Notion Pro

USER MANUAL

IMC Group Ltd

1 About Notion Pro Help

Welcome to the Notion Pro online help system.

The current release of Help is version 1.2.15, release date 19th January 2017

Introducing the Notion Pro System

2 Introducing the Notion Pro System

2.1 What does Notion Pro do?

IceSpy Notion Pro enables you to configure and monitor temperature sensors installed in (typically) refrigerated storage units or other temperature-sensitive environments.

Notion Pro is a System, containing software and hardware. For details of the hardware, see The Notion Pro Hardware, also http://www.the-imcgroup.com/notionpro/.

The Notion Pro software (described in this Help) gives a graphical user interface (GUI) which works through all the main web browsers, for display on a desktop PC, laptop or mobile device such as a tablet or smart phone.

Summary of Functionality

Data is mainly generated by wireless sensors and collected by wireless receivers. The data is relayed to the server by TCP/IP, USB or GPRS and is stored in an SQL database. The data is then available for viewing using a local management application or via a standard Web Browser.

Notion Pro is:

Scalable Notion Pro can be installed on a single site with 1 user up to 100's of sites with 1000's of users.

Browser-based Notion Pro uses commercially available browsers such as Internet Explorer, Chrome or Firefox to view the data.

SQL Database Notion Pro uses an SQL database - the modern method making it easy to access data. The SQL database could be used by 3rd-party tools if required/ commercially desirable.

Notion Pro:

- allows you to rapidly change what you need to, given the necessary permissions
- allows you to select any combination(s) of sensors to form 'Views' with all subsequent operations (alarms, reporting) only operating on that subset
- gives you control of exception handling protocols, the various options do not have to be generically configured by the Administrator
- has extensive reporting capabilities, with custom reports available as easily accessible plug-ins to the main system (future proofing/ready customisation)
- has a totally separate GUI (Graphical User Interface) from the underlying hardware
- is a services-based system
- architecture ensures that support for as yet unknown hardware can be readily integrated

(future proofing) by modularising the hardware services and accessing the database via a universal interface module

- uses Browser technology as the primary view (optionally over the web BUT NOT NECESSARILY, could be all Intranet). Browser support will likely be there as long as computers run, the risk of problems caused by Operating System Providers is therefore minimised
- allows seamless support for large numbers of sensor communication protocols, and very large numbers of sensors over multiple sites.

See Also

Getting Started with Notion Pro

2.2 Installing your Notion Pro Equipment

A typical Notion Pro installation would consist of one or more Network Receivers (sometimes referred to as a Base Station) and a number of sensors (transmitters). For the transmitters, the procedure below (starting at Step 10) would need to be followed for each transmitter that you are using.

The procedure below is for installing the Network Receiver. The procedures for installing the Notion Pro family of Base Units (i.e. the Network Receiver, the Echo Module, the SMS Module and the ARB Module) are very similar. For details of the hardware, see the IceSpy Notion Pro System Manual, IMC doc. no. IM5521.

As far as possible, the Receiver and Transmitter units should be placed where they will not be subject to electromagnetic interference and where they will not be shielded by walls, doors, furniture, appliances etc. See Equipment Positioning for more details.

Install Step	Notes
1. Using the mounting bracket as a drilling template, drill holes for the receiver wall mounting bracket into the wall at an appropriate location. 2. Using the spacers provided to give clearance, screw the mounting bracket to the wall.	When mounting the Receiver, you should bear in mind that you will need to run cables from the Receiver to the mains power supply and to your network socket.

Install Step	Notes
	
3. Using a Phillips screwdriver, remove and retain the screws from the battery cover plate at the rear of the Receiver.	
4. **Note:** If installing an SMS Module, the SIM card must be installed prior to battery installation, see Installation. Insert the 8.4V backup battery into the recess at the rear of the Receiver, taking care to insert the connector attached to the battery into the matching connector within the Receiver.	
5. Screw the battery cover plate to the rear of the Receiver.	
6. Attach the Receiver to the mounting bracket.	
7. Using the supplied Ethernet cable, connect the Receiver to your Network connection if you have one.	
8. Using the supplied cable, connect the Receiver to the mains power supply.	
9. If you are NOT using the door monitoring and alarm function option with this transmitter, go to step 11 below. Secure a matching pair of door monitoring and alarm function sensor pads to the door and door frame of your refrigerated/ frozen storage unit.	If you intend to the lay the transmitter loosely in the storage unit, ensure that you position the door frame sensor pad such that the cable running from the pad goes into the storage unit. If you intend to wall-mount the transmitter, ensure that you position the

Install Step	Notes
	door frame sensor pad such that the cable running from the pad runs outside of the storage unit. Ensure that the pads meet perfectly when the door is closed.
10. Pull away the contact tag on the transmitter to ensure the battery contacts and the transmitter contacts meet.	A green light will flash briefly.  The transmitters are powered by 1 x 1.5V Lithium AA cells. Standard AA cells can be used, but are not recommended. (1.5V Lithium AA batteries supplied with transmitter will work over range -30°C to +50°C. 1.5V AA alkaline can be used but will have reduced life and a reduced operating temperature range 0°C to +40° C.) See also Battery.
11. If you do NOT intend to wall-mount your transmitter, go to step 20 below.	
12. Drill holes for the transmitter wall mounting bracket into the wall at an appropriate location.	When mounting the transmitter bracket, you should bear in mind that, if you are using the door monitoring and alarm function and/or external sensor options, you will need to run cables from the transmitter to your storage unit door frame sensor pad and/or external sensor.
13. Screw the mounting bracket to the wall.	As an alternative, the transmitter bracket could be attached to a suitable post using

Install Step	Notes
	cable ties. Slots are provided in the bracket for this purpose.
14. Slot the transmitter onto the wall bracket.	
15. If you are using the door monitoring and alarm function option with this transmitter, route the storage unit door frame sensor pad cable up to the transmitter.	
16. If you are NOT using the external sensor option, go to step 20.	
17. Place the external temperature probe and associated cable at a suitable position in your storage unit.	
18. Route the temperature probe cable over the door frame and up to the transmitter. Insert the cable into the transmitter.	
19. Repeat steps 10-19 above for each transmitter that you are using.	
20. Plug in the Receiver power supply to the mains supply and switch on at the mains socket.	The green power LED comes on.
21. Go into Notion Pro to add transmitters to Zones and set them up for use.	See Setting Up the Sensor Model for details.

2.2.1 Notion Base Wall Bracket Extender

The Notion Base plastic Wall Bracket has been designed to provide a solution to the lack of space between the Notion Base unit and the wall.

During some installations we have encountered radio reception interference caused by certain materials within a wall such as metal.

This bracket helps bring the Notion Base away from the wall enough for the radio transmission to work as specified.

Part Number: IN-WBE.

Note:

All Extender holes are 4.5mm Diameter; fixings to attach Extender to users mounting surface are not included.

The base mounting plate and spacers are supplied with the base, not with the extender bracket.

Getting Started with the Notion Pro

3 Getting Started with the Notion Pro

Administrator Users

After you have installed Notion Pro and physically installed your Base Units and Transmitters you need to:

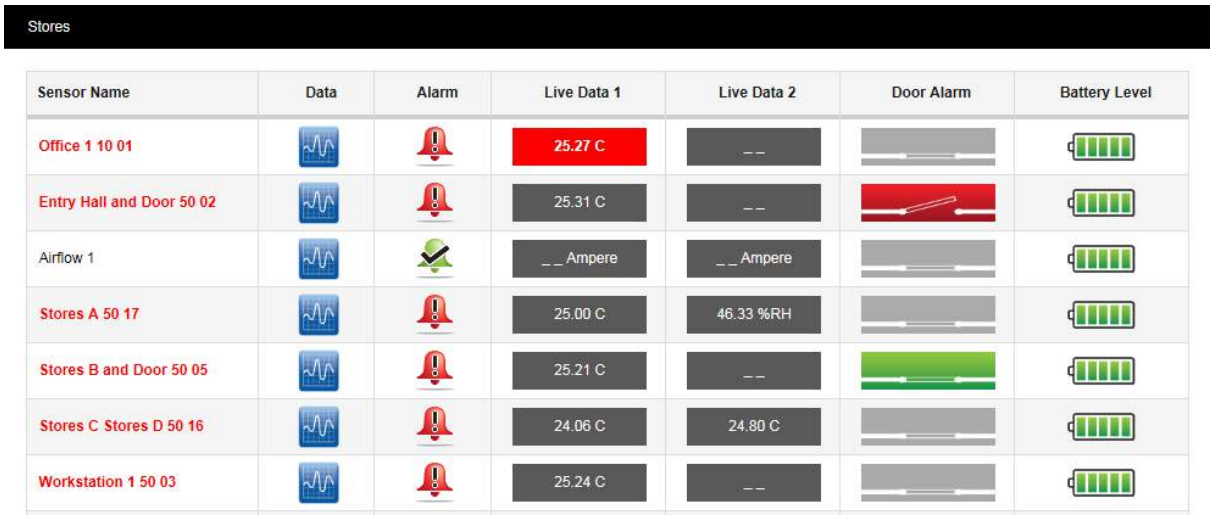
1. Set up the Notion Pro Users.
2. Create Sites, Subsites and Zones for your installation.
3. Add Base Units to your installation.
4. Add Sensors for use in your installation.

Standard Users

Look at the Help on the opening display which shows you around the Notion Pro user interface, and gives you links to further Help about how to use Notion Pro to monitor your temperature data.

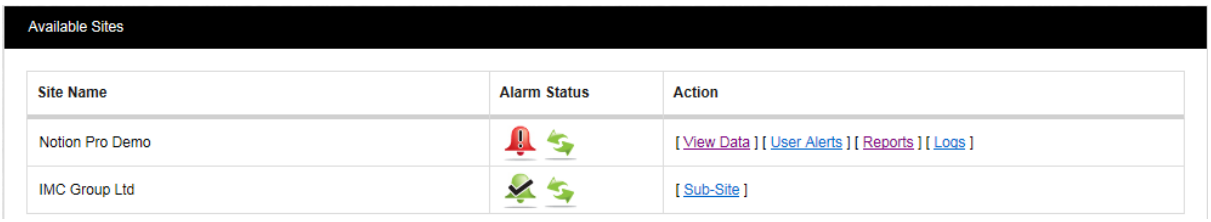
3.1 The Opening Display

If there is only one Site in your Notion Pro installation, when you first enter Notion Pro you will see something like:



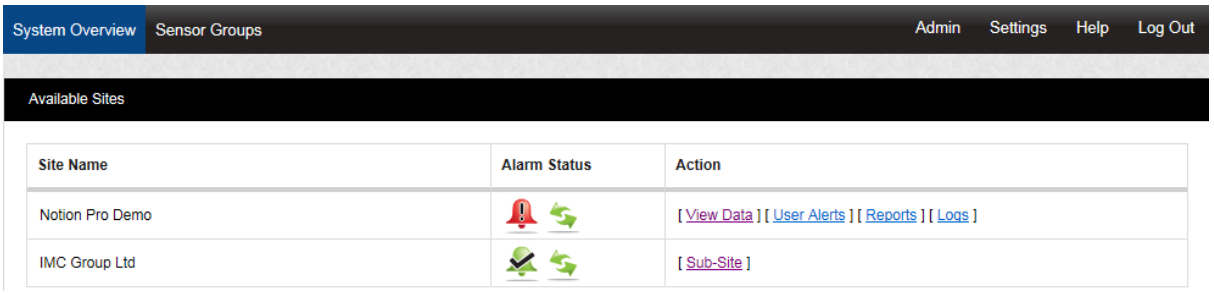
Click on an area of the above display for help on that area.

If there is more than one Site in your installation you will see something like the picture below, and you must choose the Site to view:



See Choosing the Site to View.

3.1.1 The System Overview Page



Click on an area of the above display for help on that area.

You see the System Overview when you have signed in to Notion Pro, selected the Database and clicked **Next**.

Wherever you are in Notion Pro, you can go back to the Home Page simply by clicking on Home.

See also . . .

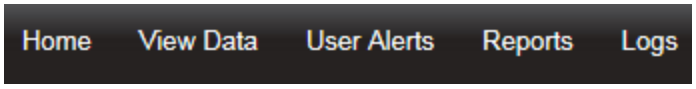
The Opening Display

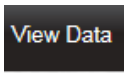
Basic Operations in Notion Pro

3.1.2 Basic Operations in Notion Pro

From the Menu Bars

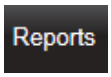
The Menu Bars are where the System Administrator performs all the principal Setup and Control operations within Notion Pro.



The options under 

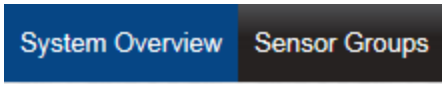
enable you to view Live data (all Users) and set and manipulate various aspects of data which go to make up the Live Data display (System Administrator Users only). See Viewing Data for more details.

enables you to set up email and SMS User Alerts (System Administrator Users only). See Setting Up User Alerts for more details.



enables you to set up and run Reports. See Setting Up and Running Reports for more details.

enables you to view System Logs (all Users).



The System Overview page comes up when you click 

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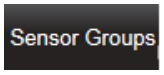
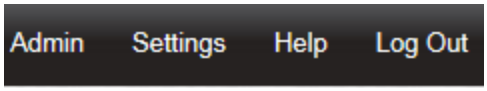
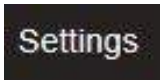


displays the available Sensor Groups which have been set up by the System Administrator.

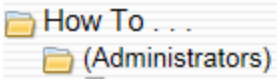


The 

and 

menus enable the System Administrator to set up Notion Pro for use following installation.

See the



menu for Help on typical Notion Pro setup tasks, and Setting Up Users, Sites and Devices for Reference Information. See also Settings.

From the Opening Display

For each transmitter you can:

view live data

see the alarm status

see the live temperature and humidity readings

see whether a door is open

see the state of the battery

How To . . .

4 How To . . .

See the below for a list of things that you might want to do in Notion Pro.

4.1 (Administrators)

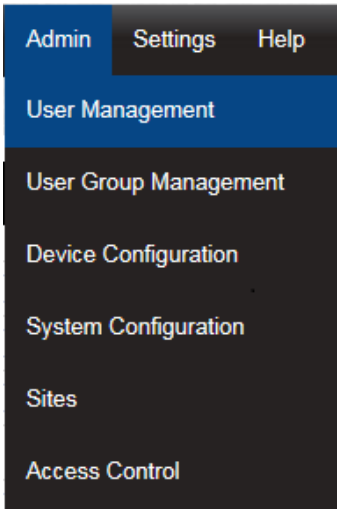
4.1.1 Set Up Users, Sites and Zones

4.1.1.1 Create and Edit Users

Read this first.

You need to create Users, give them Usernames and Passwords. You also need to assign Access Rights, Privileges, Permissions and Roles to the Users.

Start by selecting **Admin>User Management** on the main menu bar.

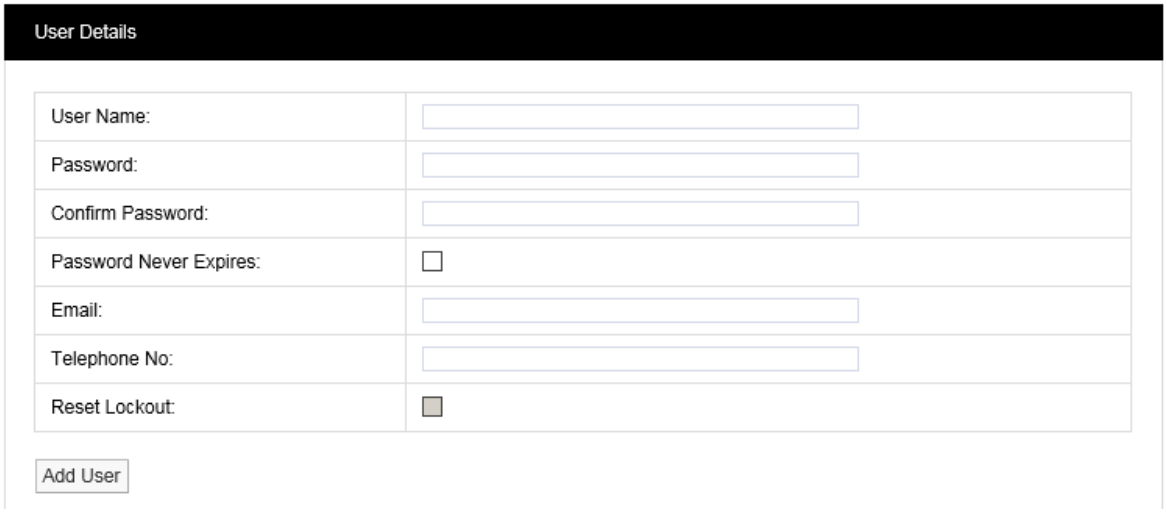


Note: you can only use the options under the **Admin** menu if you are a System Administrator user.

You can:

- **Create New Users** → Create User

You can create new users and set their name, role, email address and phone number. In the User Details dialog box:

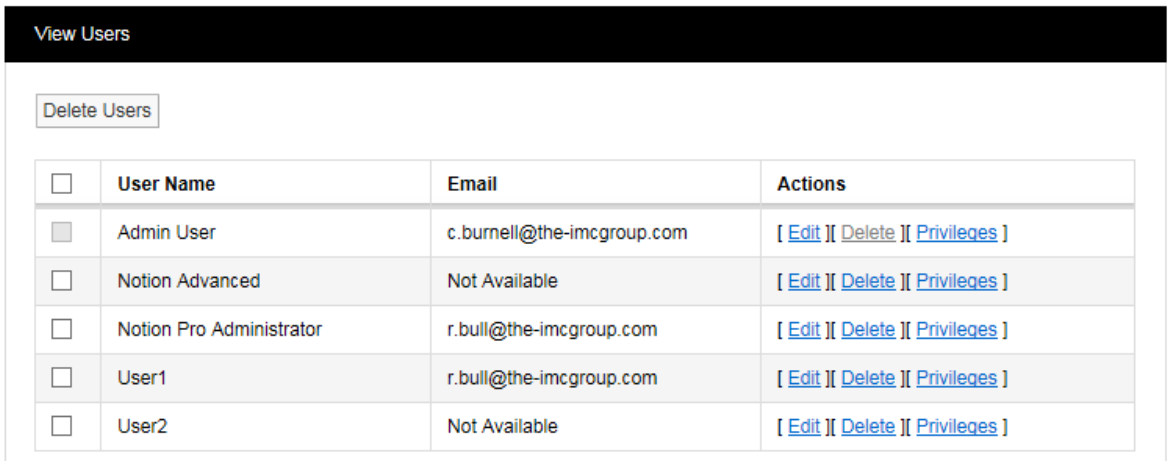


1. Enter the user's Full Name (for example, Robert Bull), User Name (for example RBull), Password, email address and mobile phone number (optional). A password must have at least four characters (eight recommended) and contain one number, one letter, one uppercase letter.
2. When you are sure the details are correct, select **Add User** .
3. Repeat for all Notion Pro Users on your Site. All User Names must be different.

See also: User Management.

Edit Existing Users → Edit/View Users

You can list users, edit user attributes, delete users, assign privileges to users. From the list in the View Users dialog box:



- To edit user attributes click Edit for the User you wish to edit, click Update User when finished.
- To delete a user click Delete for the User you wish to delete, click YES to confirm.

See also: User Management.

Assign Viewing Privileges to a User → Edit/View Users

You can control which Sites and Zones a User can see. From the list in the View Users dialog box:

1. Select Privileges for the appropriate user.
2. In the Assign Privileges dialog box, select the Sites, Subsites and Zones that you would like the selected user to be able to see.
3. Click **Assign Site Access**.

See Also:

User Privileges

4.1.1.2 Change a User's Password

If you want to change a user's password, proceed as follows:

1. Select **Admin>User Management**.
2. Select → Edit/View Users .
3. In the User Details dialogue box, make sure the Keep Old Password tick box is clear.
4. Enter the new password in the Password box.
5. Enter it again in the Confirm Password box.
6. Click Update User .

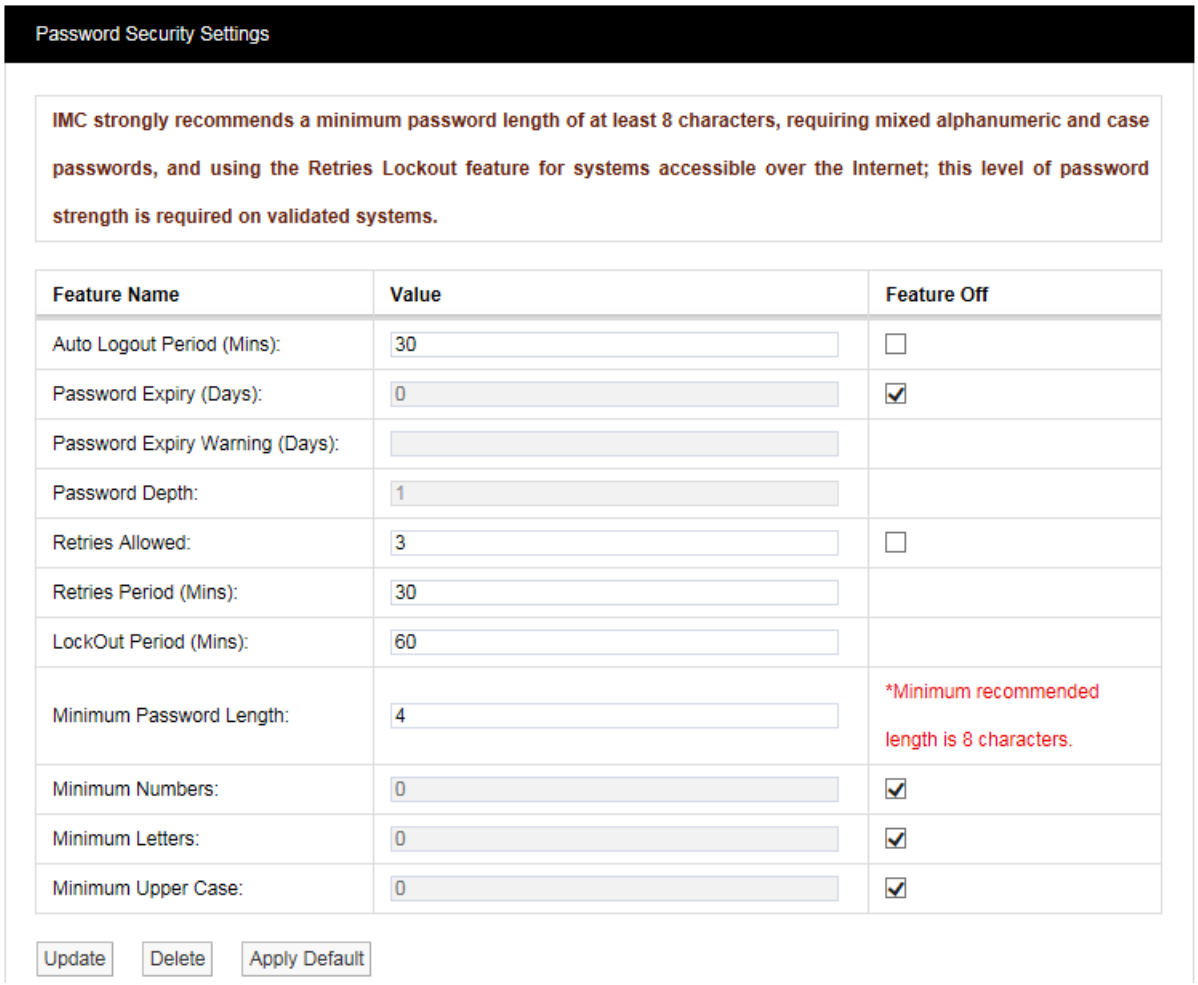
Notes:

- An ordinary user cannot change his/her own password. Only a System Administrator can do this.
- It is recommended that a password be at least eight characters in length and contain at least one number, one letter, one uppercase letter.

4.1.1.3 Set Password Security

The password security features allow the System Administrator to set the password length, expiry time and other password attributes. The security settings apply to all users.

1. Select **Admin>User Management**, then select → Password Security Settings to give the Password Security Settings dialogue box.



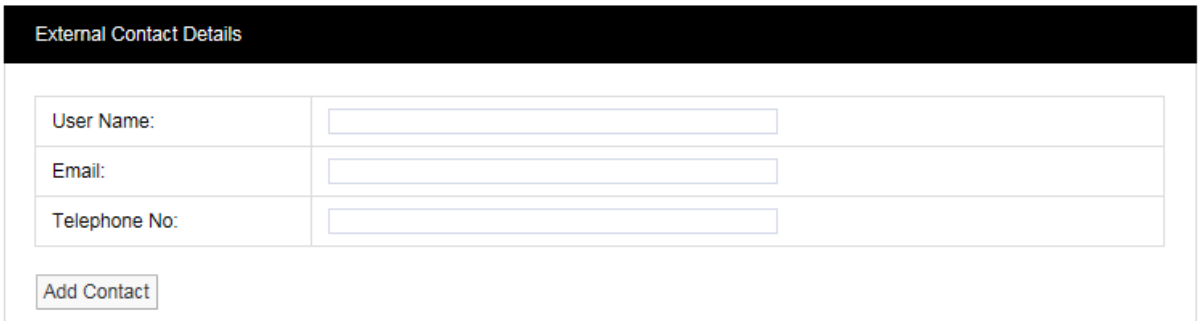
2. Set the variables in this dialogue box to the values agreed for your Installation.
3. Click Update.

See Also:

User Management.

4.1.1.4 Create External Contacts

External Contacts are used when there is a requirement to email Reports or send SMS alarm messages to people who are not Notion Pro users. The details of these people need to be entered into Notion Pro. Select → **Create External Contact** to give the External Contact Details window.



Enter the necessary details then select Add Contact.

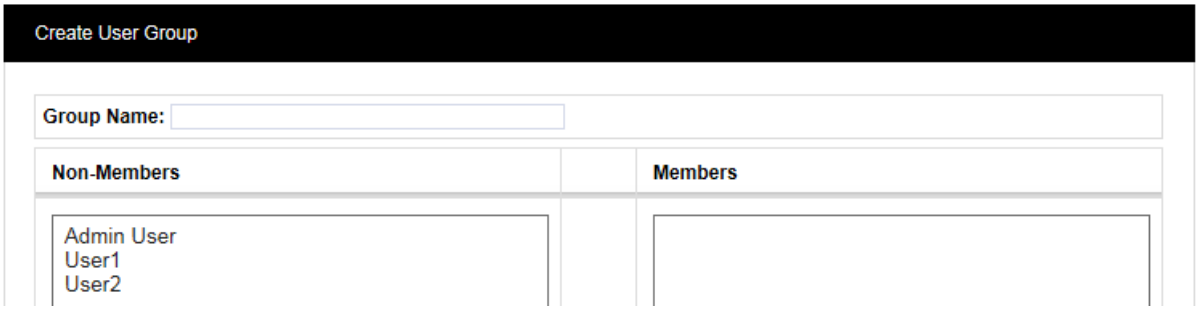
See Also:

User Management.

4.1.1.5 Create and Populate User Groups

You can separate Users into **User Groups**. User Groups allow **Privileges** to be set, so that only members of a given User Group will have the privilege to be able to view data relating to the User Group. Users added to a Group inherit the viewing privileges associated with that Group.

1. Select **Admin>User Group Management**. The Create User Group dialogue box appears.



(In this example, two new Users, named User1 and User2 have been created. None of them are members of a Group yet.)

2. Enter a name for the Group into the **Group Name:** field.
3. Select a user in the **Non-Members** list who you want to be member of the named Group.
4. Click >> .
5. Repeat as necessary (or hold down the Ctrl key while selecting users, then click >>).
6. Click Add Members.

Note: You can define a Group to correspond to physical location on a Site. Another approach would be to define and name Groups by sensor type, for example, a Group for all temperature sensors or a Group for all humidity sensors (or a Group for all temperature and humidity sensors).

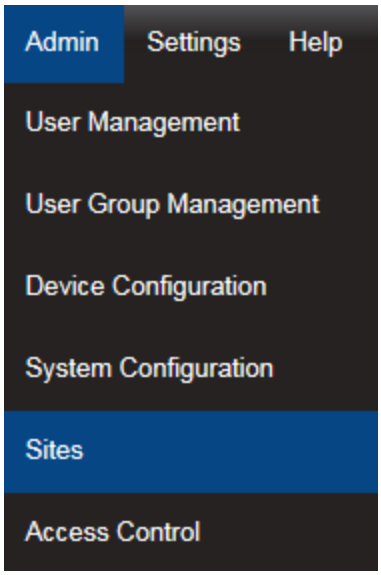
See Also:

User Group Management.

4.1.1.6 Create Sites and Subsites

You will have created a Site and given it a name as part of the 'Creating a New Database' steps in the Installation Procedure. We will refer to this Site as 'YourSite'. YourSite will contain a Zone called Zone 1 (created automatically by the Install Procedure.)

Start by selecting **Admin>Sites** from the main menu bar.



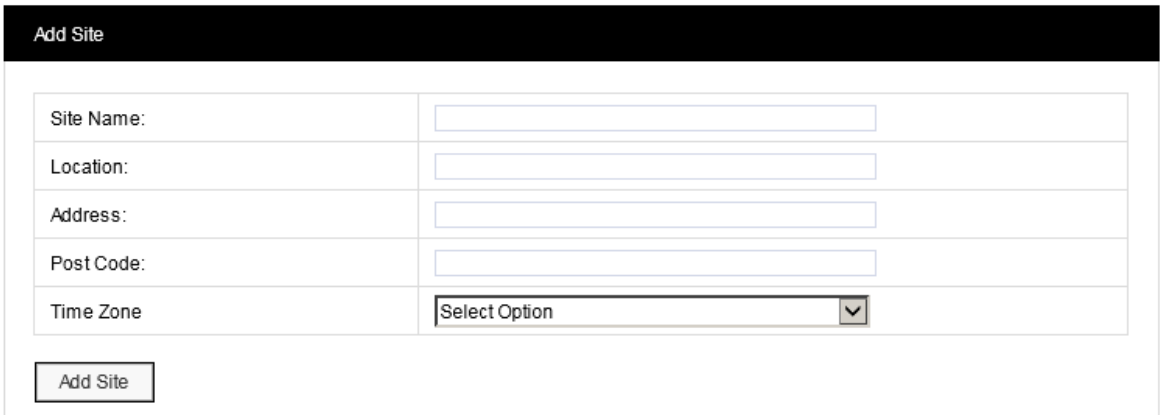
Note: you can only use the options under the **Admin** menu if you are a System Administrator user.

You can:

Create Sites → **Add New Site**

You can create a new Site and give it a name and location information.

1. Select **Admin>Sites** to give the Add Site dialogue box:



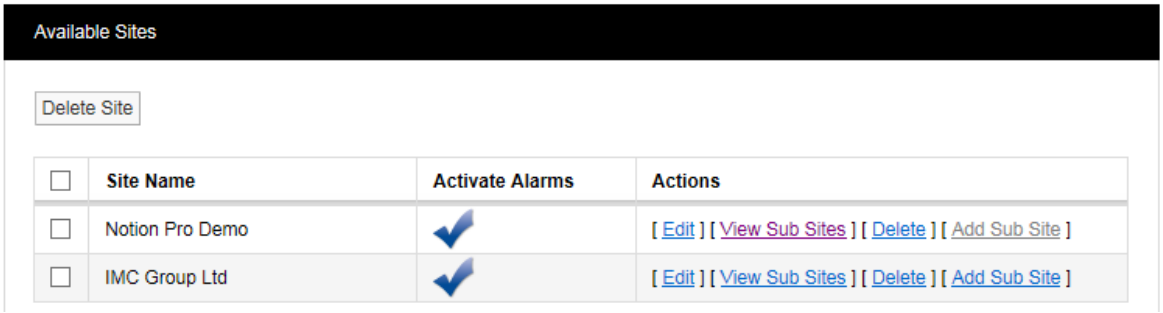
2. Enter the necessary details then select **Add Site**.

It is important to set the Time Zone correctly, otherwise Notion Pro will give false time/ date data for that Site. You must now assign **Site Access** to the User Groups, so that the User Group members can see data on the Site.

Create Subsites → Edit/View Sites

A Sub-Site is a subdivision of a Site. For example, a Site could be a hospital, the Subsites could be the different units in the hospital.

1. To add a sub-site, first select **Admin>Sites**, then select → **Edit/View Sites** to give:



2. Select Add Sub Site in the Actions column to give the **Add Subsite** dialogue box.
3. Enter the Sub Site name and other details as necessary, then select **Add Subsite**.

Note: you can also Edit and Delete Sites from the **Available Sites** dialogue box.

See Also:

Site Management.

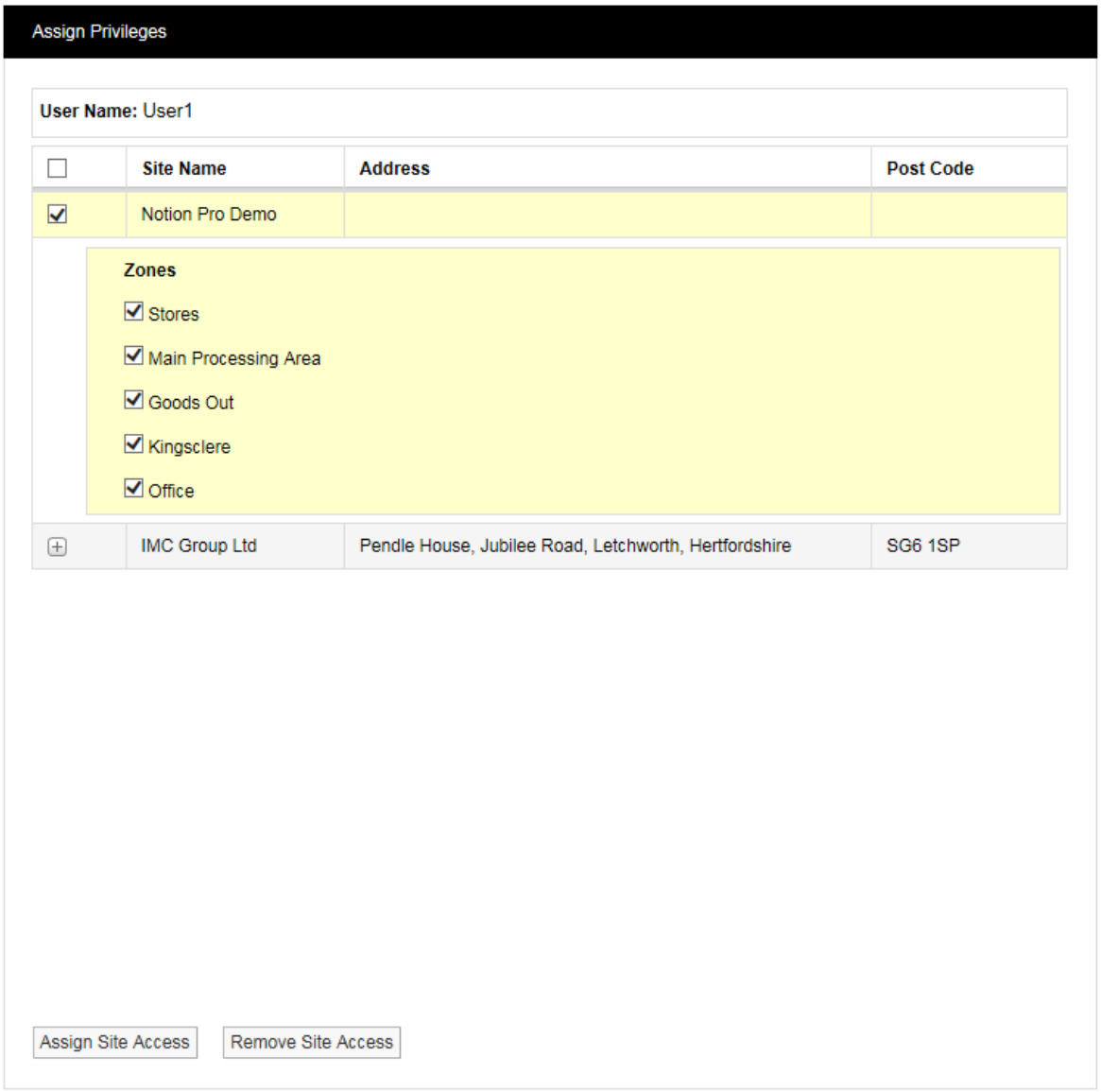
4.1.1.7 Set Access Rights

This topic introduces the procedure for assigning User access rights by assigning Privileges to the **User Groups** of which the Users are members.

You can:

Set Access Rights → Edit/View User Groups

1. Select **Admin>User Group Management**, then select → Edit/View User Groups
2. Select Privileges for the required Group to give the Assign Privileges window:



Zones are commonly used to group different types of Sensor, for example you could have a Zone for temperature sensors, a Zone for humidity sensors, etc. See Adding Zones for how to create Zones.

3. Select the tick boxe(s) next to the required Sites and Zones.
4. Click **Assign Site Access** (you may need to scroll to the bottom of the Assign Privileges window to see this).

See Also:

User Group Management.

4.1.1.8 Create Zones

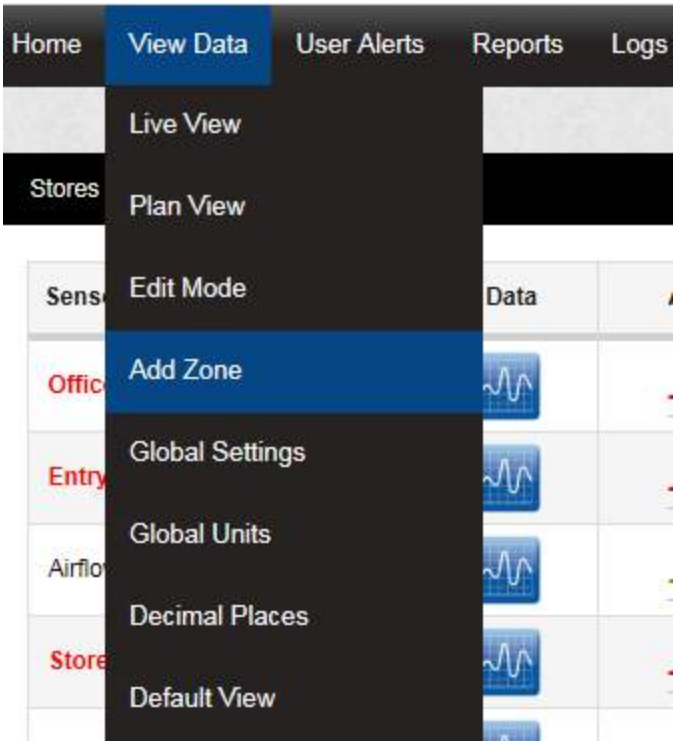
Zones are used to logically group sensors, this could be all sensors of the same type or all the sensors in a particular area. For example a Zone could be called RH&T Sensors which contains all the humidity and temperature sensors, or First Floor Sensors which contains sensors of different types but which are all on the first floor. During installation a default Site is created. This Site contains one empty Zone called Zone1.

Note: If there is only one Site in you Notion Pro installation you will see the **View Data** menu (see below) straight away, otherwise you must first select the Site of interest starting from the Opening Display.

You can:

- **Create a Zone**

1. Select Add Zone from the **View Data** menu, see below:



2. In the Add Zone dialogue box, enter a name for the Zone, then click **Add Zone**.

See Also:

Setting Up the Sensor Model.

4.1.1.9 Define Roles and Permissions

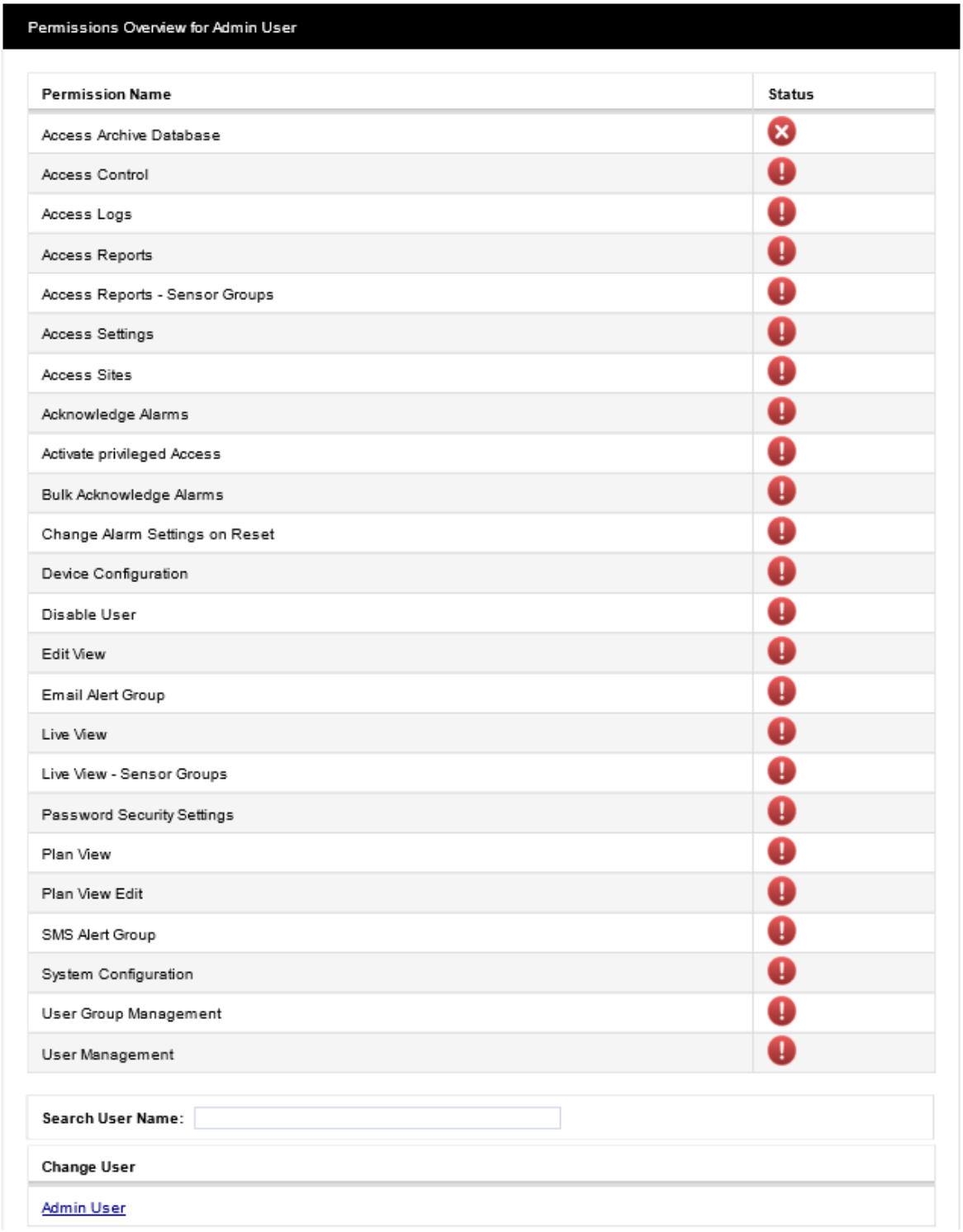
This topic introduces the procedures for assigning Permissions and Roles to users.

You can:

- **Review Permissions** → Permissions Overview

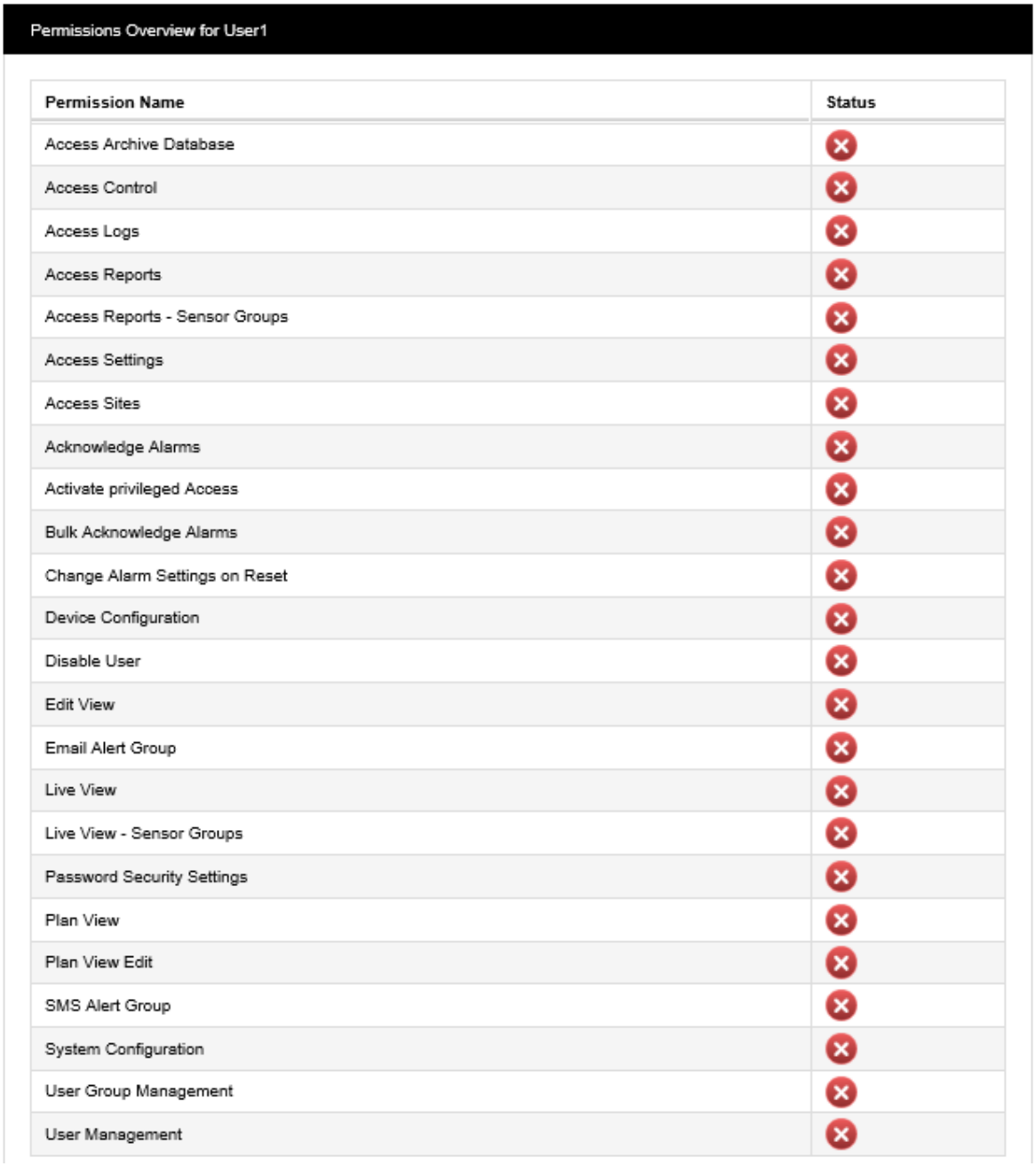
These steps give an example of how the Administrator would review the Permissions of the Site's users.

1. Select **Admin>Access Control** to give:



(shows the default Permissions for a System Administrator).

2. Click on User1 in the list at the bottom of the Permissions table to give:



Permissions Overview for User1

Permission Name	Status
Access Archive Database	
Access Control	
Access Logs	
Access Reports	
Access Reports - Sensor Groups	
Access Settings	
Access Sites	
Acknowledge Alarms	
Activate privileged Access	
Bulk Acknowledge Alarms	
Change Alarm Settings on Reset	
Device Configuration	
Disable User	
Edit View	
Email Alert Group	
Live View	
Live View - Sensor Groups	
Password Security Settings	
Plan View	
Plan View Edit	
SMS Alert Group	
System Configuration	
User Group Management	
User Management	

(table shows typical Permissions for a Standard User).

Manage Roles → Manage Roles

These steps go through an example of creating Roles.

1. Select **Admin>Access Control**, then select .
2. Click on New Role to give the **New Role** dialogue box.

3. Enter **Advanced User** into the **Name:** field.
4. Select the **Ignore** option buttons for:

- Access Control
- Access Logs
- Access Sites
- Activate privileged Access
- Disable User
- User Group Management
- User Management

Select the **Allow** option buttons for all other Permissions.

5. Click **Save**.

The **Select a Role to Manage** dialogue box appears, confirming that the Advanced User Role has been defined.

Assign Roles to Users → Manage Roles

Now you have defined some Roles, you need to assign those Roles to the Users. Most users will probably be 'Standard Users'. You can always 'upgrade' a user temporarily (while, for example, you are on holiday) by assigning a different Role to them or by giving them extra Permissions within their existing Role. It is assumed that you have at least one User, one of who is called User1.

1. Select **Admin>Access Control**, then select → Manage Roles.
2. In the Select a User to Manage dialogue box, click Select in the **Action** column for User1 to give the ManagingUser1 dialogue box.

See Also:

Access Control

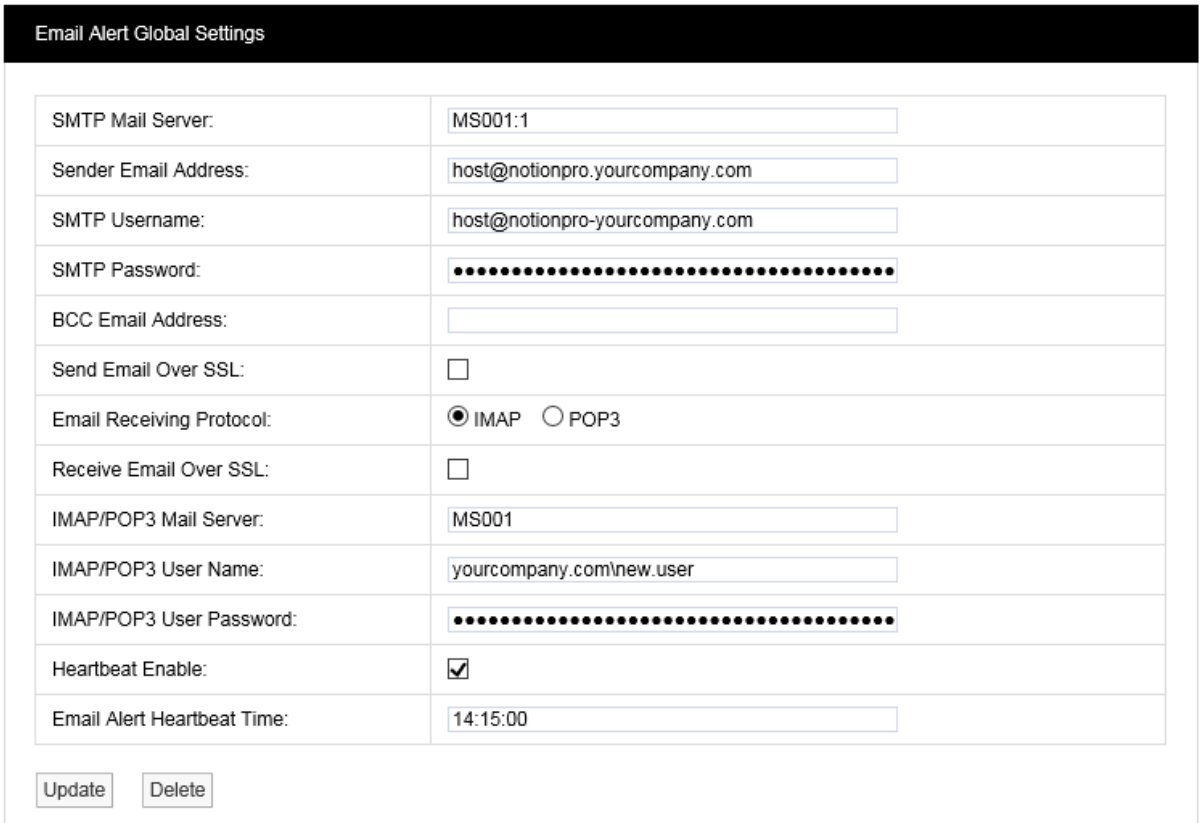
4.1.1.10 Specify email and SMS Alert Settings

This topic introduces Email and SMS **Alerts** and tells you how to specify them. Alerts enable Users to be emailed with the status of Notion Pro. Alerts can also be set to enable Users to be emailed if a sensor goes into Alarm condition (see Create Alert Groups). If your Site has an SMS Module then users can also get text messages to inform them of alarm conditions.

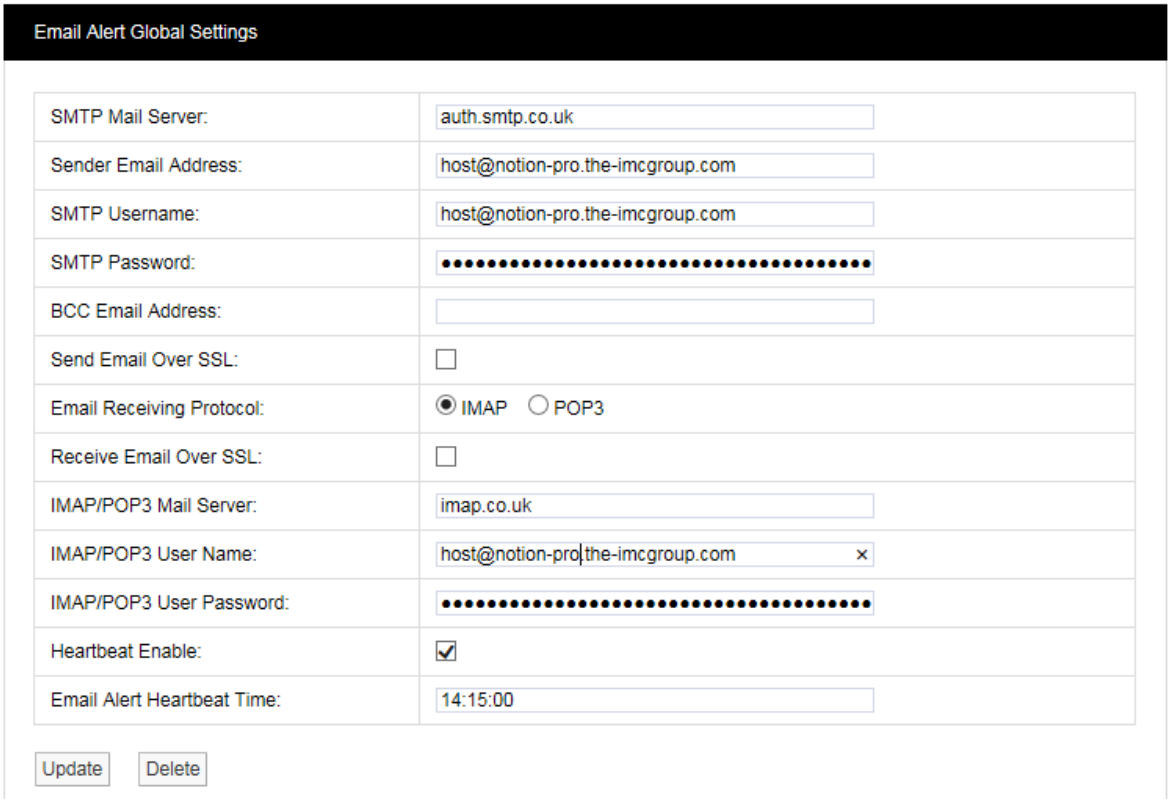
Before you start

You can:

Set Up Email Alert Global Settings



1. Select **Admin>System Configuration**, to give:



Note: the above settings are for illustration purposes only and are not 'real'.

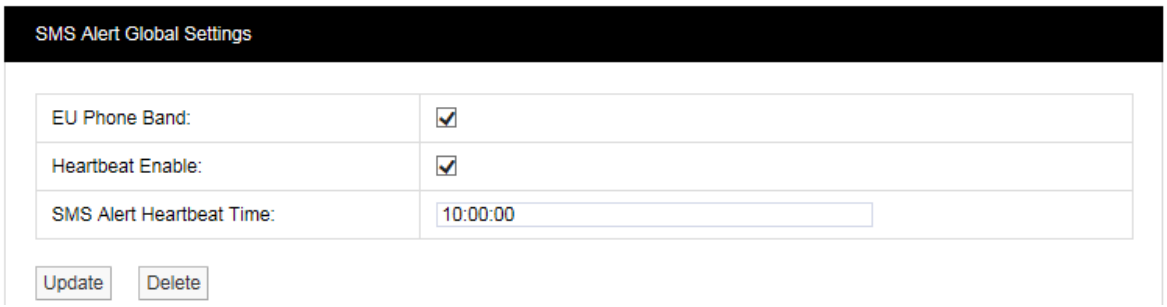
2. Fill in all the fields in the Email Alert Global Settings window, then select **Update**.

See Also:

System Configuration

Set Up SMS Alert Global Settings → SMS Alert Global Settings

1. Select **Admin>System Configuration**, then select → SMS Alert Global Settings to give:



2. When using the SMS Module anywhere using GSM900/1800, select EU Phone Band.
3. It is recommended that Heartbeat Enable is always selected.

4. Set the Heartbeat Time as applicable
5. Click Update.

Set Up the Email Heartbeat Group → Email Heartbeat Group

The Heartbeat Group enables several users to receive the same Heartbeat message.

1. Select **Admin>System Configuration**, then select → Email Heartbeat Group to give:

2. Give the Group a Name.
3. Enter an Email Subject. This is the text to be used as the Subject line in the Heartbeat email.
4. To specify the Users that will receive the Heartbeat message begin by selecting the Contacts tab.
5. If no contacts have been added select Add Contacts.
6. Select the required Site from **Site Name**:
7. Select User names as necessary from the **Source List**: and click > for each selection, or click >> to select all Users.
8. Click **Submit**.

Set Up the SMS Heartbeat Group → SMS Heartbeat Group

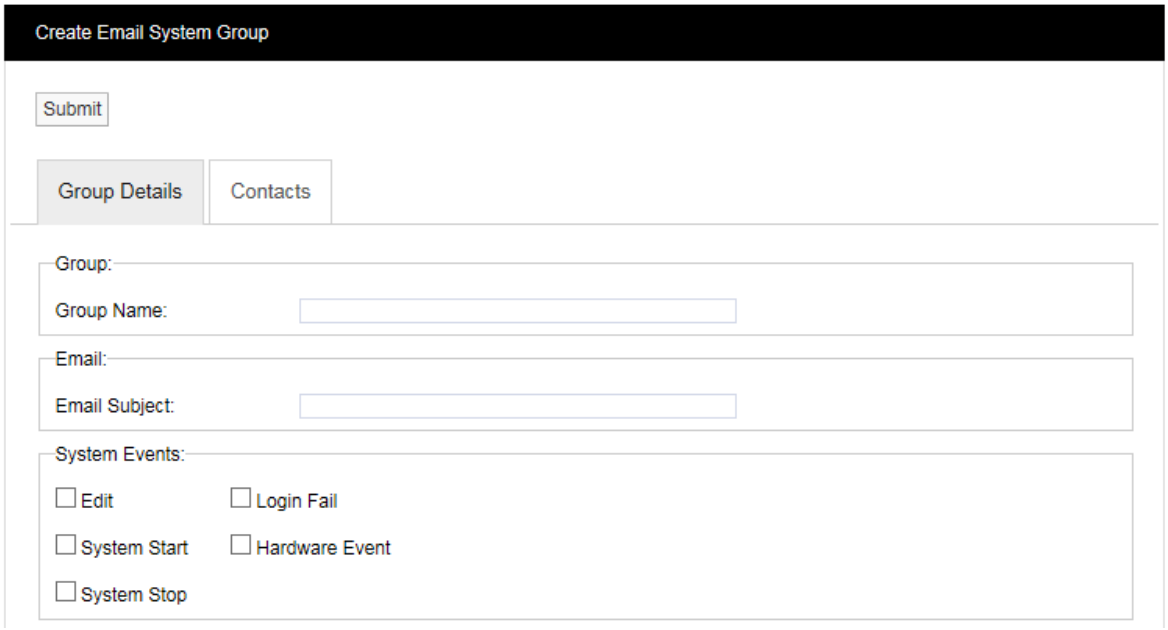
(The procedure is very similar to setting up the Email Heartbeat group. Begin by selecting → SMS Heartbeat Group.)

Note: to see Usernames in the **Source List** for SMS Contacts, you must have entered mobile phone numbers in the User Details window for each User.

Set Up Email and SMS System Groups → Email System Group → SMS System Group

The Email System group enables emails to be sent to notify users of 'System Events' such as when Notion Pro starts or stops.

1. Select **Admin>System Configuration**, then select → Email System Group to give:



2. Select the 'events' that you need users to see from the System Events panel.
3. Click **Submit**.

The procedure is very similar to the procedure for creating the Email Heartbeat Group, see above.

The procedure to create an **SMS System Group** is very similar to the procedure for creating an Email System Group, start by selecting → SMS System Group.

Check email feature → Check Email Feature

This can be used to check that the Contact email settings you have specified work correctly.

1. Select **Admin>System Configuration**, then select → Check Email Feature.
2. Enter an email address into the Check Email Feature window, then select Submit.

See Also:

System Configuration

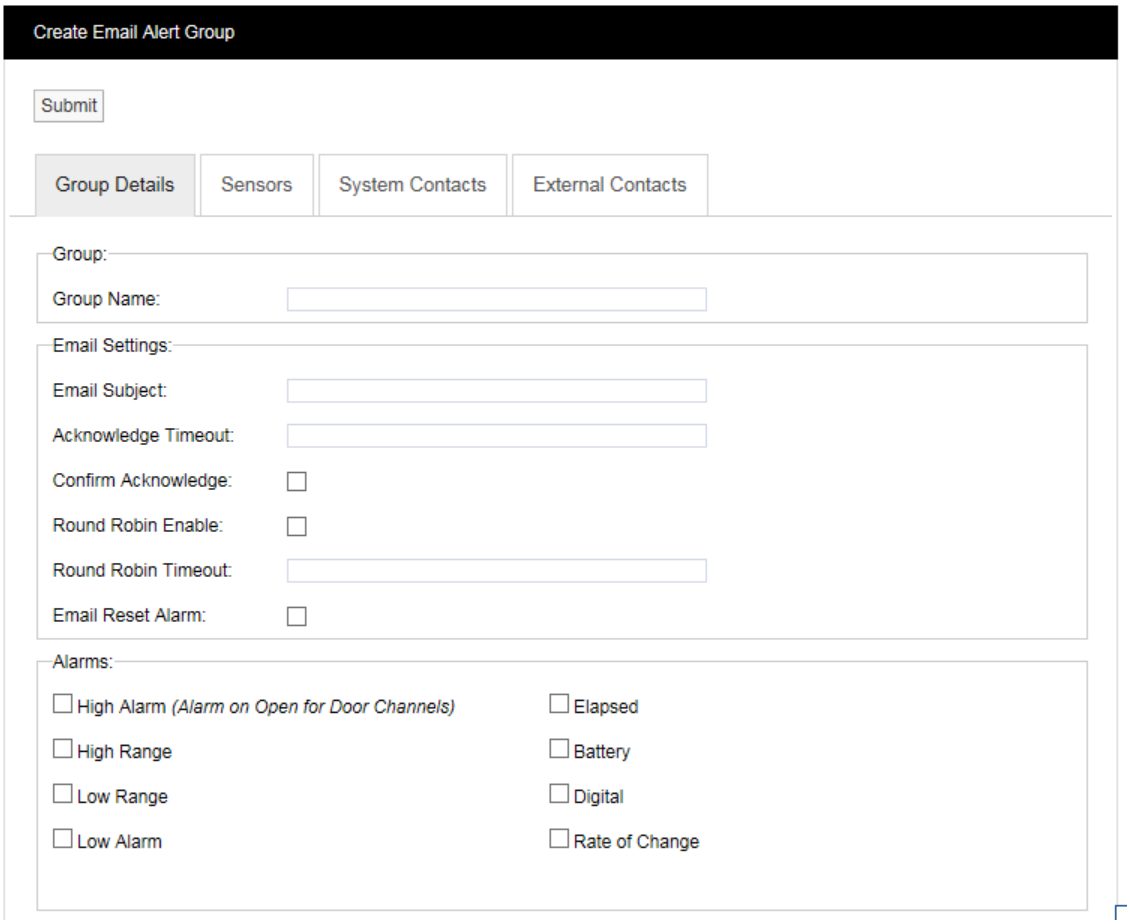
4.1.1.11 Create Alert Groups

User Alerts provide automated Alarm notification delivered via Email or SMS or both to Users who are members of **Alert Groups**. (An SMS Module is required for SMS Alarms).

You can:

- **Create Email Alert Groups** ➜ Create Email Alert Group.

1. From the menu bar in the Live View, select **User Alerts>E-mail Alert Group** to give the Create Email Alert Group dialog box.



2. Complete the Group Details tab as applicable.
3. Select the **Sensors** tab.
4. Add Sensors for which Alerts are to be sent by selecting Add Sensors to give the Add Sensors dialog box.
5. Select the required Zone from the **Zone Name:** pull-down list. The **Source List:** will become populated with the sensors in the selected Zone.
6. Select Sensors as necessary from the Source List: and click > for each selection, or click >> to select all Sensors. Select **Submit** when you have

finished specifying sensors for Alerts.

7. Select the **System Contacts** tab to specify the Users who are to receive the Alerts.
6. Select the required Site from **Site Name**: pull-down list.
7. Select User names as necessary from the **Source List:** and click > for each selection, or click >> to select all Users.
8. Perform the same operations for **External Contacts** if necessary.
9. When you are satisfied with the Email Alert Group settings click **Submit**.

Create SMS Alert Groups → Create SMS Alert Group

This procedure is very similar to that used to create Email Alert Groups - see above. You must also define SMS Alert Global Settings.

See also:

User Alerts

4.1.2 Set Up Sensors

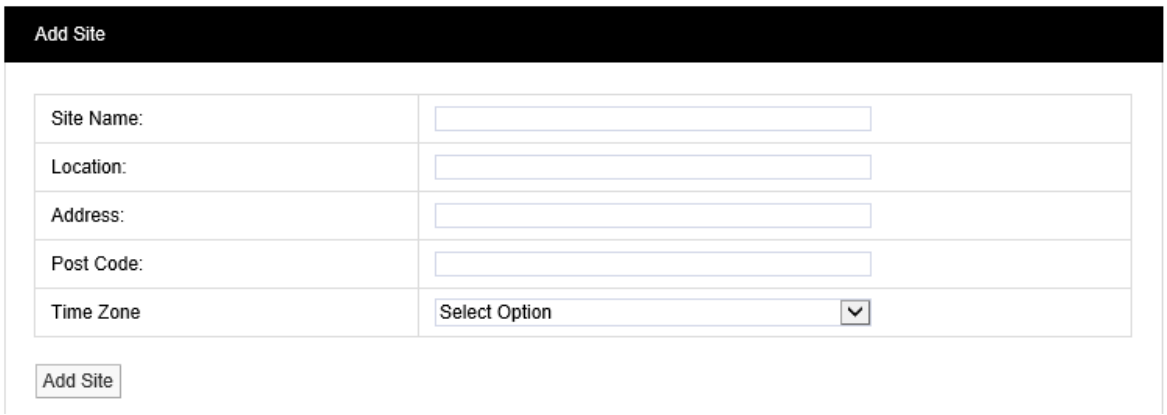
4.1.2.1 Create, Edit and View Sites

Sites are the main access points to the system data, each Site represents a single physical Site where receiving devices such as Network Receivers or SMS Modules are located along with Sensors. Sites can also have Sub Sites associated with the main top level Site.

You can:

Create Sites → Add New Site

1. Select **Admin>Sites**, then select → Add New Site from the side menu to give the Add Site dialogue box:



2. Enter Site Name, Location and Address information as appropriate.
3. Select the time zone of the Site from the **Time Zone** pull-down menu. (The value displayed by default is the time zone of the host PC. **It is important to set this correctly**, as dates in the database are stored using GMT.)

Edit Sites → Edit/View Sites

1. Select **Admin>Sites**, then select → Edit/View Sites from the side menu to give the Available Sites dialogue box.
2. Select the tick box next to the Site you wish to edit.
3. Select Edit in the highlighted line to give the Edit Site dialogue box. This is very similar to the Add Site dialogue box, see above.
4. Carry out the required edits, then select **Update** to save your changes.

View Sites → Edit/View Sites

1. Select **Admin>Sites**, then select → Edit/View Sites from the side menu to give the Available Sites dialogue box.

The Sites that have been created are listed here. You can carry out Edit, Delete or Add Sub Site operations from here on the selected Site. If Sub-Sites have been added to the selected Site then you can view them by selecting View Sub Sites, otherwise View Sub Sites will not be click-able.

Add Sub-Sites → Edit/View Sites

1. Select **Admin>Sites,** then select → Edit/View Sites from the side menu to give the Available Sites dialogue box.
2. Select the tick box next to the Site you wish to add a Sub Site to.
3. Select Add Sub Site to give the Add Sub Site dialogue box. This is very similar to the Add Site dialogue box, see above.
4. Enter Sub Site Name, Location and Address information as appropriate.
5. Select **Add Sub Site** to create the Sub Site.

View Sub-Sites → Edit/View Sites

1. Select **Admin>Sites**, then select → Edit/View Sites from the side menu to give the Available Sites dialogue box.
2. Select View Sub Sites for the Site whose Sub Sites you wish to view. (If the Site has no Sub Sites, View Sub Sites will not be click-able.)

Delete Sites → Edit/View Sites

1. Select **Admin>Sites**, then select → Edit/View Sites from the side menu to give the Available Sites dialogue box.
2. Select Delete against the Site that you wish to delete.
3. A confirmation box is displayed for you to confirm that you wish to delete the Site. Select YES if you are sure you wish to delete the Site, otherwise select NO.

Delete Sub Sites → Edit/View Sites

1. Select **Admin>Sites**, then select → Edit/View Sites from the side menu to give the Available Sites dialogue box.
2. Select View Sub Sites for the Site which contains the Sub Sites you wish to delete. (If the Site has no Sub Sites, View Sub Sites will not be click-able.)
3. Select Delete against the Sub Site that you wish to delete.
4. A confirmation box is displayed for you to confirm that you wish to delete the Site. Select YES if you are sure you wish to delete the Sub Site, otherwise select NO.

See also:

Site Management

4.1.2.2 Configure Devices

You need to set up and configure the Notion Pro Hardware Devices to get live sensor data from your Site. For full details of the hardware, see the IceSpy Notion Pro System Manual, IMC doc. no. IM5521.

This section runs through what you need to do to:

- set the Database Logger service for the Network Receiver device
- set the default Network Receiver Service Port details
- add a Network Receiver device to your Notion Pro installation
- create Device Groups

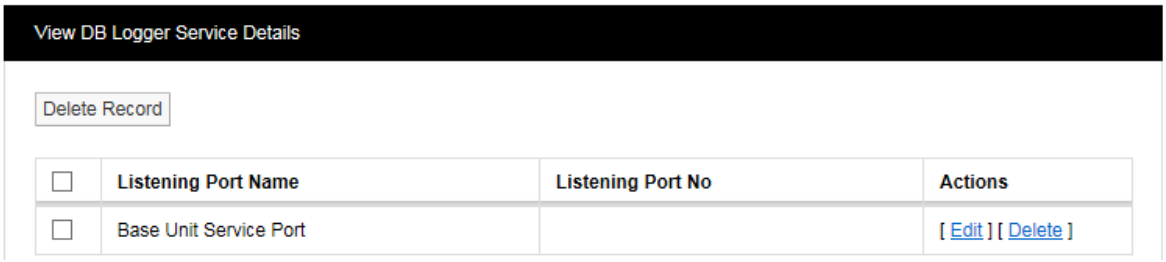
You can:

Change the Database Logger Service → Edit/View DB Service

The DB Logger Service is the Service that passes data to the Notion Pro SQL database.

The Listening Port Name and Number are set automatically during installation, but may be changed to suit your local IT installation if required.

Select **Admin>Device Configuration**, then select ➜ Edit/View DB Service from the side menu to give the View DB Service Logger Service Details dialog box, for example:



1. To change the Logger Service details click Edit to give the Database Logger Service Details dialog box. Make changes as required, then click **Update Details**.
2. To delete the Logger Service details click Delete for the relevant Service Port entry. Alternatively, select the tick box for the relevant entry, then click **Delete Record**. In both cases a confirmation box is displayed for you to confirm that you wish to delete the Service. Select YES if you are sure you wish to delete the Service, otherwise select NO.

Add a Device to Notion Pro ➜ Add Device

1. Select **Admin>Device Configuration**, then select ➜ Add Device from the side menu to give the Control Device Details dialog box.
2. Enter the device details as required. In particular, you must select the Device Type and Installation Site from the appropriate pull-down menus.
3. When you have entered all the necessary details, click **Add Device**.

Create a Device Group ➜ Create Device Group

You must have a Device Group, even if there is only one Receiver Device at your Site.

1. Select **Admin>Device Configuration**, then select ➜ Create Device Group from the side menu to give the Create Device Group dialog box.
2. Give the Group a name, then select the Device Type from the pull-down menu. The available devices of that type will appear in the **Non-Members** list.
3. Select a device by highlighting it, then click >> to move it across to the **Members** column.
4. Click **Add Members** to create the Device Group.

See also:

Device Configuration

4.1.2.3 Add Sensors

We have already gone through the steps to create Zones.

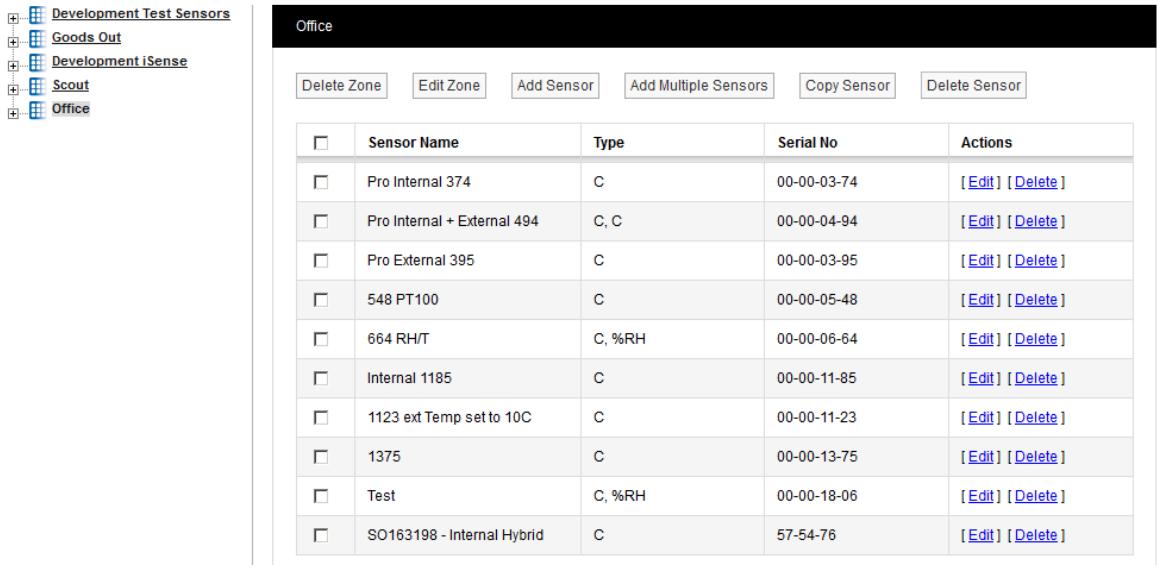
This section goes through the steps to add Sensors to Zones. At this point it would be advisable to record, in a table, attributes of the sensors you intend to add to Notion Pro.

Note: the examples in this section are for Temperature sensors or Humidity sensors (or for sensors which measure both Temperature and Humidity). Notion Pro supports other sensor types, the displays for those sensors will be slightly different to those shown here.

You can:

- **Add Sensors**

1. From the System Overview select View Data for the Site which contains the Zones that you with to add sensors to. The Live View display has the name of the currently selected Zone at its top left corner.
2. Select **View Data>Edit Mode** from the menu bar to give a display similar to that shown below:



3. Select **Add Sensor to Zone** to give the Add Sensor dialog box.
4. Using the table referred to earlier, enter details of the sensor you wish to add. Sensor Type and Device Group are selectable from pull-down lists. Serial number is on the back of the transmitter.
5. When you have entered all the details you require, select **Add Sensor**.
6. Repeat the above steps for all the sensors you intend to add to the current Zone.

Multiple sensors of same sensor type can also be added by selecting **Add Multiple Sensors**, this feature is useful for adding sensors in a batch.

You can also sort sensor records by clicking **Sensor Name** heading.

Configure Sensors

You may need to change the sensor properties from the pre-set default values. These properties include General Settings, Calibration, Alarms and Filters. See Adding Sensors for full details of sensor configuration.

Accessing Sensor Properties

1. Continuing with the example above, select the ⊞ sign next to Stores, then select the ⊞ sign next to Office 1 10 01, finally select the ⊞ sign next to Properties.
2. Select General to give the General Information dialog box.
3. Set properties as required.

Calibration Properties

1. Continuing with the example above, select the ⊞ sign next to Calibration.
2. Select Next Due to give the Next Calibration Due Date dialogue box.
3. Select a new date from the tool.
4. Select **Update** .
5. Repeat as necessary for all sensors in all the Zones on your Site.

Temperature Calibration Properties (for sensors with a temperature channel)

1. Continuing with the example above, select the ⊞ sign next to Temperature to give the Temperature dialog box.
2. If you need to change any of the default values, select the field next to the required setting, enter the new value and select **Update** .
3. If you wish to return to the default settings at any time, select **Set Default** .
4. Repeat as necessary for all temperature sensors in all the Zones on your Site.

Door Calibration Properties (for sensors with a door monitoring and alarm function channel)

1. Continuing with the example above, select the ⊞ sign next to Door to give the Door dialog box.
2. If you need to change any of the default values, select the field next to the required setting, enter the new value and select **Update** .
3. If you wish to return to the default settings at any time, select **Set Default** .

4. Repeat as necessary for all door monitoring and alarm function sensors in all the Zones on your Site.

Current Calibration Properties (for current clamp sensors)

1. Continuing with the example above, select the ⊞ sign next to Current to give the Current dialog box.
2. If you need to change any of the default values, select the field next to the required setting, enter the new value and select **Update** .
3. If you wish to return to the default settings at any time, select **Set Default** .
4. Repeat as necessary for all current clamp sensors in all the Zones on your Site.

Humidity Calibration Properties (for sensors with a Humidity channel)

1. Continuing with the example above, select the ⊞ sign next to Humidity to give the Humidity dialog box.
2. If you need to change any of the default values, select the field next to the required setting, enter the new value and select **Update** .
3. If you wish to return to the default settings at any time, select **Set Default** .
4. Repeat as necessary for all humidity sensors in all the Zones on your Site.

Set Sensor Alarm Properties

You can set basic alarm properties on a sensor as follows:

- whether the sensor is enabled to give alarms are not
- the **Levels** (for example, of temperature and/or humidity) above or below which an alarm would be triggered
- the delay period (**Alarm Advance**) before an alarm would be raised
- the rate of change of a quantity which would raise an alarm (for example, a rapidly increasing temperature might indicate a fire)
- the days of the week on which your sensor alarms are enabled (you may want to turn alarms off at weekends if there is no activity on the Site).
- **Filter** alarms to help reduce interference
- set **Notes** against an alarm.

Setting Sensor Alarm Levels and other Properties

1. Click on the ⊞ sign next to Alarms under the sensor for which you wish to set alarm properties. Levels is highlighted by default and gives a dialog box dependent on the sensor type.
2. If you wish to change any of the default values, select the field next to the required

setting, enter the new value and select **Update** .

3. Repeat as necessary for all sensors (or all types) in all the Zones on your Site.

Other Alarm Settings

1. Select Advanced to give the Alarm Advance dialog box.
2. Adjust the values and/or set the Yes/No options as necessary, then select **Update**.
3. If you wish to set any notes against an alarm setting, select Notes to give the Alarm Notes dialog box.
4. Enter the required note in the Notes Description field, then click **Add**.

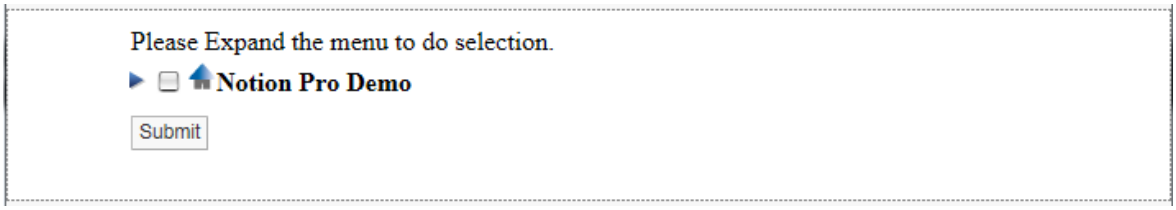
Filters

1. Select Filters to bring up a dialog box which allows you specify filtered limits on data values.
2. Enter the required minimum and maximum values, then click **Update**.

Define Global Settings

Global Settings allow alarm disable times and days to be set across a range of Sensors.

1. Select **Global Setting** on the Alarm Levels or Alarm Advance dialog box to give a (Site-dependent) window, for example:



2. Click ▶ to show the Zones within the Site.
3. Select the Zones (by clicking in the box next to the Zone name) that you wish to apply Global Settings to, then click **Submit**.

See also:

Adding Sensors

Configuring Sensors

Setting Alarms

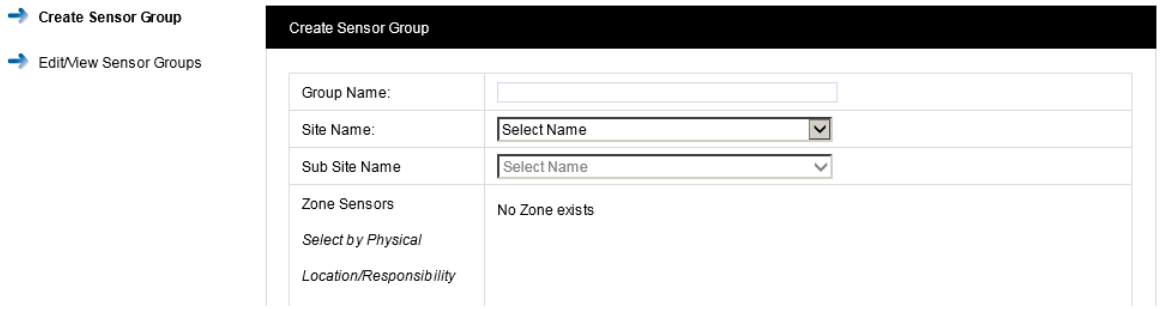
4.1.2.4 Create and Edit Sensor Groups

The **Sensor Groups** feature is extremely useful for grouping sensors of the same type that are measuring the same parameters.

You can:

Create Sensor Groups → Create Sensor Group

1. Select **Settings>Customise Sensor Groups** from the main menu bar to give the Create Sensor Group dialog box, see below



2. Enter a name for the Group, for example 'Door Sensors'.
3. Select the owning Site for the Sensor Group from the pull-down list. If the Site has Sub Sites these will now appear. Select the Sub Site if required.
4. After selecting the Site (or Sub Site) the available Zones on that Site become visible. Select the + symbol next to the Zone name that contains the Sensors that you wish to select.
5. When you are happy with you selections click on **Create Group**. The Group you have created appears in the **View Sensor Groups** dialog box.

Edit Sensor Groups → Edit/View Sensor Groups

1. Select **Settings>Customise Sensor Groups**, then select → Edit/View Sensor Groups on the side menu to give the View Sensor Groups dialog box.
2. Select Edit against the Group you wish to edit.
3. From here you can delete Sensor Groups (**Delete Members**, or Delete for the selected Group), add a Sensor Group (**Add Members**) or edit a Sensor Group (Edit again from under the **Actions** column to add or remove sensors).

See Also:

Setting Up Sensor Groups

4.2 (All Users)

All Users can:

- view live data
- check alarm statuses
- look at system logs

- produce reports.

The options described here are only a summary of what's available. For full information see:

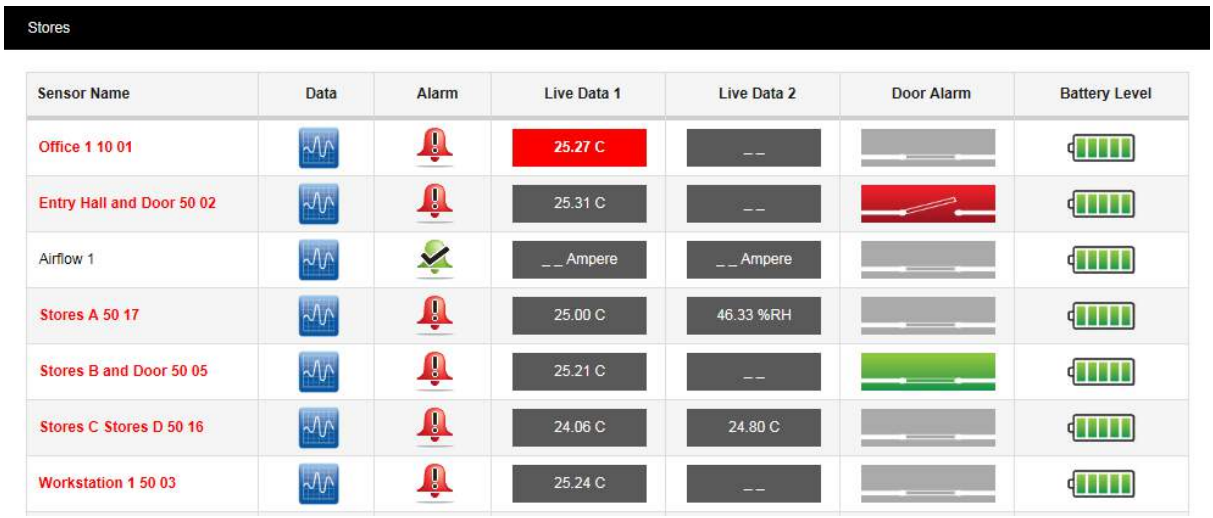
Viewing Data

Setting Up and Running Reports

4.2.1 Get a Quick View of …

4.2.1.1 sensor readings

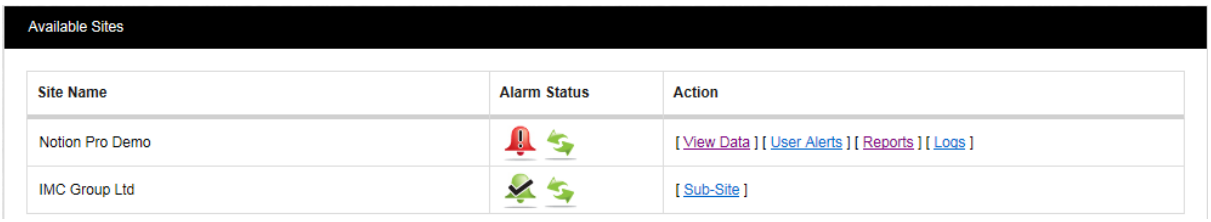
When you log in, if your System Administrator has only given you viewing rights for one Site, you will see something like:



In this example (called the **Live View**) we see that:

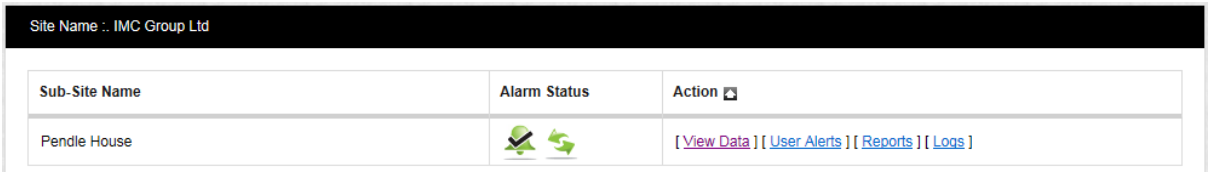
- we are looking at the sensors in the 'Stores' Zone (see top left corner)
- all the sensors except one are showing an alarm
- all the sensors are showing temperature readings, except 'Stores A 50 17' which is also showing a humidity reading, and 'Airflow 1' which is a current sensor
- somebody has left the door open in the Entry Hall
- the door is closed in Stores
- all the sensor batteries are OK.

If you have you have more than one Site in your installation you will have to select the Site of interest first. In this case, when you log in you might see something like:



To see the sensor data in the Notion Pro Demo Site, just click View Data.

The IMC Group Ltd Site has a Sub-Site, click on Sub-Site to see it:



Click View Data as before to see the sensor data in the Pendle House Sub-Site.

