

# iComm

## USER INSTRUCTIONS



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# Document Management

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**Document Title:** iComm User Instructions

## Revision History

Version Number	Date	Summary of Changes
1.0	September 2016	Document first edition for iComm 2.x
1.1	February 2020	Updated screenshots and text

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# iComm

## USER INSTRUCTIONS

1

Preliminary Information

## 1-1 Overview

This manual is designed to provide the customer with complete and comprehensive documentation for the Innotech's iComm Comms Server.

### 1-1.1 About this Manual

This manual is intended to provide the user with complete and easy-to-follow instructions for operation of iComm. In preparing these instructions, Innotech assumed that the typical operator is not necessarily familiar with the operation of processor (computer) systems. For this reason, operating instructions and procedures are presented at a technically basic level and as clearly as possible.



References made throughout this manual to "iComm" refer to the iComm 2.x Comms Server unless specified.

### 1-1.2 Scope of this Manual

This technical manual has multiple sections:

**Table 1-1: Manual Scope**

Chapter	Description
Chapter 1 - Preliminary Information	Chapter 1 provides related information of a general nature. This chapter also contains a brief description of iComm and installation details.
Chapter 2 - <a href="#">Connection Tab</a>	Chapter 2 provides details of the current connections, devices and blocks. The Connection tab is used for creating and managing connections.
Chapter 3 - <a href="#">Requests Tab</a>	Chapter 3 provides information related to the Client and block requests.
Chapter 4 - <a href="#">Applications Tab</a>	Chapter 4 provides information about the iComm Applications Tab. The tab shows client connections to iComm and which points are associated with those clients.
Chapter 5 - <a href="#">Administration Tab</a>	Chapter 5 provides information related to the Administration of iComm. Settings such as passwords and the port number can be changed here.
Chapter 6 - <a href="#">Appendix</a>	Chapter 6 provides information for setting up various iComm connections step-by-step from start to finish.

### 1-1.3 Information Icons

Throughout this manual, icons are used to illustrate important notes. Examples are shown below.



These notices provide extra information. It is non-critical information but **should be read**.



#### IMPORTANT

These notices contain information about the software that **must be done** before proceeding further to ensure success.

## 1-2 Description of iComm

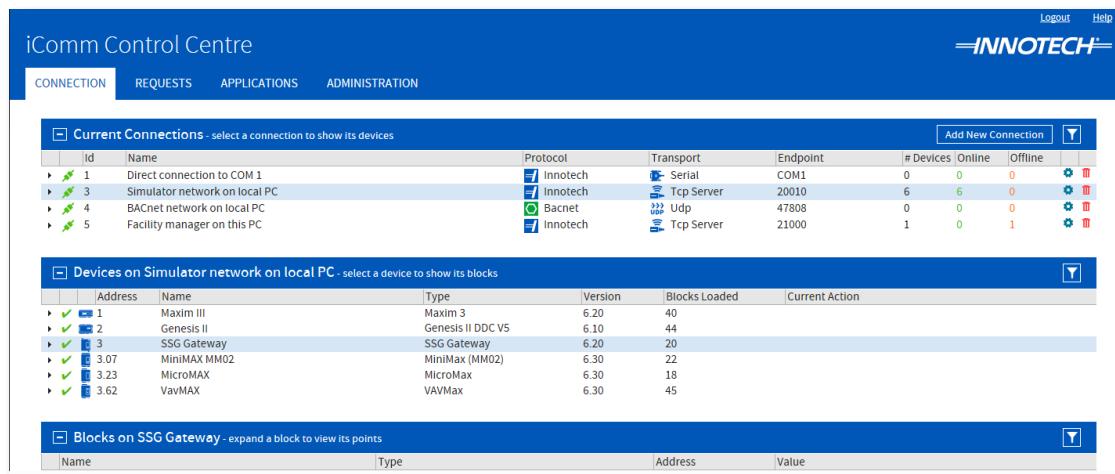
iComm is the communications server used by application software to communicate with Innotech® digital controllers. It supports multiple concurrent applications communicating with multiple servers and device networks. iComm is the communications hub of any HMI-integrated device network.

iComm supports communication to Innotech devices using a range of communication methods such as Serial, USB, TCP/IP, BACnet/IP or Internal Simulator connections. Additionally, iComm supports communication with 3rd party devices through supported protocols, such as BACnet/IP networks.

iComm 2.x is a Windows Service application with a user interface launched in a compatible web browser. The interface is accessible locally or from a remote location and allows the user to analyse usage, traffic and communications activity in real-time.

### 1-2.1 Features

- Interface is compatible with most browsers and tablets
- Supports up to 4,194,303 BACnet addresses
- Robust and efficient construction using the latest multi-threaded programming techniques
- Multiple concurrent application connections supported
- Multiple concurrent network connections serviced
- Detailed listing of all registered applications
- Listing of devices available for a specific connection
- Consolidated listing of requests for values from all applications
- Detailed event log to window with exporting
- Points list export to CSV
- Integrated browser-based help
- Display of currently-connected applications with their IP address and name
- Statistics page showing bytes of network traffic to and from server
- User login authentication



The screenshot shows the iComm Control Centre interface. At the top, there are tabs for CONNECTION, REQUESTS, APPLICATIONS, and ADMINISTRATION. The CONNECTION tab is selected, showing a table of 'Current Connections' with the following data:

ID	Name	Protocol	Transport	Endpoint	# Devices	Online	Offline
1	Direct connection to COM 1	Innotech	Serial	COM1	0	0	0
3	Simulator network on local PC	Innotech	Tcp Server	20010	6	6	0
4	BACnet network on local PC	Bacnet	Upd	47808	0	0	0
5	Facility manager on this PC	Innotech	Tcp Server	21000	1	0	1

The REQUESTS tab shows a table of 'Devices on Simulator network on local PC' with the following data:

Address	Name	Type	Version	Blocks Loaded	Current Action
1	Maxim III	Maxim 3	6.20	40	
2	Genesis II	Genesis II DDC V5	6.10	44	
3	SSG Gateway	SSG Gateway	6.20	20	
3.07	MinIMAX MM02	MinIMAX (MM02)	6.30	22	
3.23	MicroMAX	MicroMax	6.30	18	
3.62	VavMAX	VAVMax	6.30	45	

The ADMINISTRATION tab shows a table of 'Blocks on SSG Gateway' with the following data:

Name	Type	Address	Value

**Figure 1-1:** iComm Window

## 1-2.2 iComm Version

The iComm Interface version is shown in the footer of the web page.

# 1-3 System Requirements

## 1-3.1 Specifications

### 1-3.1.1 Supported Operating Systems

- Windows® 10 Professional 64-bit & 32-bit
- Windows® Server 2012 R2
- Windows® Server 2008 R2 with service pack 1

### 1-3.1.2 System Requirements

- Intel® Pentium® 2.8GHz dual core processor or equivalent
- 4GB of RAM
- 1GB Hard Disk Space Required
- 16:9 display (1920x1080 resolution recommended)
- CD-ROM or DVD-ROM drive
- Keyboard and Microsoft® mouse or compatible pointing device
- Internet Explorer 9+, Chrome, Firefox or Safari.

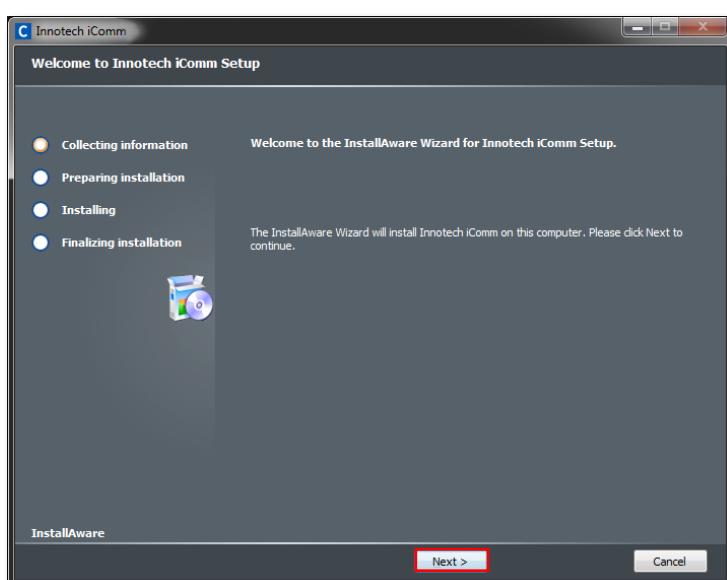


- When upgrading from a previous iComm version, all your current connections and settings will be retained. New settings in iComm will be set to a default value.
- Windows 10 builds are supported for approximately 18 months after release. It is recommended that you should upgrade your operating system if using an unsupported build.

## 1-3.2 Installation

Follow the steps in this section to complete installation of iComm.

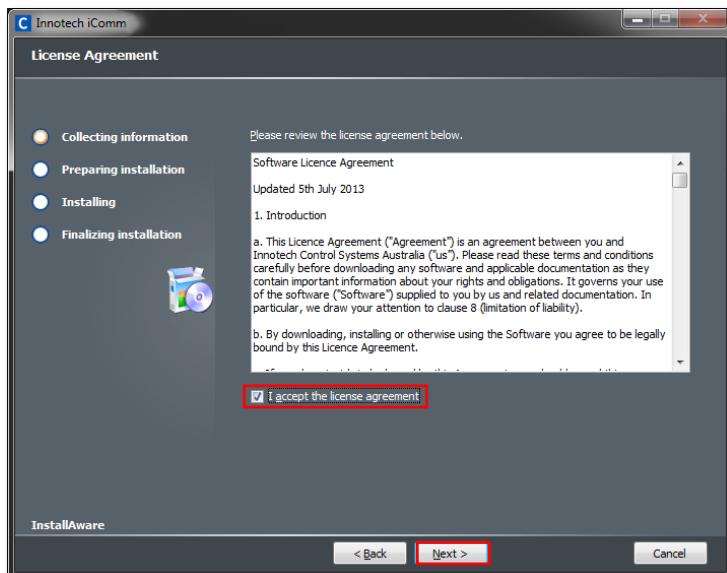
1. Double click the iComm setup file to begin and then click Next.



**Figure 1-2:** iComm Installation - Start

## iComm User Instructions

2. Read the iComm License Agreement.
3. Click the checkbox to accept the License Agreement.
4. Click Next to continue.

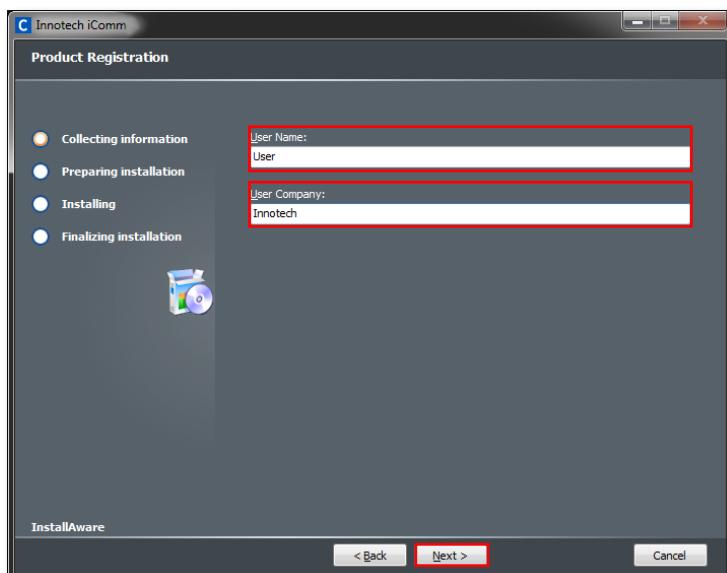


**Figure 1-3:** iComm Installation - License Agreement

**IMPORTANT**

*If you do not accept the license agreement, you will not be able to continue with the installation of this software.*

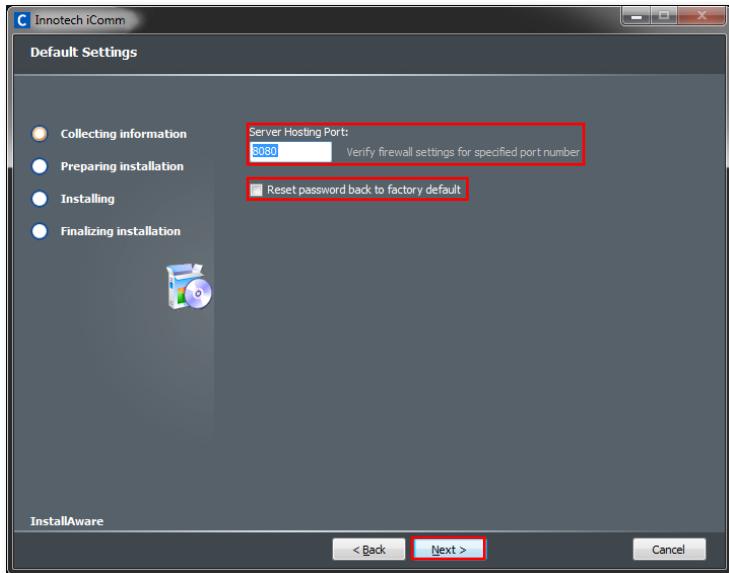
5. Enter a User Name and Company Name.
6. Click Next to continue.



