

# Smart Watering with Rachio

The **Smart Watering with Rachio** driver suite enables seamless Control4 integration with **Rachio Irrigation Controllers** and **Smart Hose Timers**. It includes two drivers:

- **Smart Watering with Rachio:** The main proxy driver for the Rachio API connection.
- **Smart Watering Valve:** Represents individual sprinkler zones or Smart Hose Timers.

## Installation and Updating

### Installation Steps

1. Unzip the driver package.
2. In Composer Pro:
  - Go to **Driver > Add or Update Driver or Agent**.
  - Add `smart_watering.c4z` , then `smart_watering_valve.c4z` .
  - **Both drivers must be added before proceeding.**

### Existing users

As of version **1.4.0 (build 104000)**, driver filenames have changed. Users who began using this driver before version 1.4.0 are likely using legacy filenames. Current driver downloads from Driver Central only include the new filenames. Legacy files will continue to receive automatic updates via Driver Central until version 2.0.0.

Current Filename	Legacy Filename
<code>smart_watering.c4z</code>	<code>rachio_smart_watering.c4z</code>
<code>smart_watering_valve.c4z</code>	<code>rachio_smart_hose_timer.c4z</code>

## Configuration

### Prerequisites

1. Ensure the user has a Rachio account: <https://app.rach.io>.
2. Rachio devices must be set up in the Rachio account.
3. Obtain the **Rachio API Key**:
  - In Web: Account Settings > **GET API KEY**
  - In App: Tap Profile Icon > **API Key Copy**
  - Guide: [Rachio API Docs](#)

### Initial Setup

1. In **System Design**, add **Smart Watering with Rachio** to the project.
2. Select the driver in the project. In the **Properties** tab:
  - Paste the API key into `API Key` and click **Set**.
  - Confirm `API Status` and `User ID` populate correctly.

### Adding Devices

#### Automatic

1. In the **Actions** tab, choose **Add Devices** and click **Set**.
- Creates a valve device for each active sprinkler zone and Smart Hose Timer and automatically binds the connection.
  - Devices appear in the current room. Move them elsewhere in the project, if desired. For example, to an 'Exterior' or 'Outside' room.
  - Re-run **Add Devices** to include newly added or re-enabled zones.

#### Manual (Optional)

1. In **Actions**, run **Create Bindings**.
2. Add a **Smart Watering Valve** driver to the project.
3. Link a valve proxy binding from the main driver through the **Connections** tab.

## Configure Valve Drivers (optional)

For each 'Smart Watering Valve` device that was created, you can optionally set a few configuration options.

1. Icon Set: The icons to use in navigator. Options consist of 'Hose' for Smart Hose Timer, 'Grass' and 'Flowers'.
2. Timer Values: Specify the watering durations available through the Navigator UI. Example: If set to 5,10,15,30,60, tapping the Navigator button once sets a 5-minute timer, twice sets 10 minutes, and so on. Valid values are displayed beneath the property in Composer.
3. On Default Time: This value is used when activating the valve through a keypad button (using the On control output). Default is 10 minutes.

## Smart Watering Valve Features

Each sprinkler zone or hose timer in Rachio is connected to a **Smart Watering Valve** device. This provides:

- An experience button in Navigator for runtime visibility and control
- Support for physical keypad connections
- Various variables, events, commands, and conditionals to facilitate programming

### Keypad Button Support

Button link control outputs are available on each valve.

- **Toggle** – Toggles valve state
  - **On** – Turns valve on for `On Default Time`
  - **Off** – Immediately stops watering
1. In **Connections**, find the sprinkler zone or hose timer device.
  2. Make connections from each control output to a keypad button, pico remote, or other device of choice.

### Experience button

To show a valve experience button in Navigator:







1. In **System Design**, select the room. In the **Navigator** tab, click **Modify** under Comfort.
2. Move the valve device from **Hidden Devices** to **Shown Devices**.
3. Click **OK**.
4. Refresh Navigator in the File menu.

### Button Behavior

- **First tap**: Starts watering with the first `Timer Value` as the duration.
- **Next tap (within 5 sec)**: Cycles through timer values.
- **After 5 sec**: Next tap turns water off.
- Timer display can be customized in each valve driver's properties from the following options: `1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25, 30, 45, 60, 90, 120`
- For sprinkler zones only, if the run is paused, the icon will display a pause symbol. Tapping once will resume.

### Icon Set

Icon set can be changed in the valve Driver Properties. By default, hose timers will be set to the hose icon set while sprinklers will be set to grass.

Icon Set	Off Example	On (10 min) Example
Hose		
Grass		
Flowers		

## Driver Properties

### Smart Watering with Rachio

Properties

Properties

Summary

Properties

Properties

Documentation

Lua

Cloud Status	License Activated
Automatic Updates	Off
Driver Version	104500
API Status	Last API request was successful

Configuration

API Key	1234-abcd
Actions	– Choose Action –
Log Level	Off

Information

User ID	a90d13da-3020-490d-af20-d328483120fe
Hub Status	Click to show hub status
Hub Status Last Updated	Apr 17, 2025 14:25:29
Main API Limit	1958 requests remaining
Smart Hose API Limit	1955 requests remaining

### Smart Watering Valve

Properties

Properties

Summary

Advanced Properties

Properties

Documentation

Lua

Cloud Status	License Activated
Automatic Updates	Off
Driver Version	104500
Status	Timer values successfully updated

Configuration

Icon Set	Grass
Log Level	Off
Timer Values	5,10,15,30,60 Valid values include 1,2,3,4,5,6,7,8,9,10,15,20,25,30,45,60,90,120
On Default Time	10

## Composer Pro Programming

See **Programming Reference** below for a comprehensive list of events, commands, variables and conditionals that can be used with programming. The following are a few real-world programming examples. These examples use components from both Smart Watering Valves and this main driver.