See also:

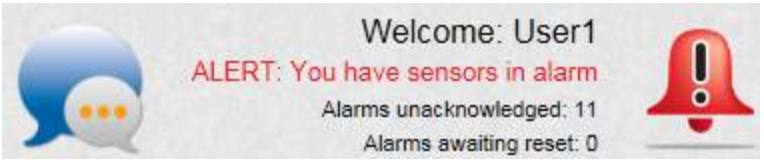
The Opening Display

The System Overview Page

Choosing the Site to View

4.2.1.2 alarm statuses

When you log in, at the top right corner you will see something like:

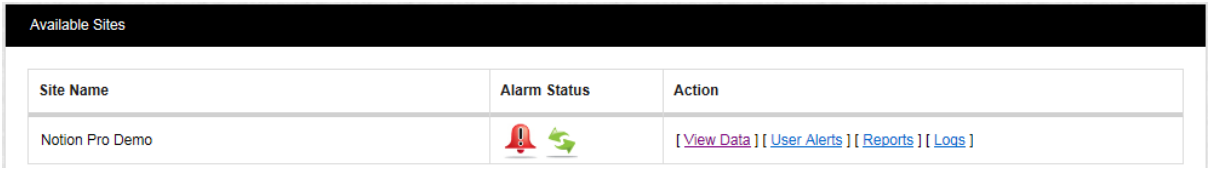


In this example we see that:

- We have sensors in alarm.
- 11 alarms are unacknowledged, 0 alarms are awaiting reset.

- The **System Message** bubble on the left is showing amber dots, which means there no new unread system messages. To see the System Messages, click on the bubble to show:

Clicking on the red alarm bell icon gives:



The **Communication Status** icon ( ) (green arrows in this case) shows that communications to all control devices (such as Network Receivers) are working normally.

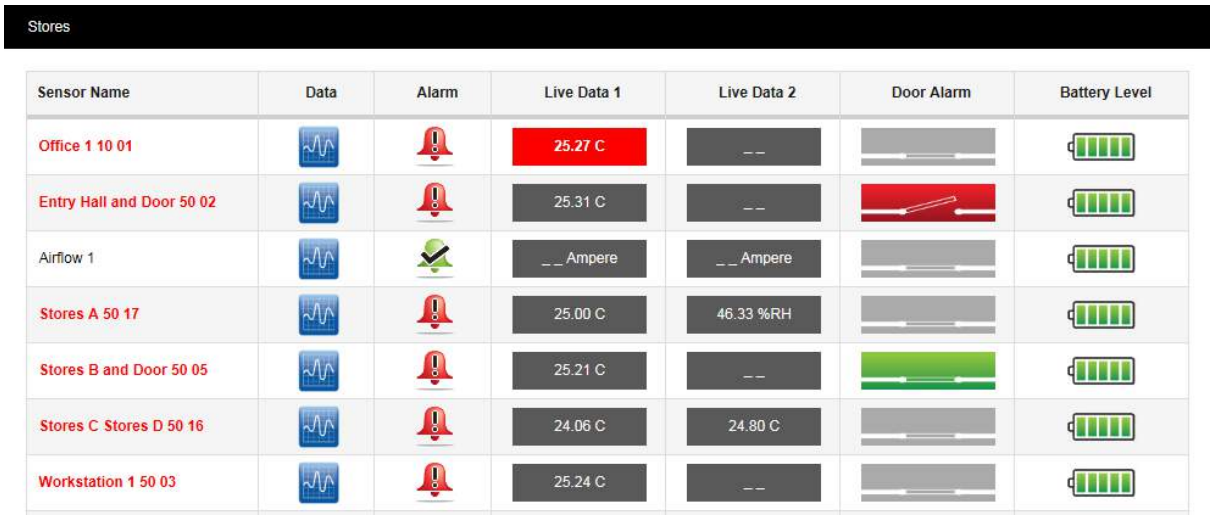
Clicking on  from this view goes back to The Opening Display

See also:

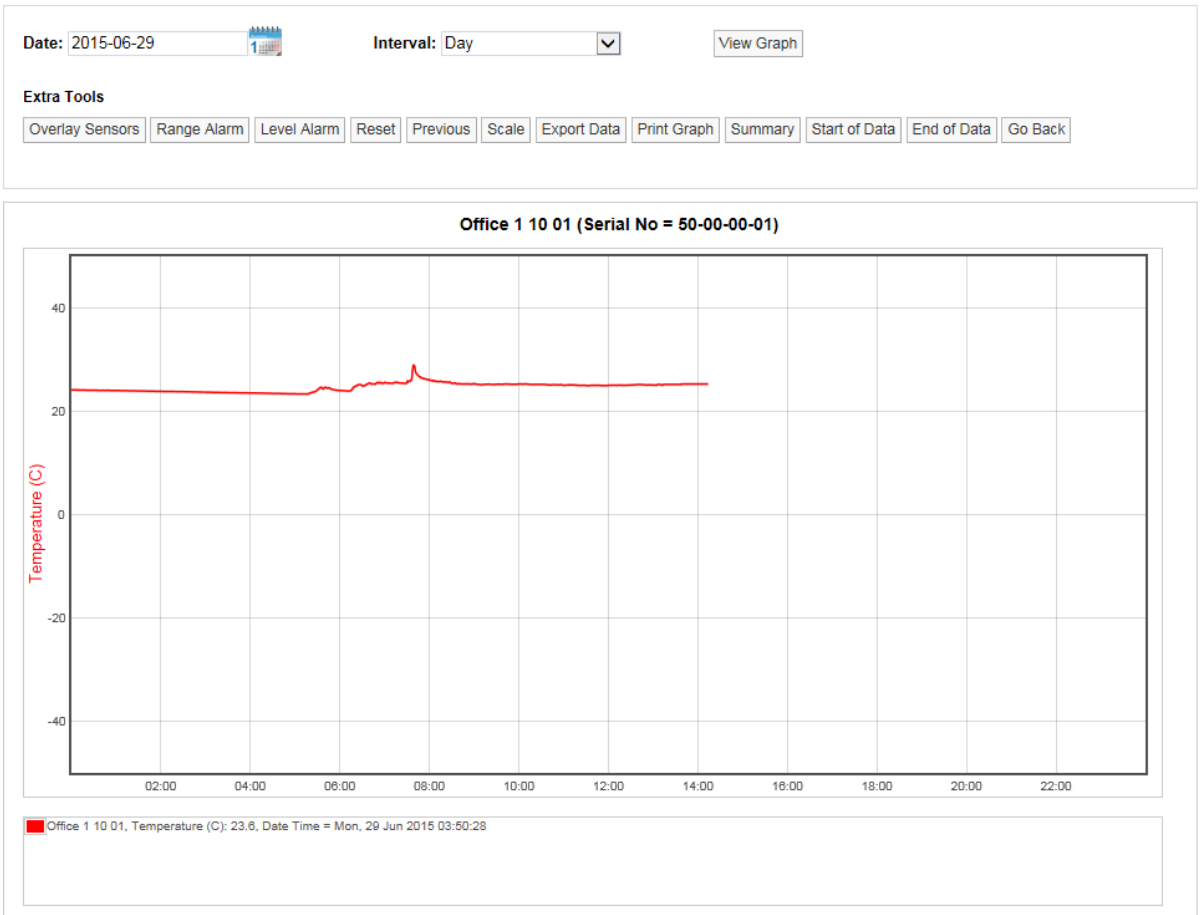
View System Alarm Status Overview

4.2.1.3 a sensor reading in graphical form

Starting from the **Live View**,



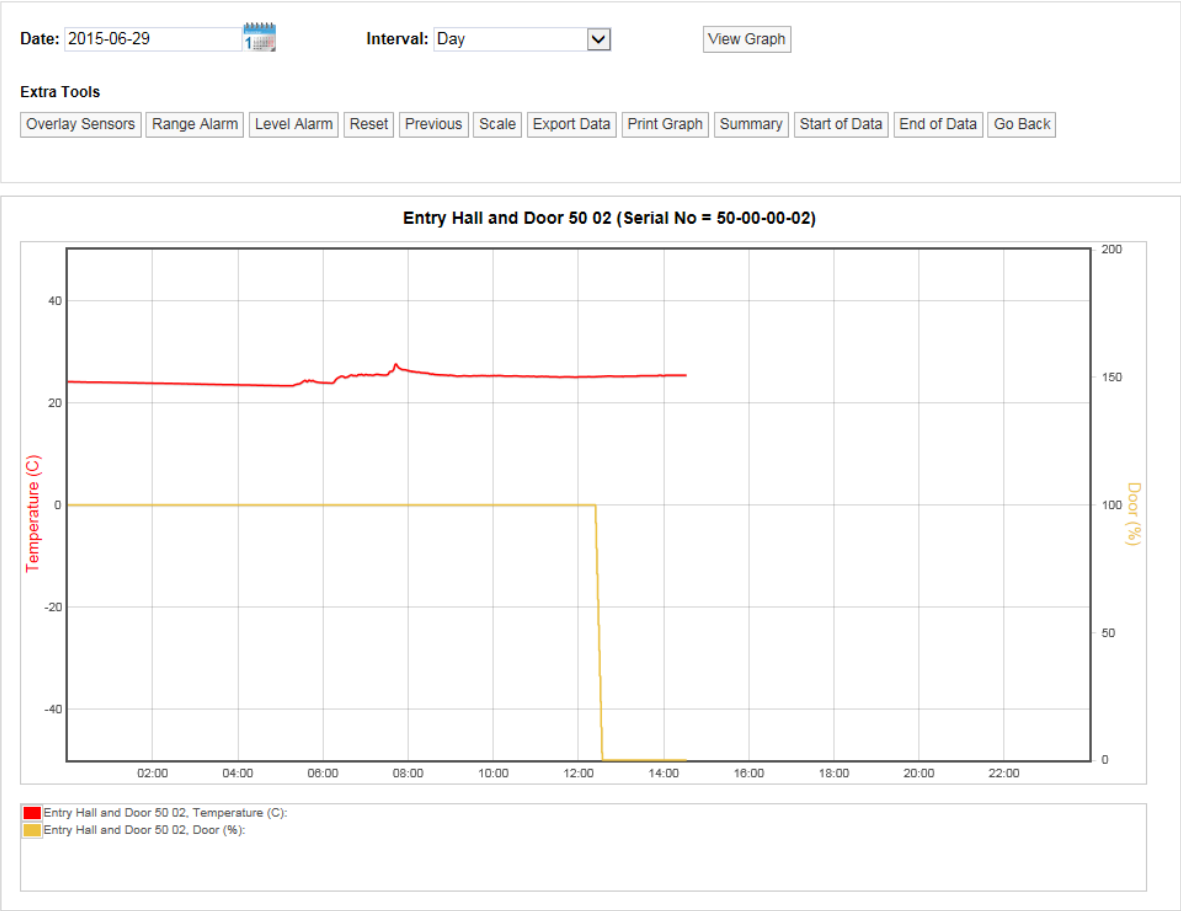
click on  for the sensor of interest to give, for example:



Here, the graph shows live temperature data, starting at 00:00 for the **Office 1 10 01**

sensor.

An example of a graph for a two-channel sensor might be as shown below:



Here we see temperature data in red, door data in yellow. The door had been open (and so in an alarm state) until about 12:30, then somebody closed the door.

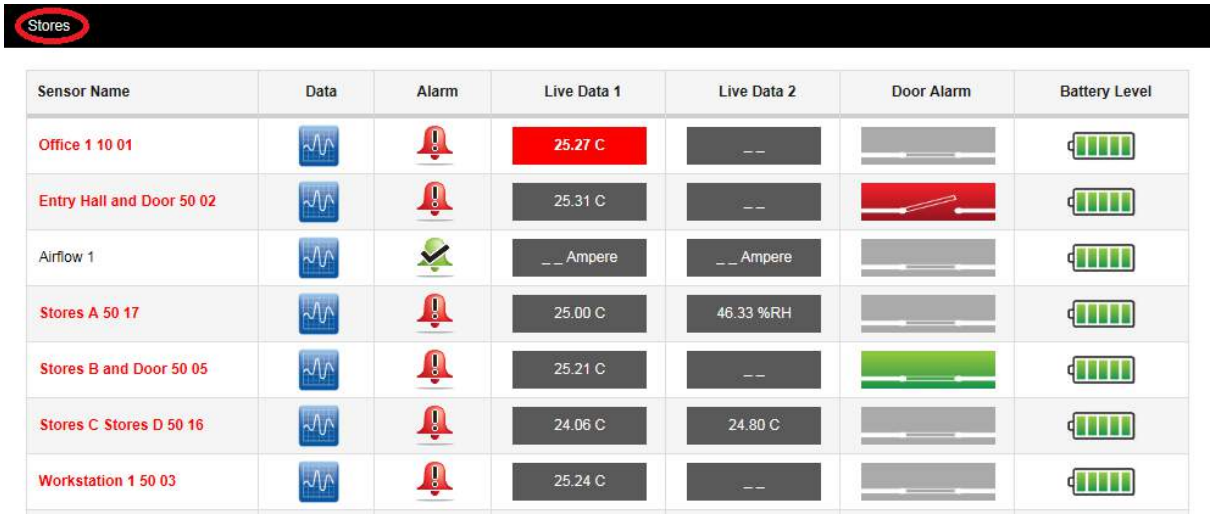
See also:

Viewing Live Data

4.2.2 Look at Sensor readings from . . .

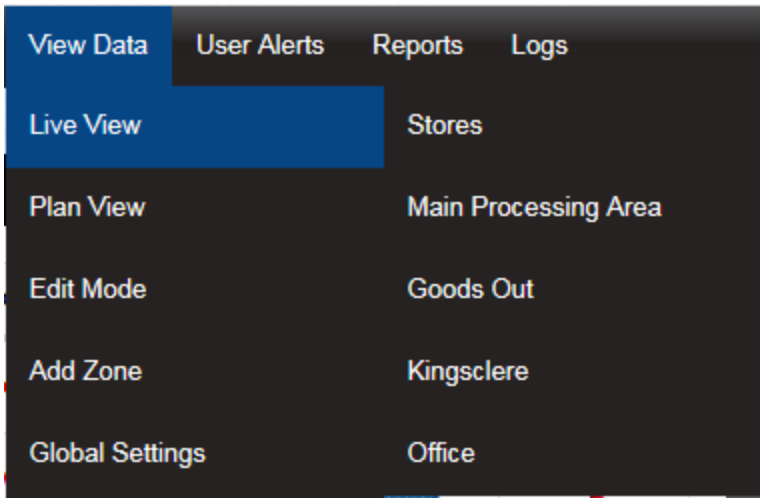
4.2.2.1 another Zone

The name of the Zone for the current data display is shown at the top-left corner of the Live View for the Zone ('Stores' below):

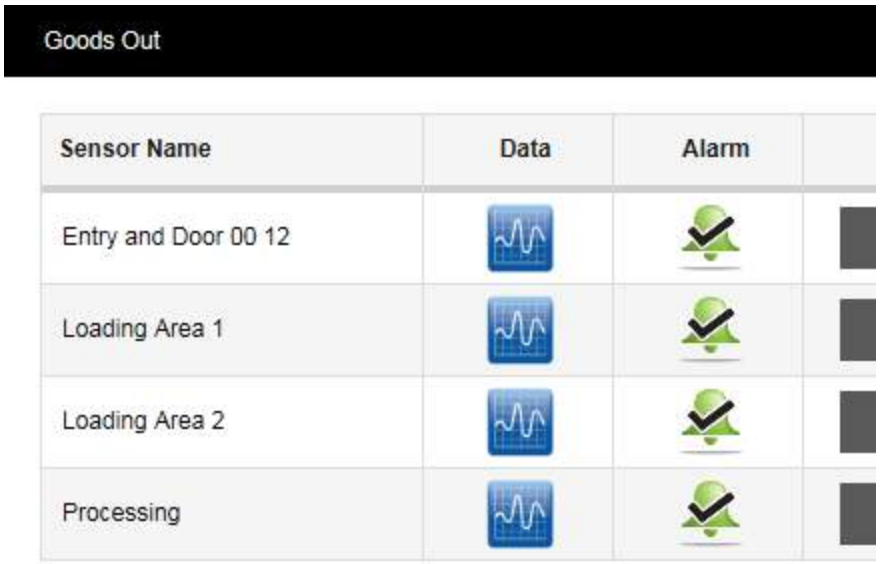


To switch the Live View display to show another Zone:

1. Select **View Data>Live View**:



2. Move the mouse pointer down the Zone list until you have highlighted the Zone of interest.
3. For example, moving the pointer down to 'Goods Out' might change the display to show:



See also:

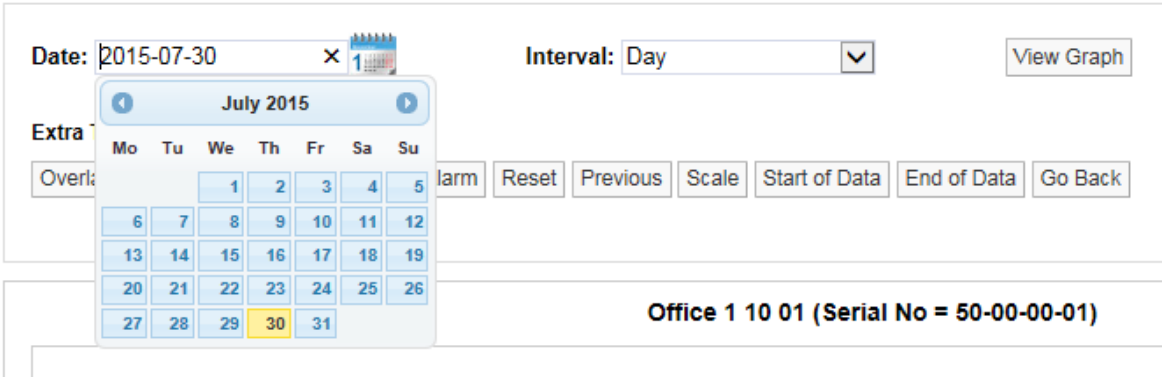
Viewing Data

4.2.2.2 another Day

The graphical display shows data from, by default, the current day.

To show data from a day in the past:

1. Click on the calendar icon on the controls above the graphical display:



The current day is highlighted in yellow.

2. Click on the day in the past for which you would like to see the sensor data.
3. The graphical display changes to show data from the selected day.
4. To display data from a month (or a year) in the past, click the arrow at the top of the calendar until you get to the month of interest, then click on the day of interest.

Obviously you can only get historical data up to the point when the transmitter was actually installed.

See also:

Operations from the Live View

4.2.2.3 another time interval

By default, sensor data is displayed for the current 24-hour period, but you can change the display to show data from a wider time interval.

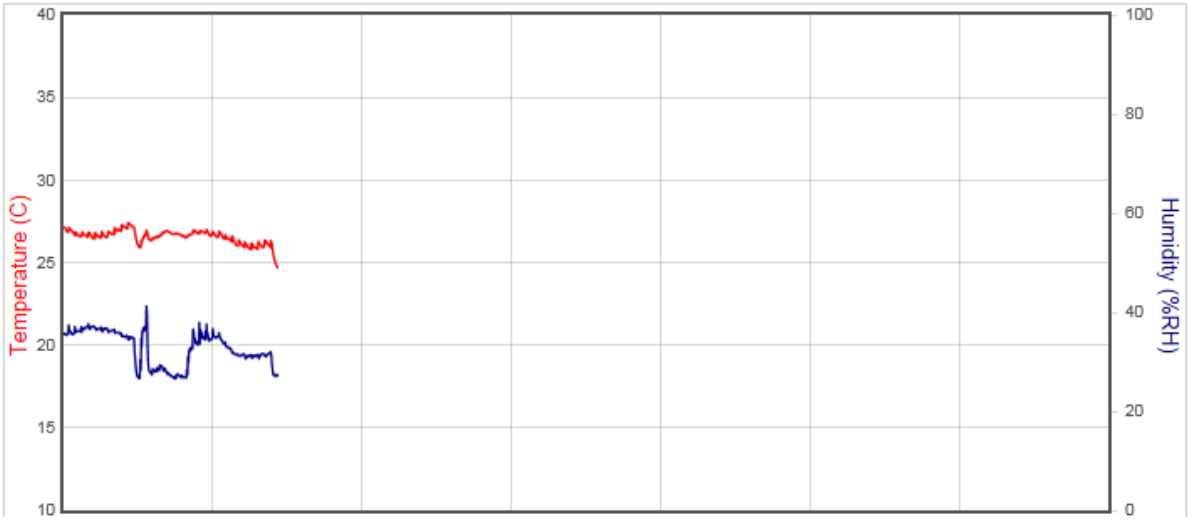
To show data over a different time span:

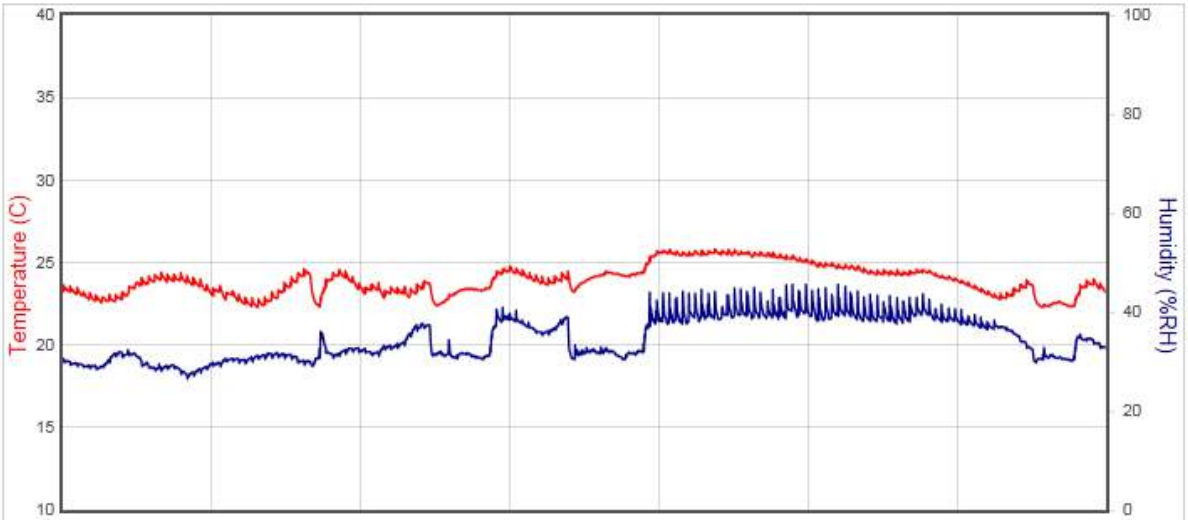
1. Select a different time interval from the **Interval** pull-down menu on the controls above the graphical display:

(if you wish you may also select a different starting date at the same time).

2. Click View Graph.

For example, the two displays below show data for a sensor over a one-week period, followed by a display of data from the same sensor over a one-month period:





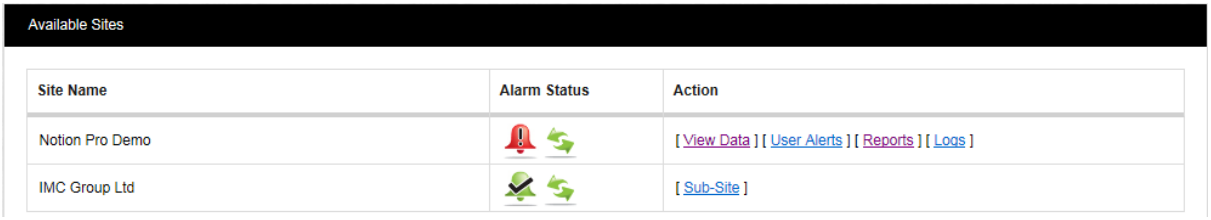
See also:

Operations from the Live View

4.2.3 View and Acknowledge Alarms

4.2.3.1 View System Alarm Status Overview

1. Click Home.
2. View the Alarm and Communication Status of the Sites in your installation in the Available Sites window.



See also:

Alarm Management

Alarm Statuses

Alarm Status

4.2.3.2 View System Messages

1. From anywhere in Notion Pro, look at the **System Message Alert** icon at the top of the screen.

2. To view **System Messages**, click on the icon.

See also:

System Status Overview

Alarm Statuses

4.2.3.3 Acknowledge Alarms

If the  symbol is displayed on the Live View page for a given Site, the associated transmitter has gone into an Alarm state (for example, a temperature threshold has been exceeded) and the alarm has not been acknowledged.

To acknowledge an Alarm:

1. Make sure you are in the Live View page for the Zone which contains the sensor of interest. See another Zone.
2. Click on the  symbol for the sensor of interest.
3. On the resulting Acknowledging Alarm for page, enter a suitable message into the **User Actions** box, then click **Acknowledge**.

The  symbol changes to  to indicate that the alarm has been acknowledged.

4. To reset the alarm, click on the  symbol.

See Also:

Acknowledging Alarms

4.3 Create and View Reports

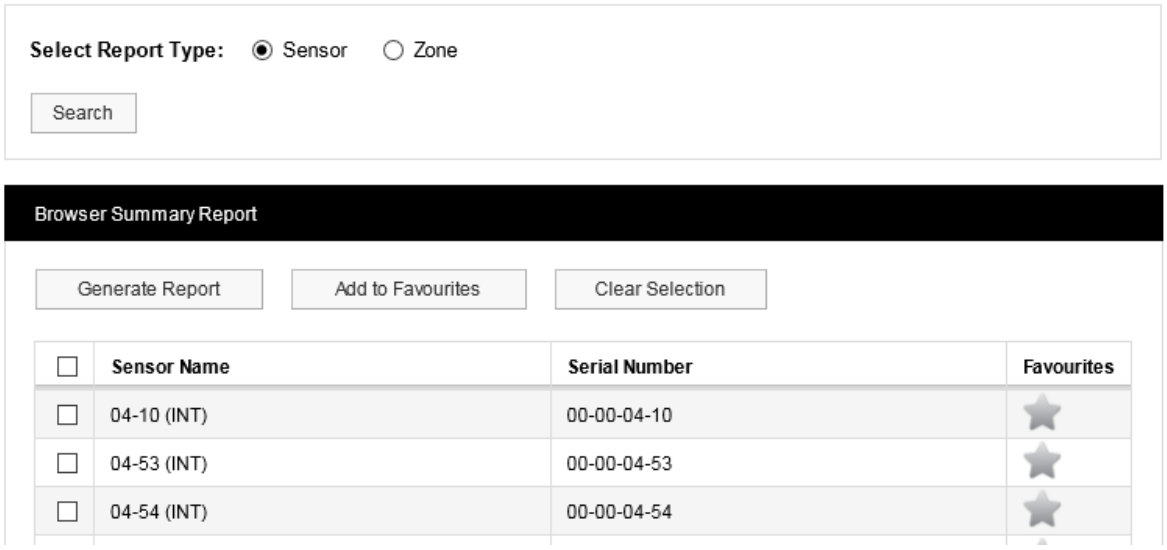
Notion Pro can produce a variety of **Reports**. These can be tailored to a customer's individual specifications. The report will be in .pdf format with the option to export a .csv data file.

You can create and view:

Summary Reports → Browser Summary Reports

These can be summaries of data collected by selected sensors or all sensors in a Zone over the past week.

1. Select **Reports>Browser Summary Reports** to give the Summary Report dialog box.



2. To report on selected Sensors:
   i. Ensure that the Sensor option button is selected.
   ii. Select the sensors of interest from the **Sensor Name** list.
   iii. Select **Generate Report**.
3. To report on a Zone:
   i. Ensure that the Zone option button is selected.
   ii. Select **Search**.
   iii. Select the Zone of interest from the **Zone Name** list.
   iv. Select **Generate Report**.

See also:

Summary Reports

Calibration Reports → Browser Calibration Reports

A simple report of all sensors that need calibrating on a given date.

1. Select **Reports>Browser Calibration Reports**.
2. By default, a Report will be generated for all sensors which need to be calibrated one month from today's date. If you wish to select a different due date click  and select the required date. Select the 'Include Out of Service Sensors' tick box if required. Click **Search** to generate the Report.

Exception Reports → Browser Exception Reports

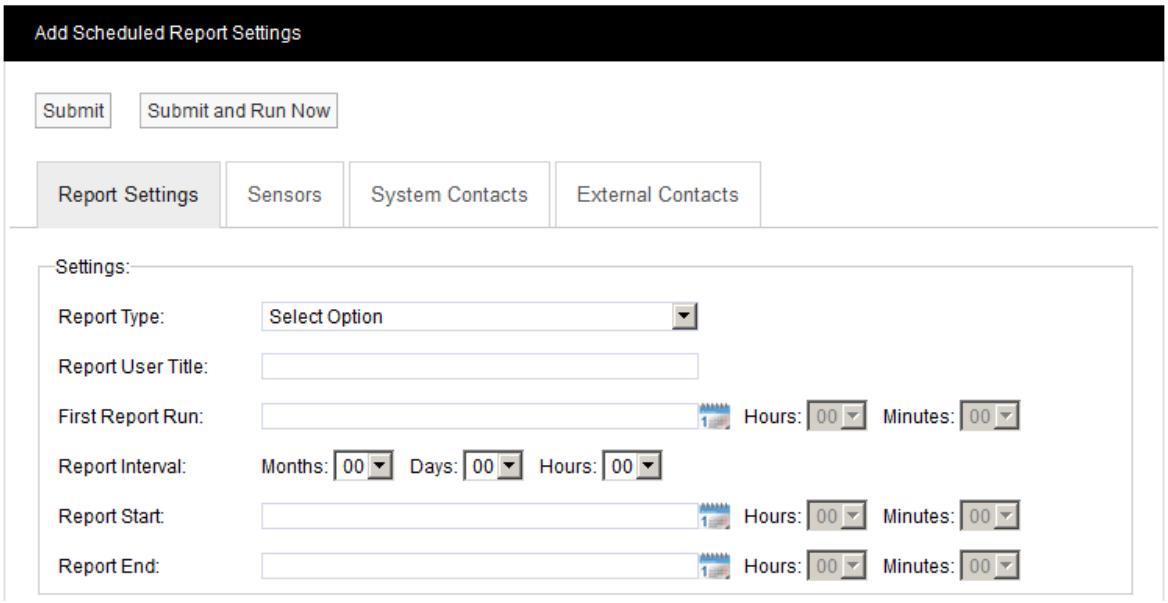
Reports of ongoing alarm conditions, by Sensor or by Zone.

1. Select **Reports>Browser Exception Reports**.
2. To report on selected Sensors:
   i. Ensure that the Sensor option button is selected.
   ii. Select the sensors of interest from the **Sensor Name** list.
   iii. Select **Generate Report**.
3. To report on a Zone:
   i. Ensure that the Zone option button is selected.
   ii. Select **Search**.
   iii. Select the Zone of interest from the **Zone Name** list.
   iv. Select **Generate Report**.

Scheduled Reports → Schedule Reports

Reports of a variety of types which start and end at predefined dates/times and run at predefined intervals.

1. Select **Reports>Scheduled Reports** to give the Add Scheduled Report Settings dialog box.



2. Select the required Scheduled Report Type from the **Report Type:** pull-down list.
3. Enter a suitable title for the Report in the **Report User Title:** box.
4. Select a date and time for the first Report run using the **First Report Run:** controls. This should be later today or any time in the future.
5. Specify a **Report Interval** if required. This is the length of time between repeated runs of the Report. For example an interval of one day would give daily Reports. You don't have to specify a Report Interval, this would give a 'one off' Report.
6. Use the **Report Start:** and **Report End:** controls to specify the time span for the Report. This would typically be dates in the past, but could be dates in the future (although if, for example you specified a start date one week in the future and end date two weeks in the future you would have to wait 2 weeks before you saw a Report).

   Note: you should set an Interval, with no Report Start or Report End time, **or** a Report Start and Report End time, (but no Interval).

7. Having set up the Report dates, we now need to specify the Sensor data that we wish to report on. Click the **Sensors** tab, then click Add Sensors to give the Add Sensors dialog box.
8. Select the Zone that contains the sensors you wish to report on from the **Zone Name** pull-down list. The **Source List** becomes populated with the sensors in the selected Zone.
9. Select a sensor in the **Source List** that you wish to report on, and select > to transfer it to the **Destination List**. To transfer all sensors in a single operation click >> .
10. When satisfied with your selections, select **Submit**.

11. Now we need to specify a list of Users (**System Contacts**) that the Report will be emailed to. Click the **System Contacts** tab, then click Add Sensors to give the Add Contacts dialog box.
12. Populate the **Destination List** for **System Contacts** using the same methods that you used to populate the Destination List for Sensors (see step 9 above). When satisfied with your selections click **Submit**.
13. If any **External Contacts** have been set up and you wish to send the Report to them, select the **External Contacts** tab and populate and **Submit** it in the same way as for **System Contacts**.
14. When satisfied with all of your Report Settings, select **Submit** or **Submit and Run Now** under the Add Scheduled Report Settings banner. **Submit and Run Now** button is used to generate reports immediately; however some delay can be expected if a large report is submitted.

The Scheduled Report you have defined will now be added to the View Scheduled Reports window.

See also:

Setting Up and Running Reports

4.4 View System Logs

Notion Pro has a series of **System Logs** for keeping track of critical events such as system activity, alarm activity and SMS activity.

You can:

- **View the Activity Log** → Activity Log

Logs user activity.

Select **Logs>Activity Log** to give the Activity Logs dialog box.

- **View the Alarm Log** → Alarm Log

Select **Logs>Alarm Log** to give the Alarm Logs dialog box.

View the SMS Log → SMS Log

Select **Logs>SMS Log** to give the SMS Logs dialog box.

View the Email Log → Email Log

Select **Logs>Email Log** to give the Email Logs dialog box.

See also:

Viewing System Logs

Reference Section

5 Reference Section

See below for a list of information topics.

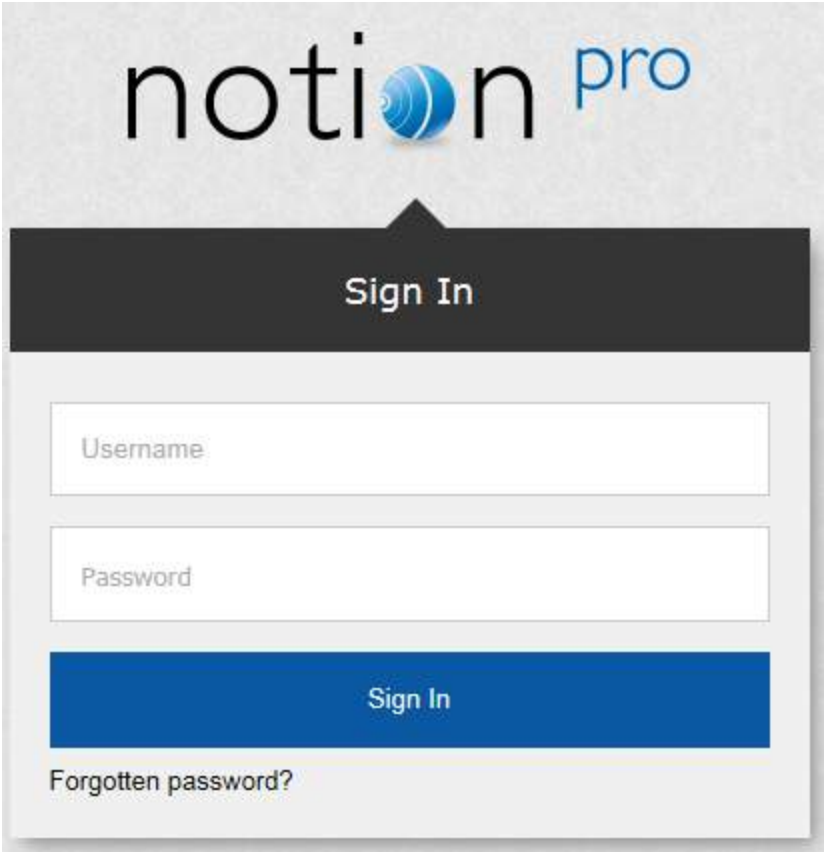
5.1 Signing In

Note: If you are NOT a System Administrator, you will be unable to access the Notion Pro facilities detailed in this topic, the Setting Up Users, Sites and Devices topics, and the Setting Up the Sensor Model topics.

To view the Notion Pro website, you will need to open a browser and navigate to the Notion Pro site.

If you are working on the Notion Pro Server itself, type http://localhost/NotionPro on to the Browser's address field.

If you are working on a another computer or device, you will need to use the URL supplied by your System Administrator or IT Support provider to reach the Notion Pro server. This may be similar to \\ServerName\NotionPro for a LAN connection or www.mycompany.com/Notion Pro for an internet connection.



Once you have navigated to the correct URL, the login screen will be displayed, as above.

As you are setting up the System immediately after installation, you need to login as the

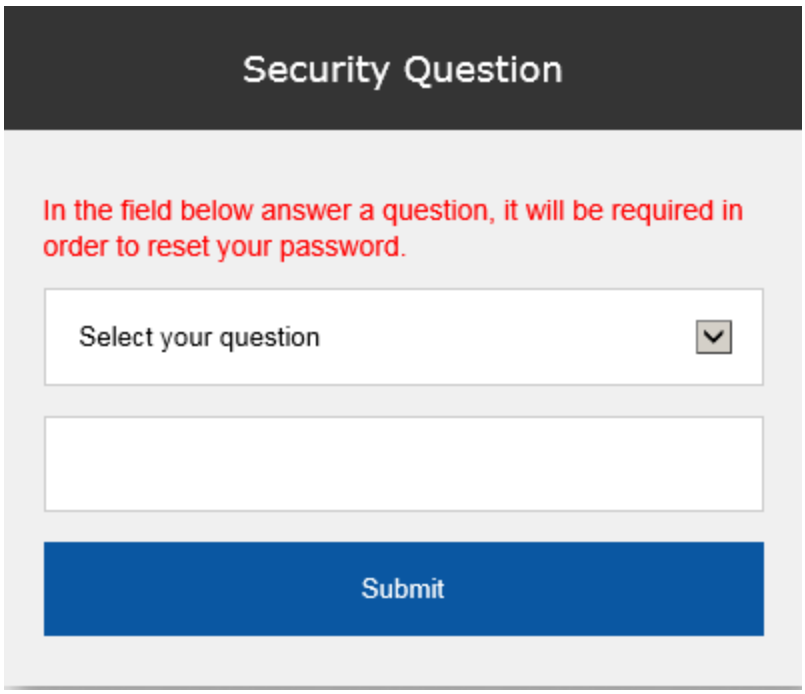
System Administration User:

Username: Admin User

Password: Admin

Enter your username and password to login, then click Sign In. Passwords are case sensitive.

As this is the first time you have logged in, you must supply the answer to a security question, so if you forget your password in the future you can retrieve it using a procedure which includes supplying the answer to your security question. See below:



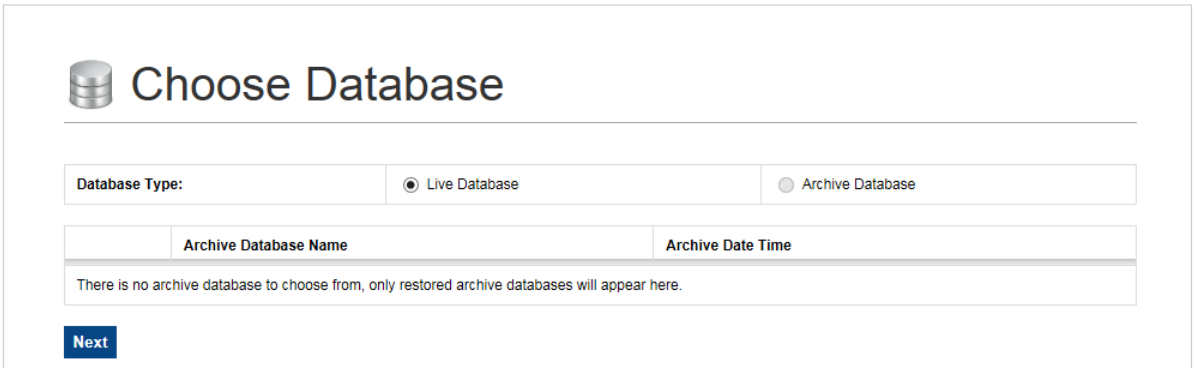
Choose your security question by clicking and choosing from the list. Type the answer into the box below, then click Submit. You will now be returned to the login screen, where you will again need to enter your username and password.

The Security Question screen is only shown when a user logs in for the first time; it will not show when you login as the Admin User again.

Note: When you are editing users' details, you should change the default Admin User password so that it is secure.

5.1.1 View Archived Database

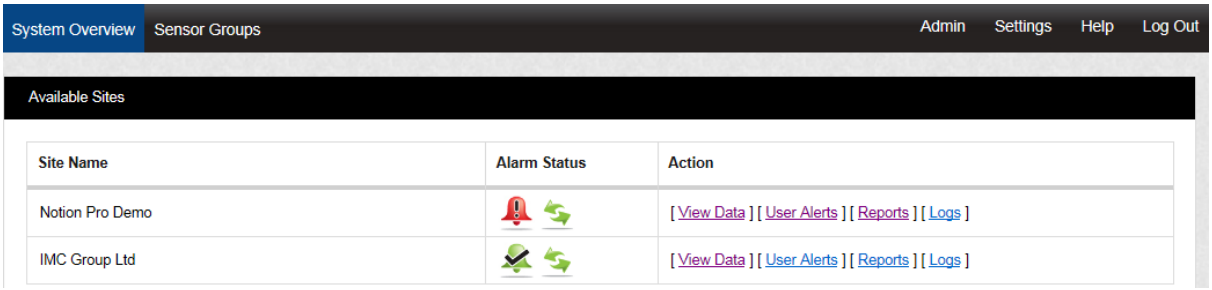
For detailed information about the Notion Pro Archive / Backup system, see the IceSpy Notion Pro Archive/Backup Manual, doc no IM5549.



To access Archived data, select Archive Database, select the required Archive Database from the list, then click **Next**.

5.1.2 View Live Database

To access the live Notion Pro system, make sure Live Database is selected and click Next to give the System Overview, see below for an example.



See Setting Up the Sensor Model and Viewing Data for more details of the System Overview display and viewing Live Data.

Note: You will only see the Available Sites view if your installation has more than one Site. For a one-Site installation, clicking Next will take you straight to the Live View, see Viewing Live Data.

5.2 Setting Up Users, Sites and Devices

The options under the Admin menu enable System Administrators to set up Notion Pro for use.

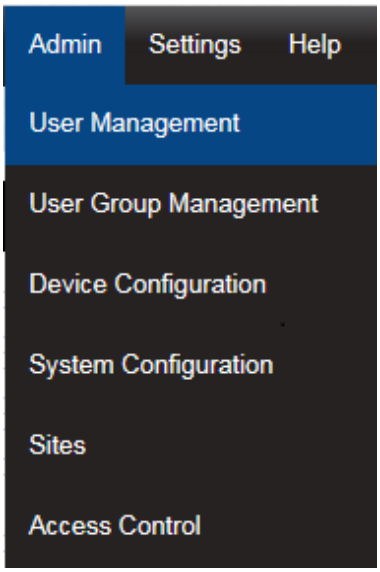
5.2.1 User Management

Note: The functionality described in this Section only applies to System Administrators or

Users who have been given System Administrator access rights. The Admin User is created automatically when Notion Pro is installed. The Admin User cannot be deleted.

User Management allows you to add Users, edit Users add External Contacts and edit External Contacts.

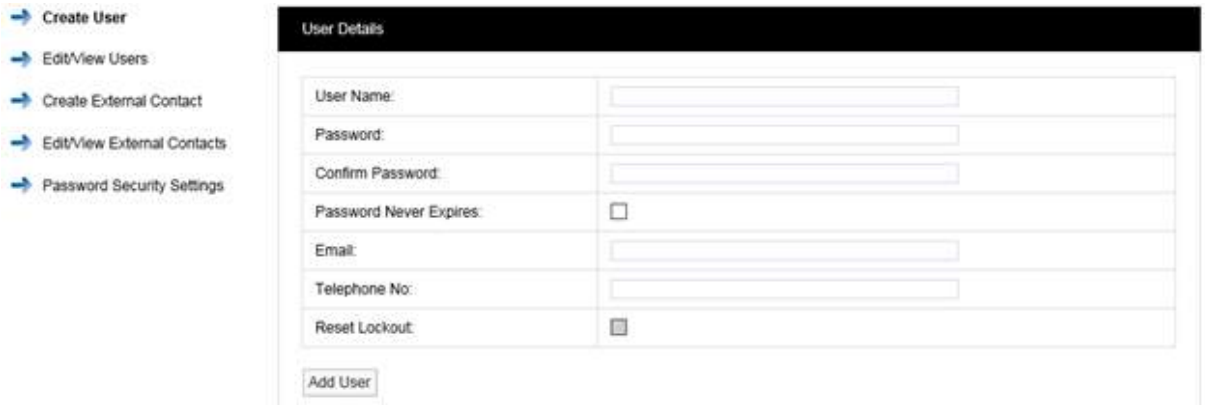
Adding and Editing Users



Select Admin then User Management from the drop down menu to access the User Management section.

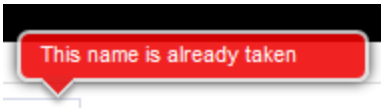
The Admin menu is located at the right hand side of the top menu bar.

After selecting User Management a new window appears see below.

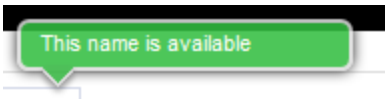


Add User Name

In the dialog box above enter a new User Name. If the user name is already taken the following message will be displayed.

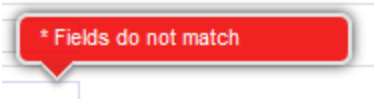


Select another User Name until the following message is displayed:



Add Password

Enter a password into the Password field, now re-enter your password into the Confirm Password field. It is not recommended to cut and paste the password as this would copy a mistake to the Confirm Password field. If when typing your password into the Confirm Password field you make a mistake, the following message will be displayed.



If you have re-typed your password correctly then you will be able to proceed to the next step.

By default, Notion Pro requires passwords to be at least four characters long. The Administrator will not be able to set a minimum password length of less than four characters. This is configurable by the Administrator. The User ID and password cannot be the same.

Administrators may also require that user passwords have an alphanumeric and mixed case. In this case, passwords must have numeric characters, upper and lower case letters.

Note: It is recommended that a password be at least eight characters in length and contain at least one number, one letter, one uppercase letter.

Password Never Expires

By default user passwords are set to expire in 90 days, this is selectable by the Administrator.

Password Expiry does NOT apply to the Admin User password, which is always set to never expire.

Email:

This field allows you to enter your email address. This is used to receive the following:

- email alerts generated from the system
- email reports.
- password reminders.

Telephone No:

This field allows you to enter your mobile phone number. This is used to receive SMS text alerts generated from the system.

The number should be entered in the following format:

+44 123 987654

When you are happy that all details are correct, click the **Add User** button.

Edit/View Users

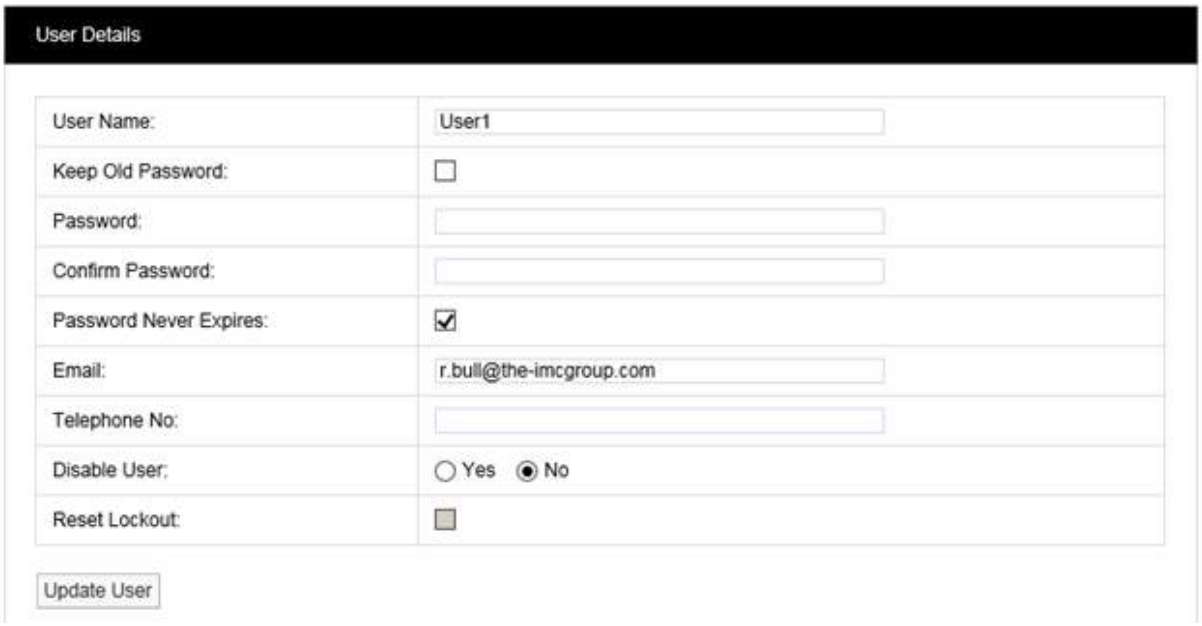
Edit/View Users allows you to edit existing user's details. The following functions are available:

- Edit allows passwords to be changed along with email address, phone number and calibration technician status
- Delete allows single or multiple users to be deleted
- Privileges allows users to be set with viewing rights.

To edit new user, select **Edit/View Users**. A new window opens, see below.

Edit

To edit a user select Edit. After selecting Edit a new window opens, see below.



In this screen you can change the User's email address, mobile phone number or calibration technician status. If you wish to update the User without changing your password tick Keep Old Password and the existing password will be populated in the password dialog boxes. If you wish to change your password follow steps in Add Password. (See also Change a User's Password.)

Reset Lockout

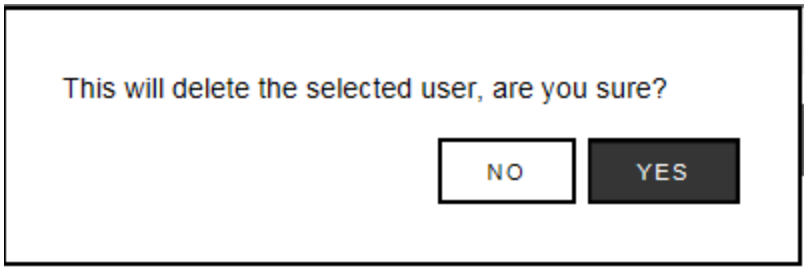
Locked out users can be reset from this screen, by selecting Reset Lockout.

When you are happy that all details are correct, click the **Update User** button.

Delete User

There are three methods for deleting users:

1. Select Delete. This will delete the record selected, once you are happy with your selection confirm delete by selecting YES on the warning dialog box (see below.



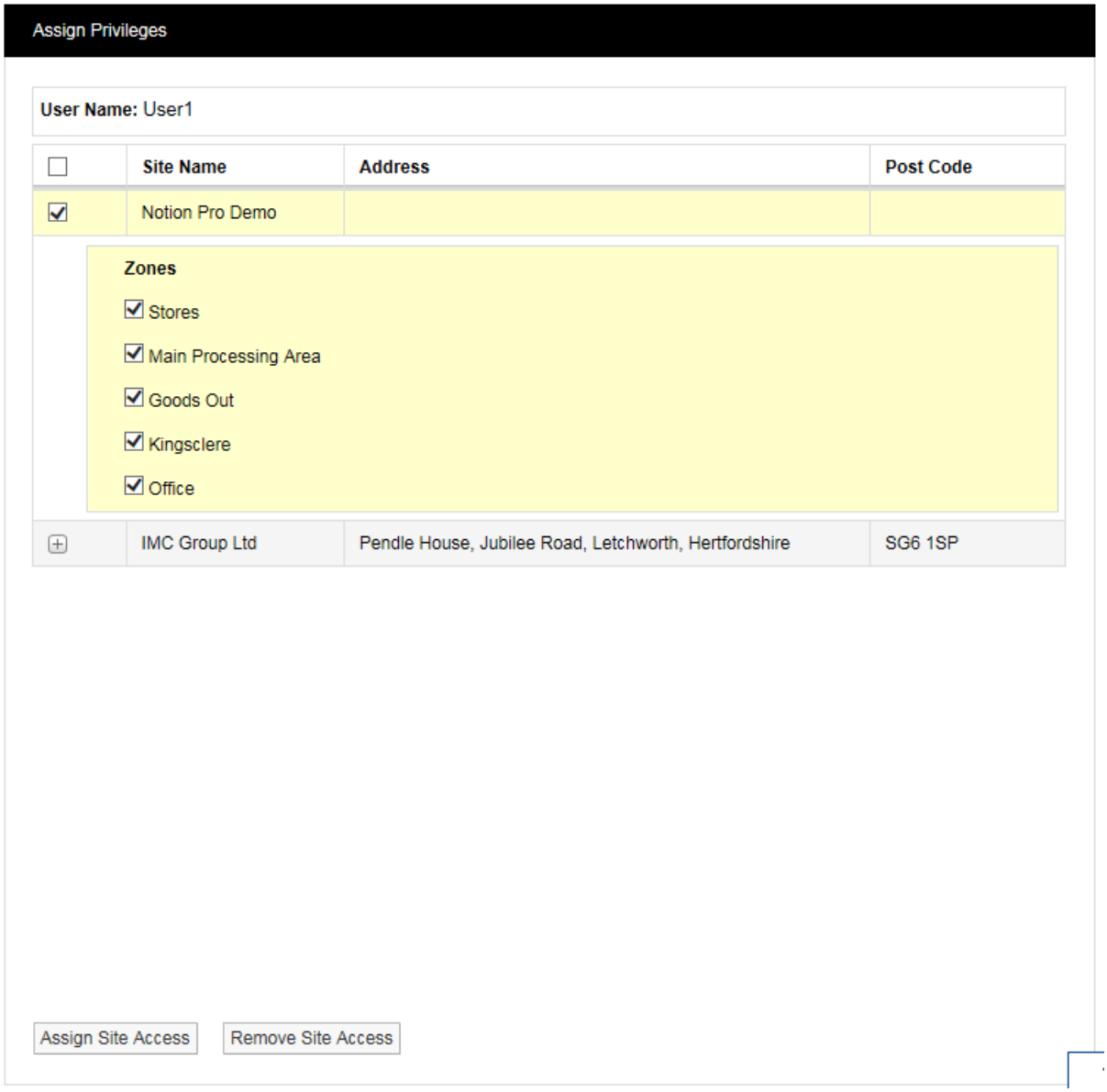
2. If more than one user is to be deleted select the tick box to the left of the name, tick all users to be deleted. Once you are happy with your selections click **Delete Users** select confirm delete by selecting YES on the warning dialog box.
3. By clicking the tick box next to User Name all users will be deleted. WARNING, this will select all users for deletion. Once you are absolutely sure you want to delete all users

click **Delete Users** and confirm delete by selecting YES on the warning dialog box.

WARNING: Deleting users cannot be undone.

User Privileges

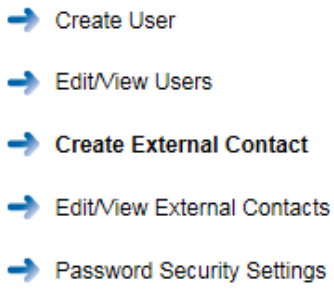
This allows individual users to be assigned viewing rights to Sites and Zones. (See Site Management for more information on Sites and Zones.) Click on Privileges in the View User window (see Edit/View Users) for the User that you wish to assign viewing rights to. This gives the **Assign Privileges** dialogue box (see below).



In the example above, User1 has been pre-allocated with viewing access to the Notion Pro Demo Site and the listed Zones. Click **Assign Site Access** or **Remove Site Access** as required. See also User Group Management.

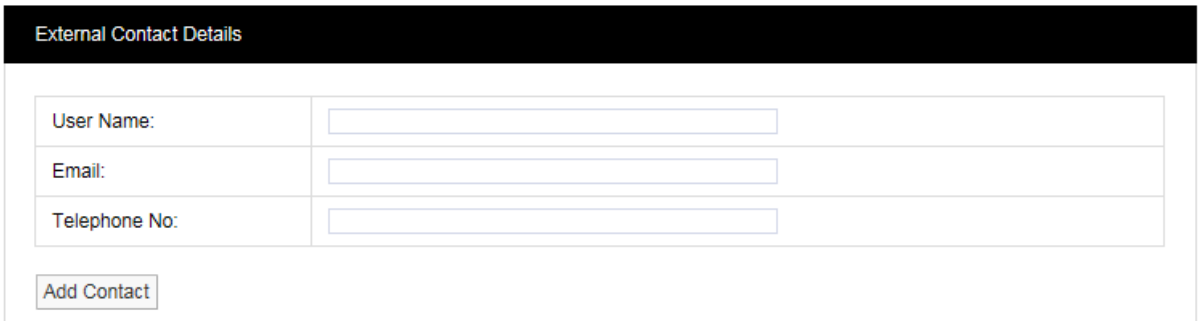
Create External Contacts

External contacts are used when there is a requirement to email reports or send SMS alarms to people who are not Notion Pro users.



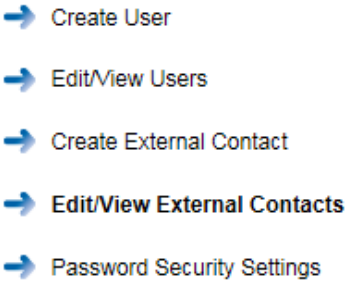
To create external contacts, select **Create External Contact**.

After selecting Create External Contact a new window opens, see below.



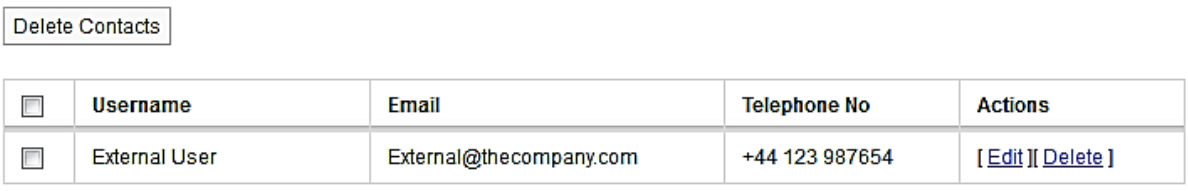
Enter User Name, Email and Telephone No for an external user. There is no requirement for a password as these users do not have access to Notion Pro.

Edit/View External Contacts



To Edit/View external contacts, select **Edit/View External Contacts**.

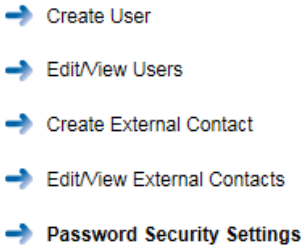
After selecting **Edit/View External Contacts** a new window opens.



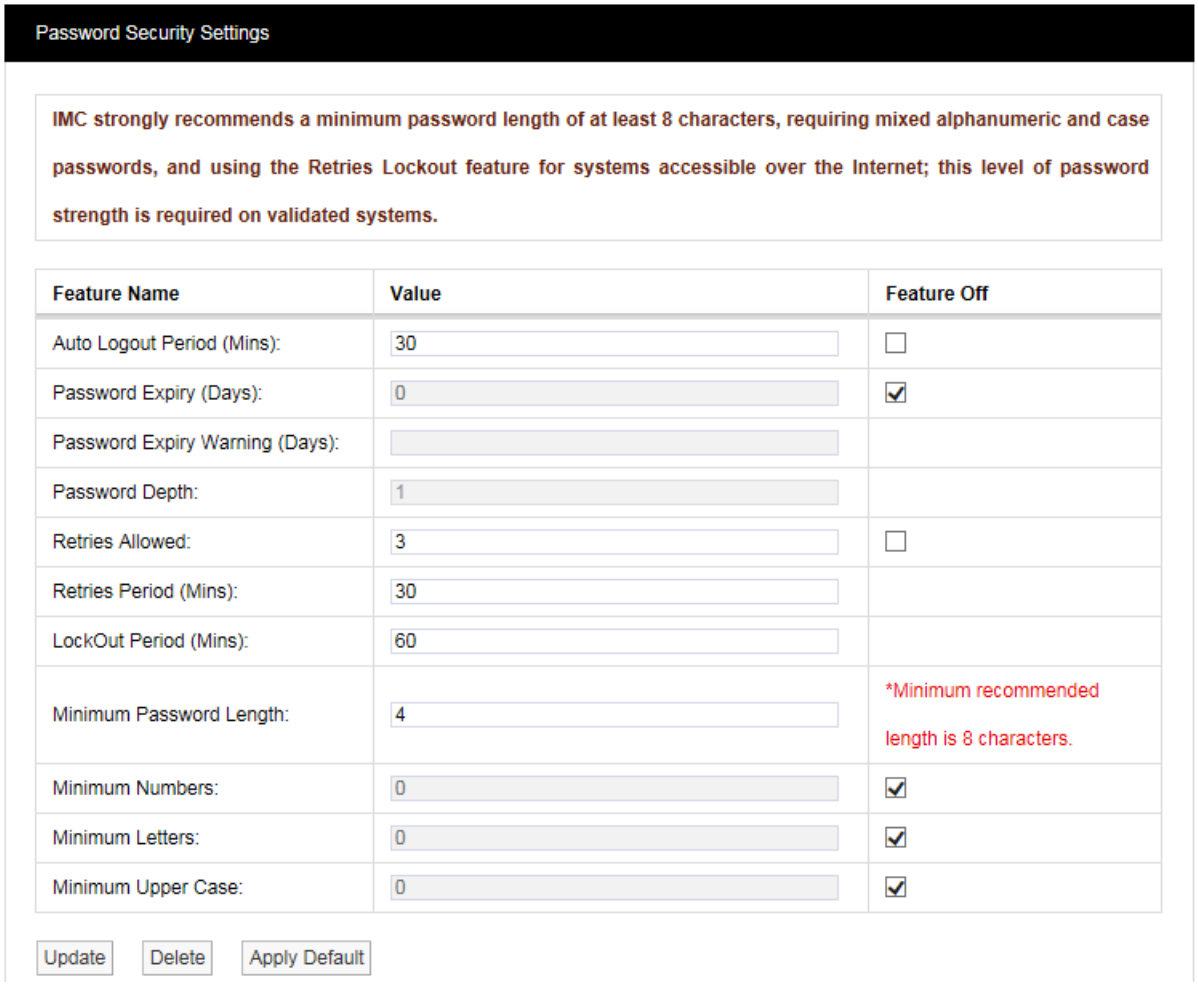
To edit external user details follow steps at Edit, to delete external users follow the steps in

Delete User.

Password Security Settings



To Edit/View Password Security Settings, select **Password Security Settings**. Once selected, the Password Security Settings window will be shown see below.



Figure

The **Password Security Settings** window is used to set the system's login security features. Login security features apply globally to all logins, with some exceptions for the Admin User account, as detailed below. Individual features can be disabled by selecting the associated **Feature Off** tick box. Clicking **Apply Default** will return Password Security

features to the default settings. click **Update** to apply any changes made.

Auto Logout Period (Mins)

If a login session is left unattended, then the system will log the user off after the Auto Logout period. The auto logout period can be set by the Administrator.

When Auto Logout activates, the browser will continue showing the last screen actioned by the user, and if on the Live View, data values will continue to update on the screen. However, when the user tries change window or enter a value, then the browser will show the Login screen and require the user to log back into the system.

The Auto Logout Period can be set between 5 and 60 minutes, the default period is 30 minutes.

Password Expiry

Passwords will automatically expire, and need to be changed, after the Password Expiry time. By default user passwords are set to expire in 90 days, this is selectable by the Administrator. Password Expiry does **NOT** apply to the Admin User password, which is always set to never expire.

Users are warned on login within 10 days of expiry, and given the option to type in a new password. This can be done any time between the first warning and expiry. The warning time is settable by the Administrator. This will be a countdown warning and will decrease as the expiry deadline approaches.

Once a password has expired no further access will be allowed for that user until they enter their expired password at which point the system will force a change before any further progress can be made.

Password Depth

This option is **NOT** available on the standard version of Notion Pro.

The Password Depth sets the number of previous passwords that cannot be immediately reused by a user. A password depth can be set globally, between 1 and 10.

Retries Allowed

This is the number of failed login attempts allowed for a username, within the **Retries Period**, before the user is locked out. Locked out users are informed of their locked out status, when they try to login.

Lockout Period is the time that a user will be locked out after the **Retries** limit is exceeded.

By default users will be locked out for 60 minutes after three consecutive failed password login attempts within a 30 minute period. Where a lockout occurs, the user will be informed of the lockout period by a message on the browser, and the lockout will be recorded in the activity log.

The number of Retries Allowed can be up to 10. The Lockout Period can be up to 1440 minutes and the Retries Period can be between 10 and 1440 minutes. The Admin User is

never locked out.

A lockout value of 0 will lock out users until reset by the Administrator. Any Administrator lockout will be for 30 minutes, (this prevents the Administrator becoming permanently locked out).

A **Reset Lockout** tick box is available on the **User Details** screen. This control will normally be greyed out, and will only become active when the user is currently locked out. This control is only accessible by an Administrator. Administrators can reset a locked out user from the **Edit/View Users** window, see Edit.

Username Reuse

Deleted usernames cannot be reused for the period of time specified by **Username Reuse**. If an Administrator types a Reuse blocked username into the **User Details** screen, a warning will be displayed. By default, Username Reuse checking is disabled.

Minimum Password Length

By default, Notion Pro will require passwords to be at least four characters long, the Administrator will not be able to set a password length of less than four characters. This is configurable by the Administrator. The User ID and password cannot be the same.

Accepted Value Ranges

The list below details the setting ranges for each option:

Auto Logout – 5 to 60 minutes.

Password Expiry – 30 to 730 days.

Retries Allowed – 1 to 10 attempts.

Lockout Period – 0 to 1440 minutes; 0 will lockout users until reset by the Administrator.

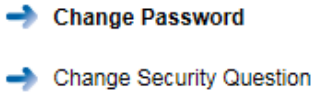
Retries Period – 10 to 1440 minutes.

Password depth – 1 to 10; **not** available on the standard version of Notion Pro.

Minimum Password Length – 8 to 50 characters.

Minimum Numbers, Minimum Letters, and Minimum Upper Case – 1 to 50, these values are consistency checked, against minimum length and each other.

Changing the Password

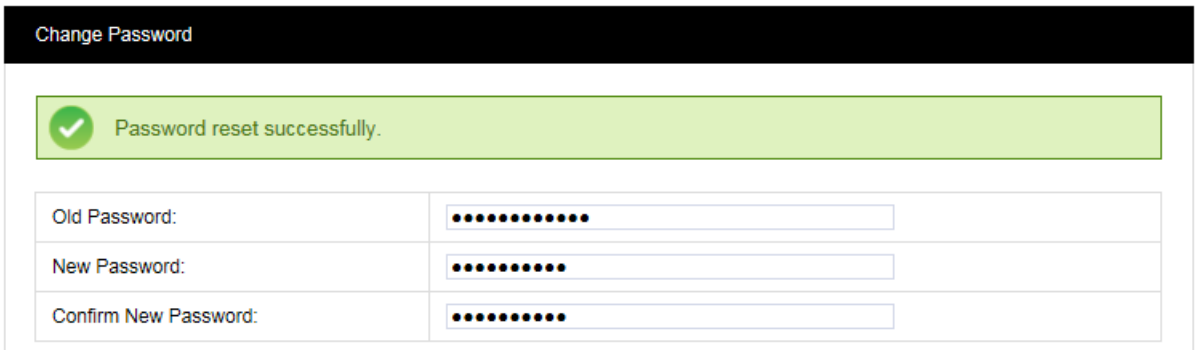


To change your password select **Settings>Account Settings** then **Change Password** to give the **Change Password** dialogue box. See below.

Enter the old password in the Old Password field. Enter the new password in the New Password field, enter it again in the Confirm New Password field.

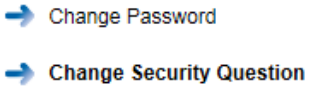
Note: It is recommended that a password be at least eight characters in length and contain at least one number, one letter, one uppercase letter.

Click **Submit**. The message shown below will be displayed to confirm a successful password reset.

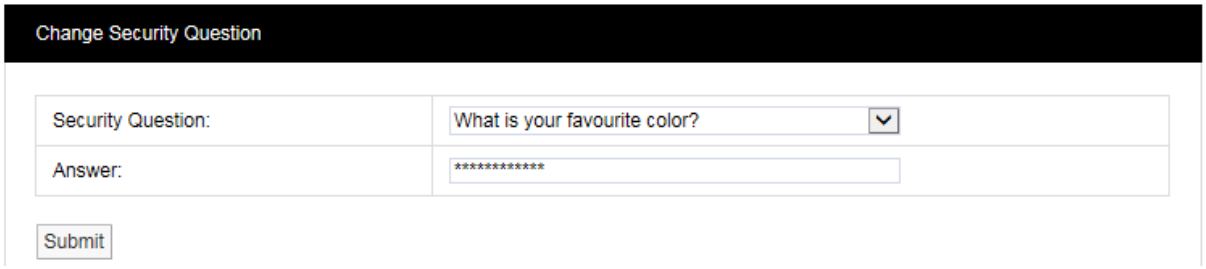


Changing your Security Question

You will need to know the answer to your security question if you have forgotten your password and you have to click on the Forgotten password? Link on the **Sign In** screen.



To change your security question select **Settings>Account Settings** then **Change Security Question** to give the **Change Security Question** dialogue box. See below.



Select your desired question from the Security Question pull-down list, the enter the answer

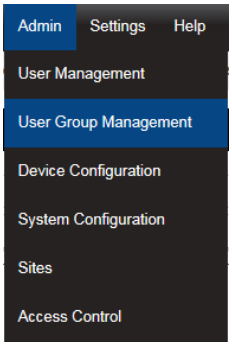
into the Answer field, then click Submit. Click Submit. The message shown below will be displayed to confirm a successful password reset.

5.2.2 User Group Management

User Group Management

This section describes how **User Groups** are created and used. User Groups allow viewing **Privileges** to be set for a group, Users added to that group inherit the viewing Privileges associated with that group. Any previous viewing Privileges assigned to an individual user will be overridden by the viewing Privileges associated with that group.

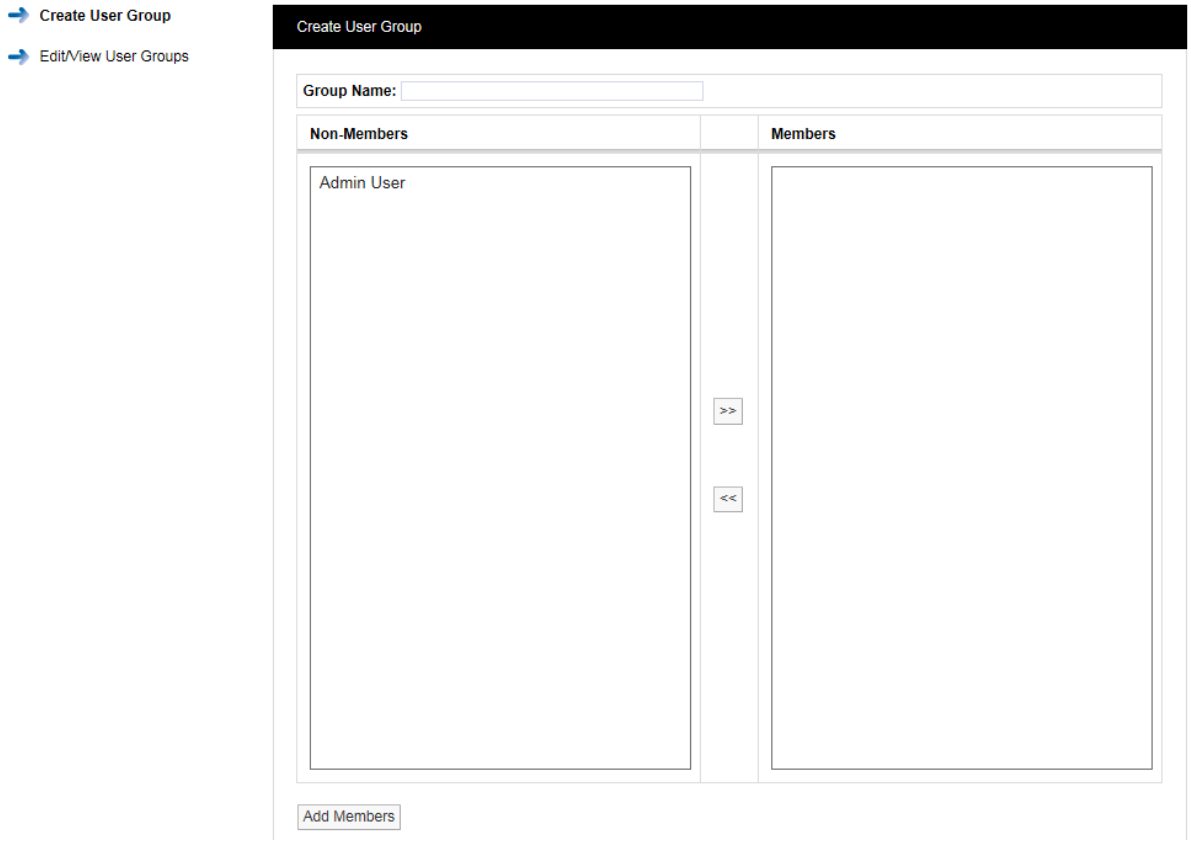
To learn about setting Privileges for individual users see User Group Management. Privileges are the viewing rights that allow a user to see **Sites** and **Zones**. Through Privileges a user can be restricted to the number of Zones they can see. This is especially useful on very large systems.



Select **Admin>User Group Management** from the drop down menu to access the **User Group Management** section.

After selecting **User Group Management** a new window appears, see below.

Create User Groups

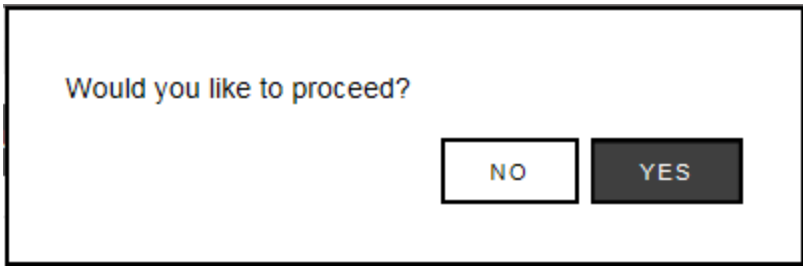


To create a **User Group**, enter a name for the User Group, see examples below:

- **T+RH Sensors** - for a small Site this could be used to allow access to all of the temperature and humidity sensors.
- **T+RH Sensors 1st Floor** - for a larger site this could be used to allow access to all of the temperature and humidity sensors on one floor.

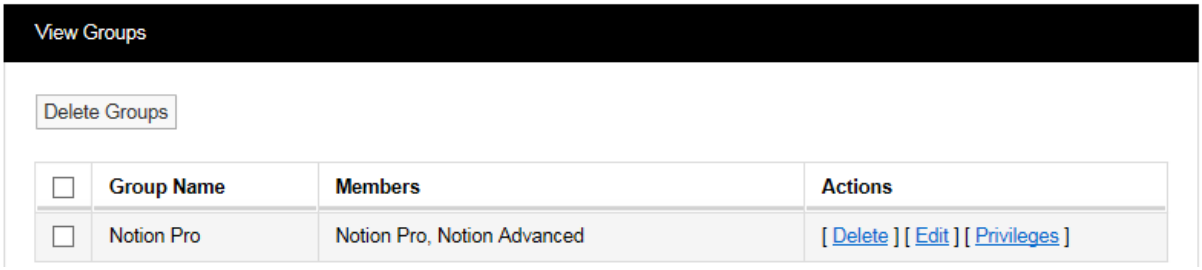
Select the Users that you would like to add to the group. All users that have not already been associated with a group will be shown in the left column. To select more than one user hold the Ctrl key and select the required users. Once you are happy with the selected users click the double left arrows located between the columns, this will move the users to the right column.

Users can be de-selected by selecting them in the right column and clicking the double left arrows. When you are happy with your selection, click on **Add Members**. You will be asked if you would like to proceed, see below.

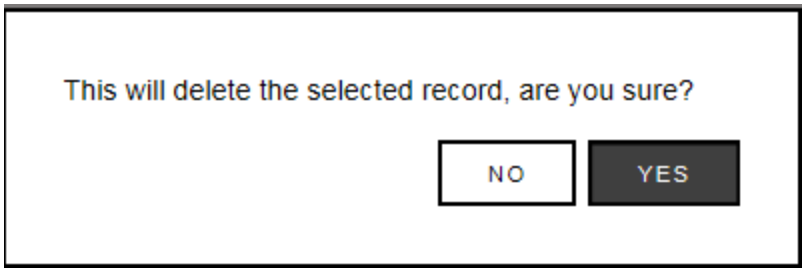


Select YES to proceed or NO to cancel.

Delete User Group



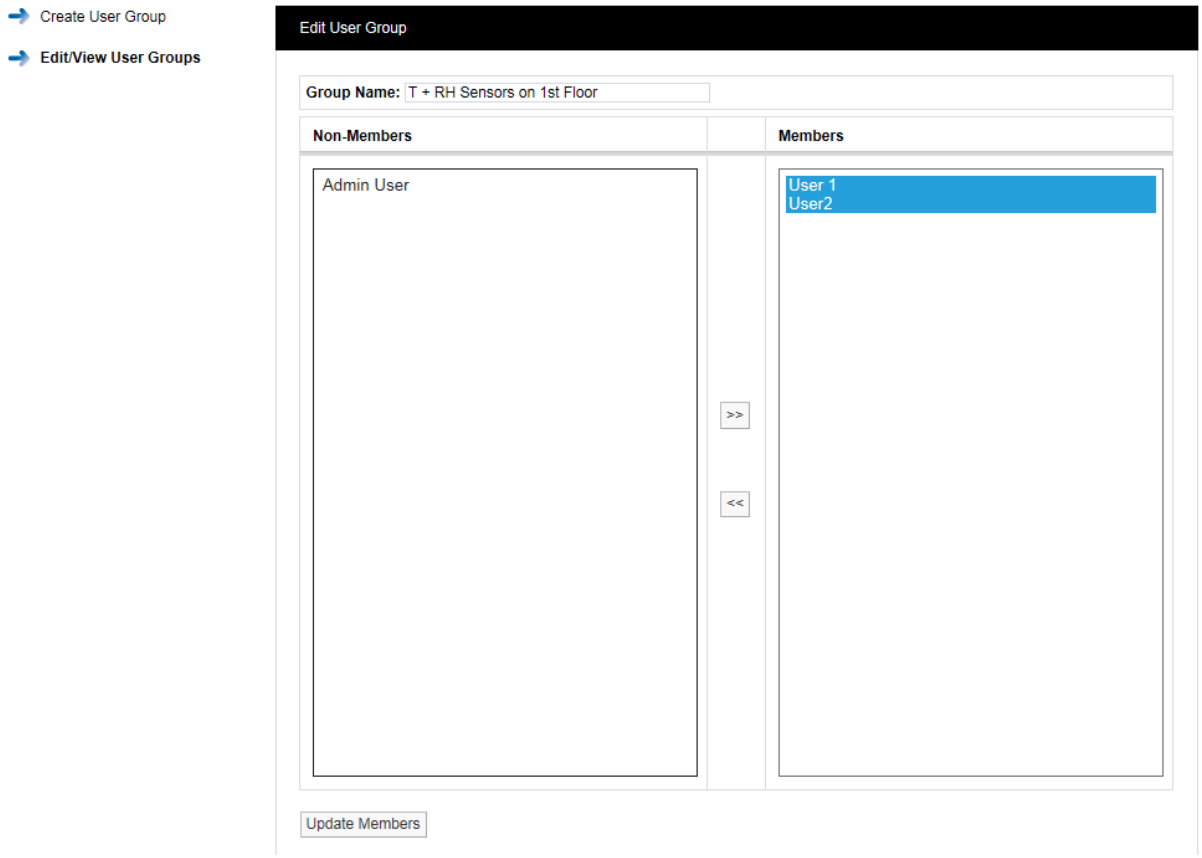
To delete a User Group select Delete in the line corresponding to the User Group to be deleted. Once Delete has been selected you will be asked if you would like to proceed, see below.



Select YES to proceed or NO to abort.

Edit User Group

To Edit a User Group select Edit in the line corresponding to the User Group to be edited. Once Edit has been selected the **Edit User Groups** window will appear, see below.



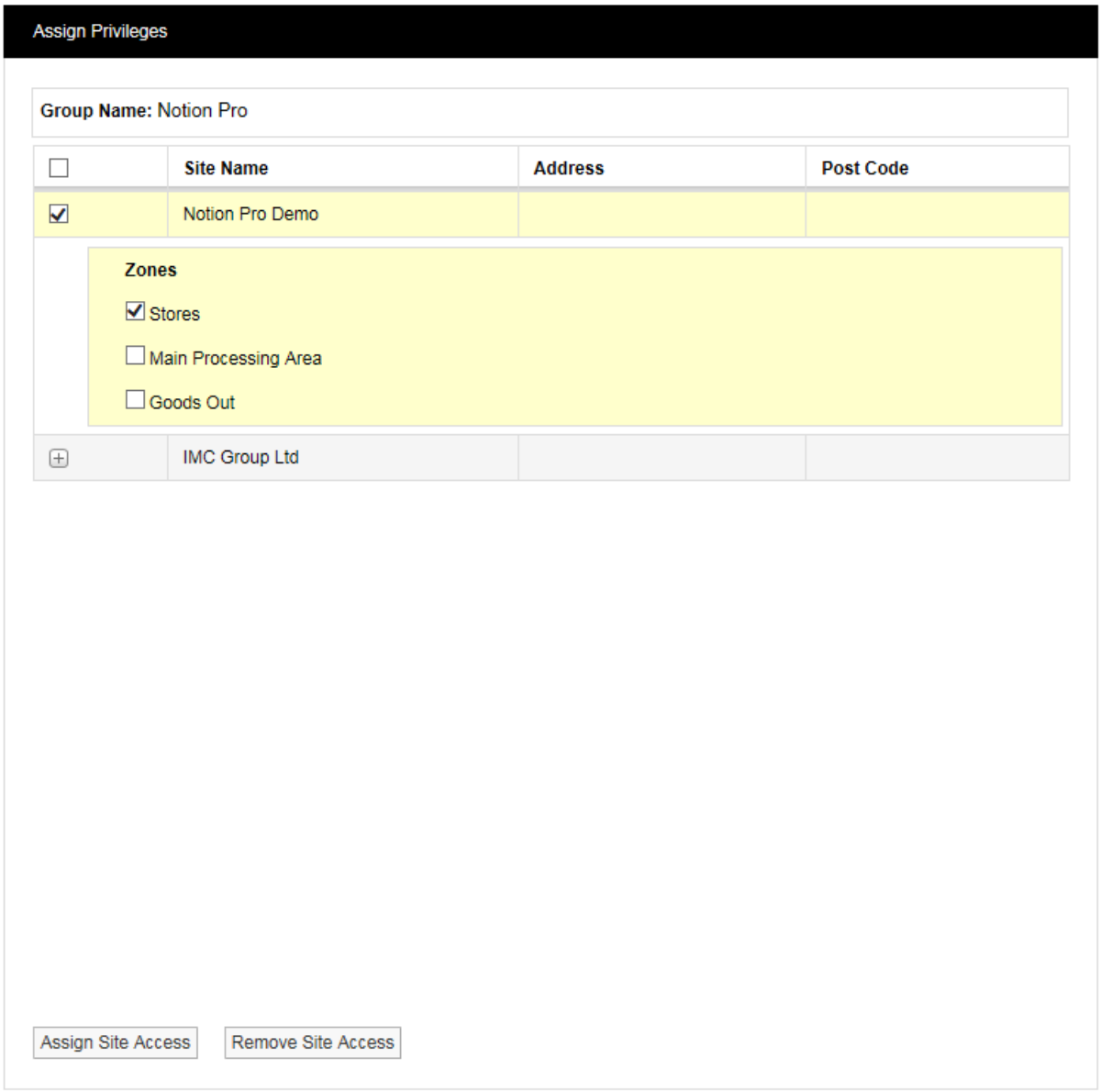
Users can be removed from the User Group or added. To remove Users highlight them in the right column and click the double left arrows. To add Users highlight them in the left column and click the double right arrows.

When happy with your selections click **Update Members**. You cannott remove all the members from a group you must always have to have at least one member. If you want to remove all the members then the User Group needs to be deleted.

When a User is removed from a User Group that User will require **Privileges** adding, see section 2.1.9 to add Privileges.

User Group Privileges

To set the Privileges for a User Group select Privileges in the line corresponding to the User Group to be edited. Once Privileges has been selected the **Assign Privileges** window will appear, see below.

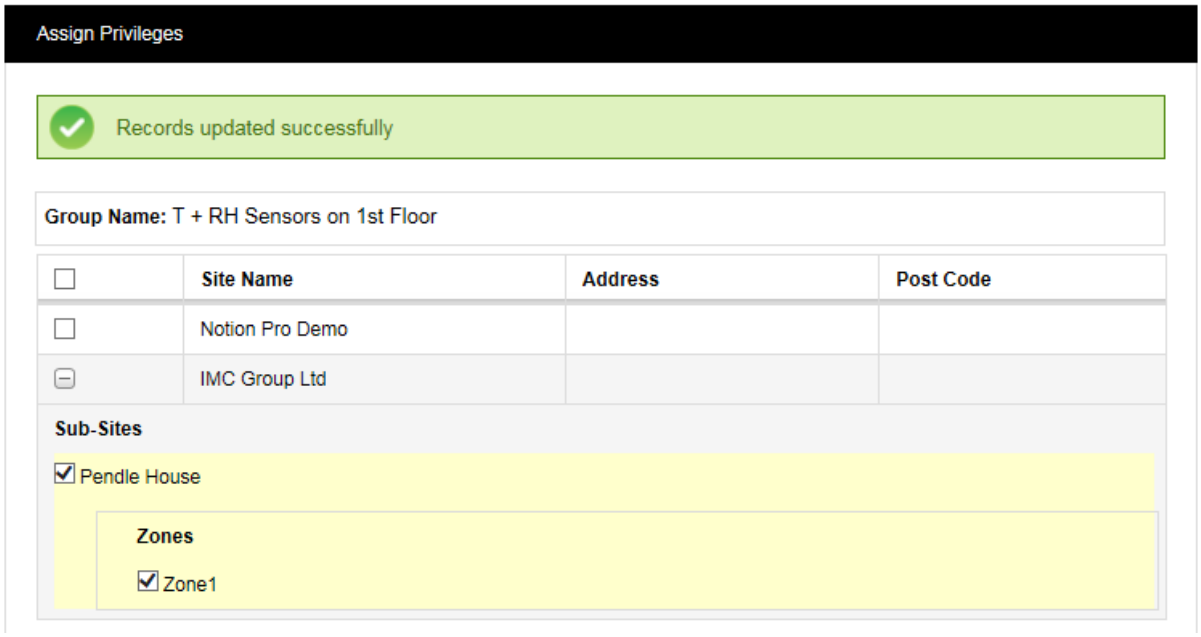


All Sites that have been added to Notion Pro will be visible in the **Assign Privileges** window. Sites with an empty tick box are top level Sites with no Sub Sites associated. Sites with a + symbol have Sub-Sites associated, see IMC Group Ltd above.

Selecting the + symbol will reveal the Sub Site details, see below.

To allow the members of User Group T + RH sensors 1st floor to view the sensors from the IMC Group Pendle House subsite select the tick box next to Pendle House. This will now allow all Users added to this group to be able to see those sensors only.

When you are happy with your selections click on Assign Site Access, see below.



To remove access the process is the reverse of the above. When happy with your selections click on **Remove Site Access**.

Some sites will have more Zones and sensor types than others. However, the process for allocating Privileges is the same. Depending on what the System Administrator wants an individual user to see as many or as few sensors or Zones can be selected.

