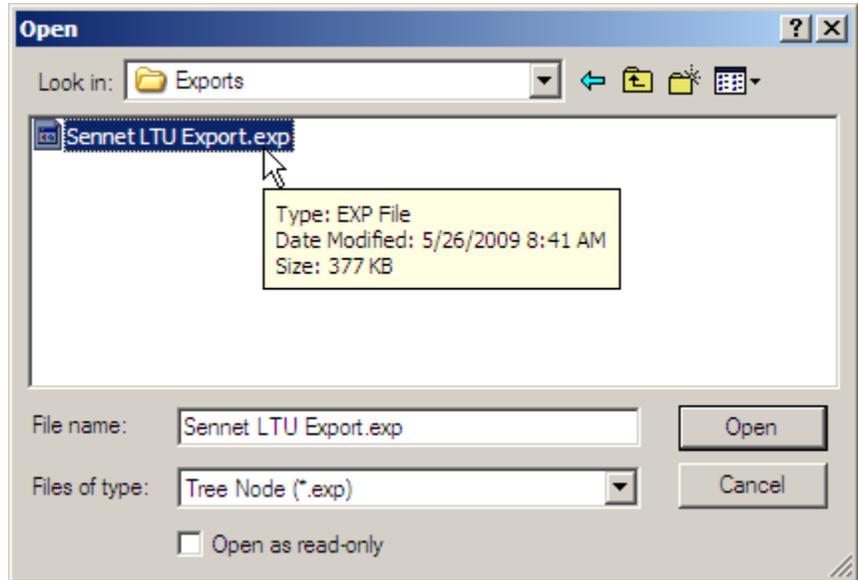
2. The RTU(s) will be added to the tree and the system level Text-To-Speech message "**Node Added**" will sound.

### Import an RTU – Procedure

1. Expand the System Layout Node and Right-Click on an Area. Select **Add Node...** from the Shortcut Menu as shown below:

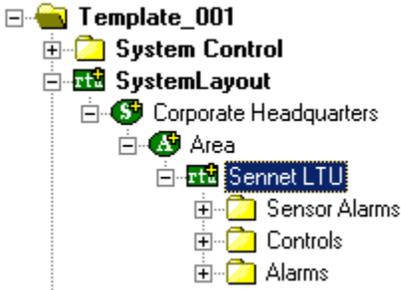


2. Select the **Browse** button on the **Add Node** dialog: A browse window will open. Browse to the appropriate location then select the RTU .exp file you wish to import and select the **Open** button. A new type (**Custom**) will be automatically added to the **Add Node** dialog and the imported .exp will be listed below the **Custom** type.



3. Select the imported RTU then enter the number of devices you wish to add to the tree in the **Total number to add:** edit box. You may add multiple devices to an area.

- The RTU(s) will be added to the tree and the system level Text-To-Speech message **"Node Added"** will sound.



## ***Sennet Configuration***

The following section describes configuration of the various elements of the Sennet RTUs.

The Sennet LTU RTU, for example, consists of a parent (the basic Sennet node) and three children as follows:

- **Sensor Alarms** – a collection of all sense inputs.
- **Controls** – a collection of all control counters.
- **Alarms** – the collection of all alarms.

### **RTU Node (Parent Node)**

The parent (Sennet LTU) node is configured by **Right-Clicking** on the RTU and selecting **Properties...**

### **RTU Setting Tab**

The screenshot shows a configuration window titled "Area - Sennet LTU". It has two tabs: "Property Page" and "Notes/Comments". The "Property Page" tab is active and contains the following fields:

- Name:** A text box containing "Sennet LTU".
- ID:** A text box containing "359".
- Access Level:** A dropdown menu showing "Level 1".

Below these fields is a section titled "RTU Setup" which contains:

- Domain:** A text box containing "31".
- Net:** A text box containing "1".
- Node:** A text box containing "0".
- Retain
- Virtual Point: A dropdown menu showing "None".

At the bottom right of the window are "Ok" and "Cancel" buttons.

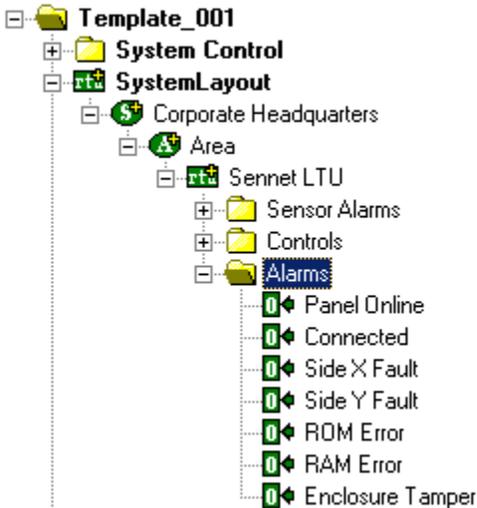
- 1. Name:** - enter a descriptive name for the device here. Example: Perimeter Area South.
- 2. Access Level** - this is the Access Level of the node object (RTU).
- 3. RTU Setup** - this area is used to configure the Intelli-Site network parameters and basic functional characteristics of the node.
  - a. Domain and Net** - the Domain identifies the device chain and the Net identifies the device number.

