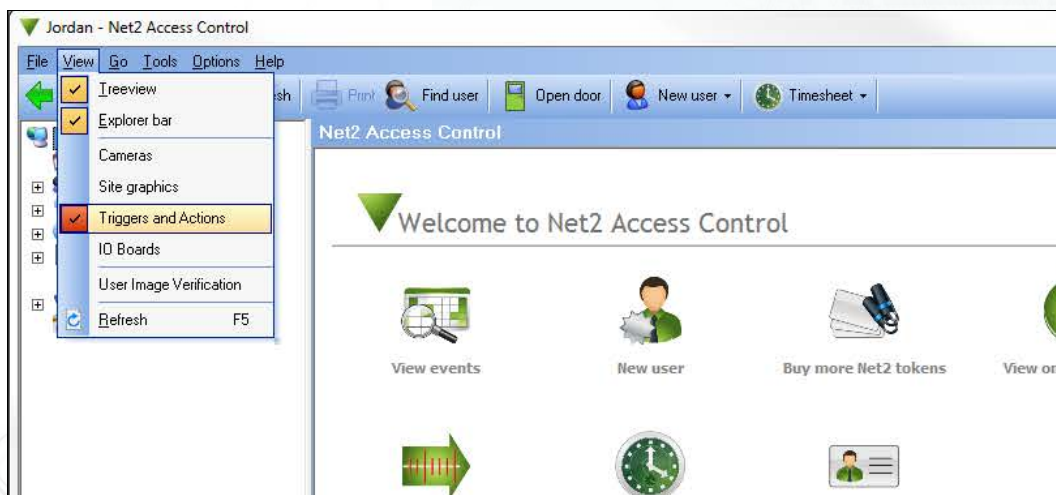# Using triggers and actions

Important

For Triggers and Actions to function correctly,
the Net2 server must be running at all times.

Triggers and Actions is a powerful feature. It can be
used to report on specific events as they occur via
email, SMS or by playing a sound file. When used in
conjunction with I/O boards, it will enable the Net2
to automatically control various systems around
a building. For example, when a user enters the
building, Net2 can be configured to automatically
turn on the lights. It can even be used for more
complex tasks. (AN1076 - Integrating Net2 with Lift
control systems - < http://paxton.info/842 >)

To use Triggers and Actions, you will need to enable
it from the menu below:

Email and SMS text messages

With Triggers and Actions, it is possible to send an email or SMS in response to a pre-defined trigger. For
instance, if an ACU goes off line, an email can be sent to the system engineer to investigate the problem.

Email and SMS servers must be configured in the Net2 Server Configuration Utility before these options will
appear in the Triggers and Actions wizard.

See the later section of this document for further information on the setting up of these servers.

Rules

The Triggers and Actions feature is based around user defined rules. When an event occurs (Trigger) that is defined in a rule, a specific action is performed.

To create a new rule

Select Triggers and Actions from tree view. Click 'Add' - The title page displays - Click 'Next'.

Choose the Trigger that will cause this rule to be run. Examples include:

When a user is granted access through a door.
When a user is denied access through a door.
When a control unit goes offline.
When a local alarm occurs at a control unit.
When the intruder alarm is unset.
When a keypad door bell is pressed.
When a system setting is changed.

And many more.

Follow the wizard through the next screens to configure any additional parameters (user group, door names, time zones, etc) that will further define that particular trigger event.

The wizard will now ask for the action(s) to be performed. These options are detailed in the following sections. Click 'Next' on the wizard to select and configure the required options.
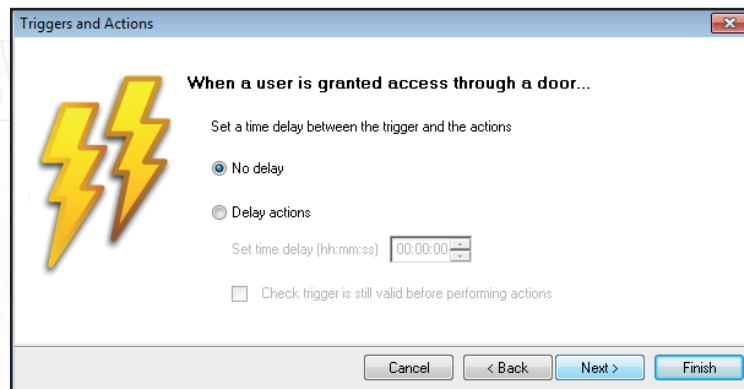
Give the rule a descriptive name and click 'Finish' to save.