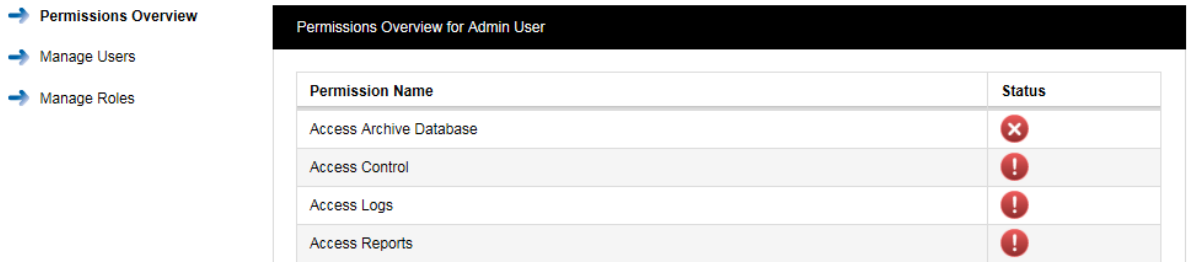
See also User Privileges for more information on setting Privileges.

5.2.3 Access Control

This topic describes how users are granted P**ermissions**. Permissions are system access rights such as Edit, Delete etc.

Notion Pro allows the creation of **Roles** which are assigned with access permissions. Users are added to Roles and inherit the permissions assigned to the Role thus avoiding the repetitious and error-prone task of adding multiple individual users.

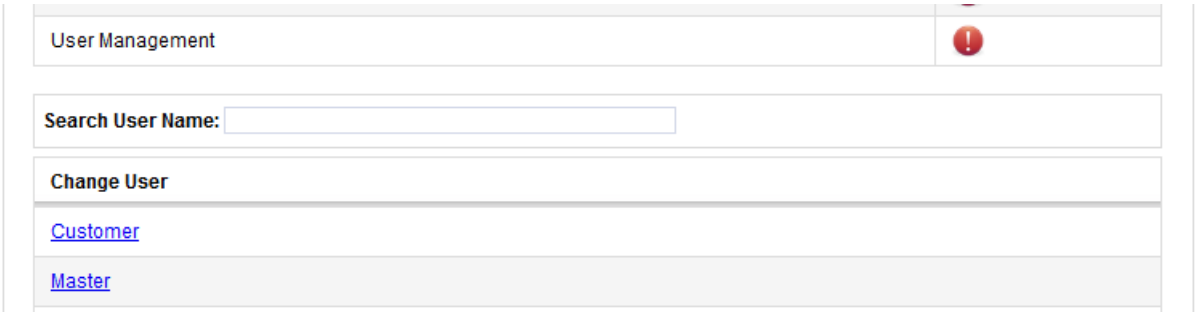
Permissions Overview



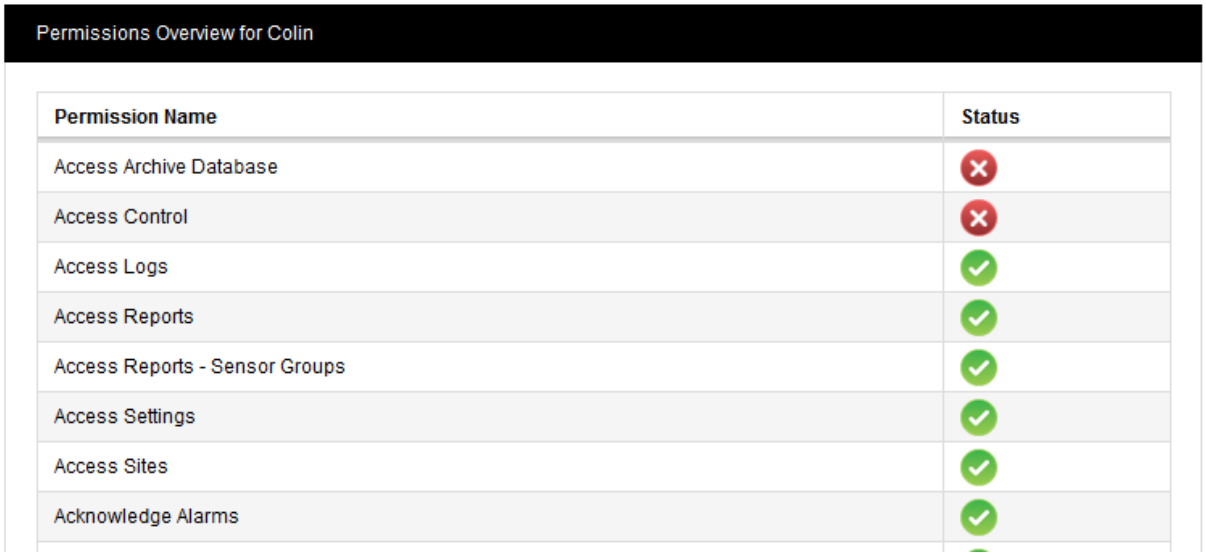
The menu on the right above gives access to the different sections of Access Control, the list on the left above is the **Permissions Overview** for the Admin User.

Note: the Permissions Overview list is much longer than the lists shown here, but these are abbreviated here for space reasons.

The Admin User is created automatically when Notion Pro is installed. The Admin User cannot be deleted or the Permissions altered. As Users are added to the system they will automatically appear at the bottom of the Permissions Overview screen, see below.



To view the Permissions granted to a user click on the underlined user name. The Permissions Overview for Customer window will appear, see below.

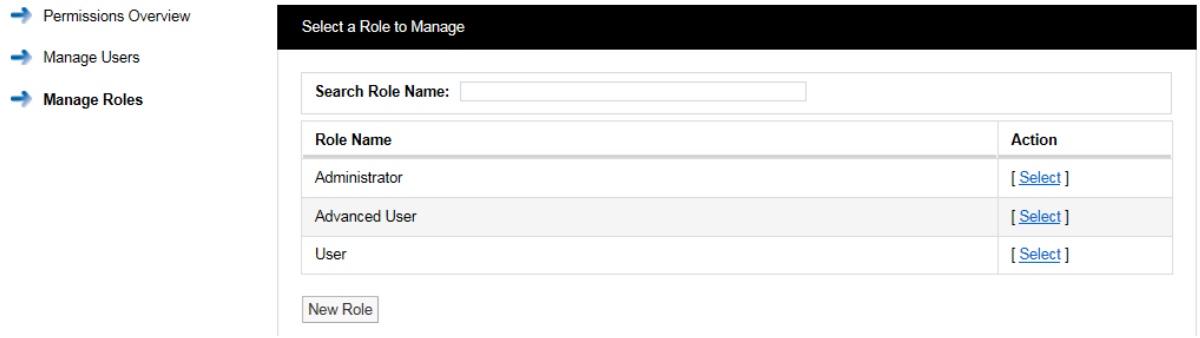


A red circle with a cross means that the Permission is denied, a green circle with a tick means that the Permission is granted. These permissions are inherited from the Role that

the user has been assigned, this process is described below.

Manage Roles

Before you can assign Permissions to a user you need to create Roles. To view Roles click on Manage Roles. The Select a Role to Manage window will appear see below.

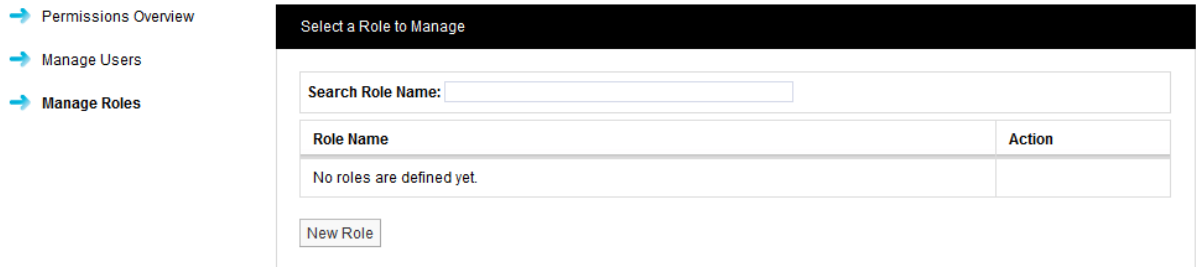


When Notion Pro is installed there are no pre-defined Roles set. The Admin User can create Roles and decide what Permissions to assign to each Role. The list below shows a typical set of Role. There is no limit to the amount of Roles that can be set.

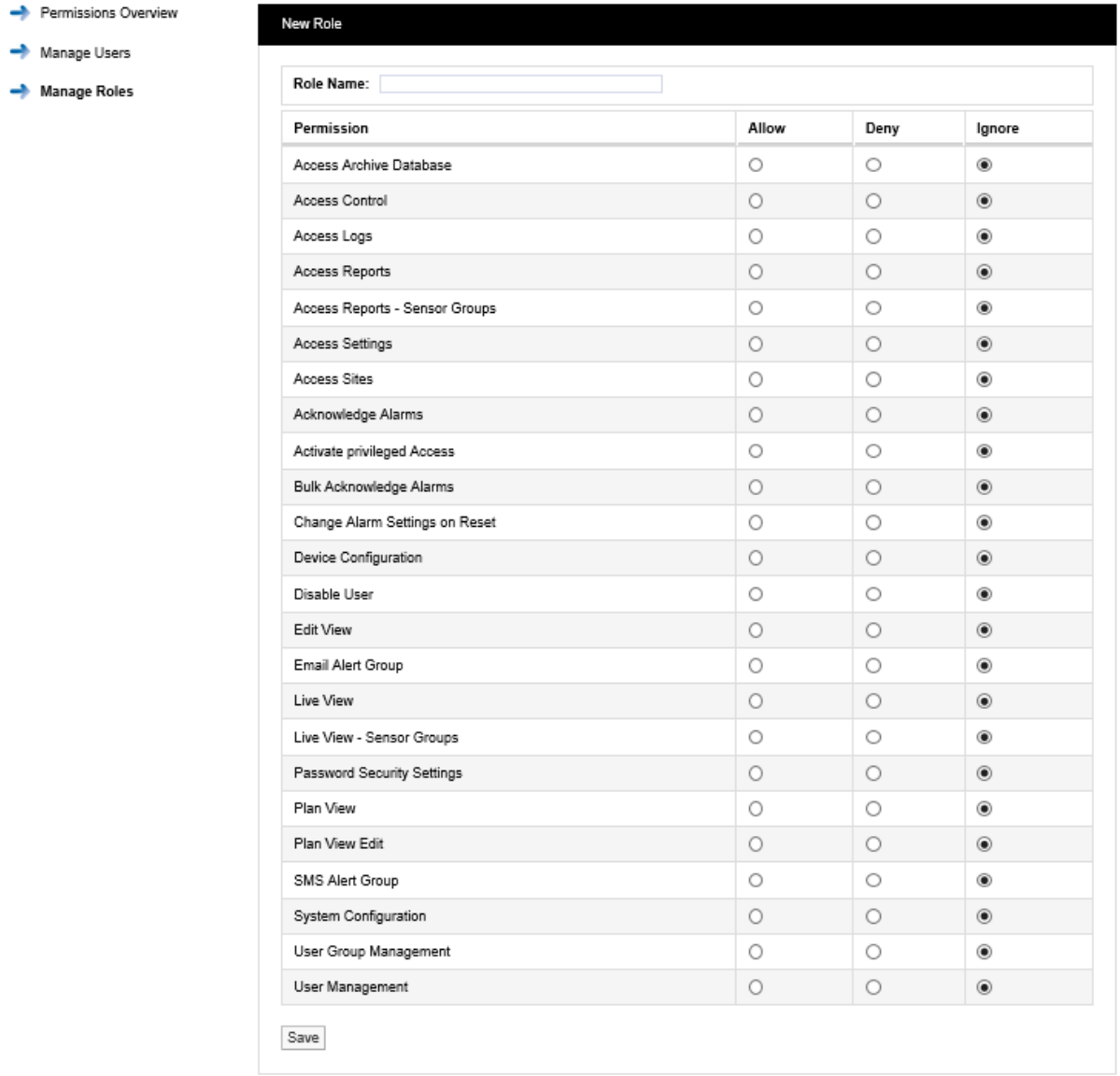
- Administrator
  This would be a high level Role with all Permissions assigned.
- Advanced User
  These would be trusted users with access to Admin functions blocked but still able to edit sensor properties. Full data viewing and alarm acknowledging allowed.
- General User
  These would be lower level users with access to Admin functions and sensor editing blocked. Full data viewing is allowed.
- Guest User
  These would be view-only users with no editing or alarm acknowledging rights. Full data viewing is allowed. See also Roles.

When Notion Pro is installed a default Admin User is created. The Admin User cannot be deleted and is preset with the Username "Admin User" and the Password "Admin". We recommend that these details are changed immediately after installation. This can be done from **Admin>User Management** see User Management. The Default Admin User is pre-assigned with all available Permissions.

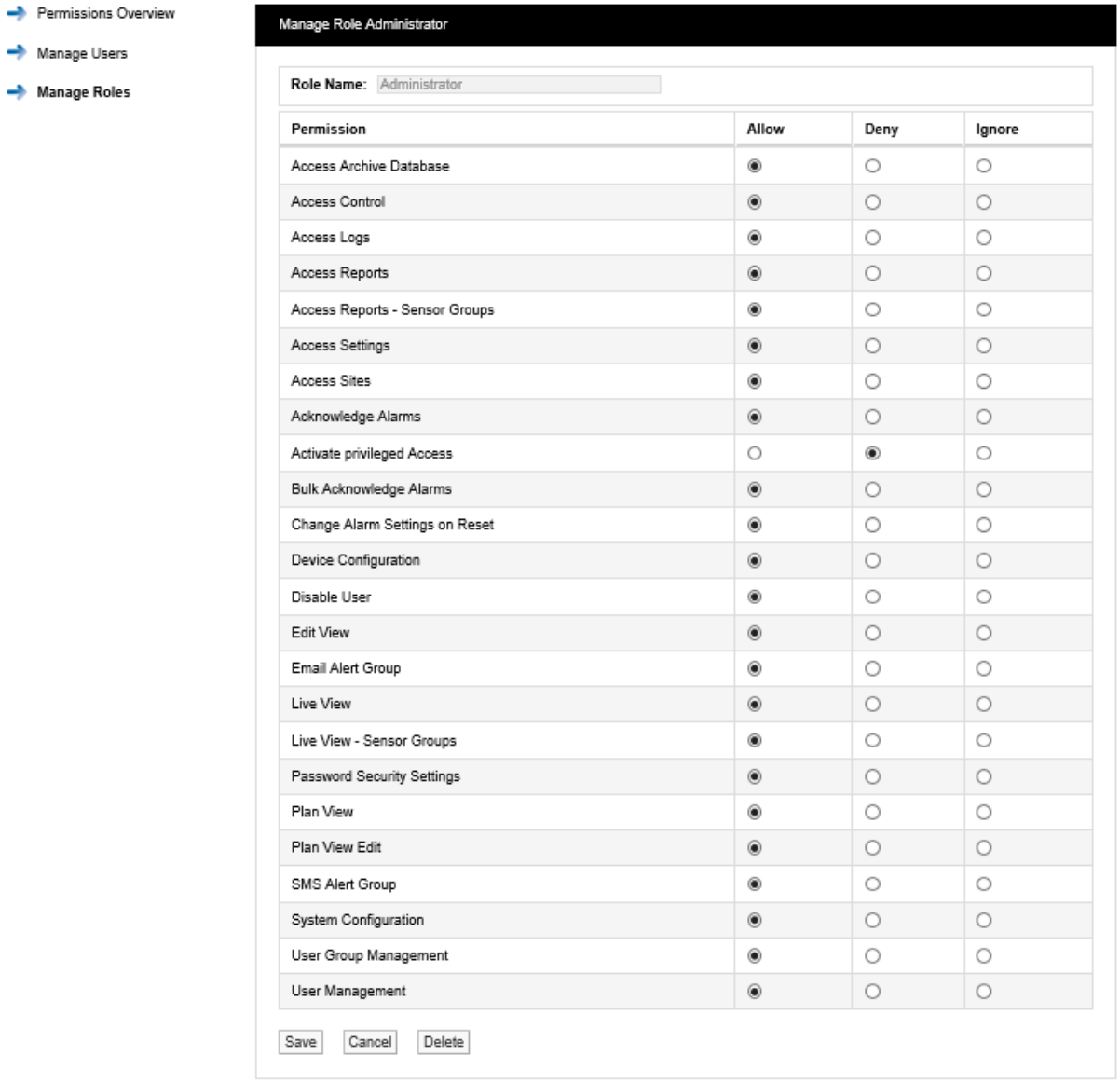
When setting up from first install, select Admin**>Access Control>Manage Roles**. The Select a Role to Manage window appears see below.



Click on **New Role**. The New Role window appears see below.



Enter a name for the Role. We would recommend using Administrator for the highest level user. It is also suggested that all functions are set to **Allow** with the exception of **Activate privileged Access** which should be set to **Deny**. Select Save. You have now created the Administrator Role. See below.



Other Roles can be created as required. following the instructions above.

Permission Definitions

Permission	Description	User Level
Access Archive Database	Controls access to Archived read only data	M
Access Control	Controls access to the Access Control section	H
Access Logs	Controls access to System Logs	M

Permission	Description	User Level
Access Reports	Controls access to Reports	M
Access Reports - Sensor Groups	Controls access to the Sensor Groups, Reports menu	M
Access Settings	Controls access to entire Settings menu	H
Access Sites	Controls access to Sites meu	M
Acknowledging Alarms	Allows a user to acknowledge alarms	M
Acknowledge Alarms in Bulk	Allows user to acknowledge multiple sensors alarms	H
Activate privileged Access	Allows Admin User to login as the user, see note **1** below.	H
Change Alarm Settings on Reset	Allows a user to change alarm values when resetting an alarm	M
Device Configuration	Controls access to the Device Configuration menu.	H
Disable User	Allows a user to disable other users.	H
Edit View	Controls access to Edit Mode for Views.	M
Email Alert Group	Controls access to Email Alert Group settings	M
Live View	Controls access to the Live View, see note **2** below.	L
Live View - Sensor Groups	Controls access to Sensor Groups	L
Password Security Settings	Allows access to Password Security Settings screen	H

Permission	Description	User Level
Plan View	Controls access to Plan View menu, see note **2** below.	L
Plan View Edit	Allows movement of sensors in Plan View	M
SMS Alert Group	Controls access to SMS Alert Group menu	M
System Configuration	Controls access to System Configuration menu	H
User Group Management	Controls access to User Group Management menu	H
User Management	Controls access to User Management menu	H

Key:

- H These permissions are recommended for the highest level user only
- M These permissions can be granted to general users
- L These permissions can be granted to all users

Notes:

1. So the Admin User can configure settings which the normal user does not have access to.
2. This should be available to all users.

Suggested Role Definitions

The following table gives suggested roles and the settings for those roles. You may wish to define roles and permissions slightly differently for your Site.

Role	Permissions
General Administrator	Select Ignore for: - Access Control - Access Logs - Access Sites

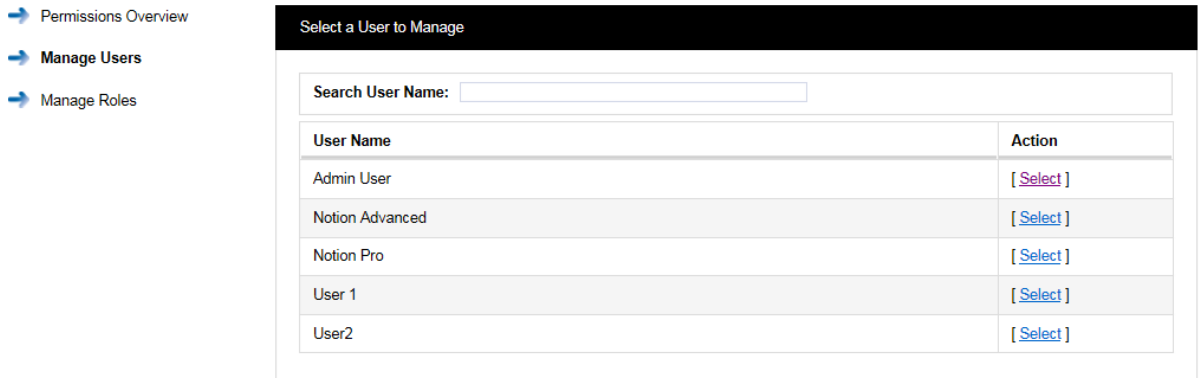
Role	Permissions
	□ Activate privileged Access □ Disable User □ User Group Management □ User Management Select the Allow option buttons for all other permissions.
Advanced User	Select Ignore for: □ Access Control □ Access Logs □ Access Sites □ Activate privileged Access □ Change Alarm Settings on Reset □ Device Configuration □ Disable User □ User Group Management □ User Management Select the **Allow** option buttons for all other permissions.
Standard User	Select Ignore for: □ Access Reports □ Access Reports – Sensor Groups □ Access Settings □ Acknowledge Alarms □ Bulk Acknowledge Alarms □ Live View □ Live View – Sensor Groups □ Plan View Select the **Deny** option buttons for all other permissions.

Role	Permissions
Guest User	Select Ignore for: ☐ Live View ☐ Live View – Sensor Groups ☐ Plan View Select the **Deny** option buttons for all other permissions.

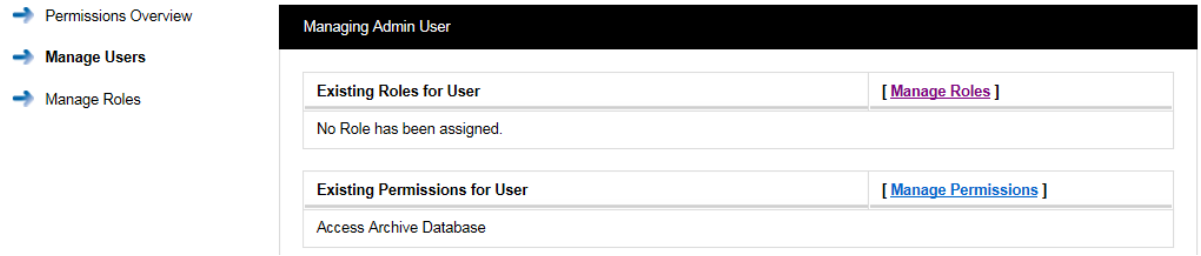
Manage Users

Notion Pro allows users to be associated with Roles rather than having to individually add Permissions to each individual User. Permissions can also be done individually if required.

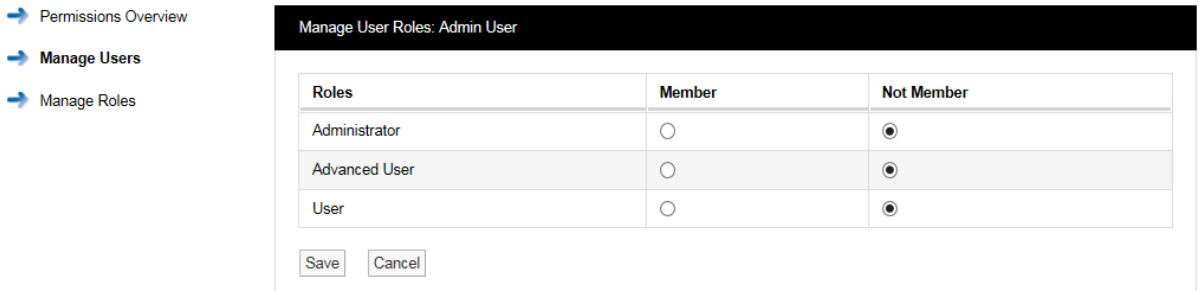
When setting up users, select **Admin>Access Control>Manage Users**. The Select a User to Manage window appears. See below.



To assign a User to a Role click on Select next to the user name that you want to assign a Role to, see above. The Managing User window appears, see below.



To assign a Role to this User select **Manage Roles**. The Manage User Roles window appears. See below.



In this case the previously selected User was the Administrator user, so we need to select the **Member** option button next to Administrator to put this user into the Administrator Role. This user will now inherit the Permissions assigned to this Role. More than one user can be assigned to the same Role.

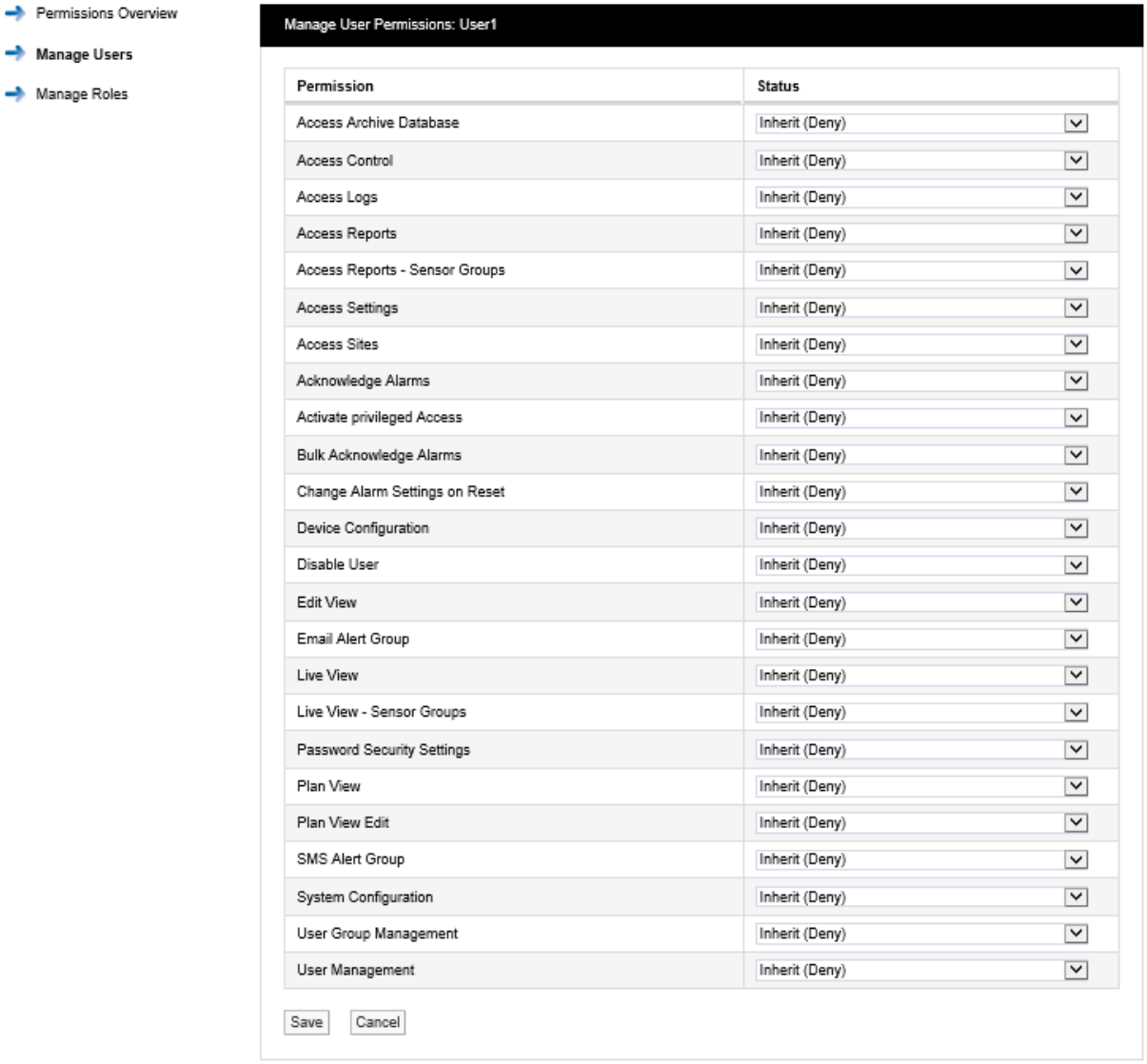
A user can be assigned to more than one Role, for example a lower level user can be assigned a higher set of Permissions by an Admin user on a temporary basis. This allows a user to stand in for a colleague without the need to access the user settings and individually change the Permissions.

User Permissions

The main method for Notion Pro users to be granted Permissions is by association to a Role. For total flexibility an individual user can have some permissions Allowed or Denied rather than inherited.

To Manage Permissions for a User:

1. Select **Manage Users** to give the **Select a User to Manage** dialogue box.
2. Select the required user to give the **Managing** <user name> dialogue box.
3. Click **Manage Permissions** to give the Manage User Permissions window. See below.



To change a Permission select the drop down arrow next to the Permission to be changed and select either Allow or Deny. The above process can be repeated for other Users and Roles.

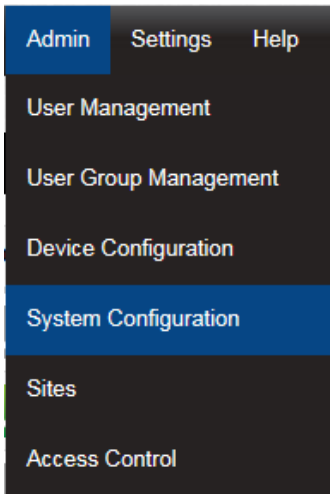
5.2.4 System Configuration

This section describes where SMS settings are set for the automated alarm functions.

Email Alerts enable Notion Pro Users to be emailed with the status of Notion Pro. Email Alerts can also be set to enable Notion Pro Users to be emailed if a sensor goes into Alarm condition. If your Site has an SMS Module then users can get text messages to inform them of alarm conditions.

Note: You should have details of values and settings for the following items. These details should be completed in the IceSpy Notion Pro Pre-Requisites document, doc. no. IM5546:

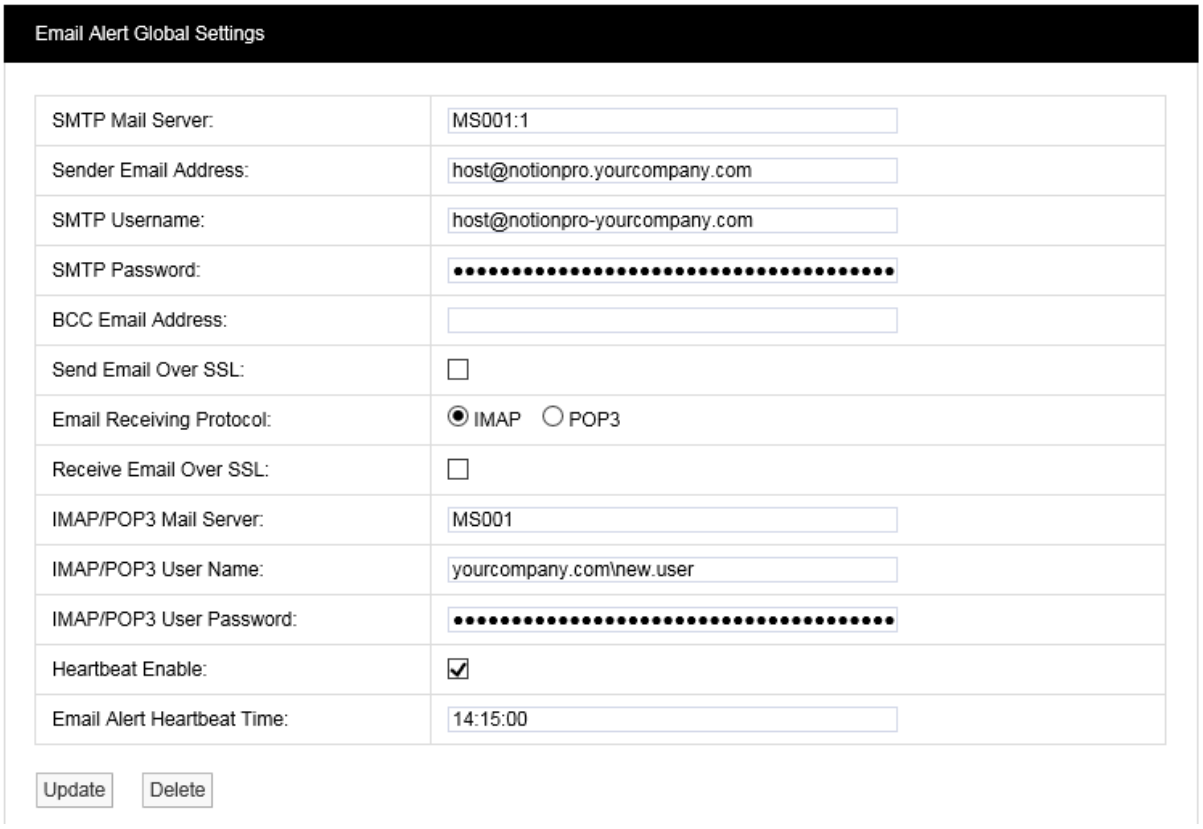
- SMTP Mail Server name
- Sender Email Address
- SMTP Username
- SMTP Password
- BCC Email Address
- Heartbeat Enable setting
- Email Alert Heartbeat Time setting
- Email Receiving Protocol (optional)
- Receive Email over SSL setting (optional)
- IMAP/POP3 Mail Server Name (optional)
- IMAP/POP3 User Name (optional)
- IMAP/POP3 User Password (optional)



Select **Admin>System Configuration** from the drop down menu to access the System Configuration section.

After selecting **System Configuration** a new window appears, see below.

Email Alert Global Settings



The in the above example details ideally should have been collected prior to installation and if available will be on the Notion Pro Pre-Requisites document. If the details are not available at the time of commissioning, you will need to contact your IT department or provider. If the details are available enter them into the dialog boxes above.

It is not essential that these details are entered at this time. If email alerts and emailed reports are not required at this point these details can be entered at a later date.

Mail Servers can be specified as a resolvable hostname or IPv4 address. The example settings, shown above use standard IANA assigned port numbers when connecting to the mail server(s). If required you can specify the port number to be used, by adding a colon ':' followed by the required port number to the server hostname or IPv4 address; e.g. 'MS001:25' would use port 25.

If you do not know the address(s) and/or port number(s) used by your Mail server, contact your system administrator or IT support provider. Do NOT contact IMC Technical Support, as this is information that only your IT administrator or support provider can supply.

It is recommended that the Heartbeat message is enabled, the problem with automated alarm systems using tools such as email, is if you don't get an alarm for several days or weeks then it is difficult to know if that is because the system is not generating any alarms or is it because the email system has failed. The Heartbeat message will give a daily indication that everything is functioning correctly. The timing of the Heartbeat message can

be set in the bottom dialog box, please ensure that the time is entered in the following format:

- 14:15:00

Any time from the 24 hour clock can be set. When all settings are entered select Update.

The Receive Email and IMAP/POP3 settings are for email alert acknowledgement handling, and can be left blank should this feature not be required.

Note: Do NOT set the BCC Email Address to be the same as the Sender Email Address.

Warning: It is not recommended that email alerts are used on their own for critical alarms. Email alerts rely on your internal email systems functioning correctly. Or if your Internet Service Provider is suffering any problems this will also cause disruption of service.

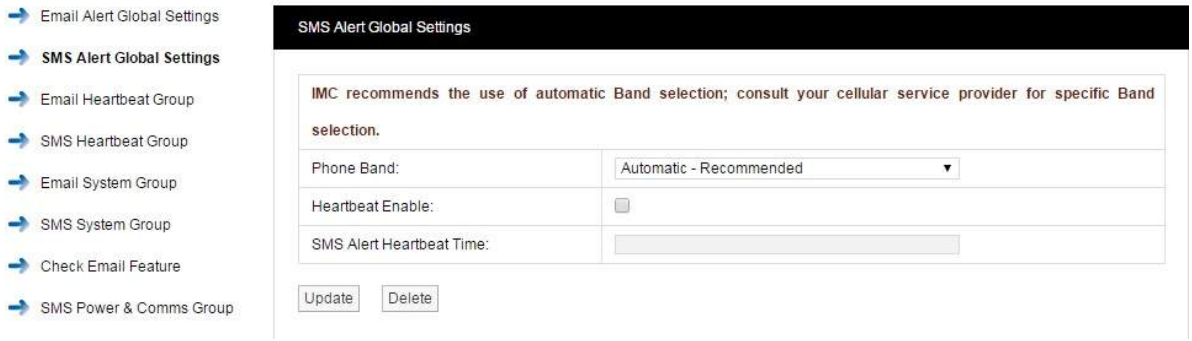
For critical alarms IMC recommends the use of two different methods to send out alarm alerts. Other forms of alarm alert generation methods are SMS driven from the SMS Module GSM device or hard wired relays driven locally from the Network Receivers. Both methods require extra hardware.

Contact your IceSpy sales representative or your local distributor for further details. Contact information can be found on our website at http://www.the-imcgroup.com/contact-us for our UK Head office contacts or http://www.the-imcgroup.com/global-distributors to contact one of our authorised distributors

SMS Alert Global Settings

Notion Pro allows alarm alerts to be sent out via SMS Alerts.

To set up SMS Alert Global Settings, select **SMS Alert Global Settings**, the SMS Alert Global Settings Window will appear see below.



IMC recommend that the SMS unit is set to auto-detect the phone band; however, the Phone Band drop down control can be used to select a specific band for your service provider.

It is recommended that the Heartbeat message is enabled. The problem with automated alarm systems using tools such as SMS is, if you don't get an alarm for several days or weeks then it is difficult to know if that is because the system is not generating any alarms or is it because the SMS system has failed. The Heartbeat message will give a daily

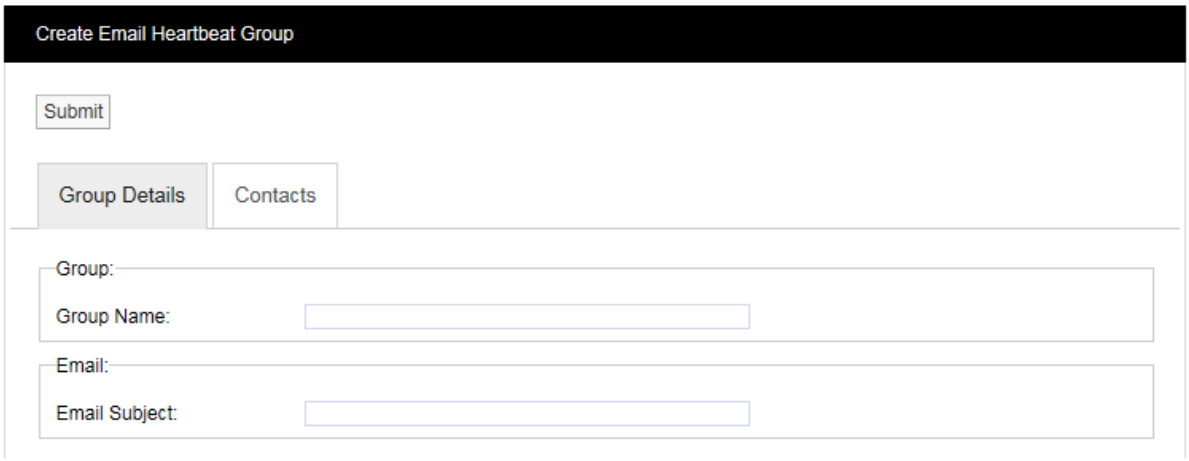
indication that everything is functioning correctly. The timing of the Heartbeat message can be set in the bottom dialog box, please ensure that the time is entered in the following format:

- 10:10:00

Any time from the 24 hour clock can be set. When all settings are entered select Update.

Email Heartbeat Group

You can create the Email Heartbeat Group which allows multiple users to be allocated to a group. To create the Email Heartbeat Group select **Email Heartbeat Group** from the side menu and the Create Email Heartbeat Group Window will appear see below.

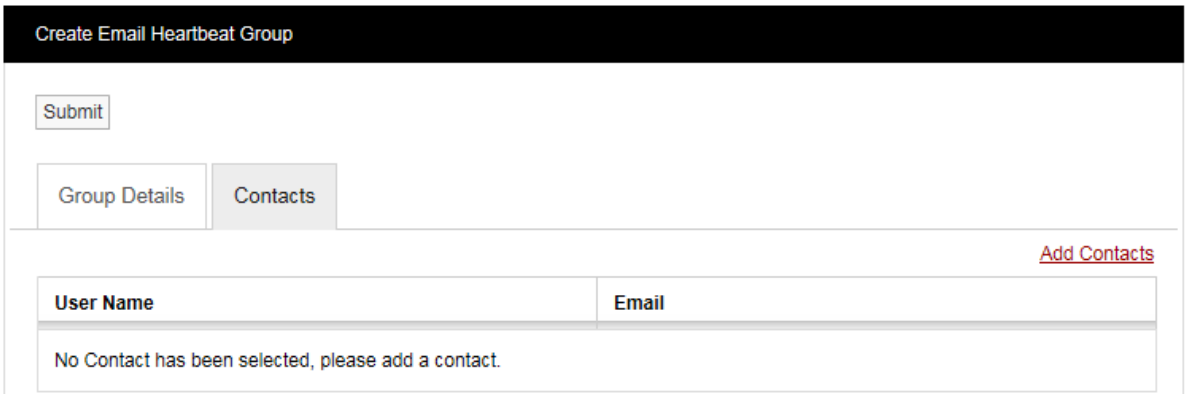


Step 1

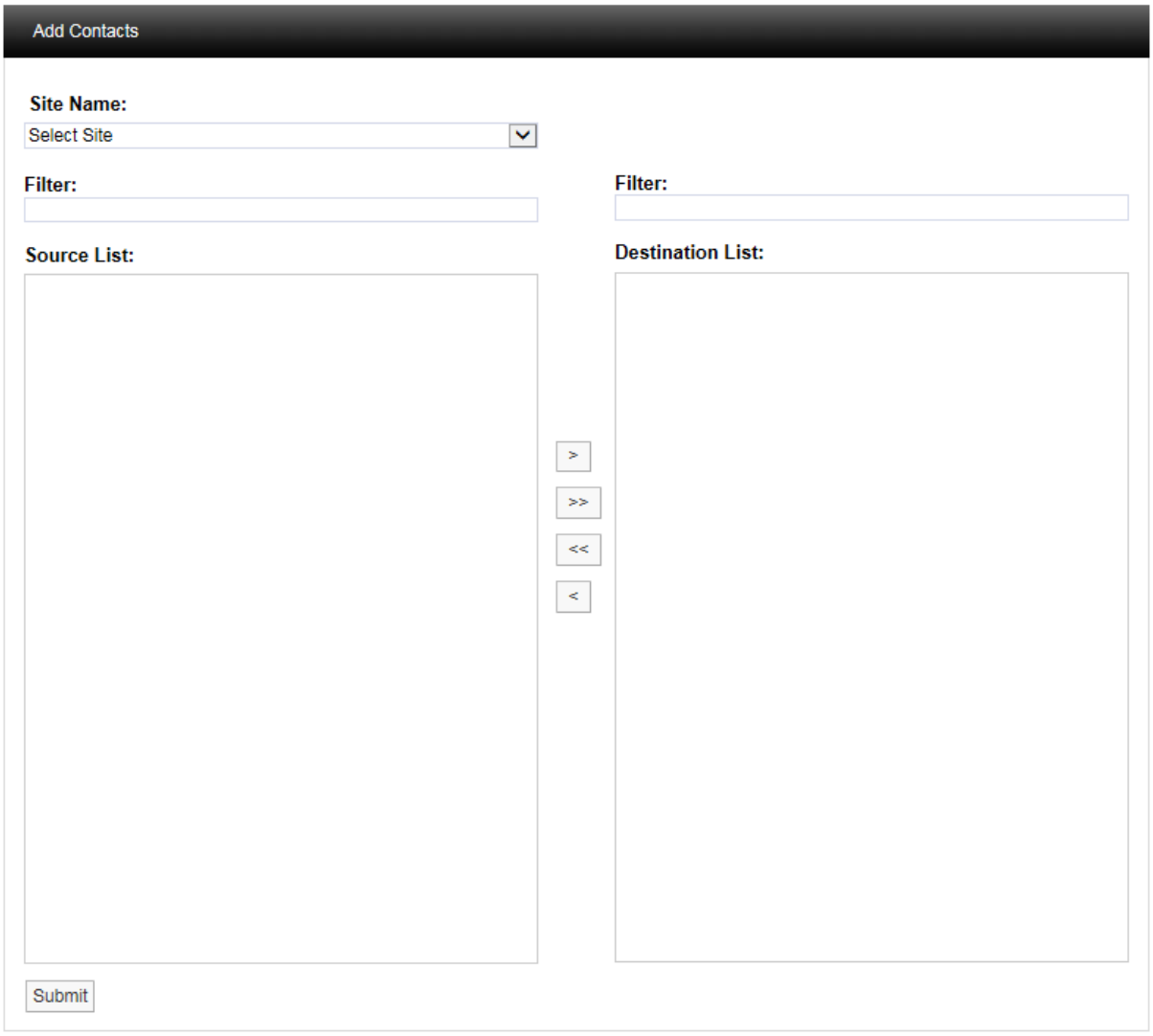
Enter a name for the group in the dialog box next to Group Name, then enter a phrase in the dialog box next to Email Subject. The text entered here will become the subject of the email.

Step 2

Click on the Contacts tab and the Contacts dialog box appears, see below.



To add Contacts select Add Contacts and the Add Contacts window appears, see below.

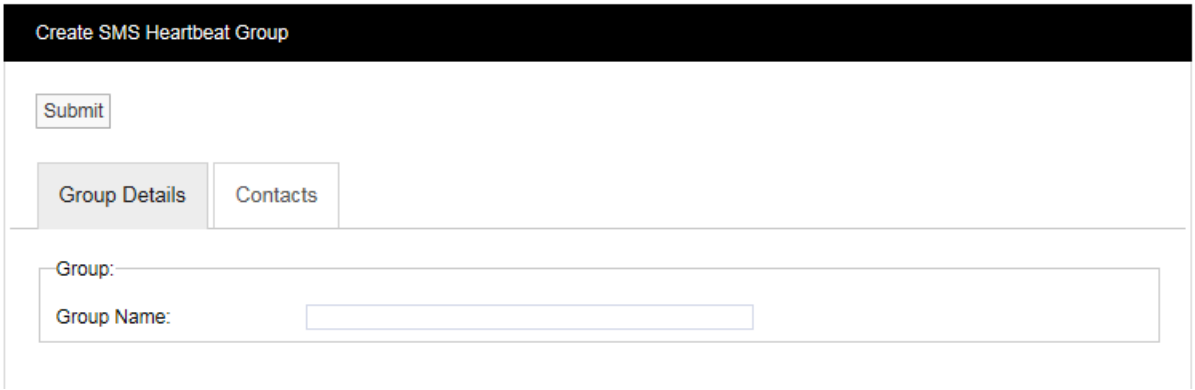


Select a Site from the **Site Name** drop-down menu on the dialog box. On initial setup there will only be one Site available which is created during the installation. See more about creating Sites in Site Management.

The selected Site's associated contacts will appear in the left window, when the Site contacts/users list is long the required Contacts can be found by using the Filter. Select the right-facing arrow to move the Contact to the right window. More than one Contact can be moved across. Once you are happy with your selection of Contacts select the Submit button at the bottom left. This will return you to the Edit Email Heartbeat Group window. Select the Update button to save the group.

SMS Heartbeat Group

You can create the SMS Heartbeat Group, which allows multiple users to be allocated to a group. To create the SMS Heartbeat Group select **SMS Heartbeat Group** from the side menu and the Create SMS Heartbeat Group window will appear see, below.

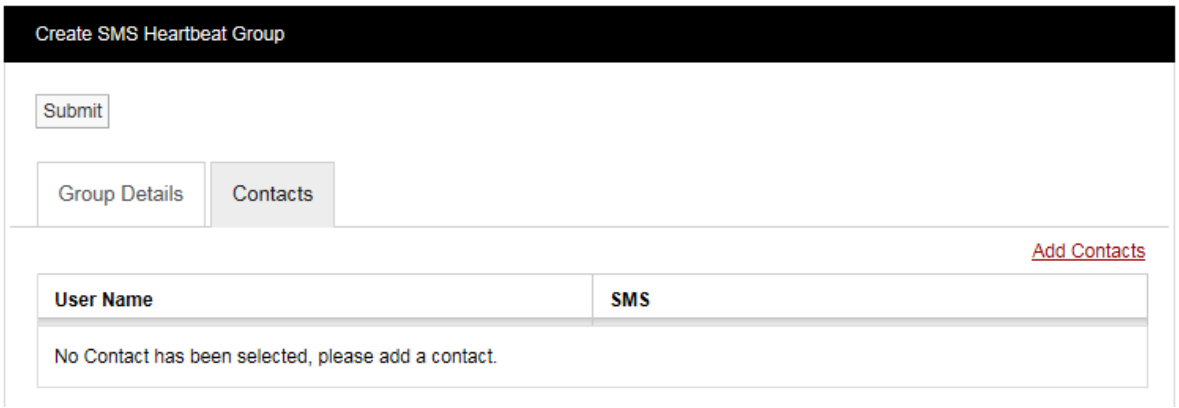


Step 1

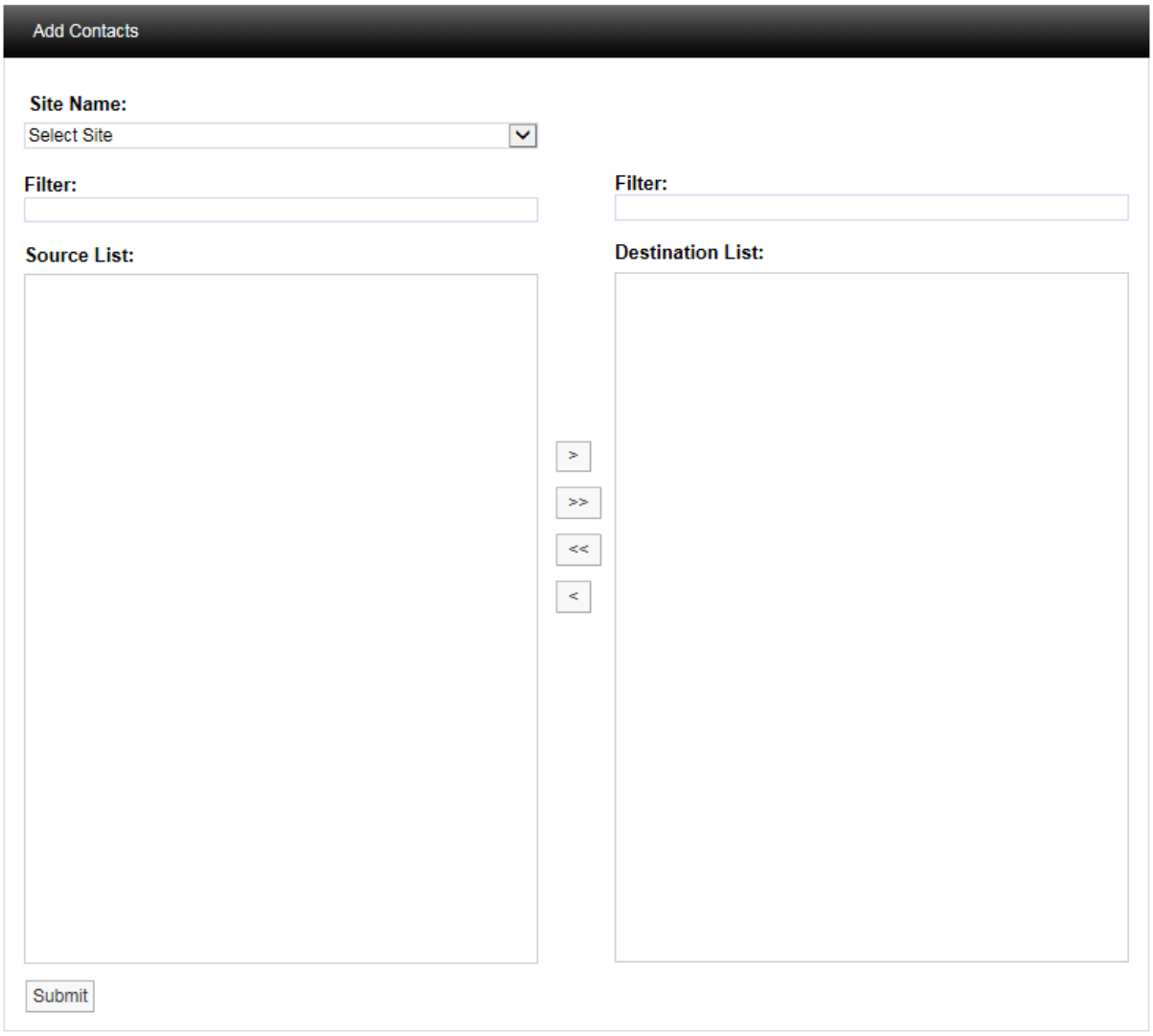
Enter a name for the group in the dialog box next to Group Name.

Step 2

Click on the tab marked Contacts and the Contacts dialog box appears, see below.



To add Contacts select Add Contacts and the Add Contacts window appears, see below.



Select a Site from the **Site Name** drop-down menu on the dialog box. On initial setup there will only be one Site available which is created during the installation. See more about creating Sites in Site Management.

The selected Site's Contacts will appear in the left window, when the Contact list is long the required Contact can be found by using the Filter. Select the right facing arrow to move the Contact to the right window. More than one Contact can be moved across. Once you are happy with your selection of Contacts select the **Submit** button at the bottom left. This will return you to the Create SMS Heartbeat Group window. Select the **Submit** button to save the group.

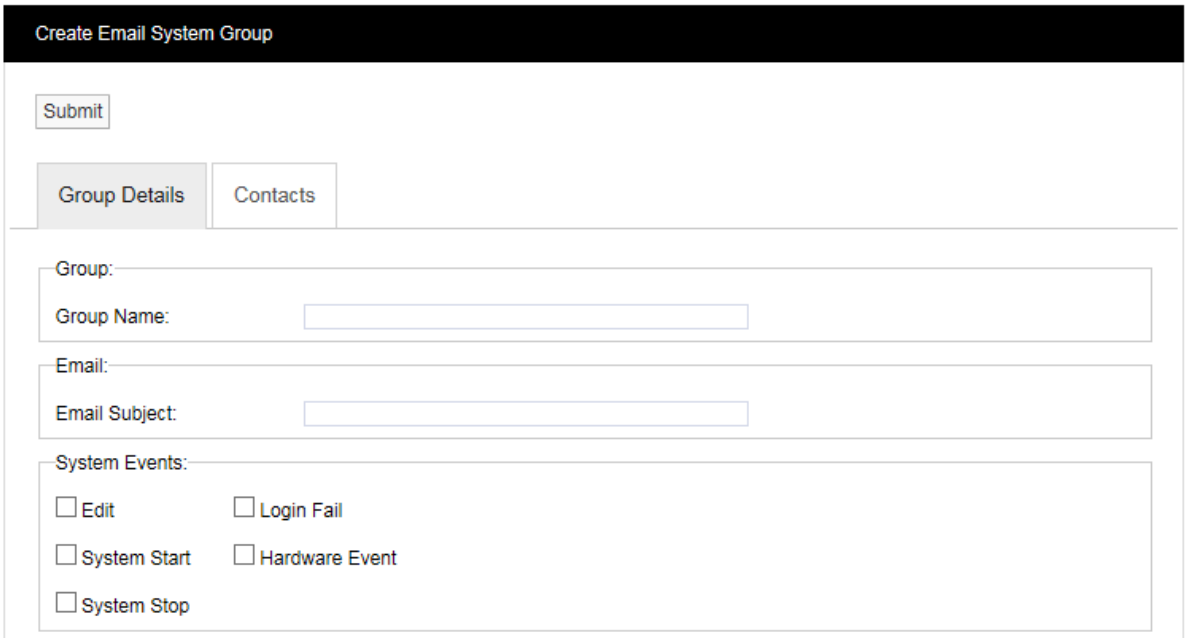
Email System Group

You can create the Email System Group, which sends email alerts from a predefined list of System Events. These events are:

- Edit

- System Start
- System Stop
- Login Fail
- Hardware Event

Multiple users can be allocated to the group. To create the Email System Group select **Email System Group** from the menu and the Create Email System Group window appears, see below.



Step 1

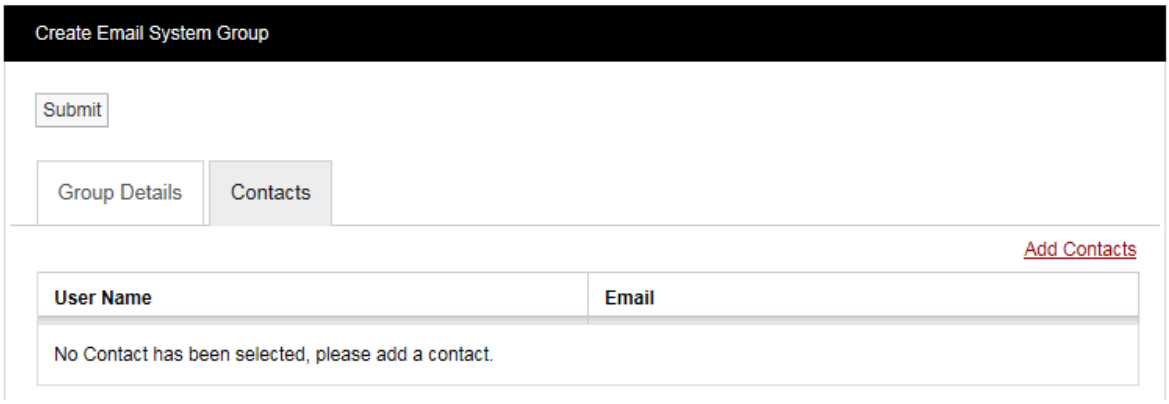
Enter a name for the group in the text box next to Group Name, next enter a phrase in the text box next to Email Subject. The text entered here will become the subject of the email.

Step 2

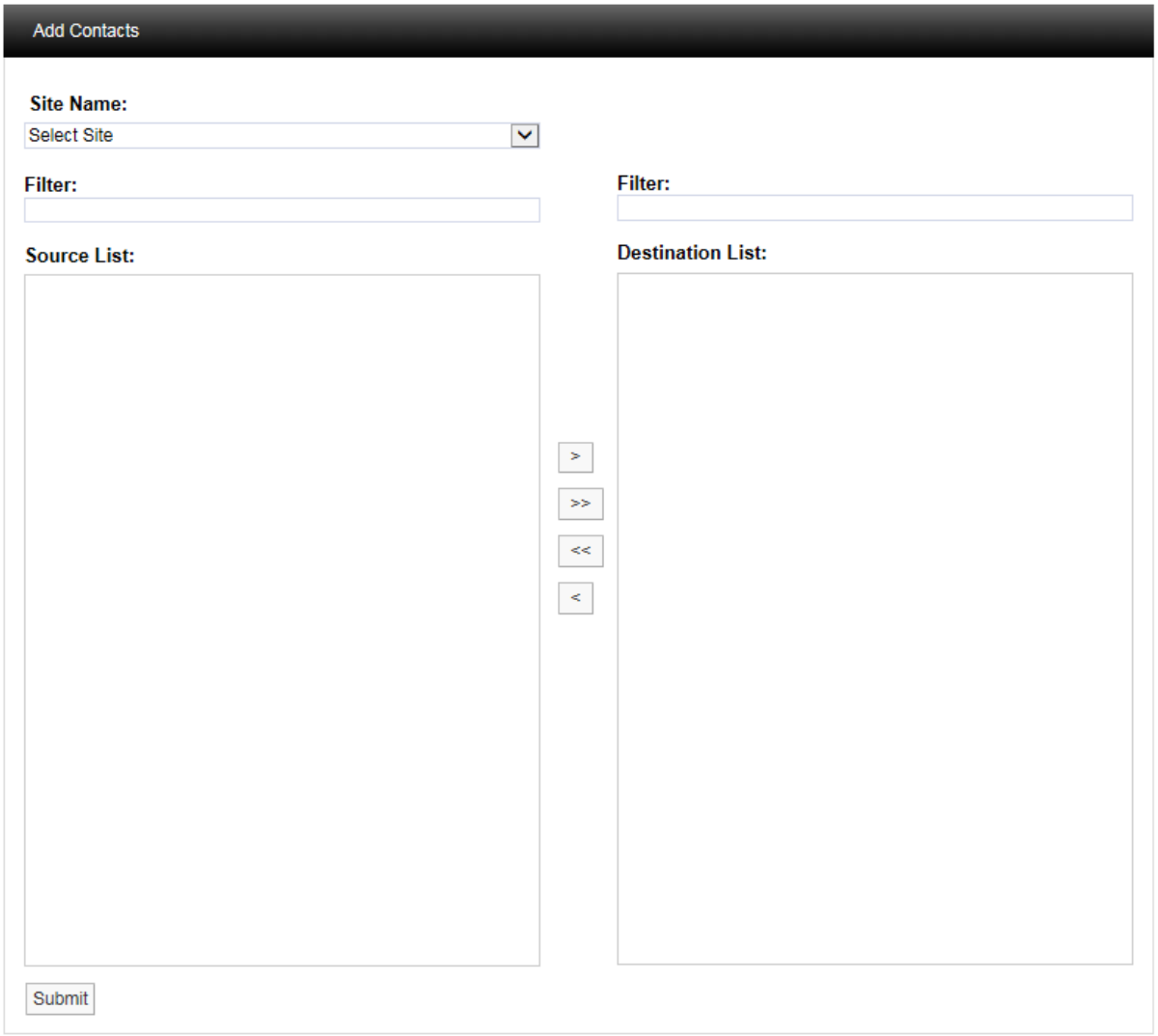
Select the parameters from the System Events panel that you require notification on.

Step 3

Click on the Contacts tab, see below.



To add Contacts select Add Contacts and the Add Contacts Window will appear, see below.



Select a Site from the **Site Name** drop-down menu on the dialog box. On initial setup there will only be one Site available which is created during the installation. See more about creating Sites in Site Management.

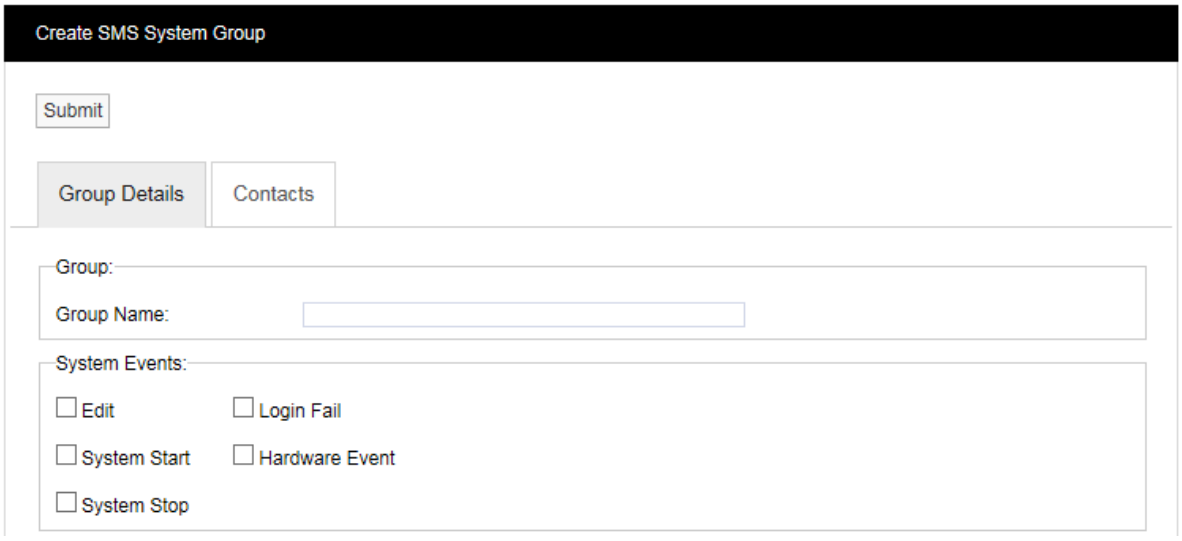
The selected Site's contacts will appear in the left window, when the Site contacts list is long the required Contact can be found by using the Filter. Select the right facing arrow to move the Contact to the right window. More than one Contact can be moved across. Once you are happy with your selection of Contacts select the **Submit** button at the bottom left. This will return you to the Create Email System Group window. Select the **Submit** button to save the group.

SMS System Group

You can create the SMS System Group. The SMS System Group, which sends SMS alerts from a predefined list of System Events. These events are:

- Edit
- System Start
- System Stop
- Login Fail
- Hardware Event

Multiple users can be allocated to a group. To create an SMS System Group select SMS System Group from the side menu and the Create SMS System Group window will appear, see below.



Step 1

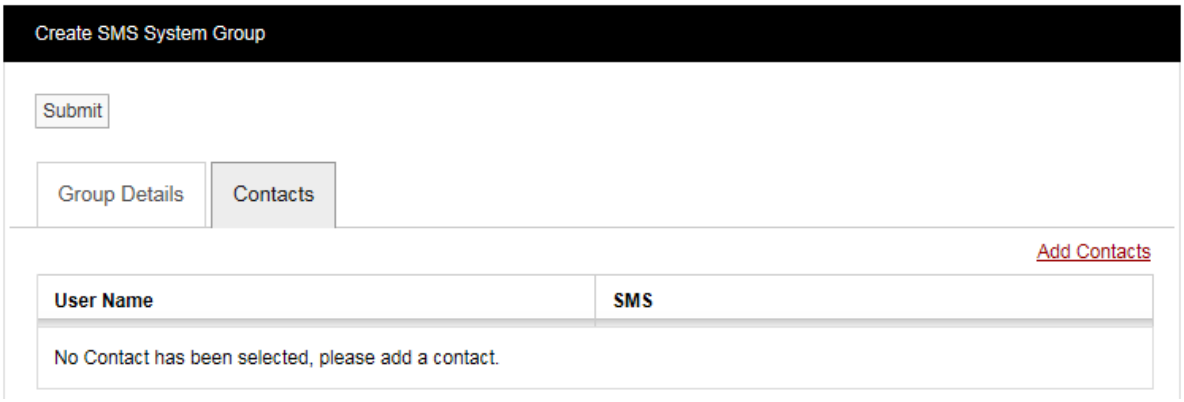
Enter a name for the group in the dialog box next to Group Name.

Step 2

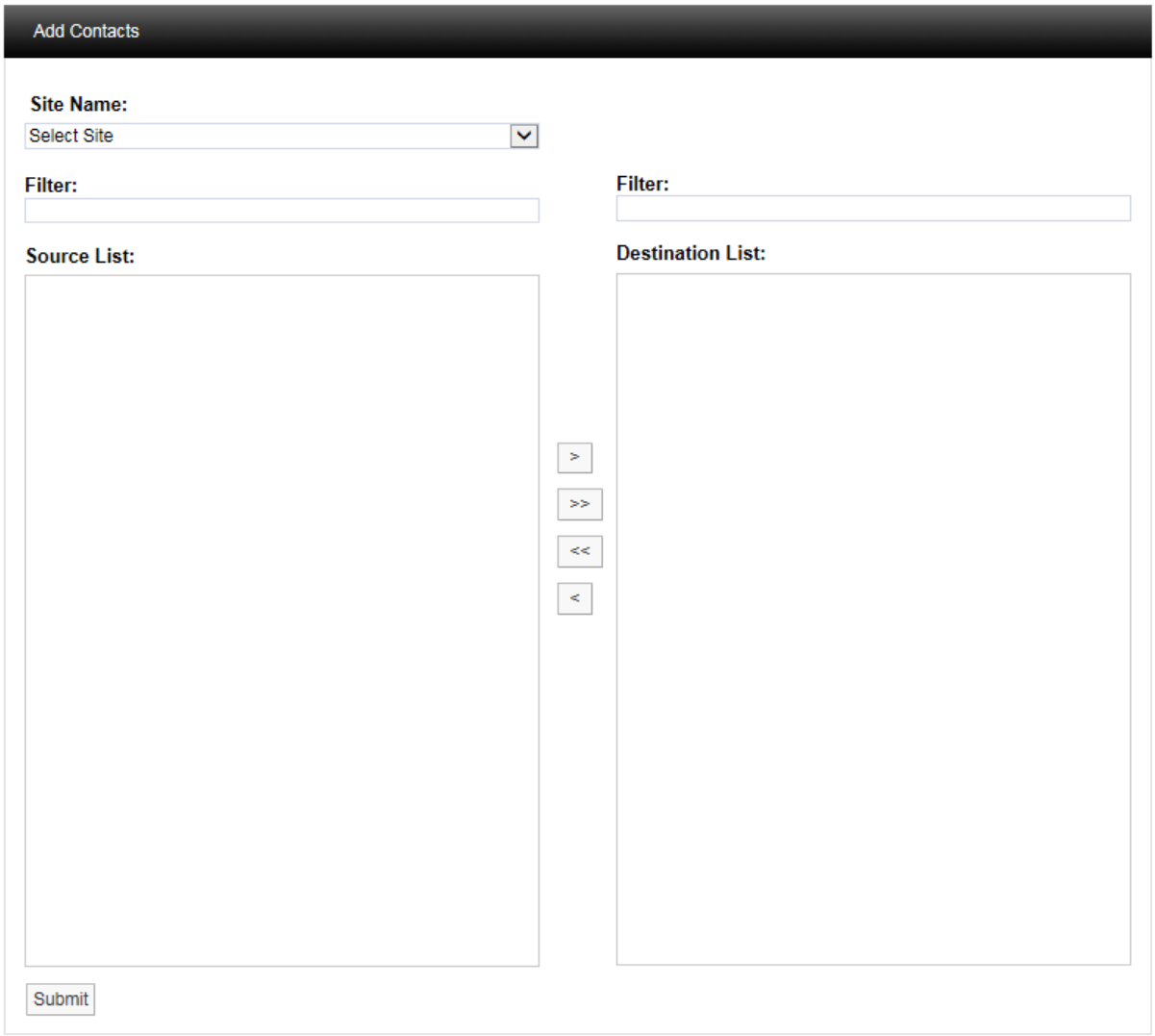
Select the parameters from the System Events panel that you require notification on.

Step 3

Click on the **Contacts** tab and the Contacts dialog box appears, see below.



To add Contacts select Add Contacts and the Add Contacts window appears. See below.



Select a Site from the **Site Name** drop-down menu on the dialog box. On initial setup there

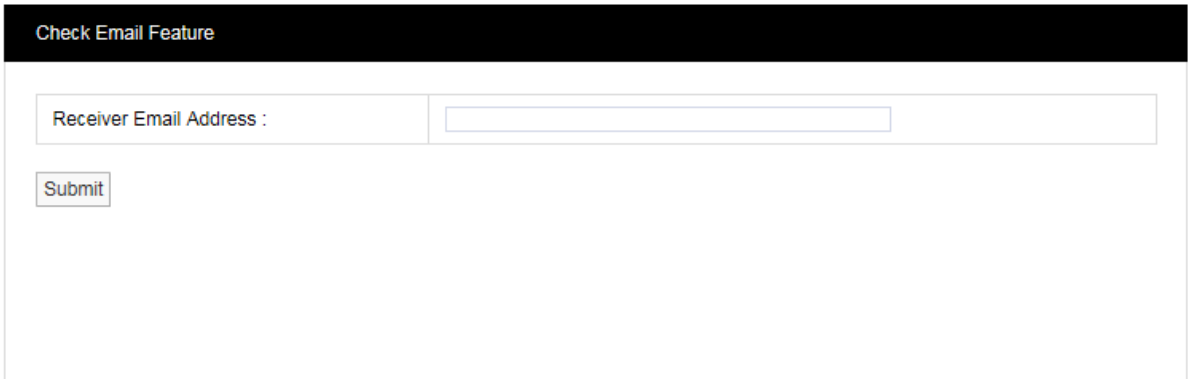
will only be one Site available which is created during the installation. See more about creating Sites in Site Management.

The selected Site's contacts will appear in the left window, when the Site contacts list is long the required Contact can be found by using the Filter. Select the right facing arrow to move the Contact to the right window. More than one Contact can be moved across. Once you are happy with your selection of Contacts select the **Submit** button at the bottom left. This will return you to the **Create SMS System Group** window. Select the **Submit** button to save the group.

The Check Email Feature

This can be used verify that the settings that have been set up in Email Alert Global Settings function correctly and that you can receive an email from Notion Lite.

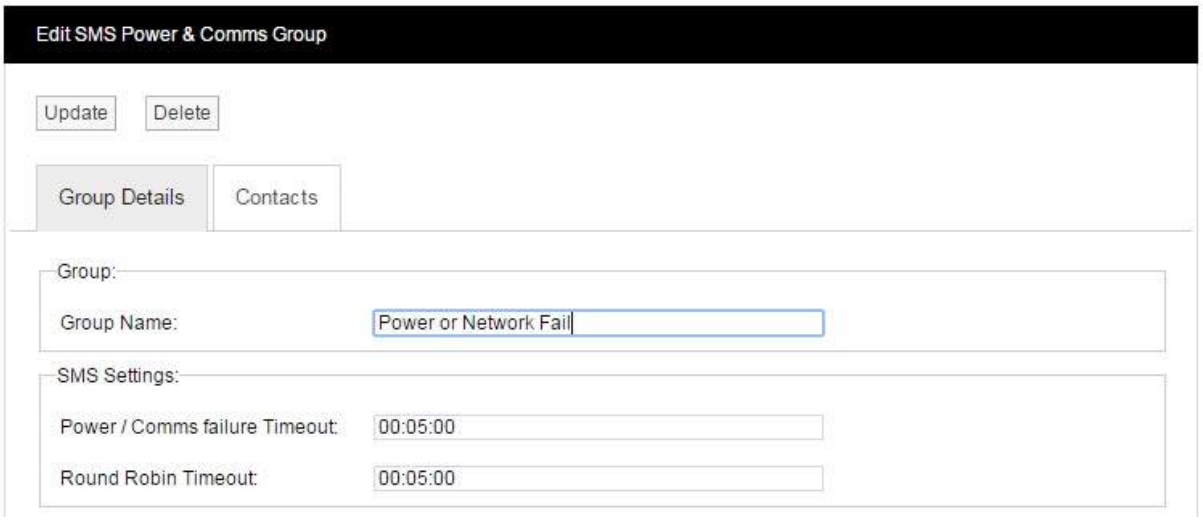
Select **Check Email Feature** to give the Check Email Feature dialog box, see below.



Enter your email address into the Receiver Email Address field then click Submit – you should receive an email from Notion Pro.

SMS Power & Comm's Group

This Group is used to set up a list of phone numbers to receive SMS messages, should the IMC SMS Module detect a power failure or lose of communications with the Notion Pro server.



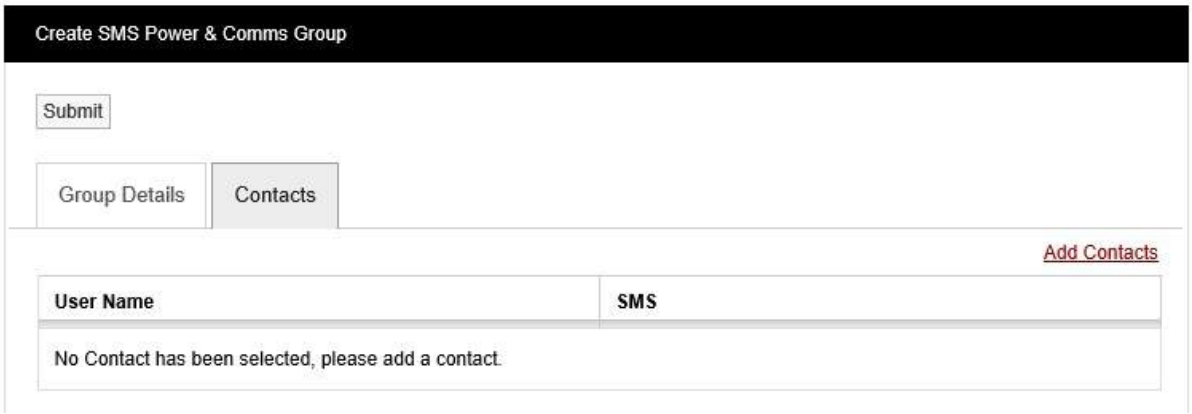
Enter the required Group name, Power / Communication failure timeout and Round Robin Time.

Group name - user set name, this appears at the start of the SMS sent on the event of a Power or Communications failure.

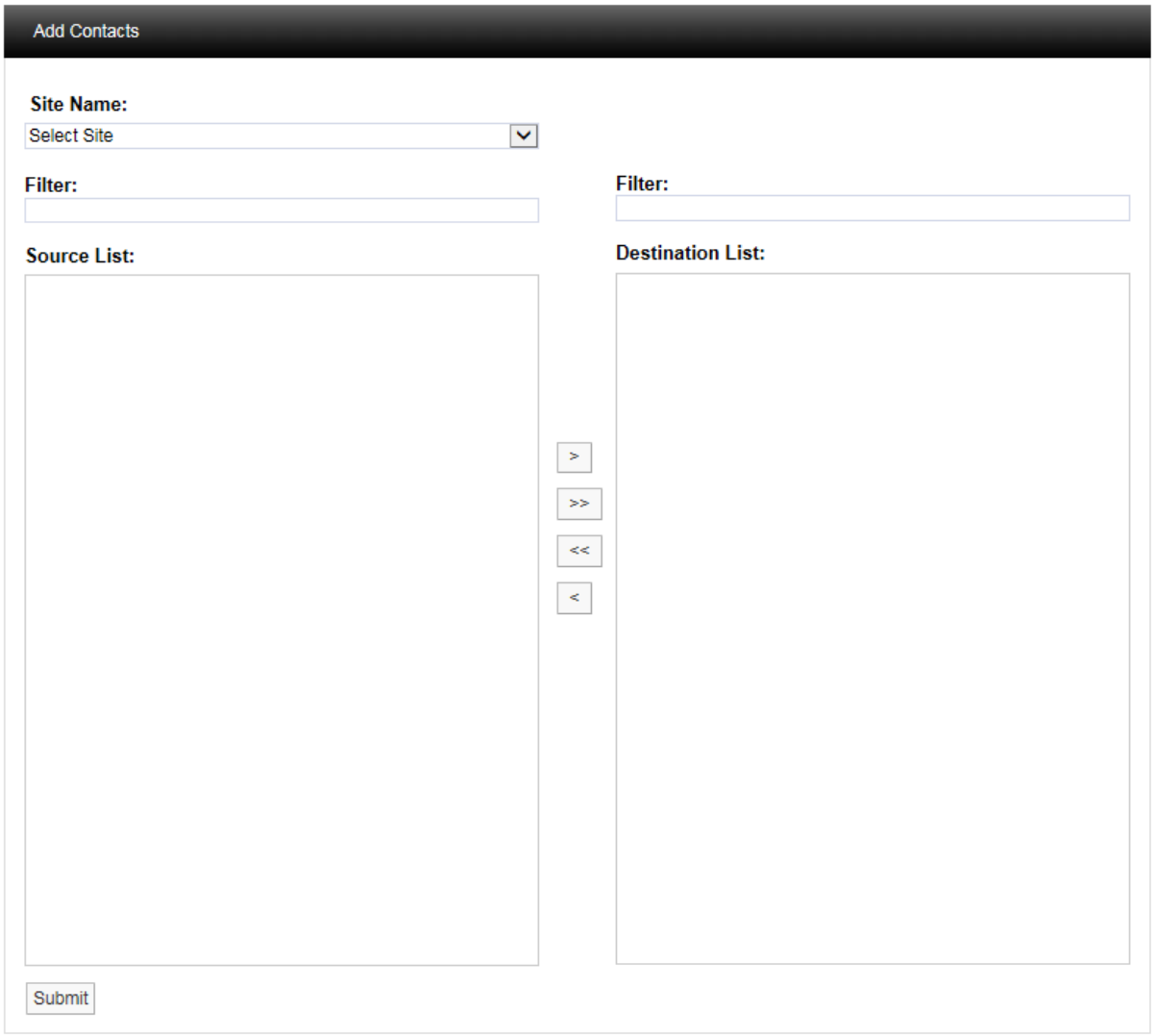
Power / Comm's failure Timeout - period the IMC SMS Module will wait after a Power or Communications failure, before sending SMS messages.

Round Robin Timeout - period the IMC SMS Module will wait between sending each SMS message to the contacts assigned to the group.

Click on the **Contacts** tab to display the current list of contacts set to receive the SMS messages.



To add or edit Contacts, click **Add Contacts**, the **Add Contacts** screen will display as below.



Select a Site from the **Site Name** drop-down menu on the dialog box. On initial setup there will only be one Site available which is created during the installation. See more about creating Sites in Site Management.

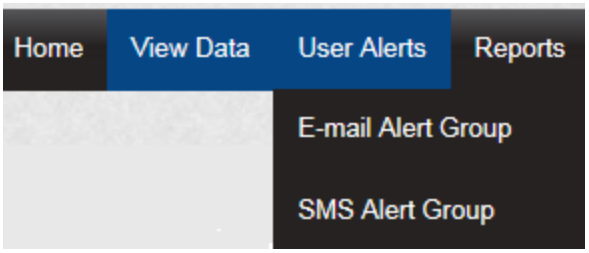
The selected Site's contacts will appear in the left window, when the Site contacts list is long the required Contact can be found by using the Filter. Select the right facing arrow to move the Contact to the right window. More than one Contact can be moved across. Once you are happy with your selection of Contacts select the **Submit** button at the bottom left. This will return you to the **Create SMS Power & Comm's Group** window. Select the **Submit** button to save the group.

5.2.5 User Alerts

The options under this menu concern setting up user alerts by email and SMS. A user must be a member of an **Alert Group** in order to receive messages specified when setting up the System Configuration.

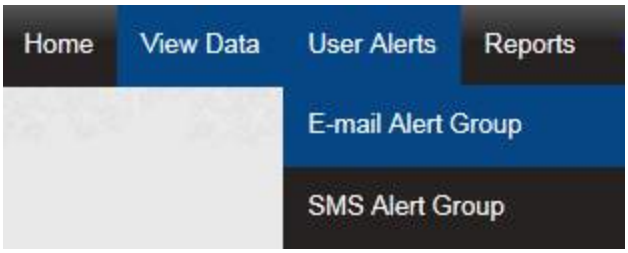
User Alerts provide automated Alarm notification delivered via Email or SMS or both. (An SMS Module is required for SMS Alarms).

This section will take you through the use and settings for Email alarms and SMS Alarms. To access the User Alert settings select User Alerts from the main menu, see below.

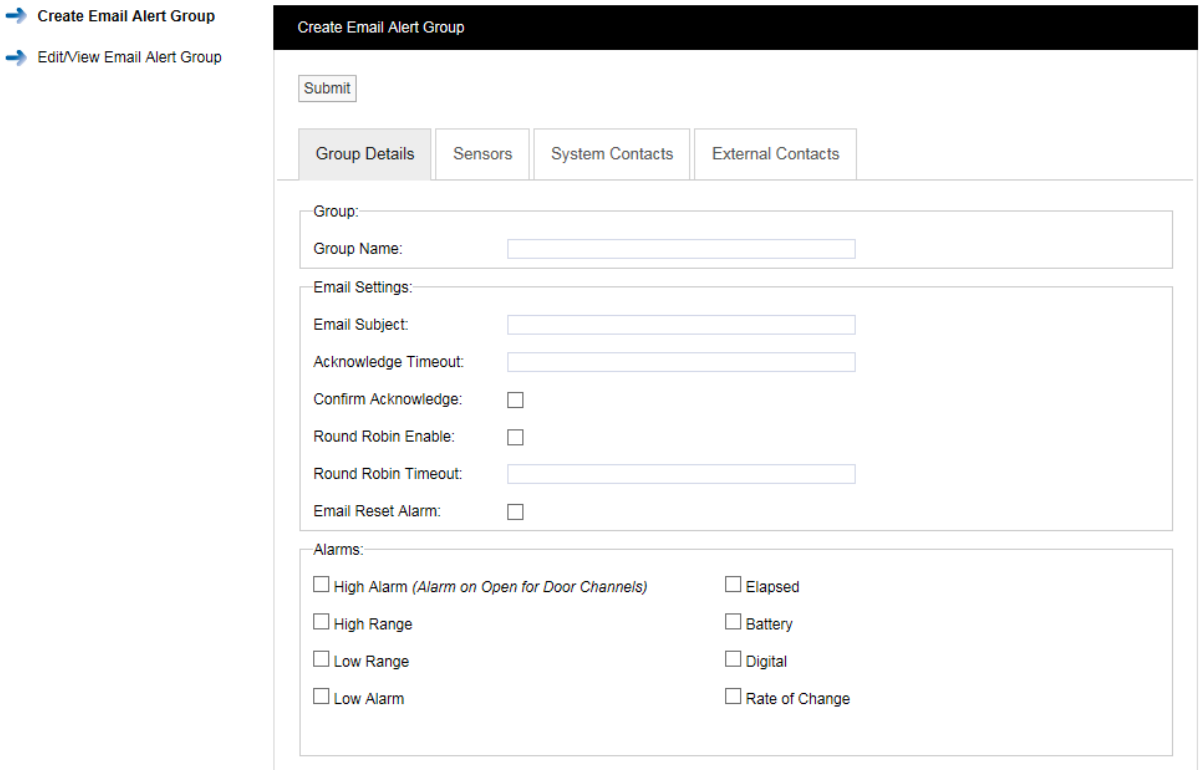


Email Alert Group

To access the Email Alert Group settings select E-Mail Alert Group from the menu, see below.



After selecting E-mail Alert Group, select → Create Email Alert Group. The Create Email Alert Group window appears, see below.



The window above allows Alert Groups to be created and configured for the automated notification of email Alarms.

Step 1

Input a Group Name. This can be something that makes sense to the Site in question or something related to the function. For this example, we will call the group, "Service Email" this will be a Group that sends email Alarms to the Service Engineers.

Step 2

Enter a subject title for the Email into Email Subject. For this example we will call it "System Alarm on Notion Pro Site" this would then alert the engineer in the email subject that they were getting an email about an Alarm condition on that Site.

Step 3

Enter an Acknowledge Timeout. This is the time that the system will wait for an acknowledgement email. This should be entered in time format like this 12:00:00, this would be a 12 hour delay.

Step 4

Select the tick box next to Confirm Acknowledge if an acknowledgement email is required.

Step 5

Email Alerts can be sent in "Round Robin" mode. Round Robin mode is when email alerts are sent to the first name in the list. If there is no response within the time limit the system

moves on to the next person in the list and so on until a response is received, or emails have been sent to everybody in the list. To activate Round Robin mode select the tick box next to Round Robin Enable.

Step 6

You can select the time period the system waits before sending the next email, this should be entered in the Round Robin Timeout field in time format like this: 00:15:00. This would be a 15 minute delay.

Step 7

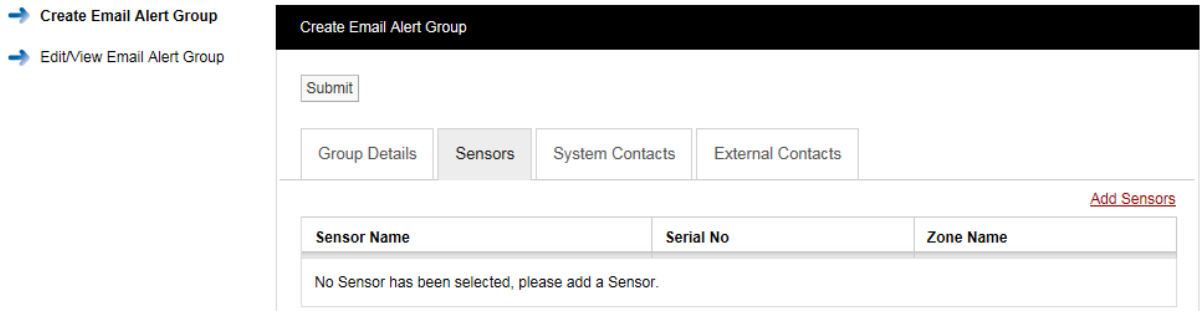
If required, a reply email can be sent which will reset the alarms. To activate this feature select the tick box next to Email Reset Alarm.

Step 8

Select the alarm parameters that Email Alerts are required for by clicking in the tick box next to the alarm condition within the Alarms panel. Multiple selections can be made.

Step 9

Select the Sensors that you require to be included in the Alert Group. Click on the Sensors tab. A new window will appear, see below.



To add sensors click the underlined Add Sensors link. A new window will appear, see below.

To select a Sensor first select a Zone from the **Zone Name:** drop down menu.

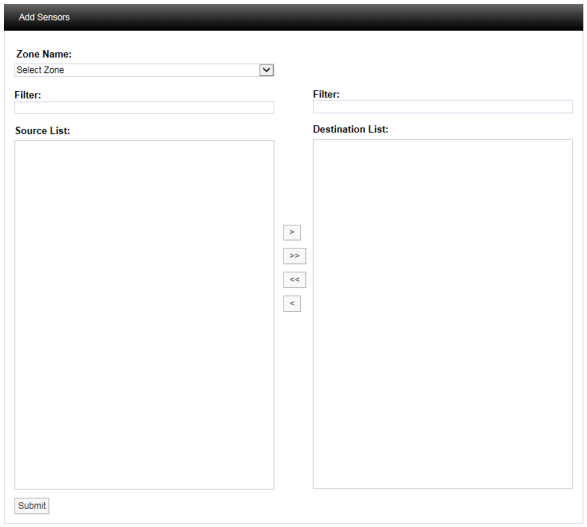
As the Zone is selected the available sensors in that Zone will populate the left column (**Source List**).