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**Note: The Domain of an Ethernet-based (TCP/IP) panel will be unique for each panel. It is recommended that the net (and panel number) for Ethernet panels be set to 1.**

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**b. Virtual Point** – allows the user to make the RTU a virtual RTU by specifying a V-Point from the Virtual Points node.



## Alarms

The Alarms subnode on the Sennet RTU contains premade alarm conditions that can notify the operator of a specific problem with the field device.

- 1. Panel Online:** This point will be set on when the Sennet driver is communicating with the Network Manager
- 2. Connected:** This point will be set on when the Network Manager is communicating with the Sennet field device
- 3. Side X Fault:** This point will be set on when a Side X Fault is detected
- 4. Side Y Fault:** This point will be set on when a Side Y Fault is detected
- 5. ROM Error:** this point will be set on when a ROM error is detected
- 6. RAM Error:** this point will be set on when a RAM error is detected
- 7. Enclosure Tamper:** this point will be set on when and enclosure tamper is detected

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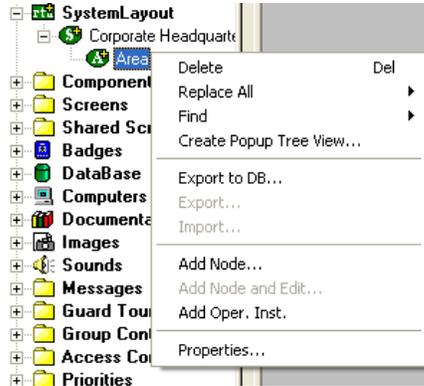
**Note: The RTU setup and configuration of Sennet variations is similar to the steps above. This applies to: Crossfire, MX-Series, IPCC, and Silver. The subnodes under each may vary, but the setup is the same.**

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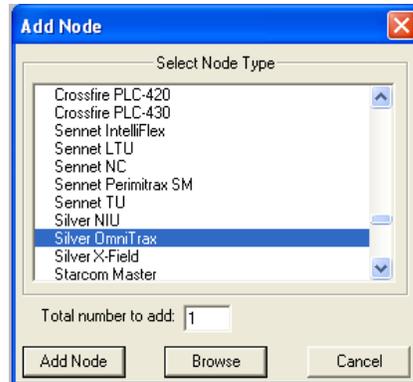
## Section 3 – Setting up an OmniTrax zone

This section describes the procedure that will allow the project file programmer to create a functional Omnitrax alarm zone.

**Add and Omnitrax RTU to the Project Tree:** Expand the System Layout section of the Project Tree and right-click on the Area Node under the Corporate Headquarters Site Node:

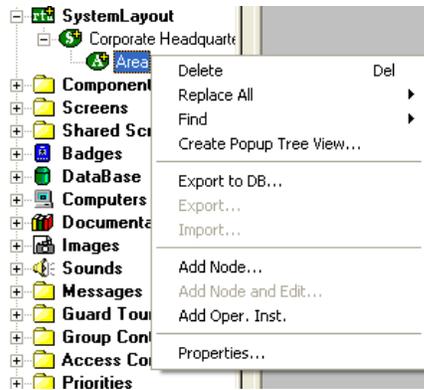


Select Add Node... from the popup dialogue and then select Silver Omnitrax from the Add Node dialogue:

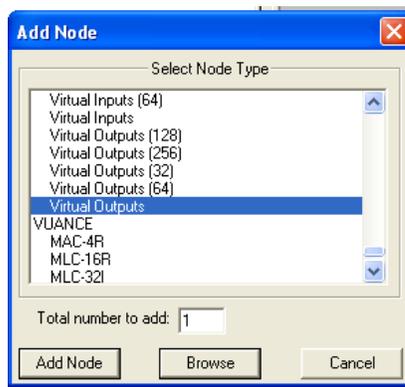


Select the Add Node button  to add the Omnitrax RTU to the Project Tree.

**Step 2 – Add Virtual Points RTU to the Project Tree:** Right-click on the Area node under the Corporate Headquarters node:



Select Add Node... from the popup dialogue and then select Virtual Outputs from the Add Node dialogue:



Select the Add Node button  to add the Virtual Outputs RTU to the Project Tree.

**Step 3 – Rename Virtual Points:** Rename the first four (4) Virtual Points as follows:

- Zone 1 Alarm
- Zone 1 Access
- Zone 1 Failure
- Zone 1 Tamper

**Step 4 – Create an Alarm Zone Group:** Expand the Door Control node and Right-click on the Alarm Zone node. Click Add Node... to create an Alarm Zone Group.

