



App Note 116

PulseWorx Gateway

Three things to know about the scheduler

In addition to acting as a connection point to your home network from mobile platforms, the Gateway also includes an autonomous scheduler capable of activating or deactivating scenes based upon the time of day. The Gateway User Guide contains a lot of information on how to configure and operate the scheduler both in UPStart and in the mobile platforms. You may want to refer to those sections in the user guide for background on the scheduler.

This tip covers three areas that arise when users first approach the scheduler: How to control a single device, how to control a scene differently than the devices would normally respond as their presets are configured, and how to disable and re-enable control of a scheduled device.

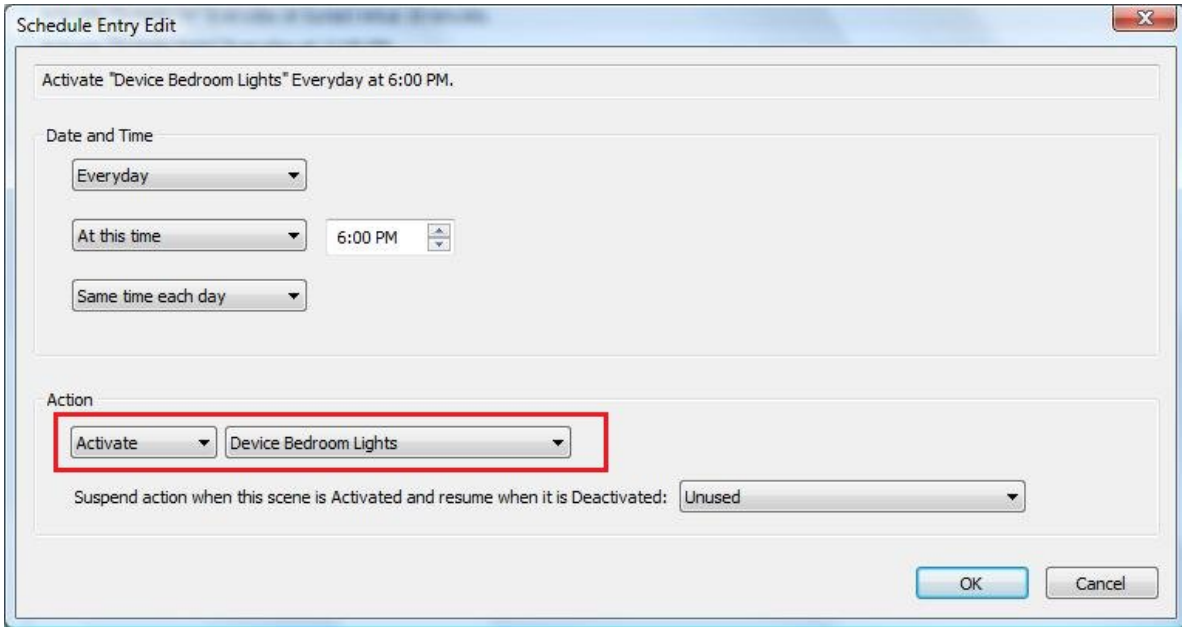
The first question, "How to turn a single device on or off" has a simple answer: You can't directly. But continue reading and you will find that it can be done with just some small extra work. The scheduler is similar to UPB in that it is scene based. When you press a button on a keypad to turn on "that light," you really are configuring the button to send a "scene activate" command and the scene being activated has a preset in the device you are controlling. The keypad sends a scene command and the device – or devices – respond if they have that scene in their receive components table. The entry in the receive components table says if the device should respond and to what level and what rate.

If you plan to work with the Gateway scheduler here is a tip: For every device you want to control by the scheduler create a scene for the device and add that scene to the device's receive components table with the level best suited for this device at the rate you want. You could name the scene the same as the device name or, to make it easier to locate in a list of scene names, you could prefix the scene name with a "Device" prefix. For example, the "Lights" device in the "Bedroom" could have a scene named "Bedroom Lights" or "Device Bedroom Lights."

