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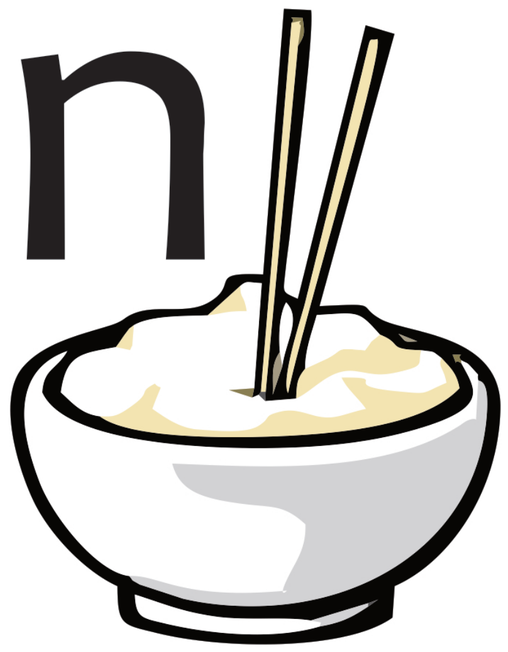

URC Toolkit Module

Installation and Usage Guide

Revision: 20180130
Date: Thursday, March 8, 2018
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Contents

Overview

The URC Toolkit consists of 4 modules. The included modules are Custom Events, Retriggerable One Shot, Repeat Timer and Wake On Lan. All of the modules work with a single licence code.

Custom Event

The Custom Event module allows you to turn any RS-232 or IP One Way driver in to a Two Way driver. You can simply take this module, modify any of your one way drivers to add the CustomEvent vfd and when you add your driver to a project it will now have an Automation Event.

The module will pass through any of your one way commands so you don’t need to modify anything to get this working. The Automation Event has a match field that you enter the expect result and when that result appears it will trigger an event allowing you to create any macro you like based on feedback from that device.

There is an example section below that describes some of the uses of this module.

Retriggerable One Shot

The Retriggerable One Shot module allows for PIR like control over any external trigger. The module is setup with a timer and uses a Two Way command as a trigger. Each time the trigger is hit the timer restarts and only when the timer has expired without the trigger being hit again will the timer event fire. Examples of its use are detailed in the sections below.

Repeat Timer

The Repeat timer can be used to set up to trigger a basic repeating event. Simply set up a time for the event in seconds, minutes, hours or days, giving it an ID in the setup and when the interval is reached the timer will fire. At this point it will start its timing again. It is also possible to stop an existing timer that is running.

Wake On Lan

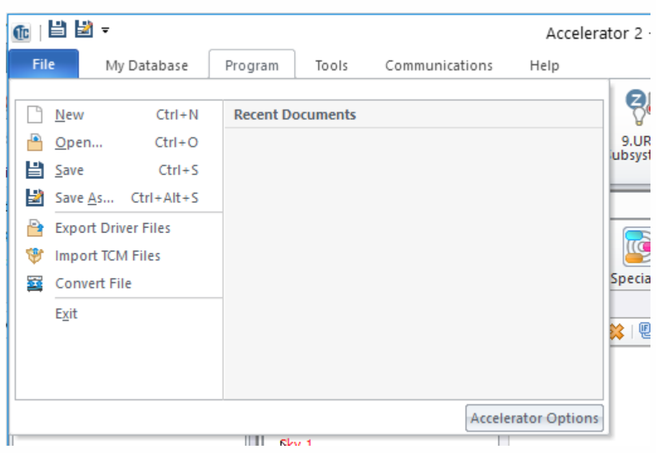
The Wake On Lan module allows you to send a magic packet to the device you specify. All you need to do is add the MAC address to the Two Way command and your good to go.

Installation

Import the TCM in to accelerator

The zip file that included this documentation has the TCM file you will need to import. Go to the file menu, select import TCM Files and load the provided file.
(for more information check http://www.urccontrolroom.com/tc/software/tools/tcm/start)

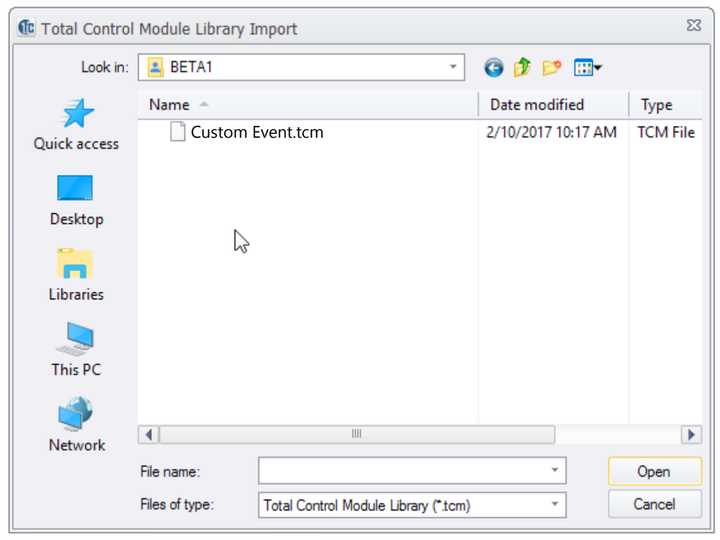
The instruction below relates to the Custom Event module but the process is the same for each of the other modules as well.
The first step is to download and extract the module from the zip file. It doesn't matter where you store the file but we advise keeping them together.

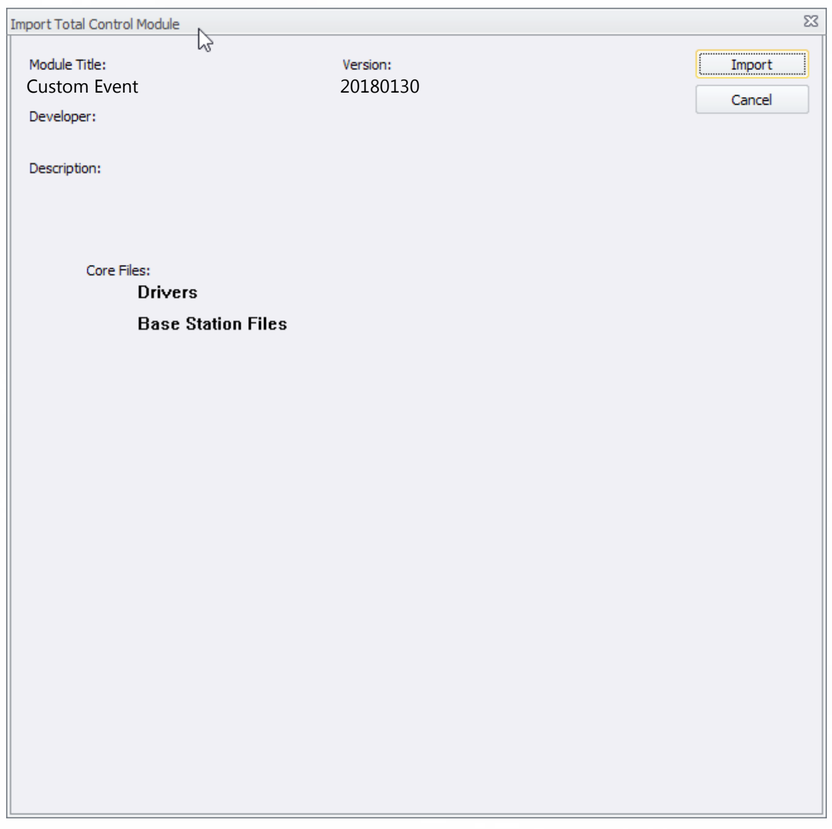


Click on the file menu and select

Import TCM Files.

find the Custom Event TCM file you have downloaded select it and click on open





Finally, double check that the module details are correct and hit import.