To select Sensors highlight the ones that you want to generate email alerts for then click > .

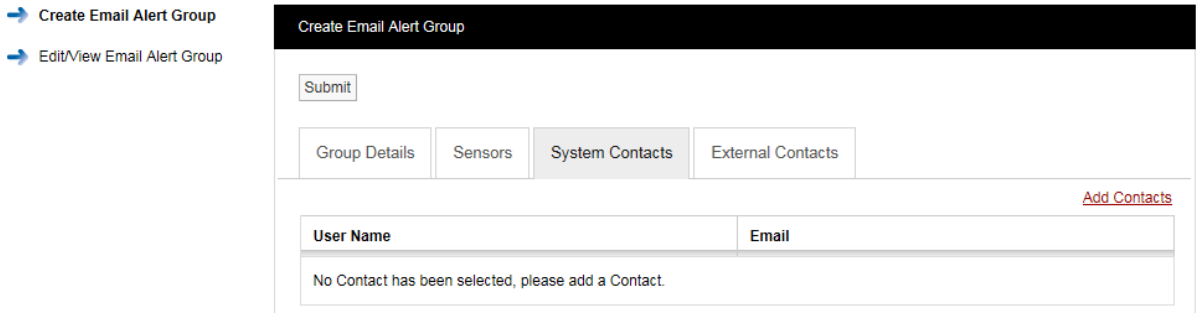
To deselect Sensors highlight them in the right column and click < .

To move all Sensors across click the double arrows.

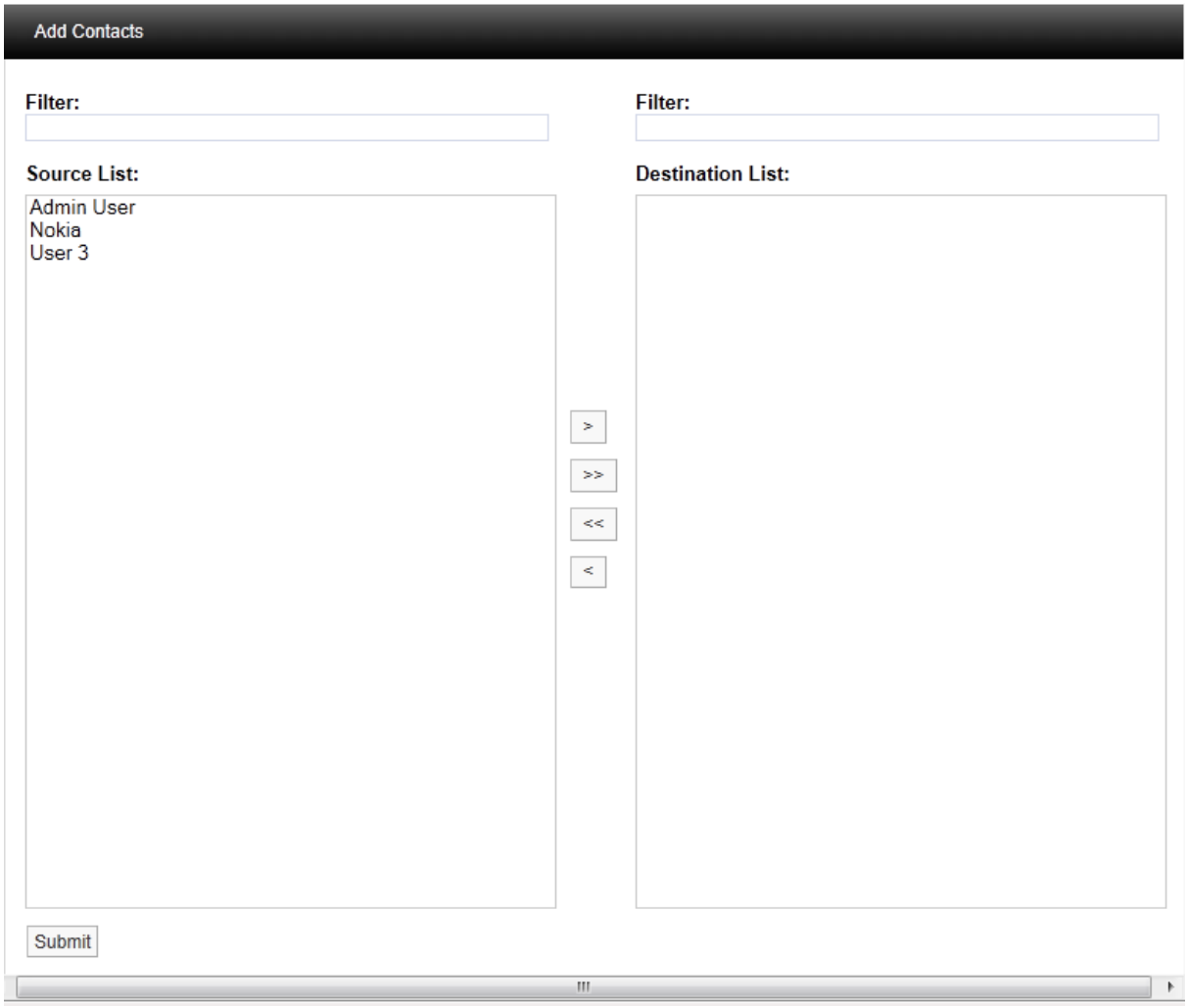
Once happy with you selection select **Submit**.



To add Contacts to the Group select the **System Contacts** tab, see below.



Contacts are the people that you want alerting by email when any of the selected sensors are in Alarm. To add Contacts select Add Contacts. A new window will appear, see below for example.



To select a Contact or Contacts highlight the required contacts and select > , to de-select a Contact highlight the Contact and select < .

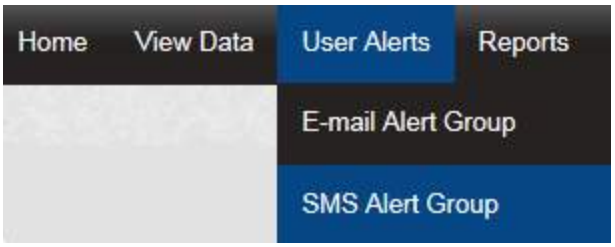
When happy with the details select **Submit**.

There is an option to have email Alarms sent to non-Notion Pro Users or External Contacts. See User Management.

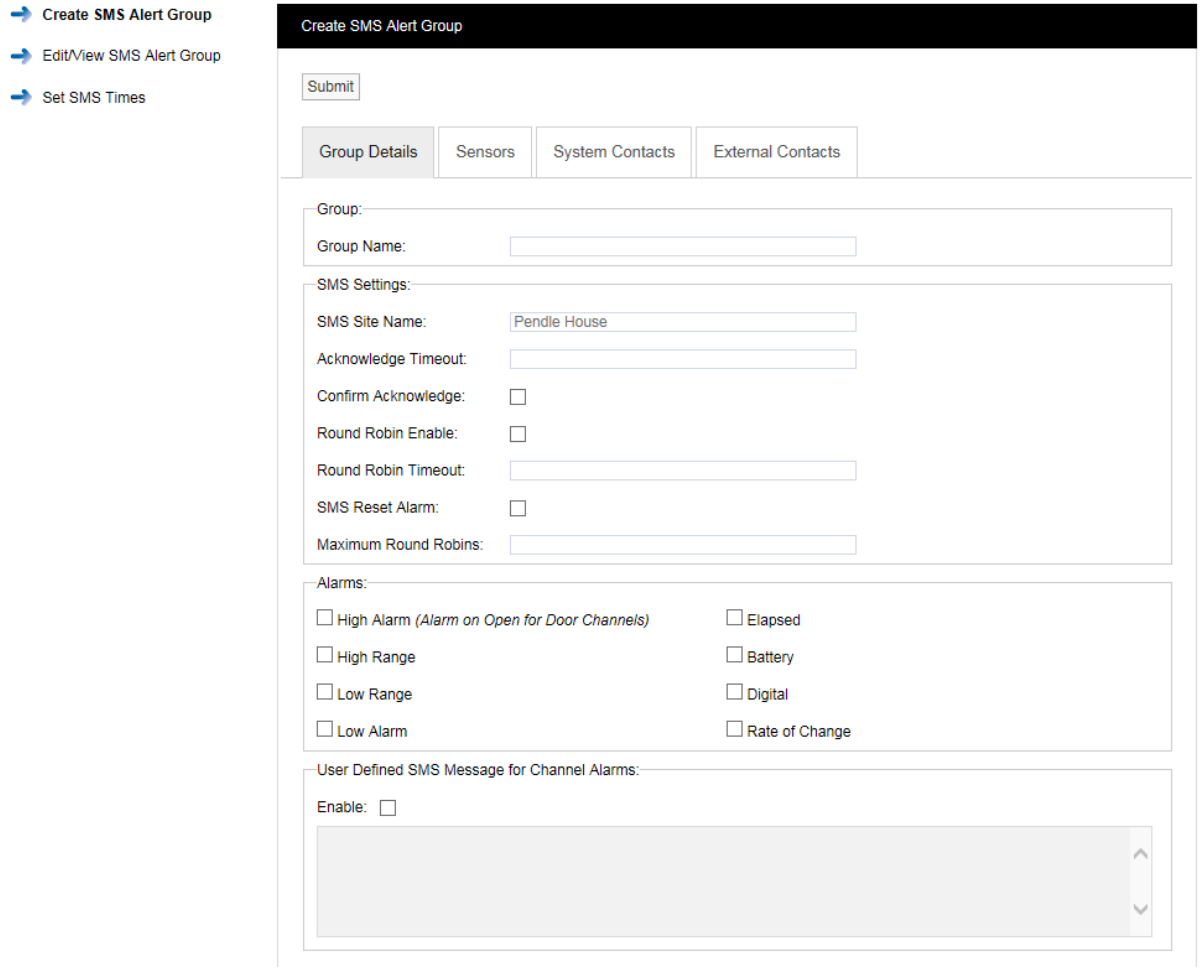
To select External Contacts click the External Contacts tab and follow the procedure above for adding System Contacts.

SMS Alert Group

To access the SMS Alert Group settings select SMS Alert Group from the menu, see below.



After selecting SMS Alert Group the Create SMS Alert Group window appears, see below.



The window above allows **SMS Alert User Groups** to be created and configured for the automated notification of SMS Alarms.

Step 1

Input a Group Name. This can be something that makes sense to the Site in question or something related to the function. For, example we could call the group, "Service SMS". This will be a group that sends SMS Alarms to the Service Engineers.

Step 2

Enter an Acknowledge Timeout. This is the time that the system will wait for an

acknowledgement message before re-sending the message. This should be entered in time format like this: 00:10:00. This would be a 10 minute delay.

Step 3

Select the tick box next to Confirm Acknowledge if an acknowledgement SMS message is required.

Step 4

SMS Alerts can be sent in "Round Robin" mode. Round Robin mode is when SMS Alerts are sent to the first name in the list. If there is no response within the time limit the system moves on to the next person in the list and so on until a response is received. To activate Round Robin mode select the tick box next to Round Robin Enable.

Step 5

You can select the time period the system waits before sending the next message, this should be entered in time format like this: 00:15:00. This would be a 15 minute delay.

Step 6

If you require, a Reply SMS can be sent which will reset the Alarms. To activate this feature select the tick box next to SMS Reset Alarm.

Step 7

The number of times the system will go around the Round Robin loop can be limited. To activate this feature enter the number of times the system should go round the loop in the Maximum Round Robins field.

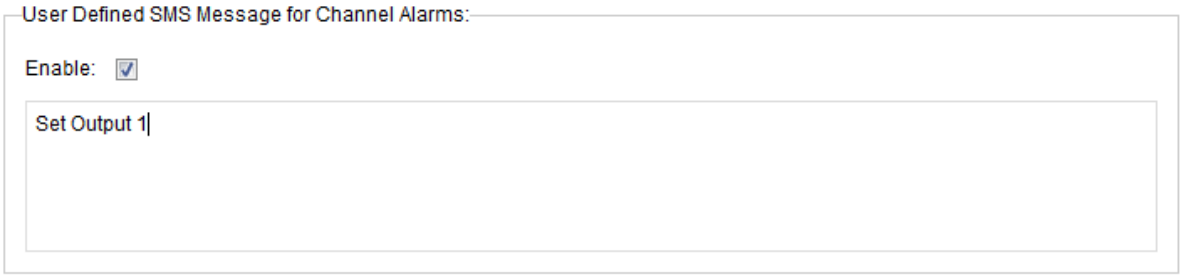
Step 8

Select the Alarm parameters that Email Alerts are required for by clicking in the tick box next to the Alarm condition within the Alarms panel. Multiple selections can be made.

Step 9

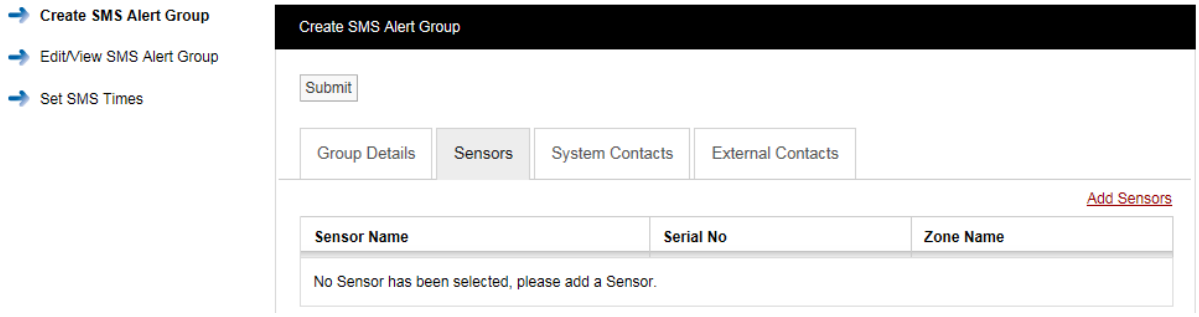
For Channel Alarms, you may define your own text message, (this can be used to trigger events on a 3rd-party system with SMS receive capability).

To set-up the required message select Enable and enter the required text in the text box. See below.

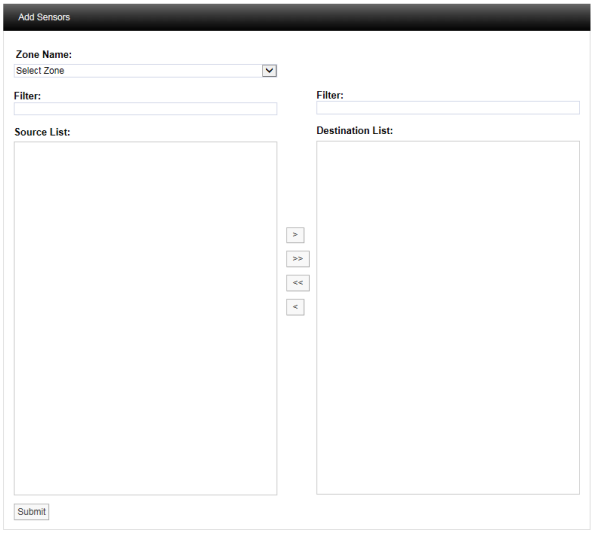


Step 10

Select the Sensors that you require to be included in the Alert Group. To select sensors click on the Sensors tab. A new window will appear, see below.



To add sensors click the Add Sensors link, a new window will appear, see below.



To select a Sensor first select a Zone from the drop down menu.

As the Zone is selected the available Sensors will populate the left column (Source List).

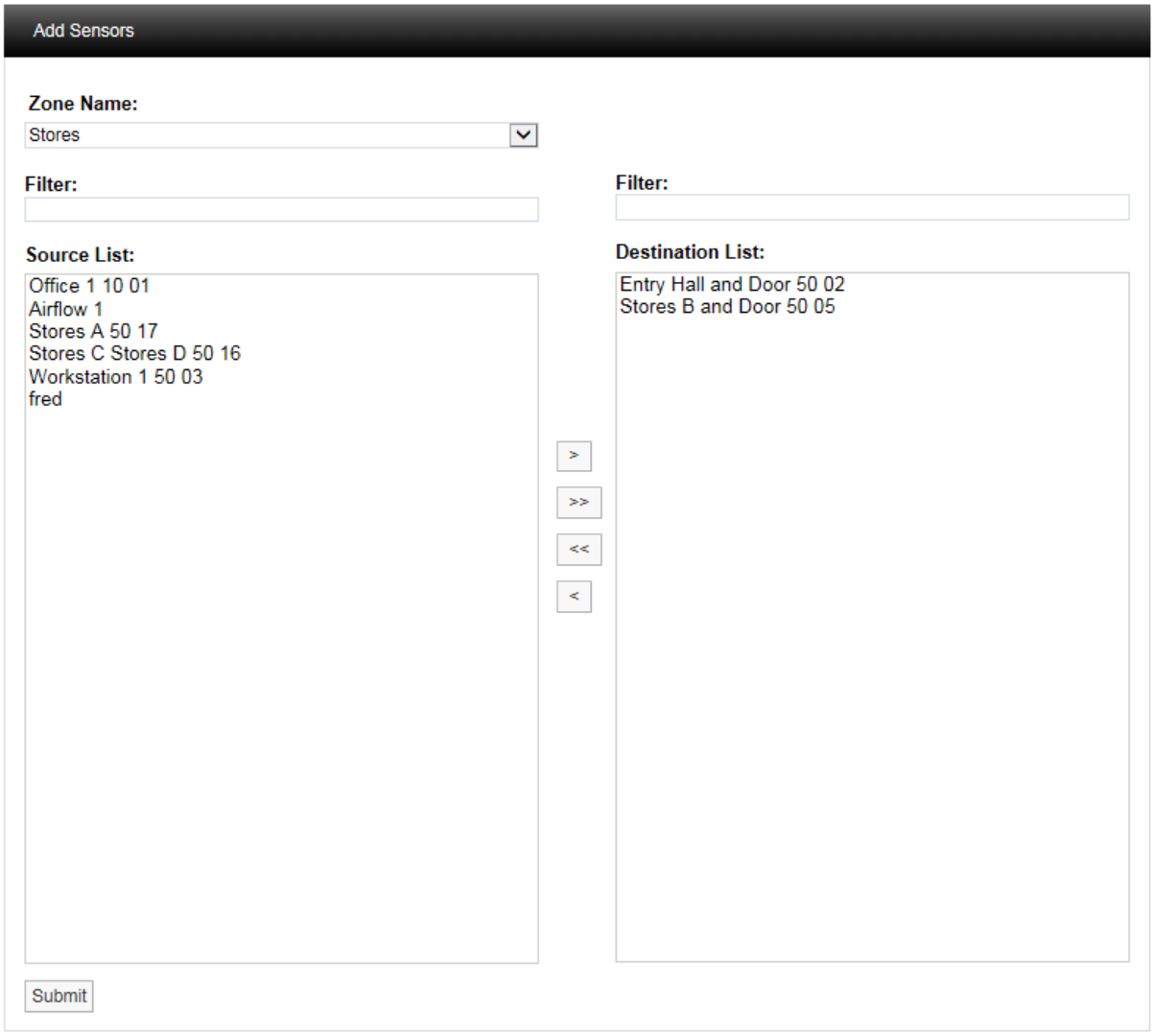
To select sensors highlight the ones that you want to generate email alerts for then click > .

To deselect Sensors highlight them in the right column and then click < .

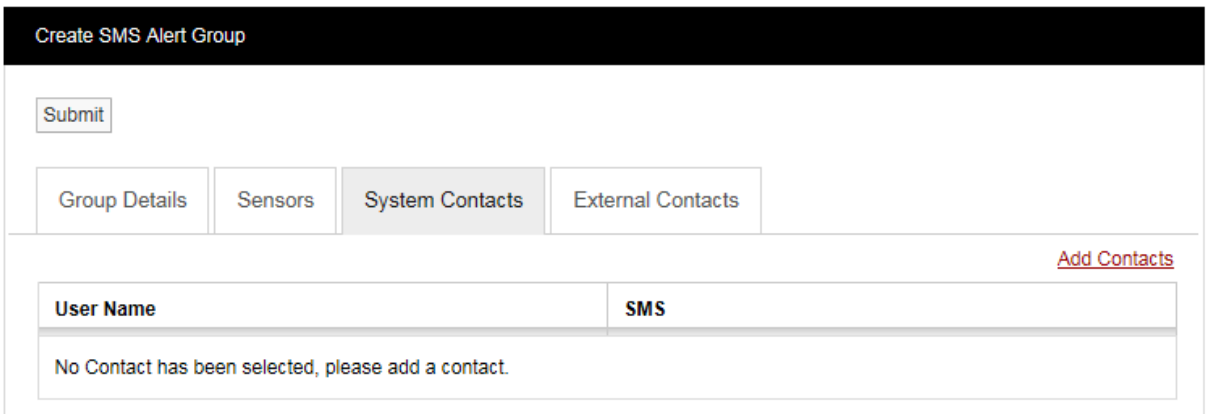
To move all Sensors across click the double arrows.

Once happy with you selection select **Submit**.

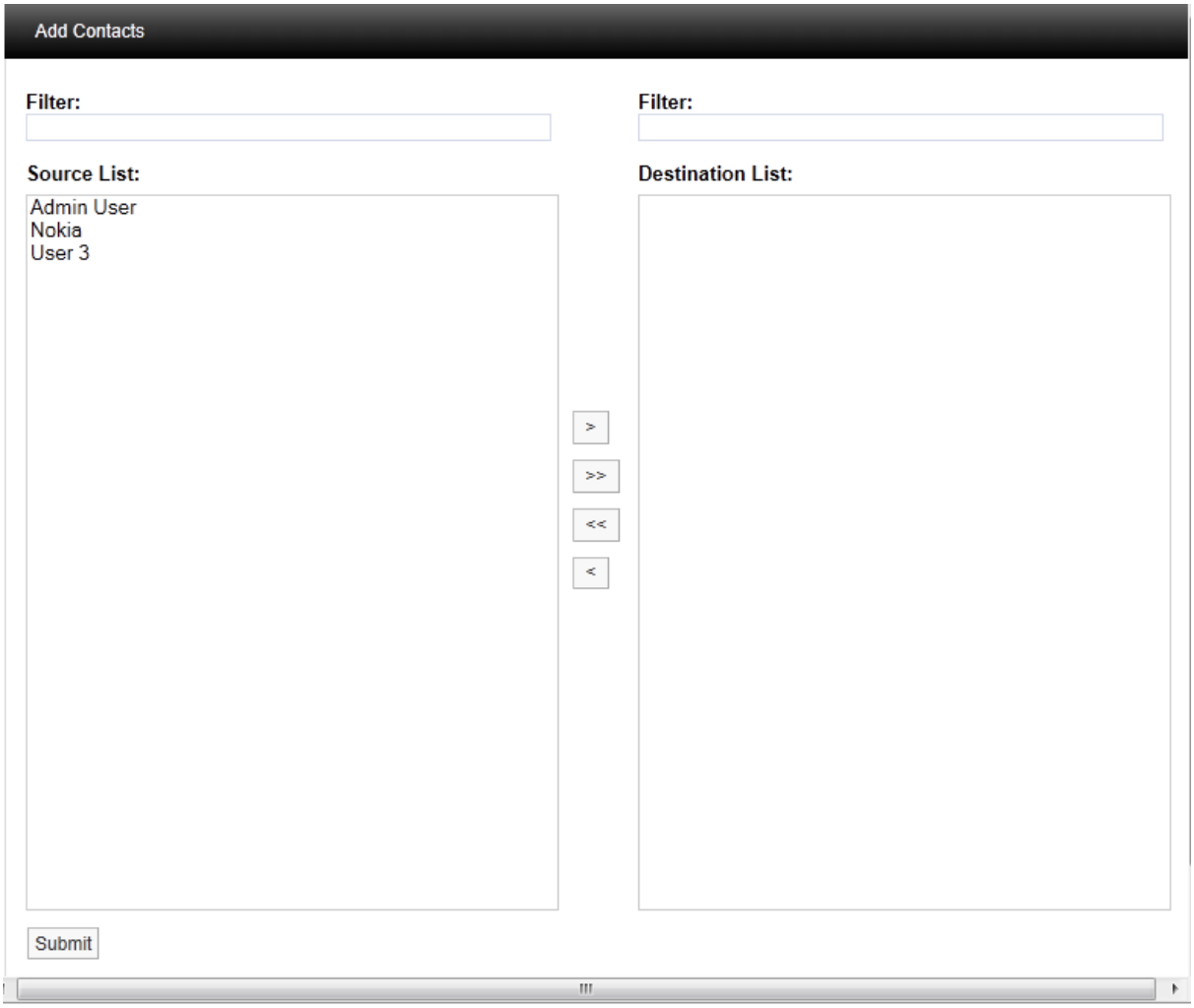
See below for example.



To add Contacts to the Group select the **System Contacts** tab. A new window will appear, see below.



Contacts are the people that you want alerting by email when any of the selected Sensors are in Alarm. To add Contacts select Add Contacts. A new window will appear see below.



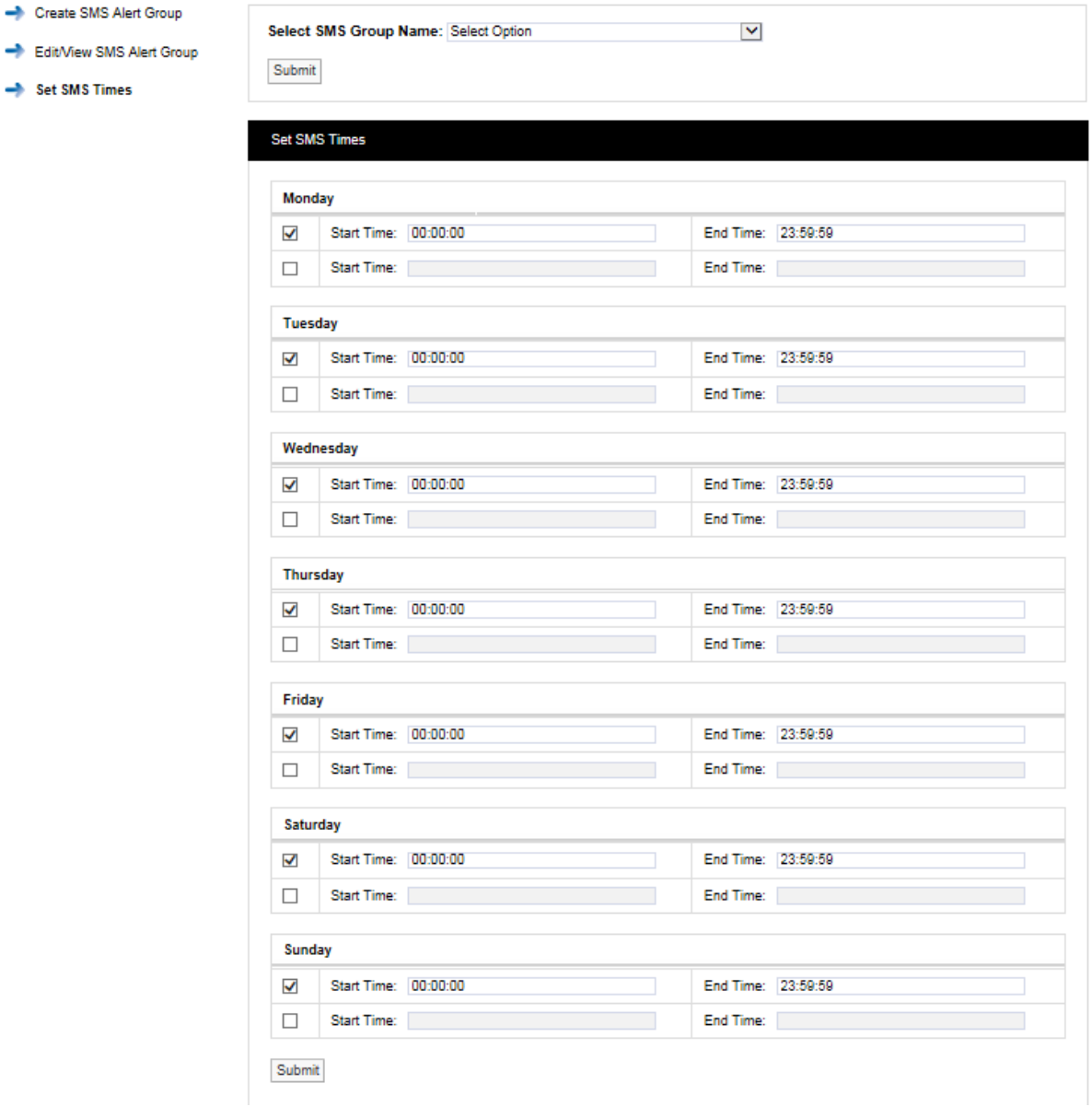
To select a Contact or Contacts highlight the required Contacts and select >, to de-select a Contact highlight the Contact and click <. When happy with the details select Submit.

There is an option to have email Alarms sent to non-Notion Pro Users or External Contacts. To add External Contacts to the system see Create External Contacts.

To select External Contacts follow the procedure above for adding System Contacts.

Set SMS Times

You can set times of day within which SMS messages can be sent. Select **Set SMS Times** to give the Set SMS Times dialogue box. See below.



Select the required SMS Alert Group from the **Select SMS Group Name** pull-down menu.

For each day of the week, select the required Start and End times for SMS messaging. If necessary, two Start and End time periods can be set within a single 24-hour period.

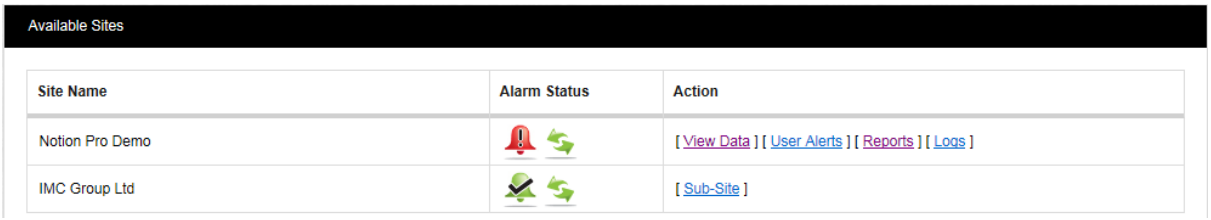
Enter Start and End times as required, then click **Submit**.

5.2.6 Site Management

Sites are the main access points to the system data, each Site represents a single physical Site where receiving devices such as Network Receivers are sited along with measuring Sensors/Transmitters.

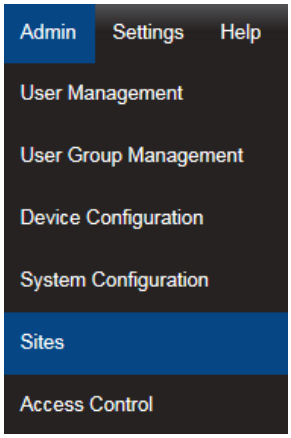
Sites can also have **Sub Sites** associated with the main top level Site. A Sub Site is used where it is desirable to sub-divide a main Site, for example when there are large numbers of

sensors on a Site or many departments. Sub Sites could also be floors in a building or departments.



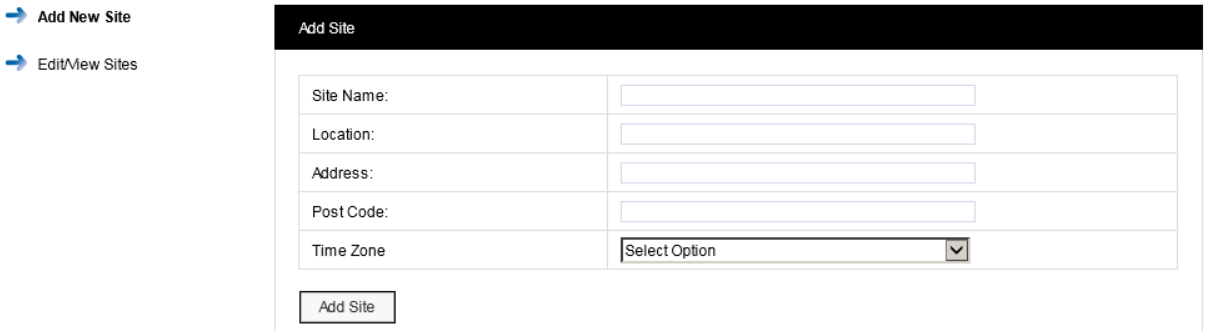
When Sub Sites are used the View Data, User Alerts, Reports and Logs are not available from the top level Site. These functions are now available from the Sub Sites. See below for details of viewing Site data from the Available Sites dialogue box.

Creating Sites



Select **Admin>Sites** from the drop down menu to access the Sites section.

After selecting Sites a new window appears (see below).



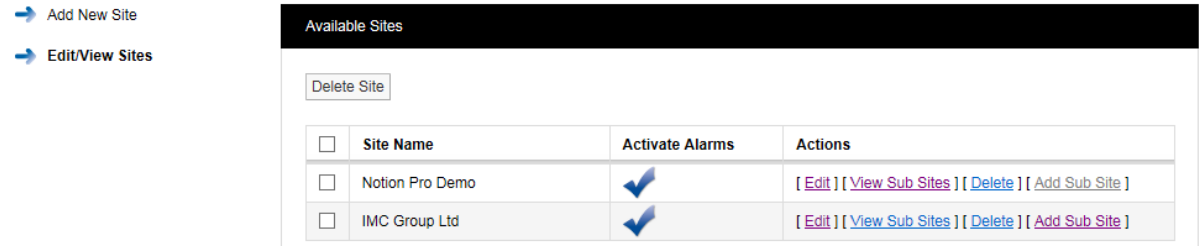
To add a Site complete the following:

- Site Name: Enter a name for the Site. For example, this could be the name of the company.
- Location: Enter the location. For example, this could be the town or city. (not mandatory)
- Address: This would be the Site address. (not mandatory)
- Post Code: This would be the Site post code. (not mandatory)

- Time Zone: Set this to the time zone of the Site. (The value displayed by default is the time zone of the host PC. **It is important to set this correctly**, as dates in the database are stored using GMT.)
- When all details have been entered and are correct, click Add Site.

Viewing Sites

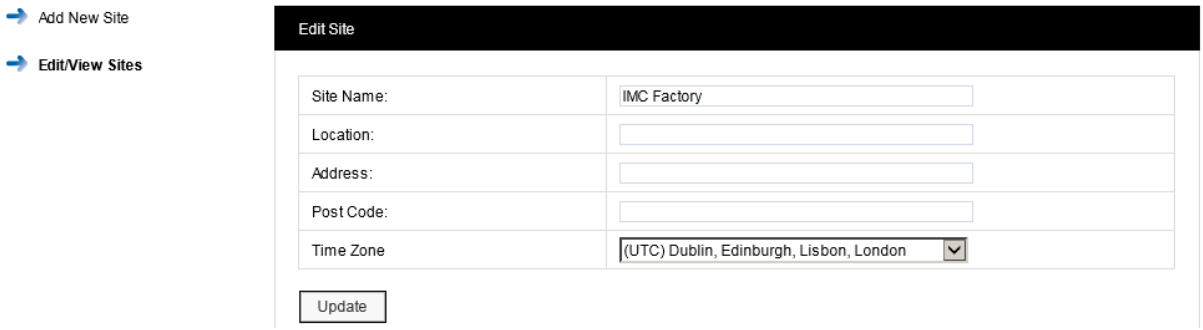
To View Sites select **Edit/View Sites** from the side menu. The Available Sites window appears. See below.



Note: The **Available Sites** dialogue box here is for editing Sites and Sub Sites and is *not* same as the **Available Sites** dialogue box available from the System Overview selection.

Editing Sites

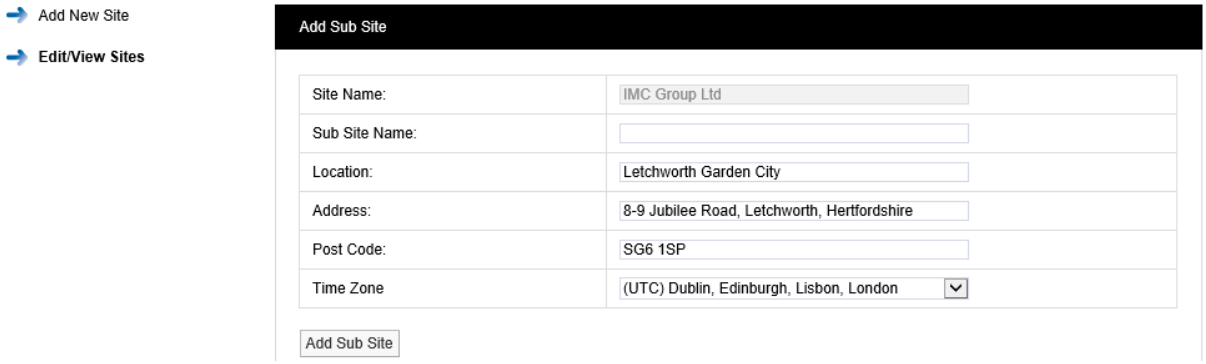
To edit a Site select Edit on the line corresponding to the Site you wish to edit. The Edit Site window appears, see below.



All Site details can be edited in this window. When all details are correct select **Update** to save details.

Adding Sub Sites

To add Sub Sites select Add Sub Site on the line corresponding to the Site you wish to add Sub Sites to. The **Add Sub Site** window appears, see below.

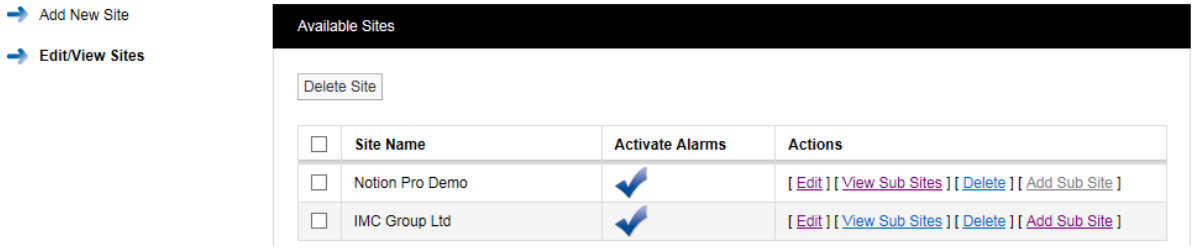


Enter a name for the Sub Site into the Sub Site Name field. When all details are correct select **Add Sub Site** to save the details and add the Sub Site.

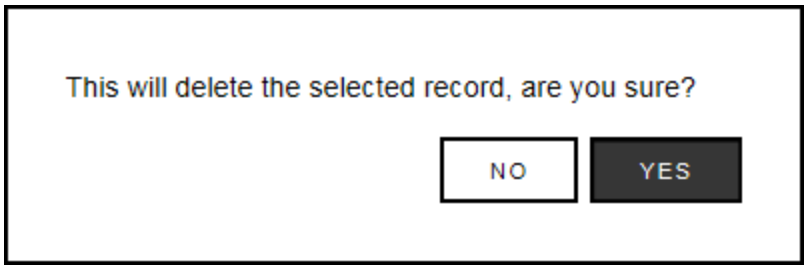
To return to the main Sites menu select **Edit/View Sites** from the side menu.

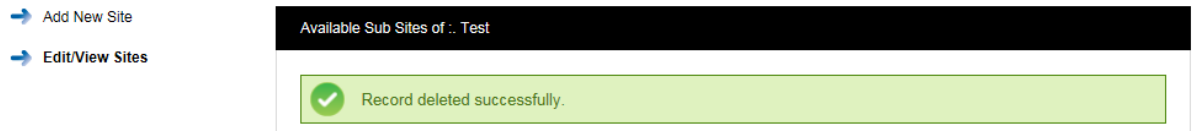
Deleting Sites

To delete a Site you must first delete all Sub Sites if any exist. To check this select **Edit/ View Sub Sites**. If Sub Sites exist select Delete to delete the Sub Site, see below.



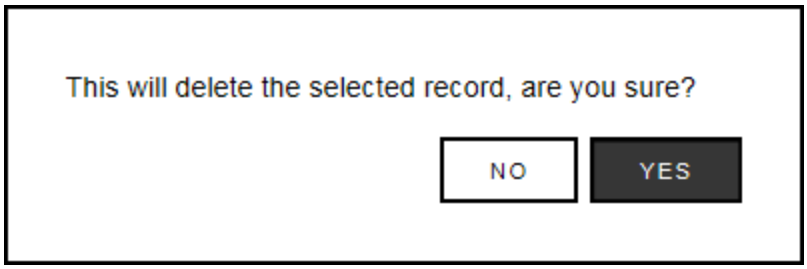
When you are happy that you are deleting the correct Sub Site click Delete and confirm the deletion, see below.





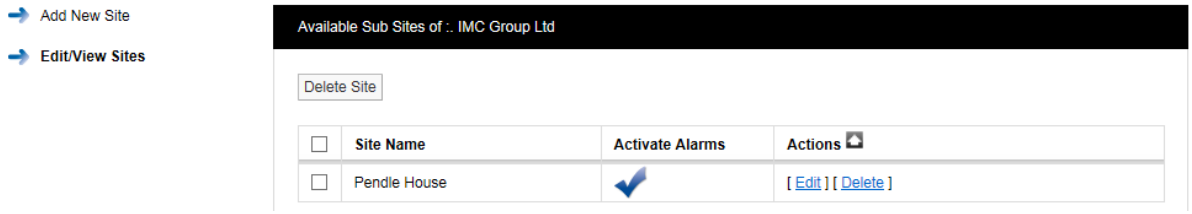
After deleting all Sub Sites the main site can now be deleted, to delete the required Site select Delete against the Site to be deleted.

When you are happy that you are deleting the correct Site select YES, see below.



Viewing Sub Sites

To View a Sub Site select View Sub Sites on the line corresponding to the Site you wish to view Sub Sites for. The Available Sub Sites of window appears, see below.

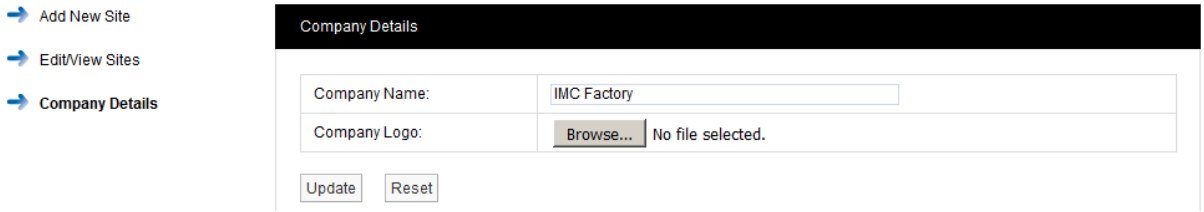


To Edit the Sub Site select Edit, address details and images can be changed or added. When happy with any changes select **Update**.

Adding Company Details

Select Company Details from the menu allows you to add your Company logo. After adding the details the logo will appear next to Notion Pro logo in the header of the website.

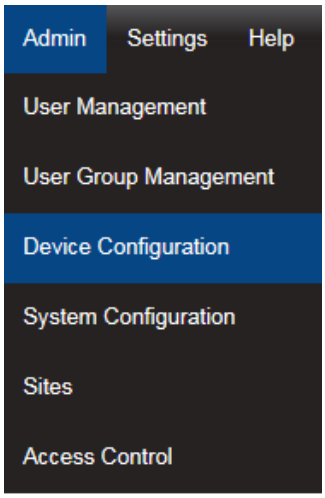
To add your logo, click Choose File navigate to the required logo image, and click Open. Choose File button varies from browser to browser; in some browsers it might say Browse.



5.2.7 Device Configuration

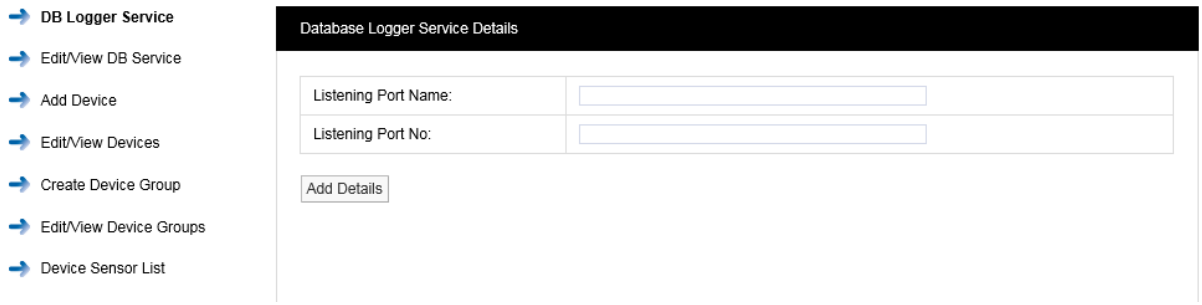
Warning: Changing settings in this section will impact on system function, please proceed with caution. If in doubt please contact your local supplier or IMC Support.

This section is where Notion Pro Hardware Devices are setup and configured.



Select **Admin>Device Configuration** from the drop down menu to access the Device Configuration section.

After selecting Device Configuration a new window appears (see below).

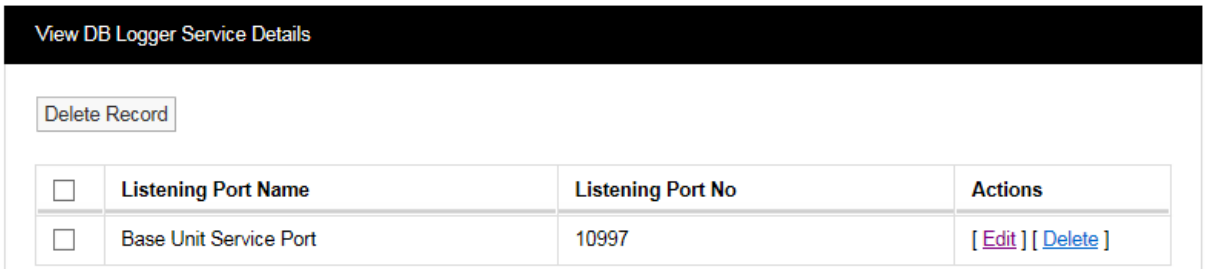


Setting up the Database Logger Service

The DB Logger Service is the Service that passes data to the SQL database. The Listening Port Name and the Listening Port No are set automatically during installation. There is an option to change this information during installation but it is highly recommended that the default values are used. If there is a port conflict this should be noted on the Notion Pro Pre-Requisites Manual (doc. no. IM5546).

Edit/View DB Service

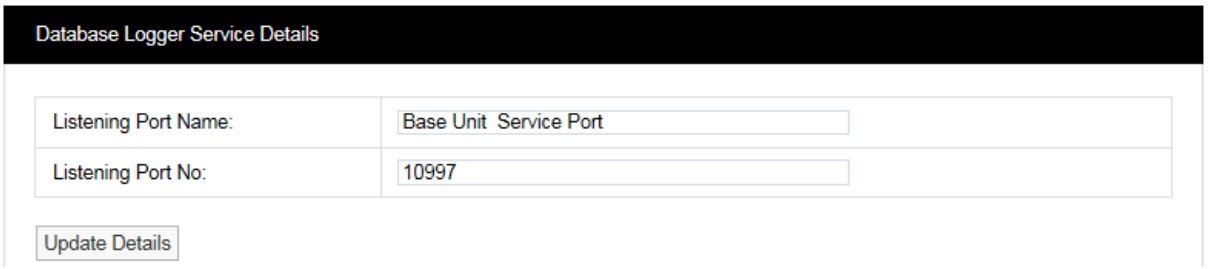
To Edit the Listening Port No select **Edit/View DB Service** from the menu. A new window View DB Logger Service Details will appear, see below.



It is possible at some time in the future that a new piece of software could be added to the server which causes a Port conflict. IMC would recommend that the new item be given a different Port number. If this is not possible then a new Port number can be allocated to the

relevant Notion Pro Service.

To Edit the Port number select Edit in the line corresponding to the Service you wish to change the Port number a new window Database Logger Service Details will appear, see below.

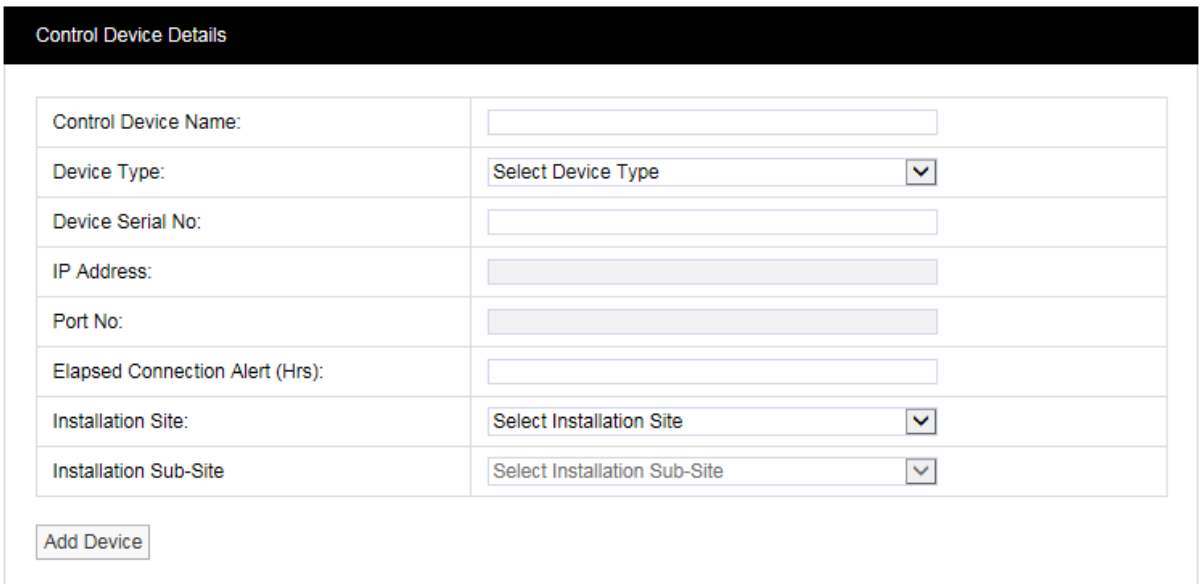


You will need to contact your IT department or IT service provider to get a new Port number. Once you have the new Port number enter it into the dialog box next to Listening Port No. Once you are happy with the details select Update Details.

Warning: The Data Services will need to be re-started after changes are made, and all Receiver Units , Alarm Units and SMS Units will need to be reconfigured.

Adding Devices

This section describes the addition of wireless receiving devices to Notion Pro. To add Devices to Notion Pro select **Add Device** from the side menu. A new window Control Device Details will appear, see below.



Control Device Name:

This should to be related to Site and location to identify the Device this should be a unique name across all sites. Example: Network Receiver First Floor Building One. Enter required text into dialog box next to Control Device Name.

Device Type:

The Device Type is selected from a pre-defined list. Select the Device Type from the drop-down menu. There is a label on the back of all Receiving Devices that states the Device Type.

Device Serial No:

This can be found on a label on the back of the device.

Elapsed Connection Alert

An Alert is generated if the specified time period elapses, without the selected device connecting to the IMC Remote Data service. An entry is recorded in the Activity Log and the icon in the Available Sites dialogue box (see Site Management) changes to red (). If the Email System Group and/or the SMS System Group has Hardware Event selected, then an Email and/or SMS will be sent.

Installation Site:

The Installation Site can be selected from the drop-down menu. This list is automatically populated with Site names added in the Sites section. Select the Site name for the Site that you are adding the Device to.

Installation Sub-Site:

The Installation Sub-Site can be selected from the drop down menu. This list is automatically populated with Sub Site names added in the Sites section. Select the Sub Site name for the Site to which you are adding the Device.

Edit/View Devices

Select the items to Edit when happy with the changes select Update Details.

Create Device Groups

Base Units can receive data from a maximum of 200 transmitters. On systems with more than 200 transmitters, Device Groups enable specific sensors to be assigned to a Base Unit, or group of Base Units.

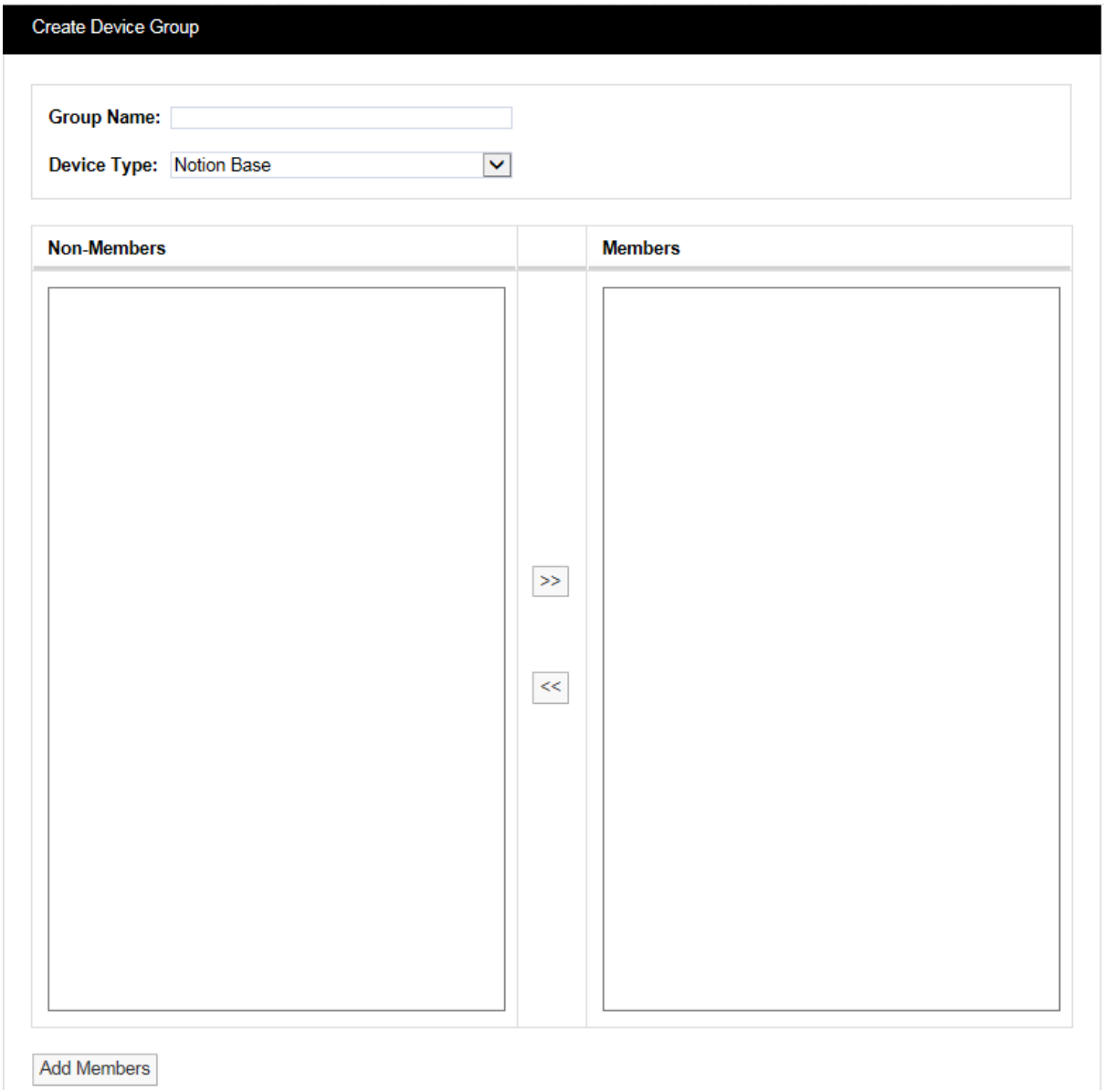
On systems with fewer than 200 transmitters, all sensors are available to be received by all Base units. However, Base Units still need to be a member of a Device Group.

If you are going to fewer than 200 transmitters and all your Base Units are in a single location such as a warehouse or a laboratory, then it is probably best to group all your Base Units in a single group.

If you are going to exceed 200 transmitters then you will need to use multiple Device Groups; also if you have Base Units at separate physical locations, then using separate Device Groups can help you manage your system.

To add a Device Group select Create Device Groups from the menu, a new window Create

Device Group will appear, see below.



The Group Name should be a name that easily identifies a Device Group, a Group that contains one or more Receiving Devices. Every receiving device must be in a Device Group.

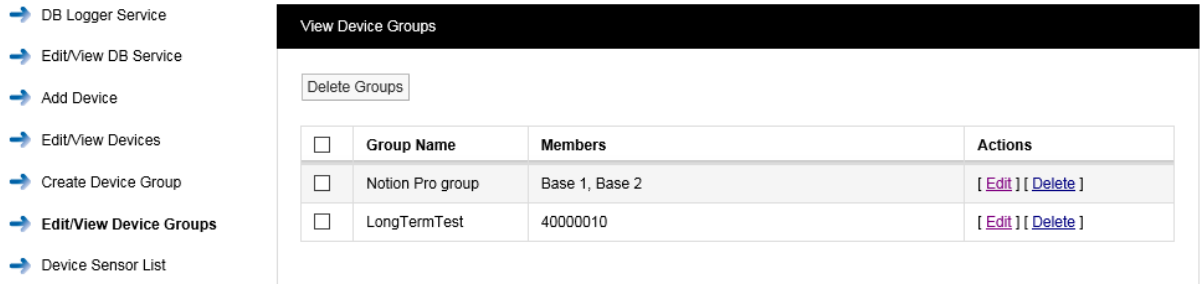
The Device Type is selected from a drop down menu. Select the Device Type that corresponds to your Device. The name of the device type is clearly printed on the front of your device (Base Unit).

Available Devices will be listed in the left column, to select a Device highlight it then click the double right arrows to move it across to the right column.

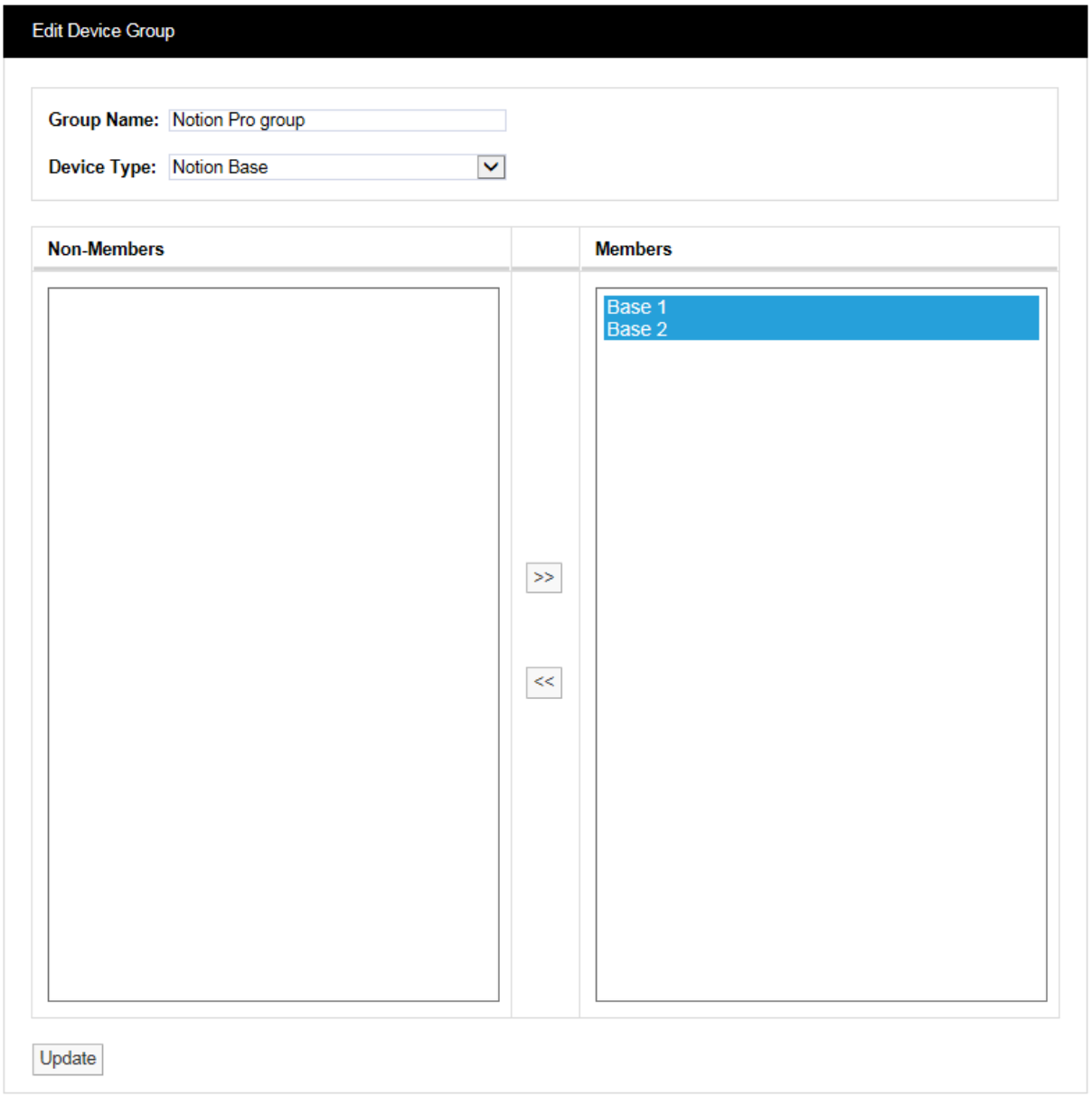
Once you are happy that the details are correct select **Add Members**.

Edit/View Device Groups

To Edit/View Device Groups select Edit/View Device Groups from the menu to give the View Device Groups window, see below.



To Edit a Device Group select Edit in the line corresponding to the Group Name that you wish to Edit, a new window called Edit Device Group will appear, see below.



To remove Devices from the Group highlight them in the right hand column then select >>. This will deselect them and move them to the left column. You cannot de-select all Devices from a Group a Group always has to have at least one Device. If you need to deselect all the Devices then Delete the Group. This can be done by selecting Delete in the previous step.

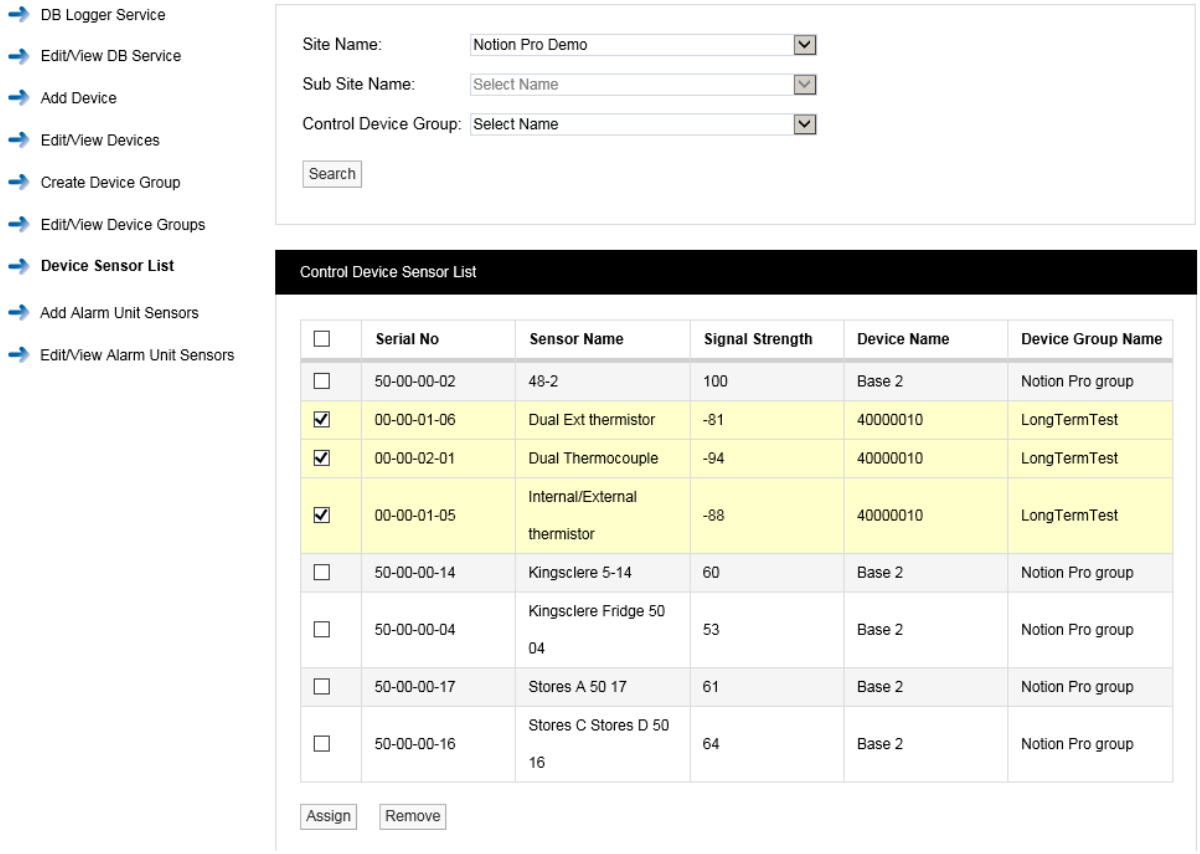
Device Sensor Lists

Note: For systems with less than 200 sensors, Device Sensor Lists have no effect.

These list all the sensors associated with a Device Group. The signal from a given sensor can be received by more than one Base Unit (Network Receiver). You can select a particular sensor instance (for example, the one with the highest signal strength) and assign

it to the associated device group.

To display a Control Device Sensor List select **Device Sensor List** from the menu on the left to give the Control Device Sensor List window, see below.



Note: You cannot create (or delete or edit) a Control Device Sensor List. These are created by Notion Pro as sensors are added to the System.

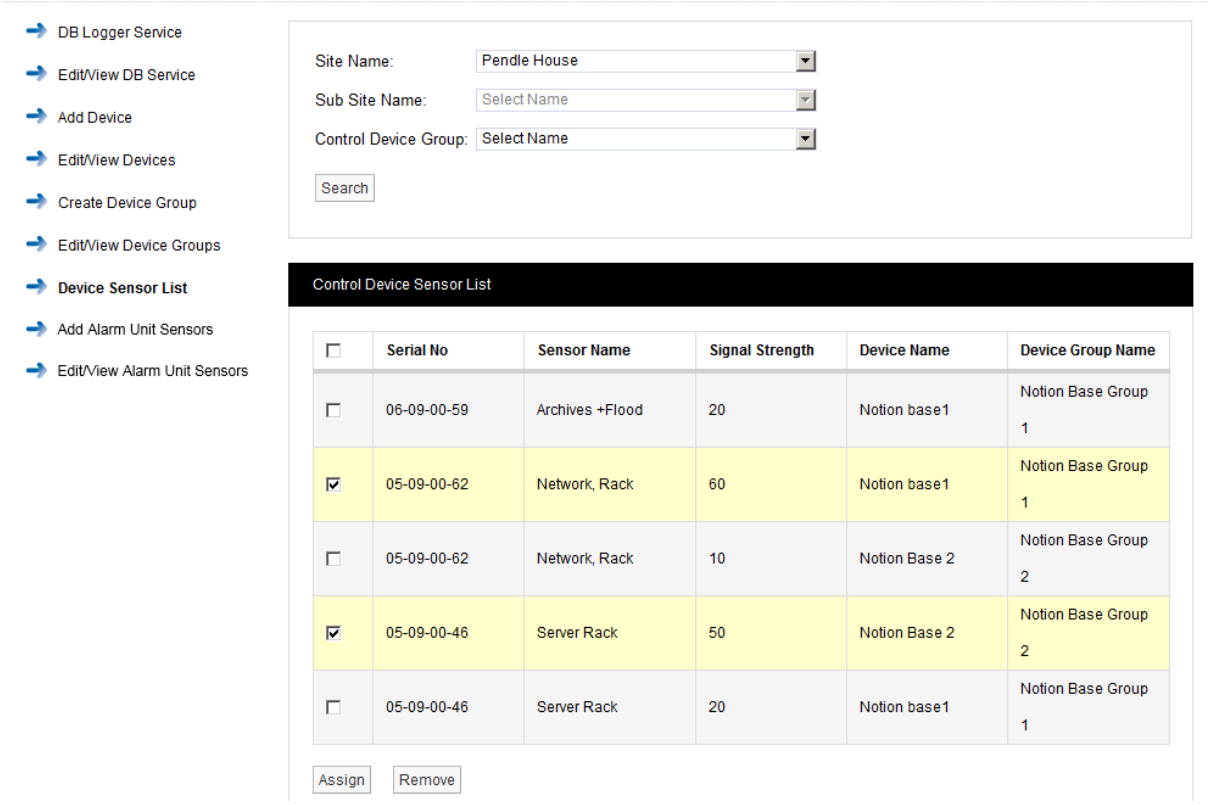
Select the Site of interest from the 'Site Name' list. You must select a Site. Select the Sub Site of interest from the 'Sub Site Name' list, and the Control Device Group of interest from the 'Control Device Group' list. It is not necessary to specify a Sub Site or a Control Device Group, in this case a list of sensors for all Sub Sites and Device Groups will be generated (as in the example above). Click **Search** to generate the list.

To assign a sensor to its associated Device Group, select the tick box on the left side of the table, then click **Assign**. The list will be redisplayed with assigned sensors highlighted. (See above, three sensors have already been assigned to the 'LongTermTest' Device Group).

To remove a sensor from its associated Device Group, select the tick box on the left side of the table for the sensors you wish to remove, then click **Remove**. The list will be redisplayed with assigned sensors highlighted. (In the example above, three sensors have already been assigned to the 'LongTermTest' Device Group).

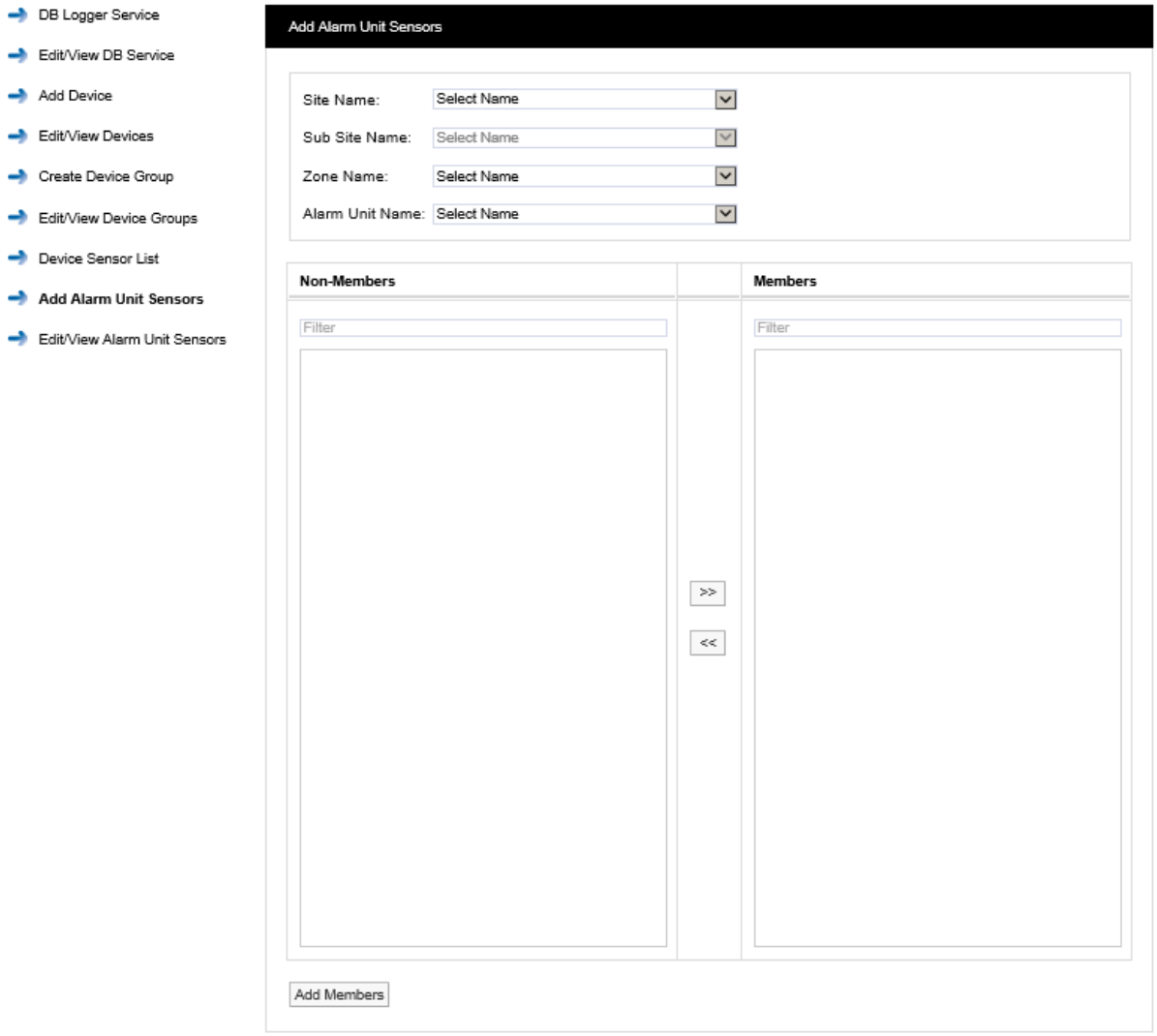
As another example, the example below shows a case where signals from two sensors (05-09-00-62 and 05-09-00-46) are each being received by two Network Receivers. The user

has selected the two sensors with the highest signal strengths to link to a Device Group.



Adding Alarm Unit Sensors

This facility supports the operation of the Notion Alarm Unit (the ARB Module) and enables you to associate sensors with the unit. Select **Add Alarm Unit Sensors** from the side menu, see below.



Site Name

Select the Site which contains the Alarm Unit of interest from the pull-down list.

Sub Site Name

Select the Sub Site (if present) which contains the Alarm Unit of interest from the pull-down list.

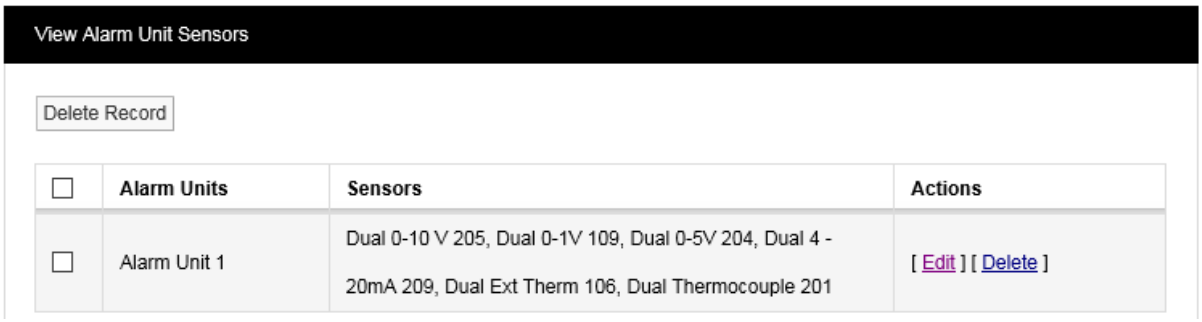
Zone Name

Select the Zone which contains the Alarm Unit of interest from the pull-down list.

Alarm Unit Name

Select the Alarm Unit of interest (previously created using the Add Device facility described at section 2.7.3). The Add Alarm Unit Sensors dialog box changes to show a list of the sensors which can be associated with the Alarm Unit. See below for example.

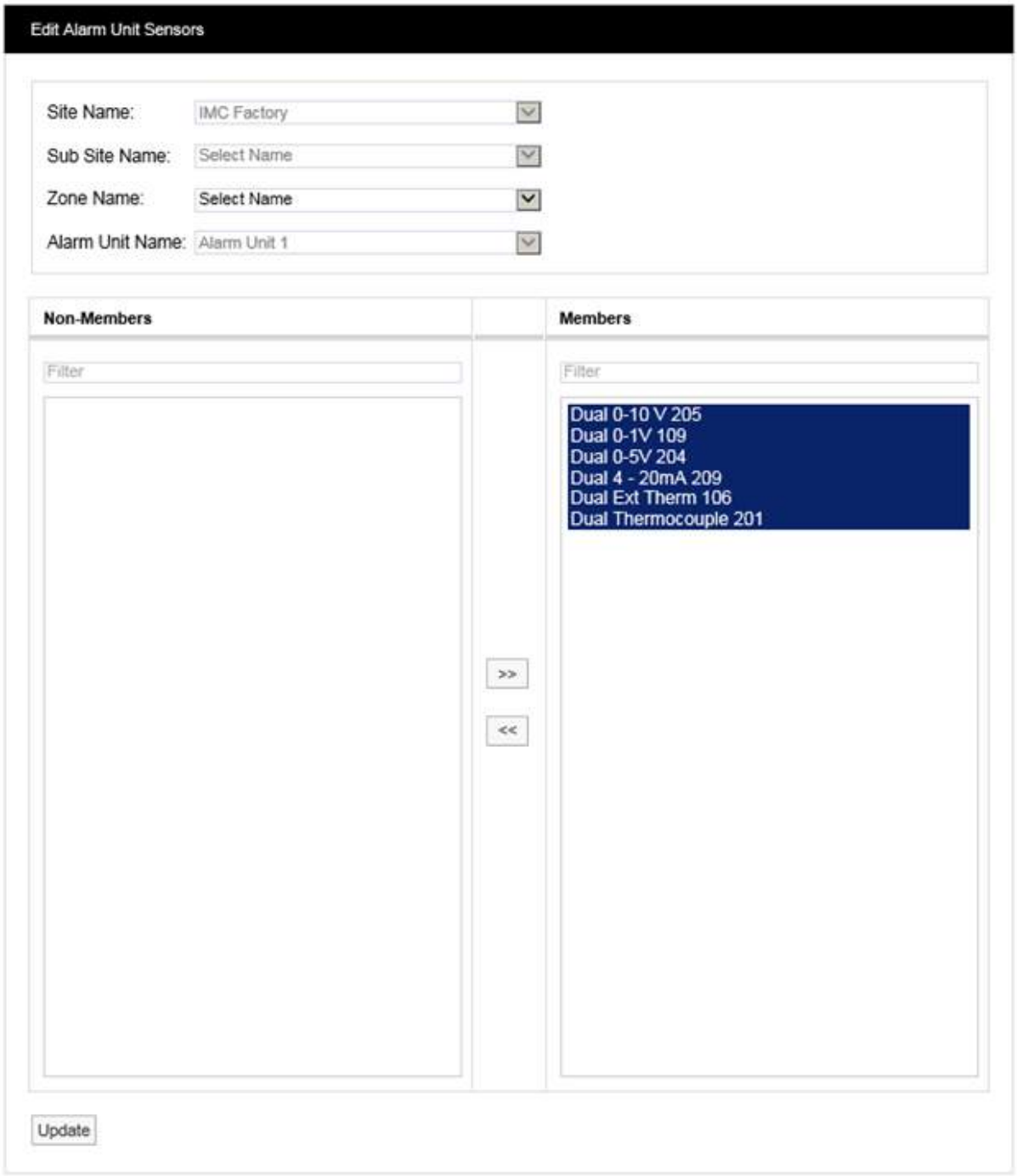
To associate sensors with the Alarm Unit select the required sensors from the **Non-Members** list then select >> to move the selected sensors to the **Members** list. Click **Add Members** to move the selected sensors to the **Members** list. The **View Alarm Unit Sensors** dialogue box will appear to show the sensors which have been associated with the Alarm Unit. See below for example.



Editing/Viewing Alarm Unit Sensors

To edit or view associated Alarm Unit sensors select **Edit/View Alarm Unit Sensors** from the menu to give the **View Alarm Unit Sensors** window, see above for example.

To the list of sensors associated with a given Alarm Unit, select Edit in the line corresponding to the Sensor list that you wish to Edit. A new window called **Edit Alarm Unit Sensors** will appear, see below.

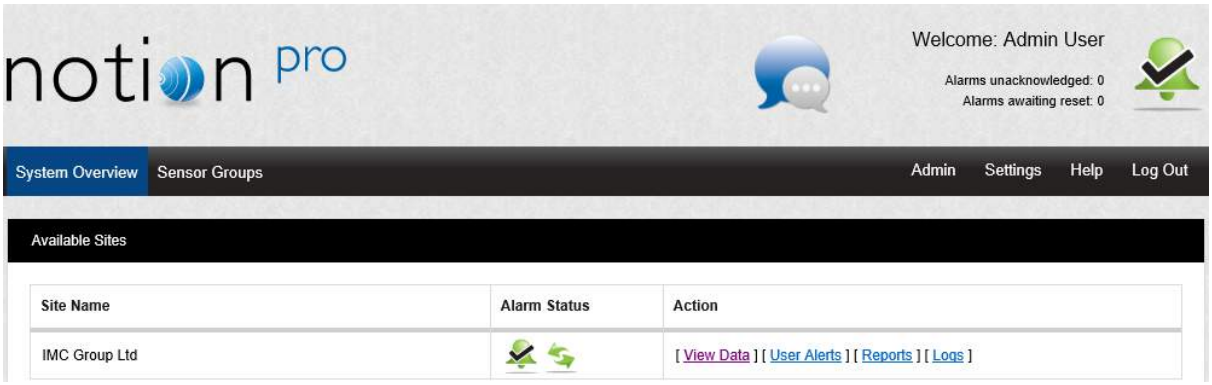


To remove sensors from the list highlight them in the left hand column then select <<. The double left arrows will de-select the selected sensor(s) and move them to the left column. Having de-selected the required sensors click Update to update the list.

5.3 Setting Up Sensors

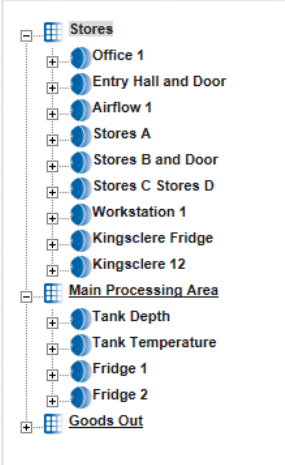
This topic gives detailed information on how to add Zones and Sensors to the Notion Pro System in your Installation.

During the Notion Pro installation process a default Site will have been created. You can Edit the details for the default Site, see section Site Management. The first time you run Notion Pro the System Overview screen will look something like:



Before you can start monitoring temperature, humidity and other data you will need to add some sensors to Notion Pro.

Each main Site can have any number of Sub Sites. Sensors added to a Site can be sub divided into Zones. Zones are viewed in a familiar Windows-style tree, see below.



Zones allow large systems to be sub-divided into logical groups of sensors.

Zones can also be used when granting viewing Privileges. When a Site contains many sensors, just granting Privileges for a whole Site could still lead to a single User being overloaded with data that doesn't relate to that User. Zones can be allocated to Users as well as Sites.

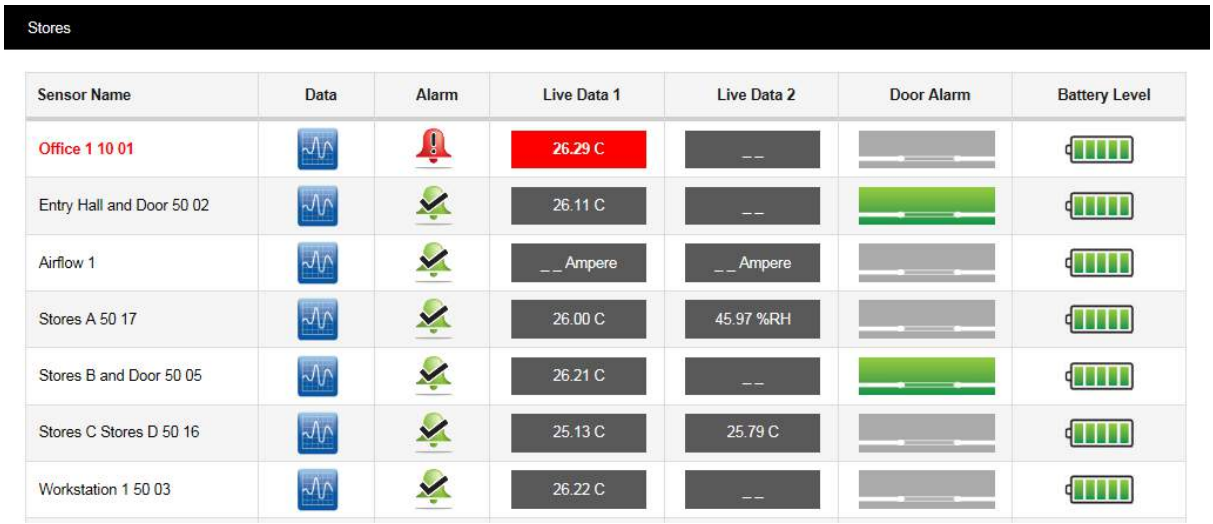
Individual sensors can't be allocated Privileges, only Sites and Zones. There is no practical limit to the number of Zones that can be added to the system. To allocate an individual sensor to a User add a Zone for that sensor.

5.3.1 Adding Zones

Zones are used to logically group sensors, this could be all sensors of the same type or all the sensors in a particular area. For example a Zone could be called RH&T Sensors which contains all the humidity and temperature sensors, or First Floor Sensors which contains sensors of different types but which are all on the first floor.

During installation a default Site is created. This Site contains one empty Zone called Zone1.

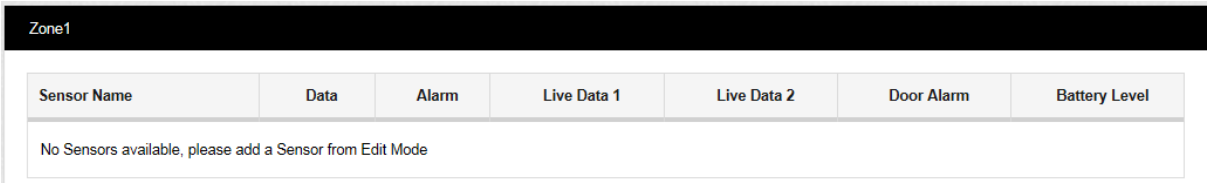
An example of a Zone which has had Sensors added and which has live data coming through is shown below.



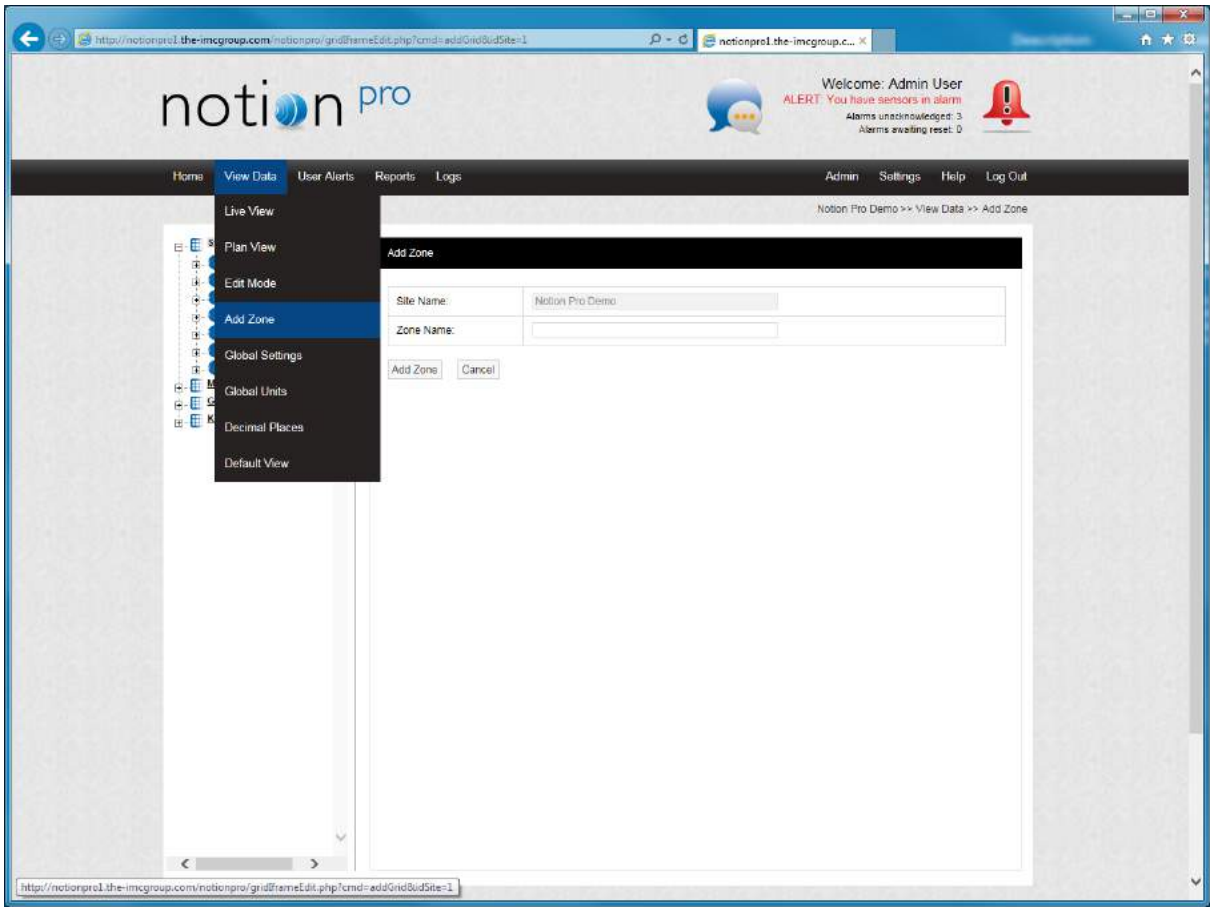
The above display shows the 'Stores' Zone. See Viewing Data for full details of the Live Data viewing facilities in Notion Pro.