**Step 5 – Create an Alarm Zone:** Right-click on the Alarm Zone Group and select Add Node and Edit... to create an Alarm Zone Construct:

**Step 6 – Add Points to the Alarm Zone Construct:** Add the following points to the Alarm Zone Construct:

- Drag-and-drop the Silver Omnitrax Cable Zone 1 point into the Sensor Field under the Sensor List.
- Drag-and-drop the Zone 1 Alarm virtual point into the Alarm Output point field.
- Drag-and-drop the Zone 1 Access virtual point into the Access Input point field
- Drag-and-drop the Zone 1 Tamper virtual point into the Tamper Output field (on the Options page)
- Drag-and-drop the Zone 1 Failure virtual point into the Failure Output field (on the Options page)
- Drag-and-drop the the Silver Omnitrax fault points into the Failure List (on the Options page)
- Drag-and-drop the Silver Omnitrax Enclosure Tamper into the Tamper List (on the Options page)

**Alarm Zone Group - Alarm Zone**

Settings | Options | Actions | Notes/Comments

Name:

Access Level:

Sensor Setup

Use Alarm Expression Alarm Expression

|   | Point | Selection | Qualifier | Operation |
|---|-------|-----------|-----------|-----------|
| 1 |       |           |           |           |
| 2 |       |           |           |           |
| 3 |       |           |           |           |
| 4 |       |           |           |           |

Sensor List

|   | Sensor                  | Latch | Failure | Disable | Control Output |
|---|-------------------------|-------|---------|---------|----------------|
| 1 | [839] Silver OmniTrax-> |       |         |         |                |
| 2 |                         |       |         |         |                |
| 3 |                         |       |         |         |                |
| 4 |                         |       |         |         |                |

Alarm Output:  Auto-Secure Timeout (sec):

Access Input:  Auto-Secure Counter:

Selected Counter Val:

Alarm Processing Setup

Processing Timeouts In Seconds

Ack Timeout Value:  Process Timeout Value:

Ack Timeout Counter:  Process Timeout Counter:

Ack Timeout Output:  Process Timeout Output:

Auto-Ack Input:  Auto-Process Input:

**Alarm Zone Group - Alarm Zone**

Settings | Options | Actions | Notes/Comments

**Alarm Options**

Pre-Alarm Delay (ms):

Pre-Alarm Output:

All Sensors:

Mult. Sensor Window (sec):

Multiple Sensor Output:

Adjacent Zone List:

**Tamper Options**

Tamper Output:

Tamper List:

**Camera Views**

|   | Camera | Preset | Primary                  |
|---|--------|--------|--------------------------|
| 1 |        |        | <input type="checkbox"/> |
| 2 |        |        | <input type="checkbox"/> |
| 3 |        |        | <input type="checkbox"/> |
| 4 |        |        | <input type="checkbox"/> |

**Failure Options**

Failure Output:

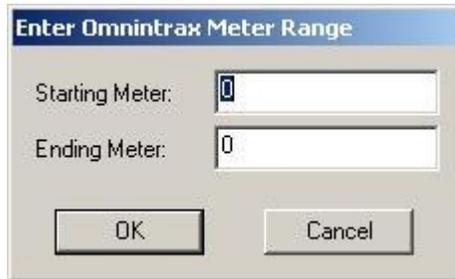
Failure List:

Include Sensor Failure Pts

Disable Zone On Failure

**Step 7 – Add the Alarm Zone to the Screen:** Drag-and-Drop the Alarm Zone Construct on to the screen (lead-in) and select the points to define the zone (hit Escape to end drawing).

**Step 8 – Specify the Starting and Ending Meter:** As soon as the user hits the Escape key, the following dialog will appear. Enter the Starting and Ending Meter in the appropriate boxes then click “OK”. The alarm zone will be filled in with the dropped one. The inactive and active images will be filled it with ‘AlrLocn.ico’ and ‘AlrLocnActv.ico’



The image shows a dialog box titled "Enter Omnitrax Meter Range". It contains two text input fields: "Starting Meter:" and "Ending Meter:". Both fields have the number "0" entered. Below the input fields are two buttons: "OK" and "Cancel".

## Section 4 – Starcom RTU Configuration

This section describes the following Design Mode RTU activities in Intelli-Site.

- Adding a Starcom Master RTU to the Intelli-Site tree
- Starcom Master RTU Configuration
- Adding a Starcom Master RTU to the Intelli-Site tree
- Starcom Slave Configuration



### Adding a Starcom Master RTU

- The same process applies as previously outlined in **Section 2**, except in the Add dialog, select "Starcom Master"

### Starcom Master RTU configuration

- Right-click on the "Starcom Master" RTU node, and select "Properties"

Area - Starcom Master

Starcom Master | Notes/Comments

Name: Starcom Master 359

Access Level: Level 1

Starcom Master Setup

Domain: 30

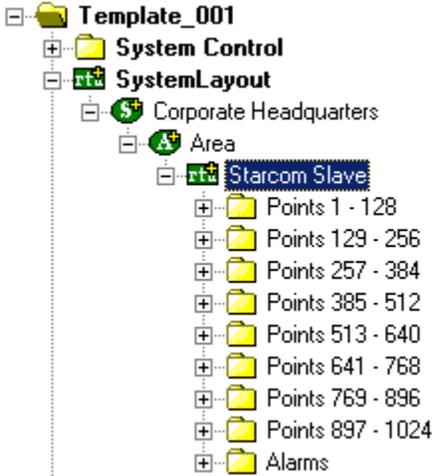
Virtual Point: None

| Inputs |        | Outputs |        |
|--------|--------|---------|--------|
|        | Points |         | Points |
| 1      |        | 1       |        |
| 2      |        | 2       |        |
| 3      |        | 3       |        |
| 4      |        | 4       |        |
| 5      |        | 5       |        |
| 6      |        | 6       |        |
| 7      |        | 7       |        |
| 8      |        | 8       |        |
| 9      |        | 9       |        |
| 10     |        | 10      |        |
| 11     |        | 11      |        |
| 12     |        | 12      |        |
| 13     |        | 13      |        |

Ok Cancel

- On the Starcom Master tab you will see two columns: Inputs and Outputs.