**Figure 1-4:** iComm Installation - Product Registration

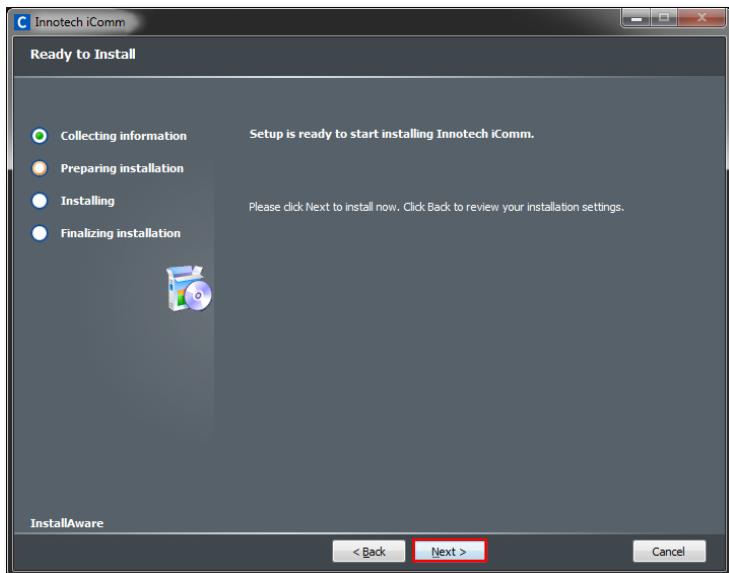
## iComm User Instructions

7. Specify the Server Port or accept the default setting.
8. If required, check the box to reset the password to the factory default (pw: admin).



**Figure 1-5:** iComm Installation - Default Settings

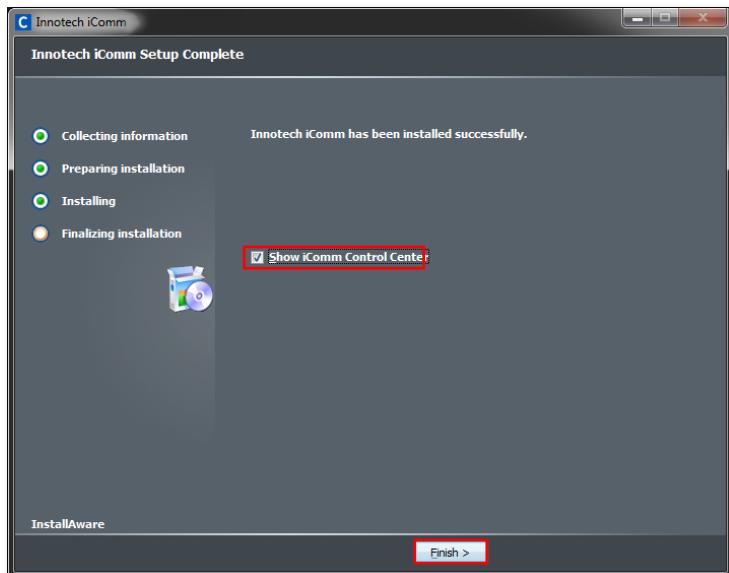
9. Click Next to start the installation process.



**Figure 1-6:** iComm Installation - Ready to Install

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10. Click Finish after the installation process is completed. If required, check the box to run iComm after the installation window closes.



**Figure 1-7:** iComm Installation - Installation Complete



Depending on the speed of your computer, it is possible that the default browser may start before the iComm service. In this instance, you may see an error message like "This Page Cannot be Displayed". If this occurs, simply press F5 to refresh the browser window and load iComm after the service has started.

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### 1-3.3 iComm System Tray Icon

The iComm system tray icon has several notification states, explained in the table below.

**Table 1-2:** iComm System Tray Icon Status

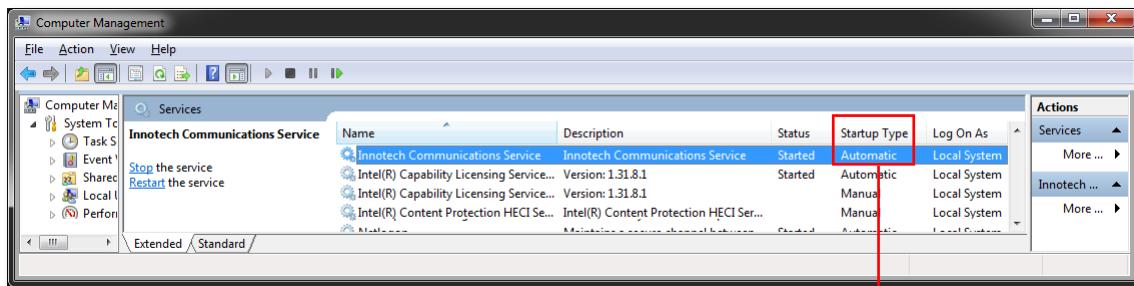
Icon	Description
	Static green triangle indicates that the iComm Communications Service is running.
	Alternating between the green triangle and no indicator shows that the Service is starting.
	A red square indicates that the service is stopped.

### 1-3.4 iComm Windows Service

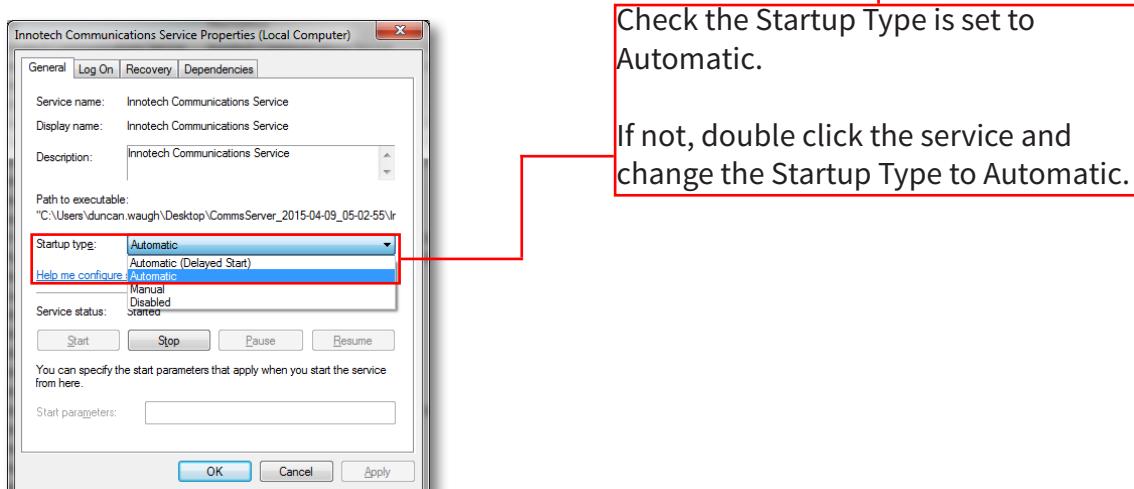
After installation, check that the iComm service (Innotech Communications Service) is set to automatic. This will ensure that in the unlikely event that iComm crashes, it will be restarted automatically by Windows. iComm 2.x is not restarted by iSEA like iComm version 1.3x.

**Table 1-3:** Windows Services

Operating System	Procedure
Windows 7	<ol style="list-style-type: none"> <li>1. Right click "Computer" in the start menu or the icon on the desktop.</li> <li>2. Select Manage from the Context Menu.</li> <li>3. Click the arrow to the left of Services and Applications in the left pane.</li> <li>4. Click Services. The running services will appear in the middle pane.</li> </ol>
Windows 8.1/10	<ol style="list-style-type: none"> <li>1. At the Start screen, move the cursor to the lower left corner of the screen and right click the Windows icon <b>OR</b> at the Desktop screen, right click the Windows icon on the taskbar.</li> <li>2. Click Computer Management.</li> <li>3. Expand the Services and Applications item and click Services to view the running services.</li> </ol>

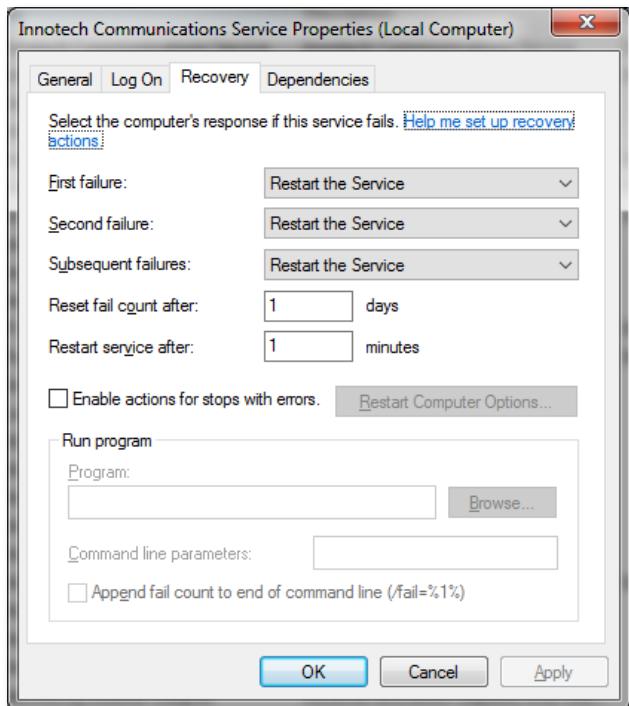


**Figure 1-8:** Computer Management - Services



**Figure 1-9:** Innotech Communications Service Properties

The Recovery tab settings control how and when the iComm service is restarted in the event of a crash.



**Figure 1-10:** Innotech Communication Service Recovery Settings

## 1-4 Starting iComm

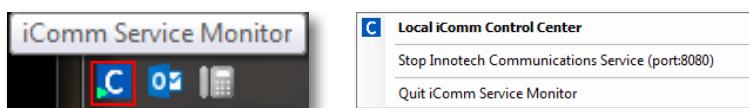
### 1-4.1 Accessing iComm

iComm runs in the background as a service, which starts when Windows starts. It consists of two parts, the core (service) and the user interface. The interface is accessed a web browser and can be accessed on the local machine where the core is running, or on a remote computer by specifying the IP address.

When the green triangle in the system tray icon is static (not flashing), double click the iComm system tray icon to open iComm's User Interface.



Opening iComm from the system tray icon will open Internet Explorer whether it is the default browser or not. iComm has been developed and tested in Internet Explorer.



**Figure 1-11:** iComm System Tray Icon and Menu

## 1-4.2 Logging In

When iComm starts you will be required to log in.

1. Enter your password. (Default password: *admin*)
2. Click the Log In button. After login, iComm will show the Connection Tab.

If you are having trouble logging in, click the "Help" link for assistance.



**Figure 1-12:** iComm Log In Prompt

## 1-4.3 Navigating the iComm Tabs and Panels

### 1-4.3.1 Tabs

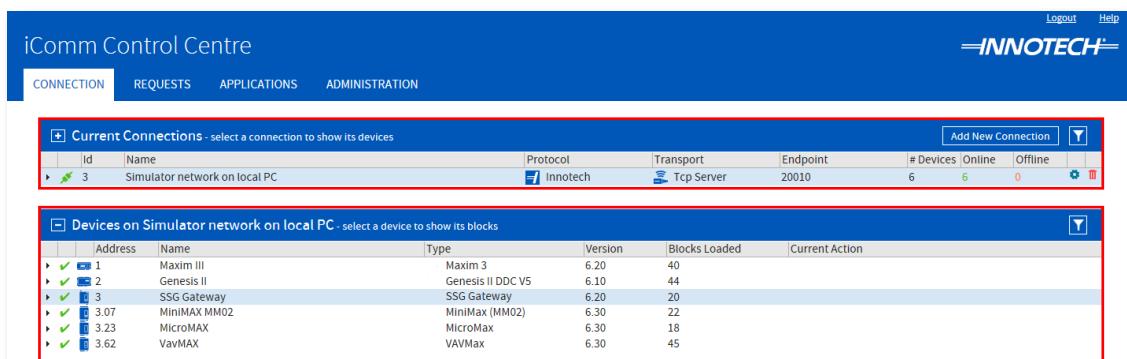
Click the tab heading to change the active tab. The active tab will have a white background.



**Figure 1-13:** iComm Tabs

### 1-4.3.2 Panels

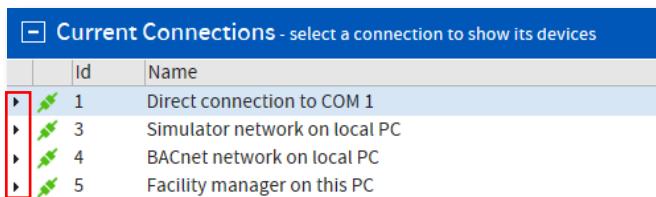
Click the **+** or **-** to expand or collapse each section of the connection screen. When collapsed, only the currently selected item will be shown.



**Figure 1-14:** iComm Panels

#### 1-4.3.3 Chevrons

Most of the information shown in iComm has further details that by default are not shown. Clicking the chevron will expand the details for the selected item.  
Click the chevron again to close the details for the selected item.



**Figure 1-15:** Chevrons



**Figure 1-16:** Expanded Chevron

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## 1-5 iComm Help

A Help link is provided near the Innotech logo in the top right of the iComm window.