To Edit and add Zones select View Data from the System Overview display for the Site of interest then **View Data>Edit Mode** from the main menu bar, see below.

A new window will appear. This window will, as we add Zones and sensors become the main data viewing and access window, see below (for the default Zone, Zone1).

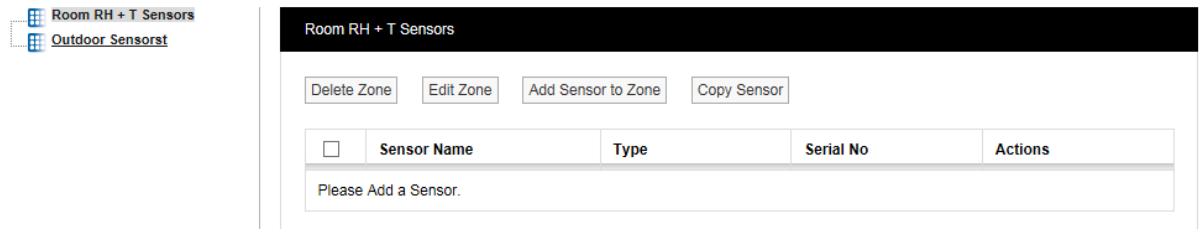


To add a new Zone select Add Zone from the main View Data menu, see below.



A new window will appear, see below.

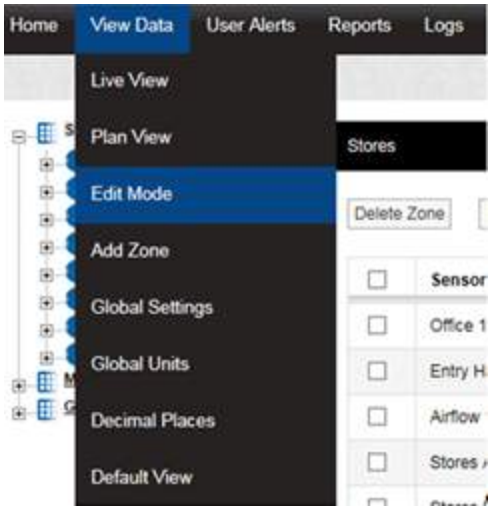
To add a new Zone, enter a name into the Zone Name field. For this example we will call the Zone Outdoor Sensors. When happy select **Add Zone**. You will now see that another Zone has appeared in the tree, see below.



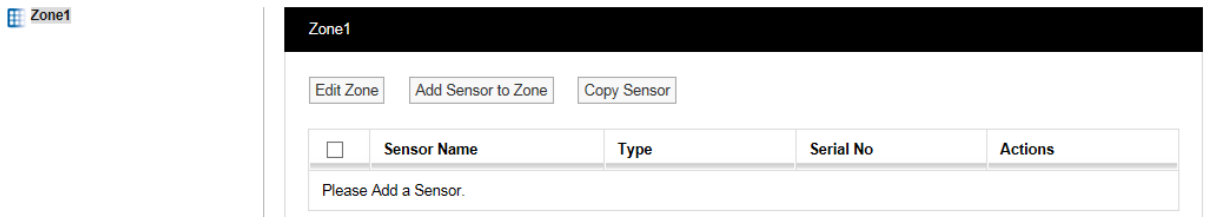
5.3.1.1 Editing Zones

Edit Mode is only available if you have the correct access Permissions. If you do not have the required access permissions you will see the following message:

Access Denied. You are not authorised to perform this task, please contact your System Administrator.

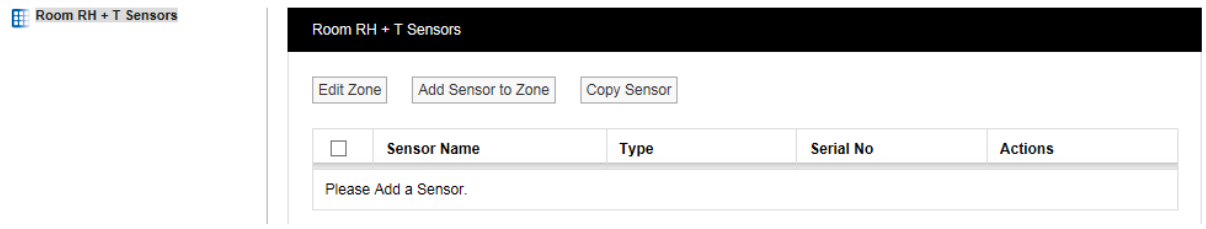


After selecting Edit Mode the Sensor and Zone editing/configuration window appears, see below.



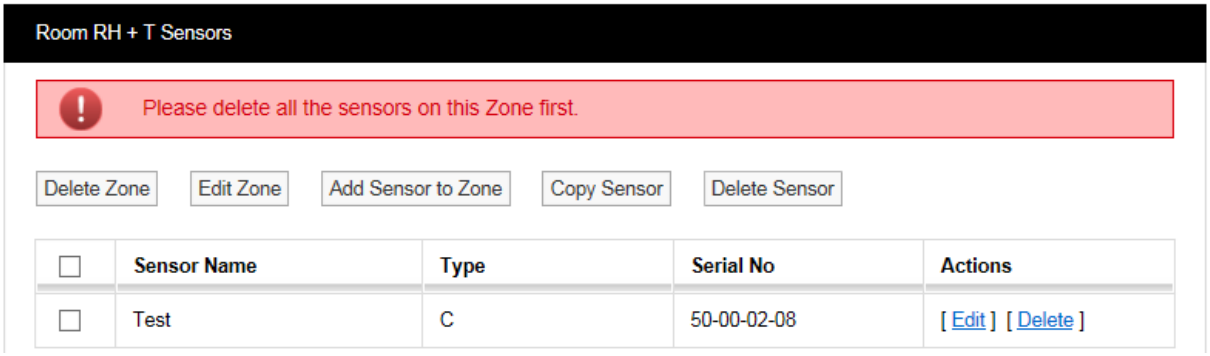
To Edit the Zone select **Edit Zone**. the Edit Zone window will appear, see below.

Select a name for the Zone that will make it easy to identify either the type of sensors in the Zone or the location of the Zone. In this example we are changing the Zone1 name to 'Room RH + T Sensors'. Enter the name into the **Zone Name** field, once happy select **Update**, see below.



5.3.1.2 Deleting Zones

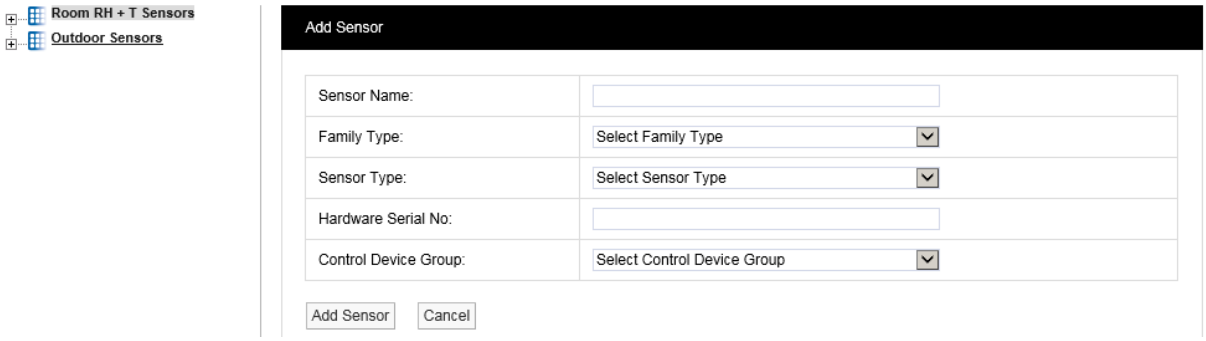
To delete a Zone select the tick box next to the Zone that you want to delete then select **Delete Zone**. You cannot delete a Zone with Sensors still in the Zone, see below.



Delete all sensors in the Zone then repeat the steps above to delete the Zone.

5.3.2 Adding Sensors

Now that we have added some Zones we can now add some Sensors. Before adding Sensors you need to select the Zone that you wish to add Sensors to. To add Sensors select **View Data>Edit Mode**, then select **Add Sensor to Zone**. A new window called Add Sensor will appear, see below.



You will notice that the Zone Room RH + T sensors is highlighted (because it is at the top of the list). This is the Zone that the new Sensor will be added to. If you wish to add a sensor to another Zone, simply click on the Zone name.

Sensor Name:

Here you can type a name for the Sensor that means something in relation to either the type of measurement that the Sensor is making or the location, for example, Room 1 RH/

T.

Family Type:

The 'family' for the sensor you are adding. Select from iSense, Notion or Legacy / Scout.

Sensor Type:

Select the type of Sensor you are adding from the drop-down menu, a detailed list explaining all the Sensor types can be found on the IMC Group website.

For this example we will add a temperature sensor, the standard temperature and humidity sensor can be found in the list as Notion Temperature/RH.

Hardware Serial No:

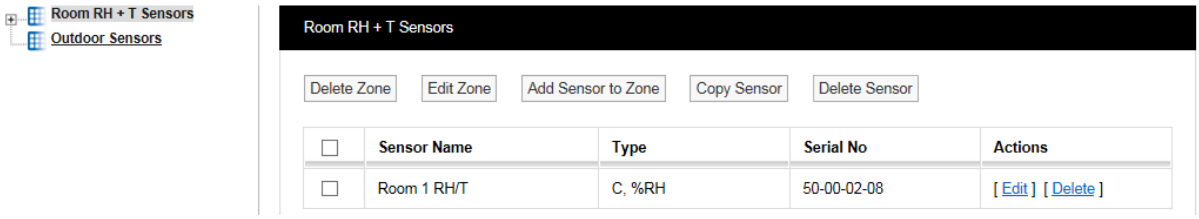
This is the transmitter serial number and can be found on the back of the transmitter, for example: 50-00-02-08.

Note: if the sensor has already been added, you would get an error message, as shown in below:

Control Device Group:

The Control Device Group contains wireless receiving device that will receive the data from the transmitters. The Control Device Group is selected from the drop down menu, select the Group that corresponds to the Site and is compatible with the wireless transmitters used at that Site. For more details see Device Configuration. For this example, we are going to select Notion Pro Group.

Once you are happy with the details select **Add Sensor**. You will now see that the Zone icon has a + symbol to the left of the icon and that the sensor we have just created has appeared in the table on the right hand side of the screen. See below.



You can add more sensors by repeating the steps above. Multiple sensors of same sensor type can also be added by selecting **Add Multiple Sensors**, this feature is useful for adding sensors in a batch. When adding more sensors additional Zones can also be added and additional sensors added to those Zones. Sensors can be edited or deleted by selecting either Edit or Delete in the line corresponding to the sensor to be edited or deleted.

Copy Sensors

Sensors can be copied from on Zone to another. There are cases where you may want to

have the same sensor duplicated in different Zones.

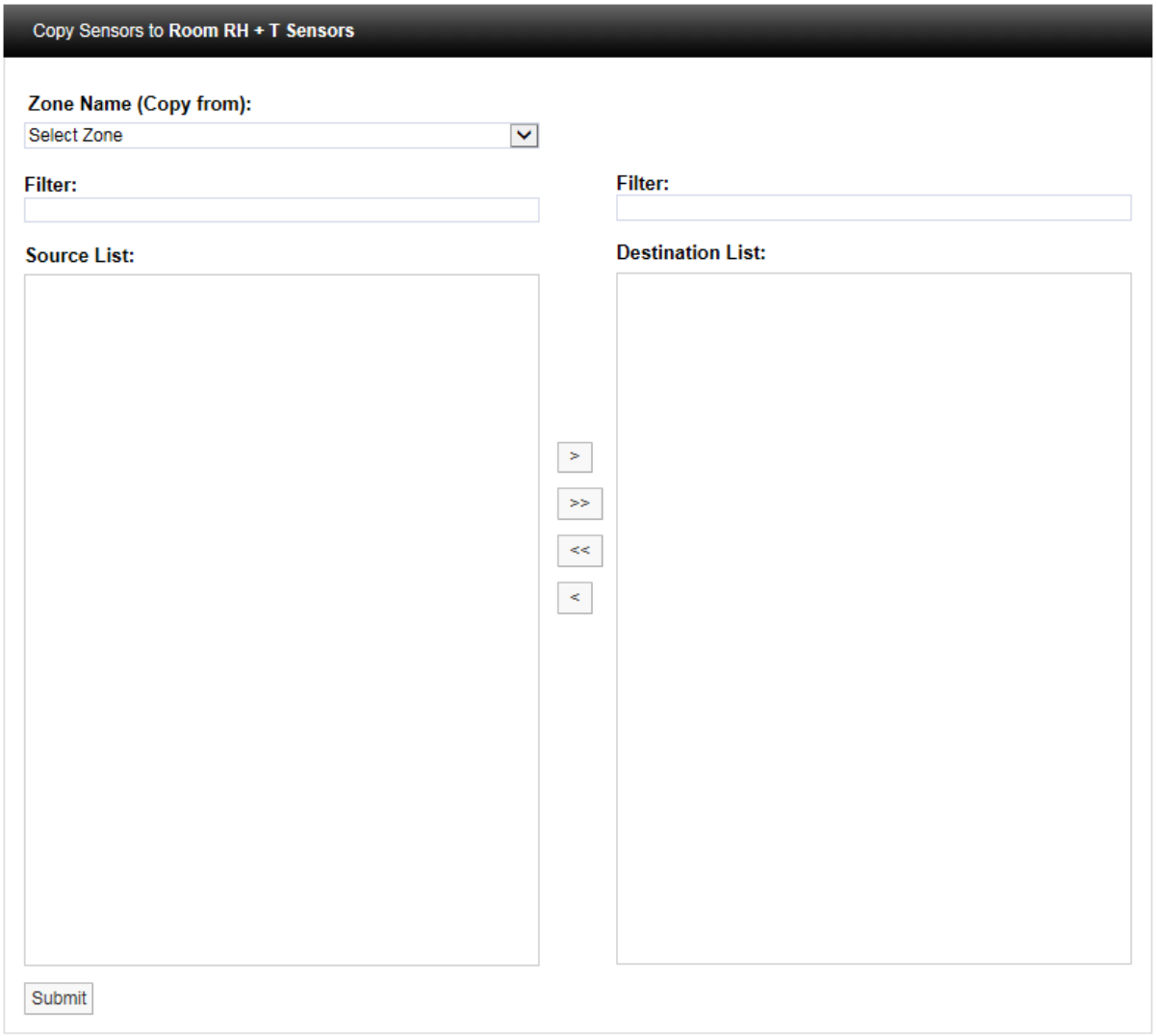
Example 1

When a site has an outdoor sensor it is desirable to have this sensor available in every Zone. The data from an outdoor sensor can be compared with sensor data from individual rooms to see if the conditions inside are being driven by the conditions outside. This is a good indicator of how well HVAC systems (Heating, Ventilating and Air Conditioning) are performing.

Example 2

Rooms that have many enclosed spaces such as fridges in a hospital or display cases in a museum can benefit from being able to compare sensor data. A gallery with 20 display cases all with RH/T sensors could be compared with an RH/T sensor placed in the open gallery. By comparing the data you can see if the conditions outside are driving the conditions inside the cases.

To copy sensors, highlight in the Zones list the Zone that you want to copy sensors to then select Copy Sensor from the Zone dialog box. The Copy Sensors to window appears, see below. You will notice that the name of the Zone that the sensors are going to be copied to forms part of the window name.



Select the Zone that you want to copy the sensor/s from. The names of the available sensors in that Zone will appear in the left column. Highlight the sensor/s you wish to copy then click > . This will move the highlighted sensor/s to the column on the right. When happy with the details select Submit. To copy all the sensors click >> .

Delete Sensors

There are three methods to delete Sensors:

- Select the tick box to the left of the sensor names that you want to delete on the Zone dialog box then select **Delete Sensor** from the top menu. This will delete all highlighted sensors.
- Select **Delete** in the row corresponding to the sensor you wish to delete. This will delete only that sensor.

- To delete all sensors in the table, select the tick box on the left of the title row (next to Sensor Name), then click **Delete Sensor**.

Warning: Deleting Sensors cannot be undone.

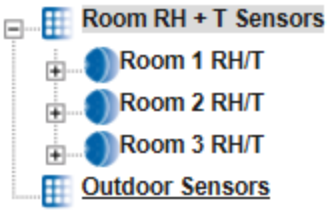
5.3.3 Configuring Sensors

This topic takes you through the configuration of the Sensor properties which include **General Settings**, **Scale**, **Alarms** and **Filters**.

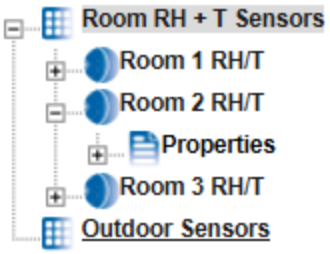
Accessing Sensor Properties

To access Sensor properties highlight the Zone name that contains the Sensor that is to be edited, see below.

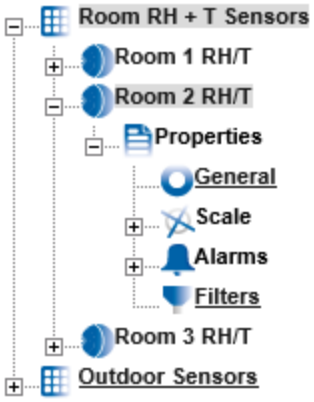
To see the available Sensors click on the + symbol next to the highlighted Zone. The selected branch will expand showing all the available sensors, see below.



To view the properties of the Sensor that is to be edited click on the + symbol next to the Sensor name. This will expand the branch again, see below.

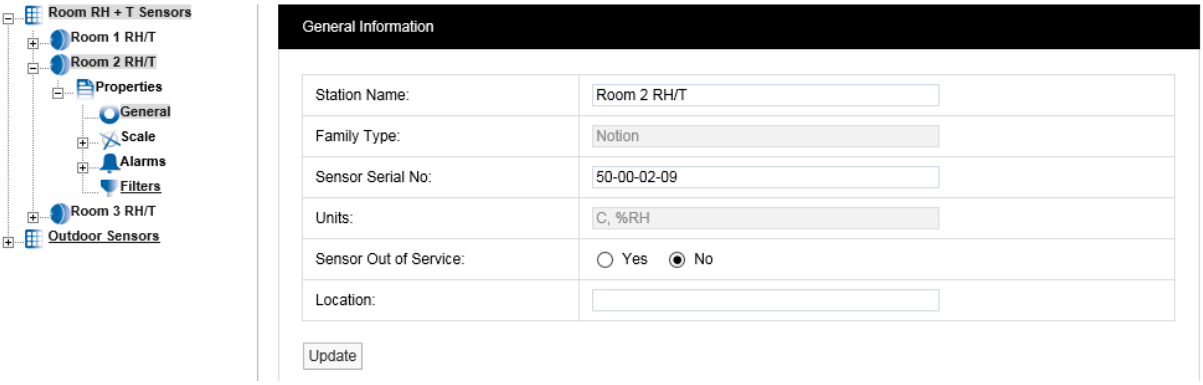


To access the individual Sensor properties click on the + symbol next to properties this will expand the branch again, see below.



General Properties

To edit the General Sensor Properties click on the underscored link **General** .This opens the General Information window, see below.



Station Name:

The Station Name can be changed, be aware that changing the name may be confusing for other Users as the Station Name normally relates to the physical location of the Sensor. Changing the Station Name no longer starts a new data file.

Family Type:

Notion.

Sensor Serial No:

This is set when the Sensor is added to the system.

Units:

This is the units for each of the channels for the Sensor. These cannot be changed here as they are set by the Sensor install. (But see Global Units.)

Sensor Out of Service:

This feature allows you to temporally take a sensor out of service. This is useful if the Sensor is measuring something that is turned off for a period and monitoring is not required.

It avoids alarms being generated while the Sensor is not required. Out of Service Sensors are displayed with blue text in the **Live View**.

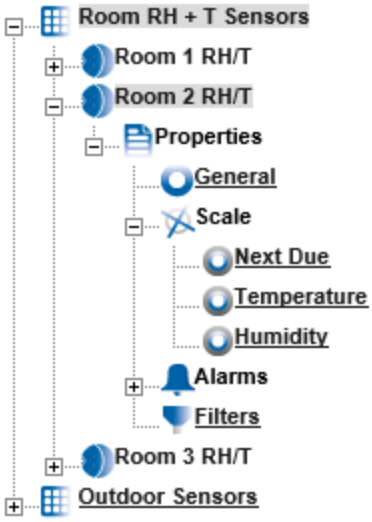
Location:

The Location field allows you to put a note against the sensor to assist with physically locating the Sensor within a building. This is an aide-mémoire and serves no operational function within the software and is not mandatory.

Once you are happy with any changes select **Update**.

Scale

To access Calibration **Scale** properties click on the + symbol next to **Scale** and the tree will be further expanded, see below.



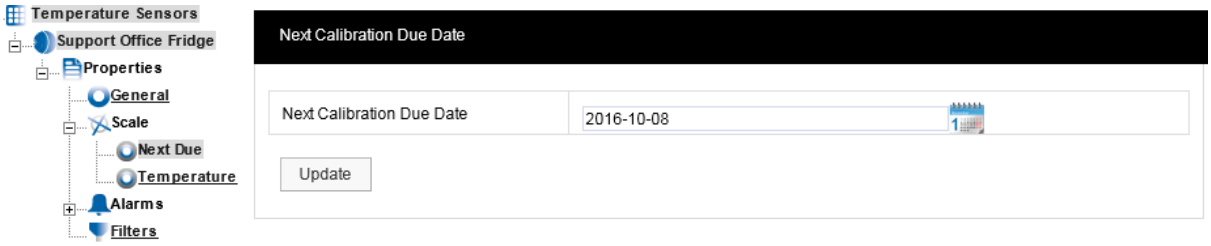
The Scale section allows you to set Graph Scaling, Decimal places and the Next Due calibration date for Calibration Reports.

If you have iSense Sensors, then this section will allow you to enter the Sensors/ Transmitters to IMC, having IMC Calibration Engineers come to Site or self-correct calibration parameters for those sensor(s). See the documentation delivered with the iSense unit for specific calibration details.

Next Due

This feature allows the next Calibration due date to be entered into the system. A PDF Report can be triggered from the due date field. This is very useful in a regulated environment where exceeding the stipulated calibration period would cause a non-compliance. (See Calibration Reports for more information on Calibration Reports.)

To access **Next Due** click the link, the Next Calibration Due Date windows appear, see below.



To change the due date enter the new date into the Date field (in LYLY-MM-DD format) or click on the calendar icon and select the required data. If the Sensor has just been added to the system the date in the form is one year from the date that the Sensor was added.

A typical period would be 12 months for environments that are contaminated or the constant operating humidities are very high. Where the environments are clean and the averages humidities are mid-range then every 24 months would be acceptable.

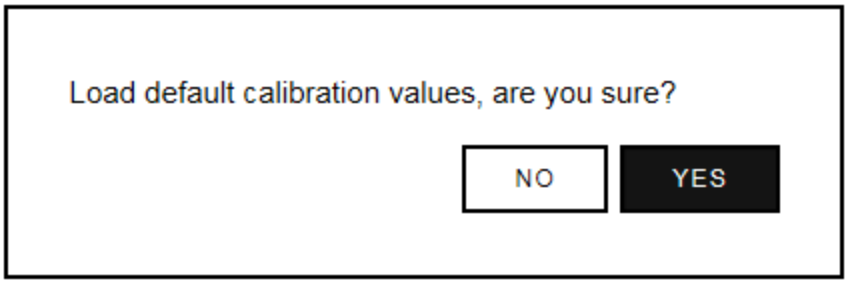
When you are happy with the new date click **Update**.

Channel One/Temperature Calibration

To enter the Temperature scale page select **Temperature**. The Temperature window appears, see below.

Each Sensor is installed with a default range. These are only a suggestion and can be changed to suit your requirements.

The defaults can be re-loaded by selecting **Set Default**,you will be asked to confirm see below.



Once the new Scale details are known these can be entered into the table above. Select **Update** to confirm the details. If correct the following message will be displayed:

Channel Two/Humidity Scale

To access the Humidity scale settings click Humidity and repeat the steps above.

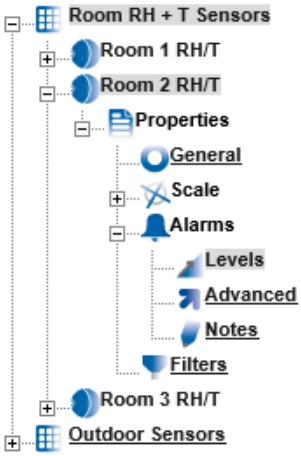
Note: Not all Sensors/Transmitters have two channels, some have only one.

5.3.4 Setting Alarms

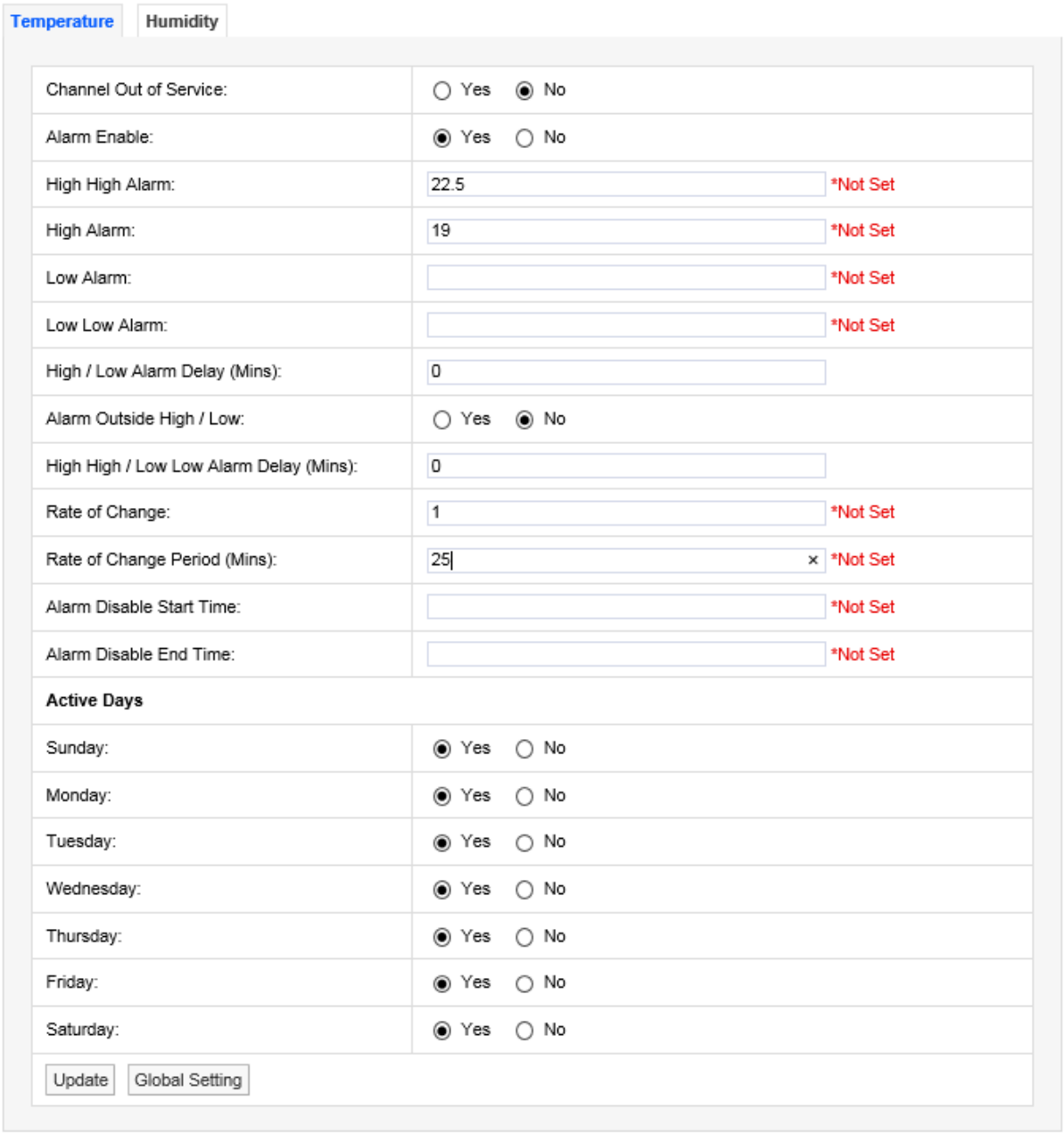
This topic will take you through setting Alarms.

Levels

To access Alarm Settings click on the + symbol next to **Alarms** (in Edit Mode). This will expand the branch again, see below.



To access Levels click on **Levels**. See below.



The Sensor in this example is a two-channel temperature and humidity device. You will see two tabs at the top one marked **Temperature** and highlighted, the other marked **Humidity**. The highlighted tab is the active tab. The tab names will change depending on sensor type, the number of tabs will change depending on the number of channels.

Channel Out of Service

This feature allows a single channel on a dual channel device to be taken out of service. This is useful as it may not be desirable to take the whole device out of service for example if a dual channel temperature transmitter was being used to measure the temperatures in a fridge freezer and the freezer had failed or was not in use the channel associated with the freezer could be taken out of service. This would allow alarms from the fridge to come

through the system but there would be no alarms from the unused freezer.

To take a channel out of service select the appropriate tab and select the No option button to take that channel out of service. When the channel is required again select the Yes option button.

Alarm Enable

If a Sensor is temporally out of service, or if the alarms are temporally not required rather than set all the alarm settings to zero the alarms can be disabled. To disable the alarms select the No option button. When the alarms are required again select the Yes option button.

High/High High Alarm

The High High Alarm is the highest level alarm that can be set on the system. This alarm should be set at a level that warns the user of potential damage. (High would represent the highest point of the desirable working range.) To set the High High Alarm type a value in the text box next to High High. The level can be set to one decimal place.

Low/Low Low Alarm

The Low Low Alarm is the lowest level alarm that can be set on the system. This alarm should be set at a level that warns the user of potential damage. (Low would represent the lowest point of the desirable working range.) To set the Low Low Alarm type a value in the text box next to Low Low Alarm. The level can be set to one decimal place.

High/Low Alarm Delay (Mins)

The high/low alarms can be delayed, which is very useful to prevent false alarms. In many buildings rooms are air conditioned to keep the environmental conditions constant. The conditions in any room change when doors are opened but soon recover when the door is closed again.

If alarms are set these could be activated every time a door is opened which would generate many alarms on the system. There is a danger with alarms that a syndrome called alarm fatigue develops where alarms are generated so frequently that they become an annoyance and are consequently ignored.

To avoid this a delay in minutes can be set for the alarms. For example when a door is opened the temperature drops but has recovered back to normal 10 minutes after the door is closed, without an Alarm Delay an alarm would be generated every time the door is opened. With an Alarm Delay of 15 minutes there would be no alarm generated however if the door was left open there would be an alarm generated after 15 minutes. To enter a High/Low Alarm Delay enter the time in minutes in the text box next to High/Low Alarm Delay.

Alarm Outside Range

To activate High/Low Alarms click the **Yes** option button. To disable High/Low Alarms click the **No** option button.

High High/Low Low Alarm Delay (Mins)

This feature allows a delay to be activated on the High High and Low Low alarms. It is generally accepted that no delay is enabled on the High High and Low Low alarms as these are normally the fail safe alarm levels. If delays are used here it may be that a very small delay is used to avoid a single reading out of spec generating alarms. To put a delay on the High High and Low Low alarms type a value in the text box next to High High/Low Low Alarm Delay (Mins), and should be entered in minutes.

Rate of Change

This feature activates rate of change alarms, depending on the application, a high and low level alarm may not work. A Rate of Change alarm is a mechanism that monitors how fast a parameter is changing and generates an alarm based on the selected criteria. For example, and alarm could be generated if temperature changes by more than 10°C per minute.

To set the Rate of Change enter a value in the dialog box next to Rate of Change. For example, a value of 10 would mean 10°C per minute if temperature units are set to °C. (See Global Units for how to set units.)

Rate of Change Period (Mins)

This feature is used together with the Rate of Change value above. Rate of Change Period is the time period associated with the Rate of Change value. This would be entered in minutes, so combined with Rate of Change would work like this - if the temperature changed by more than 10°C in 5 minutes an alarm would be generated. To set the Rate of Change Period enter a value in the field next to Rate of Change Period (Mins).

Alarm Disable Start Time

This feature allows alarms to be disabled during certain time periods. For example if a room is used during the day to work on sensitive items, alarms would be required during the day, but not required during the night. To set the Alarm Disable Start Time enter the time in the field next to Alarm Disable Start Time and should be entered like this: 18:00:00 in hours, (24 hour clock format) minutes and seconds. All alarms will be disabled after 18:00.

Alarm Disable End Time

This feature works together with Alarm Disable Start Time and sets the reactivation time for alarms. To set the Alarm Disable End Time enter the time in the dialog box next to Alarm Disable End Time and should be entered like this: 08:00 in hours, (24 hour clock format) minutes and seconds. All alarms for this device will be active again after 08:00:00.

Active Days

This feature allows alarms to be turned off on certain days. For example where sensitive goods are worked on during the week and put away each evening and at the weekend alarms would not be required at these times. The weekday alarms are handled by Alarm Disable Start and Stop Times. The weekends can be handled by disabling the alarms on Saturday and Sunday. To disable alarms on certain days select the No option button. In this example we want to disable the alarms on Saturday and Sunday. To do this select the No option button next to Saturday and Sunday. To make those days active again select the

Yes option button.

Once you are happy with your selections click Update. The alarm settings will be saved. The above can be repeated for the second tab if applicable. After selecting Update and the settings are saved the settings page returns with a message "Record updated successfully" see below.

The example dialog box below shows a correctly completed temperature alarm settings page. The actual values will change depending on the measuring parameters, every application will be different. The example shows a high level alarm of 25.5°C, a low level alarm of 5°C with a delay of 5 minutes. The high range is set to 20°C and the low range to 5°C with a delay of 5 minutes.

There is a rate of change alarm active which will alarm if the temperature changes by more than 10°C in 5 minutes. All alarms are disabled between the hours of 8am and 6pm and there will be no alarms at any time on Saturdays or Sundays.

Caution:

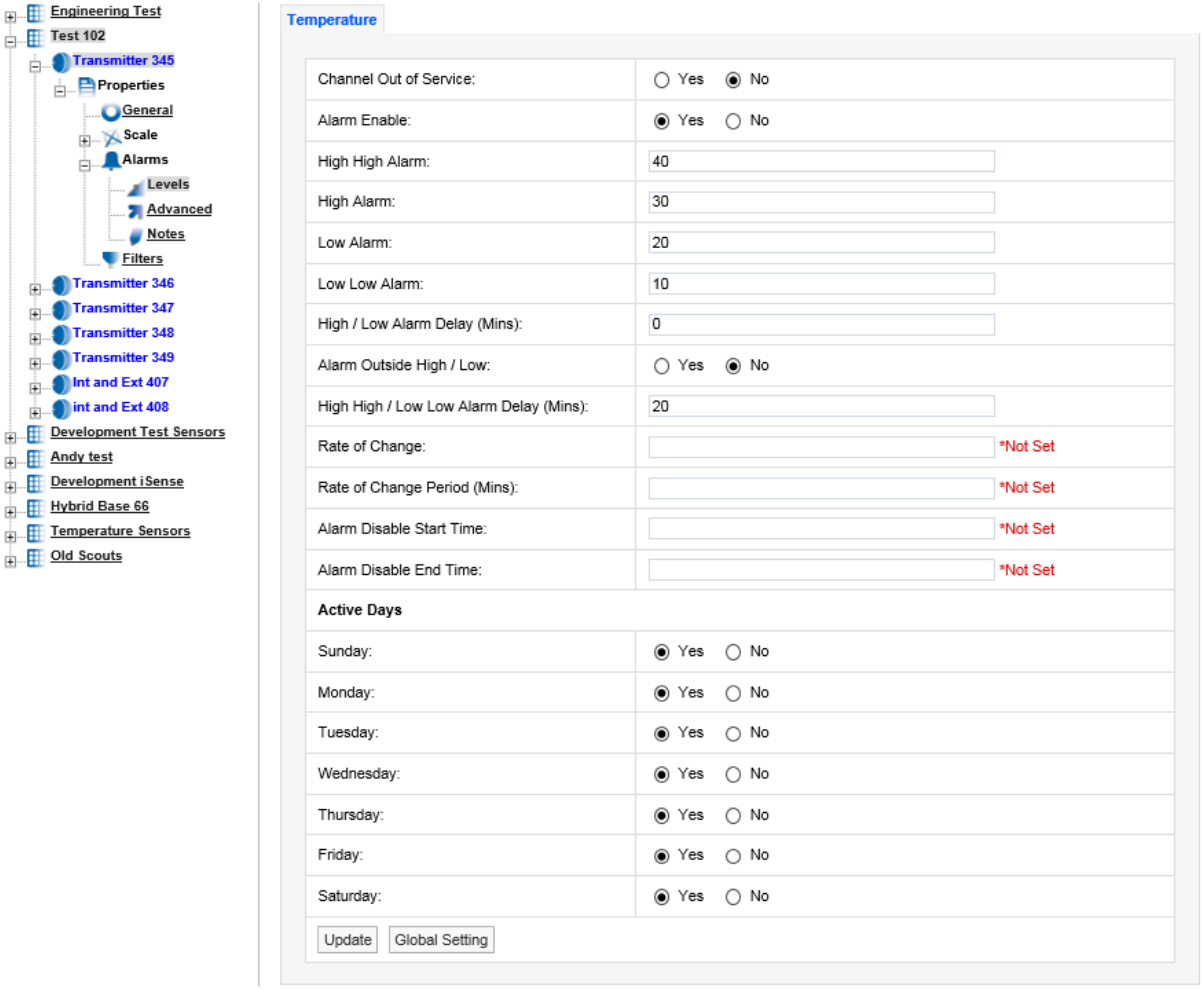
Alarm fatigue can be a major problem on automated monitoring systems especially when the alarms can drive emails or SMS alerts to call out service personnel.

There are many circumstances where the conditions of a room or space are not actively controlled and are driven by outside forces such as what's happening next door or the weather outside. In these cases there is little point setting alarms that would relate to ideal conditions, especially if those conditions couldn't be met on a daily basis. In these cases it is better to have no alarms set.

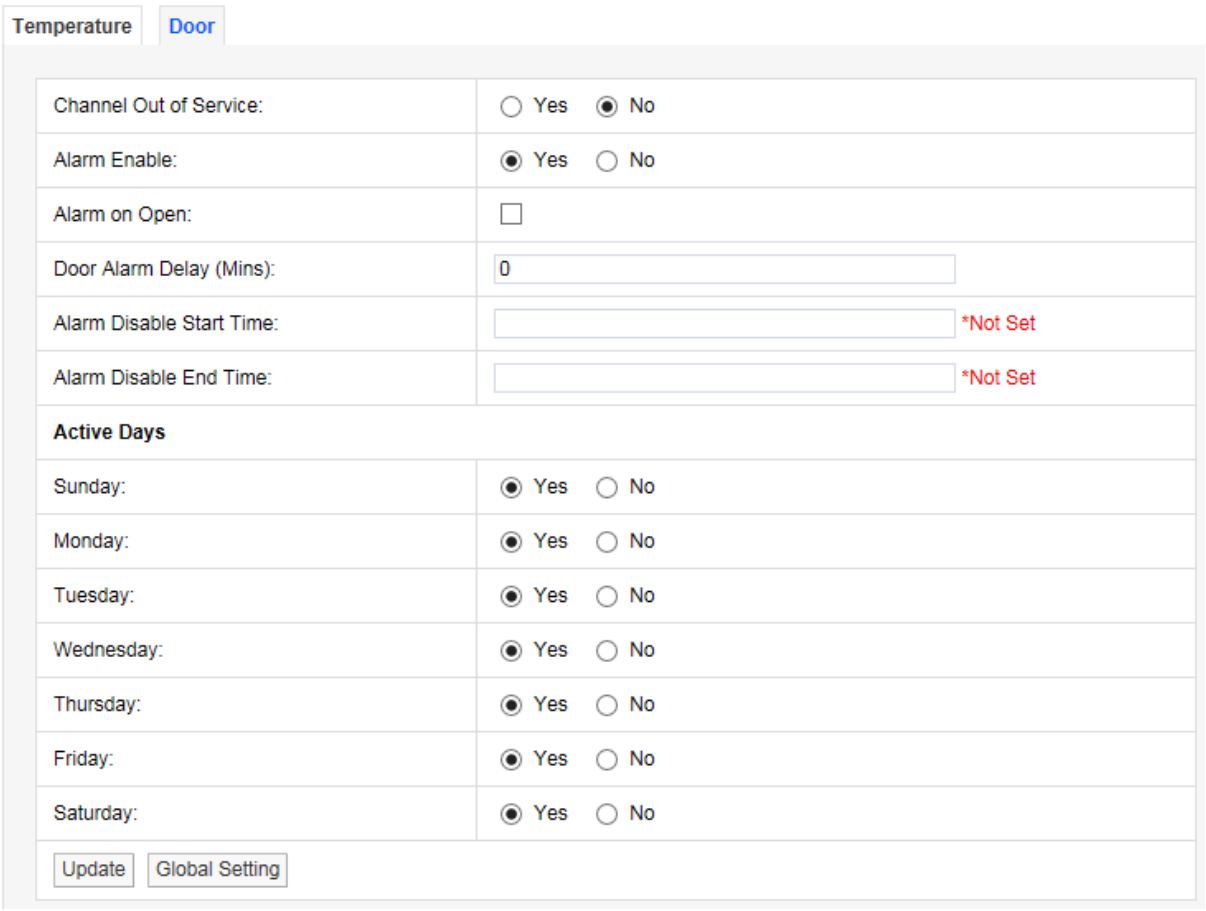
The danger of receiving many alarms that do not have an action where something can be done to prevent the re-occurrence of that alarm is the main cause of alarm fatigue.

If on the same system there was a critical space with high value objects that was controlled by an HVAC (Heating Ventilation and Air Conditioning) system, and on system failure an alarm was generated there is a great danger that this alarm could be ignored.

We are not suggesting that alarms are never set in these conditions just that thought and consideration are given during the alarm setting process.



Digital Alarms are Alarms generated by digital channels that record data from devices such as 'door open' sensors. Digital channels can only have two states, which are analogous to open or closed. The example dialog box below shows the alarm Levels settings view for a Digital channel:

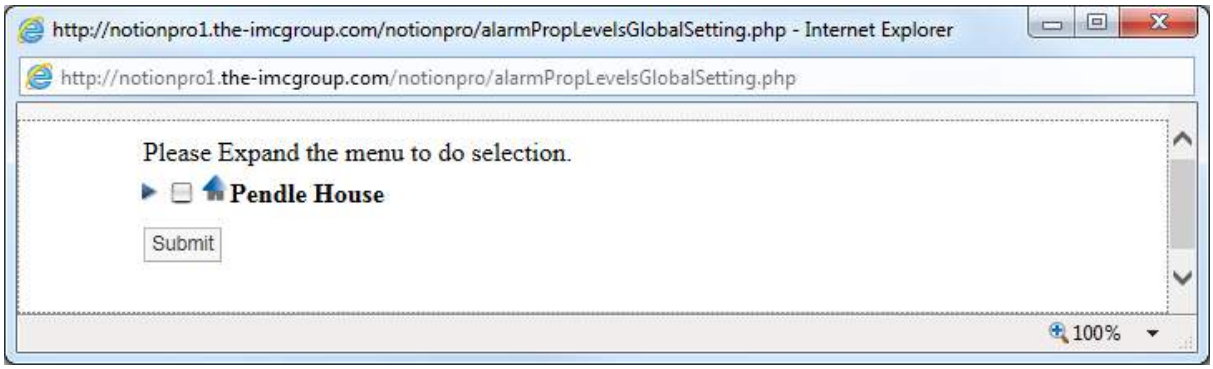


For a door open/close sensor, Alarm on Open would give an alarm if someone opened the door.

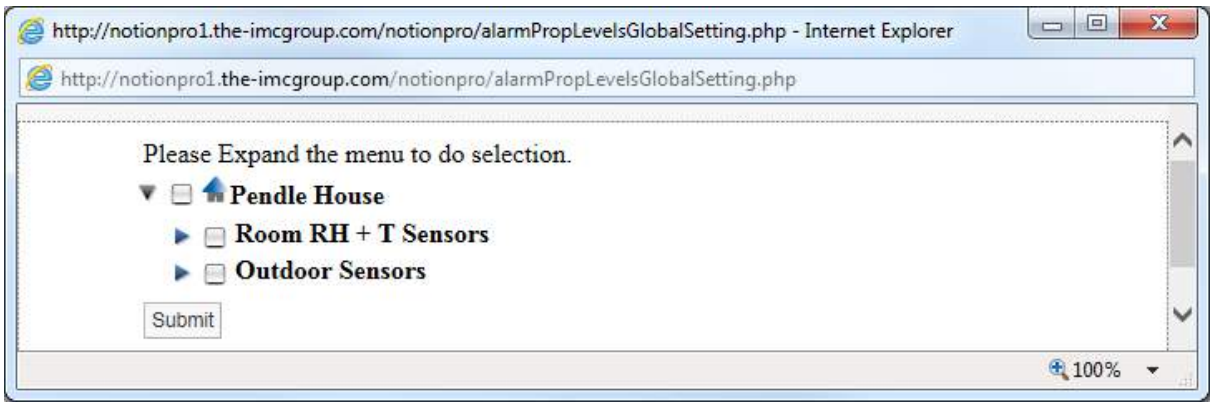
Global Settings

If there are many Sensors/Transmitters on the same system doing the same function in different spaces it can be tedious and error-prone to go through all the Sensors/ Transmitters on the system. There is a facility to change the Alarm settings globally on a number of sensors.

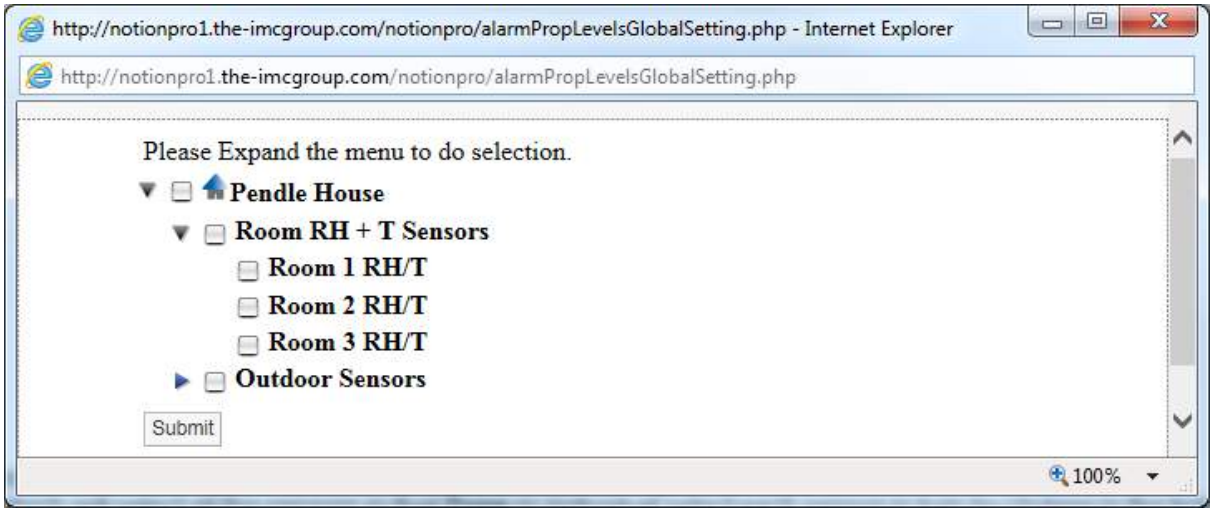
To make global changes stay on the alarm settings tab that you want to use to update other Sensors/Transmitters with and select Global Setting at the bottom of the tab. A new window will appear, see below.



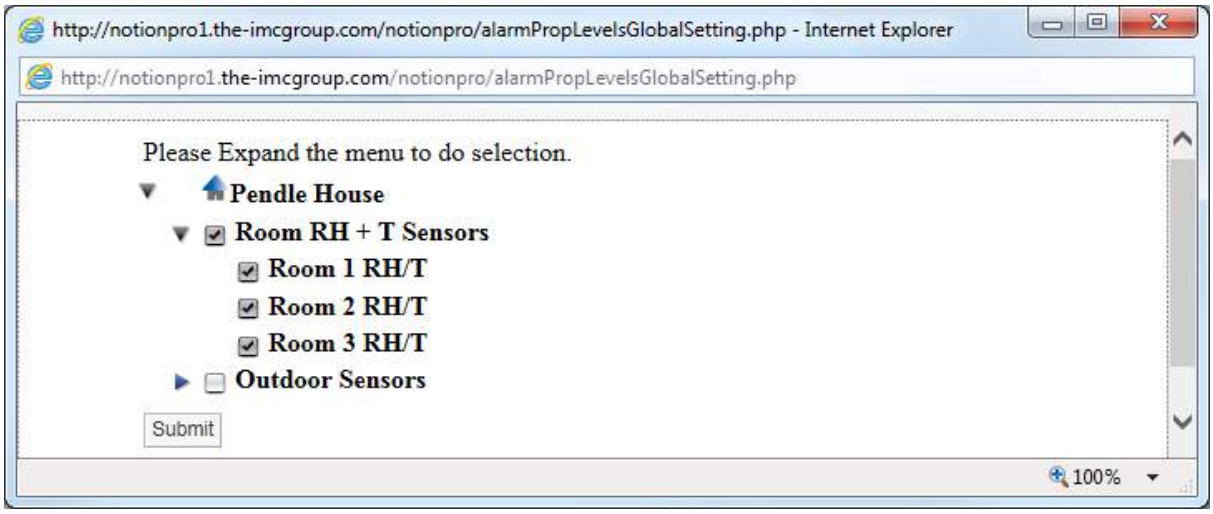
To expand the tree, select the blue arrow to the left of the Site name, see below.



To see the Sensors/Transmitters in a Zone click the blue arrow to the left of the Zone name, see below.



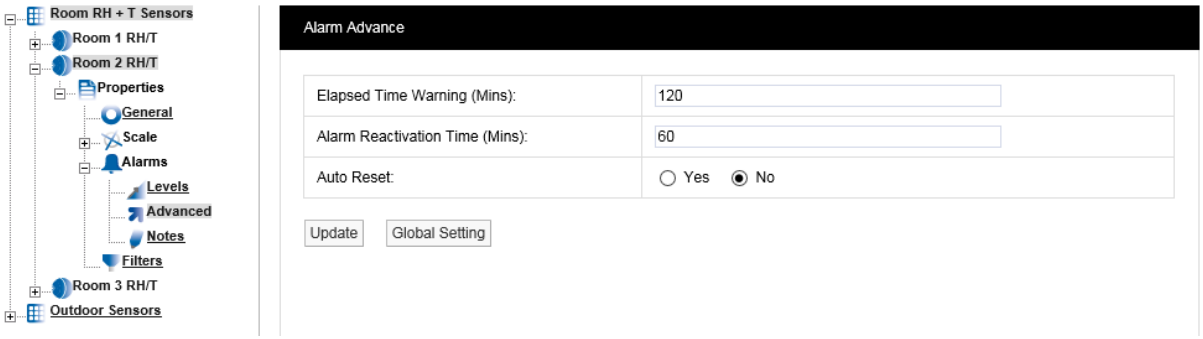
To select the Sensors/Transmitters to update the alarm settings either click in the tick box next to the Zone name which will select all the sensors in that Zone or individually select each sensor in turn by clicking in the tick box next to the Sensor name, see below.



Once you are happy with your Sensor selections select **Submit**. The selected Sensors will now be updated with the alarm settings from the selected Sensor. This can be checked by going into the alarm properties of another Sensor.

Advanced

To edit the **Advanced** settings select **Advanced**. A new window called Alarm Advance will appear, see below.



Elapsed Time Warning (Mins)

The elapsed time warning is used to alarm when a signal is not received from a Sensor within the predetermined time. In the default settings the Elapsed Time Warning is set to 120 minutes. This can be changed to any time up to 999 minutes. It is not recommended to set the Elapsed Time Warnings to very long periods. If there are lots of Elapsed Time Warnings being generated this may be an indication of a more serious problem such as poor radio coverage.

The main purpose of the Elapsed Time Warning is to alert you that a problem has occurred such as a Sensor has failed, been moved out of radio range or has inadvertently had the battery removed.

There are occasions where all the sensors in a Zone or Zones that are served by a wireless receiving device go into Elapsed Time Warning at the same time. This would be caused by either a failure in the wireless receiving device or a network problem causing the wireless

receiving device to stop communication with the database. If such problems are seen then these need to be investigated.

To set the Elapsed Time Warning period enter the required time in minutes into the field next to **Elapsed Time Warning**.

Alarm Reactivation Time (Mins)

The Alarm Reactivation Time is the default setting for the time between acknowledging an alarm and when the system checks to see if the alarm condition has returned to normal.

If the alarm condition has returned to normal the alarm status will change from amber (acknowledged) to green (OK), if after the Alarm Reactivation Time the alarm condition still exists the alarm status will return to red (unacknowledged) and create a new alarm on the system.

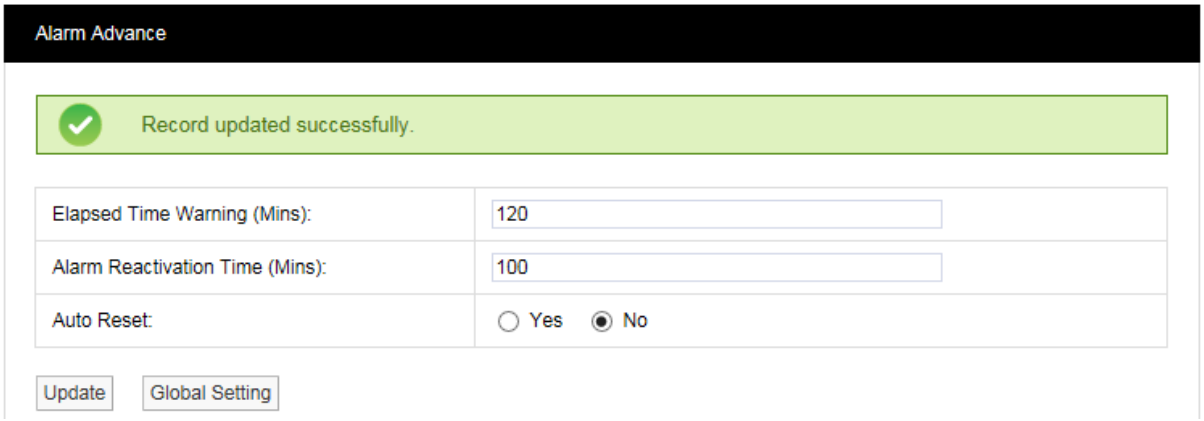
The default setting is 60 minutes. To change this enter a new value in minutes in the field next to **Alarm Reactivation Time**.

Auto Reset

Auto Reset is used to reset an alarm status to green when an alarm condition returns to normal. The default is No which means that all alarms have to be acknowledged. The disadvantage is that a Sensor could go in and out of alarm all night but when the User checks in the morning the status shows green, so without looking at the graphs or alarm logs they would be unaware of a problem.

To change the setting select one of the Yes or No option buttons as required.

When happy with the settings click **Update**. The setting will be saved, see below.



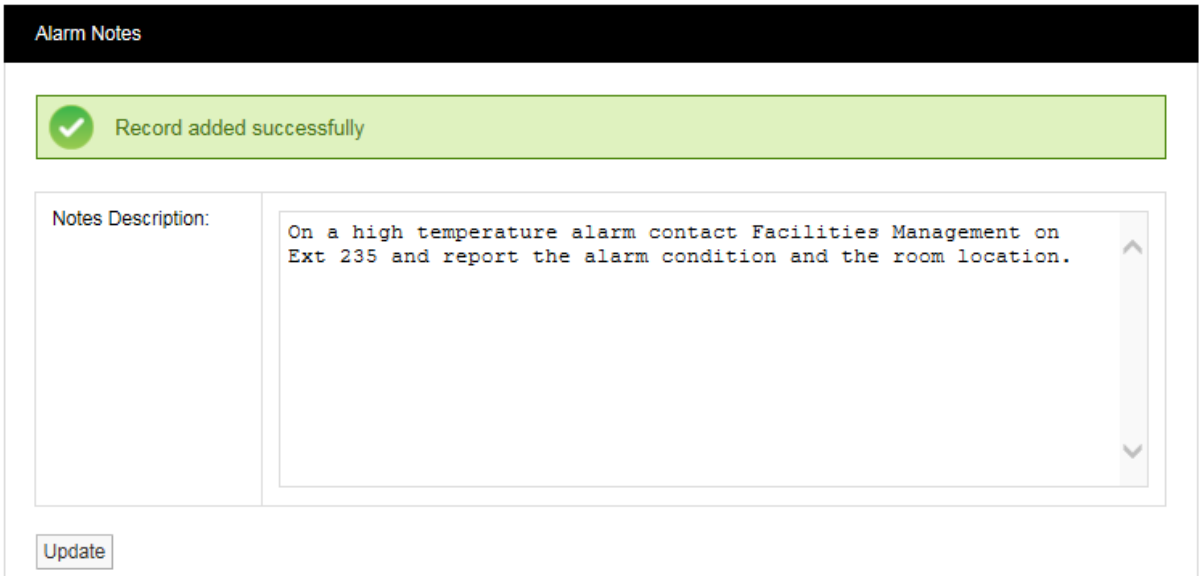
Notes

To edit the Notes settings select **Notes**. A new window called Alarm Notes appears, see below.

This feature allows you to enter notes for an Alarm. This is especially useful for inexperienced operators. The system can be set up so that low-level users can monitor the system but can't make changes. The Alarm Notes will give an inexperienced user specific instruction on what to do when an Alarm occurs.

For example in the middle of the night the temperature increases in a room or space containing high value objects, an Alarm is generated and a night shift operative or security guard views the Alarm. The Alarm message might say "On a high temperature alarm contact Facilities Management on Ext 235 and report the alarm condition and the room location". This feature means that someone not familiar with an area or its contents can still effectively and efficiently deal with an alarm condition.

To activate this feature type your instruction into the dialog box and when happy select Add. This will add the message to this Sensor. This can be set individually for every Sensor on the system. Once the changes have been added and are OK you will see the following window, see below.



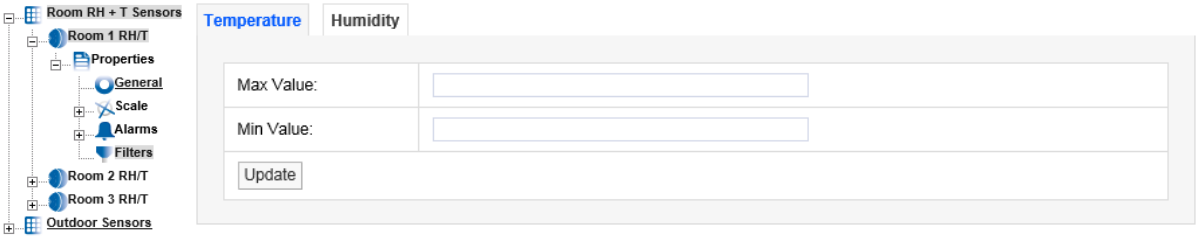
Filters

This feature lets you set filter limits for the Sensor. These should only be used in exceptional circumstances. For example if a Sensor is located in or near an electrical switch panel which

can be very noisy electrically this can occasionally cause interference on the radio link, which would be seen on the graph as a large spike in the data.

The filters are designed to remove such interference. If the Sensor is reading temperature and the expected range for this application is -10°C to +50°C a filter could be set at say -40°C for the Min Value and +80°C for the Max Value. Any readings seen above or below these readings would be rejected.

To edit the Filter settings select **Filters**. The **Temperature** tab (for temperature in this case) will appear, see below.



To activate this feature enter the required Min and Max values in the appropriate fields. The values should be whole numbers in the range 50 for the Max Value and -40 for the Min Value. Select Update when finished. (A warning message is given if you click on another tab before you've selected Update for a change you made on the current tab.) Once the data is accepted you will see the following screen, see below.

For dual channel Sensors, repeat the above process for the other channel.

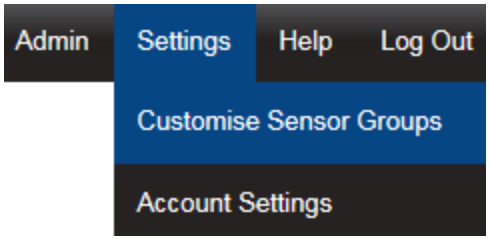
Note: Setting filters will cause data to be rejected above and below the filter limits. Check that any filter limits set are above and below the expected ranges.

5.4 Setting Up Sensor Groups

Notion Pro has the capability to group sensors of the same time together into Sensor Groups. The Sensor Groups feature is extremely useful for grouping sensors of the same time that are measuring the same parameters. Sensors from different Sites can be added to one Sensor Group.

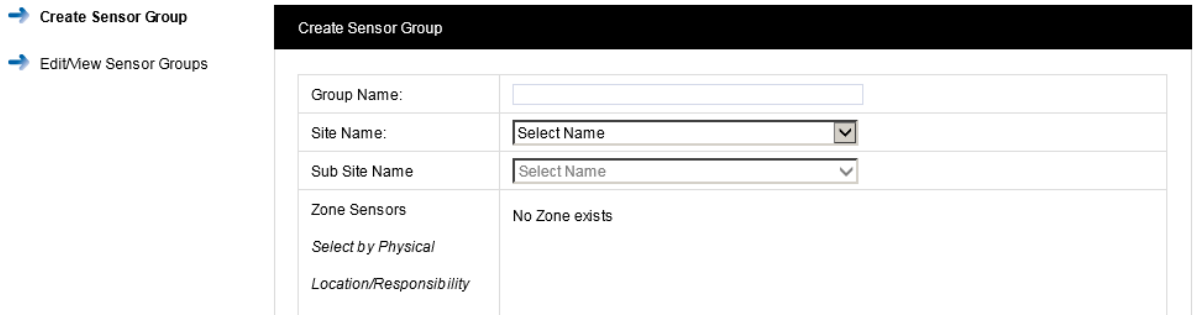
Sensor Groups are also used to control Network Receiver Alarm Relays, SMS Module Alarm Relays, and associated MS1000 Control Interface outputs via the Local Alarms settings.

To create a Sensor Group select **Settings>Customise Sensor Groups** from the main menu, see below.



The Create Sensor Group window appears, see Creating Sensor Groups

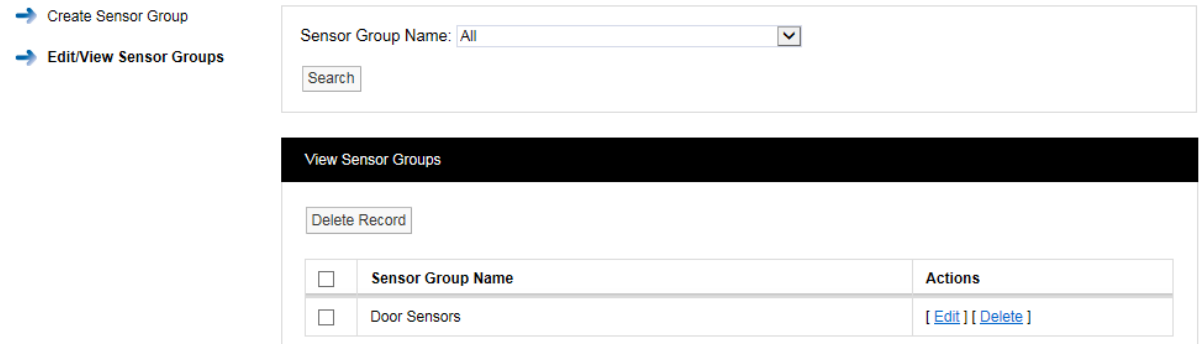
5.4.1 Creating Sensor Groups



Enter a name for the Group this could be "Door Sensors" . Select the Site from the drop down menu next to Site Name. For this example we will select Notion Pro Demo. If the selected Site contains Sub Sites, these can be selected from the Sub Site Name drop down menu.

After selecting the Site the available Zones on that Site become visible, select the + symbol next to the Zone name that contains the Sensors that you wish to select. Here we will select the sensors which have a door channel.

Once you are happy with your selections select Create Group. The View Sensor Groups window appears, see below.



This list contains all the Sensor Groups that are available. Each Sensor Group can be Edited or Deleted.

See also:

Create and Edit Sensor Groups

Viewing Sensor Groups

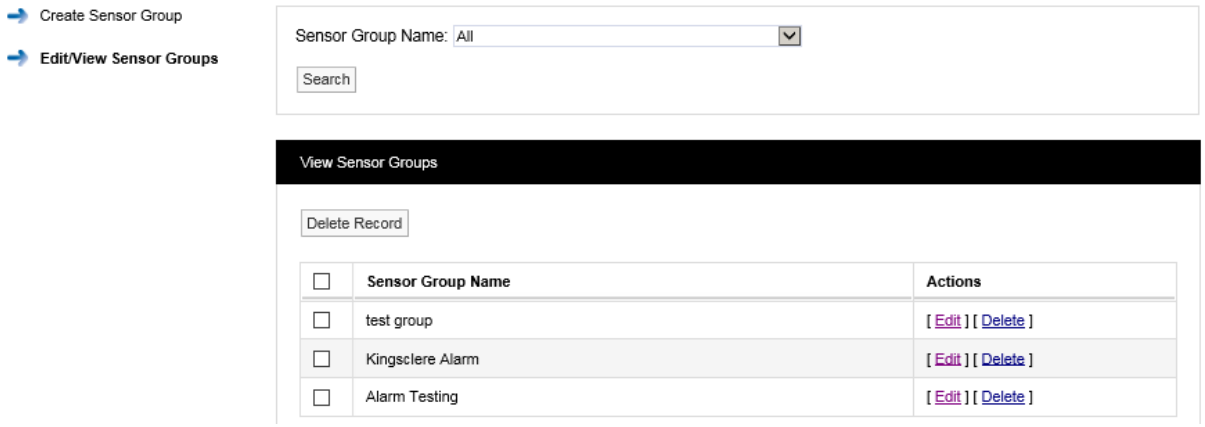
5.4.2 Local Alarms

Sensor Groups are used to control Local Alarms which drive the alarm relays on Network Receiver, Alarm Unit and SMS Unit devices. If an alarm is activated for a Sensor that is a member of the Sensor Group, then the associated Local Alarm will be activated on the device.

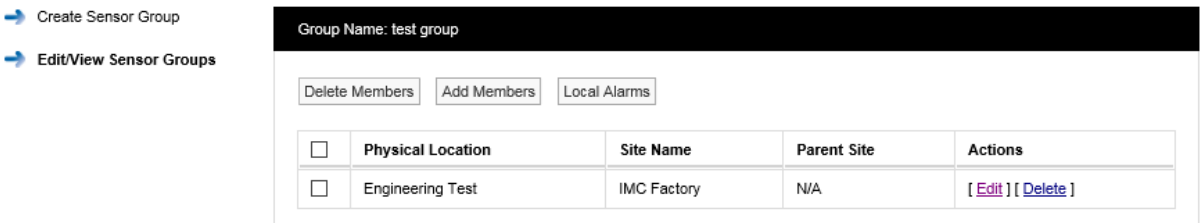
Setting up Local Alarms

Firstly create a Sensor Group, adding the required Sensors.

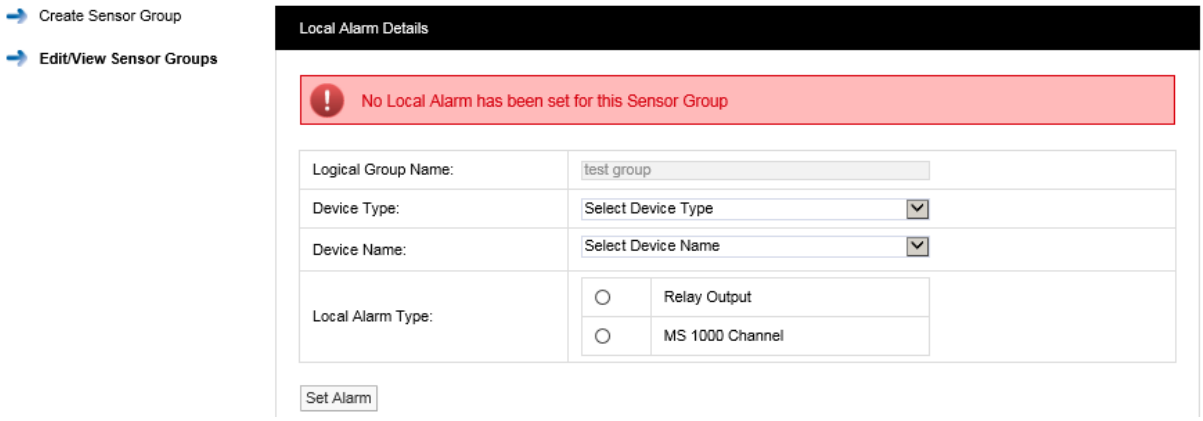
Once the required Sensor group is created, select **Edit/View Sensor Group** in the left hand menu, see below for example.



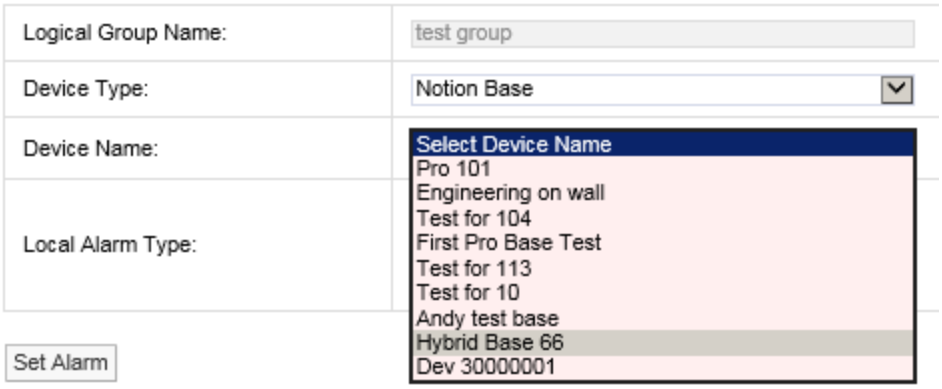
Now click on the Edit action for the new Sensor Group. The edit view will be displayed, see below.



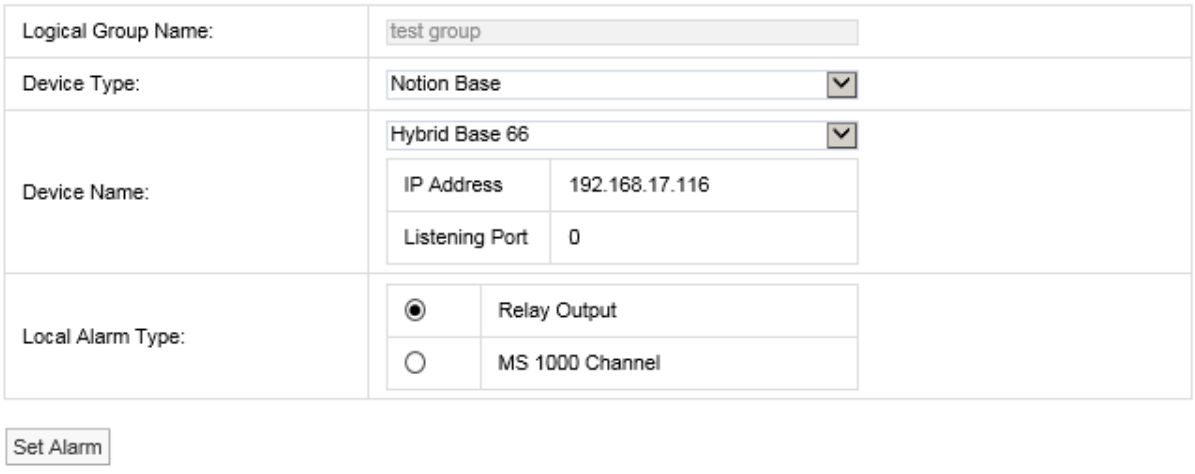
Click the Local Alarms button to display the Local Alarms view, see below.



Click on the Device Type combo control, and select the required control device type – Notion Base [Receiver Unit], IMC Alarm Unit or IMC SMS Unit, see below, then click on the Device Name combo control and select the require device by name.



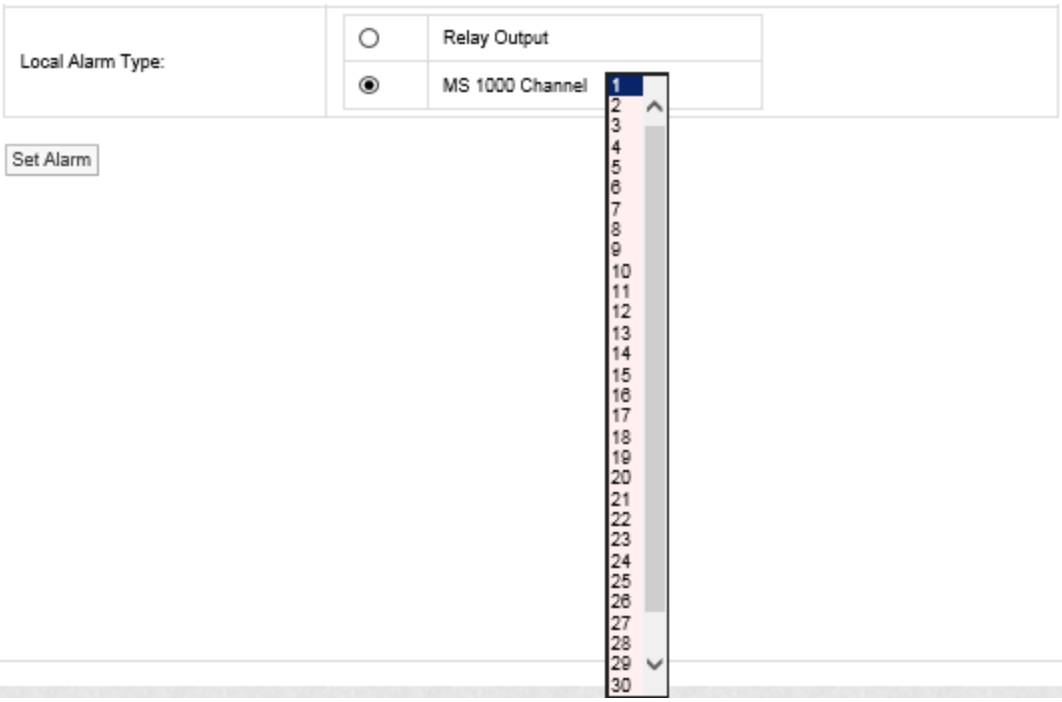
The view will now change to display device information and Local Alarm options, see below for example.



To use the Relay output, select the Relay Output option button.

If you wish to use an output on a MS1000 card; select the option button adjacent to the

MS 1000 Channel text, this displays the MS1000 channel options, see below.

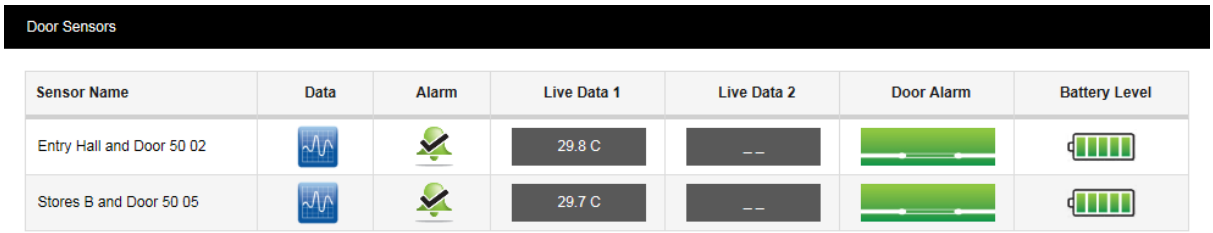


Select the required channel number (up to 32 channels are available). When the required Local Alarm has been selected, click Set Alarm to save the setting.

5.4.3 Viewing Sensor Groups

To Sensor Groups that have already been created select Sensor Groups from the Home menu bar to give the Available Groups dialogue box, see below.

The Available Groups dialogue gives you an alarm status summary for the sensors which form the Group. Clicking View Data shows you the Live View for the sensors in that group. See below for example.



See Viewing Data for details of the facilities available from the Live View window. You can also generate Reports for the sensors in the Group by clicking on Reports. See Setting Up and Running Reports.

Note: An unlimited Sites and Sensor Groups licence can be purchased, IMC product code W604. Contact IMC Group Ltd for details.

5.5 Viewing Data

This topic gives detailed information on how to view live data coming from the sensors in your Installation.

5.5.1 Signing In

First Time Login (Any User)

To view the Notion Pro website, you will need to open a browser and navigate to the Notion Pro site.

If you are working on the Notion Pro Server itself, enter http://localhost/NotionPro in the browser's address field.

If you are working on a another computer or device, you will need to use the URL supplied by your System Administrator or IT Support provider to reach the Notion Pro server. This may be similar to ServerName/NotionPro for a LAN connection or www.mycompany.com/NotionPro for an internet connection.

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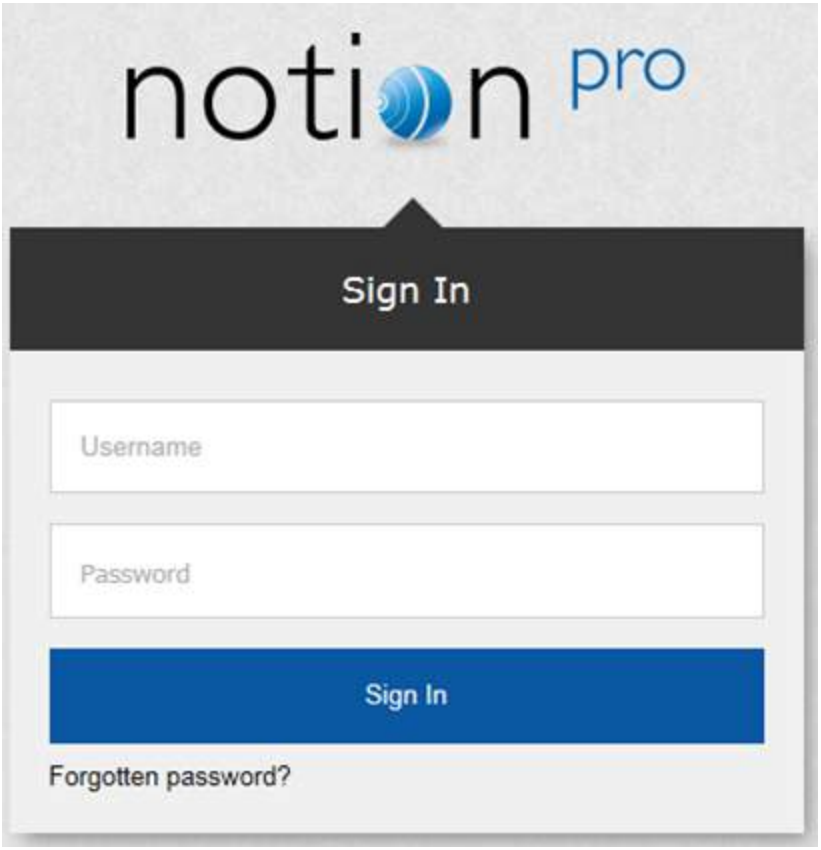
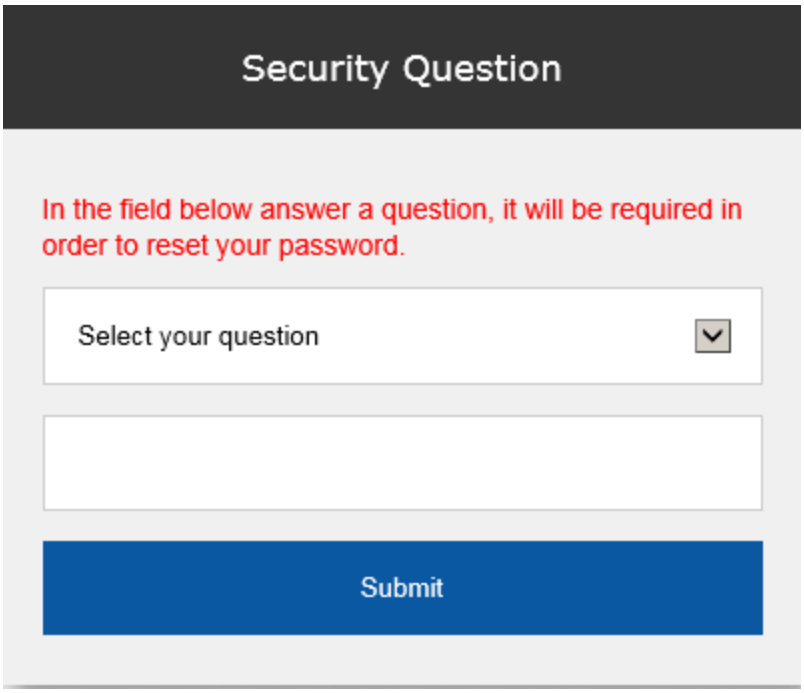


Once you have navigated to the correct URL, the login screen will be displayed, as above. Log in using the username and password that the System Administrator has given you.

Enter your username and password to login, then click Sign In. Passwords are case sensitive.

The first time you log in you must supply the answer to a security question, so if you forget your password in the future, you can retrieve it using a procedure which includes supplying the answer to your security question. See below.

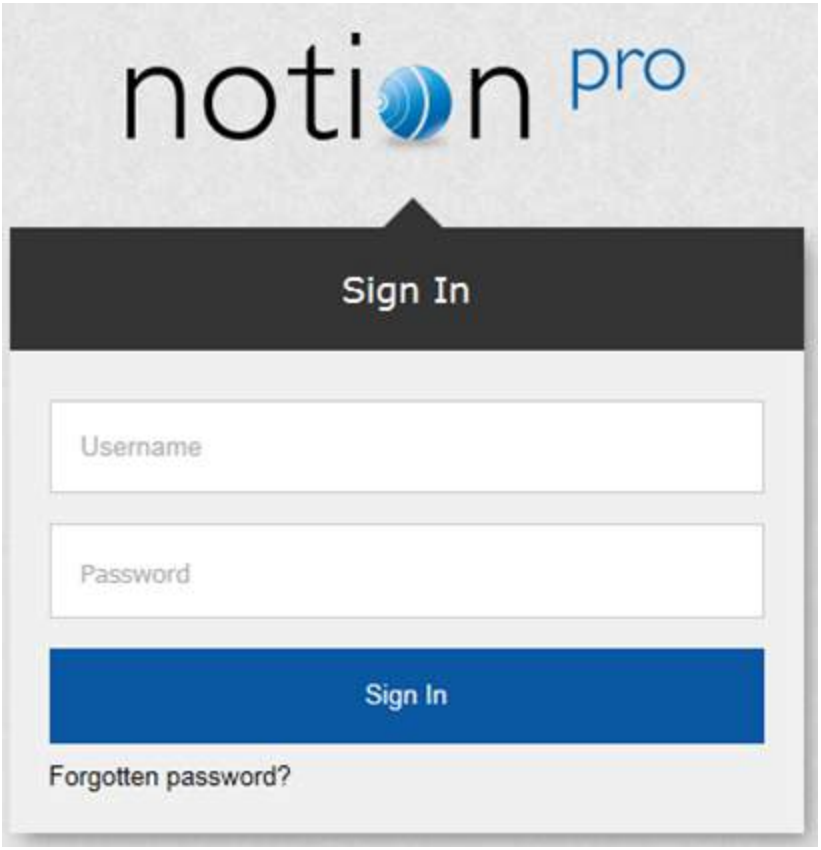


Choose your security question by clicking and choosing from the list. Type the answer into the box below, and then click Submit.

You will now be returned to the login screen see above, where you will again need to enter your username and password.

Subsequent Logins (Any User)

Once you have navigated to the correct URL, the login screen will be displayed, see 132 below.



Log in using the username and password that the System Administrator has given you.

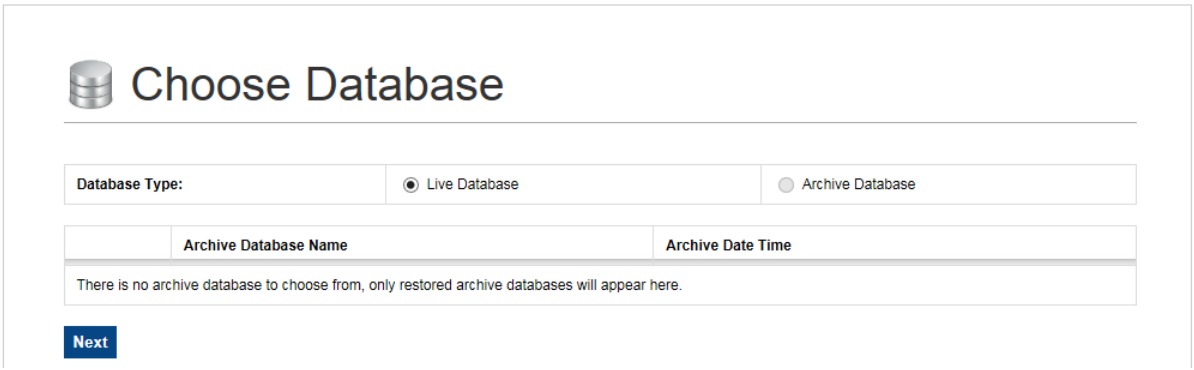
If you have forgotten your password click Forgotten password? and work through the procedure that follows. You will need to know the answer to your Security Question to be able to do this.

Archived Databases

Archived Databases will probably only be present if the Notion Pro installation at your site has been running for some time, and if the System Administrator has performed one or more archive operations.

If you login as System Administrator, or with a username with the Access Archive Database permission set, then the Choose Database screen will be displayed, see below.

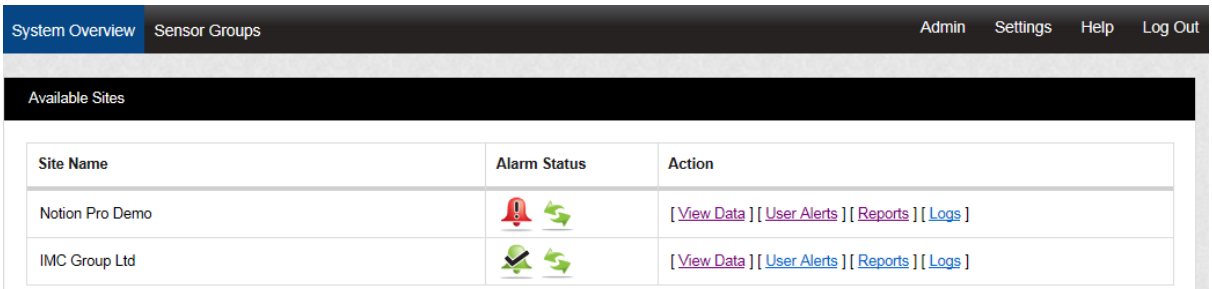
If your Username does not have the Access Archive Database Permission set, then Notion Pro will go straight to the live system Home screen.