Note: The double tap rule is not supported on Net2 Entry.

Action delay timer

An action can be delayed by setting a value in this screen.

I/O Relay

With the addition of an I/O board, you can also provide the trigger through direct hardware input.
(AN1066 - Installing an I/O board - < http://paxton.info/506 >)

When a specified input is pressed (active)
When a specific input is released (inactive)

We do not recommend more than 20 x I/O to be used as PC speed and network limitation may cause reliability issues.

I/O boards can also provide output relays to control other systems. (Lights, Heating, etc)

Select the I/O board and relay that will perform the action and what that action is to be.
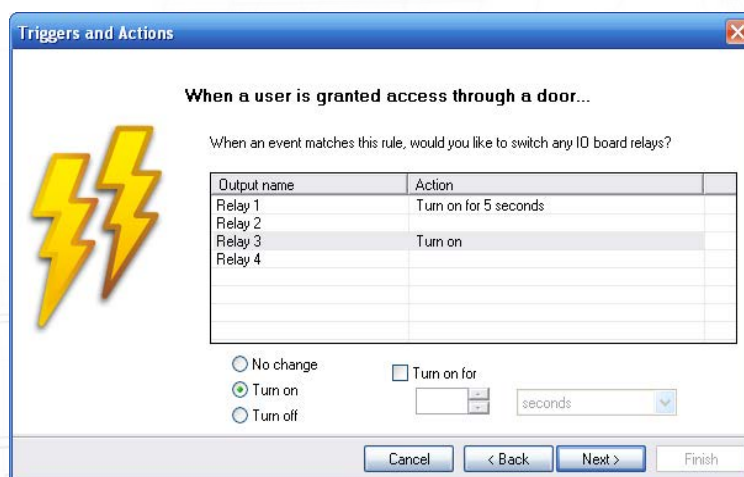
Play a sound (WAV file)

A sound can be played when an event matches the rule. Browse to the sound (*.WAV) file that you wish to play. Click Test to verify the sound. Select the client computer(s) that you want the sound file to play on by entering the computer name into the middle box and click Add. If you wish the sound to play on the server machine, place a check in the box.

Email option

Enter the email address of the recipient, sender and subject in the fields. Multiple email addresses can be used by inserting a ; between each address.

Type in the message text in the box below. You can add event detail by selecting the required data field and clicking insert.
Example:
    On {date} at {time},   {username} had an {description} event at the {doorname}
This would be sent as:
    On 22/04/2007 at 11:00,   Joe Bloggs had an Access Denied event at the Back Door.

The Highlight button will show the inserted fields, to help you check the final layout.

SMS option

Enter the number that the SMS is to be sent to and then enter the message text in the same format as described previously for email messages. Multiple SMS numbers can be used by inserting a ; between each number in the list.

Example:
　　On {date} at {time},　{username} had an {description} event at the {doorname}

This would be sent as:
　　On 22/04/2007 at 11:00,　Joe Bloggs had an Access Denied event at the Back Door.

Lockdown

Lockdown is the facility to secure the site through a single action by disabling access through selected doors. This includes disabling exit buttons and relocking doors held open by time zones.