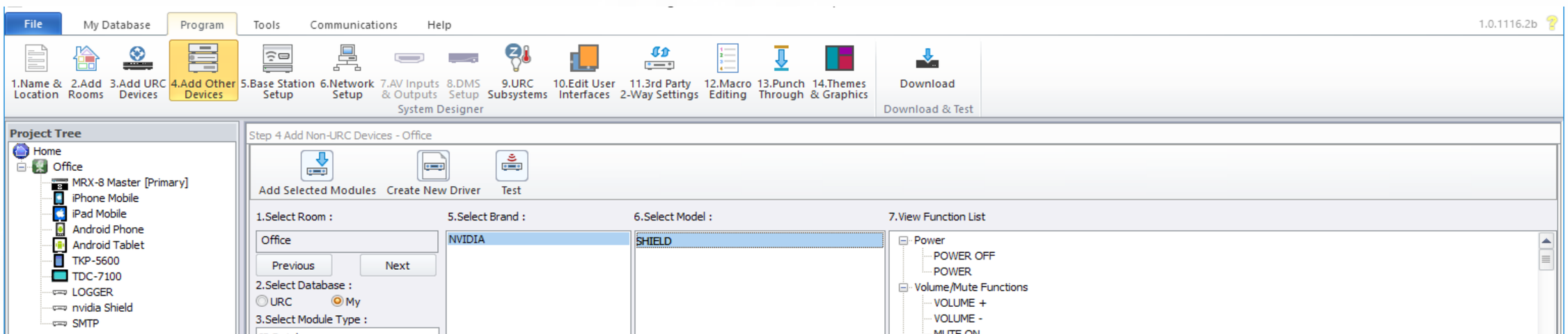
Installation

Add the Custom Event module to Accelerator

This module is designed to work with all of your Custom Event devices using a single module so you will only need to add it to one room.

Go to Step 4. Add Other Devices and Add Selected Modules.

Step 1 - select the room for the module
Step 2 - Select My
Step 3 - Select IP Database
Step 4 - Select DVR
Step 5 - Select AMAZON
Step 6 - Select CUSTOMEVENT

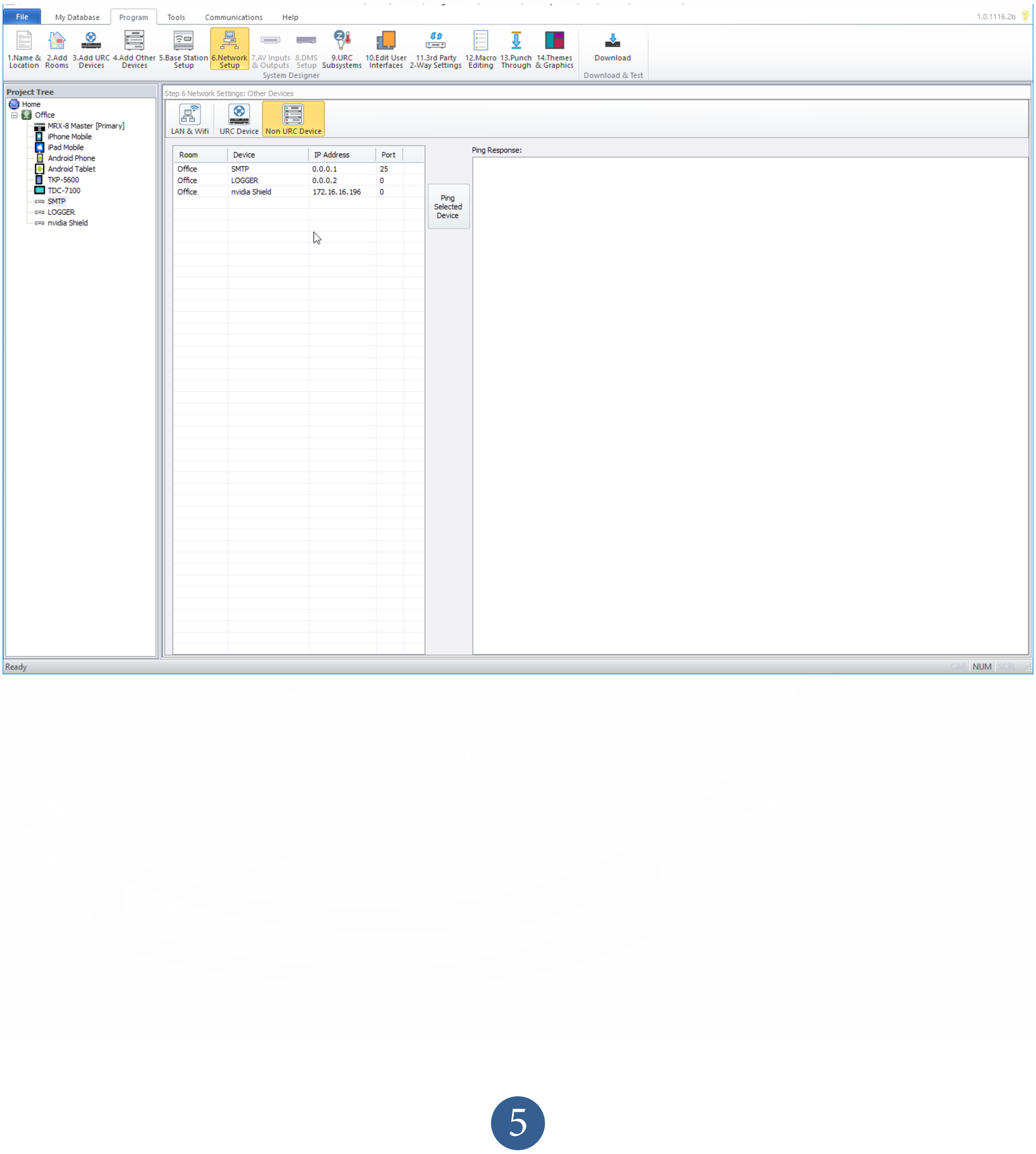


Installation

Add the network setting for the Custom Event module

The Custom Event module requires an IP address but not a port number to function.

Enter the IP address of the unit and leave the port set to 0.