### Example: Notify if batteries are low, device disconnects, or firmware upgrade is available


There are a number of events generated by both the main **Smart Watering with Rachio** driver and the **Smart Watering Valve** driver (See **Events** below). These events can be used to generate push notifications. However, to take advantage of these events you will need to configure a schedule to update statuses.

- Go to **Agents > Scheduler** and either find an existing schedule or create a new one. The interval depends on how quickly your customer wants to be notified of changing statuses. If a battery is low, or a device goes offline do they want to know within an hour or one day? Keep in mind Rachio limits API requests per day so don't schedule updates too often.
- Go to **Programming > Scheduler** and select the schedule you want to use to trigger updates.

3. In the **Device Actions** pane, select the **Smart Watering with Rachio** main device driver.
4. In the **Device Specific Commands** dropdown, choose and drag both **Check Hub Status** and **Check Valve Statuses to Script Actions**. This will ensure events are fired based on changing device statuses.

Script

Script

 **When scheduled event 'Evening' executes**

Programming Controls

Else

& And

| Or

➡ Break

➡ Stop

# Comment

Script Actions

➡ Check if hubs are online or offline

➡ Check statuses for all Rachio valve devices


Example: Pause Sprinklers on Motion Detection

If a vehicle or person is detected, and certain sprinkler zones are running, pause the sprinklers so visitors don't get sprayed.

1. In **Programming**, on the left side, select a camera or device capable of the detection event you want to trigger pausing sprinklers.
2. In the **Device Actions** pane on the right, find the sprinkler zones that should be paused if they are running when the event occurs.
3. Click the **Conditionals** tab, select **The Water is On** and drag the conditional to the **Script Actions** middle pane.
4. Repeat steps 2 and 3 for any additional zones, forming an 'OR' conditional with all zones that should be paused if watering.
5. Find the main **Smart Watering with Rachio** driver in the **Device Actions** pane.
6. In the **Commands** tab, select **Device Specific Command**.
7. Choose **Pause Sprinklers** from the dropdown. Select the appropriate irrigation controller and set a pause duration. Drag the action to the center pane, ensuring it's nested below the conditional.

Script

Script

 **When a person is detected**

Programming Controls

Else

& And

| Or

➡ Break

➡ Stop

➡ Delay 5 sec

# Comment

Script Actions

? If Exterior->Front Southwest Water is On OR If Exterior->Front North Water is On OR

➡ C4 Clouds->Smart Watering with Rachio: Pause Rachio sprinklers for 300 seconds

Programming Reference

Events

Smart Watering with Rachio:

- Rachio Hub goes offline / online
- `MAIN_API_REQUESTS_REMAINING` or `SMART_HOSE_API_REQUESTS_REMAINING` changes

Smart Watering Valve:

- Watering starts / stops
- Watering paused / resumed (sprinkler zones only)
- Battery is good / low (smart hose timer only)
- Comes online / goes offline (smart hose timer only)
- Firmware upgrade is available (smart hose timer only)
- Variable `IS_WATERING` or `TIME_REMAINING` changes

Commands

Smart Watering with Rachio:

- Check Hub Status
- Check Valve Statuses
- Pause / Resume Sprinklers

Smart Watering Valve:

- Start Watering (with duration)
- Stop Watering

Variables

Smart Watering with Rachio:

Variable	Description
MAIN_API_REQUESTS_REMAINING	Remaining daily API calls
SMART_HOSE_API_REQUESTS_REMAINING	Remaining hose-specific API calls

Smart Watering Valve:

Variable	Description	Type
IS_WATERING	<code>1</code> (true) if running or <code>0</code> (false)	Both
TIME_REMAINING	Minutes left	Both
IS_PAUSED	<code>1</code> (true) if paused or <code>0</code> (false); When <code>1</code> (true), <code>IS_WATERING</code> will also still be <code>1</code> (true)	Sprinkler Zone
BATTERY_STATUS	'GOOD' or 'LOW'	Smart Hose Timer
FIRMWARE_UPGRADE_AVAILABLE	<code>1</code> (true) or <code>0</code> (false)	Smart Hose Timer
IS_CONNECTED	<code>1</code> (true) or <code>0</code> (false)	Smart Hose Timer
LAST_SEEN	<code>UNKNOWN</code> if never checked or timestamp ( <code>2025-04-08T12:58:39.405340Z</code> )	Smart Hose Timer

Conditionals

Smart Watering with Rachio:

- If any of the variables are equal to/not equal to/greater than/less than depending on the variable type

Smart Watering Valve:

- If "The Water is On"
- If any of the variables are equal to/not equal to/greater than/less than depending on the variable type

Support

For issues or feature requests:

- [Create a Support Ticket](#) with Driver Central. Driver Central will escalate to **Blessing Innovations LLC** when necessary.
- Submit feature requests in GitLab: [Submit an Issue](#)