- Inputs: reserved for points that the software uses to talk to a device.
- Outputs: reserved for points that the device uses to talk to the software.

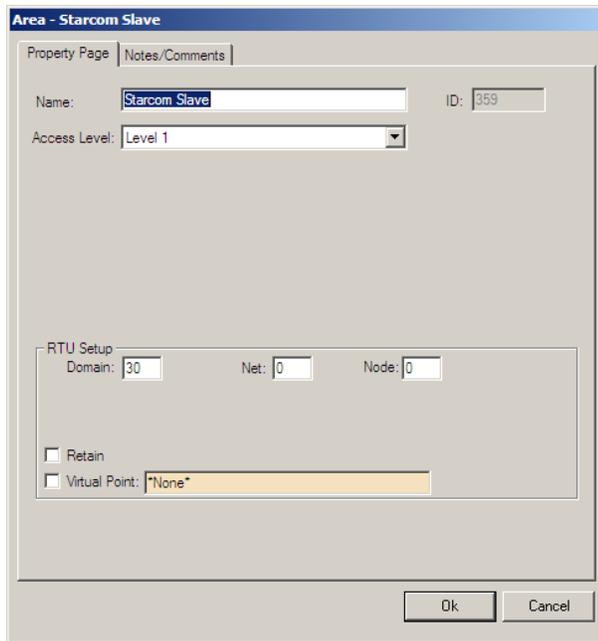


### **Adding a Starcom Slave RTU**

- The same process applies as previously outlined in **Section 2**, except in the Add dialog, select "Starcom Slave"

### **Starcom Slave RTU configuration**

- Right-click on the "Starcom Slave" RTU, and select "Properties"



- As before, with the Sennet RTU, the setup is the same. The operator must fill in the "**Domain**", "**Net**" and "**Node**" appropriately, according to his project configuration (i.e. number and placement of RTUs in the tree)

### **Starcom Slave RTU configuration**

- The subnodes underneath the "Starcom Slave" RTU parent node, are points that can be assigned in the Starcom Master Input/Output grids.



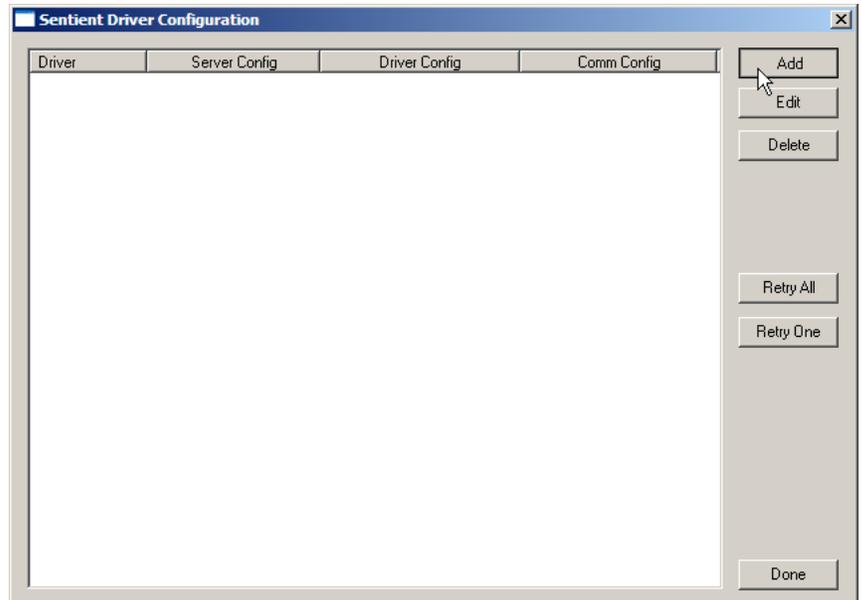
## Section 5 – Driver Setup and Configuration

This section describes how to set up the drivers in the Driver Service software for the Sennet and Starcom RTUs.