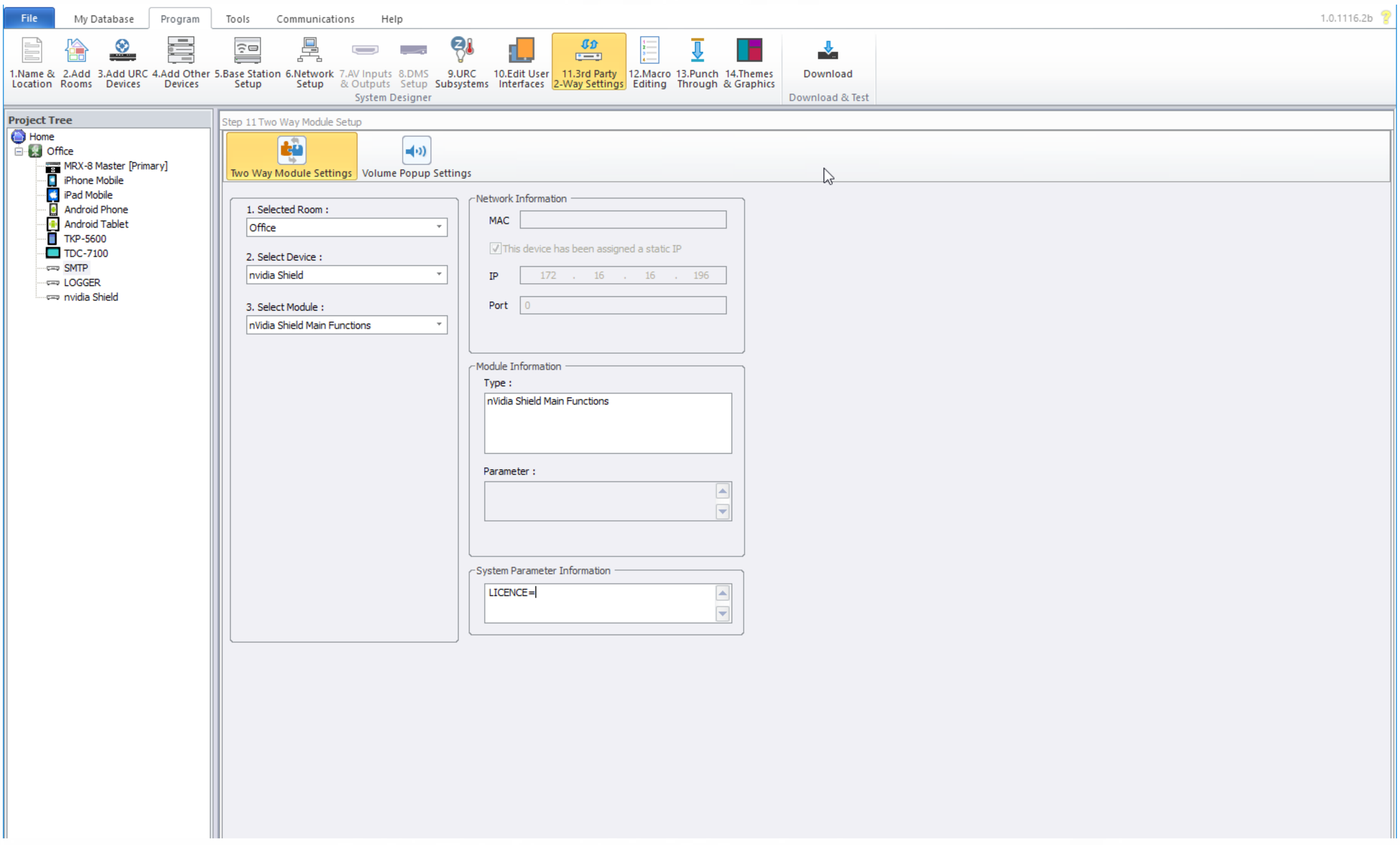


Installation

Add the licence code

The Custom Event module needs a licence to work. To add the licence go to Step 11 in Accelerator and select the Two Way Module Settings option. In the system parameter Information box enter your licence code.

You will now need to setup the accounts required to use this module and enter those details once you have them in this parameters field.



Obtaining a Licence

A licence can be obtained from driverCentral http://www.drivercentral.io. You will need to create an account to obtain a copy of the module.

The module will also work for our free showroom licence that you can apply for at http://www.chowmainsoft.com/urc-dealer-showroom.

The module will also start and automatic 7 day trial if you leave the licence field blank.