To access archived data, click Archive Database, select the required Archive Database, then click Next. For detailed information about the Notion Pro Archive / Backup system, see the IceSpy Notion Pro Archive/Backup Manual, doc no IM5549.

5.5.2 Viewing the Live Database

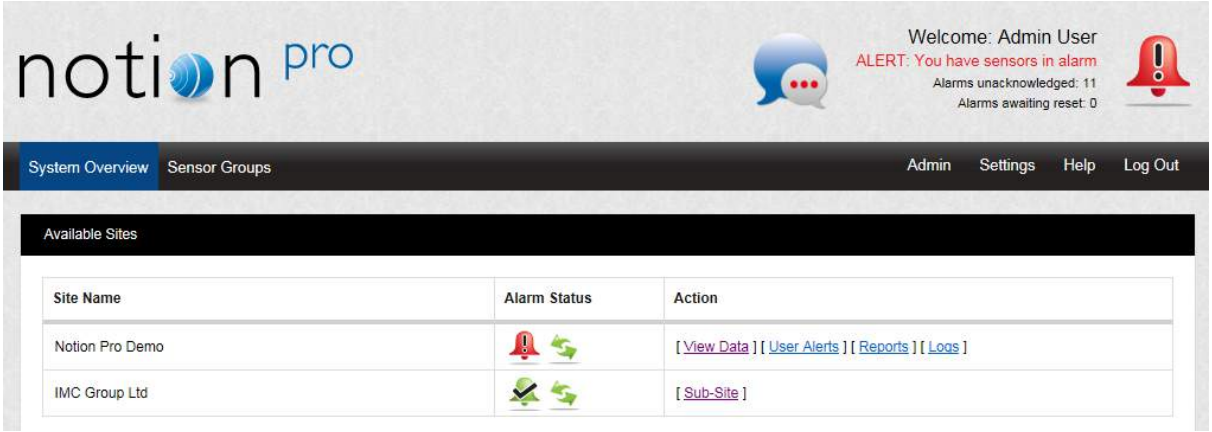
To access the live Notion Pro system, make sure **Live Database** is selected on the Choose Database dialog box then click **Next** to give the **System Overview**, see below for an example.



Note: You will only see the Available Sites view if your installation has more than one Site. For a one-Site installation, clicking **Next** will take you straight to the Live View.

5.5.3 Choosing the Site to View

On logging in to Notion Pro, you are presented with the System Overview display, see below.



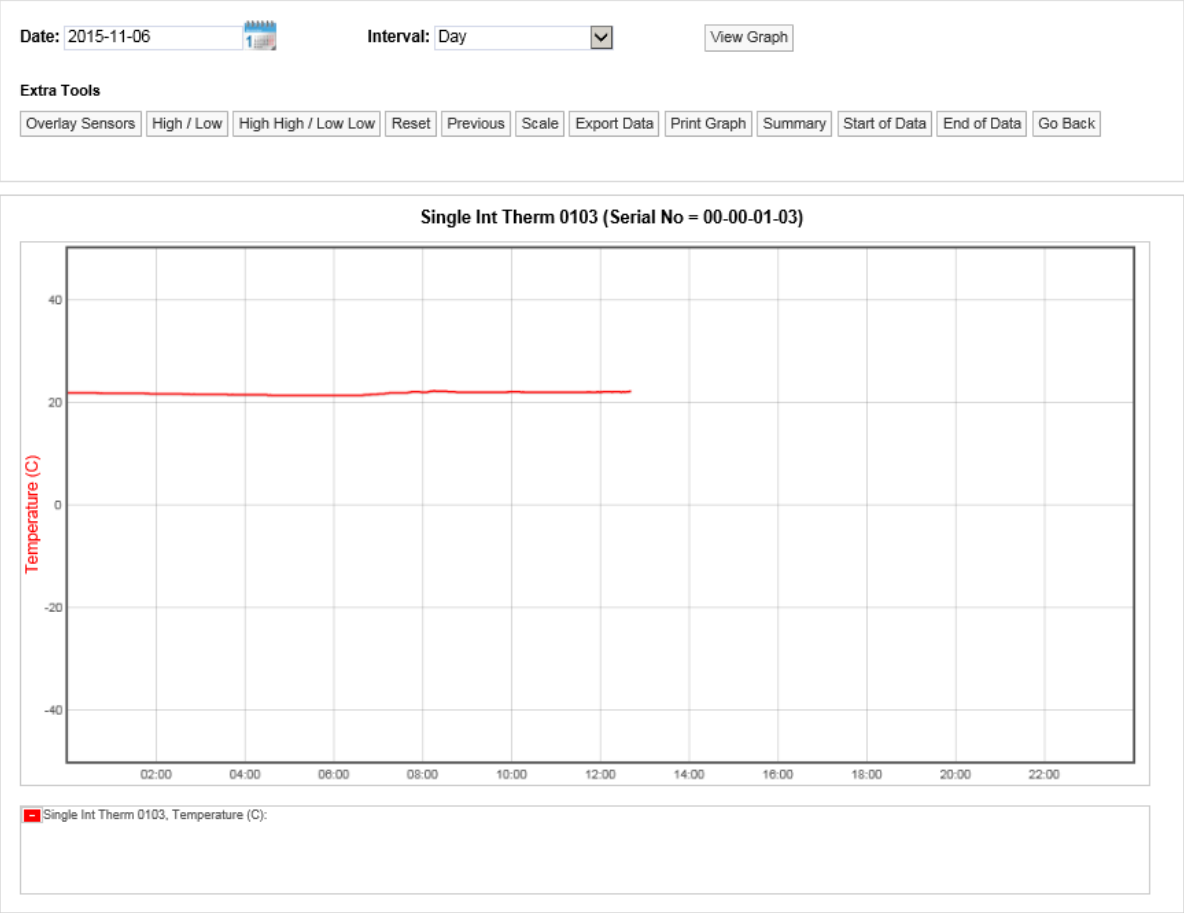
The icons under the **Alarm Status** column in the Available Sites window show the alarm and sensor communication status of the Site under the **Site Name** column on the left. See Alarm Management for details of Alarms. The available **Actions** for each Site are:

View Data	(see also Viewing Live Data)
User Alerts	Allows you to set up email and SMS Alert Groups.
Reports	Allows you to create sensor Reports.
Logs	Allows you to view and edit System Logs.

5.5.4 Operations from the Live View

The Graphical Display

To view the graph data for a Sensor click the  icon for the sensor on the **Live View**, or double-click on the Sensor Name to give the same graph in its own window. See below for an example graph.

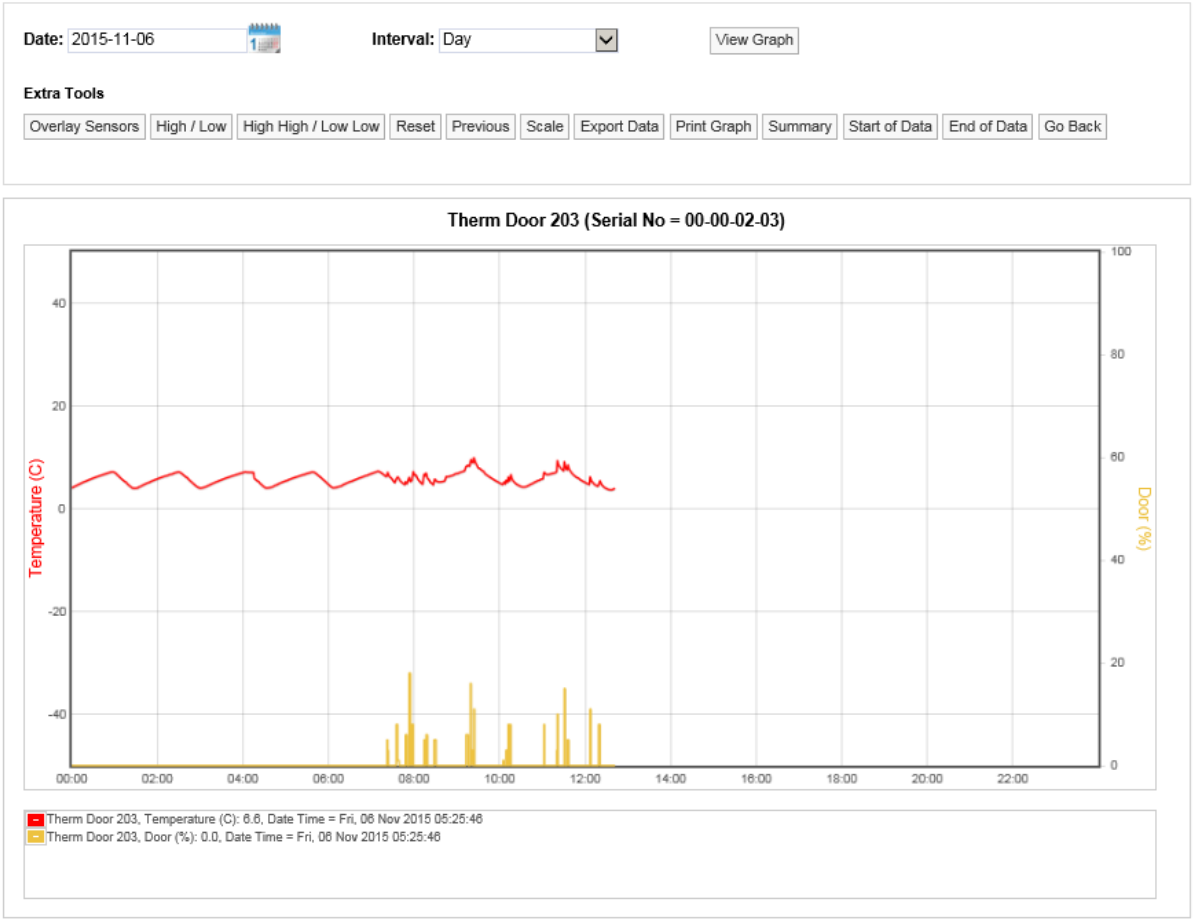


Line Graph, Temperature Data

Here, the graph shows live temperature data, starting at midnight for the 'Single Int Therm 0103' sensor. Summary data in textual form is shown in the display box under the graph area.

Double-click on the Sensor Name in the Viewing Live Data list to give the same graph in its own window.

An example of a graph for a two-channel sensor might be as shown below:



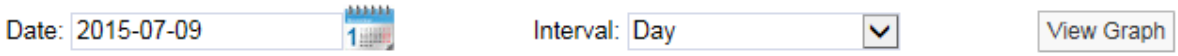
Line Graph, Temperature Data and Door State Data

Here we see temperature data in red, door data in yellow. The door sensor graph line indicates the percentage of time in each data period that the door was open. This could be one continuous period or an accumulation of several periods.

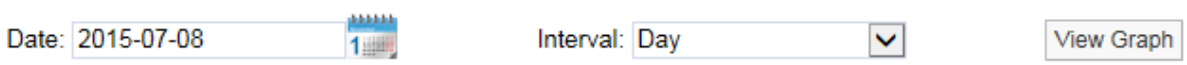
Display Time Spans

The graph window defaults to displaying the current day's data.

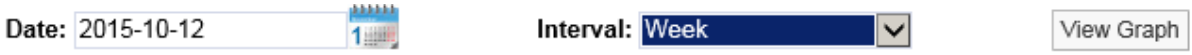
To change the date range for the graphing period, use the **Date** and **Interval** controls, see below.



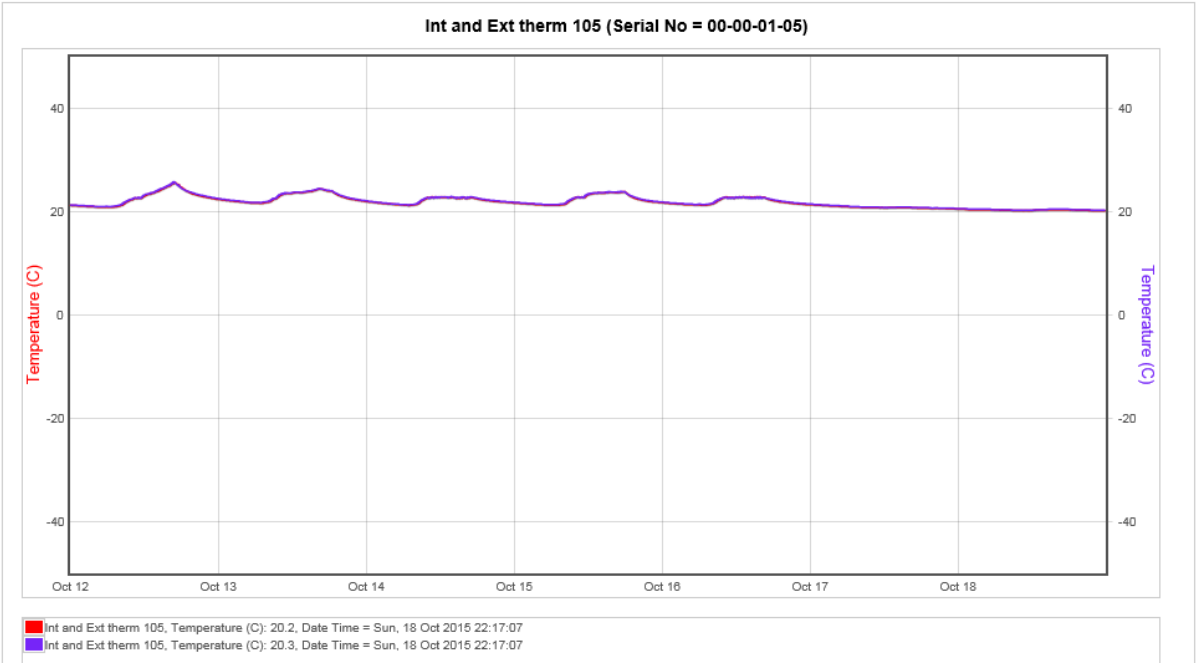
Select the calendar icon to change the data graphing start date, this is the data that the graph will start from, see below.



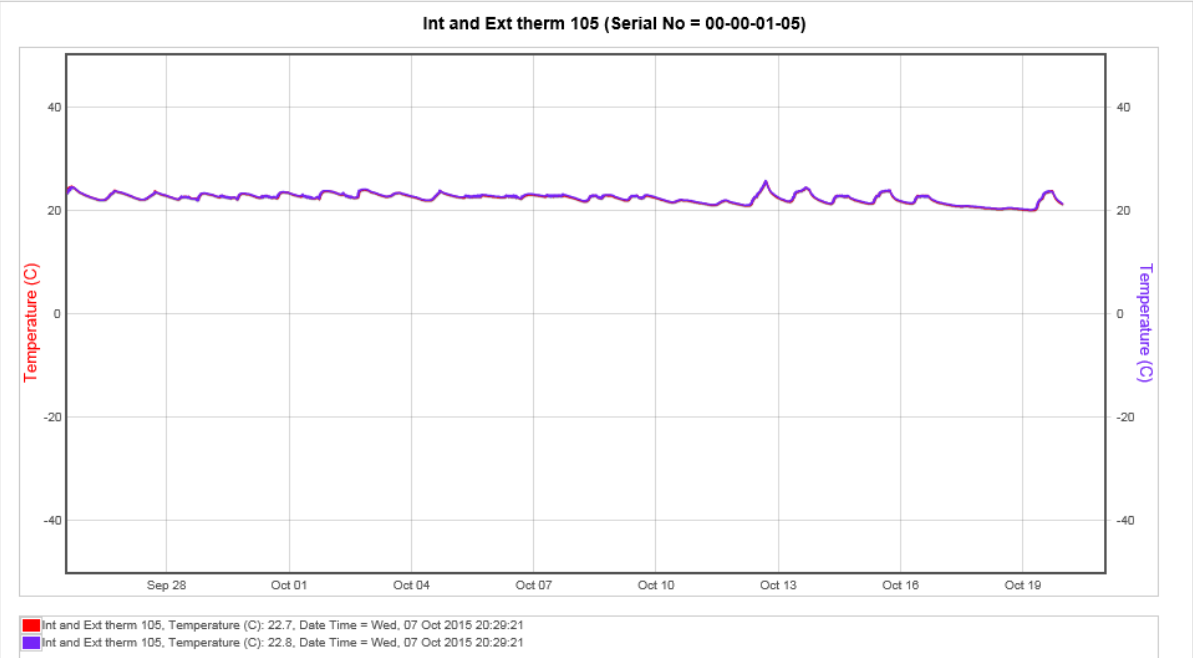
The date has been changed to the 8th July 2015. To view data for one week (commencing 12th of October 2015) use the **Interval** drop down menu and select Week, see below.



Click on View Graph to generate the graph, see below for example.



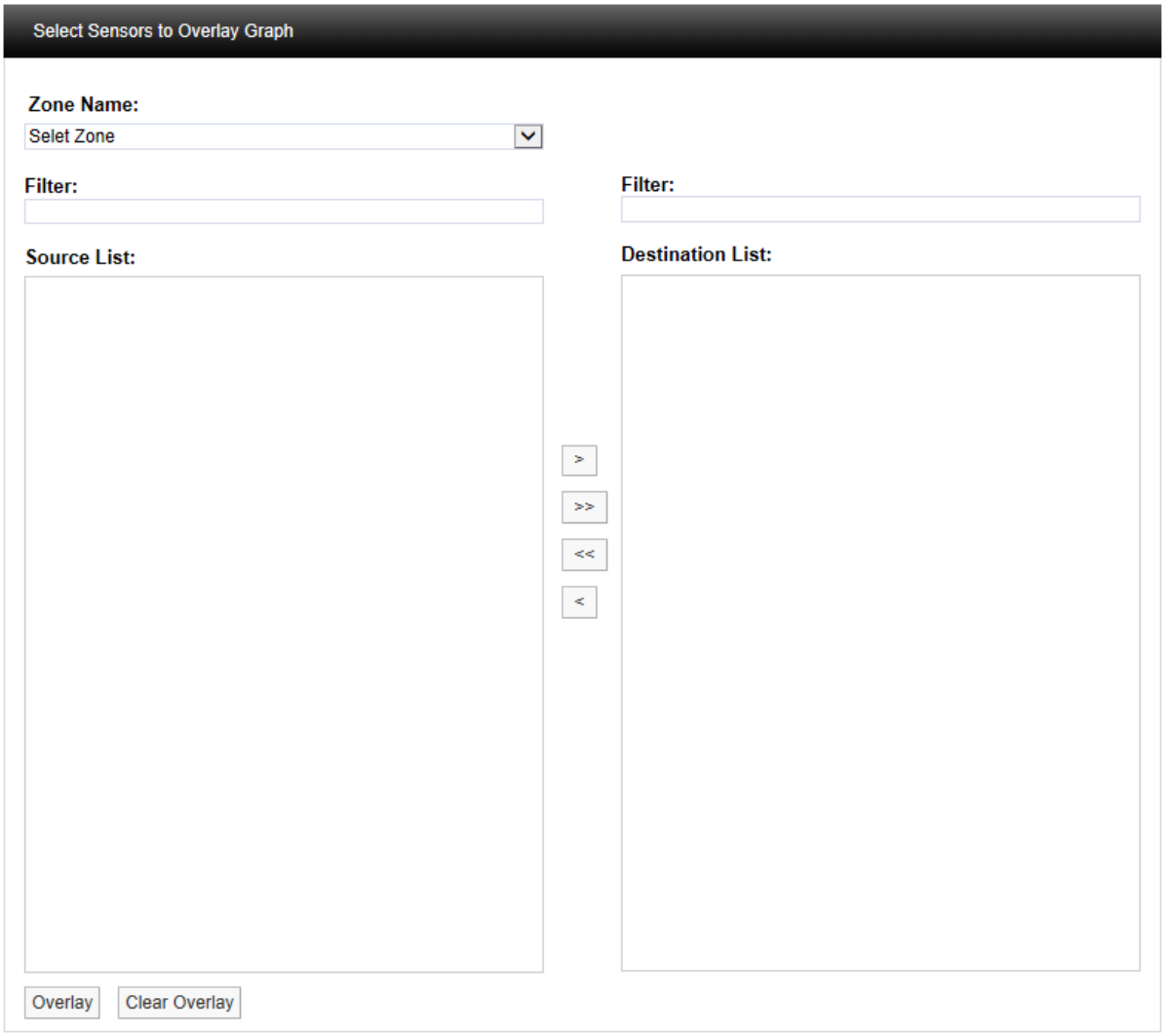
To view data for a month follow the steps above, selecting a date from the calendar that is a month or more prior to the current date, set the **Interval** to Month and select View Graph, see below.



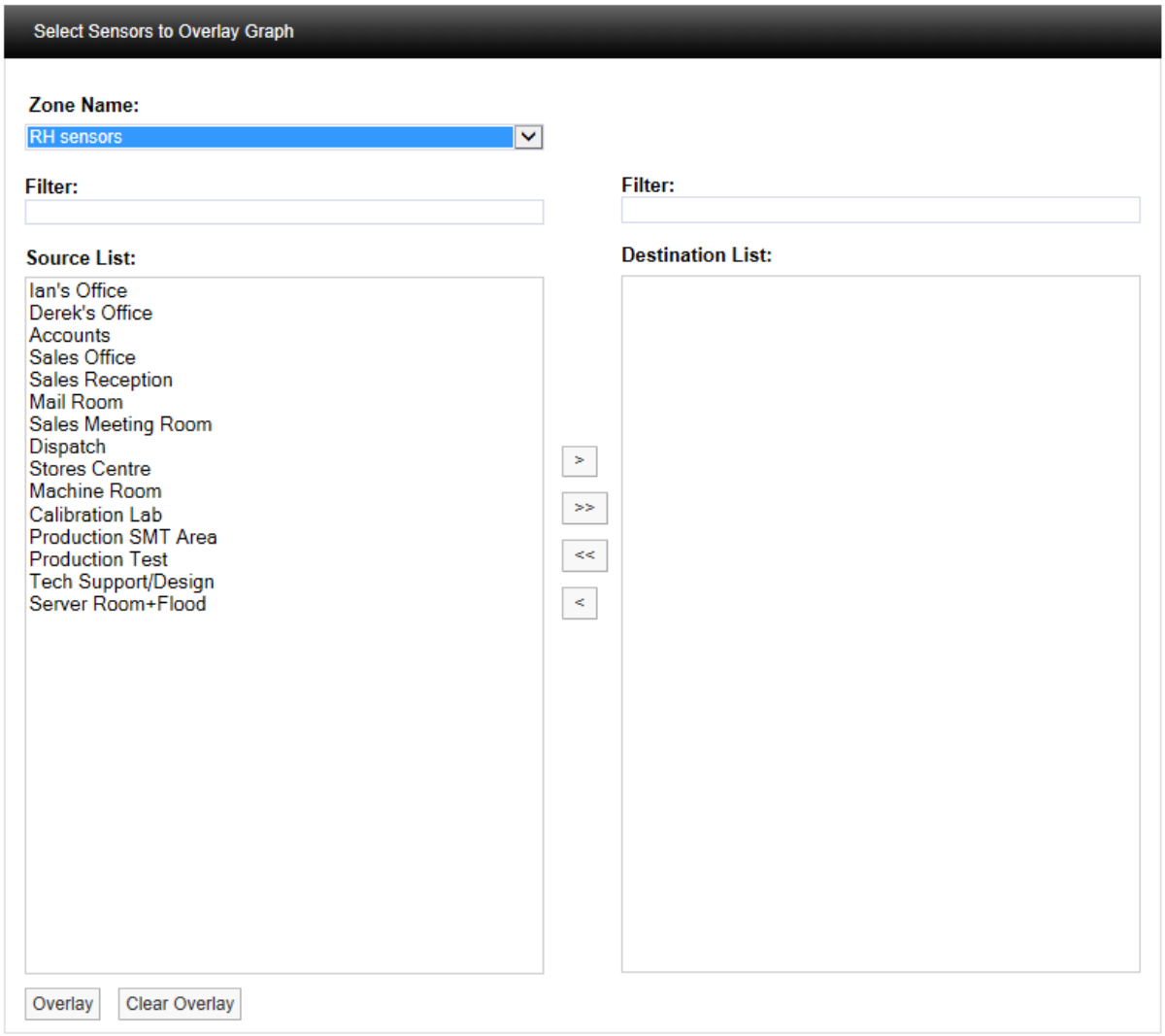
Using the tools above the graph window the following functions can be performed.

Overlay Sensors

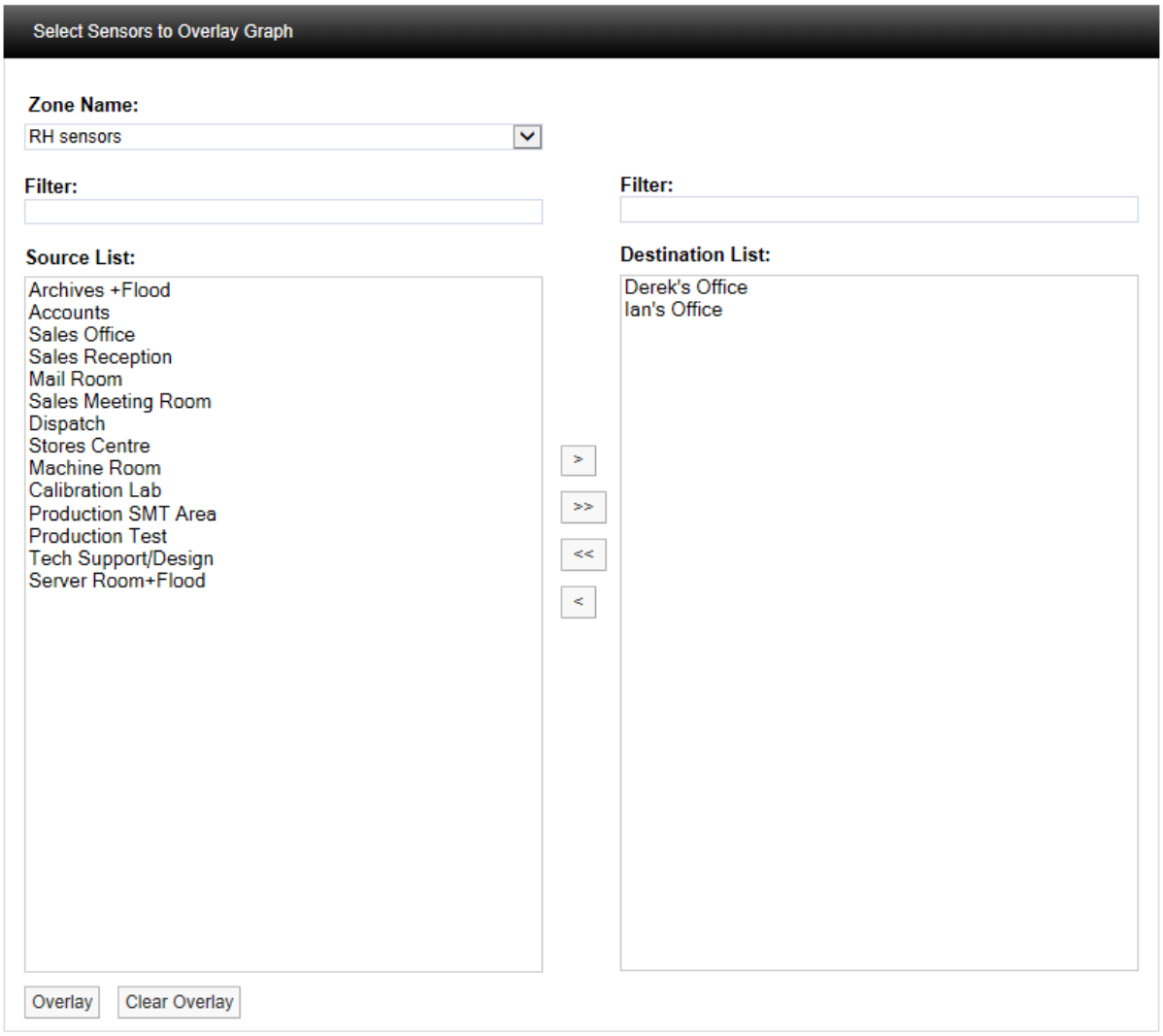
This feature allows the comparison of one or more sensors. This is particularly useful if you have an outdoor sensor and want to see if the outdoor conditions are driving the conditions indoors. To overlay sensors, in Live View select **Overlay Sensors** from the bar menu in the Live View window. A new window called Select Sensors to Overlay Graph will appear, see below.



Select the Zone containing the relevant sensors from the Zone Name: pull-down list. See below.

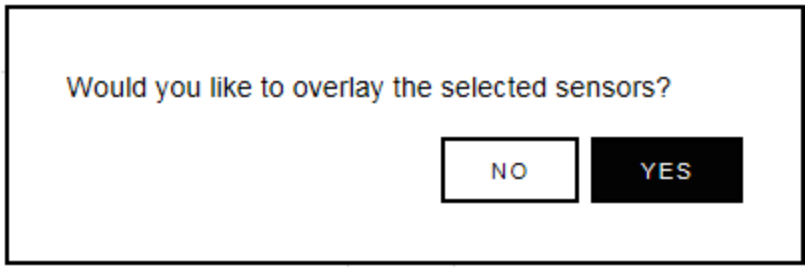


Select the sensor(s) you require from the **Source List** then click > . To select more than one sensor, hold down the Ctrl key as you select the sensors, then click > . See below.



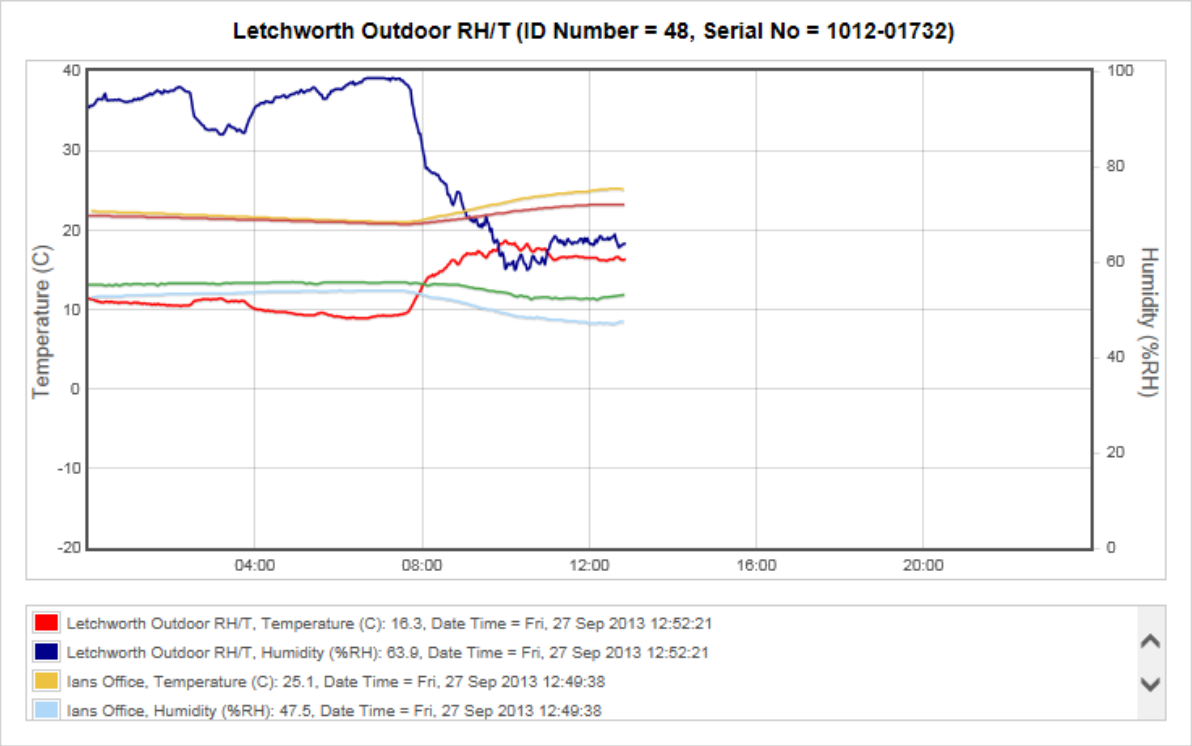
Once you are happy with your selection, scroll to the bottom of the list and select **Overlay**, see below.

After selecting **Overlay** you will be asked to confirm your selection, see below.

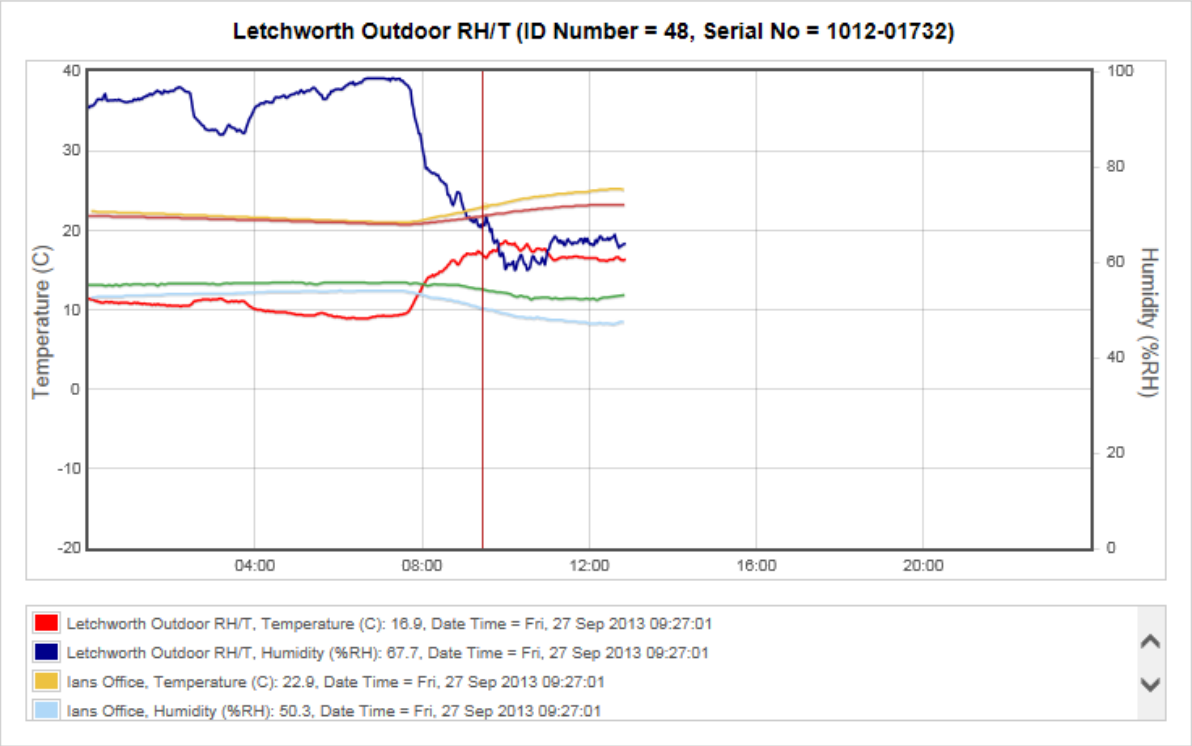


Select YES to confirm and to proceed with overlaying data. The graph window will re-appear

with the selected Sensors overlaid over the original graph, see below.



The coloured key below the graph window clearly identifies the overlaid data traces. To see all the key information use the scroll bars to view the lower data. To view specific values on the graph a cursor can be applied, to use the cursor move the mouse pointer over the graph window and the cursor will appear, see below.



Keeping the mouse pointer within the graph window, move the mouse to the left and right to move the cursor across the screen. As the cursor moves you will see the sensor values, along with the date and time, changing.

You can see from the above that as the outside temperature (red trace) increases the two indoor temperature traces (salmon and mustard) are moving up as well. This indicates that the equipment controlling the indoor space is not powerful enough to overcome the effects of the outside temperature changes.

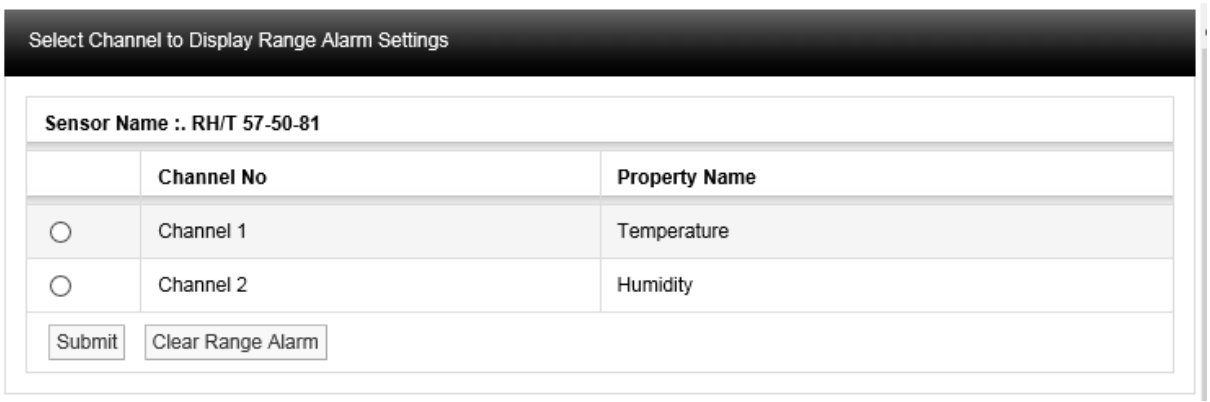
To remove the overlay select the **Overlay Sensors** button and scroll to the bottom of the Sensor list and select **Clear Overlay**, see below.

The graph data will return to the original data.

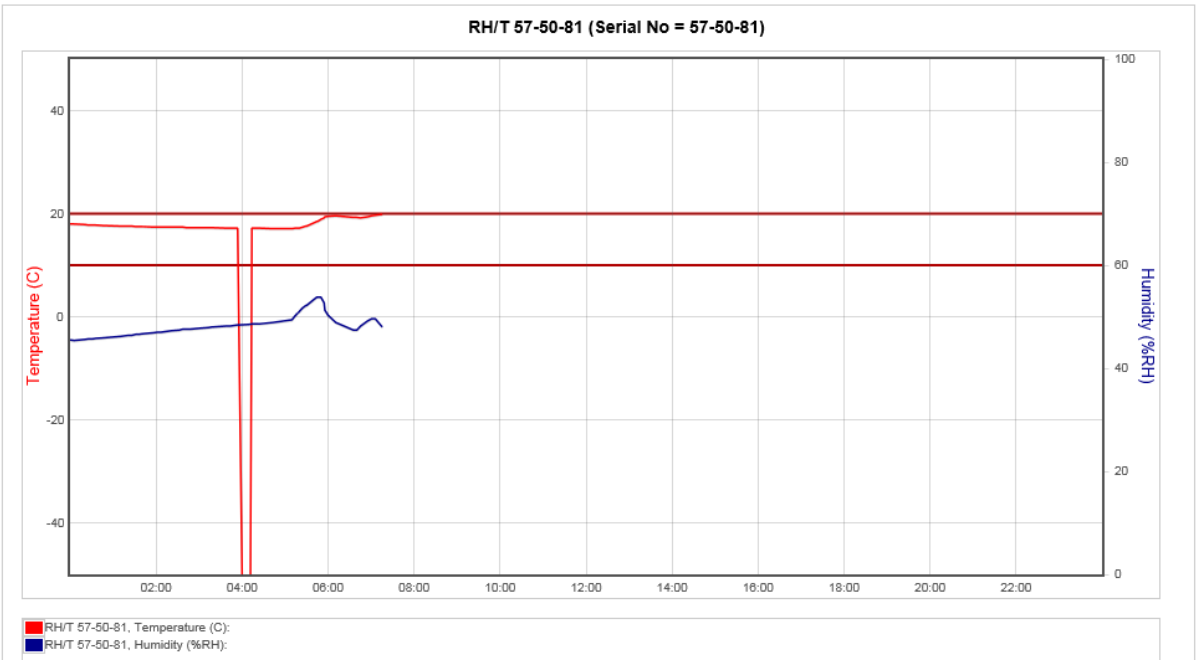
High Low Alarm

This feature allows the levels for alarms to be overlaid on the graph. To use this feature alarm levels will need to be set, see Add Sensors for how to set alarms.

Click on the **High Low Alarm** button, then the Select Channel to Display High / Low Alarm Settings window appears, see below.

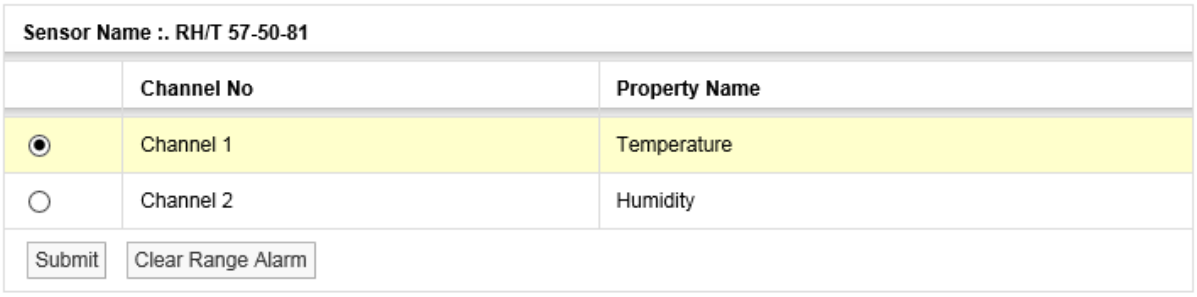


To bring on the temperature range alarms select the option button next to Channel 1 and select **Submit**. Lines representing where the range alarm levels are set will appear on the graph, see below.



This gives a clear visual indication if there has been an excursion either above or below the range alarm settings.

To clear the Alarm select **High / Low Alarm** from the graph window, the Select Channe to Display High / Low Alarm Settings window will appear again, this time the Channel that has been put on the graph will be highlighted. See below.

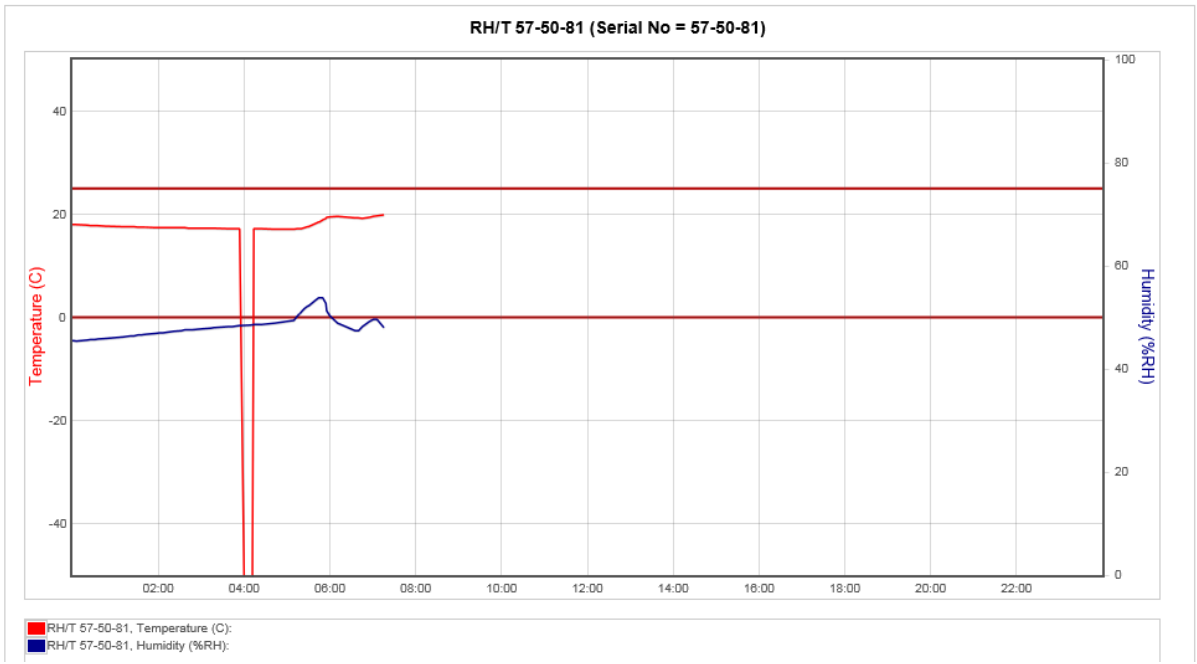


Select **Clear Range Alarm** to remove the Range Alarms from the graph.

High High / Low Low Alarm

This feature has the same function as the **High / Low Alarms** only this time the **High High** and **Low Low** alarm levels are overlaid on the graph. Level Alarms are set in a similar way to Range Alarms. To start the routine, select **High High / Low Low Alarm** from the toolbar above the graph window. See Add Sensors section for setting alarm levels (System Administrator Users Only).

The result here might be as shown below.



(Temperature has gone below the Low Low setting in the above example).

Reset

This function will clear the graph window back to the default view regardless of where you are. The default view is the current date with one day's data displayed. To reset the graph select **Reset** from the menu above the graph window.

Previous

The **Previous** function steps you back through the data one graph span at a time. If the Interval is set to Day then the graph will step in days, Week and it will step in weeks, Month it will step in months.

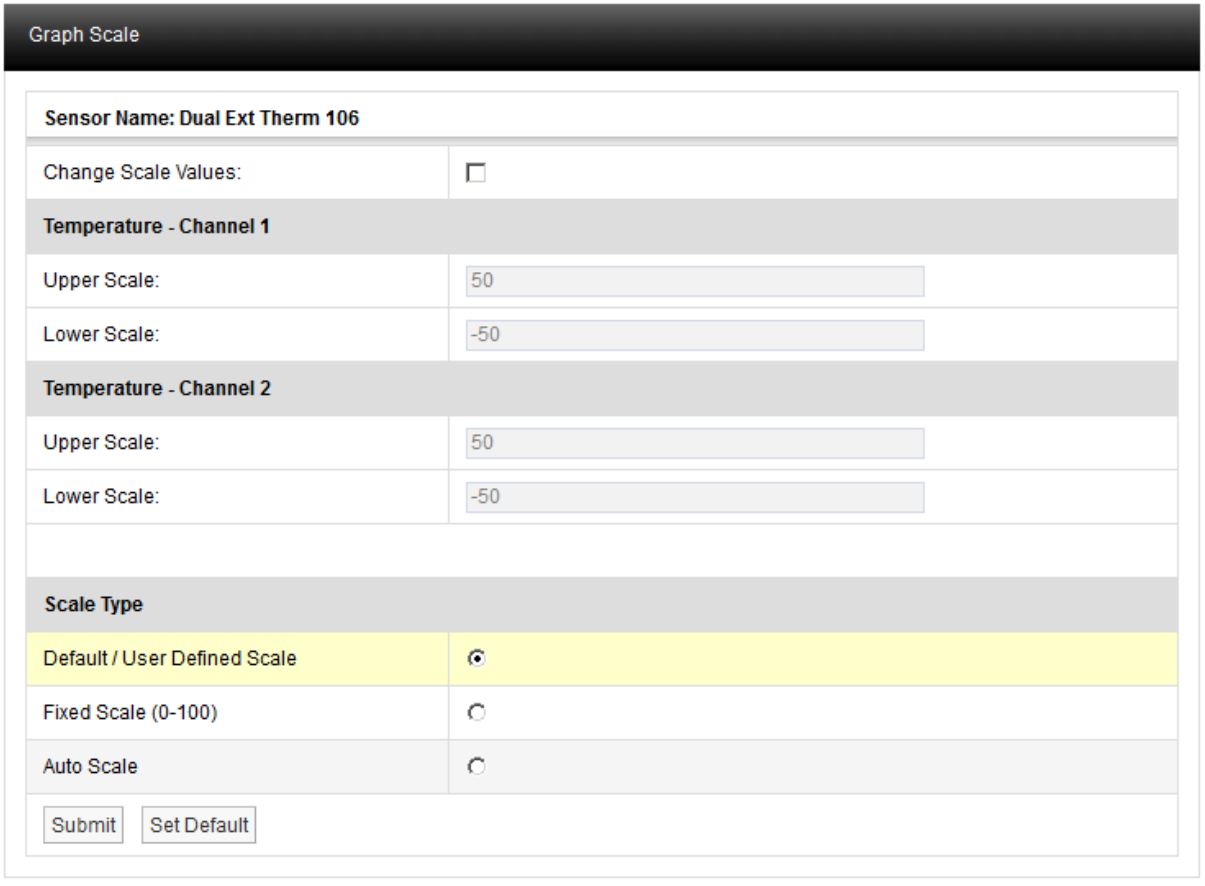
Next

The **Next** function steps you forward through the data one graph span at a time. If the Interval is set to Day then the

graph will step in days, Week and it will step in weeks and Month it will step in months. When a graph is first generated the **Next** button won't be visible as there is no future data to display. Once you select a time to graph in the past the **Next** button will appear.

Scale

The configuration of the graph Scale is selectable. There are three methods of selecting the graph Scale. To change the Scale select Scale from the menu above the main graph window. A new window called Graph Scale will appear, see below.



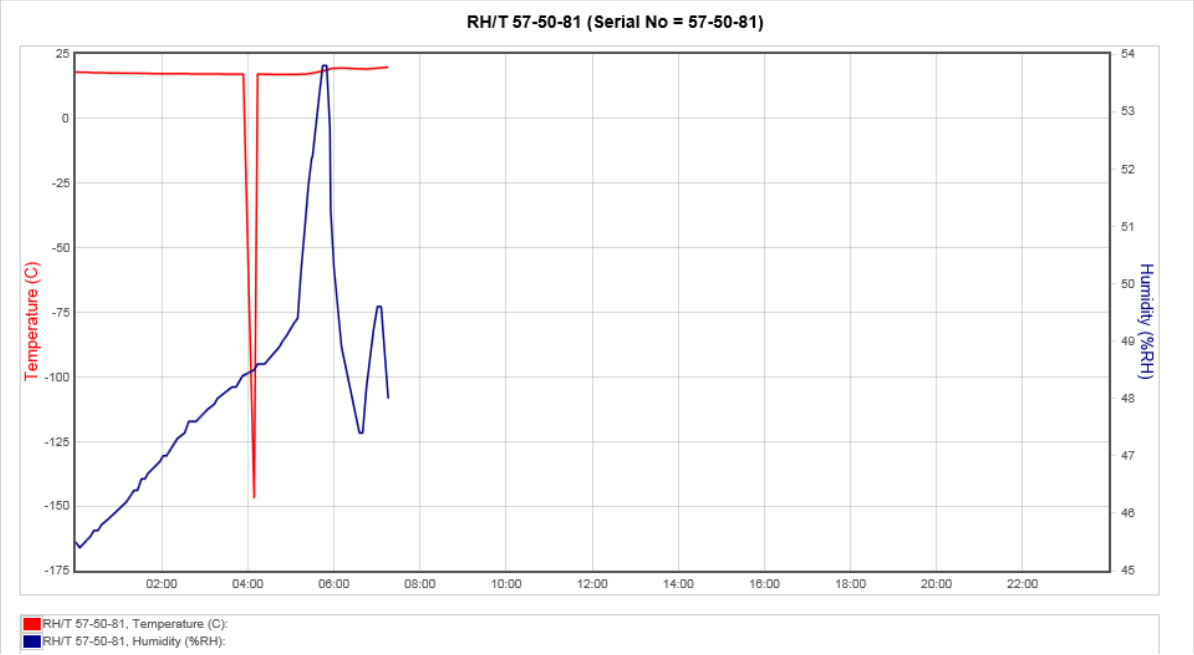
Default/User Defined Scale

You can define a default Scale for each Sensor on the system. The User Defined Scale can be set here or in the Calibration page see Configuring Sensors. Some Sensors have a very wide operating range but the Sensor in question may be being used at one end of the range. A User Defined Scale allows a more detailed view of the data.

Fixed Scale (0-100)
Each Sensor installs with a Default Scale which would cover the maximum range for that Sensor. This is Scale setting is OK if the Sensor is going to be used over its range. If it's to be used over a smaller range then a User Defined Scale may be more appropriate, see above.

Auto Scale
This feature allows the graph Scale to be set automatically. Auto Scale will set the graph Scale to a very tight range which covers the range for the data displayed. This gives a much expanded view of the data and may be confusing as the data can look like it is changing dramatically.

Select the Scale type you require by clicking the option button next to the Scale Type and select Submit. The graph will re-draw with the new Scale settings, see below.



The User Defined Scale for this Sensor is -40°C to +40°C and 0% to 100% Relative Humidity. Using Auto Scale has rescaled the graph to 150°C to 23°C and -165% [theoretical] to 20% Relative Humidity.

Export Data

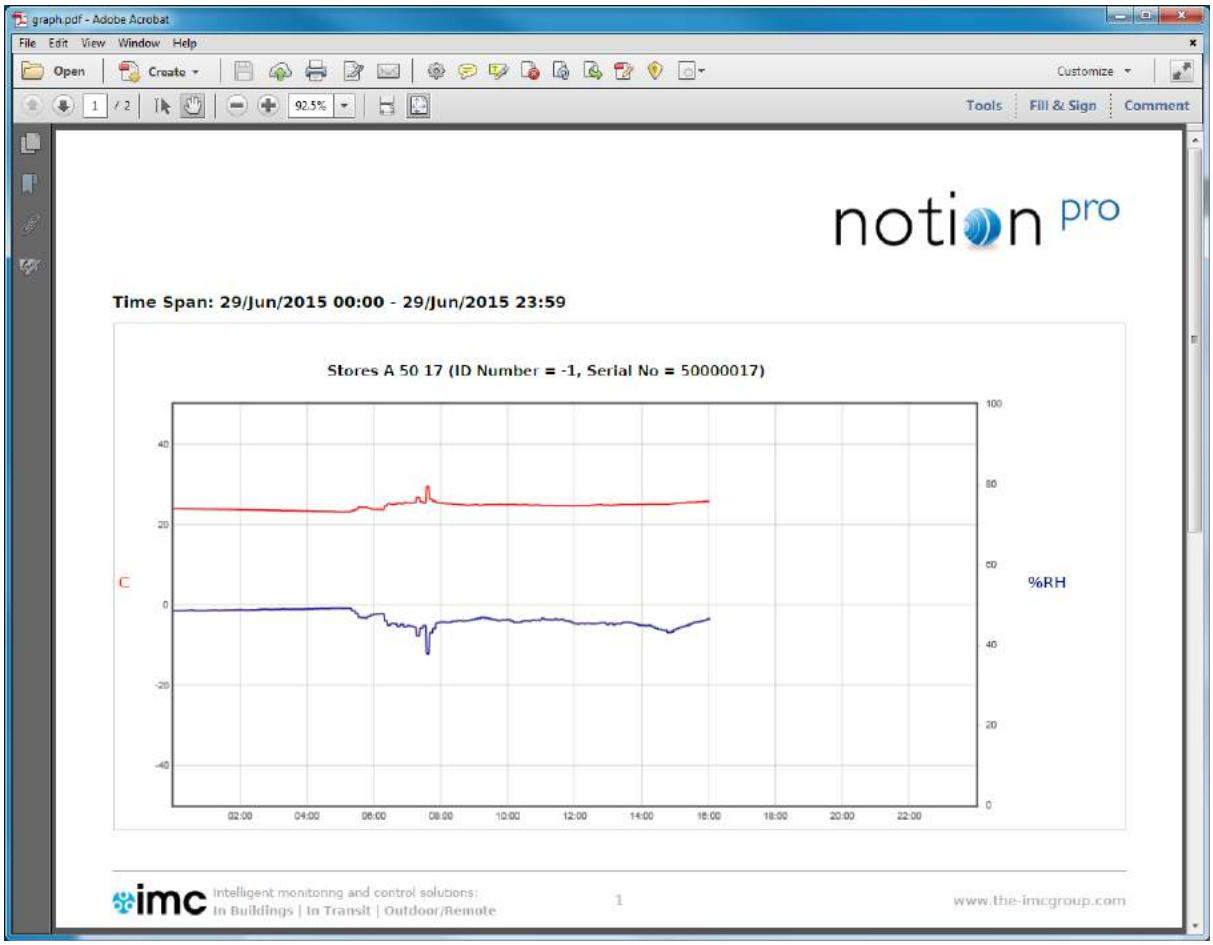
The data associated with Day and Week interval graphs can be saved as a comma separated variables file, (.CSV). The entire Day or Week's data will be exported, irrespective of the current zoom state when the data is exported. To export data click **Export Data**.

Once clicked you may be asked to choose between saving the file and opening with your computer's default spreadsheet application (see below). However, the exact action will depend on the browser you are using, the default settings for your browser and the computer operating system and its setup. If you require assistance with this contact your system administrator or IT support provider, please do NOT contact IMC Technical Support, as this is help that only your administrator/support provider can supply.

Print Graph

The Print Graph function allows you to export a picture of the graph (line or bar chart) in .pdf format. Clicking on the **Print Graph** button gives the browser's standard "Do you want to open or save . . ." window. (Example below is for Internet Explorer.)

Clicking **Open** displays the graph in a .pdf window, with IMC headers and footers:



Select **File>Save As...** to save the file to your desired location with name graph.pdf, renaming the file if required.

Start of Data, End of Data

Select Start of Data to change the graph display to the date/time when data was first recorded by the sensor. End of Data returns the display to the show data at the current date/time.

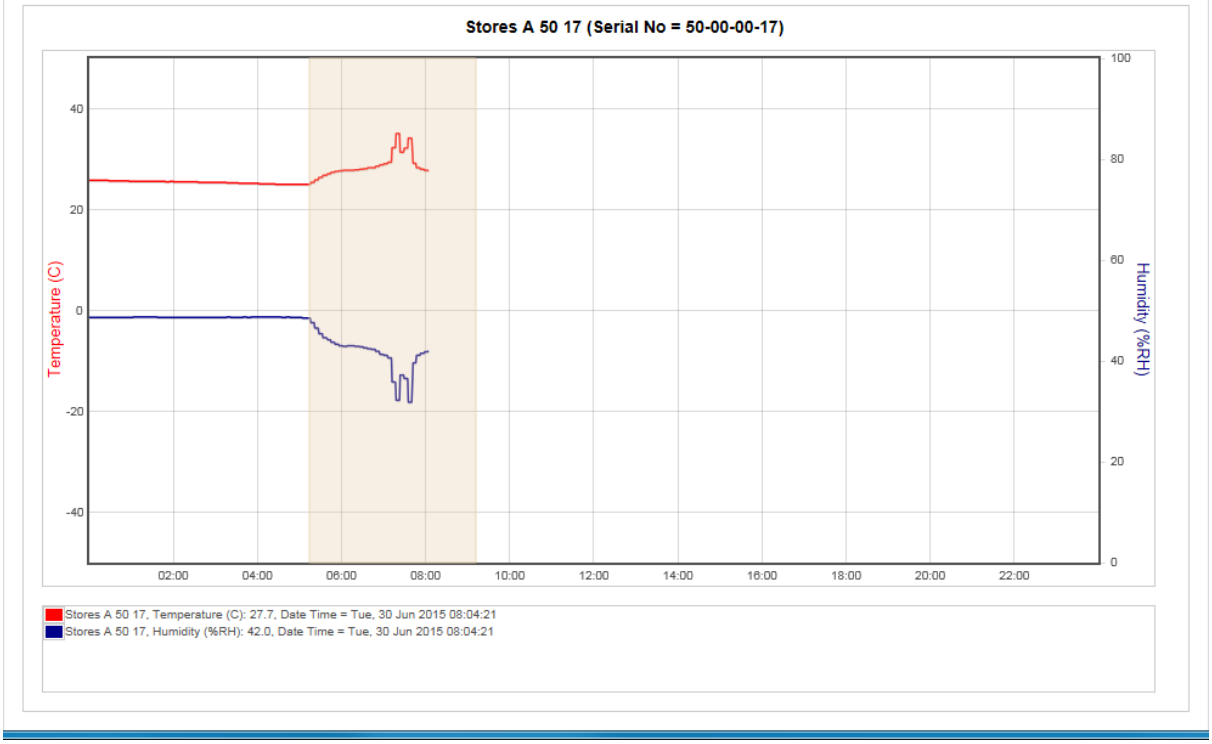
Go Back

Click this button to go back to the Live View display for the Zone at the top of the Live View list. See also Viewing Live Data.

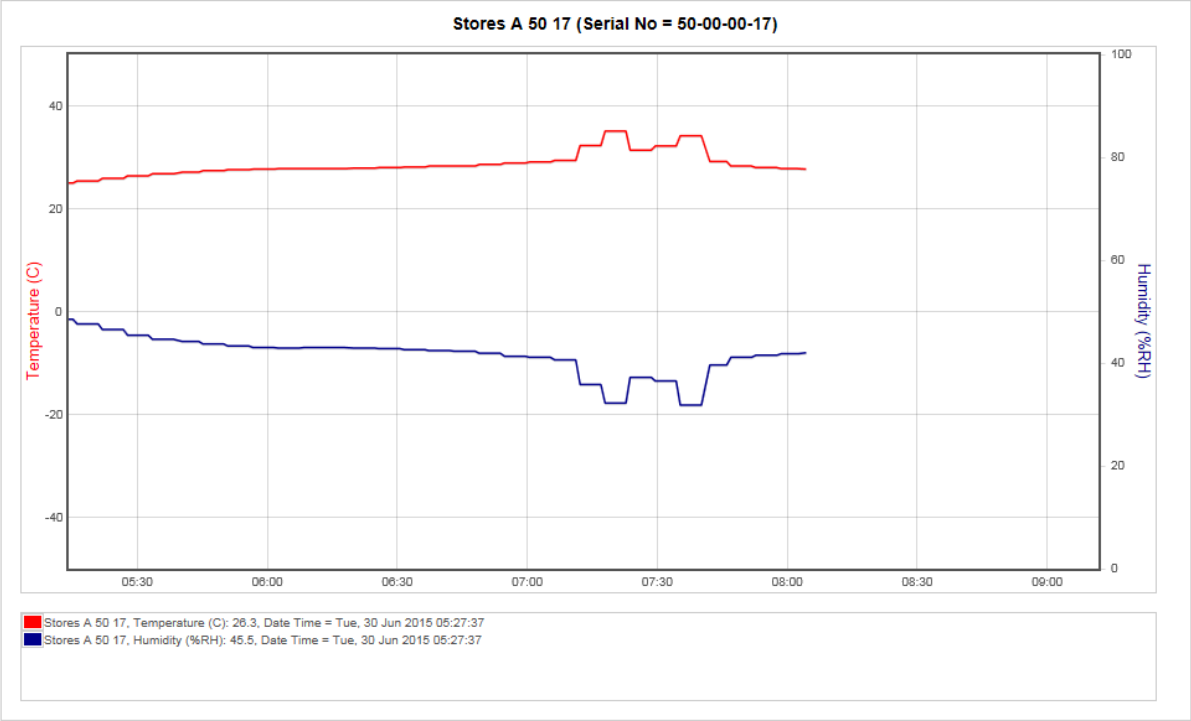
Zooming In

The graph can be zoomed by using the mouse. To Zoom in on a section of the graph place the mouse cursor at the place where you want to Zoom in on, click and hold the left mouse button and move the mouse to cover the section of the graph to Zoom in on.

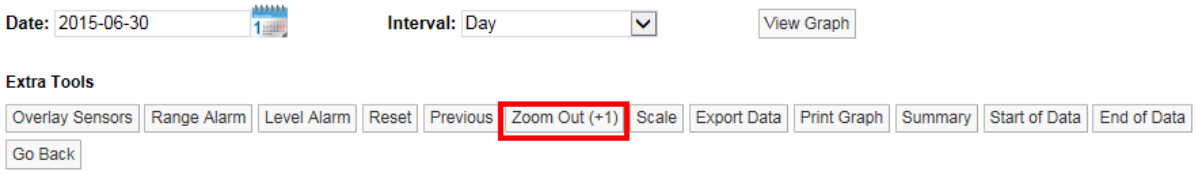
When the area required is highlighted release the left mouse button, see below.



The graph will re-draw, zoomed into the area selected, see below.



Once the graph has been zoomed a new button (Zoom Out) will appear on the graph toolbar, see below.



The new button will Zoom the graph out. You will see that Zoom Out is followed by a number in brackets. In the example above (+1) tells you that the graph has been zoomed one time. If the number in brackets was (+3) that would indicate that the graph has been zoomed three times.

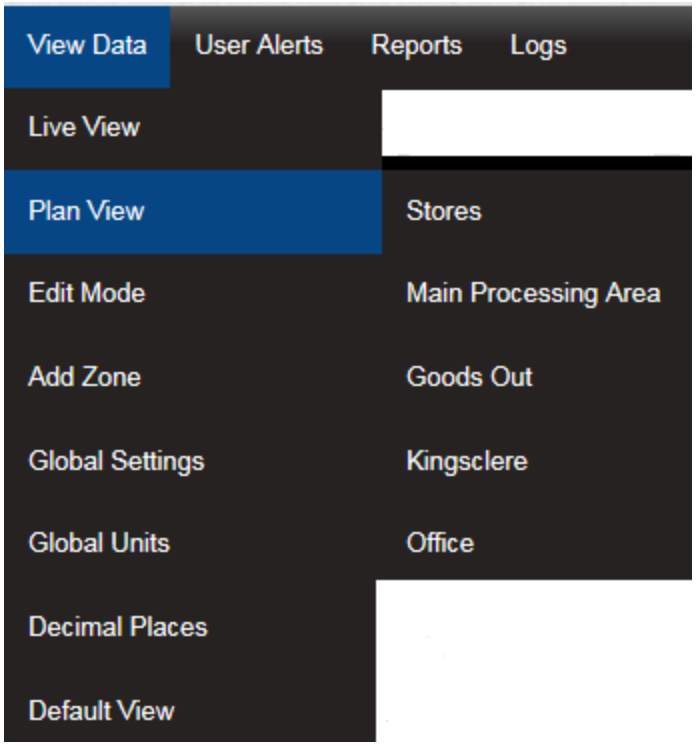
Clicking the **Zoom Out** button once will take you back one step. To go back to no Zoom in one step you can select **Reset**. Once the graph has been returned to an un-zoomed view the **Zoom Out** button will disappear.

Graph Title

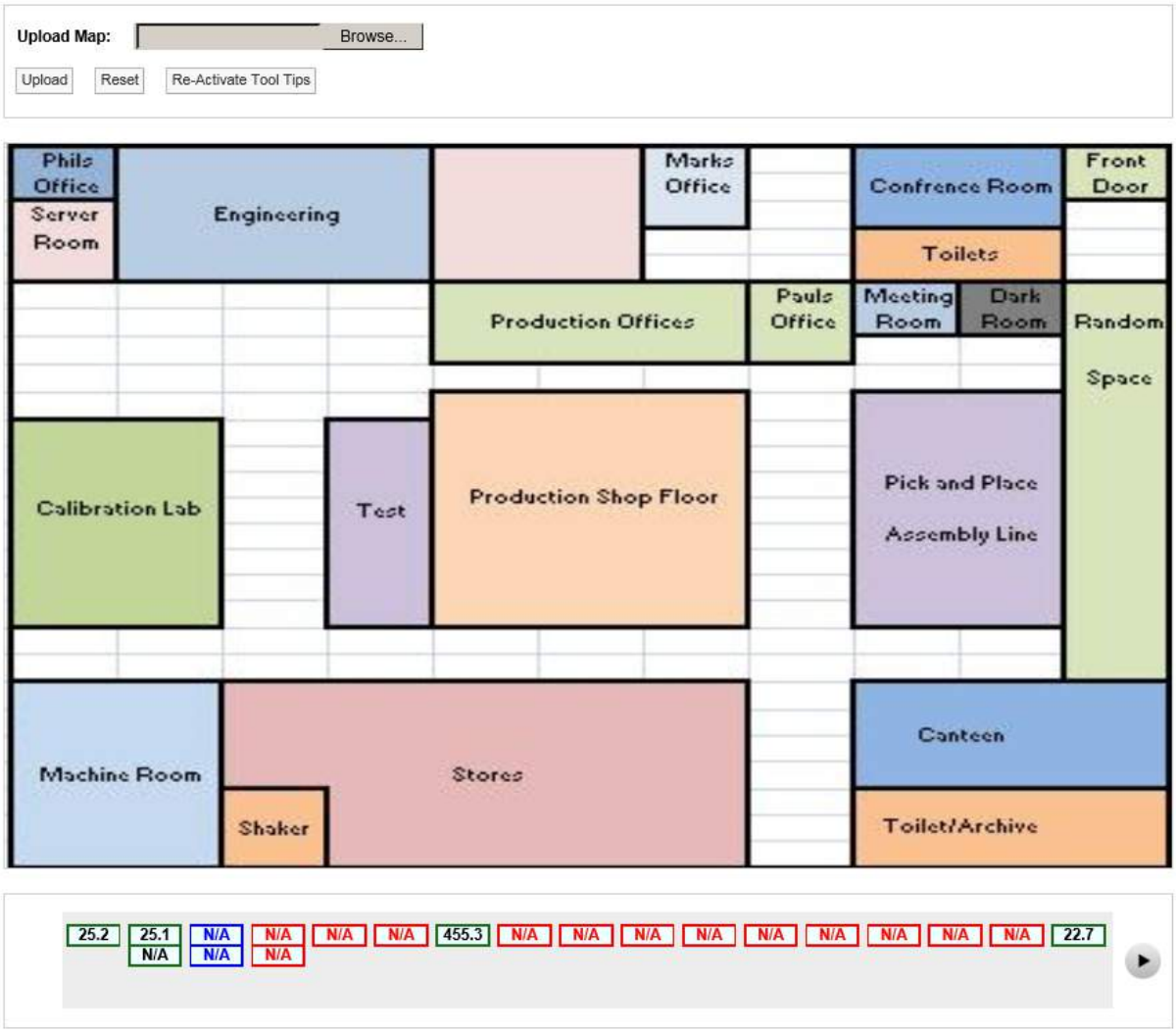
The graph title appears above the graph and is auto generated by the system. The name consists of the Station name allocated by the user when the Sensor was added to the system and the serial number, see below.

5.5.5 The Plan View

Notion Pro allows you to allocate **Plans** to a Zone. Plan View gives a graphical view of the data. To access Plan View select **View Data>Plan View** from the top menu bar, see below.



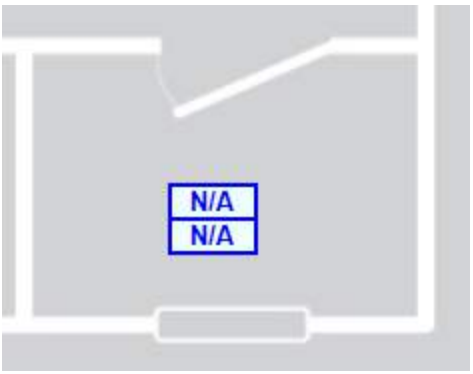
To add a Plan select **Browse...** to locate a suitable Plan file if available, suitable Plan formats are .gif, jpg and .png and should be no larger than 30K, see below.



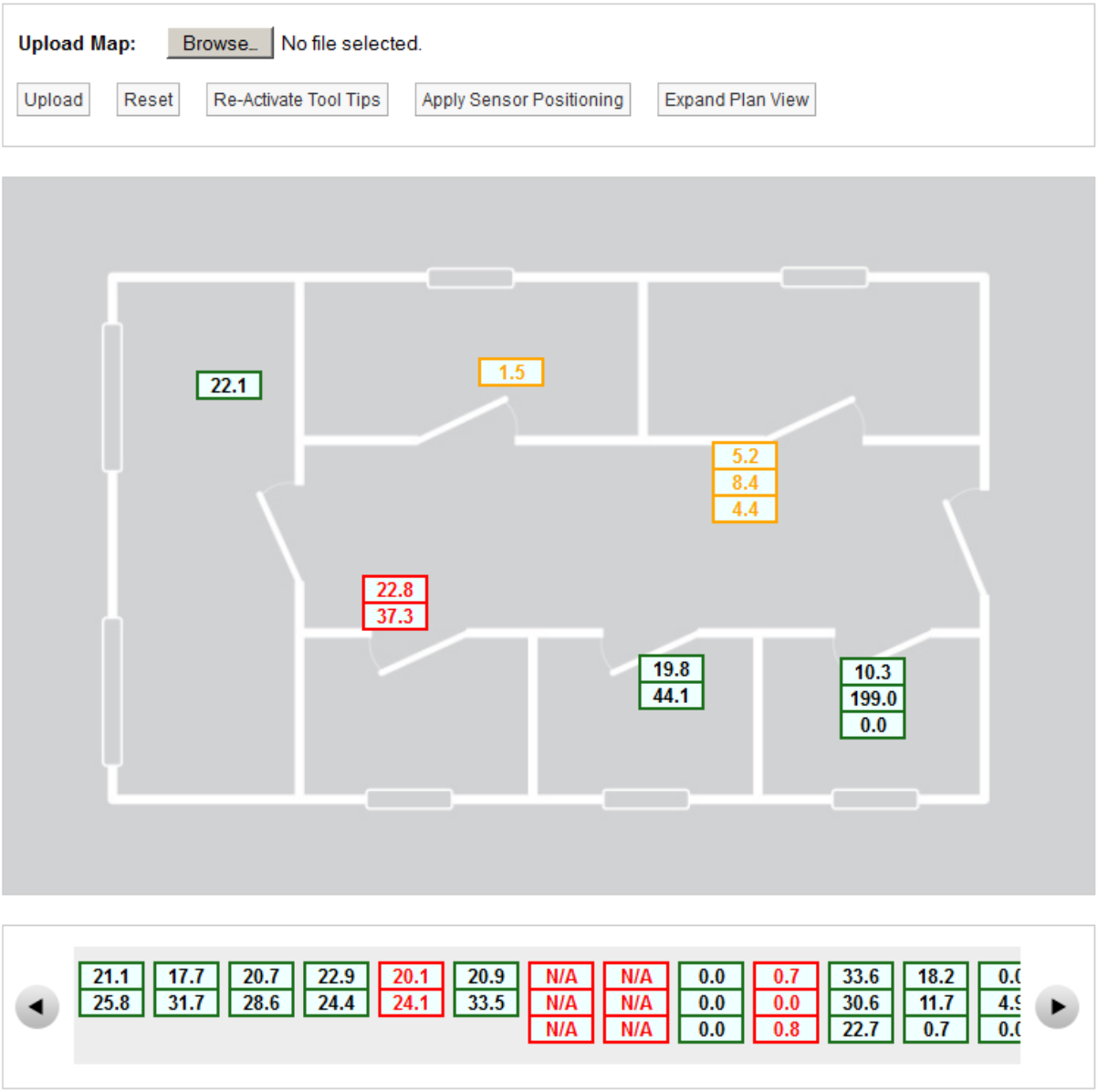
Once a suitable Plan has been located select **Upload** to load the image.

When a plan is first loaded all the sensor icons will be located along the bottom bar. The icons can be dragged to the Plan by moving the mouse pointer over the icon, holding down the left mouse button and dragging the required sensor icon to the desired location on the Plan, see below. You must have the Plan View Edit Permission set to **Allow** to be able to do this. (See Access Control).

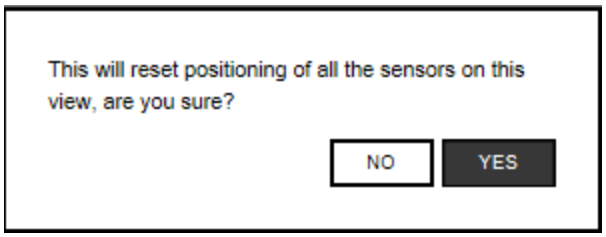
'Out of Service' sensors are displayed on the Plan View in blue, see below.



Each channel is represented by a single block. A double-channel device is represented by two blocks, a three-channel device by three blocks. See below for an example.



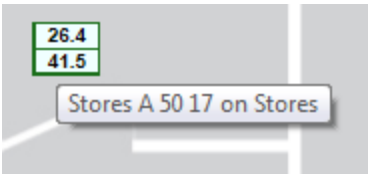
If required all icons can be removed from the **Plan** to the bottom bar, to perform this function select **Reset**, you will get a confirmation request, see below.



To continue select YES, all icons will be moved to the bottom bar.

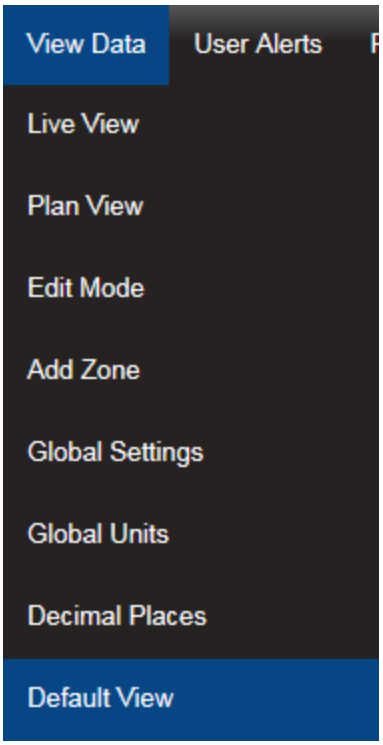
Moving the mouse pointer over a Sensor icon displays a tool tip with the sensor name and

its parent Zone. See below. Click **Re-Activate Tool Tips** if the tool tips are not visible.

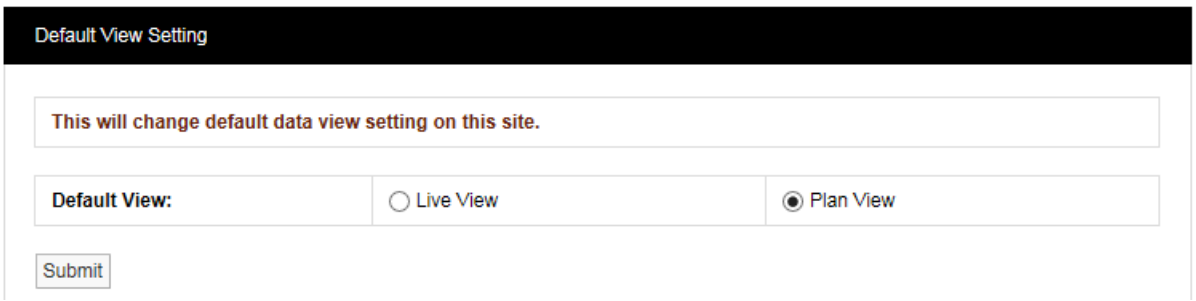


5.5.6 The Default View

The **Live View** is the default view type following Notion Pro install, but you can change this to the **Plan View** if required. To do this, begin by selecting **View Data>Default View**, see below.



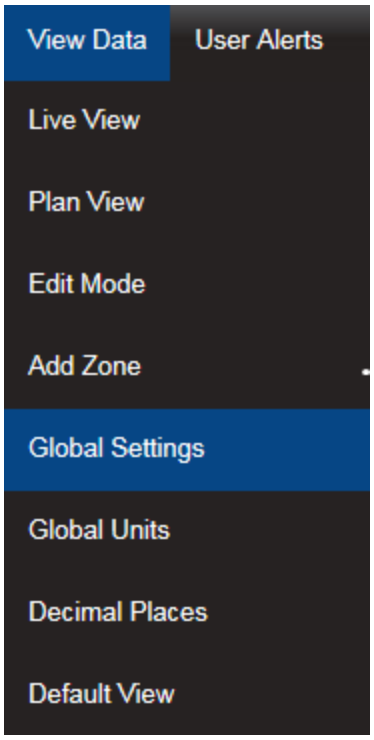
This selection gives the Default View Setting dialogue box, see below.



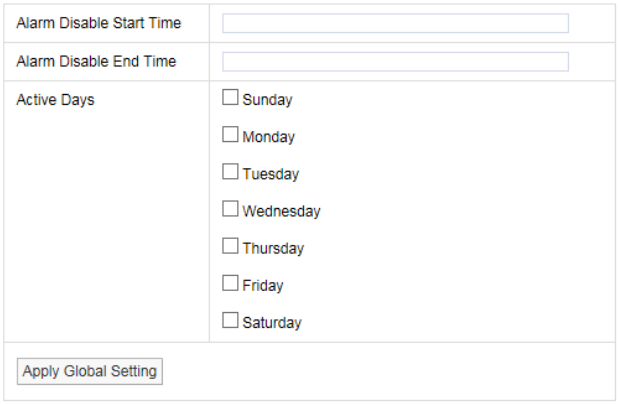
Select the required default view type, then click **Submit**.

5.5.7 Global Settings

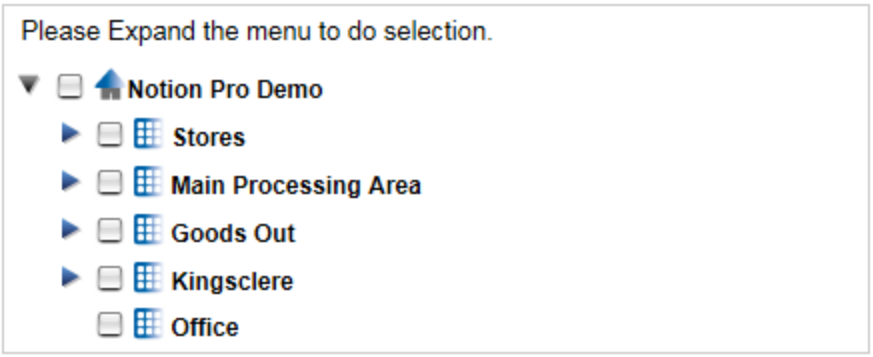
Global Settings allows alarm disable times and days to be set across a range of Sensors. To access Global Settings select **View Data>Global Settings** from the top menu bar, see below.



After selecting **Global Settings** a new page will appear, see below.



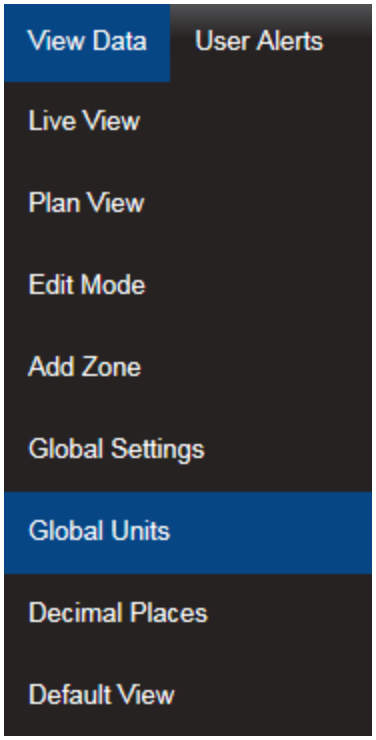
For information on setting times and days see Setting Alarms, once the times and days have been set use the Site and Zone tree on the left side to select which Sites and Zones to apply the changes to. (Click on the desired Site, the Zone tree then expands underneath it, see below for an example.)



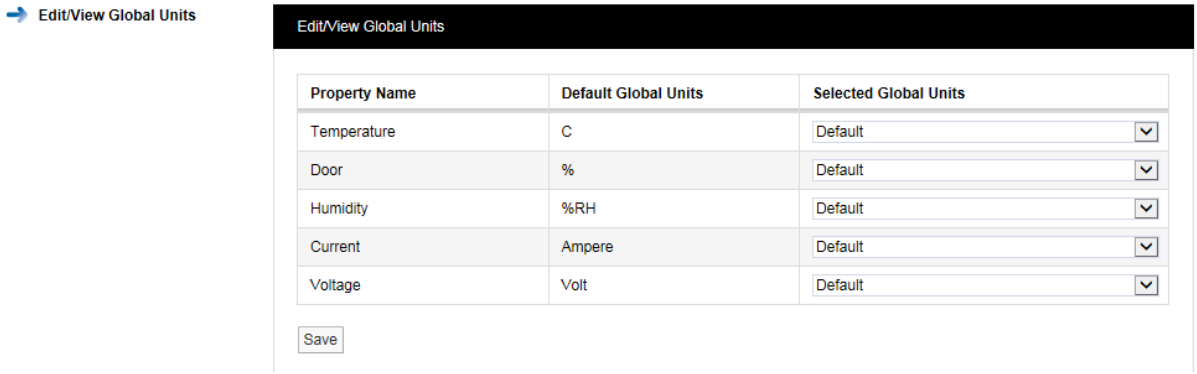
For example, setting Active Days to Sunday to Saturday (by selecting the 'day' tick boxes, see above, then using the tree view shown immediately above to select those Zones (or individual sensors within the Zones) to which the global settings are to apply, then selecting **Apply Global Setting** will result in all selected sensors becoming active Sunday-Saturday inclusive.

5.5.8 Global Units

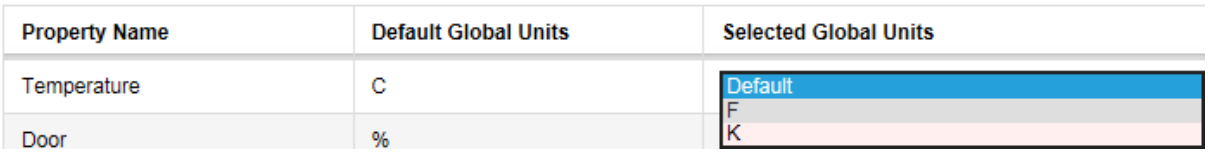
Global Units allow common Sensor value types to be displayed using alternative units, for example displaying Temperature values as Fahrenheit instead of Celsius. To access the Global Units window, select **View Data>Global Units**, see below.



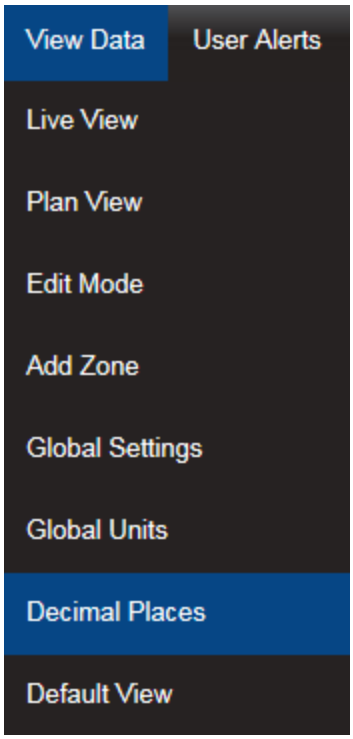
After selecting Global Units the Edit/View Global Units window will display, see below.

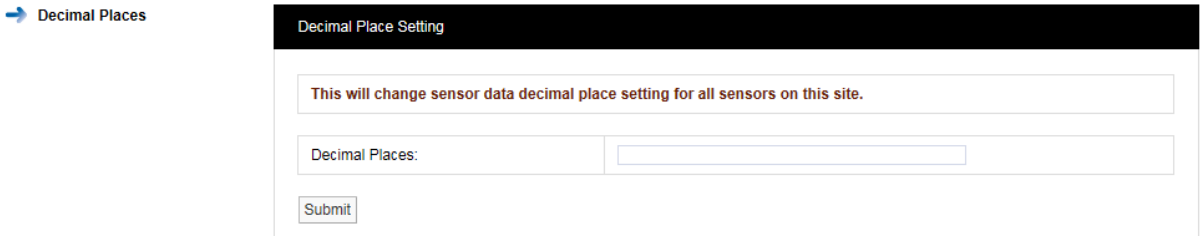


To change the units used for Temperature, for example, click the down arrow to the right of Default and select the required unit option, F or K, see below, then click **Save**. When asked 'Are you sure?' click YES to confirm.