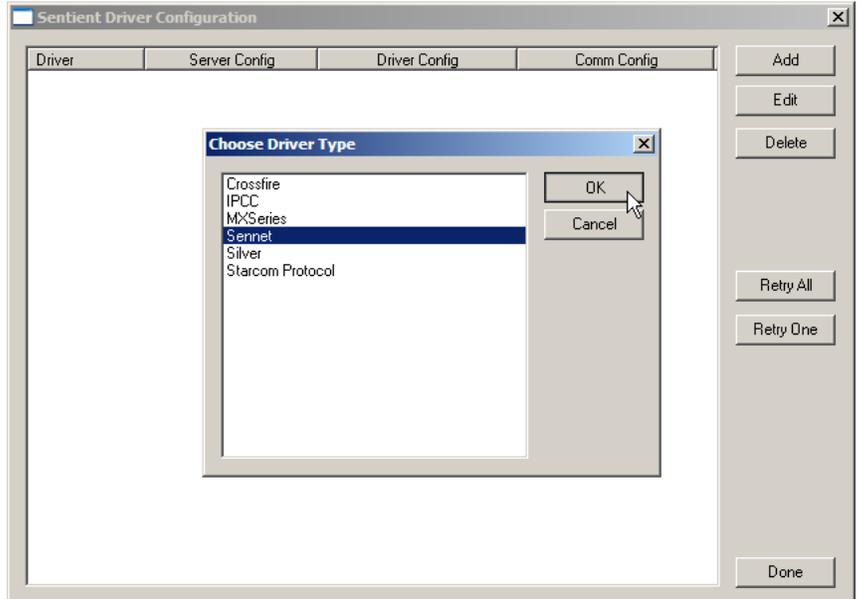
- Adding a Sennet/Starcom driver to Driver Service
- Configuring the Sennet/Starcom driver

### ***Adding and Configuring Sennet Driver***

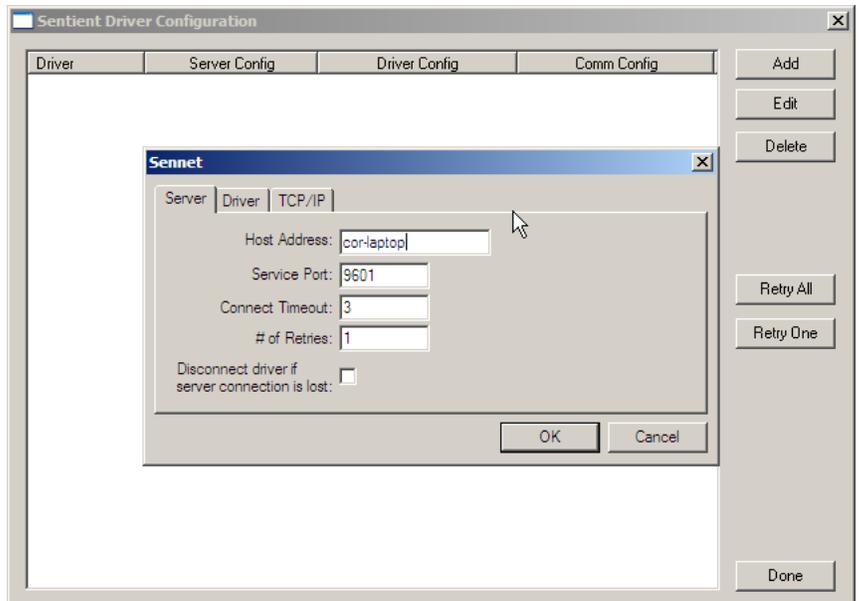
- To add and configure a Sennet driver, open the Driver Service software, then click the “Add” button, as shown below.



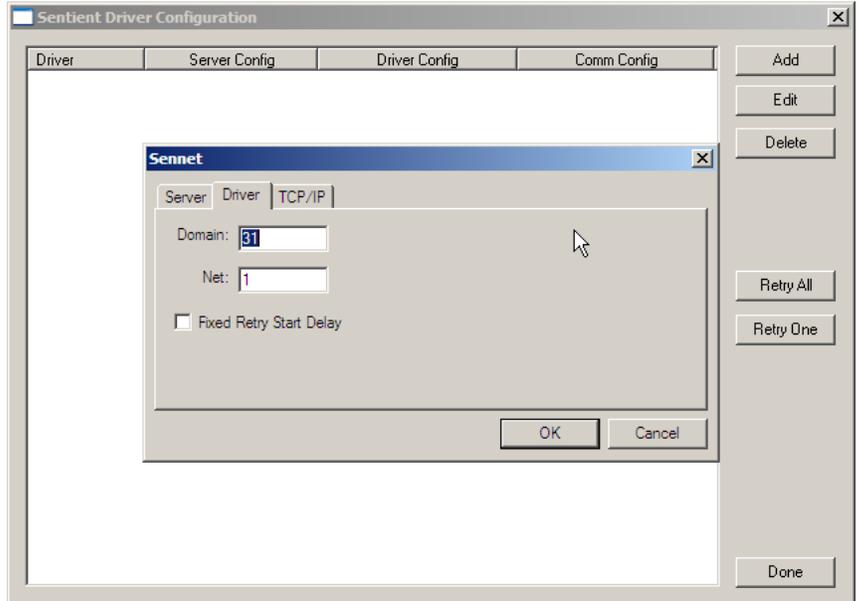
- Now, select the "Sennet" driver from the list, and click on "OK"