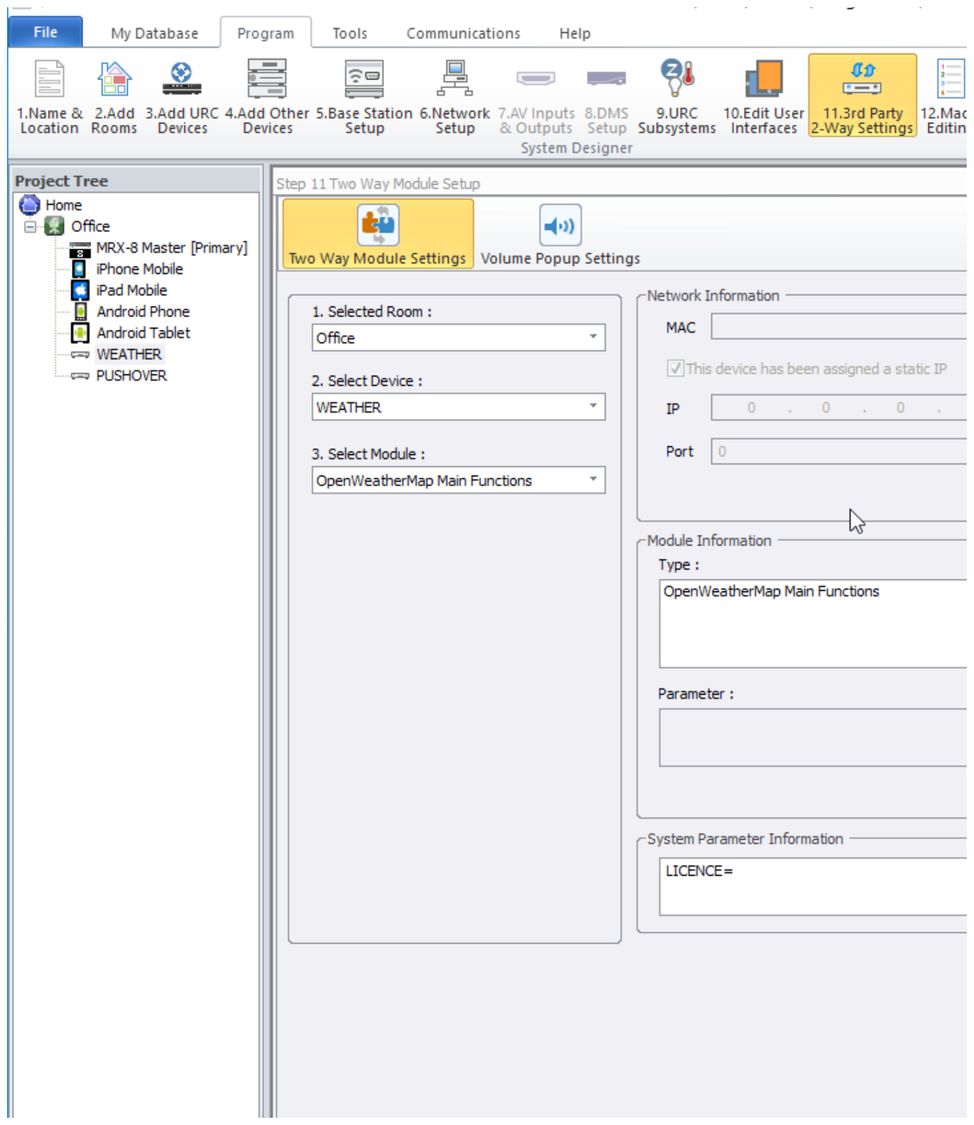
System Parameters

The Custom Event module only requires a licence code, to work. It also accepts some additional parameters for more advanced configuration if you need it.
All system parameters are entered in the following format

KEY=VALUE

The following table details the system parameters that work with this module.

KEY	PARAMETER
LICENCE	Licence code to register the driver
DEBUG	Puts the module in to it's debug mode



DEBUG parameter

If the DEBUG parameter is present and set to ON (DEBUG=ON) then detailed log files will be written to the base station. The log files can be fetched by connecting to the base station with FTP and looking in the /Common/Custom Event folder. This will cause additional load on the processor so it should be left off unless you are asked to turn it on.

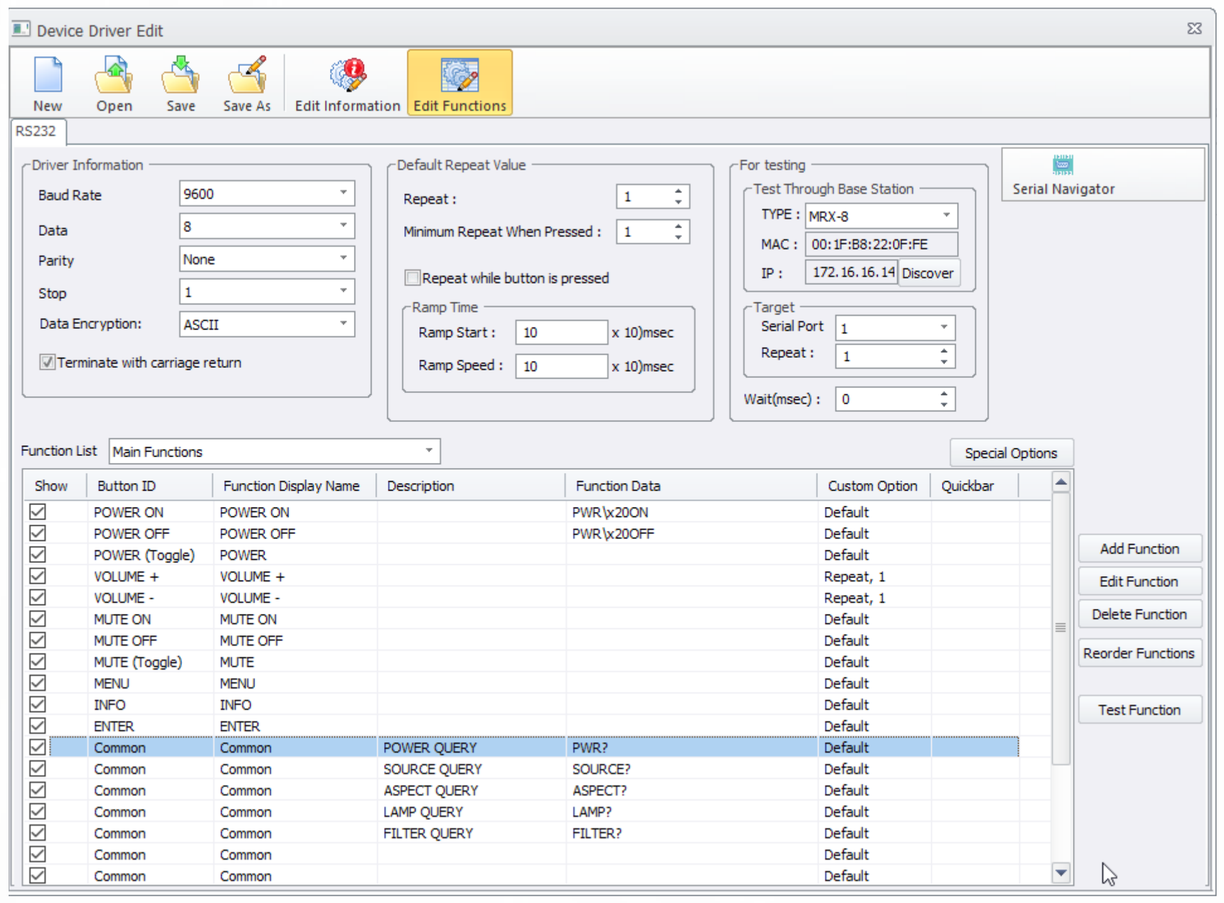
Custom Event Setup

The Custom Event module is a slightly different setup to most URC modules. In most cases the modules are provided with a working driver (csd file) that you use in your project.

The custom event module is designed to be used with a driver that you have created. We will use an Epson project as an exmple below and show how to use this module to add the ability to track the lamp hours the projector has used.

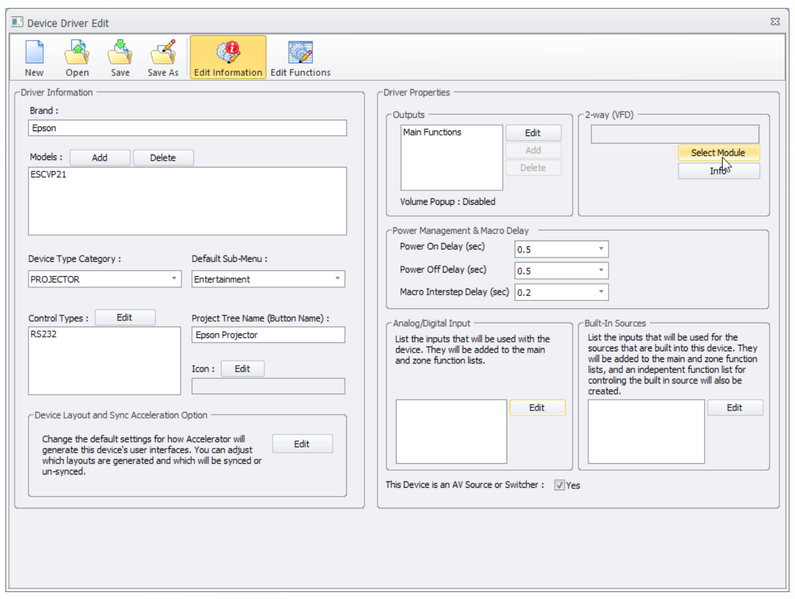
Create your driver

The first step is to create your driver as per usual. In the example shown to the right I have added codes in for querying the power, lamp hours, current source, aspect ratio and the filter state.