**Figure 1-17:** Help Link

# iComm

## USER INSTRUCTIONS

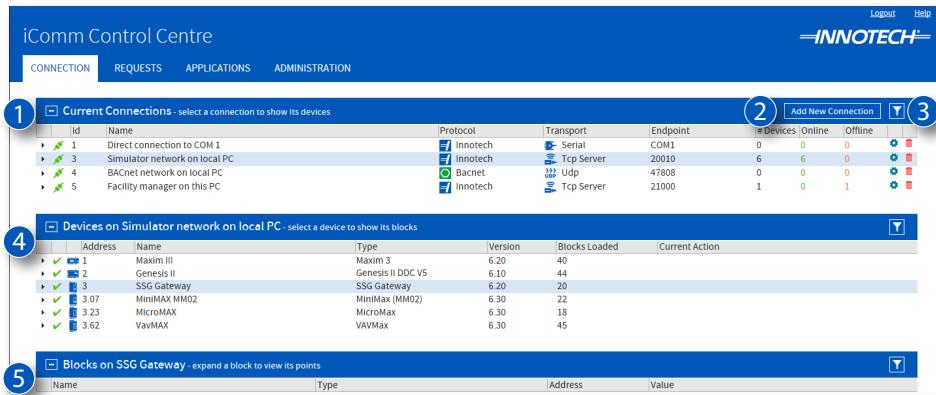


Connection Tab

## 2-1 Overview

This section provides information about the iComm Connection Tab.

Table 2-1 describes the sections of the Connection Tab.



**Figure 2-1:** Connection Tab

**Table 2-1:** Connection Tab Description

Index	Description
1	Current Connections - This panel shows the current connections available in iComm. Click a current connection to list the devices. Click the  and  to expand and collapse the list.
2	Add New Connection button - click to select a new connection type.
3	Filter Button - Click to open filtering options for the Current Connections panel.
4	Devices - The Devices panel shows the devices that are associated with the selected connection. Click a device to list the blocks. Click the  and  to expand and collapse the list.
5	Blocks List - The Blocks List Panel shows the blocks associated with the selected device. Click the  and  to expand and collapse the list.

## 2-2 Connections

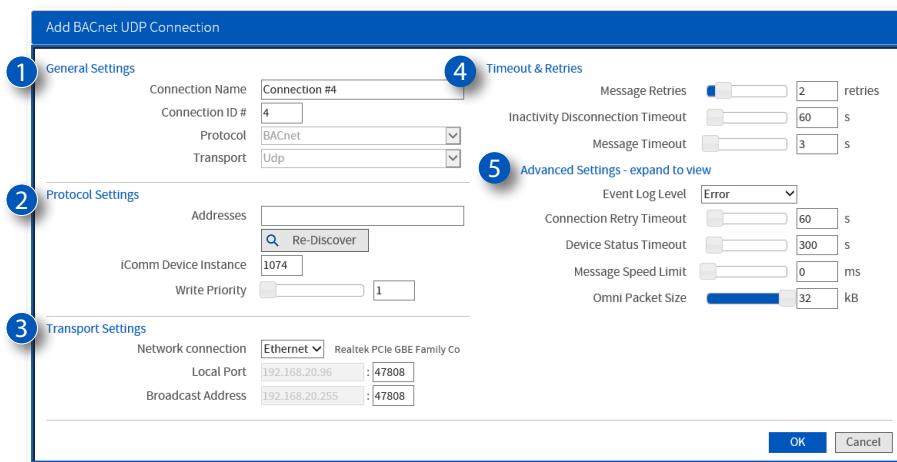
### 2-2.1 Add New Connection

Click the Add New Connection button and select a new connection type.

After selecting the connection type, the Add Connection panel will be shown. Fill in all the settings required and click OK to add the connection.



**Figure 2-2:** Select New Connection Type



**Figure 2-3:** Typical Add New Connection Window

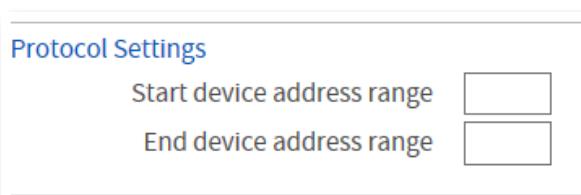
**Table 2-2:** Add New Connection Panel Description

Index	Section	Description
1	General Settings	These settings are for naming the connection, setting the connection ID and setting the protocol and transport types (if available).
2	Protocol Settings	Specify the settings based on which protocol type was selected (such as BACnet).
3	Transport Settings	Specify the settings based on which transport type was selected (such as Udp, network adapter).
4	Timeouts & Retries	Click and move the bar or enter a number to specify the timeout and retries settings.
5	Advanced Settings	Click and move the bar or enter a number to specify the setting for each item.

### 2-2.1.1 Protocol Settings

Protocol Settings are not available with all connection types. Typically, they are only available with Innotech Application Connections - Simulator, Facility Manager and iSea. Only Simulator allows changes to these fields.

Protocol settings are used to specify the device address range for the connection.



**Figure 2-4:** Add New Connection (Innotech Protocol Settings)

### 2-2.1.2 Transport Settings

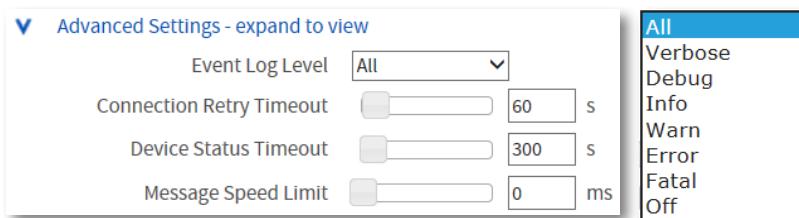
Transport Settings are for specifying Ports and/or IP Addresses for connected devices. Other transport types show other options.



**Figure 2-5:** Add New Connection (Transport Settings)

### 2-2.1.3 Advanced Settings

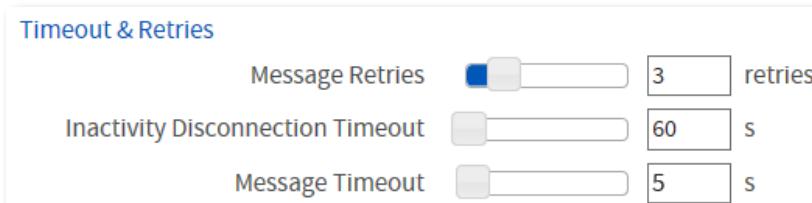
Advanced Settings are used for configuring the logging, connection retry and device status timeout for the connection. Click the Logging Level combo to select the level of logging you require for the connection. You can select to Log All, None or a specific level. See the [Administration](#) section for more details.



**Figure 2-6:** Add New Connection (Advanced Settings)

### 2-2.1.4 Timeout and Retries

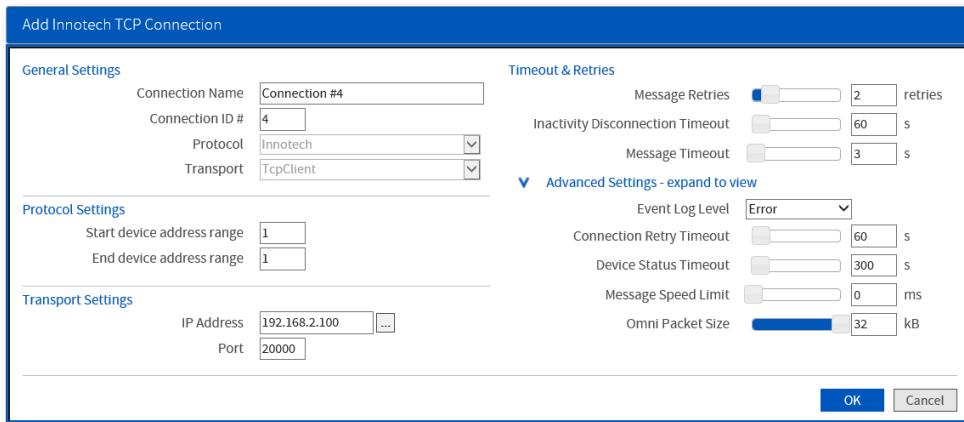
This section is for setting timeout and retry settings.



**Figure 2-7:** Add New Connection (Timeout & Retries)

## 2-2.2 Add New Connection Screens

### 2-2.2.1 Connection Type - Innotech TCP

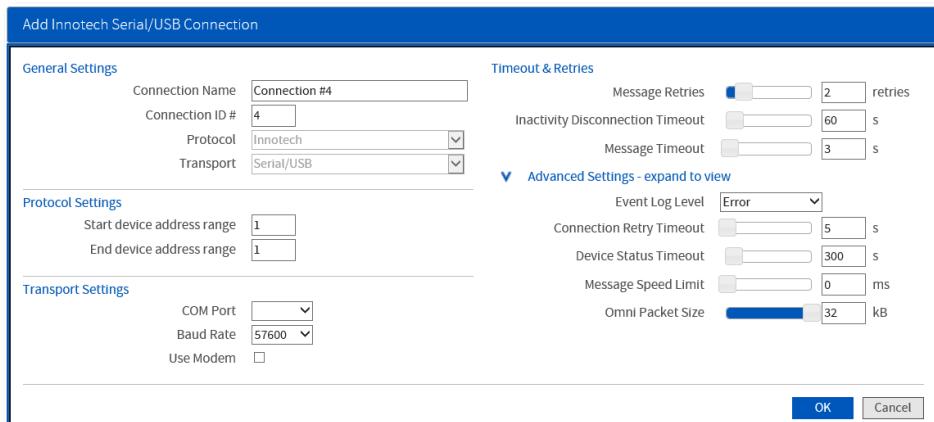


**Figure 2-8:** Add New Connection (Innotech TCP)

**Table 2-3:** Innotech TCP Connection Setting Options

Setting	Options
Protocol	BACnet, Innotech, Magellan, Modbus, Vaisala.
Transport	Specify IP address (or select from address book), Port number.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.2 Connection Type - Innotech Serial/USB

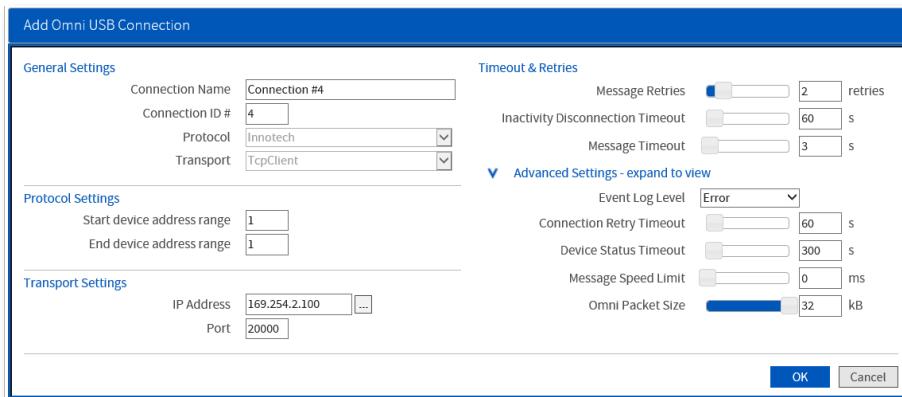


**Figure 2-9:** Add New Connection (Innotech Serial/USB)

**Table 2-4:** Innotech Serial/USB Connection Setting Options

Setting	Options
Protocol	BACnet, Innotech
Com Port	Com1 (More listed if available)
Baud Rate	4800, 9600, 38400, 57600, 115200.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.3 Connection Type - Omni USB

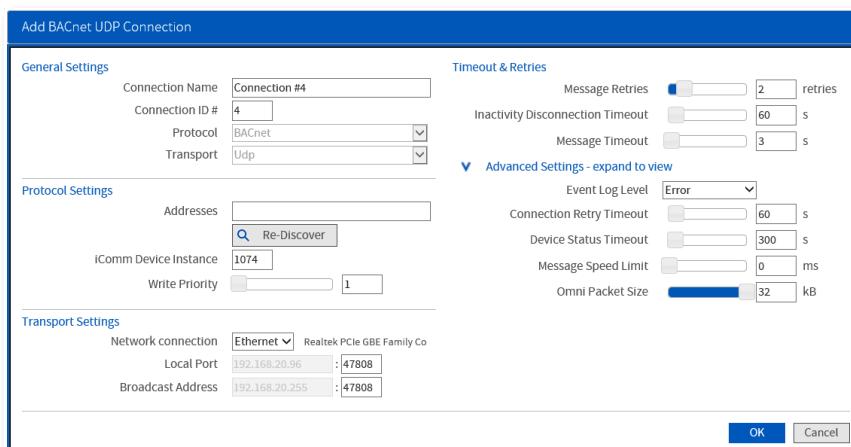


**Figure 2-10:** Add New Connection (Omni USB)

**Table 2-5:** Omni USB Connection Setting Options

Setting	Options
Protocol	Enter a start and end device address.
Transport	Select an IP address from the address book or specify another IP address. Specify a port number or accept the default.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.4 Connection Type - BACnet UDP