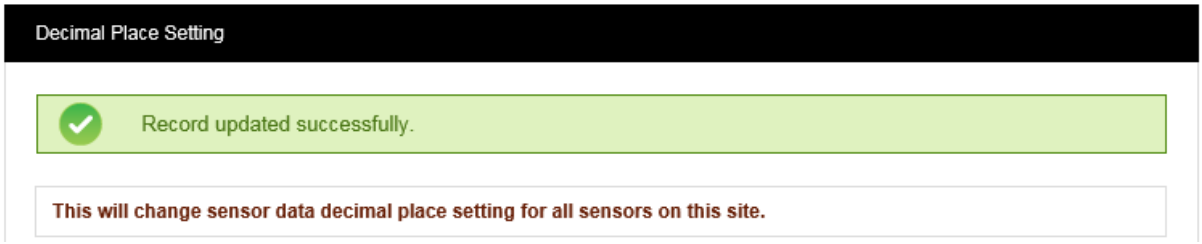


5.5.9 Decimal Places





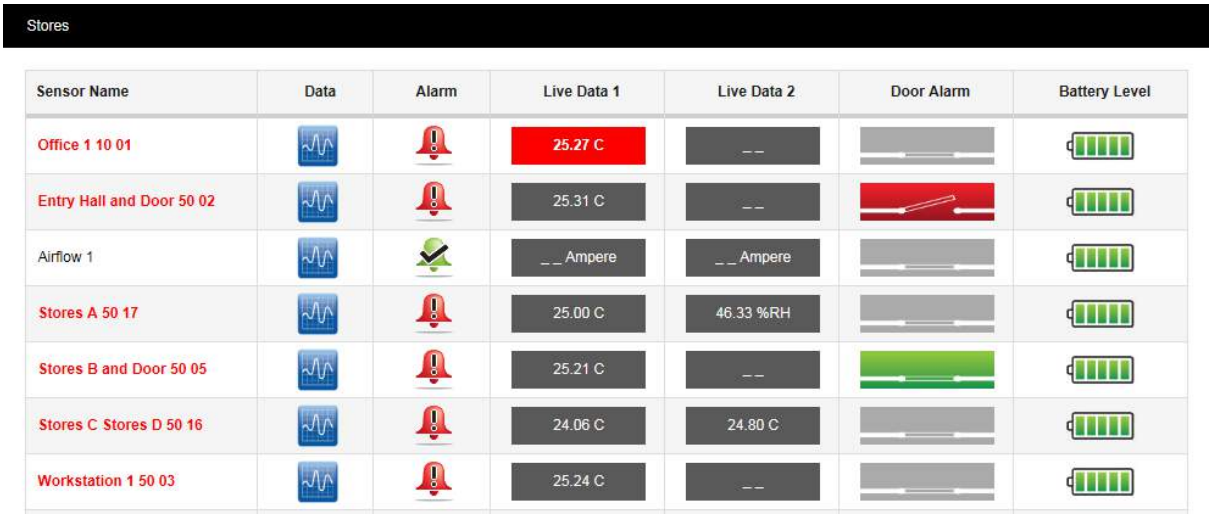
This window allows you to set the number of decimal places to be used to display sensor data. Enter the number of decimal places you require in the Decimal Places: field and click **Submit**. A confirmation window will appear confirming that the setting has been applied, see below.



5.6 Viewing Live Data

Viewing Live Data

To view live data, click View Data from the Available Sites dialogue box. For a Site which has Sub-Sites you must first click on Sub-Site and select the sub-site of interest to give the **Live View** window. See example below.



Zone Selection

The example Live Data display above is for sensors in the **Stores** Zone – see top left corner. To choose another Zone, select **View Data>Live View** and then move the mouse pointer to the right to show the Zones within the current Site. See below.

Live View Controls and Indicators

Sensor Name

The colour of the text for each named sensor in this column gives an indication of its state:

Black – sensor giving normal reading, within alarm threshold.

Red – sensor in alarm condition.

Orange – sensor in alarm condition, but alarm has been acknowledg

Blue – sensor is out of service.

Single-clicking on this text gives more information – see below. Double-clicking opens graphical display of the live sensor data – see Operations from the Live View

Click on this to give a graphical display of the sensor data – see Operations from the Live View.

This icon indicates the alarm status of the sensor.

The current reading for the sensor channel. Typically, channel 1 would be for temperature data, channel 2 for relative humidity.

A red icon indicates that the sensor reading has gone over its alarm threshold value.

The Door Alarm icons indicate the state of the door alarm channel (if present):

The door is closed.

The door is open and the alarm has not been acknowledged.

The door is open and the alarm has been acknowledged.

There is no door monitoring and alarm function associated with this transmitter.

The battery icons indicate the state of the battery for the associated transmitter:

Battery is fully charged.

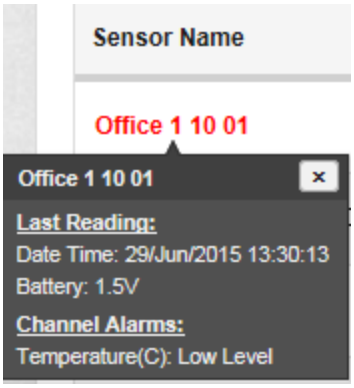
Battery has less than half its life left, but need not be replaced yet.

Battery is very low and should be replaced as soon as possible.

Battery is empty and must be replaced immediately. **Note:** Scout/ Legacy sensors do not output battery information and so the battery display symbol will always be grey. Check for Elapsed Time Alarms.

Alarm Condition Tooltips

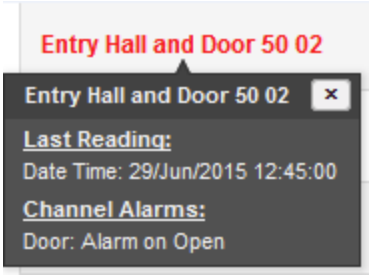
Click once on the sensor name to show the current alarm status for that sensor. See below for example.



Here we see the date and time of the previous reading from the sensor, also the current battery voltage. The channel 1 temperature value is below the Low Level value that has

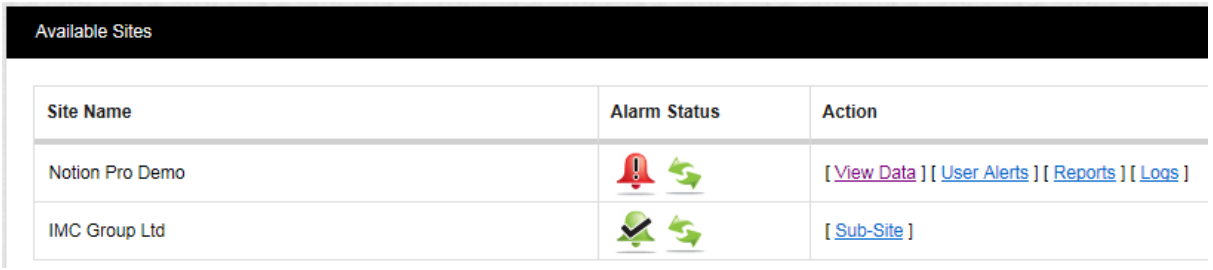
been set, and so is giving an alarm.

An 'open door' alarm might be as shown below.

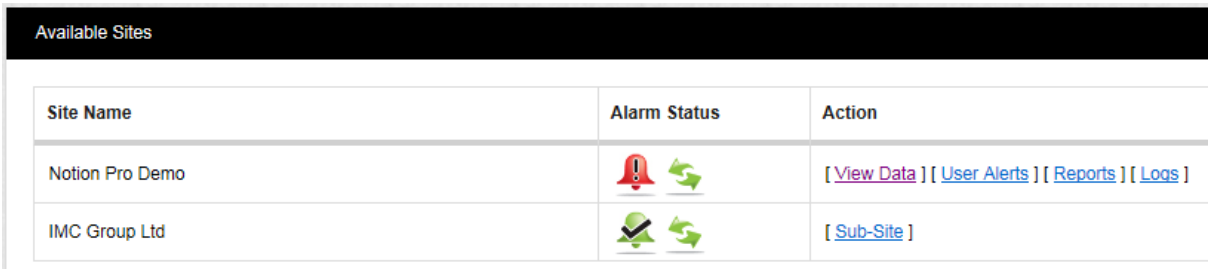


5.7 Alarm Management

This section will take you through managing alarms generated by the system. When the User first signs in to Notion Pro the first screen gives an overview of the system. The overall system alarm status can be seen by looking at the Alarm icons under Alarm Status, see below:



5.7.1 System Status Overview



We can see straight away that there are alarms on the Notion Pro Demo Site, but no alarms on the IMC Group Site.

System Messages

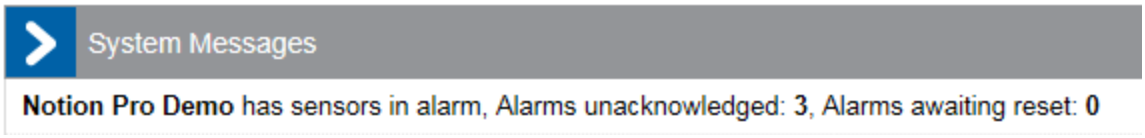
System Messages can be viewed from the **System Message Alert** icon, see the example

below:

The three coloured dots indicate the system message status:

- **White** there are no system messages
- **Amber** there no new unread system messages
- **Red** there are new unread system messages

To view the **System Messages** click on the **System Status** message bubble. A new window will appear, see below for example:



The **System Messages** inform you of where on the system the Alarms are. Once this window is closed the System Message bubble changes to amber which indicates that there are still live messages but there are no new ones since the last time the System Messages were checked, see example below.

The **Status Message** bubble is amber.

System Alarm Status Overview

The Alarm icon on the top right of the main screen gives a system wide view of the Alarm status, see the example below.

The following data is shown:

- The User that is logged in, in this example it is Admin User
- The number of unacknowledged alarms, in this example there are three
- The number alarms awaiting reset, in this example there are none.

The individual Site icons show the alarm status for that individual Site only, see Available Sites above. The  icon indicates that Control Device communications are operating normally, (see below for details).

Communications Status

The green connection icon, shown under Alarm Status on the Available Sites dialog box, indicates that communications to all control devices (such as Network Receivers) associated with the site are operating normally.

If communications have been lost to one or more of the sites control devices, the connection icon will display in red and entries will be added to the activity log.

Locating Alarms on the System

There are two ways that you can find Alarms on the system:

Method 1
Select **Home** (or System Overview) from the main menu bar.

This takes you to the main System Overview (Available Sites) screen. If any Sites that are visible are in Alarm their individual Alarm icons will have turned red.

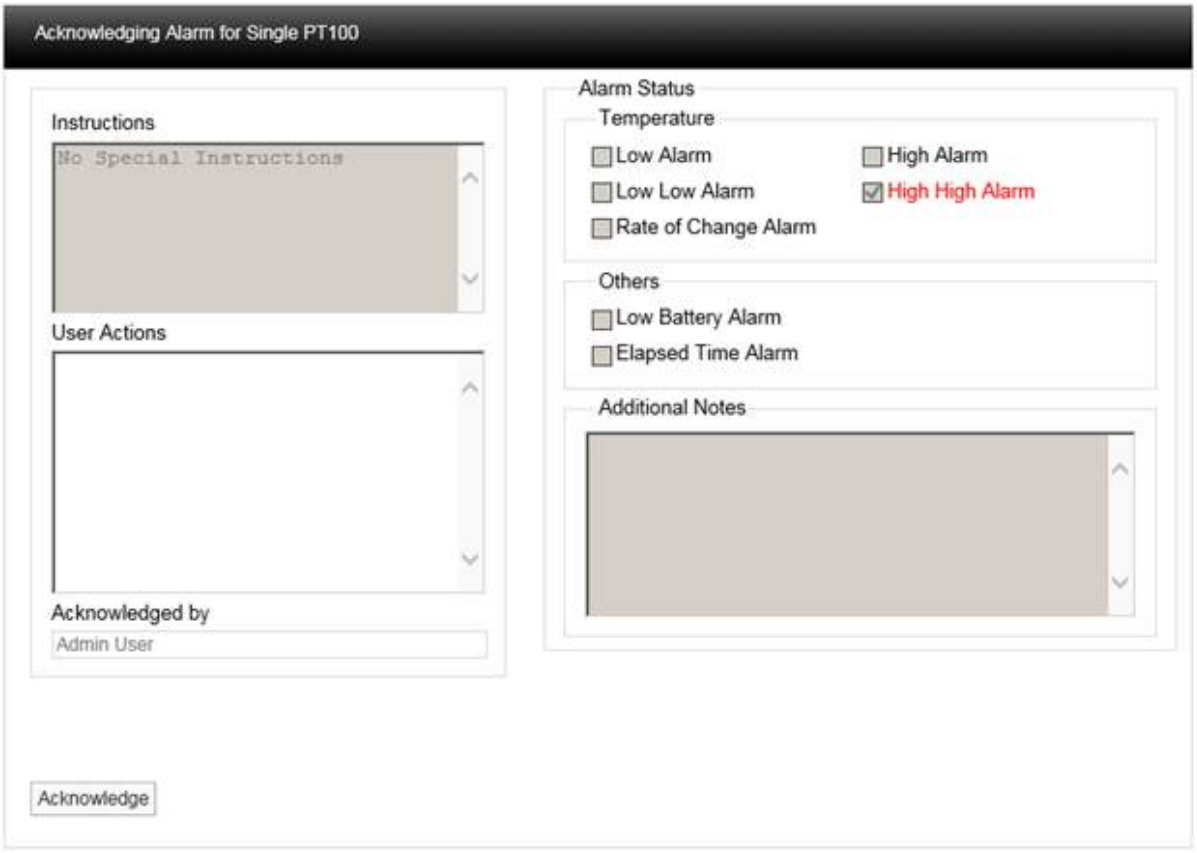
Method 2
Click on the main Alarm icon, see below.

Wherever you are in Notion Pro, clicking this icon will take you back to the **System Overview** screen, so you can tell which Site(s) contain the sensors that are in alarm.

5.7.2 Acknowledging Alarms

Acknowledge Individual Alarms

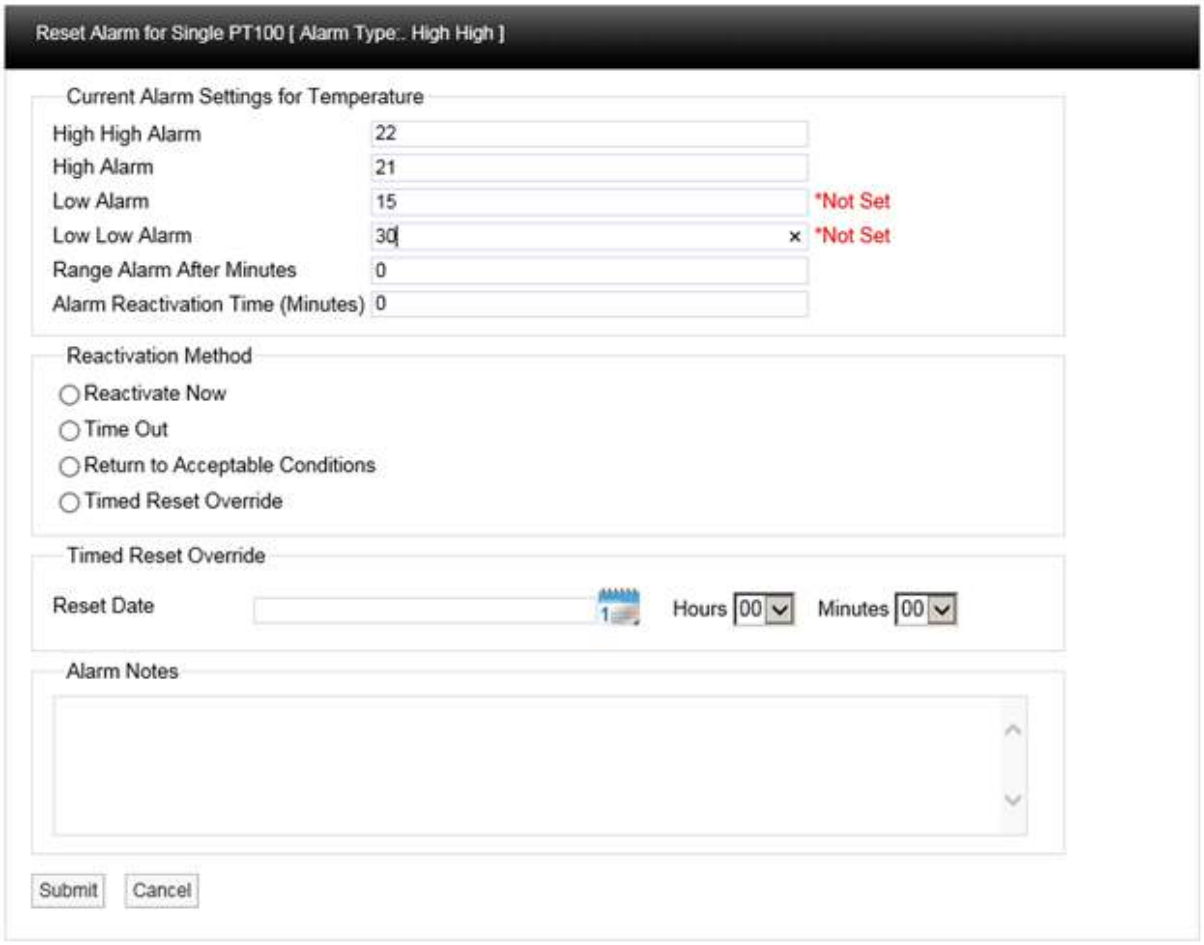
To acknowledge an individual Alarm click on the red Alarm Bell in the line in the **Live View** corresponding to the sensor that you want to acknowledge the alarm for. The Acknowledging Alarm for window appears, see below.



The type of Alarm will be highlighted in Red, in this example it is a High High Alarm for Temperature. If there were special instruction added when the alarm parameters were set these would appear in the Instructions text box. For more information on instructions see **Setting Alarms** (System Administrator Users Only).

In the **User Actions** text box enter a note that is relevant to the Alarm, for example "Humidifier out of water, humidifier tank filled up". You cannot acknowledge the Alarm without putting something in this dialog box. When happy click **Acknowledge**. The window will close and the Alarm icon will turn amber which indicates an acknowledged state.

When you are satisfied that either the cause of the alarm has been resolved and the conditions returned to normal limits the Alarm can be completed. To reset the alarm click on the amber icon, the Reset Alarm for window will appear, see below.



This window allows several features to be used.

The **Current Alarm Settings** are displayed at the top of the window, if the logged in User has the Permissions these limits can be adjusted at this stage. **Caution Note:** Any changes made here will be written back to the main database.

There are four methods available to reset the Alarm:

Reactivate Now
If **Reactivate Now** is selected as soon as you select **Submit** the Alarm will be acknowledged. If the Alarm condition still exists the status will return to red and a new Alarm will be generated on the system. If the Alarm conditions have returned to normal the amber Alarm icon will be removed from the list.

When selecting Reactivate Now a default message **"Reactivate Now was selected for this Alarm"** will be entered into the Alarm Notes text box. This can be added to or overwritten.

Time Out
If **Time Out** is selected as soon as you select **Submit**, the Alarm will be acknowledged after the time delay entered into the Alarm Reactivation Time (Minutes) dialog box. If the Alarm condition still exists after the Time Out period the status will return to Red and a new

Alarm will be generated on the system, if the Alarm conditions have returned to normal the amber Alarm icon will be removed from the list.

When selecting **Time Out** a default message "**Time Out was selected for this Alarm**" will be entered into the **Alarm Notes** dialog box. This can be added to or overwritten.

Return to Acceptable Conditions
If **Return to Acceptable Conditions** is selected, as soon as you select **Submit** the Alarm will be acknowledged as soon as the conditions return to normal limits. The amber Alarm icon will remain until the conditions return to normal limits.

When selecting **Return to Acceptable Conditions** a default message "**Return to Acceptable Conditions was selected for this Alarm**" will be entered into the **Alarm Notes** text box. This can be added to or overwritten.

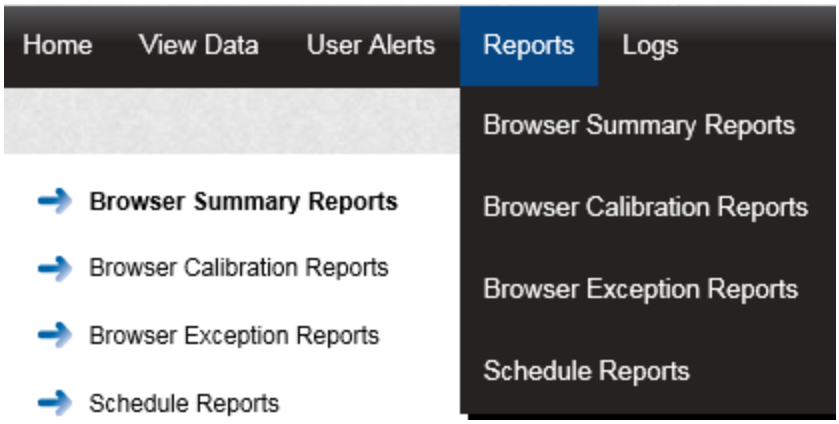
Timed Reset Override
This feature allows you to defer the Alarm reset until a date in the future. To enter the required date select the calendar icon and select the date. This will be entered in the dialog box next to **Reset Date**. Select the time of day from the **Hours** and **Minutes** drop down menus.

This feature would be used if for example the air conditioning in a room or space failed and it was going to take several days to get an engineer in to carry out repairs. In this case the Alarms would be going off all the time which is an inconvenience.

Using this feature requires you to manually enter a note into the **Alarm Notes** text box. A suitable note might be "Engineer called to repair Humidifier unable to attend site before next Friday"

When happy with the details select **Submit**.

5.8 Setting Up and Running Reports



Notion Pro can produce a variety of Reports. These can be tailored to your individual specifications. The report will be in PDF format with the option to have a CSV data file attached.

Scheduled Reports are user configurable and once configured to be auto generated on a

daily, weekly or monthly basis and sent to the user by email. The on-screen reports can be downloaded and saved in PDF format.

The topics in this section give detailed instructions on how to set up and run data Reports for the sensors on your Site.

5.8.1 Summary Reports

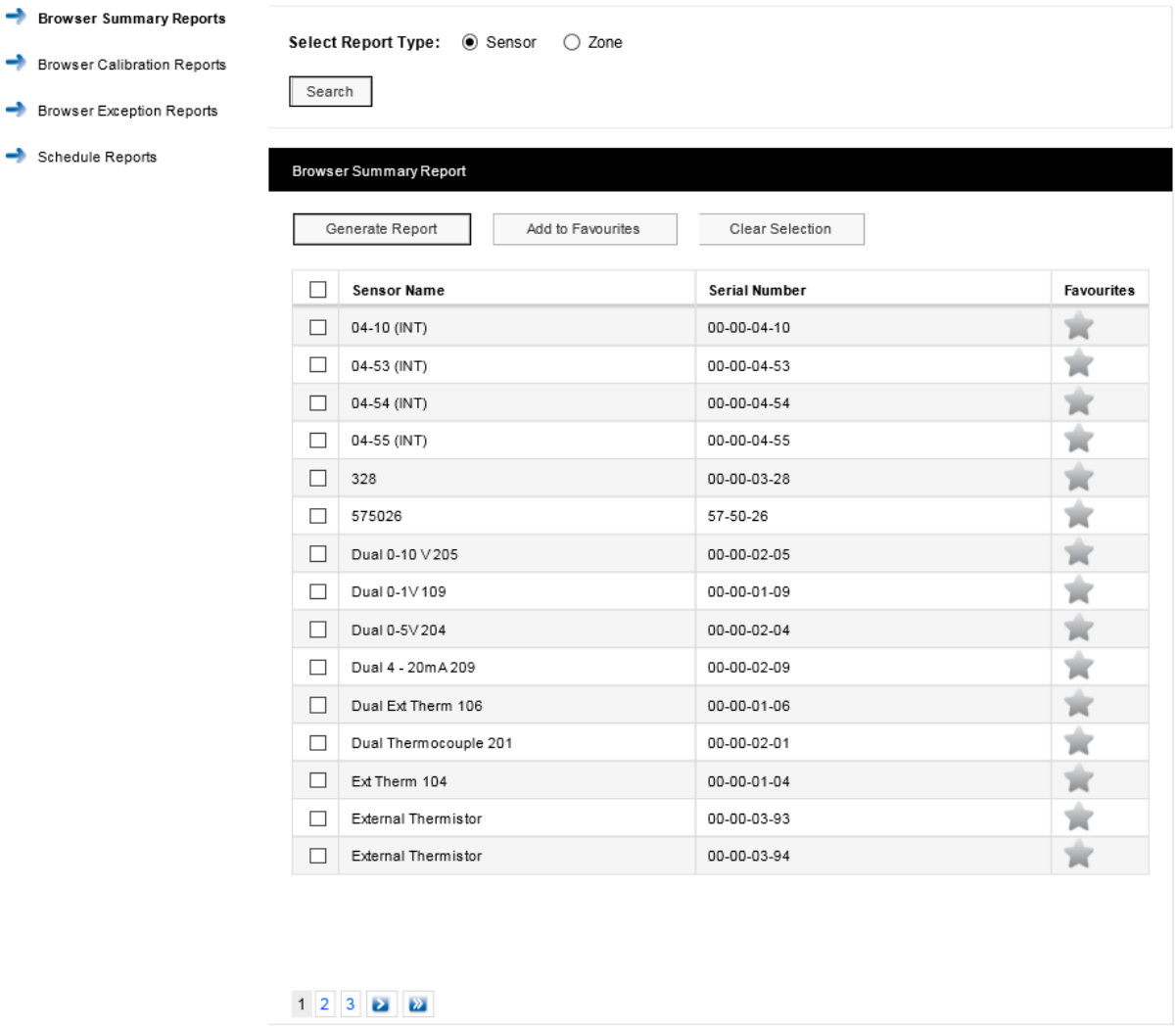
(**Reports>Browser Summary Reports**)

These can be divided into two sub-types:

- **Sensor Reports** - Summaries of data collected over the past week by selected sensors. You can also generate Reports for sensors of a selected type (temperature for a Temperature Sensor, current for an Energy Sensor etc.) over a specified date range (the past week by default).
- **Zone Reports** - Summaries of data collected by all Sensors in a given Zone for a specified date range.

To generate a Summary Report:

1. Select **Reports>Browser Summary Reports** to give the Summary Report dialog box, see below for example.



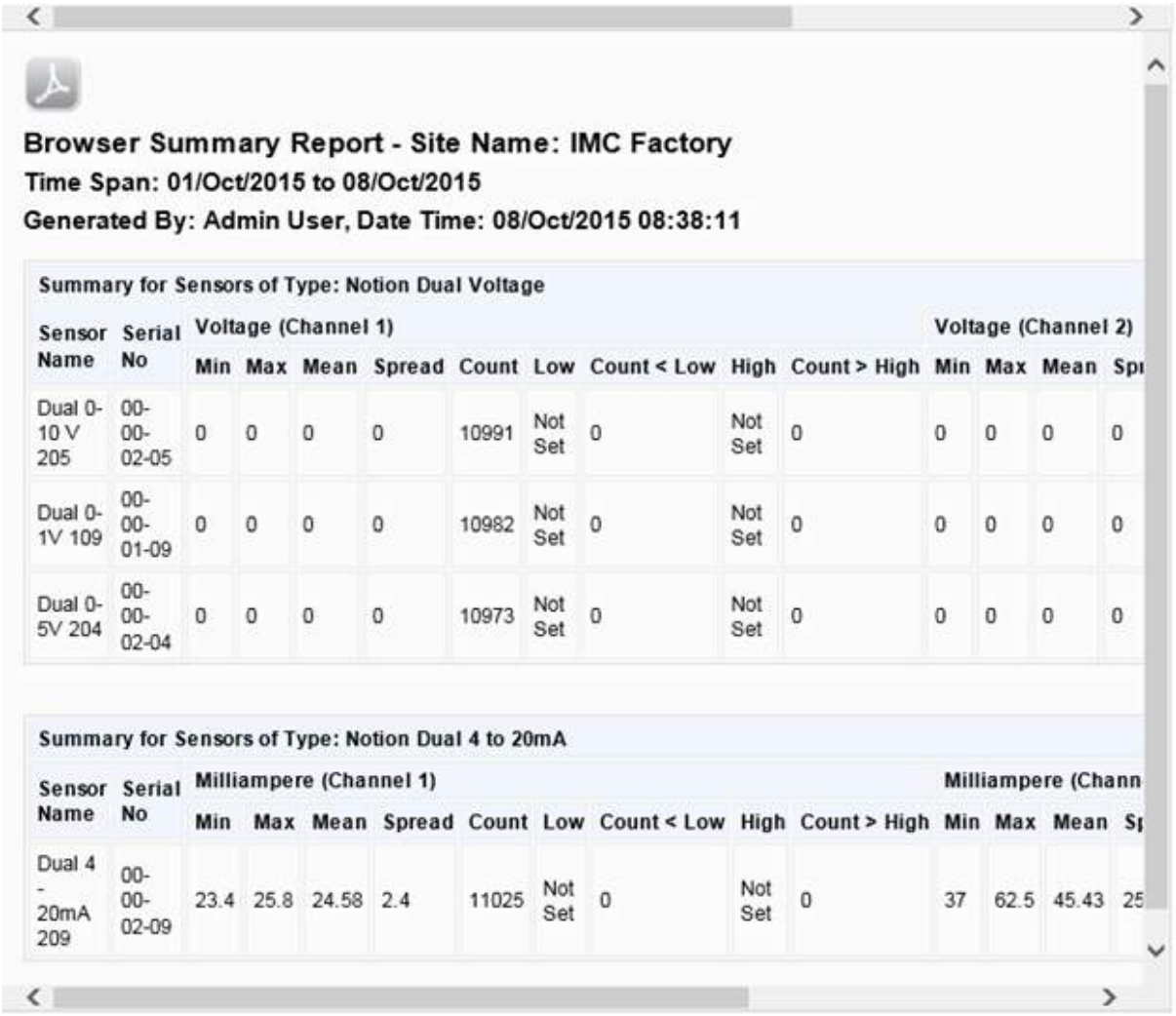
The sensor list is for all sensors of all types across your Site. To report on one or more Sensors:

i. Ensure that the Sensor option button is selected.

ii. Select the sensor(s) of interest from the Sensor Name list. If the list of sensors is long you may need to click on  to see the next page in the sensor list. To select all sensors in the list simply click in the tick box next to **Sensor Name** at the top of the list.

iii. Select **Generate Report** .

This gives a report in .pdf format. For example, see example below:



Browser Summary Report - Site Name: IMC Factory

Time Span: 01/Oct/2015 to 08/Oct/2015

Generated By: Admin User, Date Time: 08/Oct/2015 08:38:11

Summary for Sensors of Type: Notion Dual Voltage

Sensor Name	Serial No	Voltage (Channel 1)									Voltage (Channel 2)			
		Min	Max	Mean	Spread	Count	Low	Count < Low	High	Count > High	Min	Max	Mean	Spr
Dual 0-10 V 205	00-00-02-05	0	0	0	0	10991	Not Set	0	Not Set	0	0	0	0	0
Dual 0-1V 109	00-00-01-09	0	0	0	0	10982	Not Set	0	Not Set	0	0	0	0	0
Dual 0-5V 204	00-00-02-04	0	0	0	0	10973	Not Set	0	Not Set	0	0	0	0	0

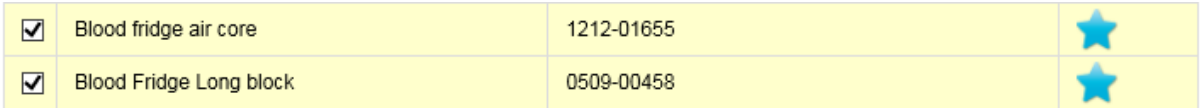
Summary for Sensors of Type: Notion Dual 4 to 20mA

Sensor Name	Serial No	Milliampere (Channel 1)									Milliampere (Chann			
		Min	Max	Mean	Spread	Count	Low	Count < Low	High	Count > High	Min	Max	Mean	Sp
Dual 4 - 20mA 209	00-00-02-09	23.4	25.8	24.58	2.4	11025	Not Set	0	Not Set	0	37	62.5	45.43	25

Note that you need to use the scroll bar at the top (or bottom) to see all of the Report. If you wish to save the report, click on  to give the standard browser 'Save' dialog box (example below is for Internet Explorer): :

Select **Save** or **Save as** to save the .pdf file to the required location.

There may be sensors that you often wish to report on. You can specify these as 'favourite' sensors. To do this, select the grey star symbol next to the sensors of interest. The star colour changes to blue and the row containing the sensor becomes highlighted. See below for example:



☑	Blood fridge air core	1212-01655	★
☑	Blood Fridge Long block	0509-00458	★

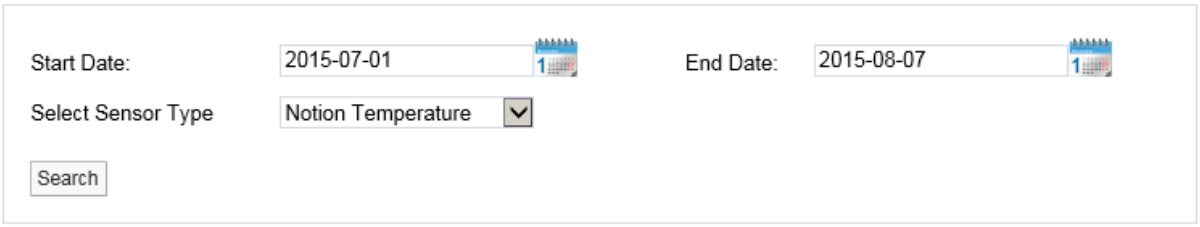
Having specified your 'favourite' sensors, select **Add to Favourites**. If you then nominate

other sensors as 'favourites' select the grey start for the sensors of interest then select **Update Favourites** .

Your favourite sensors will then move to the top of the Sensor List and **Generate Summary Report** will then generate a report for your favourite sensors.

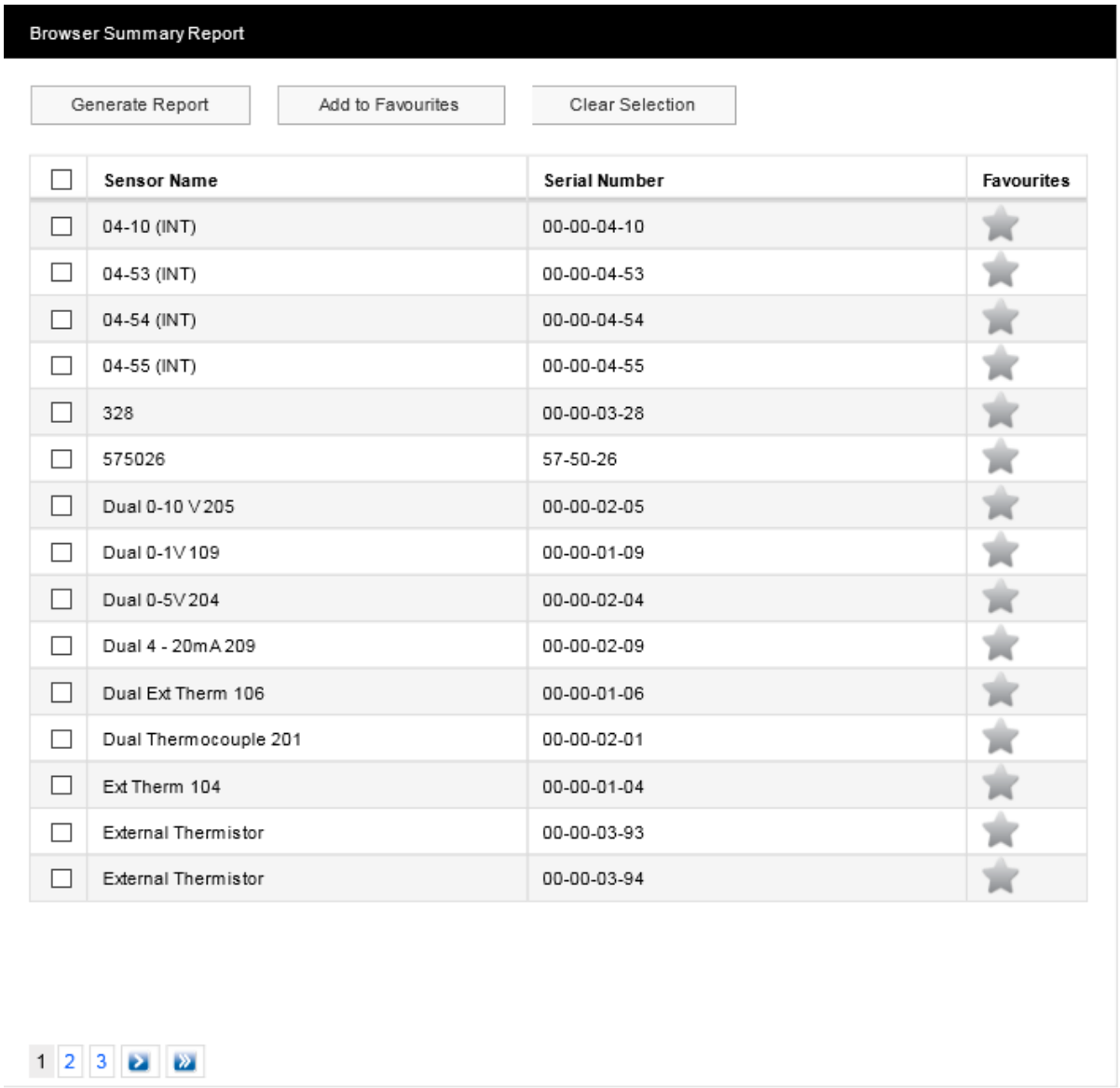
Having generated a Report, to generate Summary Reports for a selected sensor type over a specified date range, first use the  icon to choose the required Start and End dates (or enter the required dates directly into the Start Date and End Date boxes), then select the required sensor type from the **Select Sensor Type** pull-down list. Click **Search** to generate the specified Report.

Note: you will only see the date range selection controls:



after you have already generated a Report.

To report on a Zone, ensure that the Zone option button is selected. Click **Search** to generate a list of Zones for your Site. See below for example.



To generate a report for all sensors in a Zone simply select the Zone of interest from **Zone Name** list then select **Generate Report**. You can select 'favourite' Zones, or sensor types and date ranges using the same methods as detailed above for sensors.

5.8.2 Calibration Reports

(**Reports>Browser Calibration Reports**)

A simple report of sensors that need calibrating on a given date. This is one month from today's date by default, but the example below shows sensors due for calibration within one year of the current date.

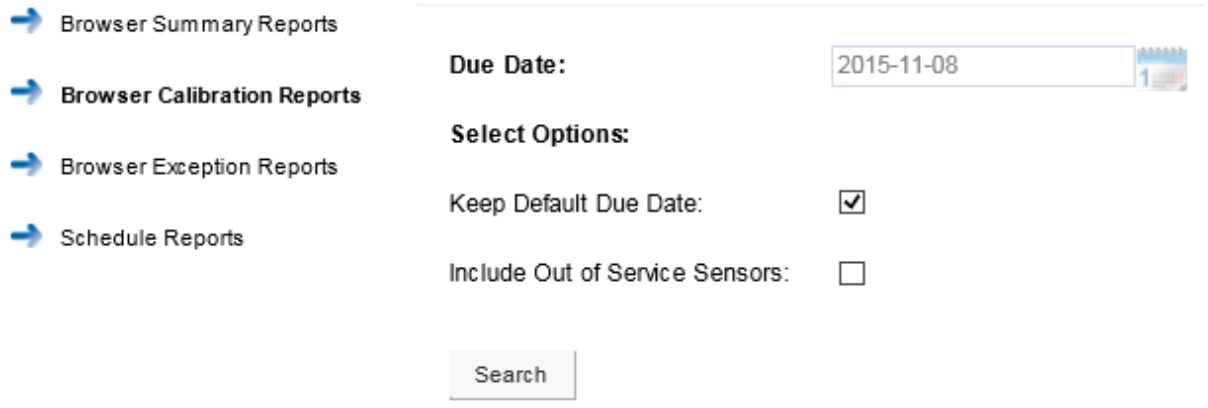
For example:

Sensor Calibration Report - Notion Pro Demo

Due Date: 01/Aug/2016 Current Date: 01/Jul/2015

Calibration Date	Sensor Name	Sensor Serial No
01/Jan/2016	Office 1 10 01	50000001
01/Jan/2016	Entry Hall and Door 50 02	50000002
01/Jan/2016	Airflow 1	50001000
17/Jun/2016	Tank Depth	50001002
17/Jun/2016	Tank Temperature	55000003
01/Jan/2016	Stores A 50 17	50000017
01/Jan/2016	Stores B and Door 50 05	50000005
17/Jun/2016	Entry and Door 00 12	00000012
17/Jun/2016	Fridge 1	50000206
17/Jun/2016	Fridge 2	50050056
01/Jan/2016	Workstation 1 50 03	50000003
17/Jun/2016	Loading Area 1	50000167
17/Jun/2016	Loading Area 2	50000168
17/Jun/2016	Processing	50020006
17/Jun/2016	Kingsclere Fridge 50 04	50000004
18/Jun/2016	Kingsclere 5-12	50000012
18/Jun/2016	Kingsclere 0-14	00000014
19/Jun/2016	Kingsclere 5-11 Dual Thermocouple	50000011
19/Jun/2016	Kingsclere 5-14	50000014
23/Jun/2016	fred	98765432

To generate a Calibration Report select **Reports>Browser Calibration Reportins**, see below:



By default, a Report will be generated for all sensors which need to be calibrated one month from today's date. If you wish to select a different due date, clear the 'Keep Default Due Date' tick box then click the **Due Date** calendar and select the required date. There may be Sensors on your Site which are out of service, but may still be due for calibration. If you wish to include such sensors in the Report select 'Include Out of Service Sensors' tick box if.

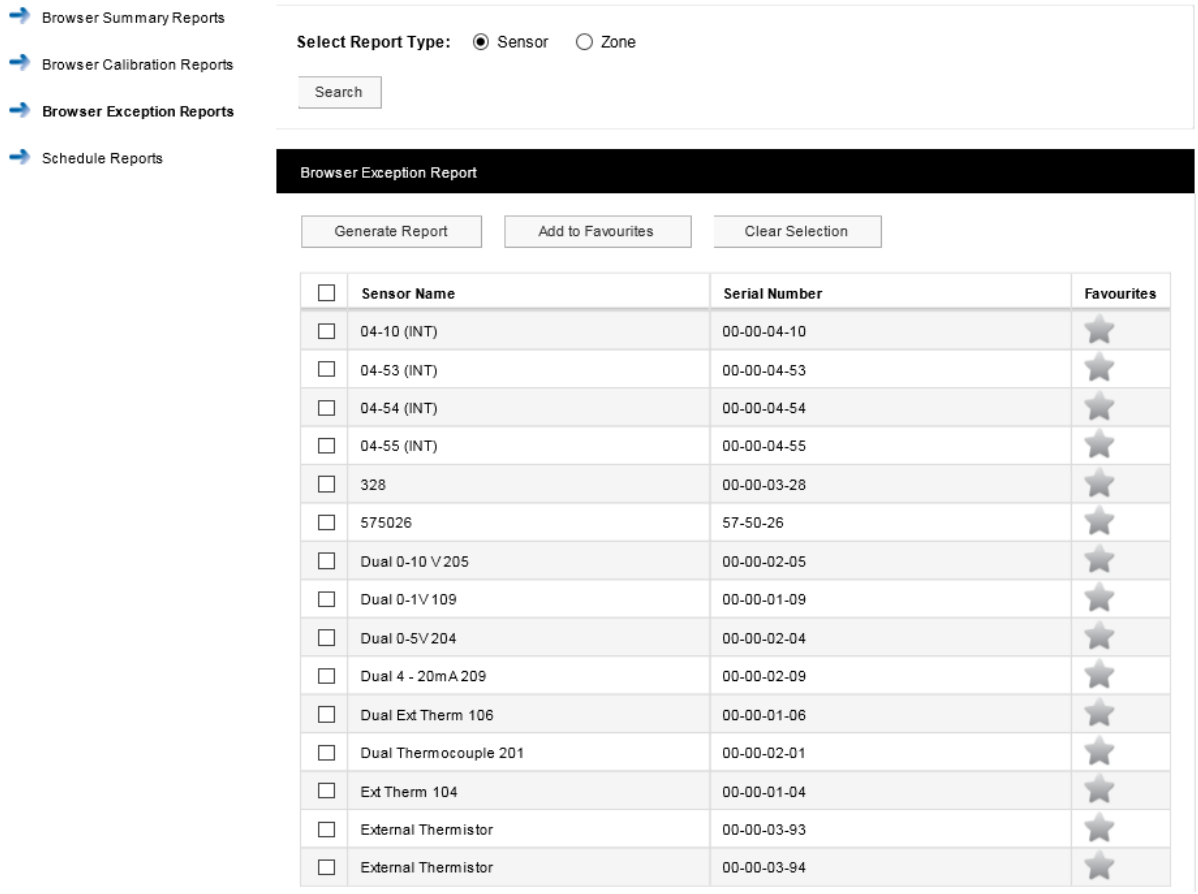
Click **Search** to generate the specified Report.

5.8.3 Exception Reports

(**Reports>Browser Exception Reports**)

Reports of ongoing alarm conditions, by Sensor or by Zone.

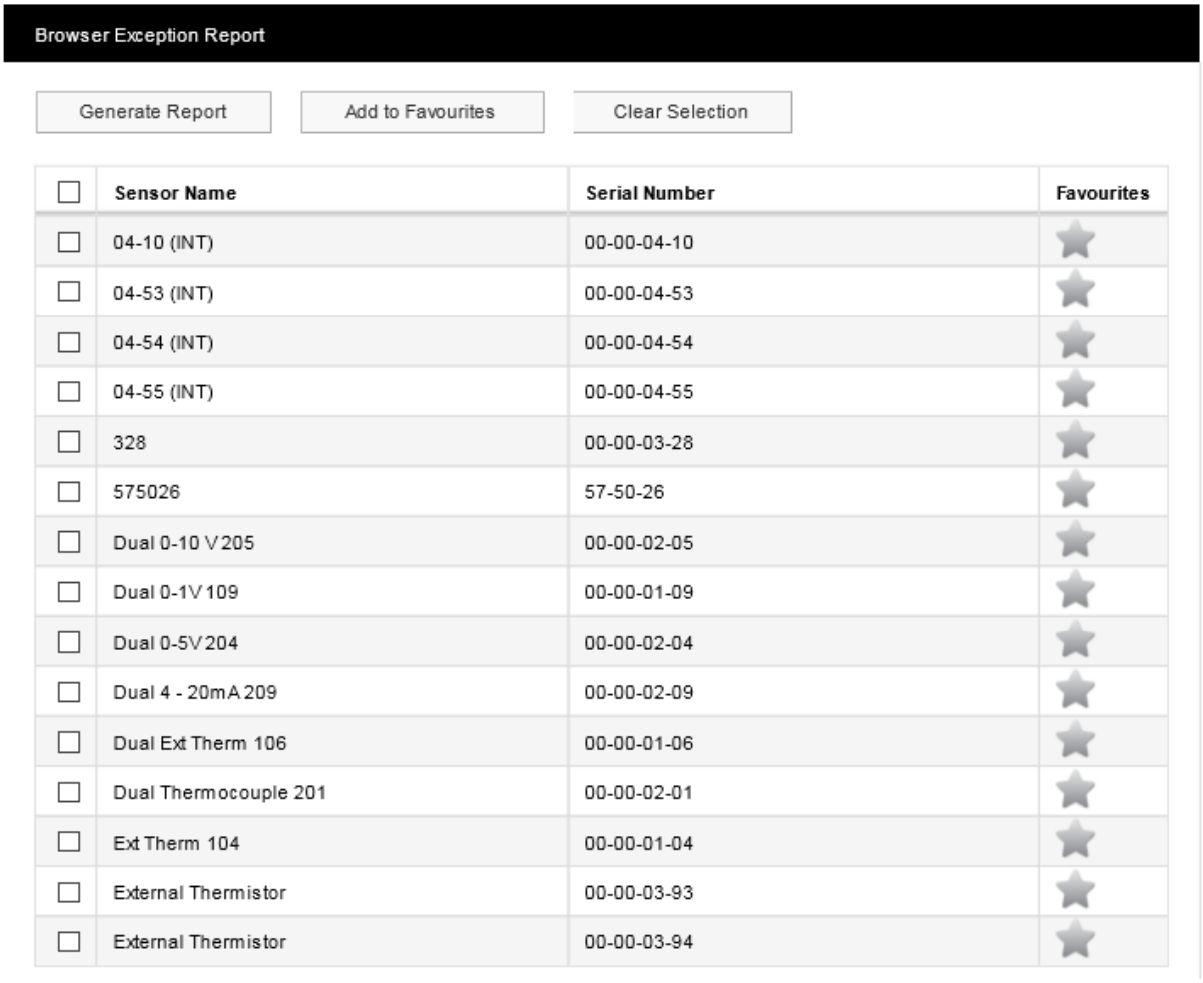
For example:



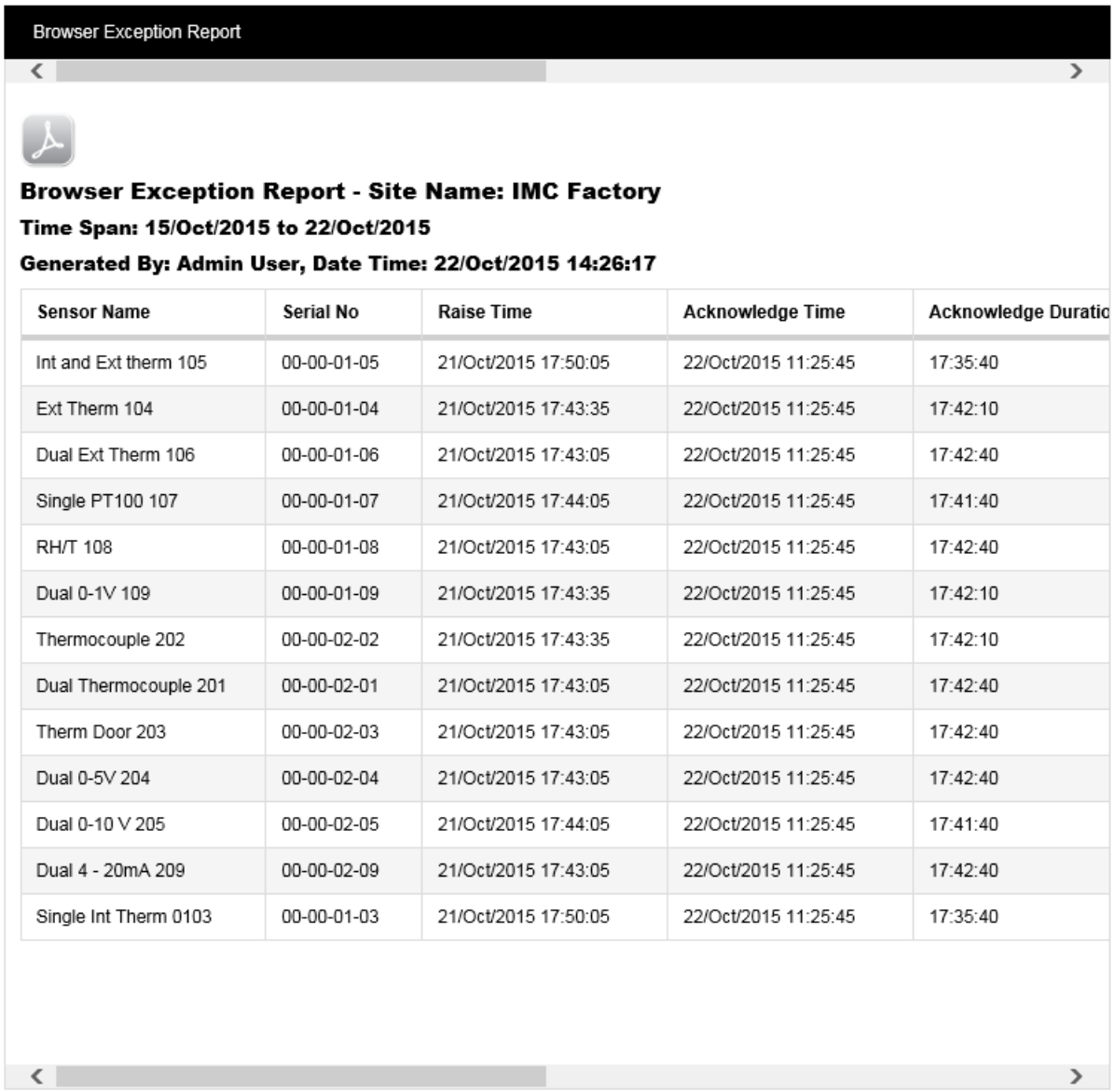
The sensor list is for all sensors of all types across your Site. To report on one or more Sensors:

1. Ensure that the Sensor option button is selected.
2. Select the sensor(s) of interest from the Sensor Name list. If the list of sensors is long you may need to click on to see the next page in the sensor list. To select all sensors in the list simply click in the tick box next to Sensor Name at the top of the list.
3. Select **Generate Report**.

This gives a report in .pdf format. See below for example.



This gives a report in .pdf format. See below for example.



Browser Exception Report

Browser Exception Report - Site Name: IMC Factory

Time Span: 15/Oct/2015 to 22/Oct/2015

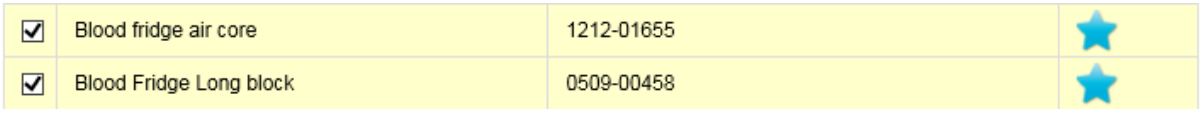
Generated By: Admin User, Date Time: 22/Oct/2015 14:26:17

Sensor Name	Serial No	Raise Time	Acknowledge Time	Acknowledge Duratic
Int and Ext therm 105	00-00-01-05	21/Oct/2015 17:50:05	22/Oct/2015 11:25:45	17:35:40
Ext Therm 104	00-00-01-04	21/Oct/2015 17:43:35	22/Oct/2015 11:25:45	17:42:10
Dual Ext Therm 106	00-00-01-06	21/Oct/2015 17:43:05	22/Oct/2015 11:25:45	17:42:40
Single PT100 107	00-00-01-07	21/Oct/2015 17:44:05	22/Oct/2015 11:25:45	17:41:40
RH/T 108	00-00-01-08	21/Oct/2015 17:43:05	22/Oct/2015 11:25:45	17:42:40
Dual 0-1V 109	00-00-01-09	21/Oct/2015 17:43:35	22/Oct/2015 11:25:45	17:42:10
Thermocouple 202	00-00-02-02	21/Oct/2015 17:43:35	22/Oct/2015 11:25:45	17:42:10
Dual Thermocouple 201	00-00-02-01	21/Oct/2015 17:43:05	22/Oct/2015 11:25:45	17:42:40
Therm Door 203	00-00-02-03	21/Oct/2015 17:43:05	22/Oct/2015 11:25:45	17:42:40
Dual 0-5V 204	00-00-02-04	21/Oct/2015 17:43:05	22/Oct/2015 11:25:45	17:42:40
Dual 0-10 V 205	00-00-02-05	21/Oct/2015 17:44:05	22/Oct/2015 11:25:45	17:41:40
Dual 4 - 20mA 209	00-00-02-09	21/Oct/2015 17:43:05	22/Oct/2015 11:25:45	17:42:40
Single Int Therm 0103	00-00-01-03	21/Oct/2015 17:50:05	22/Oct/2015 11:25:45	17:35:40

Note that you need to use the scroll bar at the top (or bottom) to see all of the Report. If you wish to save the report, click on  to give the standard browser **Save** dialog box (example below is for Internet Explorer):

Select **Save** or **Save as** to save the .pdf file to the required location.

There may be sensors that you often wish to report on. You can specify these as 'favourite' sensors. To do this, select the grey star symbol next to the sensors of interest. The star colour changes to blue and the row containing the sensor becomes highlighted. See below for example:



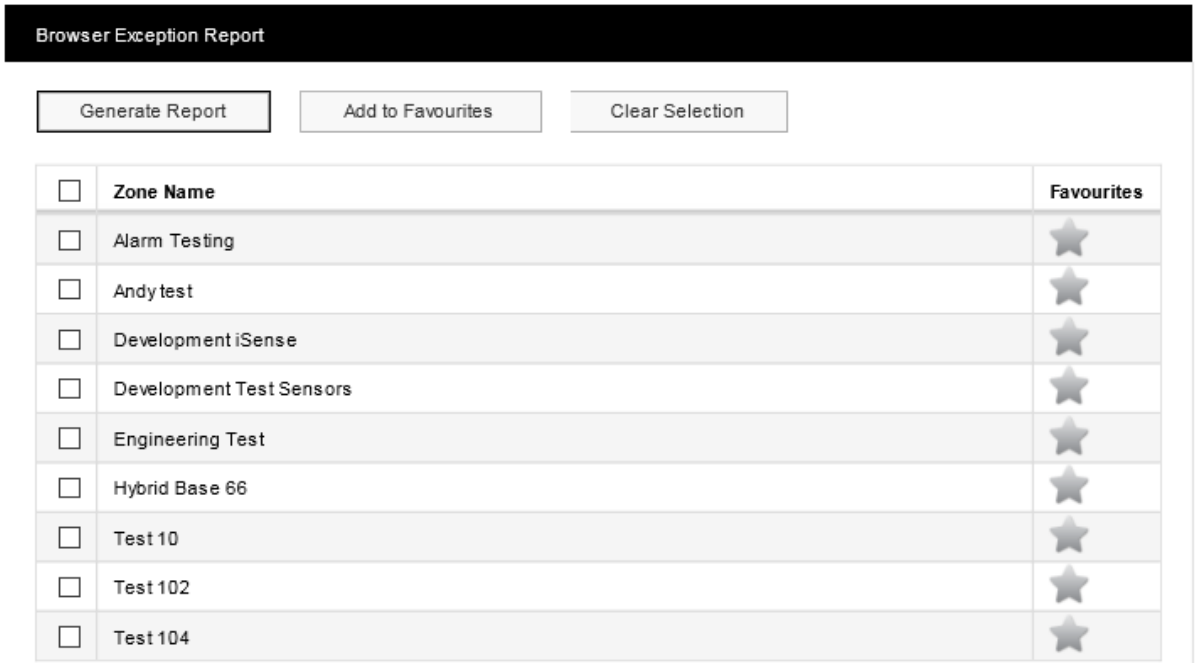
Having specified your 'favourite' sensors, select **Add to Favourites**. If you then nominate other sensors as 'favourites' select the grey start for the sensors of interest then select **Update Favourites**.

Your favourite sensors will then move to the top of the Sensor List and **Generate Exception Report** will generate a report for your favourite sensors.

Having generated a Report, to generate Exception Reports for a selected sensor type over a specified date range, first use the icon to choose the required Start and End dates (or enter the required dates directly into the Start Date and End Date boxes), then select the required sensor type from the Select Sensor Type pull-down list. Click **Search** to generate the specified Report.

Note: you will only see the date range selection controls after you have already generated a Report.

To report on a Zone, ensure that the Zone option button is selected. Click **Search** to generate a list of Zones for your Site. See below for example.



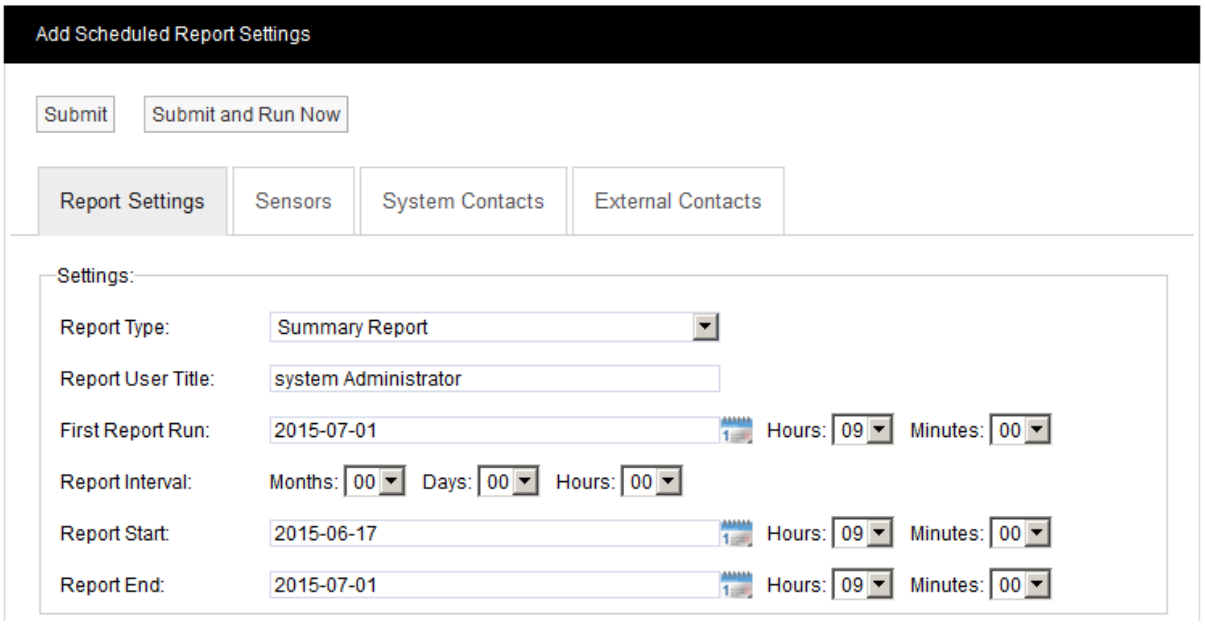
To generate a report for all sensors in a Zone simply select the Zone of interest from **Zone Name** list then select **Generate Report**. You can select 'favourite' Zones, or sensor types and date ranges using the same methods as detailed above for sensors.

5.8.4 Scheduled Reports

(Reports>Schedule Reports)

These cover a variety of Report types, which can be set up to start and end at predefined dates/times and can run at predefined intervals.

For example:



The above would generate .pdf report which would be emailed to the System Contact user(s). See below.

Time Span: 17/Jun/2015 to 01/Jul/2015

Summary for Sensor of Type: Notion Temperature						
Sensor Name	Id	Min	Max	Mean	Spread	MKT
Office 1 10 01	-1	22.2	36.5	25.2	14.3	25.14
Workstation 1 50 03	-1	22.2	33.3	25.3	11.1	25.15

Summary for Sensor of Type: Notion Temperature/Door											
Sensor Name	Id	Min	Max	Mean	Spread	MKT	Min	Max	Mean	Spread	N/A
Entry Hall and Door 50 02	-1	22.2	34.5	25.2	12.3	25.12	N/A	N/A	N/A	N/A	N/A
Stores B and Door 50 05	-1	18.5	38.6	25.3	20.1	25.15	N/A	N/A	N/A	N/A	N/A

Summary for Sensor of Type: Notion Dual Temperature											
Sensor Name	Id	Min	Max	Mean	Spread	MKT	Min	Max	Mean	Spread	MKT
Stores C Stores D 50 16	-1	-90.4	26.4	23.5	116.8	-67.63	21.7	77.5	24.6	55.8	24.37

Summary for Sensor of Type: Notion Temperature/RH											
Sensor Name	Id	Min	Max	Mean	Spread	MKT	Min	Max	Mean	Spread	N/A
Stores A 50 17	-1	0.0	327.7	5.9	327.7	1.79	0.0	327.7	10.3	327.7	N/A

The Sensors to be reported on and the Contacts who are to be emailed the report are defined in a similar way to the method used for Email Alert Groups.

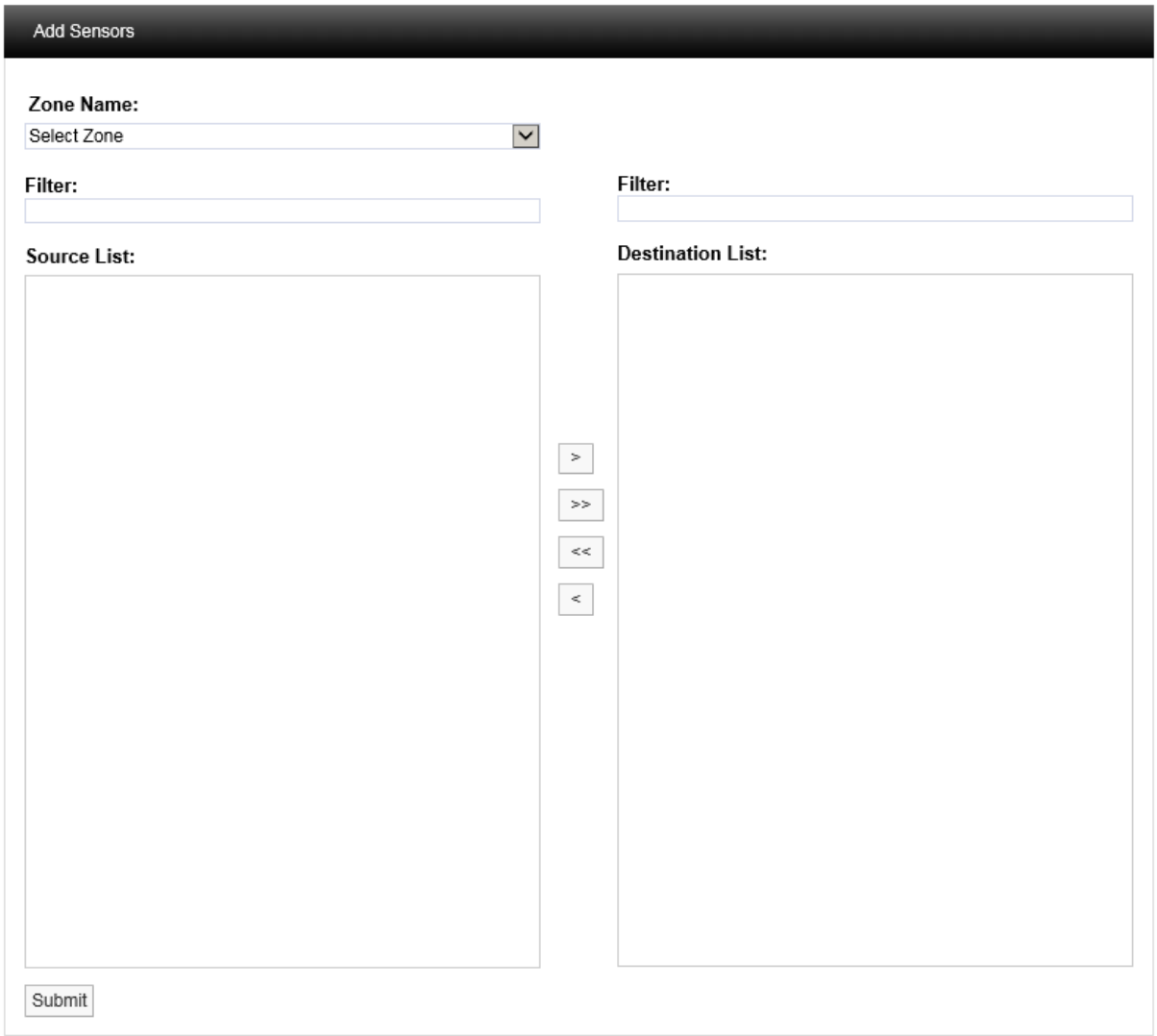
As an example, the steps to set up and run the Scheduled Report shown above might be:

1. Select **Reports>Schedule Reports**. Note ➜ **Add New Settings** on the side menu is highlighted – we are defining a new Report.
2. Select Summary Report from the Report Type: pull-down list.
3. Enter a title for the Report in the Report User Title box, for example 'Sys Admin Summary Report'.
4. Select a date and time for the first Report run using the First Report Run: controls. This should be later today or any time in the future.
5. Report Interval is the length of time between repeated runs of the Report, for example an interval of one day would give daily Reports. You don't have to specify a Report Interval, this would give a 'one off' Report.

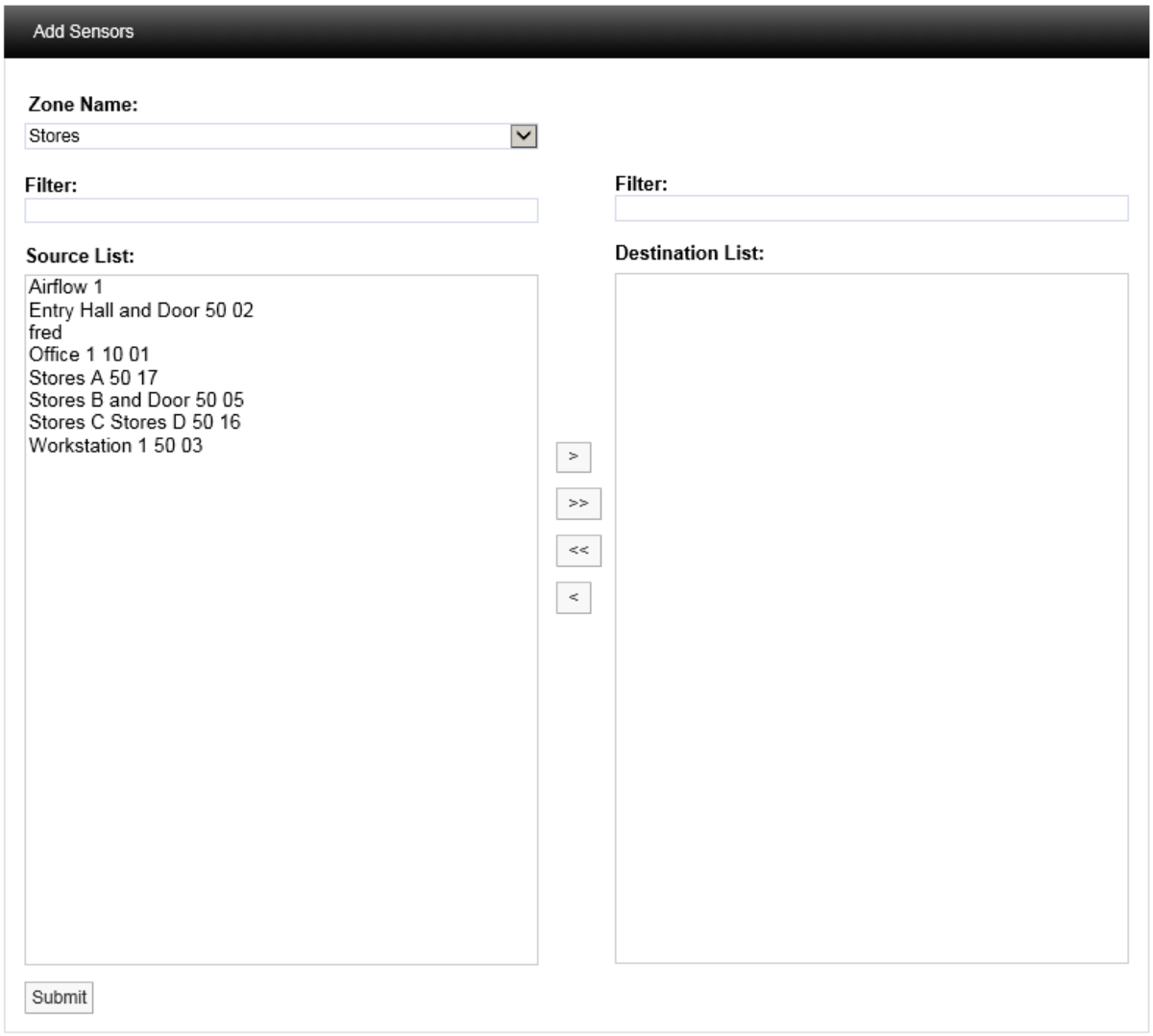
6. Use the Report Start: and Report End: controls to specify the time span for the Report. This would typically be dates in the past, but could be dates in the future (although if, for example you specified a start date one week in the future and end date two weeks in the future you would have to wait 2 weeks before you saw a Report). In our example 17 June 2015 has been set at the start date, 1 July 2015 as the end date.

Note: you should set an Interval, with no Report Start or Report End time, **or** a Report Start and Report End time, (but no Interval).

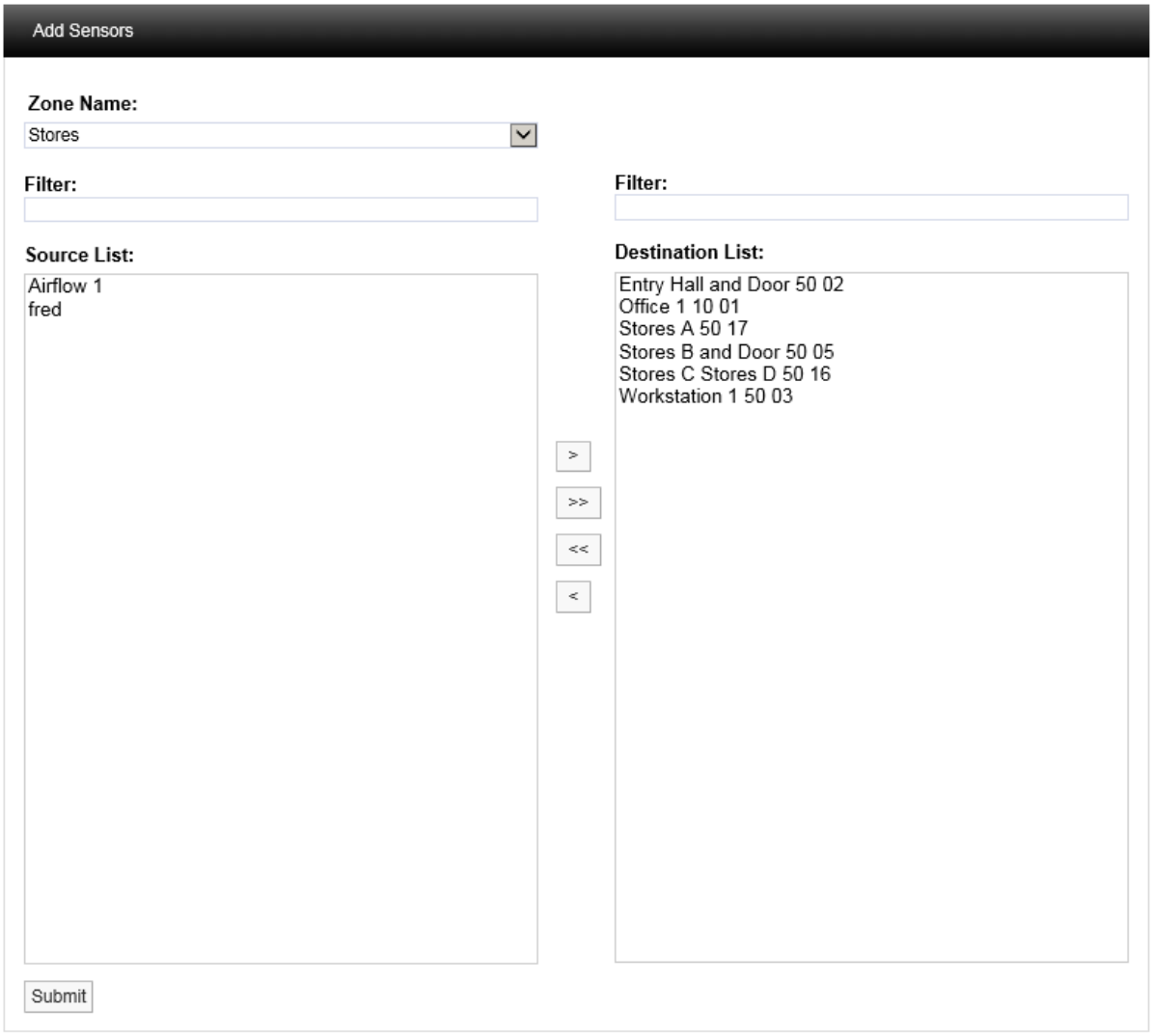
7. Having set up the Report dates, we now need to specify the Sensor data that we wish to report on. Click the **Sensors** tab, then click **Add Sensors** to give the Add Sensors dialog box, see below for example:



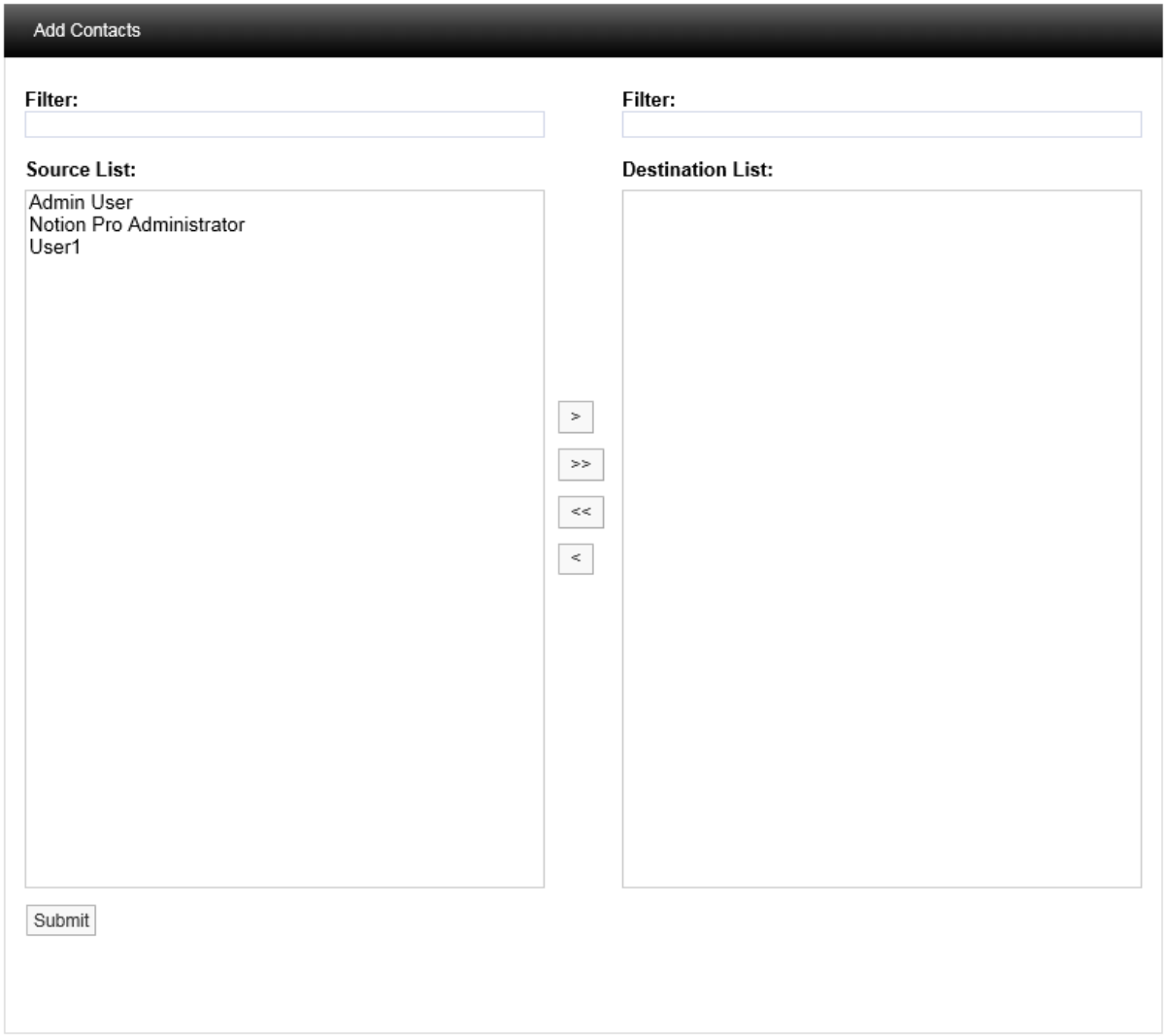
8. Select the Zone that contains the sensors you wish to report on from the **Zone Name** pull-down list. The **Source List** becomes populated with the sensors in the selected Zone. See below for example:



9. Select a sensor in the **Source List** that you wish to report on, and select > to transfer it to the **Destination List**. To transfer all sensors in a single operation click >>. When the Zone Name list is long the required Zone can be found by using the Filter. See below for an example of a populated **Destination List**.

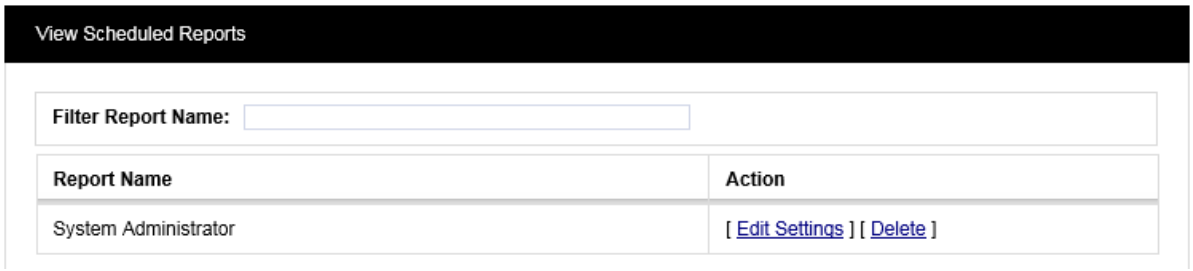


10. When satisfied with your selections, select **Submit**.
11. Now we need to specify a list of Users (**System Contacts**) that the report will be emailed to. Click the **System Contacts** tab, then click Add Contacts to give the Add Contacts dialog box. See below for details.



12. Populate the **Destination List** for **System Contacts** using the same methods that you used to populate the **Destination List** for Sensors (see step 9 above). When satisfied with your selections click **Submit** .
13. If any External Contacts have been set up and you wish to send the Report to them, select the **External Contacts** tab and populate and **Submit** it in the same way as for **System Contacts**.
14. When satisfied with all of your Report Settings, select **Submit** or **Submit and Run Now** under the Add Scheduled Report Settings banner. **Submit and Run Now** button is used to generate reports immediately; however some delay can be expected if a large report is submitted.

The Scheduled Report you have defined will now be added to the View Scheduled Reports window. See below.



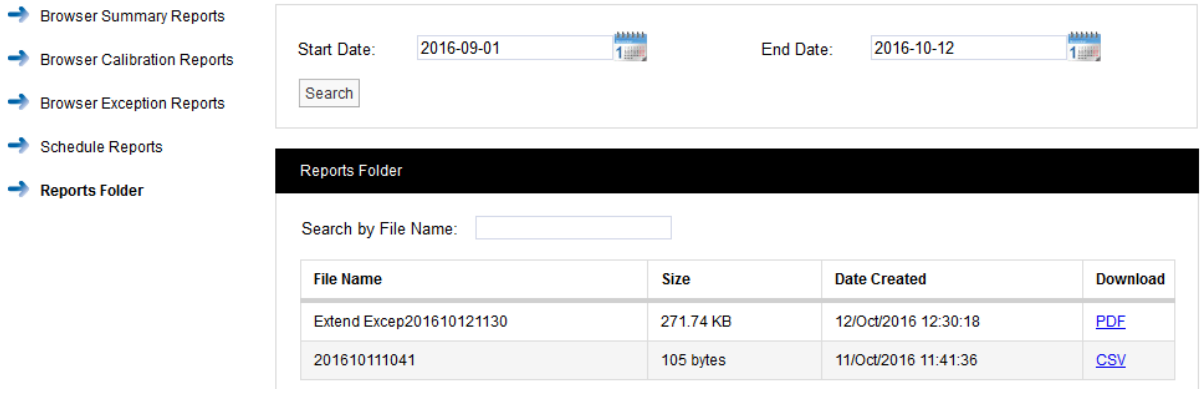
To change the Report settings, click on Edit Settings.

Note: If your Email Server has been set up to limit the maximum allowed email/attachment size, then Scheduled Reports in excess of the size limit will be blocked by your Email Server. Note that because there is no standard mechanism for feeding this eventuality back to the email client, Notion Pro cannot know that these emails have been blocked by the server. Most Email Servers inform the sender of this situation by placing a message in the sender account's Inbox. If Scheduled email Reports are not being sent, check the Inbox for the sender account you set up in Notion Pro.

5.8.5 Reports Folder

(Reports>Reports Folder)

This section display Scheduled reports saved in the **Reports Folder**, users can view or save the report by clicking the hyperlink provided under **Download**. The Reports folder needs to be set-up first by using Notion Pro Config utility otherwise reports will not be displayed. In order to refine the search use two calendars to select a **Start** and **End Date** and select **Search**. All scheduled reports generated between these dates will be displayed, see Figure below. A particular file can be searched quickly by entering first few characters of the file name in **Search by File Name** input field.



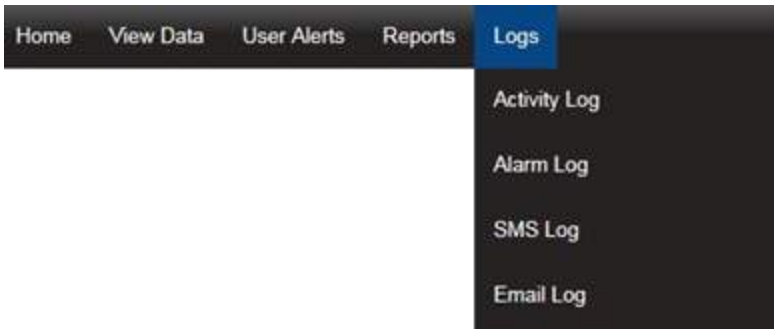
5.9 Viewing System Logs

The options under this menu enable you to view the System Logs.

Notion Pro has a series of System Logs for keeping track of critical events such as system

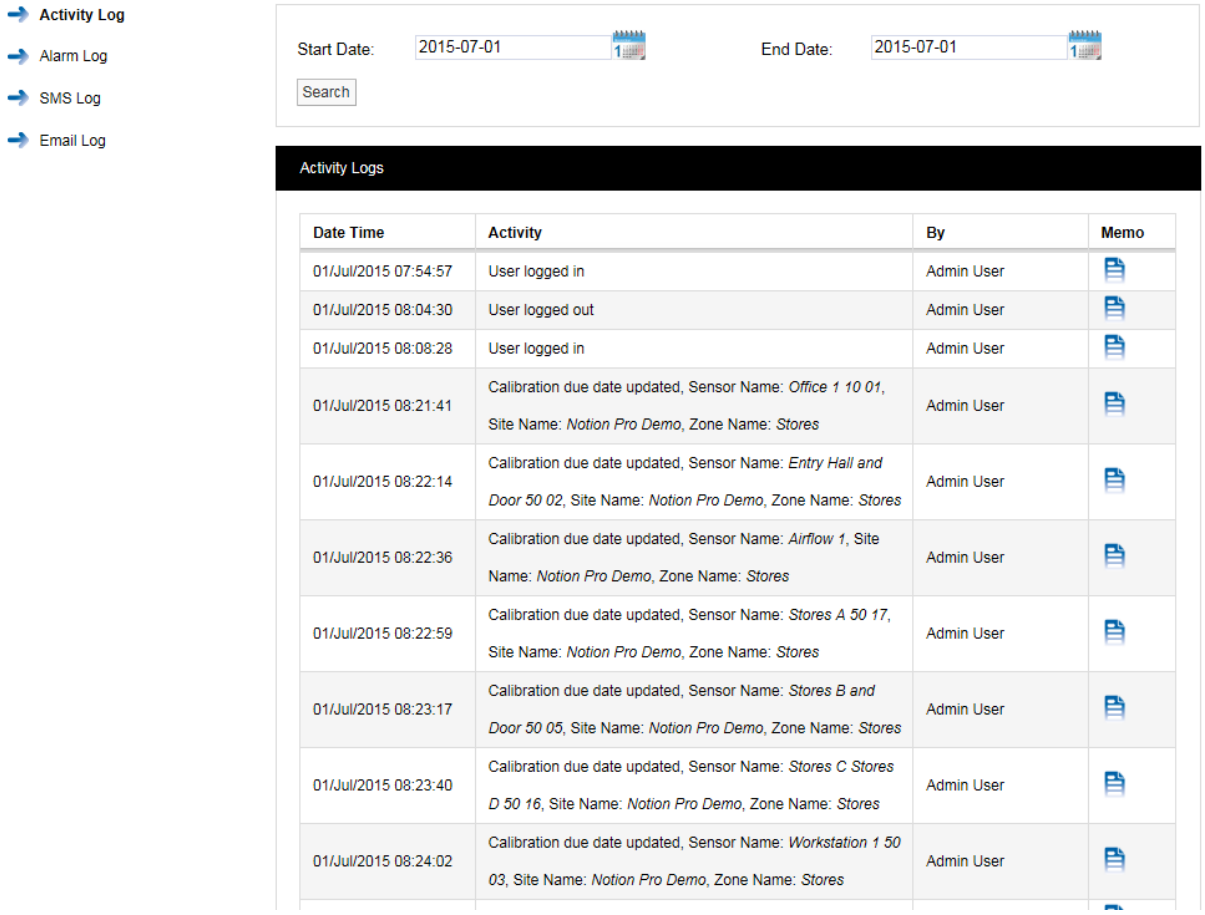
activity, alarm activity and SMS activity.