These codes will send back data to URC that we need to intercept and interpret. To do that we need to add the custom event module to this driver.

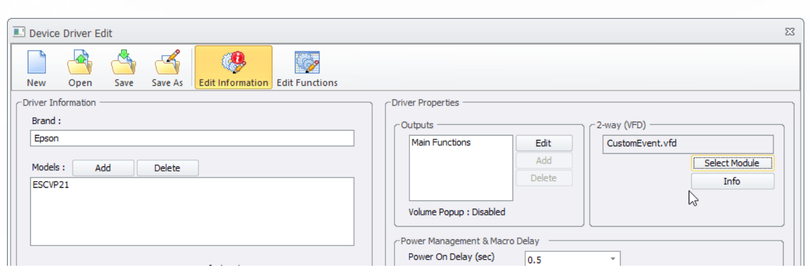
Add the Custom Module to your driver

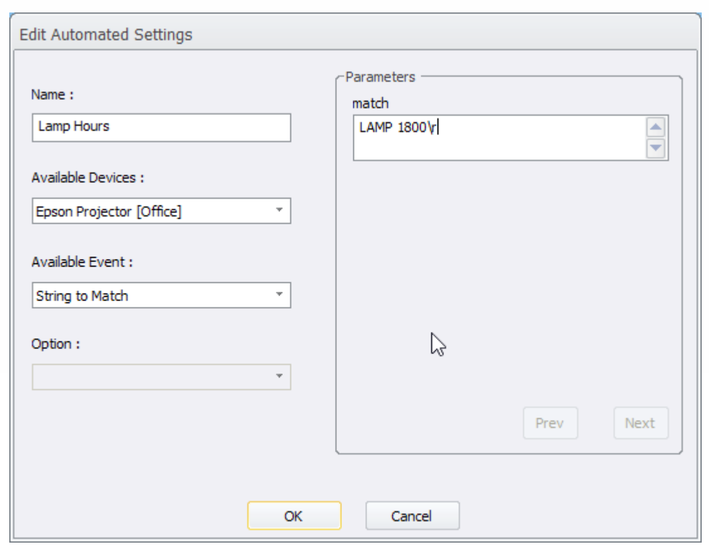


To add the Custom Event module to your driver click the Select Module button at the top right of th Edit Information screen.

Next select CustomEvent.vfd from the list of modules presented and then Click OK.

You will now have the Custom Events module attached to this driver.

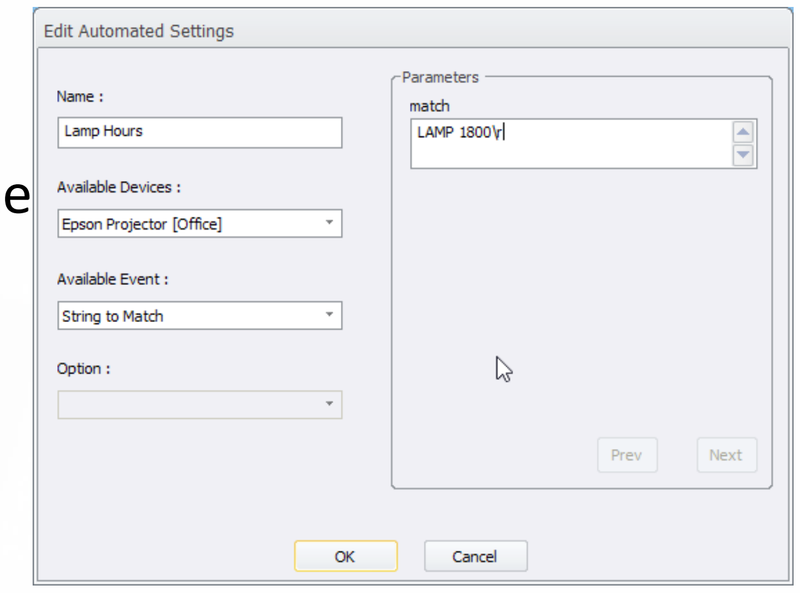




Custom Event Two Way Commands

The Custom Event module has a single Two Way Command.

The Two Way events are found under the driver you have created. The command needs one parameter - the match.



The Match string need to be the exact string you will receive from the device.

In our case we want to get the lamp hours. The module has been configured to look for a return string on LAMP 1800 which represents 1800 hours. This is simulating a lamp with a lifespan of around 2000. Ideally we want to know when it is getting close to running out so we can order a new one in and have it ready for when it does expire.

For this to work we need to have a timer running every hour (like the Repeat module discussed below) to check the current lamp hours.

Once the lamp hours match, we can send an email or notification to indicate the lamp is getting close to its end of life.

Parameter Details

PARAMETER	DESCRIPTION
Match	The exact string to match from the device the driver is communicating with.

Repeat Two Way Commands and Events

The Repeat module has two Two Way Commands and one event.

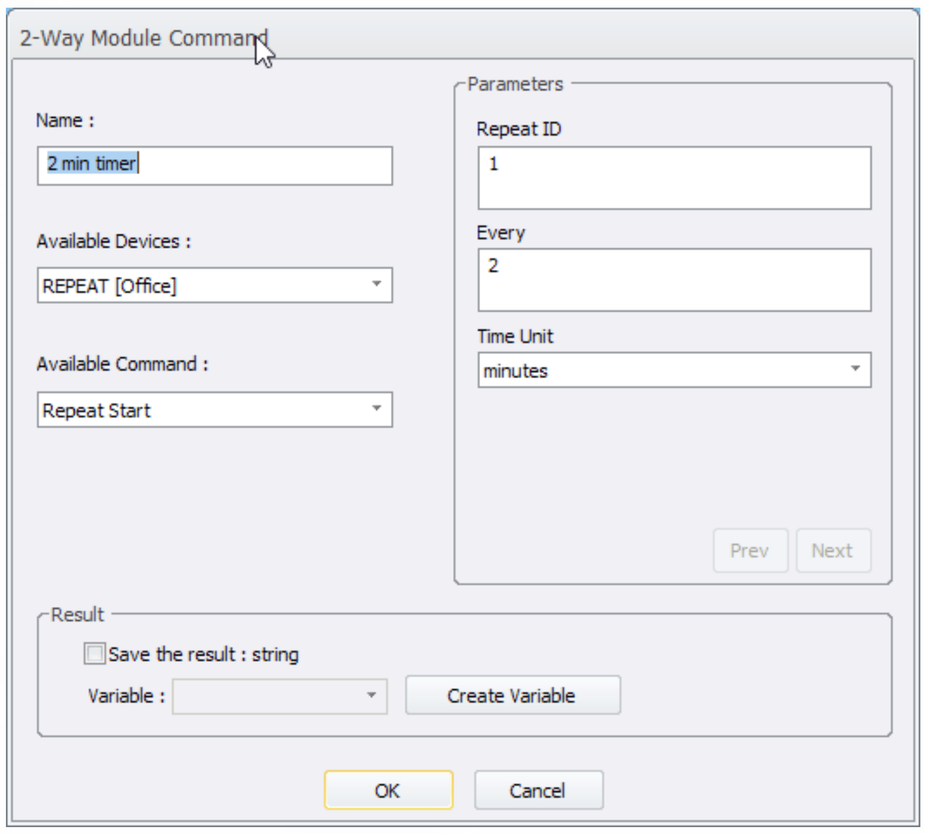
Each Two Way Command will be detailed below with a description of the parameters it requires and the results it sends back.