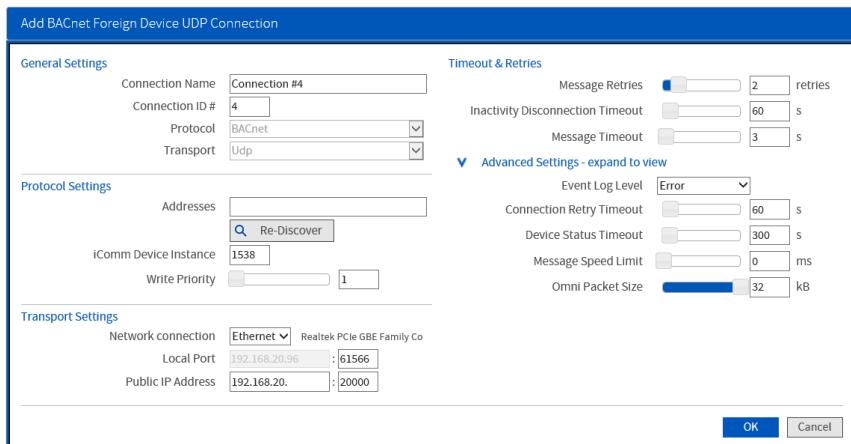


**Figure 2-11:** Add New Connection (BACnet UDP)

**Table 2-6:** BACnet UDP Connection Setting Options

Setting	Options
Protocol	Discover/enter BACnet addresses. Enter a BACnet device instance.
Transport	Select the network connection and IP addresses.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.5 BACnet Foreign Device UDP

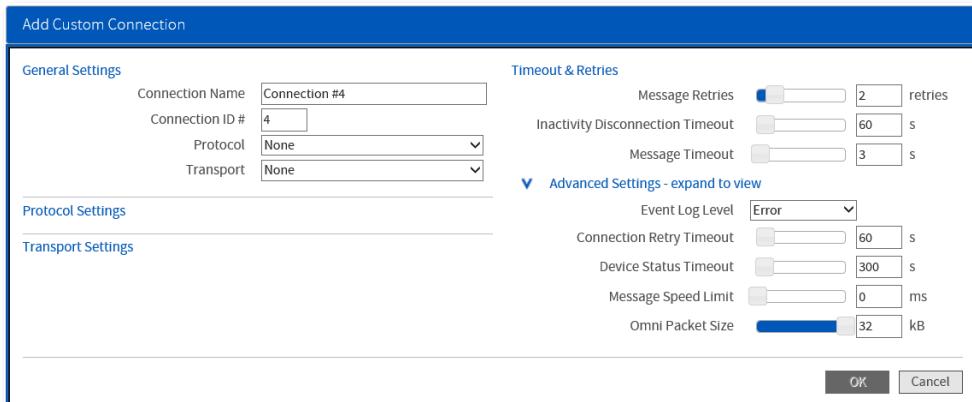


**Figure 2-13:** Add New Connection (BACnet Foreign Device UDP)

**Table 2-8:** BACnet Foreign Device UDP Connection Setting Options

Setting	Options
Protocol	Discover/enter BACnet addresses. Enter a BACnet device instance.
Transport	Select the network connection and IP addresses.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.6 Connection Type - Custom

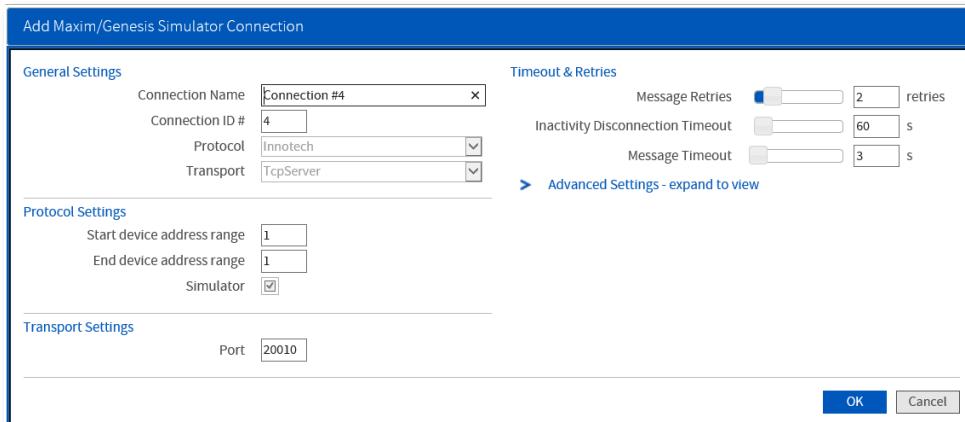


**Figure 2-12:** Add New Connection (Custom)

**Table 2-7:** Custom Connection Setting Options

Setting	Options
Protocol	BACnet, Innotech. (Additional Settings shown after selection)
Transport	Serial, TcpClient, TcpServer, Udp. (Additional Settings shown after selection)
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.7 Innotech Application Connections - Maxim/Genesis Simulator

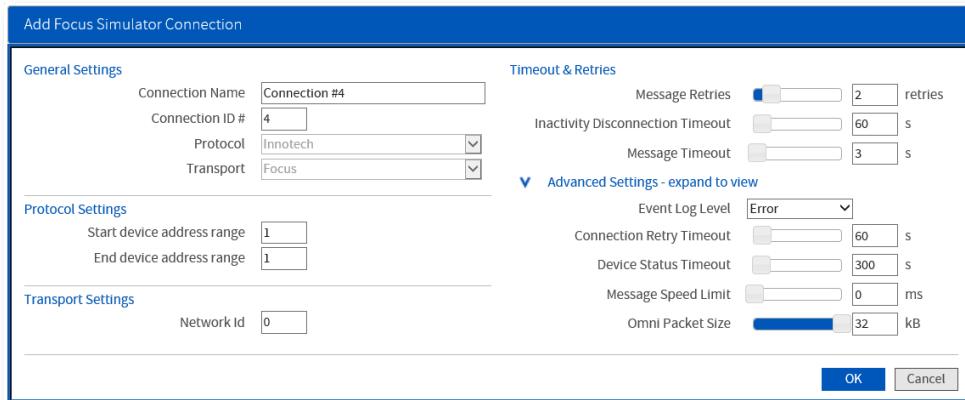


**Figure 2-14:** Add New Connection (Maxim/Genesis Simulator)

**Table 2-9:** Maxim/Genesis Simulator Connection Setting Options

Setting	Options
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.8 Innotech Application Connections - Focus Simulator

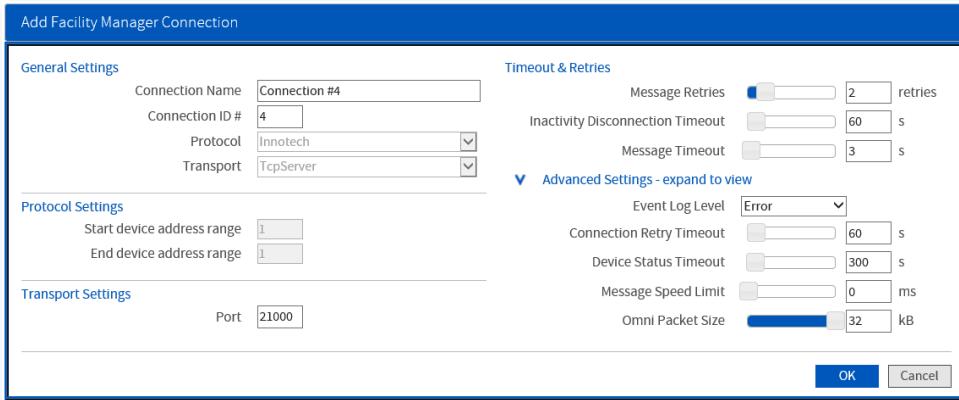


**Figure 2-15:** Add New Connection (Focus Simulator)

**Table 2-10:** Focus Simulator Connection Setting Options

Setting	Options
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.9 Innotech Application Connections - Facility Manager

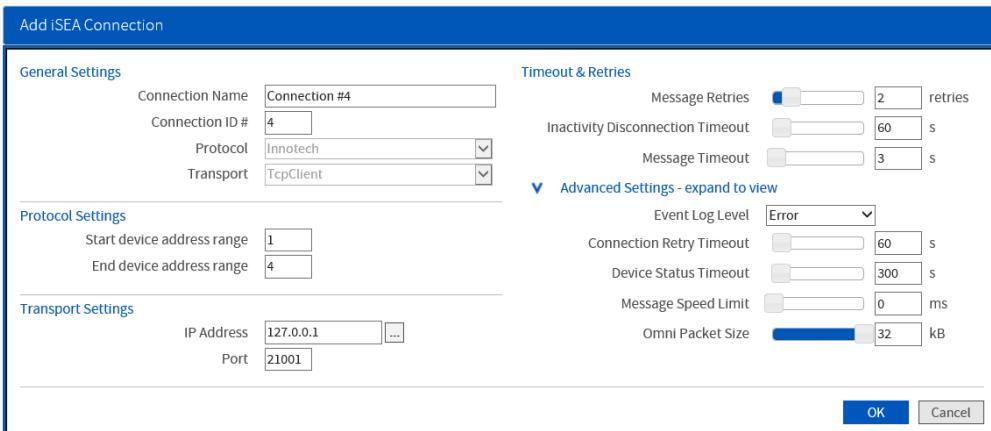


**Figure 2-17:** Add New Connection (Facility Manager)

**Table 2-12:** Facility Manager Connection Setting Options

Setting	Options
Transport	Specify the Transport Settings Port.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.2.10 Innotech Application Connections - iSEA



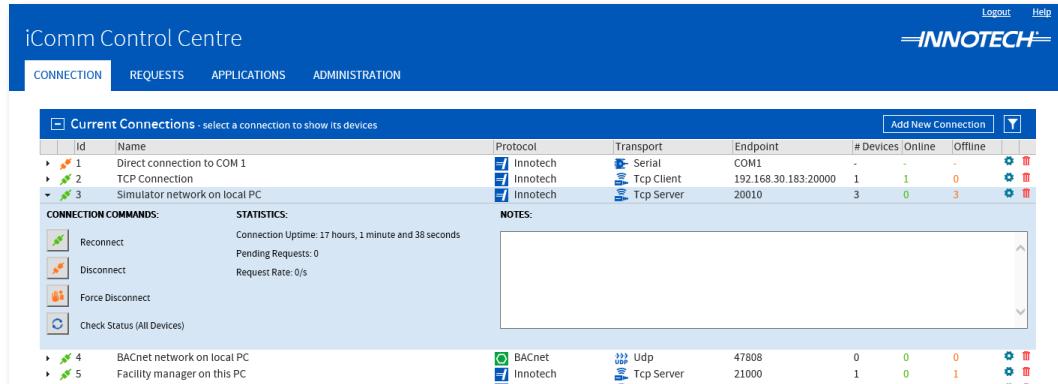
**Figure 2-16:** Add New Connection (iSEA)

**Table 2-11:** iSEA Connection Setting Options

Setting	Options
Transport	Select or enter an address and port number.
Event Log Level	All, Debug, Info, Verbose, Warn, Error, Fatal, Off.

### 2-2.3 Current Connections List

The Current Connections list gives an overview of the current connections added to iComm.



Current Connections - select a connection to show its devices		Add New Connection	
ID	Name	Protocol	Transport
1	Direct connection to COM 1	Innotech	Serial
2	TCP Connection	Innotech	Tcp Client
3	Simulator network on local PC	Innotech	Tcp Server
4	BACnet network on local PC	BACnet	Udp
5	Facility manager on this PC	Innotech	Tcp Server

**CONNECTION COMMANDS:**

- Reconnect
- Disconnect
- Force Disconnect
- Check Status (All Devices)

**STATISTICS:**

- Connection Uptime: 17 hours, 1 minute and 38 seconds
- Pending Requests: 0
- Request Rate: 0/s

**NOTES:**

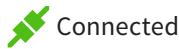
**Figure 2-18:** Current Connections

**Table 2-13:** Device List Commands

Command	Description
Reconnect	Refreshes the connection by disconnecting and then reconnecting.
Disconnect	Disconnects the connection.
Force Disconnect	Forcibly disconnects the connection.
Check Status (All Devices)	Checks the status of all devices on the connection.

The Current Connections panel shows the available connections and their details. Clicking the arrow next to the ID will expand the selection and provide further details and connection actions. Clicking the connection, will show the associated devices in the Device List.

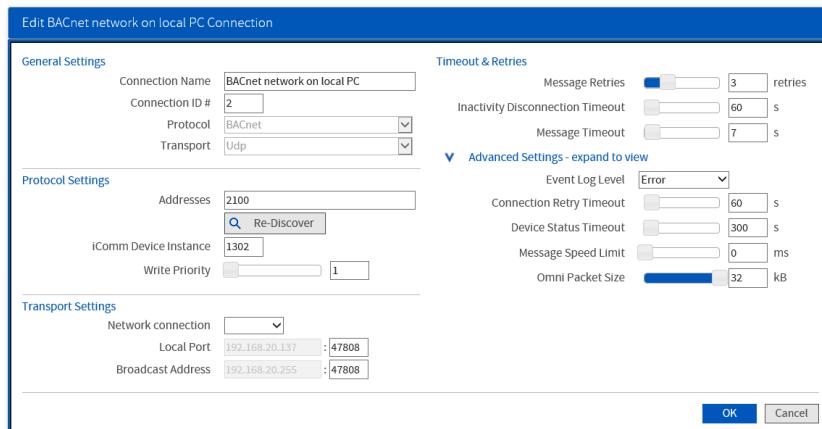
Click the settings cog to edit the connection details. After editing click the OK button. When the window closes the black 'connecting' icon will show which will change to the green 'connected' icon once the connection has been established.