To access the System Logs select Logs from the main menu, see below.



5.9.1 Activity Logs

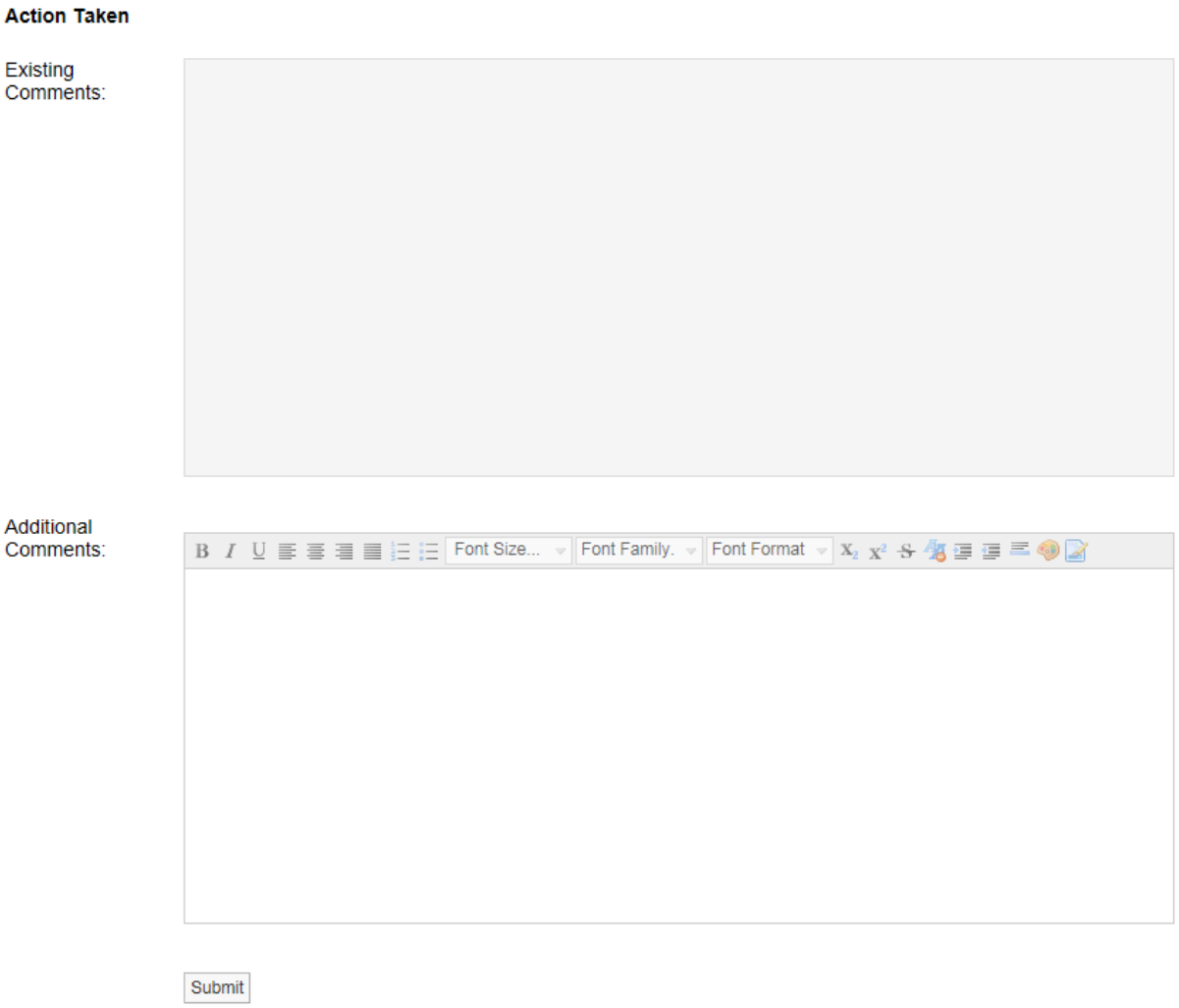
The **Activity Log** contains all the user activity on the system such as logging in and out and editing. To access the Activity Log select **Logs>Activity Log** from the main menu. The Activity Logs window appears, see below.



Date Time	Activity	By	Memo
01/Jul/2015 07:54:57	User logged in	Admin User	
01/Jul/2015 08:04:30	User logged out	Admin User	
01/Jul/2015 08:08:28	User logged in	Admin User	
01/Jul/2015 08:21:41	Calibration due date updated, Sensor Name: *Office 1 10 01*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	
01/Jul/2015 08:22:14	Calibration due date updated, Sensor Name: *Entry Hall and Door 50 02*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	
01/Jul/2015 08:22:36	Calibration due date updated, Sensor Name: *Airflow 1*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	
01/Jul/2015 08:22:59	Calibration due date updated, Sensor Name: *Stores A 50 17*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	
01/Jul/2015 08:23:17	Calibration due date updated, Sensor Name: *Stores B and Door 50 05*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	
01/Jul/2015 08:23:40	Calibration due date updated, Sensor Name: *Stores C Stores D 50 16*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	
01/Jul/2015 08:24:02	Calibration due date updated, Sensor Name: *Workstation 1 50 03*, Site Name: *Notion Pro Demo*, Zone Name: *Stores*	Admin User	

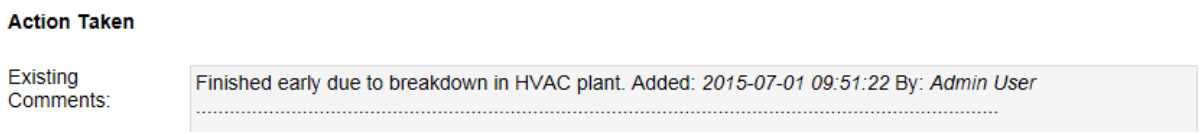
The Activity Log follows system events. Each entry is date and time stamped with a description of the action carried out or activity and the user.

There is a **Memo** field that may or may not contain any memos, for example an activity such as User logged out would not have a memo as it is created by the system when the user logs out. If required you can select the memo icon next to an activity and add a memo. See below.



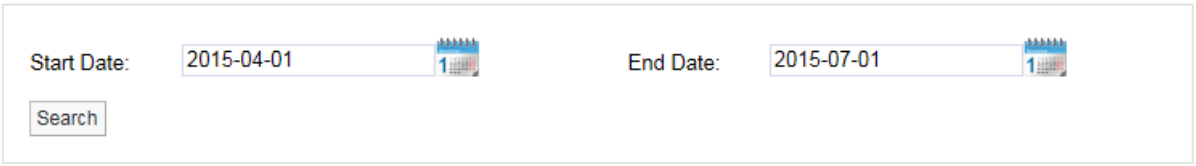
When happy with memo select **Submit**.

The memo will now be saved in the top section under existing comments. These comments are date and time stamped and are identified by user and are now not editable, see below.



Additional comments can be added at any time.

To search back through previous **Activity Logs** use the **Search** function, see below.

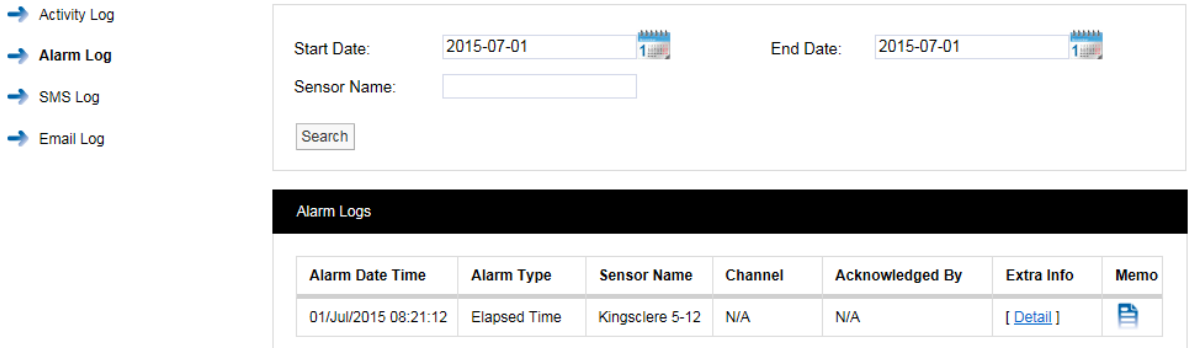


Use the two calendars to select a Start Date and End Date and select **Search**. All Activity Logs between these dates will be displayed.

To move through available log pages, use the blue left and right arrows at the bottom of the page. The single blue arrows will step through one page at a time, the double blue arrows will take you to either the first page or the last page of the search, see below.

5.9.2 Alarm Logs

The **Alarm Log** contains all the alarm activity on the system. To access the Alarm Log select **Logs>Alarm Log** from the main menu. The Alarm Logs window appears, see below.



The Alarm Log contains date and time stamped data, **Alarm Type**, **Sensor Name**, **Channel**, **Acknowledged By**, **Extra Info** and a **Memo**. **Extra Info** is a link to a floating tip, the tip contains Site and Zone name information.

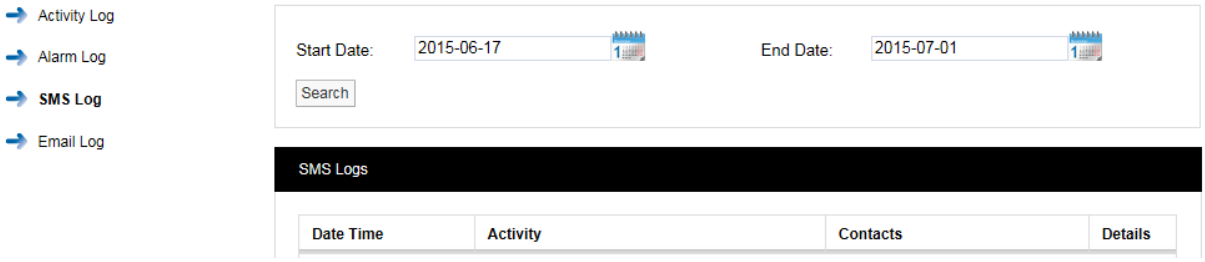
The Memo contains information on alarm reasons and action taken. Additional notes can be added at any time. These notes are not editable. Notes are added by following the steps in Activity Logs.

More Alarm Logs can be viewed by using the calendar **Search** function.

To move through available **Alarm Log** pages, use the blue left and right arrows at the bottom of the page. The single blue arrows will step through one page at a time. The double blue arrows will take you to either the first page or the last page of the search.

5.9.3 SMS Logs

The **SMS Log** contains entries for all system SMS activity. To access the SMS Log, select **Logs>SMS Log** from the main menu. The SMS Logs window appears, see below.



The SMS Log contains date and time stamped data, **Activity** details, **Contact**s and a **Details** or memo field.

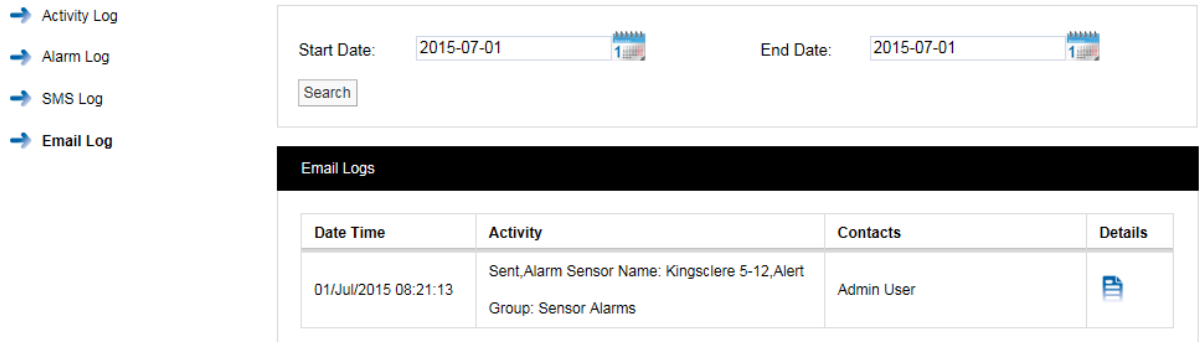
The SMS Details contains details of the message sent including User name and the contact number that the SMS message was delivered to, see below.

The example shown above SMS is a regular system heartbeat message sent to the **Admin User**. More SMS logs can be viewed by using the calendar **search** function.

To move through available SMS log pages, use the blue left and right arrows at the bottom of the page. The single blue arrows will step through one page at a time. The double blue arrows will take you to either the first page or the last page of the search.

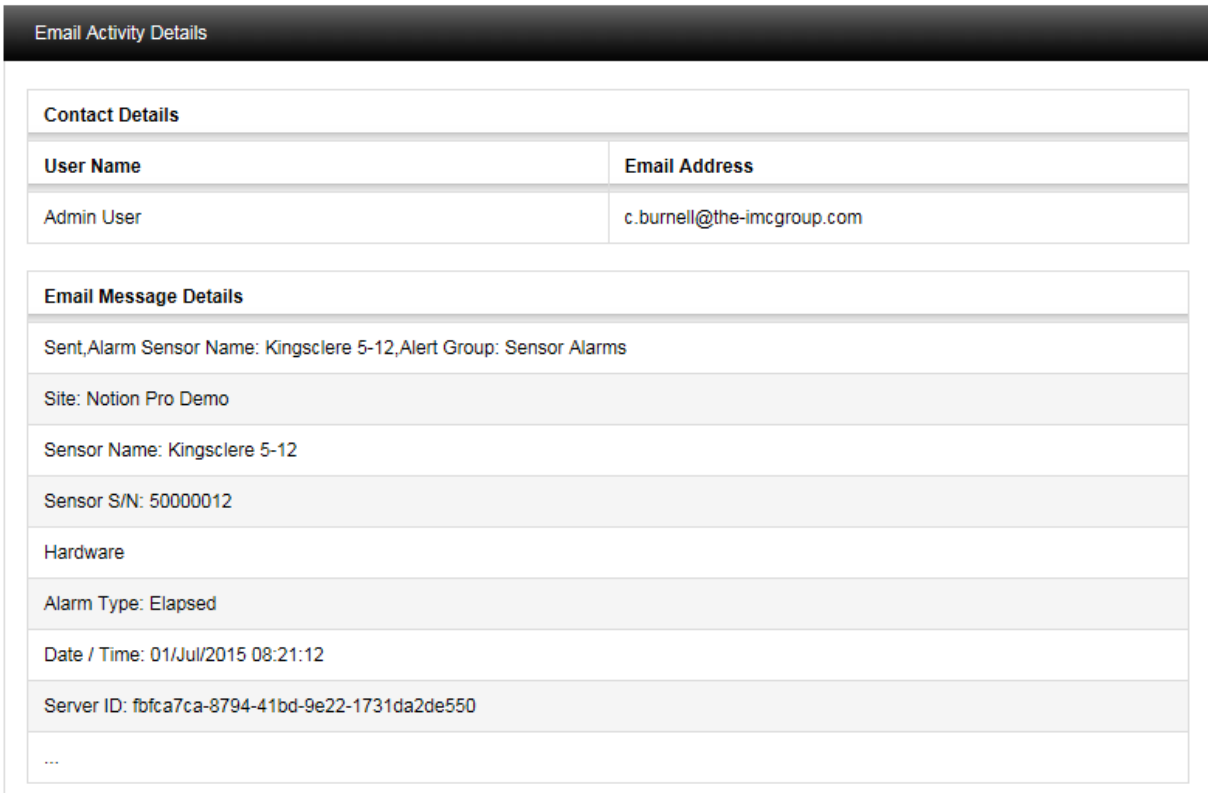
5.9.4 Email Logs

The **Email Log** contains entries for all system email activity. To access the Email Log, select **Logs>Email Log** from the main menu. The Email Logs window appears, see below.



The Email log contains date and time stamped data, **Activity** details, **Contacts** and a **Details** or memo field.

The Email Details contains details of the message sent including User name and the contact email address that the Email was sent to, see below for example.



5.10 Settings

The options under the Settings menu enable System Administrators to create Sensor Groups and handle User Passwords.

5.11 Adding Transmitters

Installing a Transmitter

As far as possible, the transmitter units should be placed where they will not be subject to electromagnetic interference and where they will not be shielded by walls, doors, metal furniture, appliances etc. They should also be mounted vertically to maximise radio range. A wall-mounting bracket is available, IMC part no. N494.

Note: the procedure below must be followed for each Transmitter that you are installing.

Install Step	Notes
1. If you are NOT using the door monitoring and alarm function option with this transmitter, go to step 2 below. Secure a matching pair of door monitoring and alarm function sensor pads to the door and door frame of your refrigerated/frozen storage unit.	If you intend to the lay the Transmitter loosely in the storage unit, ensure that you position the door frame sensor pad such that the cable running from the pad runs into the storage unit. If you intend to wall-mount the Transmitter, ensure that you position the door frame sensor pad such that the cable running from the pad runs outside of the storage unit. Ensure that the pads meet perfectly when the door is closed.
2. Pull away the contact tag on the transmitter to ensure the battery contacts and the transmitter contacts meet.	A green light will flash briefly.  The sensors are powered by 1 x 1.5V Lithium AA cells. Standard AA cells can be used, but are not recommended.
3. If you do not intend to wall-mount your transmitter, go to	(Transmitter is lying loosely in your storage unit.)

Install Step	Notes
step 11 below.	
4. Drill holes for the Transmitter wall mounting bracket into the wall at an appropriate location.	When mounting the Transmitter bracket, you should bear in mind that, if you are using the door monitoring and alarm function and/or external sensor options, you will need to run cables from the Transmitter to your storage unit door frame sensor pad and/or external sensor.
5. Screw the mounting bracket to the wall.	As an alternative, the transmitter bracket could be attached to a suitable post using cable ties. Slots are provided in the bracket for this purpose.
6. Slot the Transmitter into the wall bracket.	
7. If you are using the door monitoring and alarm function option with this transmitter, route the storage unit door frame sensor pad cable up to the transmitter.	
8. If you are NOT using the external sensor option, go to step 11.	
9. Place the external temperature probe and associated cable at a suitable position in your storage unit.	
10. Route the temperature probe cable over the door frame and up to the Transmitter.	

Install Step	Notes
Insert the cable into the Transmitter.	
11. Repeat steps 1-10 above for each Transmitter that you are adding.	
12. Use Notion Pro to set up the Transmitters for use.	See Add Sensors.

5.12 Backfill

If a transmitted signal can't get through for some reason, data is stored in an on-board cache. Backfill is where the transmitter is placed close to the ARB unit, stored data is then transferred automatically to the ARB via RFID.

5.13 Adding Users - Before you Start

- You need to know how many Notion Pro Users there are on your Site, their names, email addresses and the types of access they need to sensor data. If your installation includes an SMS Module you also need to know users' mobile phone contact numbers.
- You need to be sure that your Notion Pro licence will allow you to create the number of users necessary for your Site. Additional licences are available from IMC Group Ltd.
- It is assumed you know how to log in to Notion Pro and that you have System Administrator rights.

5.14 Alarm Status

The symbols under **Alarm** mean:

Temperatures are within the levels that have been set.

Temperatures are outside the thresholds, but the alarm has been acknowledged.

Temperatures are outside the thresholds, and the alarm has not been acknowledged.

5.15 Battery

The symbols under **Battery Level** indicate the state of the battery for the associated transmitter:

Battery is fully charged.

Battery has less than half its life left, but need not be replaced yet.

Battery is very low and should be replaced as soon as possible.

Battery is empty and must be replaced immediately.

Replacement Batteries

IMC recommends:

- Lithium - Energizer Ultimate Lithium L91 IMC stock No. G301
- Alkaline - Duracell ID1500-10 IMC stock No. 88705

Note: Alkaline batteries will work from +55ºC to -20ºC, but with greatly reduced life compared to the Lithium cell IMC recommends. For example (all these figures are approximate):

- 40% life at 20ºC compared to equivalent Lithium
- 20% at 0ºC
- 5% or less at -20ºC.

5.16 Door Alarm

The symbols under **Door Alarm** indicate the door position for the storage unit being monitored by the associated transmitter.


The door is closed.


The door is open and the alarm has not been acknowledged.


The door is open but the alarm has been acknowledged.


There is no door monitoring and alarm function associated with this transmitter.

5.17 Equipment Positioning

- Mount the Base Station vertically and away from metal as far as possible. Remember that some walls may contain metal reinforcement, so fix to a masonry/plasterboard surface if you can, or space the unit away from the wall
- Mount the transmitters vertically if you can. All transmitters can be wall-mounted or free standing, as required. As far as possible, the transmitter units should be placed where they will not be subject to electromagnetic interference and where they will not be shielded by walls, doors, metal furniture, appliances etc.
- If the transmitters are vulnerable to physical disturbance then fix them in place to ensure consistent performance.
- Repeater units can be supplied to increase effective range if needed.

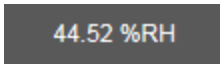
5.18 Live Data

This is the last reading received from the transmitter.

A live data display icon such as:

indicates that the temperature has gone over the alarm threshold value, but the resulting alarm has been acknowledged.

For a transmitter which has a Relative Humidity channel, a symbol such as the following would be displayed:



5.19 Manuals

The following manuals, in .pdf form, should be present on your Notion Pro install DVD:

IceSpy Notion Pro Pre-Requisites Manual , IM5546. (You should have read this before you purchased Notion Pro, but this manual may still be a useful source of reference).

IceSpy Notion Pro Installation Guide , IM5529. (If you are reading this Help topic you have already installed Notion Pro, but this manual may still be a useful source of reference).

IceSpy Notion Pro System Manual , IM5521 (Describes the software GUI from a 'reference' point of view, and goes through all the options in detail. Also gives a summary description of the Notion Pro hardware.)

IceSpy Notion Pro Archive Backup Manual , IM5549. (Describes how to back up and restore old Notion Pro data.)

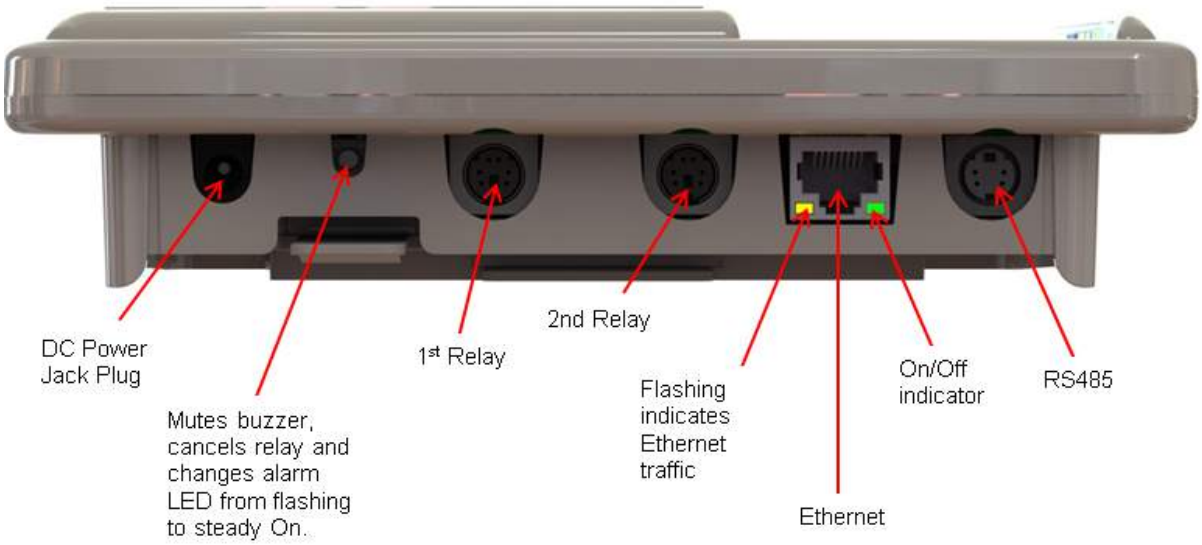
IceSpy Notion Pro Archive BaseUtil Manual , IM5575. (Initial configuration of Notion Pro devices. System Administrators only.)

5.20 Permissions

Permissions are System Access rights such as Edit, Delete etc. Permissions can be allocated to Roles.

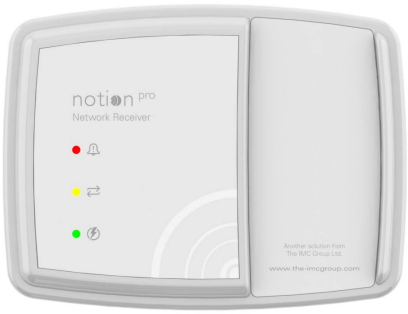
5.21 Receiver Connectors

The connectors on the underside of the Network Receiver unit are as shown below.



(The connectors on the underside of the other members of the Notion Pro Base Unit family are similar, but some of the connectors are blanked off.)

5.22 Receiver Lights



Red (flashing)	Alarm. (For example, Temperature is thresholds.)
Yellow (constant)	Receiver is connected your Network. yellow light means that a connection has yet been established.
Green (constant)	Unit is powered up. Flashes to indicate reception.

5.23 Roles

Users assigned to a Role inherit the Permissions assigned to the Role.

Suggested Role Definitions

The following table gives suggested roles and the settings for those roles. You may wish to define roles and permissions slightly differently for your Site.

Role	Permissions
General Administrator	Select Ignore for: ☐ Access Control ☐ Access Logs ☐ Access Sites ☐ Activate privileged Access ☐ Disable User ☐ User Group Management ☐ User Management Select the **Allow** option buttons for all other permissions.
Advanced User	Select Ignore for: ☐ Access Control

Role	Permissions
	□ Access Logs □ Access Sites □ Activate privileged Access □ Change Alarm Settings on Reset □ Device Configuration □ Disable User □ User Group Management □ User Management Select the **Allow** option buttons for all other permissions.
Standard User	Select Ignore for: □ Access Reports □ Access Reports – Sensor Groups □ Access Settings □ Acknowledge Alarms □ Bulk Acknowledge Alarms □ Live View □ Live View – Sensor Groups □ Plan View Select the **Deny** option buttons for all other permissions.
Guest User	Select Ignore for: □ Live View □ Live View – Sensor Groups □ Plan View Select the **Deny** option buttons for all other permissions.

5.24 Specifying Alert Settings - Before you Start

You should have details of values and settings for the following items. These details should be completed in the IceSpy Notion Pre-Requisites document, IMC doc. no. IM5546:

- □ SMTP Mail Server name
- □ Sender Email Address
- □ SMTP Username
- □ SMTP Password

- BCC Email Address
- Heartbeat Enable setting
- Email Alert Heartbeat Time setting
- Email Receiving Protocol (optional)
- Receive Email over SSL setting (optional)
- IMAP/POP3 Mail Server Name (optional)
- IMAP/POP3 User Name (optional)
- IMAP/POP3 User Password (optional)

5.25 User Groups

User Groups allow viewing **Privileges** to be set for the Group. Users added to that Group inherit the viewing Privileges associated with that group. Any previous viewing Privileges assigned to an individual user will be overridden by the viewing Privileges associated with that group

5.26 User Privileges

Privileges are the viewing rights that allow a User to see Sites and Zones. Through Privileges a user can be restricted to the number of Zones they can see. This is especially useful on very large systems..

5.27 Compliance

The Notion Pro equipment conforms to the following international standards:

- Country specific radio approval.
- CE approval. All Notion Pro hardware carries the CE mark to indicate that the equipment meets the requirements of the applicable EC directives.
- WEEE compliance.
- RoHS compliance.
- Conflict minerals.
- Reach.

See also:

R & TTE Declaration of Conformity

5.28 Terms and Conditions of Sale

1. GENERAL

In these Terms and Conditions 'The Company' means The IMC Group Ltd and 'The Customer' means the person, firm or company named in this Quotation, Order Acknowledgment, Advice Note or Invoice. No variation to these conditions shall be binding unless agreed in writing between the authorised representatives of The Customer and the Company. Any advice or recommendation given by the Company or its employees or agents to The Customer or its employees or agents which is not confirmed in writing by the Company is followed or acted upon entirely at The Customer's own risk.

2. CONTRACT

A contract shall be affected when The Company sends its confirmation and acceptance in writing of The Customer's order. Quotations which are valid for 30 days are not binding until the date of such acceptance. No oral quotations will be binding on The Company. Delivery periods shall run from the date of such acceptance.

3. PRICES

Unless otherwise expressly stated the prices quoted do not include VAT or packaging, insurance, carriage and delivery charges. Quotations represent no obligation until The Company accepts The Customer’s order. All orders are accepted for execution at prices current at date of despatch.

4. PAYMENT

Terms of payment are strictly net cash with order unless a credit account has been established. Payment by an accepted credit card may be made. Where a credit account has been established payment is strictly net monthly and payment should be made to the Company's offices at Pendle House, Jubilee Road, Letchworth, SG6 1SP by the last day of the month following that in which the goods are despatched. All outstanding balances not paid on that date will be liable to compound interest charged at the rate of 1.75% per month.

5. PROPERTY AND RISK

Property in the goods shall not pass to The Customer until The Company has been paid the whole of the purchase price. Notwithstanding the above the risk in the goods shall pass to The Customer upon delivery to the carrier at The Company's works.

6. DELIVERY

The Company will endeavour to adhere to the delivery date set out in the Quotation but such delivery date is a business estimate only and The Company shall not in any way be liable for delay in delivery or the consequences thereof however caused, including but not limited to delay or interruption of work at The Company's works before or during the delivery period any strike lockout labour dispute fire breakdown of machines force majeure or any cause whatsoever beyond The Company's control in which case deliveries may be wholly or partially suspended and the delivery period extended by the length of time during which

deliveries are suspended, Where goods are ready for delivery The Company may postpone delivery at the request of The Customer provided that The Customer pays the full price of the goods to The Company forthwith. The Company may store the goods at its own premises or elsewhere at The Customer's sole risk and all storage, insurance and transport charges shall be paid by The Customer.

7. CANCELLATION FEE

No contract for goods ordered may be cancelled by The Customer. If The Company agrees to accept a cancellation it shall be entitled to charge The Customer a cancellation fee of up to fifty per cent (50%) of the purchase price in respect of costs and expenses incurred and other damages without prejudice to any right to claim further costs expenses and damages howsoever arising. The Customer is responsible for returning any such goods, at their cost, in good condition to The Company.

8. WARRANTY

The Company guarantees the goods against defects of materials or workmanship for a period of one year commencing on the date on which the goods are dispatched. The Company in so far as it is able will also pass on to The Customer the benefit of all other manufacturers' guarantees connected with the goods supplied which are not of The Company's manufacture.

The Company's liability under this clause shall apply to defects that appear during normal and proper operational use in accordance with any operating or service manuals supplied by The Company. The Company shall be under no liability in respect of any defect of the goods arising from any causes beyond the Seller's reasonable control, or to defects arising from The Customer's faulty maintenance or handling or from alterations carried out without The Company's prior authorisation in writing or from repairs which have not been carried out in accordance with any operating or service manual supplied by The Company or defects arising from normal wear and tear.The Company's liability under this clause is limited to replacing or making good the defects in the goods.

If The Company so requests, The Customer, at the expense and risk of The Customer, shall send the goods, or part thereof which are to be replaced or made good, to The Company or some place nominated by The Company. Any repaired or substituted goods may be delivered to The Customer at the risk of The Customer but The Company may if it wishes pay the cost of carriage.

9. LIABILITY

Save as provided above The Company accepts no other liability for any other conditions or warranties expressed or implied as to the quality or fitness of any purpose of the goods and all such conditions and warranties are to the extent permitted by law hereby expressly excluded to the intent that save as provided above The Company shall not have liability to The Customer or to any third party in respect of any loss or defect in the goods supplied or in respect of any personal injury or damage or loss of any kind directly or indirectly attributable to faults or defects in such goods and The Customer will indemnify The Company against any such claims. Under no circumstance will The Company be liable for any consequential loss suffered by The Customer. In the event that The Company under

any liability to The Customer in respect of the goods the same shall form a separate cause of action and shall not entitle The Customer to any setting off and the full amount of all sums payable to The Company from The Customer hereunder shall remain due and owing. Good returned under this warranty shall be delivered to our premises at The Customers expense and if found not to be defective (or when the defect is attributable to The Customer's design or materials) will be returned to The Customer at its expense and subject to a testing charge of 15% of the invoice price together with VAT thereon if applicable.

The goods shall not be defective unless:

i. They are not in accordance with The Customers specification where this is the agreed specification

ii. If The Customer has no such specification or to the extent that The Customers specification is silent as to any aspect of the design function performances tolerances quality or characteristics of the goods do not conform to The Company's published information or if no such information has been published the goods to not conform to the standards which The Company considers normal or usual for products of the kind sold at a similar price. The Company is not in a position to ensure that The Customers specification is correct and/or sufficient for the purposes intended by The Customer and The Customer must satisfy himself on this point.

10. CONTRACTS FOR SERVICES

a) In the event that a contract made between The Company and The Customer shall amount to a contract for the provision of services rather than a contract for the sale of goods then the provisions of these Terms and Conditions shall apply with such modifications as may be necessary, to give effect to them.

b) Where specifications are to be supplied by The Customer they must be supplied before the contract can be entered into. Where The Customer is to supply working drawings/ components these must be delivered to The Company by the agreed date. Delay in the supply of such drawings or components will entitle The Company to defer delivery of the goods by a period equivalent to such delay.

c) Where any additional or changed information is submitted to The Company by The Customer The Company reserves the right to increase prices to cover any costs (including overheads) arising from any losses incurred by The Company as a result of such alteration and/or to extend the delivery period.

d) Where goods have been supplied to The Customer's specifications The Company accepts no liability for any failure or defect in such goods, and The Customer shall indemnify The Company against all actions, claims, costs and proceedings, including claims that the specification or goods infringe(s) the intellectual property rights of another. The Company gives no warranty as to the fitness for any particular purpose of goods so supplied to The Customer's own specifications and accepts no liability for clerical or stenographical errors on the drawings or specification provided by The Customer.

e) The Company reserves the right to sub-contract the fulfillment of any order or contract or any part thereof.

f) Any experimental results supplied or recommendations made under a Service contract are given in good faith within the limitations of the data available, but no warranty, express or implied, is given as to the performance of, or results obtained from such service and The Company cannot accept any liability for the consequences of using or applying the said results or recommendations.

11.

If any of these Clauses or any part of these Clauses is rendered void or unenforceable by any legislation to which it is subject it shall be void or unenforceable to that extent but no further.

12.

This contract shall be governed by and construed in accordance with the Laws of England.

May 2011

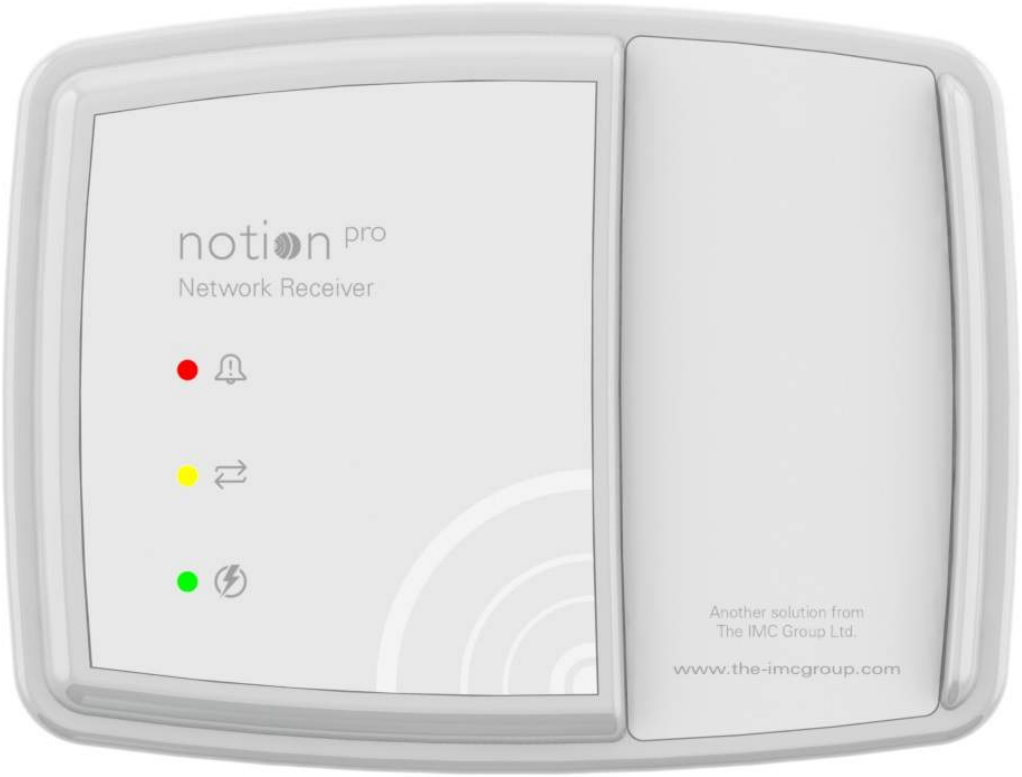
The Notion Pro Hardware

6 The Notion Pro Hardware

A Notion Pro system contains the following hardware:

- Transmitters to monitor the levels of temperature and other variables and transmit the data by radio to the Receiver. See The Transmitters for more details of the transmitters.
- the **Network Receiver** (may also be referred to as the Base Unit). See the Network Receiver.
- Optional Items. These are the Echo, the ARB Module, the SMS Module and the Calibration Module.

6.1 The Network Receiver



The Network Receiver receives radio signals from the Notion Pro Transmitters and passes them over a network to the Notion Pro software. The Hybrid Receiver will also receive signals from IceSpy System 5 Scout transmitters, Notion Pro Legacy and Notion Pro transmitters.

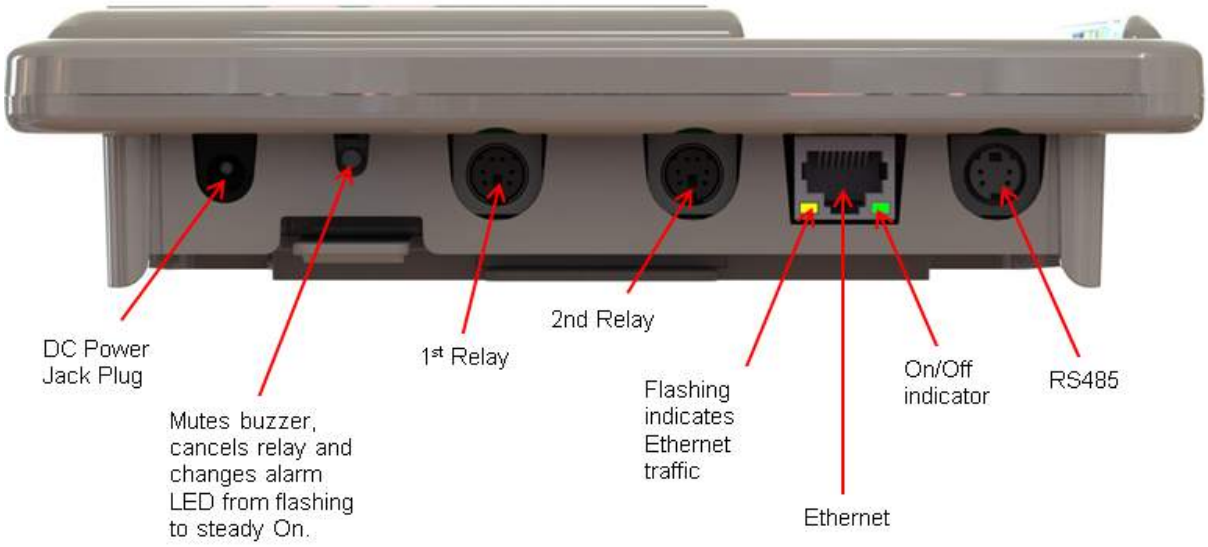
Key features:

- IMC Part No IN-NR001x (where x indicates the territory-specific frequency, for example F1 for Europe, F2 for USA; **this notation will be used throughout this Help**). Hybrid unit is IN-HR001-Fx.
- Wall mountable.
- Internal aerials as standard – external aerials are a factory-fitted option.
- Red LED for alarm (normal state off), green LED for power (normal state on), yellow LED for communications (normal state on). See also LEDs.
- Mains powered from supplied adaptor.
- TCP/IP communications.
- Two on-board Relays, one configured for alarm activation - driven by Notion Pro Local Alarms, one for communications and power failure.
- RS485 output for optional Modbus or IMC MS1000 system relay cards - driven by Notion Pro Local Alarms.
- Memory lasts for 5 days for up to 50 sensors.
- IP53 rated.

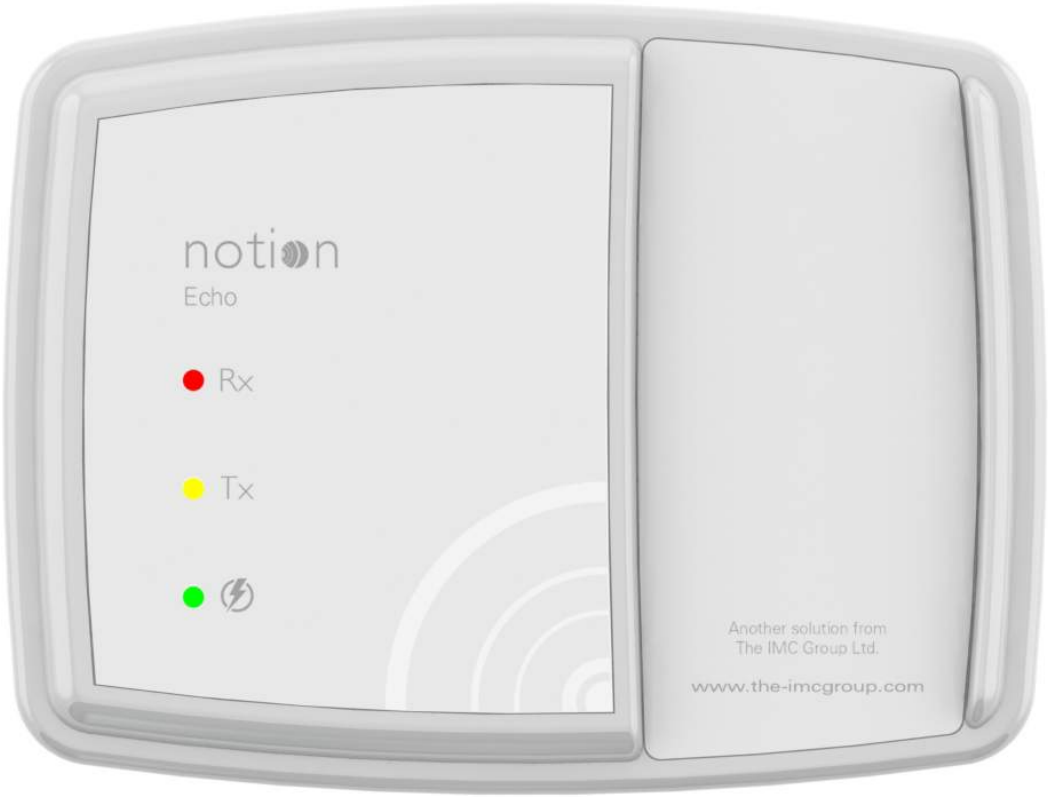
6.1.1 LEDs

Green (constant/ flashing)	Unit is powered up. Flashes to indicate radio reception.
Red (flashing)	Alarm. (For example, temperature is outside thresholds.) Changes to steady red if Reset button is pressed. Goes off when Alarm Clear signal is received.
Yellow (constant)	Receiver is connected your Network. A flashing yellow light means that an Ethernet connection has not yet been established.

6.1.2 Connectors



6.2 The Echo Module



The Echo module provides a Repeater function for transmitted signals, should this be required in your installation. Key features:

- IMC Part No IN-RP002F1

- Wall mountable.
- Green LED for power (normal state on), red LED to indicate signal being received, 1 yellow LED to indicate signal being transmitted.
- Mains powered from supplied adaptor.
- Battery backup for 3 days.
- IP53 rated.

6.2.1 Connectors

See also Connectors.

6.3 The SMS Module

This unit gives the ability for Transmitter alarms to be sent as SMS messages to mobile phones. See SMS Global Settings, SMS System Alerts, User Alerts, and SMS heartbeat, for details of SMS configuration. Key features:

- IMC Part No IN-TA001
- Wall-mountable.
- External aerial.
- Red LED for alarm (normal state off), green LED for power (normal state on), yellow LED for communications (normal state on).
- OLED display showing signal strength and alarm message status.
- Base push-button – quick press shows setup and signal strength, (RSSI), 5-second press sends SMS test message.
- Mains powered from supplied adaptor.
- TCP/IP communications.
- Two on-board Relays, one configured for alarm activation - driven by Notion Pro Local Alarms, one for communications and power failure.

- Rechargeable battery backup, to send power fail messages.
- SIM socket – accessed from back of battery compartment.
- IP53 rated.

6.3.1 Installation and Operation

SIM Installation

Note:
Make sure that both SMS sending and receiving is enabled by your cellular Service provider, for the SIM card you are using.
The SIM card is not hot-swappable, do NOT attempt to remove the SIM card without removing power and the battery first.
It is recommended that the battery be removed, when the SMS Module is not in use.

The SIM card must be installed prior to battery installation and wall mounting.

Remove the battery cover and slide the SIM card into the exposed SIM socket, so that the gold plate contacts on the SIM card connect with the gold plated contacts of the SIM socket.

Once the SIM is correctly located in the socket, fit the battery, battery cover, and mount the SMS module; see Installing your Notion Pro Equipment for details.

LED Operation

The SMS Module has three LED's which provide a quick visual indication of current status.

The red SMS Cross LED will be off during normal operation; it will flash slowly during a power fail.

The amber SMS tick LED will be on during normal operation; it will flash approximately twice a second if there is no network connection to the Notion pro server.

The green power LED will illuminate during normal operation; it will go off during a power fail condition.

Push Button

Briefly press the push button to display SIM status and signal strength, (RSSI).

When the relay is on due to an Alarm, a brief press of the push button will reset the alarm relay.

Press and hold the push button for at least five seconds to send a test message to one of the SMS Power & Comm's Group phone numbers. The SMS Module will display the phone number at the bottom of the OLED display, when the message is sent.

Error Message

When initially powered on pressing the push button will display "Unit not fully powered up. Wait 60 seconds and try again."; if pressing the button continues to display the same message after a few minutes, then there may be a problem with your SIM or cellular account.

6.3.2 Connectors

See also Connectors.

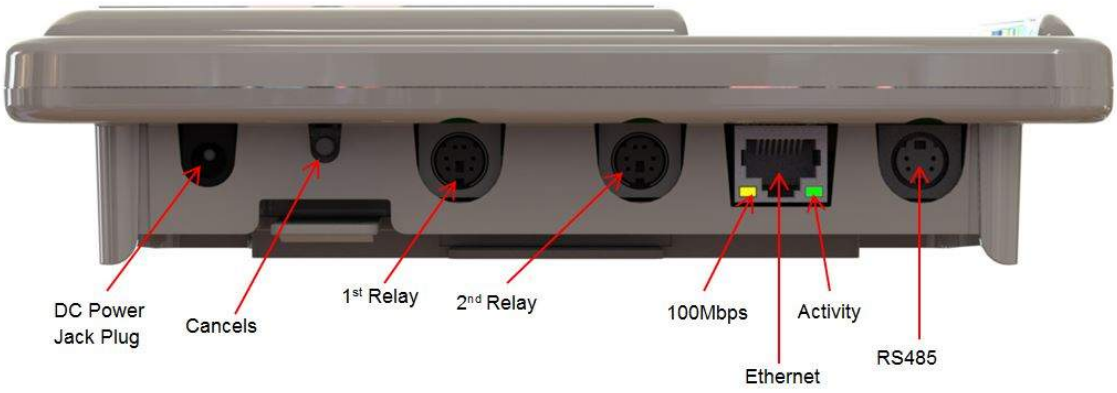
6.4 The ARB Module

The ARB unit gives an alarm display, with a keypad enabling the user to cycle through alarm information. Has RFID and Bluetooth connectivity. See ARB Module Help

- IMC Part No IN-NA002.
- Wall mountable.
- Bluetooth module to interface to MM2000 series recording thermometer.
- Red LED for alarms (normal state off), green LED for power (normal state on), 1 yellow LED for network status (normal state on).
- Mains powered from supplied adaptor.
- TCP/IP communications.
- On-board alarm relay - driven by Notion pro Local Alarms - and reset button.
- RS485 output to drive IMC MS1000 system relay cards - driven by Notion Pro Local Alarms.
- ARB units to be able to communicate with each other via the PC software for relay activation.
- RFID interface and cradle for transmitter backfill.

- IP53 rated.

6.4.1 Connectors



6.5 The Calibration Module

The Calibration Module collects data from the Notion Pro Calibration Tool (part of the Notion Pro software) and transfers the data to transmitters via RFID. Transmitter to be placed on Calibration Module cradle. Built in licence key routine to communicate with Server. Licence to use device will expire annually.

- IMC Part No IN-CM01.

- Green LED for power (normal state on).
- Mains powered from supplied adaptor..
- IP53 rated.

6.5.1 Connectors

See also Connectors.

6.5.2 Display

Alarm display. Used to show failed communications.

6.5.3 Operation

Would usually be held by a Calibration Engineer, who would come in to the customer's premises on request. Would be used flat on a table connected by RS485 cable to the Engineer's laptop.

The Calibration Tool interacts with the Calibration Module and acts as a virtual display and keyboard. When a transmitter is to be calibrated it must be placed on the Calibration Module cradle. The Engineer then puts the Calibration Module into calibration mode via the calibration tool software.

When a Transmitter is put into calibration mode it sends messages to the System to identify that it is in calibration mode to stop alarms. When the transmitter is taken out of calibration mode another message is sent to the System that it is back in normal mode. If the sensor for some reason has not been taken out of calibration mode in 6 hours then an alarm is sent to warn that the transmitter is still in calibration mode.

Once the unit has gone through its calibration routine the Engineer will take it out of calibration mode. All calibration details will be held in the Transmitter itself, so no adjustments to the Notion Pro data base are required.

6.6 The Transmitters

All the members of the Notion Pro Transmitter family have the same basic enclosure (see above) and share many common characteristics. The available sensors can monitor temperature and relative humidity, voltage and 4-20mA current, (intended to interface with third party sensors), as well as providing door alarms. There are also external PT100 and thermocouple sensor probe options. For more detail on the Notion Pro transmitter family, see http://www.the-imcgroup.com/notionpro/temperature-sensors.

All transmitters can be wall-mounted or free standing, as required. As far as possible, the Transmitter units should be placed where they will not be subject to electromagnetic interference and where they will not be shielded by walls, doors, metal furniture, appliances etc. Note that if you have more than one Network Receiver on your Site and the signal from a given transmitter is being picked up by more than one Receiver, you can associate the transmitter with the Receiver unit which is showing the highest signal strength for that transmitter. See Device Configuration.

- All units can operate within a -30°C to +50°C temperature range.
- All units have user-replaceable 1.5V Lithium AA batteries. These have an expected life of over 2years and work over -30°C to +50°C temperature range. 1.5V AA alkaline can be used but with a reduced battery life and a reduced operating temperature range (0° C to +40°C).

LED Operation

The transmitter LED indicates when the unit is transmitting data, and will briefly flash approximately once every minute.

6.6.1 Single Channel, Air Temperature, Internal

- IMC Product Code IN-TH001Fx
- Product Family: NP3000 series
- Accuracy ±0.5°C, 0.1°C resolution.
- Transmits data once per minute
- Battery level status and alarms.
- Calibration options are return to IMC, or on site by trained Engineer.
- Gap filling protocol via ARB Module with RFID interface.
- Green Status LED for commissioning and fault finding.
- IP65 rated.
- Approvals.

6.6.2 Single Channel, Air Temperature, Internal + Door Switch

- IMC Product Code IN-THD01Fx
- Product Family: NP3000 series
- As Single Channel Internal Thermistor Temperature but with door monitoring and alarm function.
- External sensor range -30°C to +50°C.

6.6.3 Single Channel, External Temperature Probe

- IMC Product Code IN-TH002Fx
- Product Family: NP3000 series
- As Single Channel Internal Thermistor Temperature but replacing the internal sensor with an external sensor via a waterproof connector.
- External sensor range -40°C to +70°C.

6.6.4 Single Channel, External Temperature Probe + Door Switch

- IMC Product Code IN-THD02Fx
- Product Family: NP3000 series
- As Single Channel Internal Thermistor Temperature but replacing the internal sensor with an external sensor via a waterproof connector.
- External sensor range -40°C to +70°C
- Dual Channel Internal and External.

6.6.5 Dual Channel Internal/External Temperature Probe

- IMC Product Code IN-TH003Fx
- Product Family: NP3000 series
- As Single Channel Internal Thermistor Temperature with the addition of external sensor channel via waterproof connector.
- External sensor range -40° to +70°C
- No door monitoring and alarm function.

6.6.6 Dual Channel External Thermistor

- IMC Product Code IN-TH004Fx
- Product Family: NP3000 series
- As Single Channel Internal Thermistor Temperature with the addition of a second external sensor channel.
- Sensor range -40° to +70°C.

6.6.7 Single Channel, External PT100 Probe

- IMC Product Code IN-PT001Fx
- Product Family: NP3100 series
- As Single Channel Internal Thermistor Temperature with the internal thermistor being replaced by a single external 4-wire Class A PT100 probe. Used to measure temperature at a specific point, typically inside a freezer. This unit can withstand a much wider temperature range that an internal thermistor.
- Range -100°C to +200°C.
- Resolution 0.1°C.
- Accuracy ± 0.1°C calibrated.

- PT100 Probe Class A accuracy un-calibrated.
- Probe connected via a waterproof connector.

6.6.8 Single Channel PT100 Probe + Door Switch

- IMC Product Code IN-PTD01Fx
- Product Family: NP3100 series
- As Single Channel PT100 Probe with door monitoring and alarm function.

6.6.9 Dual Channel PT100 Probe

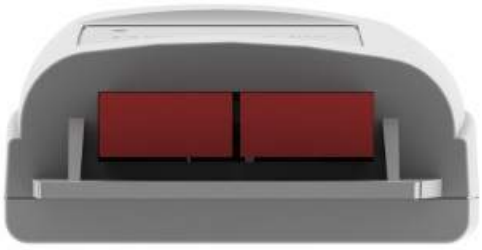
- IMC Product Code IN-PT002Fx
- Product Family: NP3100 series
- As Single Channel PT100 Probe with the addition of a second external PT100 channel.

6.6.10 Single Channel Type T Thermocouple

- IMC Product Code IN-TT001Fx

- Product Family: NP3200 series
- Single thermocouple base connector
- As Single Channel PT100 Probe with the internal thermistor being replaced by a single Type T thermocouple.
- Range -200°C to +350°C
- Resolution 0.3°C
- Accuracy ± 0.5°C.
- IP53

6.6.11 Dual Channel Type T Thermocouple



- IMC Product Code: IN-TT002Fx
- Product Family: NP3200 series
- Dual thermocouple base connector
- As Single Channel Type T Thermocouple with the addition of a second external Type T thermocouple channel.

6.6.12 Single Channel Type T Thermocouple + Door Switch

- IMC Product Code: IN-TTD01Fx
- Product Family: NP3200 series
- Single thermocouple base connector

- As Single Channel Type T Thermocouple with door monitoring and alarm function.
- Range -200°C to +350°C
- Resolution 0.3°C
- Accuracy ± 0.5°C.
- IP53

6.6.13 Dual Channel 4-20mA Input

- IMC Product Code IN-MA001Fx
- As Single Channel Internal Thermistor Temperature with the internal thermistor being replaced with two current channels.
- Input 4-20mA.

6.6.14 Dual Channel Voltage Input Transmitter

- IMC Product Codes IN-VT001Fx, IN-VT002Fx, IN-VT003Fx
- As Single Channel, Air Temperature, Internal + Door Switch the internal thermistor being replaced with two voltage channels.

6.6.15 Temperature and RH Transmitter

- IMC Product Code IN-RH001Fx
- As Single Channel Internal Thermistor Temperature + door monitoring and alarm function using the internal thermistor.
- Sensor type: Sensirion type SHT75.
- RH range 10-90%.
- Resolution 0.1%.
- Accuracy ±3%.
- Sensor mounted in external housing fixed to case.

6.6.16 Linear Transmitter (1V 5V 10V 4 to 20mA)

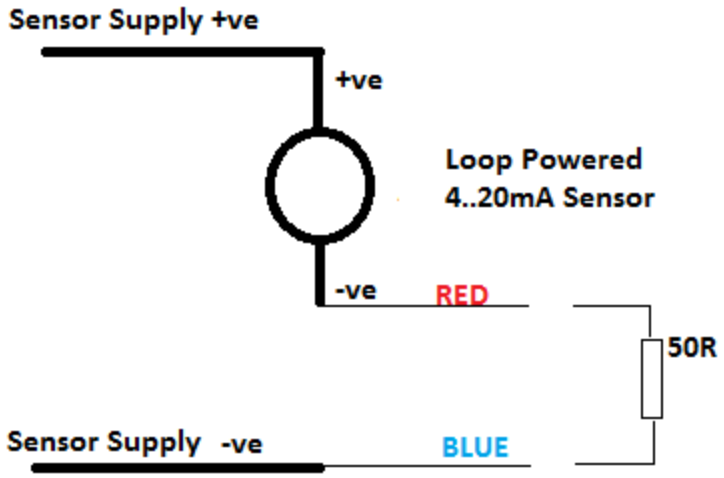
Hardware

Connect the supplied cable as follows: Red +ve, Blue -ve

The input impedance of the 0...10V and 0...5V voltage units is a nominal 10k, that of the 0...1V device is 100k. They can withstand a permanent over voltage of 2 * nominal, and short term polarity reversal.

0...20mA devices present an internal load resistance of 50R and will normally be connected as shown below. The user must ensure that no more than 2V is applied across the Red and Blue Notion Pro connections under any circumstances. The 50R resistance shown is internal to the device; the user does NOT need to add this.

4-20mA Loop Powered Sensor Connection



With a gain of 1.0 and offset = 0 (default) the software will read V or mA directly. To read in other engineering units set the OFFSET to be the voltage/current at which the device reads 0 and the gain/units as required.

Example 1 - A 0...1V sensor corresponds to +/-100Bar

Offset =0.500, Gain=100/0.5=200, Units='BAR'

For 4 to 20mA: Gain = sensor range / 16, Offset = 4 - (minimum sensor reading / Gain)

Example 2 - A 4...20mA sensor corresponds to 0 to 100Bar

Offset =4.00, Gain=100/16=6.25, Units='BAR'

Example 3 - A 4...20mA sensor corresponds to 90 to 100Bar

Gain = (100 – 90) / 16 = 0.625, Offset = 4 - (90 / 0.625) = -140, Units='BAR'

Note: Applying signals levels over the limits stated above may damage the unit and will invalidate the warranty

6.7 Base Unit Installation Procedure (typical)

Note: This procedure takes you through the generic setup steps for physically setting up the members of the Notion Pro Base Unit family, that is:

- Network Receiver
- Echo Module
- SMS Module
- ARB Module

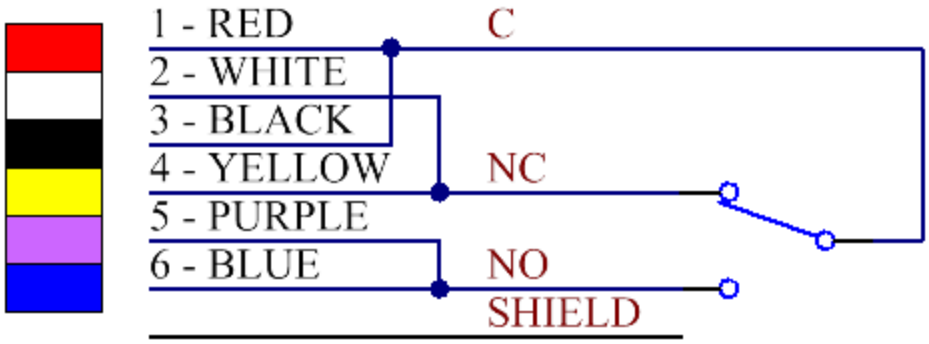
Each of these units will be referred to as a 'Base Unit' in the following procedure.

Install Step		Notes
1. Using the mounting bracket as a drilling template, drill holes for the Base Unit wall mounting bracket into the wall at an appropriate location. 2. Using the spacers provided to give		When mounting the Base Unit, you should bear in mind that you may need to run cables from the Base Unit to the 12V power supply, also Ethernet and RS485 connections.

Install Step		Notes
clearance, Screw the mounting bracket to the wall.		
3. Using a Phillips screwdriver, remove and retain the screws from the battery cover plate at the rear of the Base Unit.		
4. Insert the backup battery into the recess at the rear of the Base Unit, taking care to insert the connector attached to the battery into the matching connector within the Base Unit.		
5. Screw the battery cover plate to the rear of the Base Unit.		
6. Attach the Base Unit to the mounting bracket.		
7. Using the supplied RJ45 cable, connect the Base Unit to your Network.		(Echo Module communicates by radio and must NOT be connected to a Network.)
8. Using the supplied cable, connect the Base Unit to its 12V power supply.		
9. Plug the power supply cable into the power supply unit.		

Install Step		Notes
10. Slide the appropriate plug adaptor onto the power supply.		Do not connect the power supply to the mains supply yet.
11. Plug in the Base Unit power supply to the mains supply and switch on at the mains socket.		A green light comes on. Power Supply works automatically with 110V-120V or 220V-240V mains voltage.
11. Go into Notion Pro to add the device and configure it for use.		See Configure Devices

6.8 Relay Connections

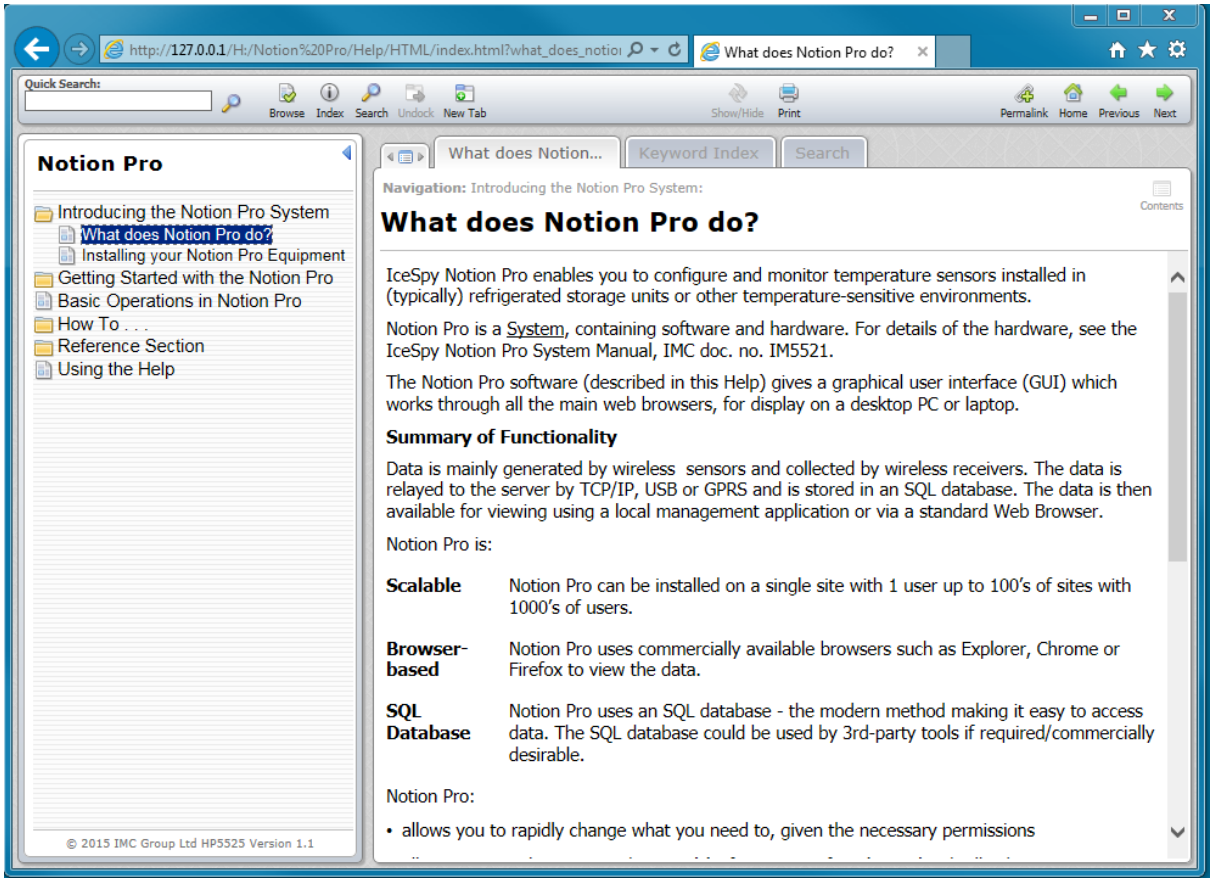


- Pins 1&3, 2&4, 5&6 are internally connected together in pairs to increase the current carrying capacity
- The shield wire is internally connected to GND.
- Both relays have the same pinout and the cables are interchangeable.
- These relay outputs are suitable for low voltage switching.

Rating: Max. load1A at 24V, do NOT exceed 50V; shield is connected to Unit 0V rail.

7 Using the Help

Selecting **Help>Notion Help** gives the Notion Pro Help, in its own window.



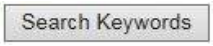
The large pane on the right gives the Help for the topic you have selected in the 'contents list' pane on the left. Click ◀ to hide the contents pane, click ▶ to show it again. The symbols and the text alongside them are 'chapter headings'. Click the to show the contents of the 'chapter' (the symbol changes to), click again to hide the chapter contents. Some of the 'headings' have their own content (for example 'Getting Started' and 'The Opening Display'), some 'headings' just open onto a list of Help topics (for example 'Basic Operations in Notion Pro').

The tabs at the top of the topic pane give you tools for getting Help in different ways.

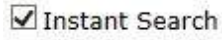
The left-hand tab displays the name of the currently displayed Help topic. The **Keyword Index** gives a list of keywords (like an index in a reference book) that you can search on for Hep.

For example, to find a Help topic containing the word 'Calendar' simply click on Calendar in the index on the left. Some keywords appear in more than one Help topic, and a sub-menu of topics appears. For example, 'Battery' appears in three Help topics:

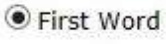
To click on another keyword move down the list using the scroll bar on the right, or click on a keyword initial letter on the list at the top.

To search for a keyword, enter the keyword in the box to the left of the 

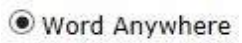
button, then click on the button.



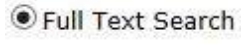
means that the search will jump to the required keyword, and highlight it, even before you have finished typing it. Clear the tick box to disable this facility.



means only the keyword whose first word is the search keyword is found,



means that all keywords which contain the search keyword at any position will be found. For example, a search for 'Offset' with 'First Word' selected means that 'Offset' will be found but 'Calibration Offset' would not be. A search for 'Offset' with 'Word Anywhere' selected would mean that both 'Offset' and 'Calibration Offset' would be found.



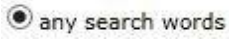
means that *any* word containing the search keyword string will be found.

For example, a search for 'Cal' with 'Full Text Search' clear would find 'Calendar', 'Calibrate', 'Calibration' and 'Calibration Offset' but not 'Graph**ical** Display'. With 'Full Text Search' selected, 'Graphical Display' would be found too.

The **Search** tab enables you to search for any keyword in the Help, regardless of whether the word is in the Keyword Index or not.

Clicking 

will produce a list of topics which contain the keyword(s) that has been searched for, ranked in order of number of occurrences of the keyword within the topic. The **Score** value gives the relevance of the topic found.



means that topics containing *any* of the search keywords will be listed. For example a search for 'Configure Transmitters' would give a list of all topics containing 'Configure' *or* 'Transmitters'.

means that only those topics containing *all* of the keywords will be listed. For example a search for 'Configure Transmitters' in this case would give a list of all topics containing 'Configure' *and* 'Transmitters'.

 gives a method of scrolling through the three tabs at the top of the Help window (click the left and right arrowheads).

The Help toolbar:

gives additional methods of navigating through the Help and performing operations on it. (Most of the icons in the toolbar perform the same operations as the main Topic/Keyword Index/Search tabs described above.)

8 Frequently Asked Questions

FAQ Contents

Operating System Questions

Licensing, Hosting & Components Questions

Database Questions (SQL/Data Storage)

Network, E-mail & Connection Questions

Security & Conformity Questions

User Interface & Browser Questions

Operating System Questions

Can I install Notion Pro on Windows 8?

There is no technical reason why Notion Pro should not work with Windows 8 Pro or Enterprise. However; due to the limited business user base and difficulties with using the user interface on a PC, The IMC Group does not recommend, or provide support for, Notion Pro installations on Windows 8.

Customers should upgrade to Windows 10, before installing Notion Pro.

Can I install Notion Pro on Windows 8.1?

Synergy can be installed on Windows 8.1 Pro or Enterprise. However; due to the limited business user base, The IMC Group is only able to provide limited support for Notion Pro installations on Windows 8.1; and would recommend upgrading to Windows 10, before installing Notion Pro.

Can I install Notion Pro on Mac, Linux, Windows XP or Server 2003?

No.

How do I tell if my PC is Windows Pro or Enterprise?

Note: This FAQ only applies to desktop operating systems, such as Windows 7, Windows 8.1 and Windows 10; it does **not** apply to server operating systems.

Open: Control Panel System.

Below the 'View basic information about your computer' title, there is a section headed 'Windows edition'.

Here you should see something like:

Windows 7 Professional, or Windows 7 Enterprise,

Windows 8.1 Pro, Windows 8.1 Enterprise,

Windows 10 Pro, Windows 10 Enterprise.

Some editions may show a letter code, such as 'N' at the end of the edition description, e.g. 'Windows 10 Enterprise N', this can be ignored.

If your edition of Windows is **not** shown above, then Notion Pro may not work on your

computer and should not be installed.

How do I add .Net 3.5 to Server 2012 without installation media?

Note: This requires an internet connection.

Open a command prompt as administrator, and run the following command:

dism /online /enable-feature /featurename:NetFx3 /all

Check server features, .Net Framework 3.5 should be added.

Licensing, Hosting & Components Questions

How is the system licensed?

On-premise systems will need licensing by sites, users, and add-ons if you require more than the default options.

What are the typical server requirements for the server side of the system? List the requirements for physical and virtual environments?

See the system prerequisites documentation.

How can the main server system software be supplied/hosted?

The system can be supplied as SaaS (Software as a Service) or On-Premise.

Does the system use any third party API's if so are there any cost implications?

Yes, but no cost implications to the end user.

Is there any hardware limitations?

See system prerequisites documentation.

When will the system be offline and unavailable to the user?

During the application system upgrades and patches and also during some applications of Microsoft updates to the server.

Does the system require any third party licences?

Yes at no additional cost to end user: Accepted by EULA agreement.

Can the system be installed and operated in a virtual server environment?

Yes, works with standard virtualisation technologies (VMware etc.).

If the system is supplied as SaaS (Software as a Service) in the cloud where is it

located?

We normally use UK data centres to host our systems but in principle anywhere.

If the system is supplied as SaaS (Software as a Service) in the cloud would this hosted at your premises?

No to ensure customer SLA's and security levels are maintained we outsource suppliers that meet our requirements.

If the system is supplied as SaaS (Software as a Service) in the cloud does it operate independently from the other systems?

Each customer system is allocated its own server environment therefore each system operates independently by design, only sharing the underlying resources of the cloud.

If the system is supplied as SaaS (Software as a Service) in the cloud what methods are available to prevent unauthorised access?

The system can be connected with a site to site using VPN (Virtual Private Network), and/or use a configurable firewall.

Does the system have an API (Application Programming Interface)?

There are no direct APIs available however we do provide access to data via Modbus and OPC at additional cost.

Does the client interface require any additional software (Plug-ins, Add-ons, Java, Flash, word processor, spreadsheet)?

The client interface uses just standard browser technology. Viewing user generated reports will however require a PDF reader and / or a CSV file reader.
The management tool will require software to be installed (normally on just one machine). This tool is used for a variety of hardware related configuration tasks

Is there a fixed schedule for software upgrades and patches?

No, updates are released as required.

Are there training or test environments available on the system?

Yes easily created as required.

Database Questions (SQL/Data Storage)

What SQL server can I use with Notion Pro W600B?

Microsoft SQL 2008 R2, Microsoft SQL 2012, or Microsoft SQL 2014.

Can I use Notion Pro with an Oracle SQL or a MySQL server?

No.

When I create a New Database from NotionProConfig, I get a TargetInvocationException message?

This Exception is thrown by the underlying Microsoft .Net code when your server has Federal Information Processing Standards (FIPS) mode enabled; Microsoft no longer recommend the use of FIPS mode.

To disable FIPS Mode:

Control Panel System and Security Administrative Tools Local Security Policy.

In Security Settings, expand Local Policies, and then click Security Options.

Scroll down to "System Cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing". Make sure the setting is disabled.

You will now need to use Microsoft SQL Server Management Studio to delete the notionPro database, before clicking New Database again.

What is the expected database growth?

Depends on number of sensors, Sensor types, number of alarms and logged events etc. If we took a system with 50 sensors, (40 single channel and 10 dual channel), as an example, the data growth would be approximately 700Mb per year + Alarms + log entries + SQL transaction log.

When I browse to Notion Pro I see text with SQL login or connection errors; or the NotionProDataService is showing SQL login or connection errors in the Application Event Log; what can I do?

Note: A SQL Login error can be caused by a connection issue to the SQL server instance; it is not necessarily an account login issue.

W600B systems:

Because W600B systems connect to a database on a different machine to the Notion Pro server, the Apache Service and NotionProDataService run as a specified active directory user, created by your IT Administrator or service provider so that the services can authenticate against the SQL server.

There are a number of potential causes: not rebooting after an upgrade; network connection issue; firewall changes; logins being changed on the domain; logins being changed on the SQL server or a user changed on the database; that the Notion Pro or SQL server for some reason, could not get a connection to the Customer's domain controller on a reboot; antivirus program blocking the connection on start-up; Notion Pro or SQL server

name change; database(s) being altered; to name but a few.

Note: If you request IMC Group Ltd Support and the problem turns out to be an internal IT issue, such as one of the above, then you may be charged for the support given.

Note: W600B systems must be installed and maintained by experienced IT personnel; as such this FAQ answer is intended for IT Administrators, if you are **not** an experienced IT professional, ask your IT Administrator or service provider for assistance. In order to fault find this kind of problem, you will need administrator access to both the Notion Pro Server, and the SQL Server.

If SQL Server Management Studio is installed on the Notion Pro Sever, use it to test the connection to your SQL Server.

If SQL Server Management Studio is not installed, you can test the connection using Telnet; Tenet to the SQL server on the instance port number, (the default port number is 1433); if you get a connection error message, then your IT Administrator or service provider will need to resolve the connection issue to the SQL server.

If the connection works; then you can try restarting the Apache service and the NotionProData Service – this can resolve odd login glitches.

Next check that the Login used by Notion Pro has not been altered. During installation, the Apache service, NotionProArchiveService, and NotionProDataService will have been set to use a network login account provided by your network administrator. Check that the services still log on as this account.

Check that this login still exists on the SQL server instance, and also that the user still exists on the notionPro and IMCNotionProArchive databases:

notionPro database user should have db_datareader, db_datawriter, db_backupoperator and db_owner roles.

IMCNotionProArchive database user should have db_datareader and db_datawriter roles.

Check that the login password has not been altered; try to login as the user on a network computer, or try resetting the user login on one of the Notion Pro services.

W600A systems:

There are a number of potential causes: not rebooting after an upgrade; logins being changed on the SQL server or a user changed on the database; antivirus program blocking the connection on start-up; Notion Pro server name change; database(s) being altered; and others.

Note: If you request IMC Group Ltd Support and the problem turns out to be an internal IT issue, such as one of the above, then you may be charged for the support given.

Note: In order to fault find this kind of problem, you will need to be logged onto the Notion Pro server as a local administrator.

Run SQL Server Management Studio. The *Connect to Server* dialog will show, the *Server Name* entry should show the name of your Notion Pro server and the SQLEXPRESS instance, in the form <Server name>\SQLEXPRESS; if the correct entry is not shown, select it from the drop down combo selection; click connect.

If SQL Server Management Studio cannot connect to the SQL server instance, make sure the SQL server is running. Open Control Panel Administrative Tools Services; then try starting or restarting SQL Server (SQLEXPRESS) and SQL Server Browser.

Expand Security then Logins. Check Management, and NT AUTHORITY\NETWORK SERVICE or Network Service, and NT AUTHORITY\SYSTEM or System Logins are present.

Expand Databases notionPro Secuirty Users; check that the following users are present: Management, and NT AUTHORITY\NETWORK SERVICE or Network Service, and NT AUTHORITY\SYSTEM or System.

In turn right click each User, and select properties; check the following roles:

Network Service user must have db_datareader and db_datawriter.

System must have db_datareader, db_datawriter, db_backupoperator and db_owner.

Expand IMCNotionProArchive Secuirty Users; check that the NT AUTHORITY\SYSTEM or System User has the db_datareader and db_datawriter roles.

If any of the Users, Logins, or roles is missing, they will need to be recreated; it is advisable to request IMC or your distributor to do this work.

Note: Where IMC provides support to fix changes that have been made to Users, Logins, and / or Roles; then this work will be chargeable.

How can system data be backed up?

The system has its own archive and backup routines, which allow data to be stored in a convenient location, ready to be backed by any proprietary backup program.

Can the system archive data?

Yes and the archived data to can be viewed on demand via the standard browser interface.

Is the system scalable?

Yes, within SQL data limits.

How can you retrieve a complete copy of the data-set?

All of the system backups are a complete copy of the data-set.

If hosted system contract is terminated what happens to the data?

After giving the customer the option of a copy of the data, the hosted system will be rebuilt with a fresh image and all data erased.

Are there any limits the number of concurrent users?

Only limited by SQL version and underlying system resources

Is there a limit to the data volumes on the server side of the system?

Yes limited by the version of the SQL (SQL express: 10GB, SQL Standard: > 1 terabyte)

What are the backup and data protection measures?

This depends on the system configuration, design and end user requirements.

On hosted systems what are the DR and BC plans?

Hosted Systems DR and BC considerations are configured in line with individual end user requirements. Typically DR would involve server imaging and off site data backup.

Will the system need to be off line during the back-up process?

No

Network, E-mail & Connection Questions

What is the data upload from a Network Receiver / Hybrid Receiver Base Unit to the Notion Pro server?

This depends on the number of sensor being received by the base receiver. Trying to give a size for one sensor would be of little value, as data is transferred from the base unit at about the same frequency as the sensor transmission rate; so most of the data would actually be due to the communications protocol. If we took a system with 50 sensors; then the average upload would be approximately 7700bytes. Uploads occur approximately once per minute.

Notion Pro is not working with my email server, what can I do?

First of all, check the Notion Pro Email log for error messages. And make sure that you have entered the email server name / IP address; sender email address; and user name and password correctly.

When you are sure all the settings are correct; then you can try to connect to the email server from the Notion Pro server using the Windows Telnet client.

Note: you may need to turn on the Telnet Client in Windows features first.

Open a command prompt, and type Telnet <email server host name or IP address>:<port number> <press enter>

For example: mailserver:465 or 192.168.1.12:25

You should see a login message from your email server - the exact message will depend on the email server.

If you do not see a login message, then the email sever address is either wrong, or is not reachable from the Notion Pro server; and you will need to ask your network administrator or IT service provider for assistance.

If you get a login message, then it is most likely that the email server is refusing to accept the account login credentials provided to Notion Pro.

Check the Notion Pro server machine event log for errors. Open: Control Panel Administrative Tools Event Viewer.

The select Windows Logs and then Application; look for Error entries with NotionProDataService as the Source, and Event ID's in the 33000, and 21000 ranges, e.g. 21007.

Looking at the General descriptions for these errors can give an indication of the problem.

How do I find the DNS suffix required for IMC Base Utility settings?

Open a command prompt on the Notion Pro server, or other Windows PC on the same domain, and run wmic computersystem get domain

There is no data arriving from my Base, or my ARB Module shows no Alarm screens, what can I do?

There are a number of potential causes for this problem, please work through the list below, before contacting your supplier for assistance.

Power

Have you fitted batteries to your transmitters? If not fit them now.

If the green power LED is off, then the device is not powered, you need to connect power to the device.

Radio Reception

For a Base check that radio data is being received. The green LED should flash periodically; if not move a transmitter close to the base and check again; if there is still no flashing, contact your supplier.

Network connection

The amber network LED will flash more than once a second, if a device has no network connection, or if a DHPC enabled device is unable to obtain an IP address. If this is the case carry out the following:

Look at the LED's on the network socket; the amber LED should be solid, and the green LED flashing frequently; if not you have an issue with your network connection, contact your system administrator or IT support provider for assistance.

If the device needs to use a fixed IP:

Use the IMCBaseUtility application to re-apply settings to the device, checking that the correct IP address is used.

If the device needs to use DHCP:

Use the IMCBaseUtiityl application to re-apply settings to the device, checking that the 'Use static IP Address' check box is **NOT** selected.

Also, check with your system administrator or IT support provider that the DHCP server is configured to allow your devices to obtain an address; options such MAC filtering can

prevent devices from obtaining IP settings from your DHCP server.

Device Configuration

Check that the device is correctly set-up in Notion pro:

Log into Notion Pro; and select Admin Device Configuration Edit/View Devices, this will display a table of Control Devices.

Check that the devices serial number is correct, and for a Base check that the device is a member of a Device Group.

Network Configuration

The amber network LED will flash approximately once a second, if the device has network connectivity, but is unable to connect to the Data Service on the Notion Pro server. If this is the case carry out the following:

Make sure the data service is running. On the Notion Pro server, open Control Panel Administrative Tools Services; check that the NotionProDataService is running.

If the device is configured to connect to your Notion Pro server using a hostname, make sure that the hostname is resolvable:

Open a Command prompt, and type nslookup <full hostname with DNS suffix> <press enter>

Example nslookup computer.domain.local

The command will display the name and IP address of your DNS server, followed by name and IP address of the supplied hostname. If the DNS server name and address is followed by an error message, such as *** <DNS server> can't find <hostname> then the hostname you have used is not resolvable and you will need to obtain assistance from your system administrator or IT support provider.

Make sure that any firewall on the Notion Pro server – including the Windows firewall - is not blocking the incoming device connection; and that you have added rules to allow incoming connections on the Base Data port, (default port number is 10997).

Make sure any Anti-Virus or network security product on the Notion pro server is configured it to allow the various Notion pro services to operate; if the Anti-Virus / network security product is intended for the home / consumer market, you may need to replace it with a product intended for professional use. Contact your system administrator, IT support provider, or the product vendor, for assistance.

How do I allow internet access to the Notion Pro website?

You will need to create a rule on your Corporate Firewall to allow an inbound connection to your Notion Pro server on port 80.

If you wish to use a port other than 80 for external access to the Notion Pro website, you can configure the rule to use 'Port Translation', so that the external port xxxxx is connected to port 80 on the Notion Pro server.

Example

Internal users - http://LAN-Address/notionpro

External users - http://WAN-Address/notionpro

External users with Port Translation' - http://WAN-Address:xxxx/notionpro

Note: Different Firewalls use different terminology. 'Port Translation' may be called some thing different on your Firewall.

How much internet bandwidth capacity is required for users client interface?

Several client users can be connected over a standard ADSL line.

What protocols does the system use?

SMTP, IMAP, POP3, SMS, GPRS, HTTP client access, TCP communication between sensors, bases, and backend system services.

What is RSSI?

RSSI stands for Received Signal Strength Indicator; it is an indication of the power in a signal received by a radio receiver.

Security & Conformity Questions

What is the minimum password length?

It is configurable from 4 to 40 by the system administrator

What is the Password Strength?

The system can configure password strength rules by specifying the minimum number of upper case letters, lower case letters, and numbers. Options are set by the system administrator.

Where are the passwords stored?

They are stored as non-readable encrypted strings in the SQL database

Can users change their passwords?

Yes as long as they know their old password.

Can administrators change user's passwords?

Yes they can without knowing the old password. A counter signatory will be required for this in the compliant versions.

Can the system enforce a password change at initial logon?

Yes but currently only on compliant systems

Is a user forced to change their password after an administrator has reset it?

Yes but currently only on compliant systems.

Can the system enforce password history?

Yes the password depth is set to 1 in the standard system, and is configurable up to a maximum of 10 on a compliant system. Specifying a low number for 'Enforce Password History' allows users to continually use the same small number of passwords repeatedly

Can the user id and password be the same?

No, the system will not allow the user to use a password the same as their ID.

Does the system enforce a maximum password age?

Yes, it is configurable by system administrator from 30 to 730 days.

Are accounts suspended if the user fails to change their password before or at the maximum password age?

The account is not actually suspended, but the system will not allow further access until the user has changed their password.

Are passwords encrypted?

Yes

Can the system suspend an account after a number of failed login attempts?

Yes, if the user exceeds the number of allowed retries (can be set 1 to 10) in the predefined retry period of time (can be set from 10 to 1140 minutes). The user will be locked out of the system for predefined period of time (up to 1140 minutes).

Does the system have an inactivity logout?

Yes the time period can be set from 5 to 60 minutes.

Can the system control user access rights?

Yes individually, or by assigning them to groups/roles.

Do you need any Microsoft user accounts?

Only on B variant systems, for the system to access the SQL database; but not for the users.

Does the system maintain a log of all system activity?

User logins, system settings edits, alarms, and system events are logged.

Are system activity logs date and time stamped?

Yes

Can you view or export the system activity logs?

Yes, you can view directly in the system and/or generate reports.

Are there any security implications or restrictions arising from the use of the system in a virtualised environment?

No

Does the system conform to eGov standards BS7666 for personal information?

N/A - There is no personal information held on the system.

Are there any licence implications arising from the use of the system in a virtualised environment?

No

Does the system conform to the Data Protection Act 1998?

The system does not hold any client information that is subject to the Data Protection Act 1998.

Does the system have built in audit trail to track user changes?

Yes user changes are logged along with date/time, but not the IP address of the user.

Does the system undergo regular independent security testing by an accredited organisation with recognised qualification CESG (Certified Cyber Security Consultancy)?

No

Do the Service providers that host the systems have ISO27001?

Yes

Who has access the audit trail on the system?

Access to the audit trail is set by the administrator and defined on an individual basis or by roles in the system.

Is there any system testing during the system deployment?

Yes, if the compliant option is selected

Does the system support data classification schemes such as HMG Protective Marking Scheme?

No.

Is there any personal data held on the system that needs to be transferred in accordance with the 8th principle of the Data Protection Act 1998?

No the system does not hold any personal data.

Is the data in transit appropriately encrypted?

Not in HTTP version of the product but HTTPS can be supported.

Is the System compliant with UK e-Gov standard e-GIF interoperability?

The system conforms to some of the key e-GIF policies, by adoption of the browser as the key interface presenting data and adoption of common specifications used on the Internet and World Wide Web for public sector information systems.

User Interface & Browser Questions

How can the data be viewed?

The client access is by a web browser (for a full up-to date list of compatible web browsers please contact IMC technical support)

On what devices can the data be viewed?

The target client is PC's and Laptops, it can be viewed on mobile devices (but it is not optimised for these).

Where can I view my data if my system is on my LAN?

Only via machines on your LAN, unless your firewall is configure to provide the system with a connection from WAN.

Where can I view my data if my system is in the Cloud?

From any location with internet access. This may be limited to devices on a VPN if you have selected that hosting option.

Graphs are not displaying properly, and/or date time pickers not working with Internet Explorer?

This problem is usually due to *Compatibility Mode* being enabled; go to Tools --> Compatibility View Settings, and disable *Display intranet sites in Compatibility View* .

Notion Pro does not work after a Microsoft SQL update?

Some SQL updates can leave the SQL server restricted to *Single User access; in this case* , rebooting the SQL server will usually correct the problem.

Notion Pro does not display properly in my browser after an upgrade?

Browser improve web page load times, by caching recent / frequently used pages; cached pages can cause Notion Pro to appear corrupted after an upgrade; to fix this issue, clear your browsers cache or history.

The actions required to clear cache / history cannot be laid out in this FAQ because they differ between browsers, and even between different versions of the same browser; however, a quick internet search will usually provide the required information.

9 Warnings FCC

FCC Class A Notice

Devices sold into the USA comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Modifications: Any modifications made to this device that are not approved by The IMC Group Ltd may void the authority granted to the user by the FCC to operate this equipment.

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