For a description of this special security feature see: AN1122 - How to configure Security Lockdown
< http://paxton.info/1743 >
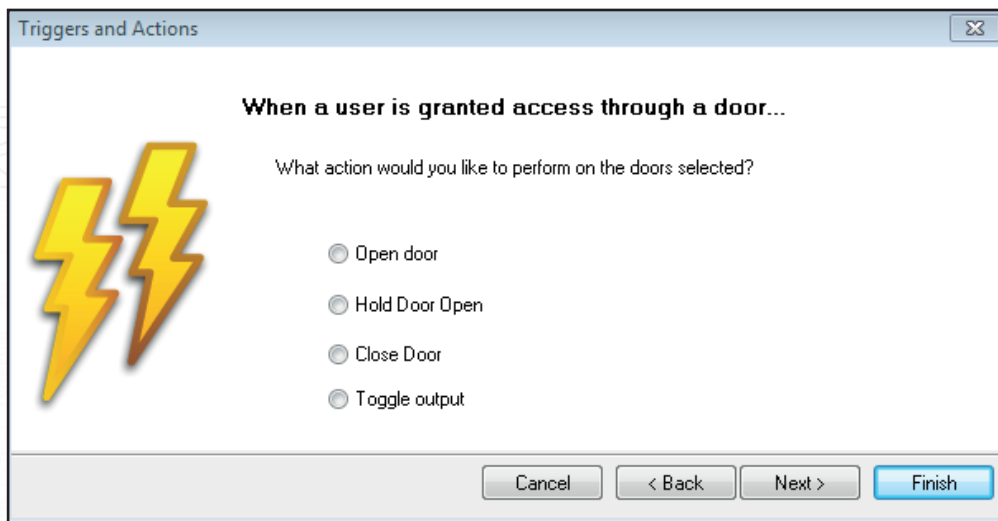
Control a Door

You can directly control a door lock by selecting an action on this screen.
The open door function unlocks the door for the 'Door open time' and it then relocks.

The Hold Door Open function unlocks the door and must be reset with another T&A rule using the 'Close Door' function to relock the door.