Repeat Start

The Repeat Start Two Way command is used to set the repeat rate and start the timer running.

It requires a Repeat ID (number), a time unit (seconds, minutes, hours or days) and the actual time in the Every field.

The image to the left show a timer set to run every 2 minutes.



Parameter Details

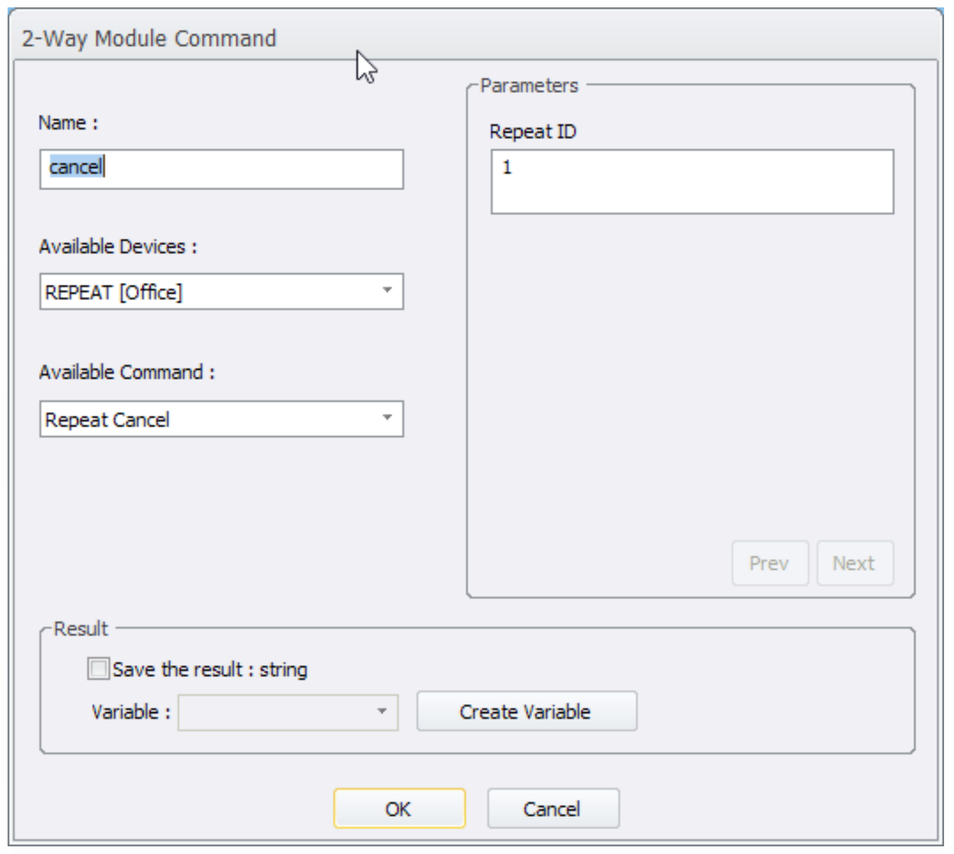
PARAMETER	DESCRIPTION
Repeat ID	The ID that is used for the device event and for the cancel Two Way command.
Every	The every field takes a number that represents the duration (in the units as listed below)
Time Unit	The unit to use for Every. This can be seconds, minutes, hours or days.

Repeat Two Way Commands and Events

Repeat Cancel

The Repeat Cancel Two Way command is used to stop a running timer.

It requires the Repeat ID of the running timer.



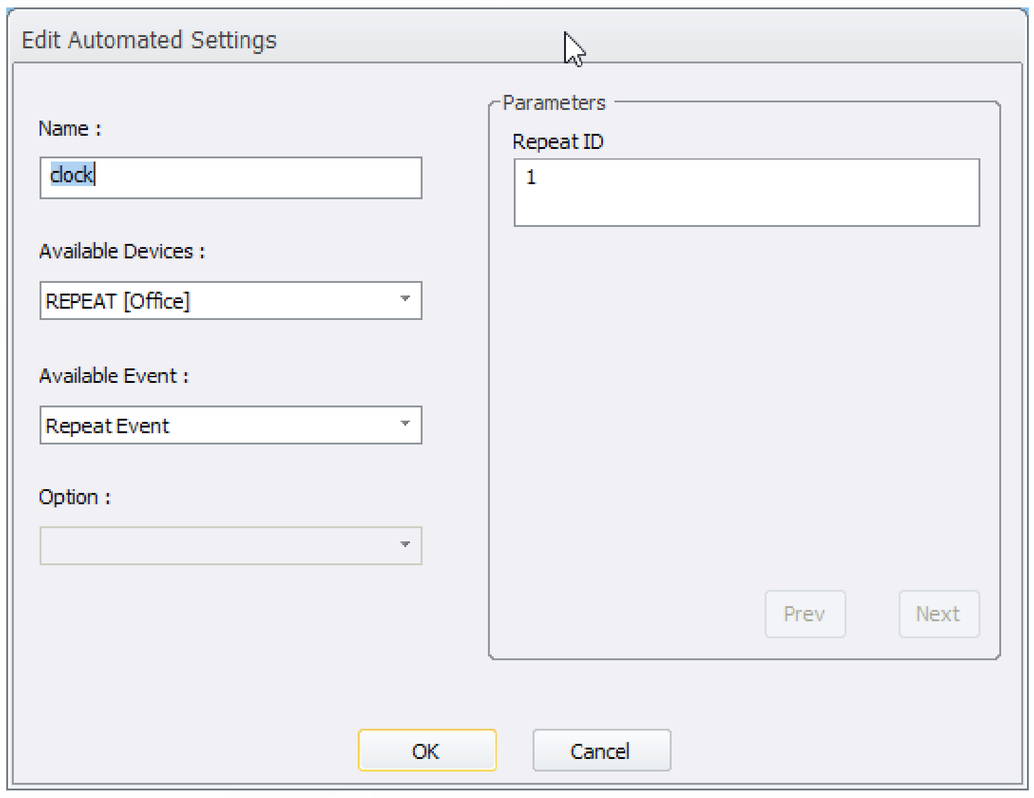
Parameter Details

PARAMETER	DESCRIPTION
Repeat ID	The ID that is used for the device event and for the cancel Two Way command.