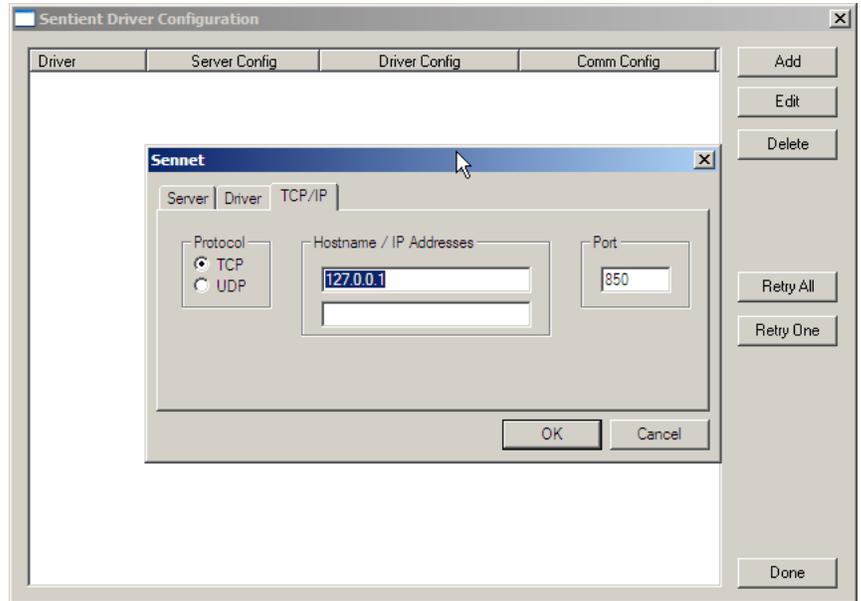
- At this point the driver configuration tabs will appear, and in the first tab, "Server", type in the "Host Address" computer name, which will be the computer running the Intelli-Site server software. If running redundant servers, the correct notation in this box is "Server1,Server2" (no spaces, and without quotes)



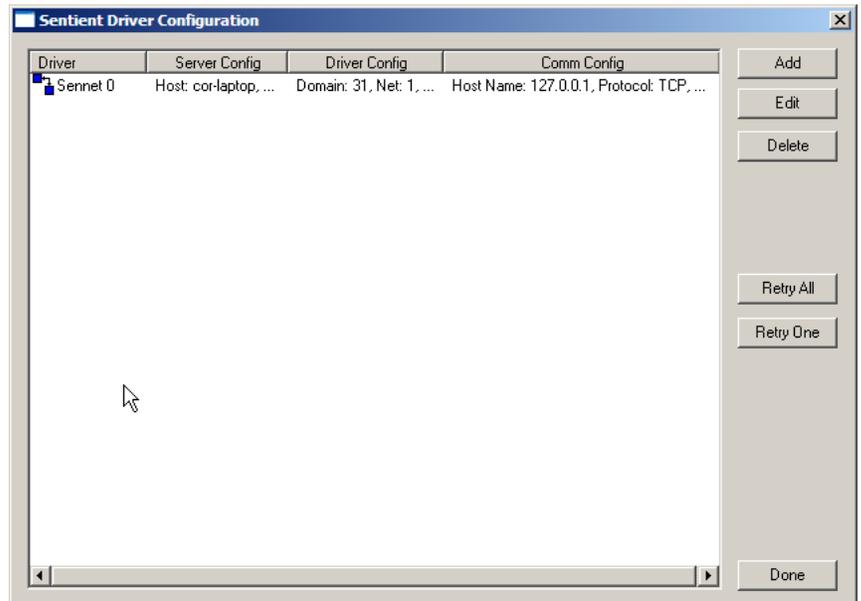
- On the next tab, "Driver", configure the "Domain" and "Net" that the specific Sennet device will be using. This must match the RTU setup in design mode.



- On the last tab, "TCP/IP," configure the "Hostname(s)", and the "Port". The Hostname refers to the computer on which the Network Manager is currently running. Many times, the Drivers reside on the same computer as the network manager, so the first Hostname box will be "127.0.0.1" or "localhost". In the case of a redundant Network Manager setup, the user is required to type the IP of the secondary or "mate" computer in the second Hostname box.

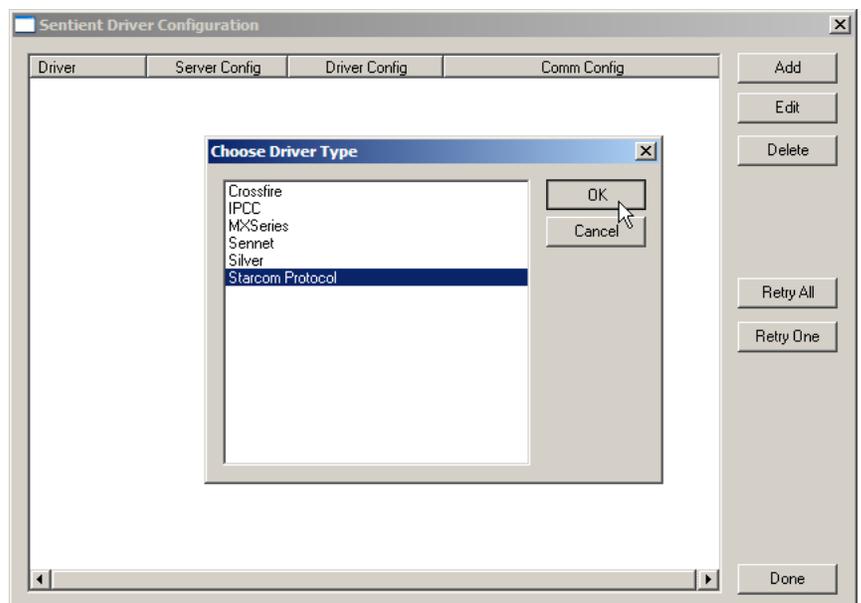


- At this point, click "OK", and the Driver Service window will now have a new Sennet driver added to its list.