**Figure 2-19:** Connection Status Icons



**Figure 2-20:** Edit Connection Button



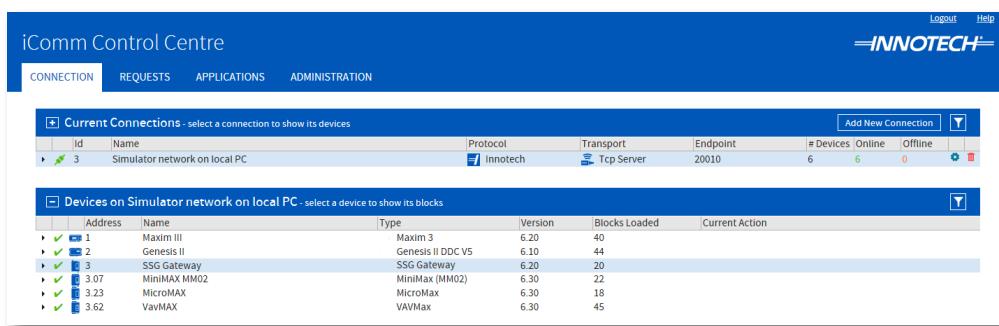
**Figure 2-21:** Edit Connection Settings

## 2-3 Devices List Panel

### 2-3.1 Device List

The Device List panel shows an overview of the devices for the selected connection. When the expand button is clicked, the panel will expand to allow further details to be shown.

Click the chevron next to a device to show expanded details and actions for the selected item. When the device is selected, the Blocks List will be populated based on the selected Device.



**Figure 2-22:** Device List Panel

✓ Connected

✗ Device Found, iComm has not completed loading the device cache.

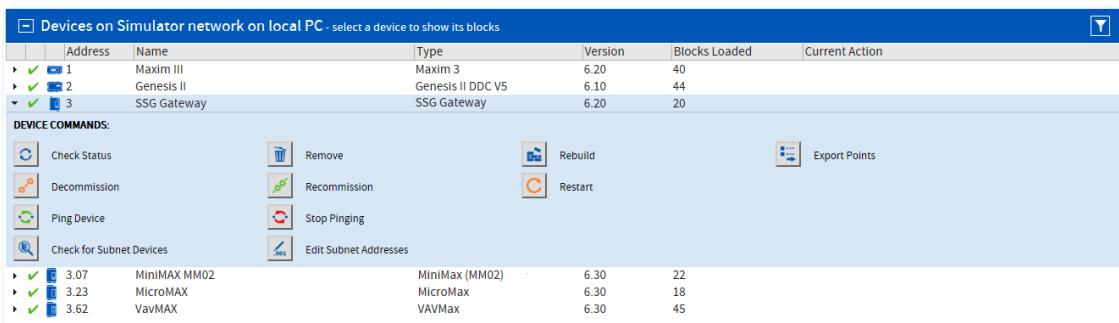
✗ Disconnected

✗ Unsupported Device

**Figure 2-23:** Device Connection Status Icons



If you know that your device is supported by iComm, an unsupported device icon indicates that iComm and/or your device's firmware may need upgrading.



**Figure 2-24:** Device List Expanded

**Table 2-14:** Device List Commands

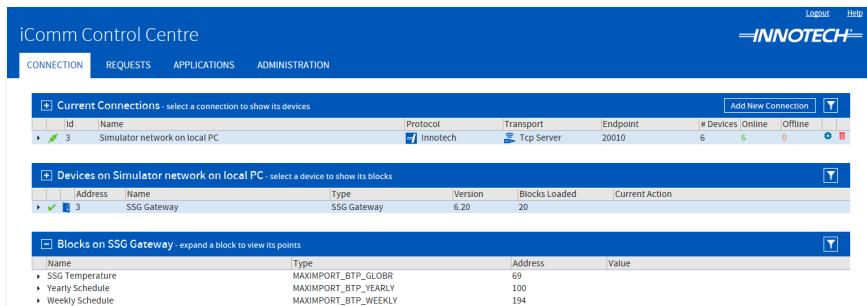
Command	Description
Check Status	Checks the current status of the device.
Decommission	Disables the device in iComm.
Export Points	Downloads all the selected device's points to a csv file for viewing in a spreadsheet program.
Ping Device	Sends pings to the device.
Recommission	Attempts to enable the device in iComm.
Remove	Removes the device from the connection.
Restart	Restarts the device.
Stop Pinging	Stops pinging the device.
Rebuild	Reinitialises the device and clears the cache.
Check for Subnet Devices	Subnet Devices Only - Checks if subnet devices are connected.
Edit Subnet Addresses	Subnet Devices Only - Opens the edit subnet address dialogue.



*Not all commands are available for all devices.*

## 2-4 Blocks List Panel

### 2-4.1 Blocks List

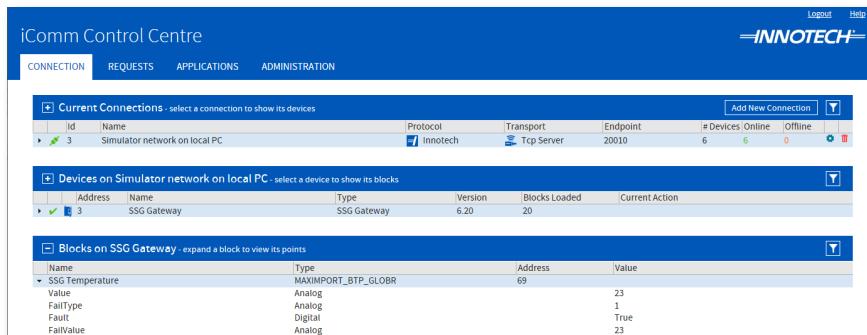


The screenshot shows the iComm Control Centre interface. At the top, there are tabs for CONNECTION, REQUESTS, APPLICATIONS, and ADMINISTRATION. The CONNECTION tab is selected. Below the tabs, there are three main sections: 'Current Connections', 'Devices on Simulator network on local PC', and 'Blocks on SSG Gateway'. The 'Blocks on SSG Gateway' section is expanded, showing a table with columns: Name, Type, Address, and Value. It lists three items: SSG Temperature (Type: MAXIMPORT\_BTP\_GLOBR, Address: 69, Value: 23), Yearly Schedule (Type: MAXIMPORT\_BTP\_YEARLY, Address: 100, Value: 1), and Weekly Schedule (Type: MAXIMPORT\_BTP\_WEEKLY, Address: 194, Value: True). There are expand/collapse arrows next to the section names.

**Figure 2-25:** Blocks List Panel

The Blocks List panel shows an overview of the blocks for the selected device. When the expand button is clicked, the panel will expand to show further details and the Devices panel rolls up and show the selected device only.

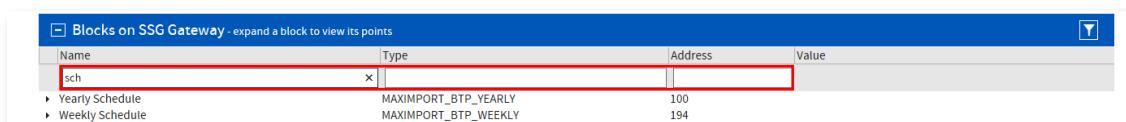
Click the chevron next to a block name to show expanded details for the selected item.



This screenshot is identical to Figure 2-25, showing the expanded 'Blocks on SSG Gateway' section. The table for the SSG Temperature block now includes additional rows for Value, FailType, Fault, and FailValue, all with the same values as the main block entry.

**Figure 2-26:** Blocks List Expanded

Click the Filter button to filter the Block List. Enter information into the textboxes to filter the information. The list will filter as you type. More precise filtering can be done by entering information in multiple textboxes.



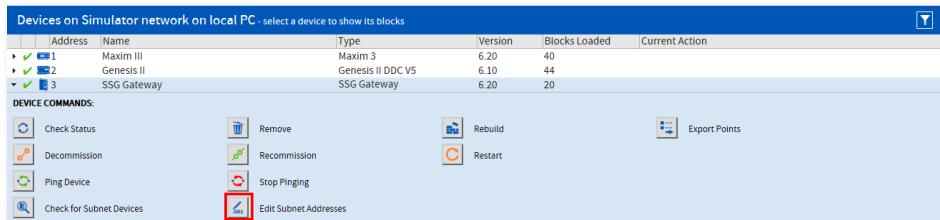
This screenshot shows the 'Blocks on SSG Gateway' section with a filter applied. The 'Name' column header has a red border, and the text 'sch' is typed into the filter input field. The table now only shows the 'Yearly Schedule' and 'Weekly Schedule' blocks, as they are the only ones containing 'sch' in their names.

**Figure 2-27:** Blocks List Filtering

## 2-5 Subnet Devices

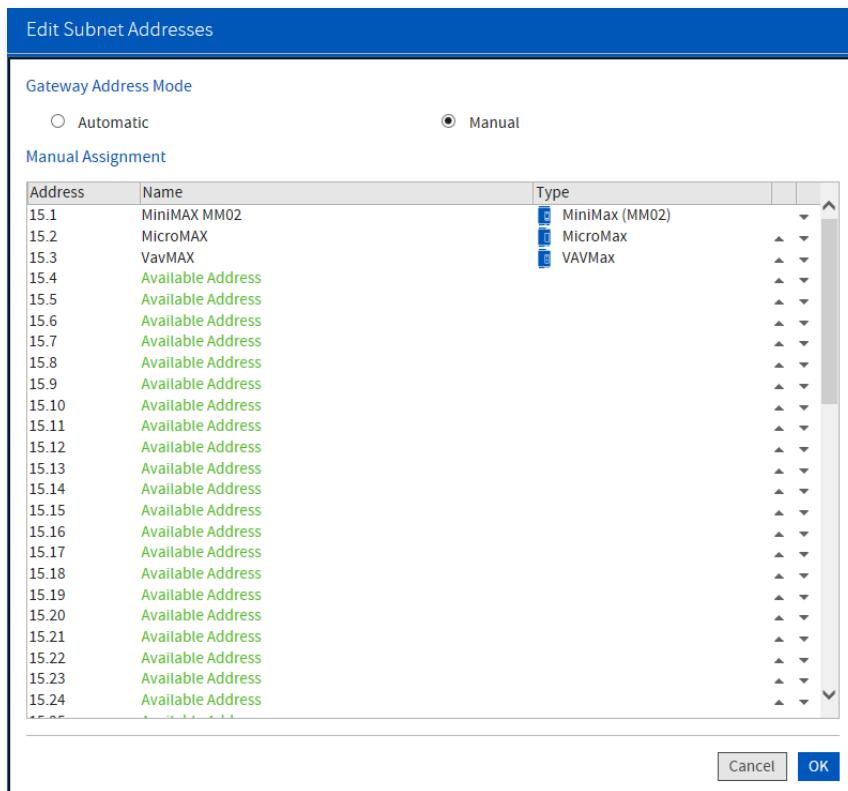
### 2-5.1 Subnet Device Configuration

Select the Subnet device in the Device List and expand to show the details. Click the Edit Subnet Addresses button to show the Edit Subnet Addresses window.



**Figure 2-28:** Subnet Device Details

You can check for new devices, remove devices and change the device addresses. The Edit Subnet Addresses window allows manual setting of the Subnet devices.

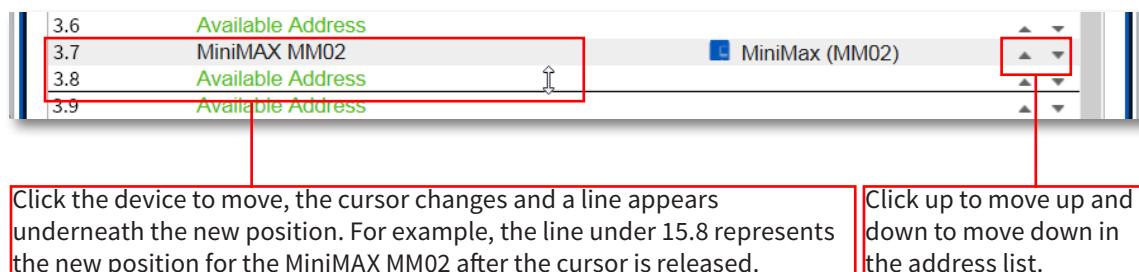


**Figure 2-29:** Subnet Device Configuration Table

## 2-5.2 Manually Changing Subnet Addresses

Changing the subnet address can be achieved in two different ways.

- Click the up and down arrows to adjust its position.
- Click and drag a device to a new address.



**Figure 2-30:** Edit Subnet Addresses

## 2-6 BACnet Devices

### 2-6.1 BACnet Block List

Select a BACnet device from the device list. Once selected, the block list will be populated based on the device.

**Figure 2-31:** BACnet Block List

# iComm

## USER INSTRUCTIONS

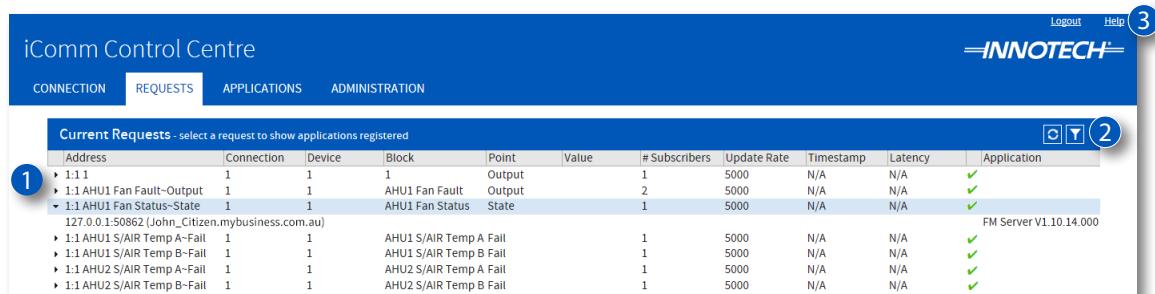


Requests Tab

### 3-1 Overview

This section provides information about the iComm Requests Tab. The Requests tab is used as a commissioning tool in addition to troubleshooting. The tab shows the points available in iComm and which clients are viewing them.