Repeat Device Event

The Repeat module will trigger a device event every time the duration set in the Two Way command is reached.

This event takes a single parameter, the Repeat ID.



Parameter Details

PARAMETER	DESCRIPTION
Repeat ID	The ID that is used for the device event and for the cancel Two Way command.

Retriggerable One Shot Two Way and Events

The Retriggerable One Shot (hereafter ROS) module has two Two Way Commands and one event.

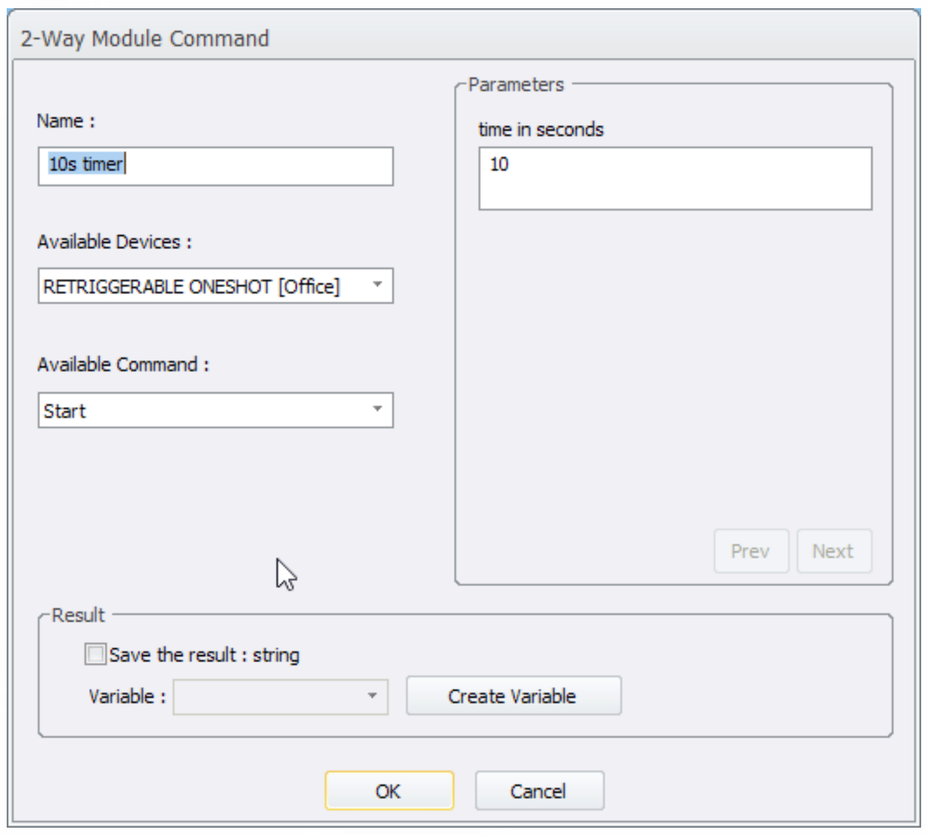
Each Two Way Command will be detailed below with a description of the parameters it requires and the results it sends back.

ROS Start

The ROS Start Two Way command is used to set the time and start the timer running.

It requires a time in seconds that the trigger should run for after the last trigger is received.

The image to the left show a timer set to run for 10 seconds.



Parameter Details

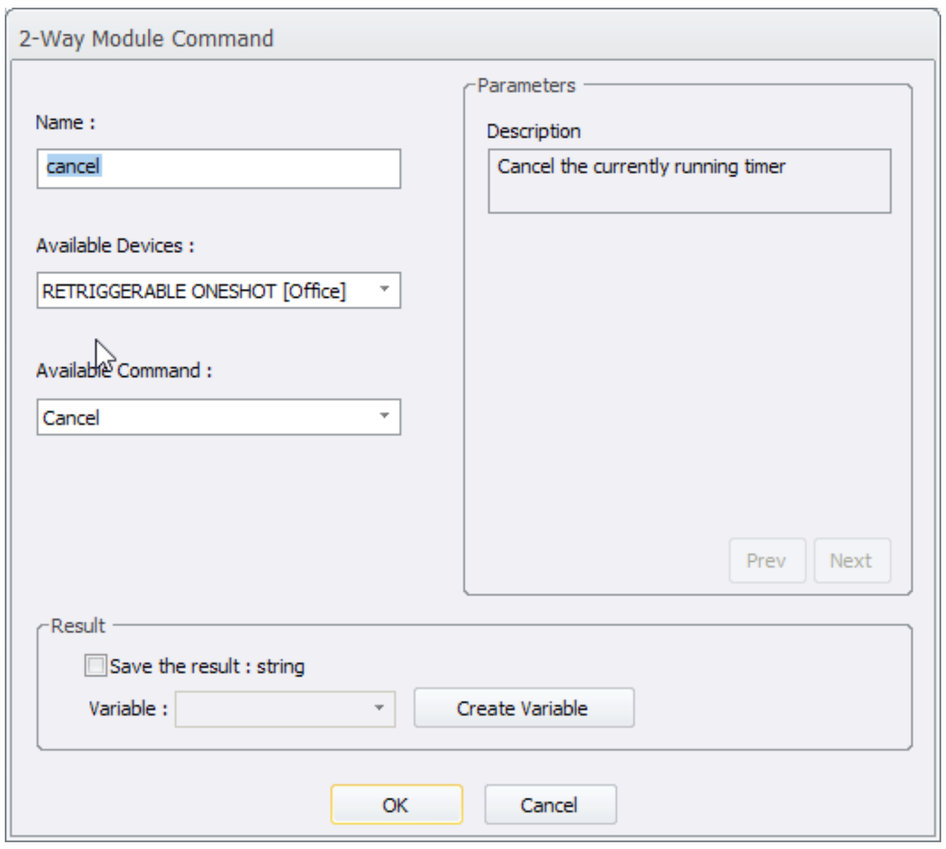
PARAMETER	DESCRIPTION
time in seconds	The time to run for after the last trig is pressed.