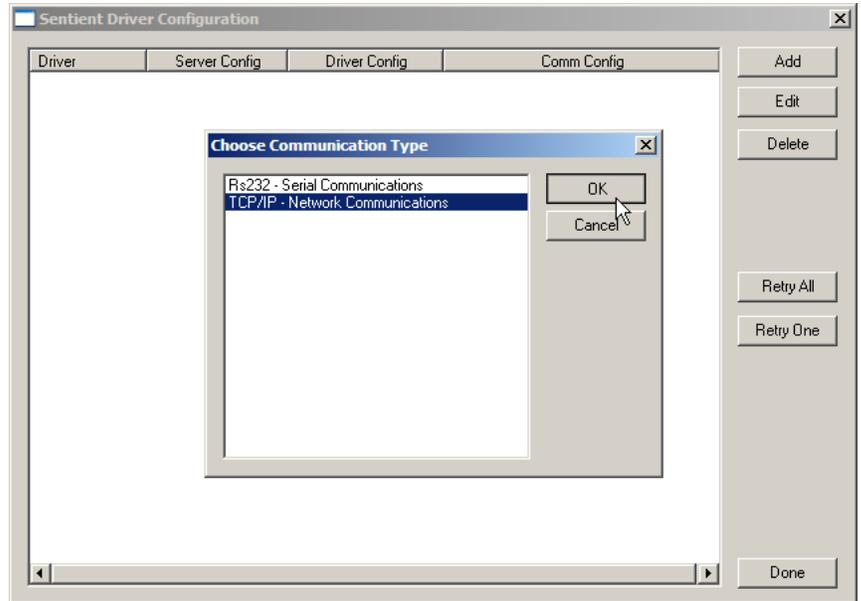


### ***Adding and Configuring a Starcom Driver***

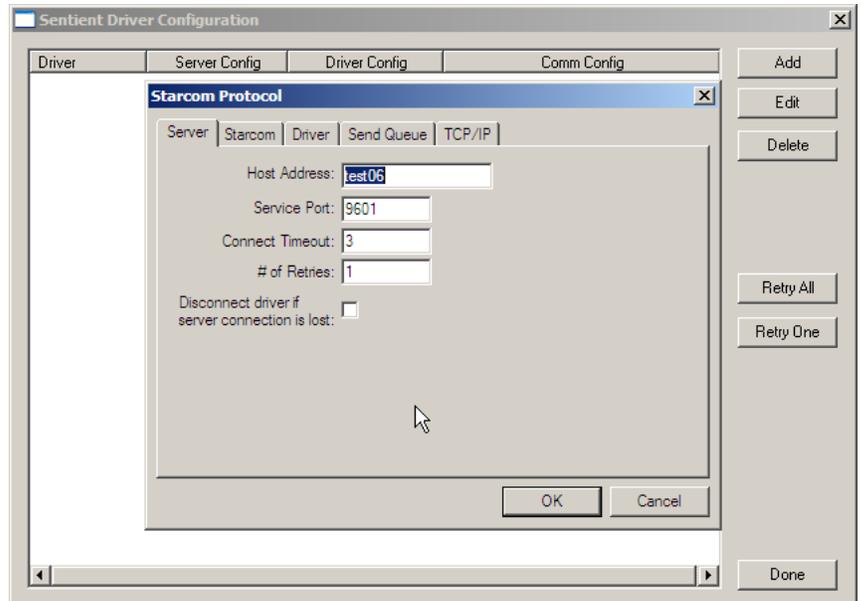
- To add and configure a Sennet driver, open the Driver Service software, then click the “Add” button, as shown earlier when adding the Sennet driver.
- Now, select the “Starcom Protocol” driver from the list, and click on “OK”



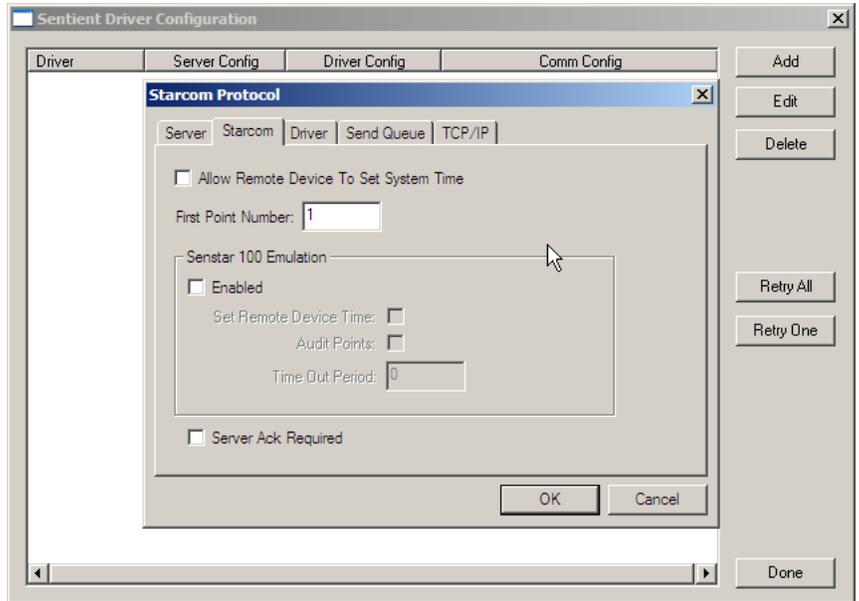
- The software will ask you to choose a communication type. In this case, we have chosen TCP/IP.