The table below describes the sections of the Requests Tab.



Current Requests - select a request to show applications registered										
Address	Connection	Device	Block	Point	Value	# Subscribers	Update Rate	Timestamp	Latency	Application
1.1	1	1	1	Output		1	5000	N/A	N/A	✓
1.1 AHU1 Fan Fault-Output	1	1	AHU1	Fan Fault	Output	2	5000	N/A	N/A	✓
1.1 AHU1 Fan Status-State	1	1	AHU1	Fan Status	State	1	5000	N/A	N/A	✓
127.0.0.1:50862 (John_Citizen.mybusiness.com.au)										
1.1 AHU1 S/AIR Temp A-Fail	1	1	AHU1	S/AIR Temp A	Fail	1	5000	N/A	N/A	✓
1.1 AHU1 S/AIR Temp B-Fail	1	1	AHU1	S/AIR Temp B	Fail	1	5000	N/A	N/A	✓
1.1 AHU2 S/AIR Temp A-Fail	1	1	AHU2	S/AIR Temp A	Fail	1	5000	N/A	N/A	✓
1.1 AHU2 S/AIR Temp B-Fail	1	1	AHU2	S/AIR Temp B	Fail	1	5000	N/A	N/A	✓
FM Server V1.10.14.000										

**Figure 3-1:** Requests Tab

**Table 3-1:** Requests Tab Description

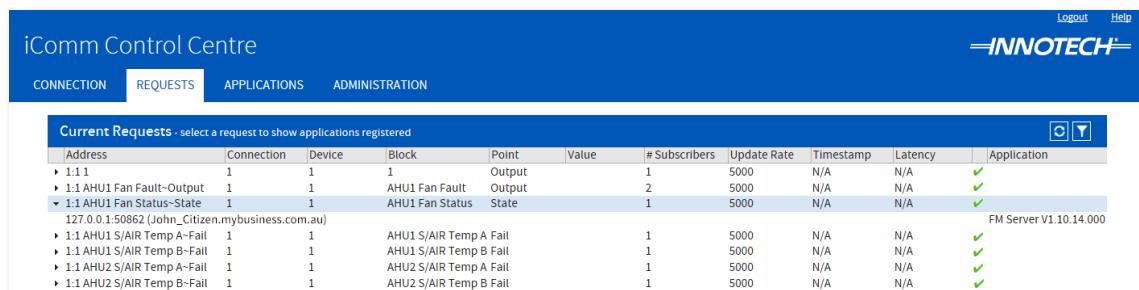
Index	Description
1	This panel shows the current Requests for iComm's connections.
2	Refresh Button - The page will load the latest content when opened, the refresh button must be used thereafter.
3	Filter Button - Click the button to open the filtering text boxes. Filter the Requests using one or more text boxes.
3	Click Help for help on the Requests tab.

### 3-1.1 Current Requests Panel

This panel shows the list of points currently registered by all clients.

For each point the panel shows:

- Address
- Connection
- Device
- Block
- Point
- Status
- Value
- Number of Subscribers
- Update Rate
- Timestamp
- Latency
- Application



Current Requests - select a request to show applications registered										
Address	Connection	Device	Block	Point	Value	# Subscribers	Update Rate	Timestamp	Latency	Application
► 1:1	1	1	1	Output	1	5000	N/A	N/A	✓	
► 1:1 AHU1 Fan Fault-Output	1	1	AHU1 Fan Fault	Output	2	5000	N/A	N/A	✓	
▼ 1:1 AHU1 Fan Status-State	1	1	AHU1 Fan Status	State	1	5000	N/A	N/A	✓	
127.0.0.1:50862 (John_Citizen.mybusiness.com.au)										FM Server V1.10.14.000
► 1:1 AHU1 S/AIR Temp A-Fail	1	1	AHU1 S/AIR Temp A	Fail	1	5000	N/A	N/A	✓	
► 1:1 AHU1 S/AIR Temp B-Fail	1	1	AHU1 S/AIR Temp B	Fail	1	5000	N/A	N/A	✓	
► 1:1 AHU2 S/AIR Temp A-Fail	1	1	AHU2 S/AIR Temp A	Fail	1	5000	N/A	N/A	✓	
► 1:1 AHU2 S/AIR Temp B-Fail	1	1	AHU2 S/AIR Temp B	Fail	1	5000	N/A	N/A	✓	

**Figure 3-2:** Current Requests Panel

# iComm

## USER INSTRUCTIONS

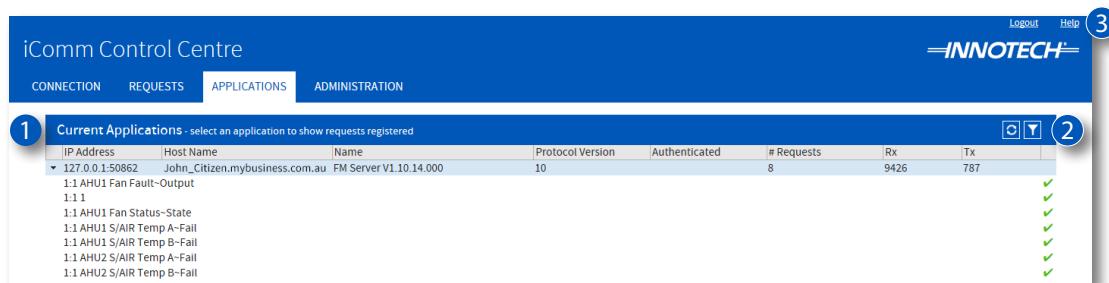
4

Applications Tab

## 4-1 Overview

This section provides information about the iComm Applications Tab. The Applications tab is used as a commissioning tool in addition to troubleshooting. The tab shows client connections to iComm and which points are associated with those clients.

The table below describes the sections of the Applications Tab.



IP Address	Host Name	Name	Protocol Version	Authenticated	# Requests	Rx	Tx
127.0.0.1:50862	John_Citizen.mybusiness.com.au	FM Server V1.10.14.000	10		8	9426	787
<ul style="list-style-type: none"><li>1:1 AHU1 Fan Fault-Output</li><li>1:1 AHU1 Fan Status-State</li><li>1:1 AHU1 S/AIR Temp A-Fail</li><li>1:1 AHU1 S/AIR Temp B-Fail</li><li>1:1 AHU2 S/AIR Temp A-Fail</li><li>1:1 AHU2 S/AIR Temp B-Fail</li></ul>							

**Figure 4-1:** Applications Tab

**Table 4-1:** Applications Tab Description

Index	Description
1	This panel shows the current Applications for iComm's connections.
2	Refresh Button - The page will load the latest content when opened, the refresh button must be used thereafter.
3	Filter Button - Click the button to open the filtering text boxes. Filter the Applications using one or more text boxes.
3	Click Help for help on the Applications tab.

### 4-1.1 Current Applications Panel

The Current Applications panel shows all the current connections in iComm and which blocks are being viewed by those connections.

For each client the panel shows:

- IP Address
- Host Name
- Name
- Protocol Version
- Authenticated
- Number of Requests
- Bytes Received (RX)
- Bytes Transmitted (TX)
- Status

IP Address	Host Name	Name	Protocol Version	Authenticated	# Requests	Rx	Tx
127.0.0.1:50862	John_Citizen.mybusiness.com.au	FM Server V1.10.14.000	10	8	9426	787	

Current Applications - select an application to show requests registered

- 1.1 AHU1 Fan Fault-Output
- 1.1 AHU1 Fan Status-State
- 1.1 AHU1 S/AIR Temp A-Fail
- 1.1 AHU1 S/AIR Temp B-Fail
- 1.1 AHU2 S/AIR Temp A-Fail
- 1.1 AHU2 S/AIR Temp B-Fail

**Figure 4-2:** Current Applications

# iComm

## USER INSTRUCTIONS

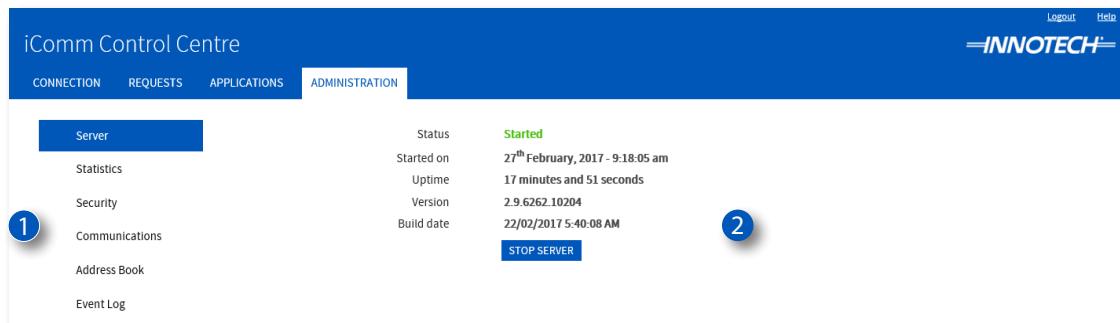


Administration Tab

## 5-1 Overview

This section provides information about the iComm Administration Tab. The Administration tab is for changing various settings within iComm.

The table below describes the sections of the Administration Tab.



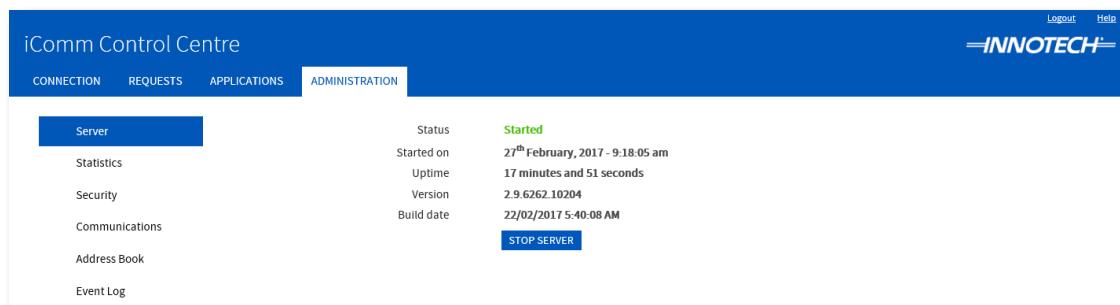
**Figure 5-1:** Administration Tab

**Table 5-1:** Administration Tab Description

Index	Description
1	Select a subcategory from the list to view/or edit iComm settings.
2	This part of the screen will show the content based on which subcategory is selected.

## 5-2 Server

The Server section of the Administration tab displays the status of the iComm server and has a button for starting and stopping the server.

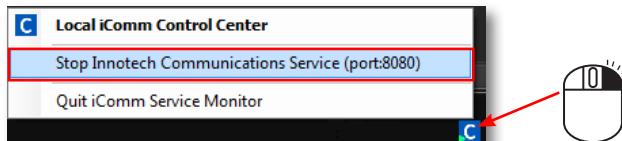


**Figure 5-2:** Server Administration

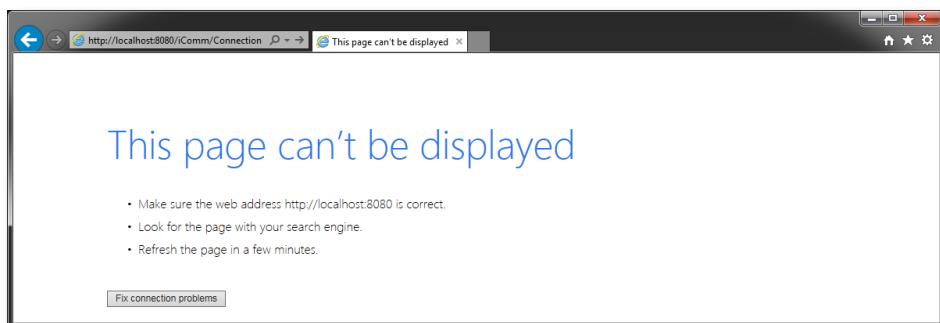
## iComm User Instructions



Users should note that stopping the 'server' is not the same as stopping the 'service'. When the server is stopped, the iComm browser interface is still accessible, but no data will be shown. Stopping the 'service' using the system tray icon will disable access to the iComm browser interface. Click [here](#) for details about the system tray icon status.



**Figure 5-3:** iComm System Tray - Stop Service



**Figure 5-4:** iComm Service Disabled

### 5-3 Statistics

The Statistics section of the Administration tab displays an outline of the current connection statistics. Items such as the Number of Connections, Online Devices, Connected Applications, Requests etc are shown here.