Retriggerable One Shot Two Way and Events

ROS Cancel

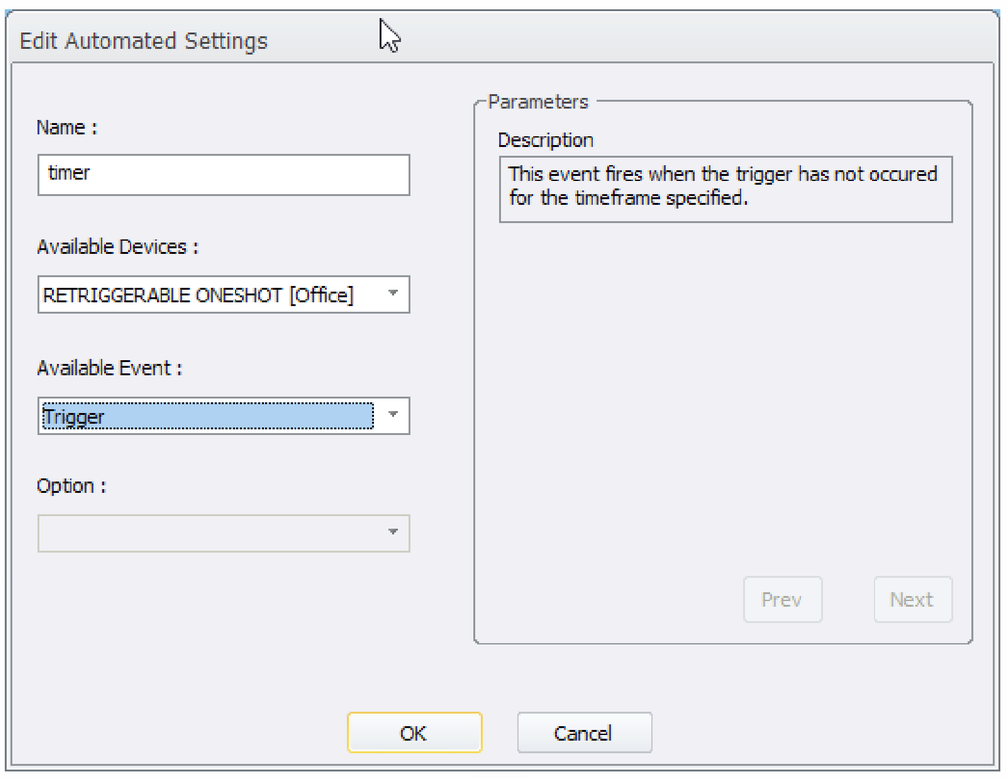
The ROS Cancel Two Way command is used to stop a running timer.

Regardless of when the last time trigger was used, this will kill the timer and it will never trigger.



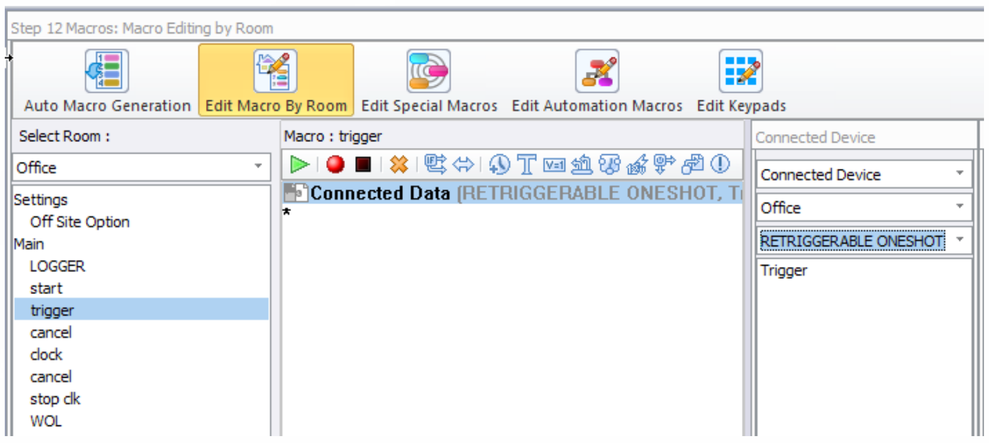
ROS Device Event

The ROS module will trigger a device event once the duration set in the start command has occured with no new trigger press.



ROS Trigger

The ROS trigger is avaiable from Connected Devices. Just attach this command to whatever your using as an input for the ROS.

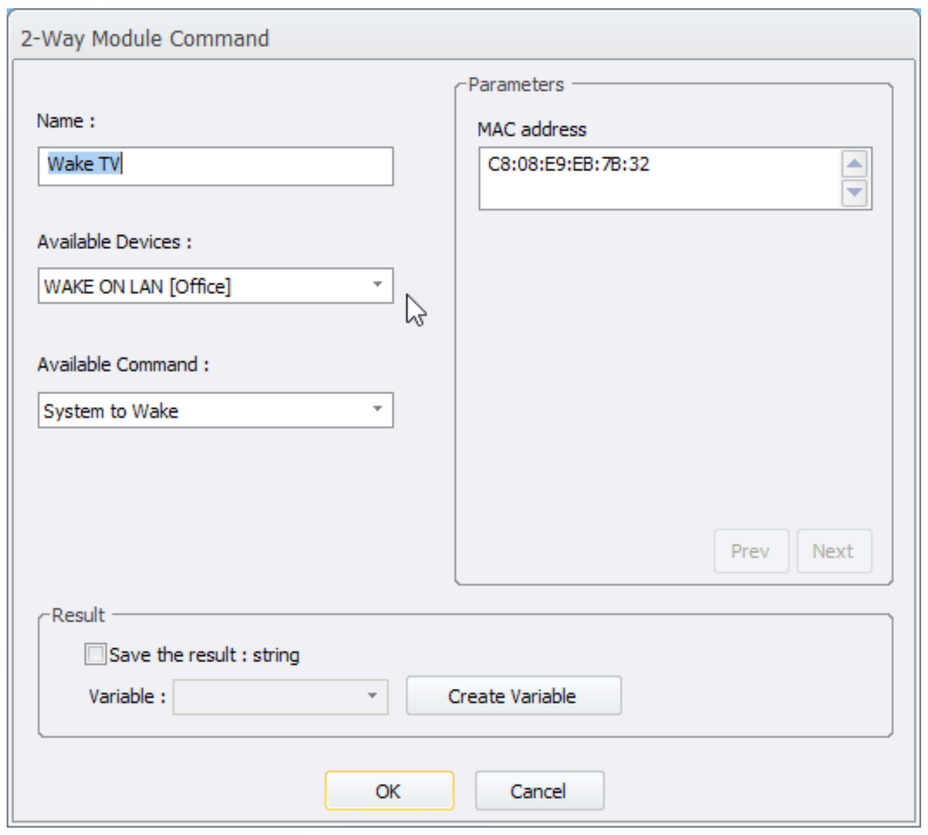


Wake On Lan Two Way Command

The Wake On Lan module is designed to take the potential for errors out of entering a long wake on lan string into a URC driver. Simply enter the MAC address into the parameter field of this Two Way command and your done.

System To Wake

The Wake On Lan System To Wake Two Way command iswake the device specified in the MAC address parameter.



Simply enter the MAC address into this field and your done. The MAC address can use colons (AA:BB:CC:DD:EE:FF), dashes (AA-BB-CC-DD-EE-FF) or spaces (AA BB CC DD EE FF) as separators between each octet or you can leave no spaces at all (AABBCCDDEEFF). The mac address can be in upper or lower case

Parameter Details

PARAMETER	DESCRIPTION
Mac Address	TheMAC address of the device you wish to wake.

Module History

Version 20180304

- Inital release