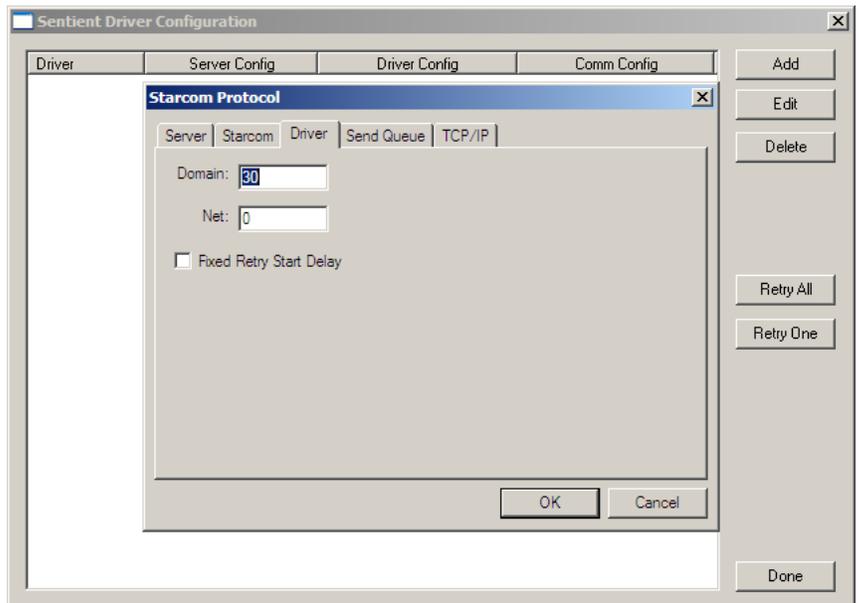
- At this point the driver configuration tabs will appear, and in the first tab, "Server", type in the "Host Address" computer name, which will be the computer running the Intelli-Site server software. If running redundant servers, the correct notation in this box is "Server1,Server2" (no spaces, and without quotes)



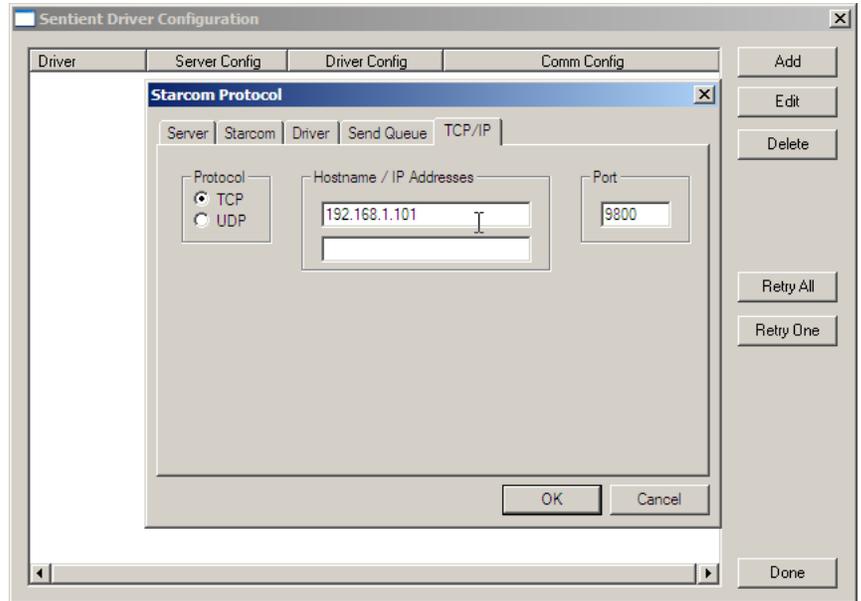
- On the second tab, "Starcom", the user will select the "Enabled" box in the "Senstar 100 Emulation" section, if the intended device is made to communicate with a Senstar 100. (See device manufacturer for details). The "Server Ack Required" option, requires the driver to hang on to the alarm that comes in from the field device until the Intelli-Site server has acknowledged receipt of the alarm. This is an optional checkbox, but can be useful in a redundant server environment where failovers may occur.



- On the next tab, "Driver", configure the "Domain" and "Net" that the specific Starcom device will be using. This must match the RTU setup in design mode.



- On the last tab, "TCP/IP," configure the "Hostname(s)", and the "Port". The Hostname refers to the IP of the Starcom device. Make sure to use the correct port number, as preconfigured in the device itself.



- At this point, click "OK", and the Driver Service window will now have a new Starcom driver added to its list.