Now any device you want to control "directly" can just have that scene activated or deactivated. Here is a schedule entry that does just that:



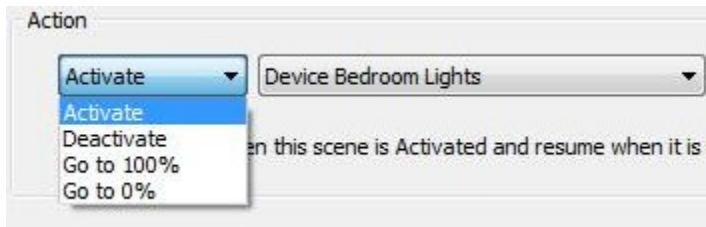
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One of the best practices to use when working with the Gateway – or UPB installations in general – is to implement a scene naming convention and stick to it. You will have some scenes that work on whole groups of devices and other scenes that control a single device. The naming convention suggested here – prefix single device scenes with "device" followed by the room and device name – is just a suggestion. Come up with one that you like.

The second topic to cover is the limitation of using the scene activate command. When a scene is activated the devices respond in the manner as stored in their receive components table: they go to a pre-selected level at a pre-selected rate. Here is a way around that limitation.

The scheduler offers in addition to activate and deactivate two other choices: Go to 100% and Go to 0%.

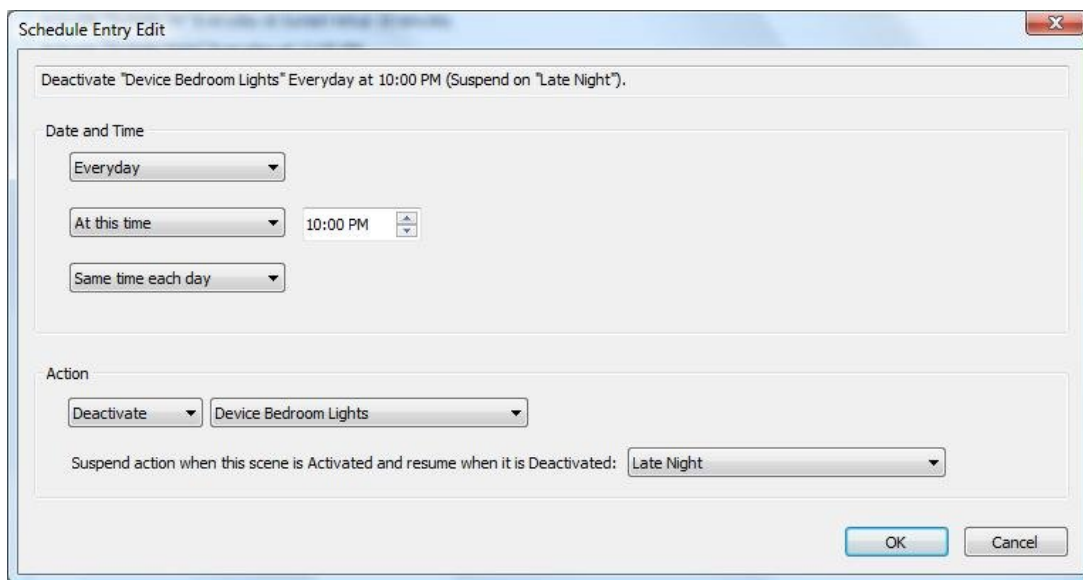


Why would you use these? To answer that question, look at the receive components table entry for this device:



When this scene is activated the device goes to 80% in 10 seconds. If you use the "Activate" option that is what happens. If you use the "Go to 100%" option then the device will go to 100% at the default rate configured in the device - ignoring the level and rate in the receive components table entry. Unfortunately, the currently implemented scheduler doesn't give you any other choices of a level besides 100% and 0%.

The last point to cover about the scheduler is how to turn it on or off for a device. For example, you may have some lights scheduled to go off at 10pm but you can override that without unplugging the Gateway. Each schedule entry can also specify a scene that controls it. For example:



As the dialog text says, when the scene "Late night" is activated this schedule entry – controlling the bedroom lights off at 10pm –will not happen. Once the scene "Late night" is deactivated then the schedule entry will happen as usual.

One way to have that late night scene be activated and deactivated is to assign it to a keypad button with the button configured as a toggle. When you press the "Late night" button the scene is activated – and the keypad LED illuminates to show you that it is active. When you press the button again the scene is deactivated and the schedule entries that are controlled by it go back to their normal operation.

For a final advanced example, you could schedule the "Late night" scene to be deactivated at say, 2am every day. That way you don't have to remember to push the button to deactivate that scene and so to re-activate the controlled schedule entries. The Gateway itself re-activates them by deactivating the controlling scene at 2am.