Current	
Network Connections	6
Disconnected Connections	1
Online Devices	2
Offline Devices	4
Decommissioned Devices	0
Unknown Devices	0
Client Connections	1
Client Requests Registered	8
Unique Client Requests Registered	7

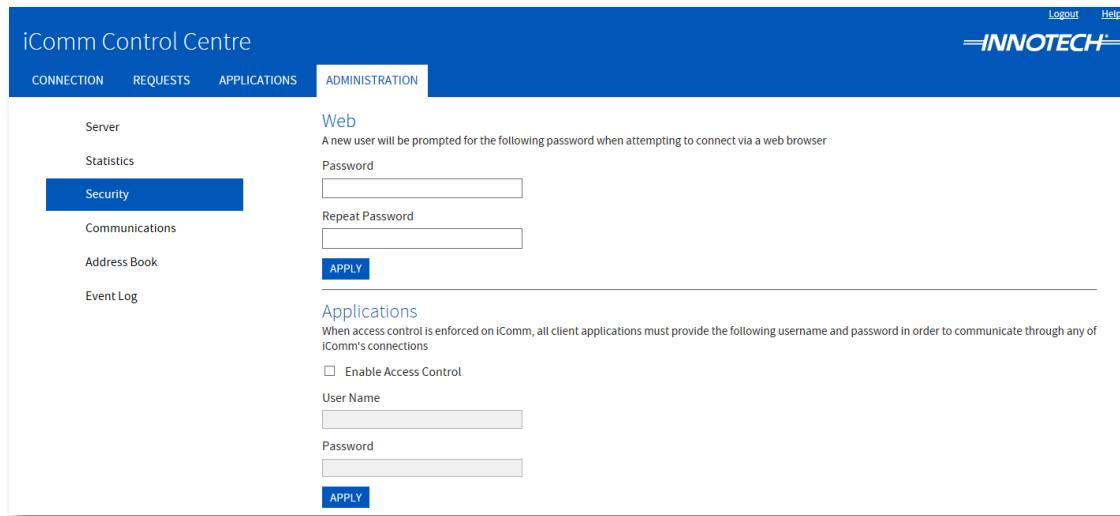
  

Client Totals	
Messages Received	62
Messages Transmitted	3
Client Requests Transmitted	9
Bytes Received	9426
Bytes Transmitted	2467
Connections	1

**Figure 5-5:** iComm Statistics

## 5-4 Security

The Security section of the Administration tab contains fields for updating the password and also enabling Access Control.



**Web**  
A new user will be prompted for the following password when attempting to connect via a web browser

**Security**

**Web**  
A new user will be prompted for the following password when attempting to connect via a web browser

**Applications**  
When access control is enforced on iComm, all client applications must provide the following username and password in order to communicate through any of iComm's connections

Enable Access Control

User Name

Password

**APPLY**

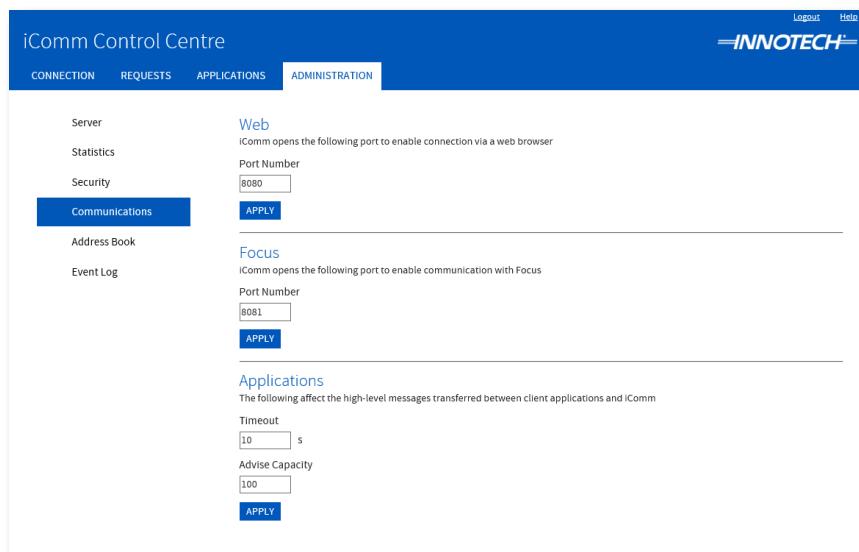
**Figure 5-6:** Security Administration

## 5-5 Communications

The Communications section of the Administration Tab enables the user to change the port number used for accessing iComm's interface.

A different port for accessing Focus can be specified if required. This setting must match the setting in Focus for the Focus Simulator to function correctly.

Applications settings determine the timeout for connected software such as Focus. If iComm does not receive a response within the timeout interval set, an error will be logged in the Event Log. The Advise Capacity relates to the number of advices that can be sent in a single message.



**Web**  
iComm opens the following port to enable connection via a web browser

**Focus**  
iComm opens the following port to enable communication with Focus

**Applications**  
The following affect the high-level messages transferred between client applications and iComm

Port Number

Port Number

Timeout  
 s

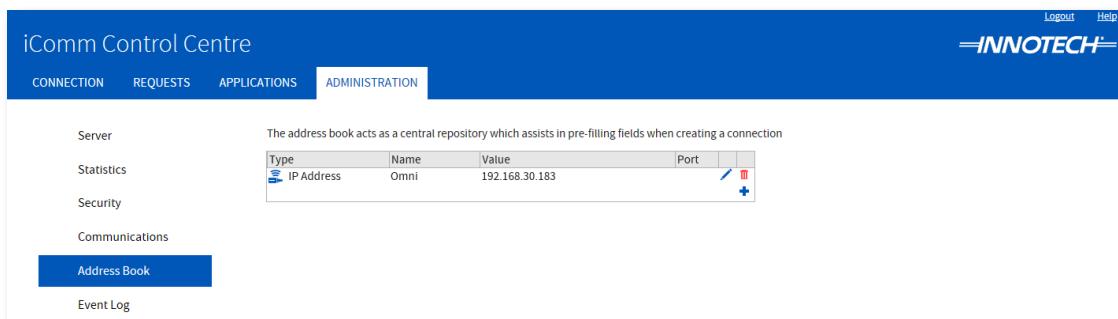
Advise Capacity

**APPLY**

**Figure 5-7:** Communications Administration

## 5-6 Address Book

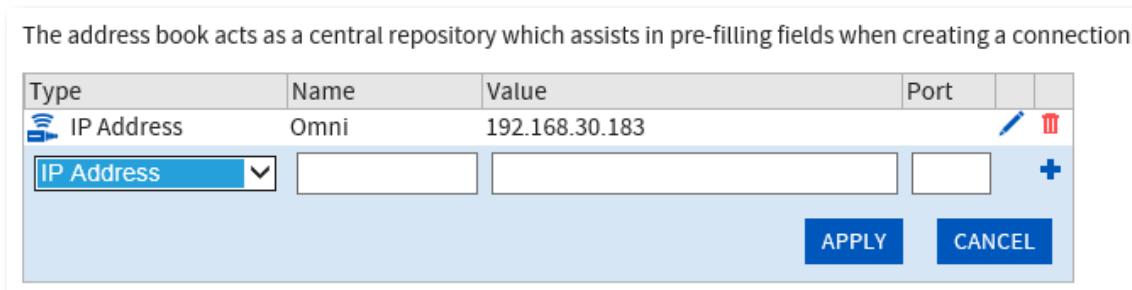
Enter frequently used phone numbers or IP addresses into the address book for use within the iComm interface.



**Figure 5-8:** Address Book Overview

### 5-6.1 Adding

1. Click the **+** icon.
2. Select a type (IP Address or Telephone).
3. Type in the connection name.
4. Type in the IP Address or Telephone Number. If adding an IP Address, you can optionally add a port number.
5. Click **Apply** to add the new item.



**Figure 5-9:** Address Book - Adding

### 5-6.2 Deleting

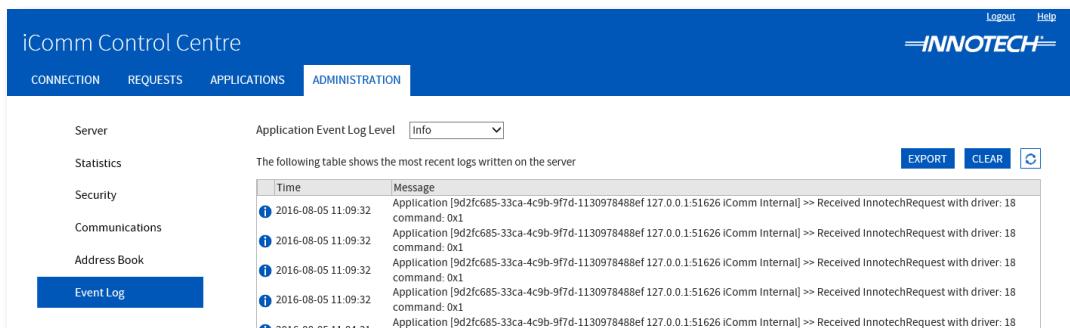
Click the Bin icon next to the entry to delete the item from the address book.



**Figure 5-10:** Delete Address Icon

## 5-7 Event Log

The logged events that are visible in the list depend on what has been specified for logging in the connection settings. Each connection can be set to log all events, no events or a specific type of event. By default, the Event Log shows Info Level logging. Clear the Event Log by clicking Clear.

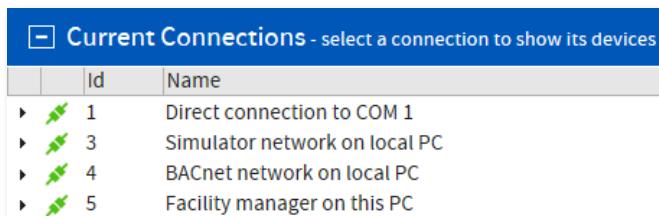


**Figure 5-11:** Event Log Window

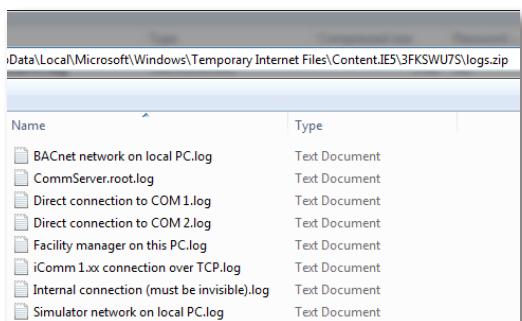
## 5-7.1 Exporting Logs

Click the Export button to export the current Event Logs to a zip file. All Connections will be included.

The logs contained in the zip file are based on the current connections list.  
The log file contains more specific details than are shown in the iComm window.



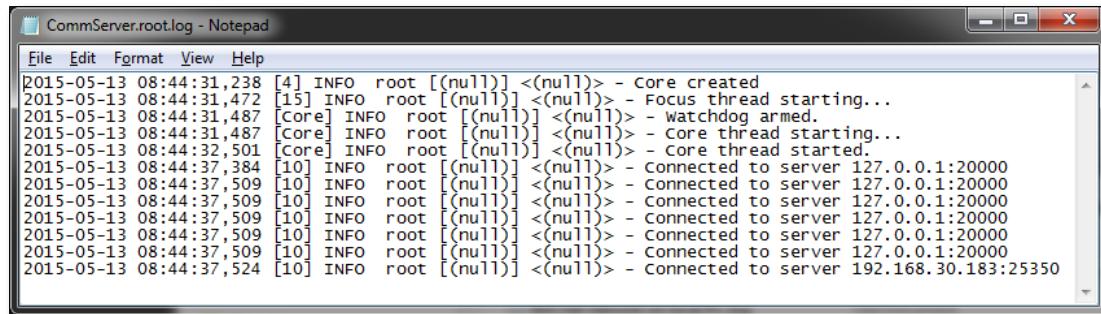
**Figure 5-12:** Current Connections List



**Figure 5-13:** Event Log - Downloaded Zip File

Application Event Log Level		Info	▼
The following table shows the most recent logs written on the server			
Time	Message		
2015-06-02 09:31:03	Application [1bc921c3-3187-42d4-adc7-6471b6ead0eb 127.0.0.1:50862 FM Server V1.10.14.000] >> Received ReadRequest for 1:1 AHU2 S/AIR Temp B-Fail		
2015-06-02 09:31:03	Application [1bc921c3-3187-42d4-adc7-6471b6ead0eb 127.0.0.1:50862 FM Server V1.10.14.000] >> Received ReadRequest for 1:1 AHU2 S/AIR Temp A-Fail		

**Figure 5-14:** Event Log - Current Log in iComm



```

2015-05-13 08:44:31,238 [4] INFO root [(null)] <(null)> - Core created
2015-05-13 08:44:31,472 [15] INFO root [(null)] <(null)> - Focus thread starting...
2015-05-13 08:44:31,487 [core] INFO root [(null)] <(null)> - Watchdog armed.
2015-05-13 08:44:31,487 [core] INFO root [(null)] <(null)> - Core thread starting...
2015-05-13 08:44:32,501 [core] INFO root [(null)] <(null)> - Core thread started.
2015-05-13 08:44:37,384 [10] INFO root [(null)] <(null)> - Connected to server 127.0.0.1:20000
2015-05-13 08:44:37,509 [10] INFO root [(null)] <(null)> - Connected to server 127.0.0.1:20000
2015-05-13 08:44:37,509 [10] INFO root [(null)] <(null)> - Connected to server 127.0.0.1:20000
2015-05-13 08:44:37,509 [10] INFO root [(null)] <(null)> - Connected to server 127.0.0.1:20000
2015-05-13 08:44:37,509 [10] INFO root [(null)] <(null)> - Connected to server 127.0.0.1:20000
2015-05-13 08:44:37,524 [10] INFO root [(null)] <(null)> - Connected to server 192.168.30.183:25350

```

**Figure 5-15:** Event Log - Log File Details

## 5-7.2 Logging Levels

The logging levels that can be selected are detailed in the table below.