Run a .exe file
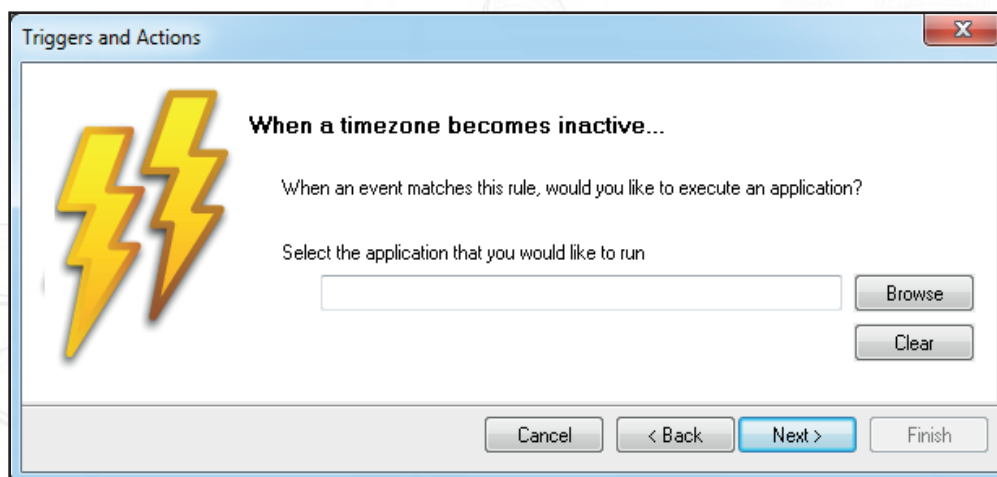
You can directly run a .exe program from a trigger.
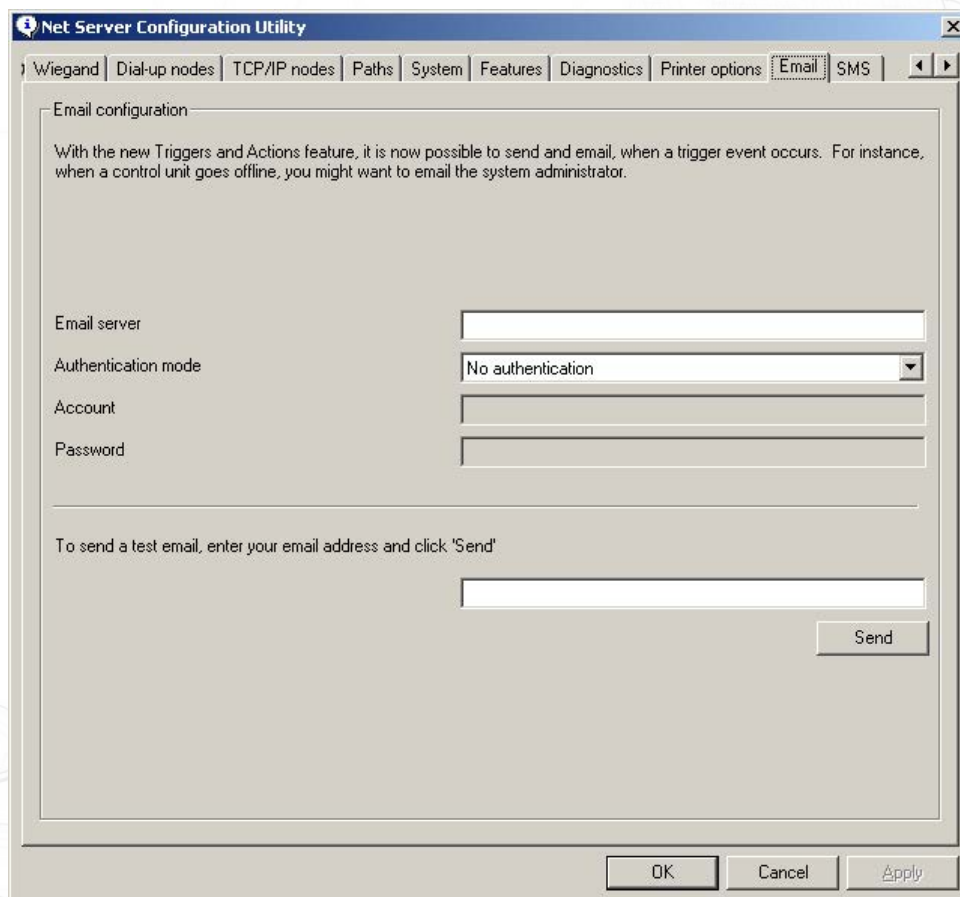
Browse for the program and click ' Next'.

Email and SMS servers must be configured in the Net2 Server Configuration Utility before these options will appear in the Triggers and Actions wizard.

Setting up the email server

Run the Net2 Server Configuration Utility. Click on the email tab and enter the relevant details for the email server. This is normally the servers name or IP address.

If authentication is being used select Basic or NTLM authentication, enter the account name and password.

Check that the email configuration is correct by sending a test email. Enter your email address into the box and click the Send button. A test email should be received, confirming that the settings are correct.

If the test email fails, check that any anti-virus software is not blocking port 25.

It is possible to test whether the port is available using HyperTerminal. Open HyperTerminal through Start/Programs/Accessories/Communications/HyperTerminal. Create a new connection. Connect using TCP/IP (Winsock). The Host address is the email server and the port number needs to be set to 25. If the port is available, details of the server will be shown on the screen.

Setting up the SMS server

To enable SMS you must have an account with www.textanywhere.net.

Run the Net2 server configuration utility. In the SMS tab click the Create button which will connect you to the Textanywhere website. Fill in the Open Account details.   When the account has been created you will receive an email. A second email will follow shortly after confirming that your account is now active.

Log in to the Textanywhere website through the client log in link and enter your email and password. You need to note the Client_ID and Client_Pass as shown in the account details page.

In the Net2 Server Configuration Utility enter your Textanywhere Client_ID into the Account field and Client_Pass into the Password field. The Originator field may be left blank, Textanywhere will use the mobile number associated with the account. The billing reference must be entered.

Send a test SMS by entering a telephone number into the box and clicking the Send button. A test SMS should be received to confirm that the settings are correct.