**Table 5-2:** Logging Levels

Type	Description
Off	Disable statistics logging
All	Log all statistics levels
<b>Error Events</b>	
Error	Error events that might still allow the application to continue running
Fatal	Very severe error events that will presumably lead the application to abort
<b>Information Messages</b>	
Debug	Events that are most useful to debug an application, contain detailed info per operation
Info	Messages that highlight the progress of the application at coarse-grained level
Verbose	Events that are most useful to debug an application, contains all details including variables
Warn	Messages about potentially harmful situations

# iComm

## USER INSTRUCTIONS

6

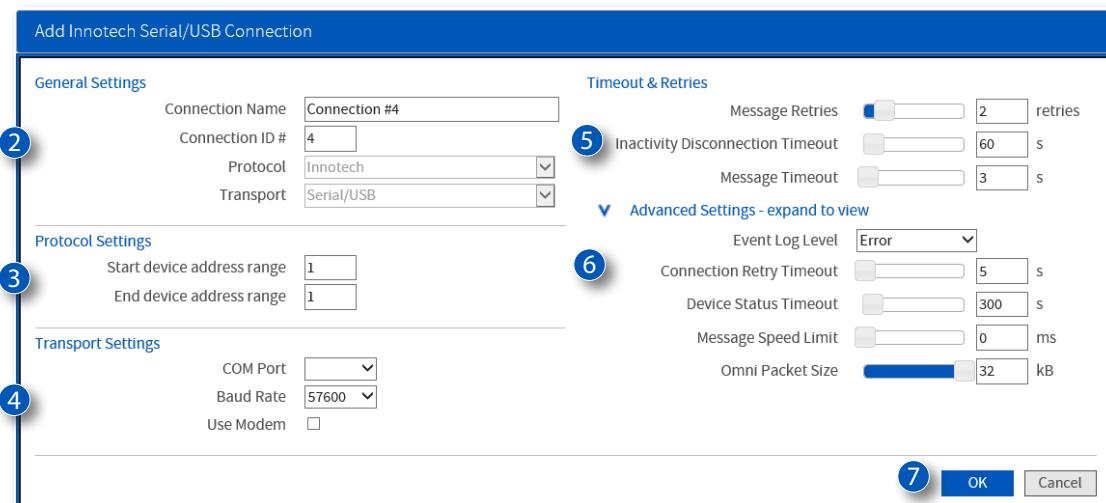
Appendix

## 6-1 Step-by-Step Setup of a New Connection

This section provides information about setting up different connections in iComm from start to finish.

### 6-1.1 Innotech Serial/USB Connections

1. Click the [Add New Connection button](#) and select [Innotech Serial/USB Connection](#)
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (edit as required)
  - Enter the start and end device address range
4. Transport Settings (edit as required)
  - Select a COM Port to use
  - Select a Baud Rate
  - Check the box if you are using a Modem
    - If you are using a modem, enter a phone number and edit other settings as required
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm



**Figure 6-1:** Add New Connection - Innotech Serial/USB Example

### 6-1.2 Innotech TCP Connection

1. Click the Add New Connection button and select Innotech TCP Connection.
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (edit as required)
  - Enter the start and end device address range
4. Transport Settings (edit as required)
  - Enter an IP Address and Port Number or click the address book button to load a predefined IP address from iComm's address book
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

---

### 6-1.3 Omni USB

1. Click the Add New Connection button and select Omni USB Connection.
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (edit as required)
  - Enter the start and end device address range
4. Transport Settings (edit as required)
  - Enter an IP Address and Port Number or click the address book button to load a predefined IP address from iComm's address book
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

---

### 6-1.4 BACnet UDP / BACnet Foreign Device UDP

1. Click the Add New Connection button and select BACnet UDP or BACnet Foreign Device UDP
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (edit as required)
  - Enter an address or click Re-Discover to discover addresses and edit the iComm Device instance
4. Transport Settings (edit as required)
  - Select a Network Connection. Only the Local Port's Port Number can be changed
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

### 6-1.5 Custom Connection

1. Click the Add New Connection button and select Custom.
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
  - Select a Protocol
  - Select a Transport type
3. Protocol Settings (edit as required)
  - BACnet (Enter an address or click Re-Discover to discover addresses, edit the iComm Device instance)
  - Innotech (Enter the start and end device address range)
4. Transport Settings (edit as required)
  - Serial/USB
    - Select a COM Port to use
    - Select a Baud Rate
    - Check the box if you are using a Modem
      - If you are using a modem, enter a phone number and edit other settings as required
  - TcpClient
    - Enter an IP Address and Port Number or click the address book button to load a predefined IP address from iComm's address book
  - TcpServer
    - Specify a Port Number or accept the default setting
  - Udp
    - Select a Network Connection and specify the settings. Only the port number can be changed.
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

---

### 6-1.6 Maxim/Genesis Simulator

1. Click the Add New Connection button and select Maxim/Genesis Simulator.
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (edit as required)
  - Enter the start and end device address range
4. Transport Settings (edit as required)
  - Specify a Port Number or accept the default setting
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

### 6-1.7 Focus Simulator

1. Click the Add New Connection button and select Focus Simulator.
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (edit as required)
  - Enter the start and end device address range
4. Transport Settings (edit as required)
  - Specify Network ID number
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

---

### 6-1.8 Facility Manager

1. Click the Add New Connection button and select Facility Manager.
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (no editing possible)
4. Transport Settings (edit as required)
  - Specify a Port Number or accept the default setting
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

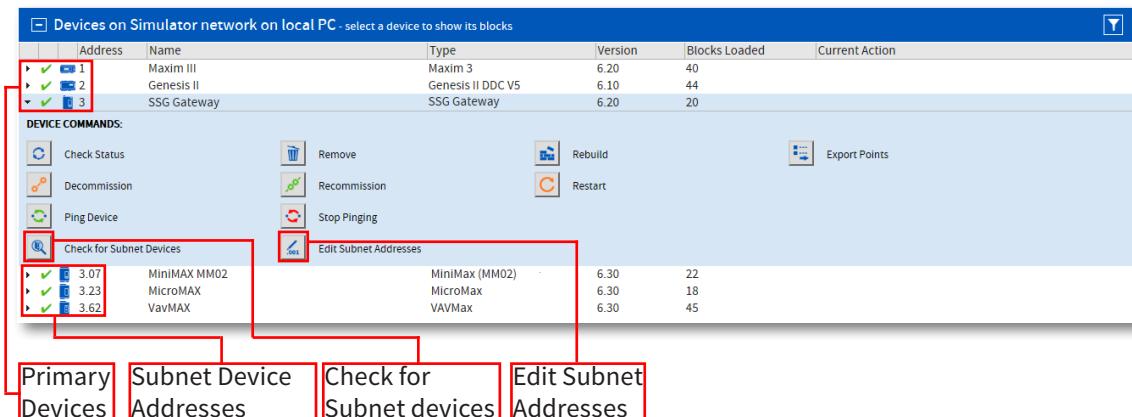
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### 6-1.9 iSEA

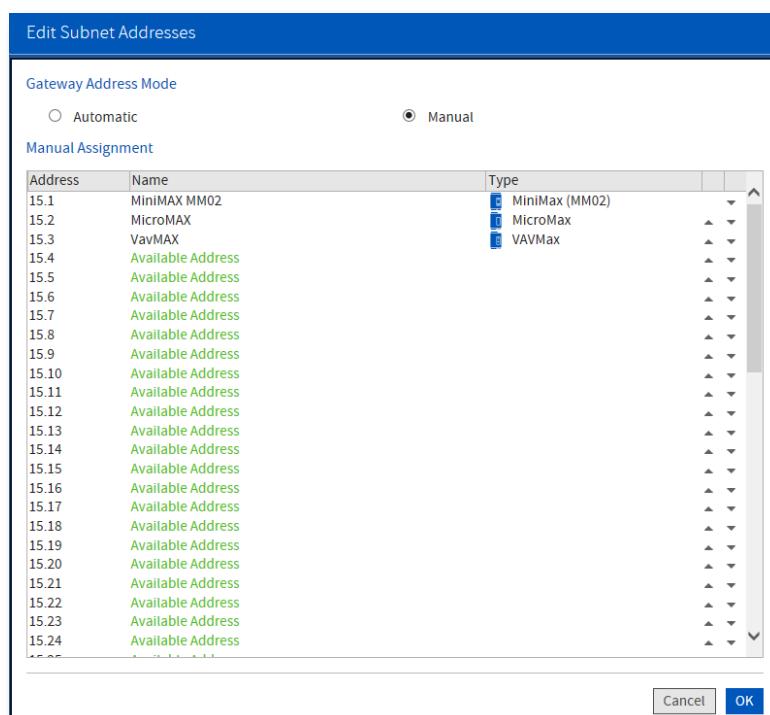
1. Click the Add New Connection button and select iSEA
2. General Settings (edit as required)
  - Edit the Connection name (use something meaningful)
  - Edit Connection ID if required (By default the next number will be selected)
3. Protocol Settings (no editing possible)
4. Transport Settings (edit as required)
  - Enter an IP Address and Port Number or click the address book button to load a predefined IP address from iComm's address book
5. Timeout & Retries
  - Accept the default settings or edit the settings as required
6. Advanced Settings
  - Select a logging level
  - Accept the default settings or edit the remaining settings as required
7. Click OK to create the connection in iComm

## 6-2 Setting up a Sub-System Gateway Subnet Device

1. Add a connection to iComm using the steps previously listed in this section. Ensure that sub-system devices are connected to your gateway.
2. Expand your SSG device details and click Check for Subnet Devices. iComm will refresh the SSG and detect the subnet devices and update their status in iComm.
3. If you need to [Edit the Subnet Addresses](#), click the Edit Subnet Addresses button to open the edit window. By default subnet addressing is done automatically. If you need to edit their address, click Manual and either click and drag the device to a new address or click the up and down arrows to move the position of the device.



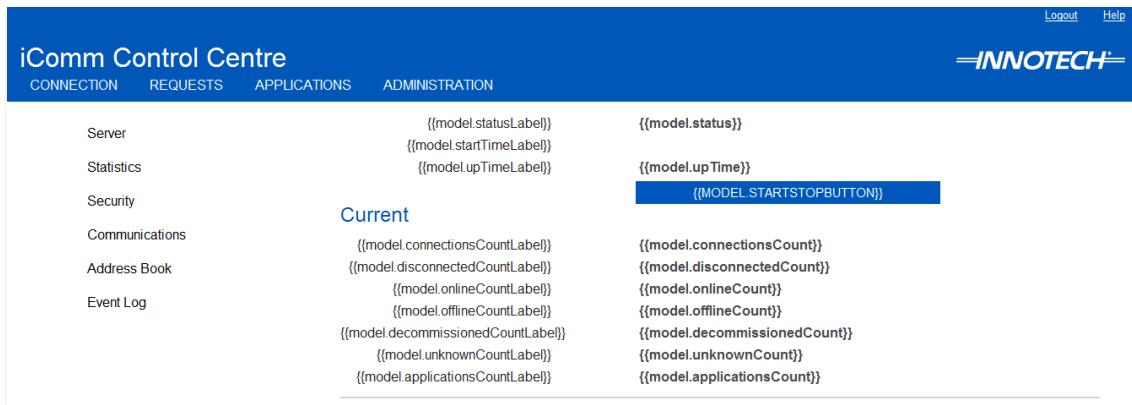
**Figure 6-2:** iComm Subnet Devices



**Figure 6-3:** Edit Subnet Addresses

## 6-3 iComm Display Problems

Display problems can occur when using Internet Explorer due to the Compatibility View settings.

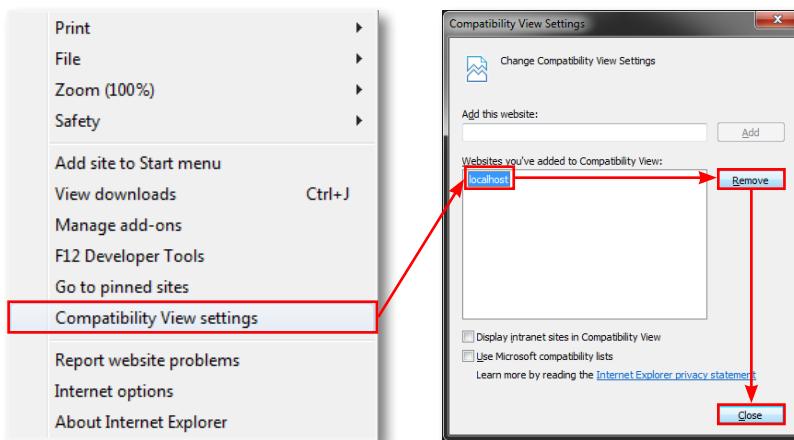


**Figure 6-4:** Compatibility Problem

If viewing problems occur, open the Compatibility View Settings and remove the IP/DNS name from the settings window. Click the settings cog to open the menu.



**Figure 6-5:** Internet Explorer Settings Cog



**Figure 6-6:** Compatibility View Settings

When Close is clicked, the page will reload and should display correctly.

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## Innotech Support

Innotech provides technical information on the Web to assist you with using its products. At [www.innotech.com](http://www.innotech.com), you can find technical manuals, user instructions, and data sheets for all our products.

For direct product support or product information, contact your local distributor, or an Innotech representative.

You can contact us via email, phone, or postal mail:

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