

OSP: Configuration

Opto 22 *groov* EPIC and SNAP PAC Driver Module Configuration

NOTES:

For the versions of Ignition recommended for this driver, see [Cirrus Link's Module Installation](#).

To download the driver module:

1. Go to [Inductive Automation's Ignition Downloads webpage](#).
2. Scroll down to Third Party Modules.
3. Under Cirrus Link Solution MQTT Modules for Ignition, select Opto-22-groov-EPIC-and-SNAP-PAC-Driver-signed.modl.

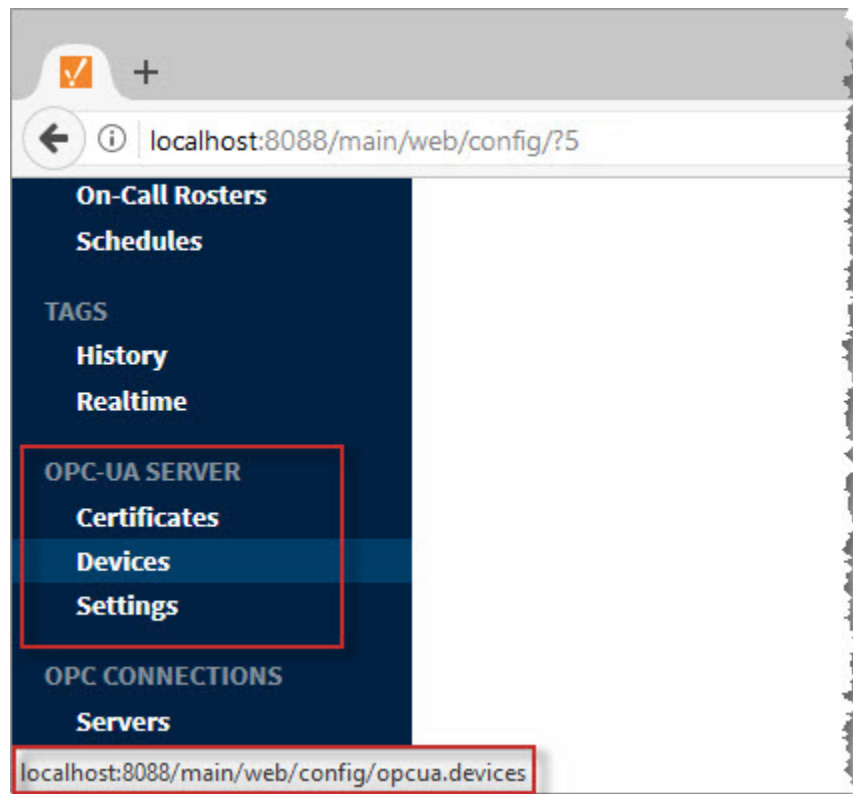
Basic steps

1. In Ignition, add the Opto 22 *groov* EPIC and SNAP PAC Driver module as a New OPC-UA Server Device.
2. Select Opto 22 *groov* EPIC and SNAP PAC to open its configuration settings.
3. Enter a name for the device and its hostname or IP address. (Configuration options are described in step 5.)
4. [OSP: Configuration#GetTags](#)

Instructions

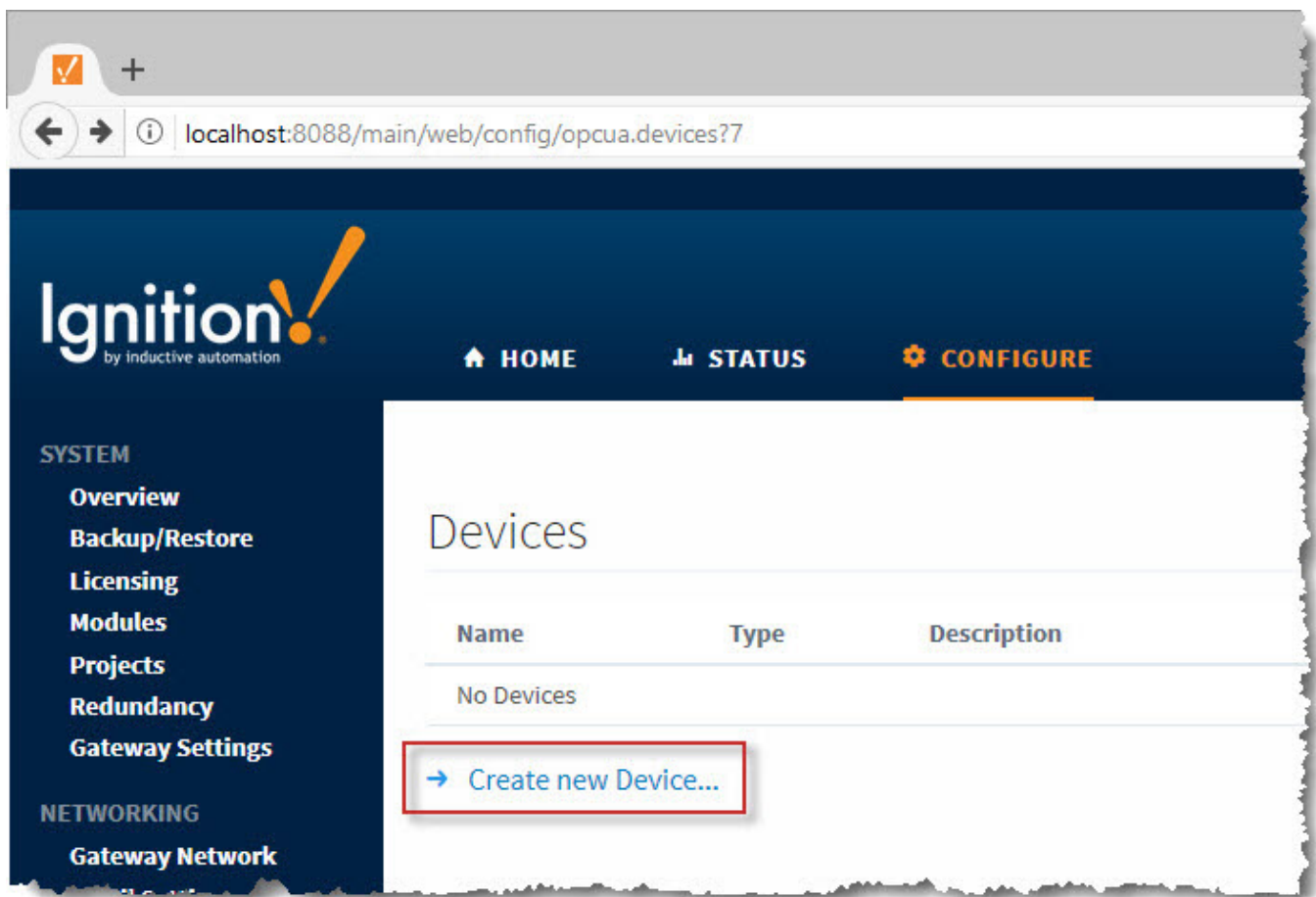
Step 1

In the Ignition Gateway Configuration webpage, find the Devices link (under OPC-UA Server).



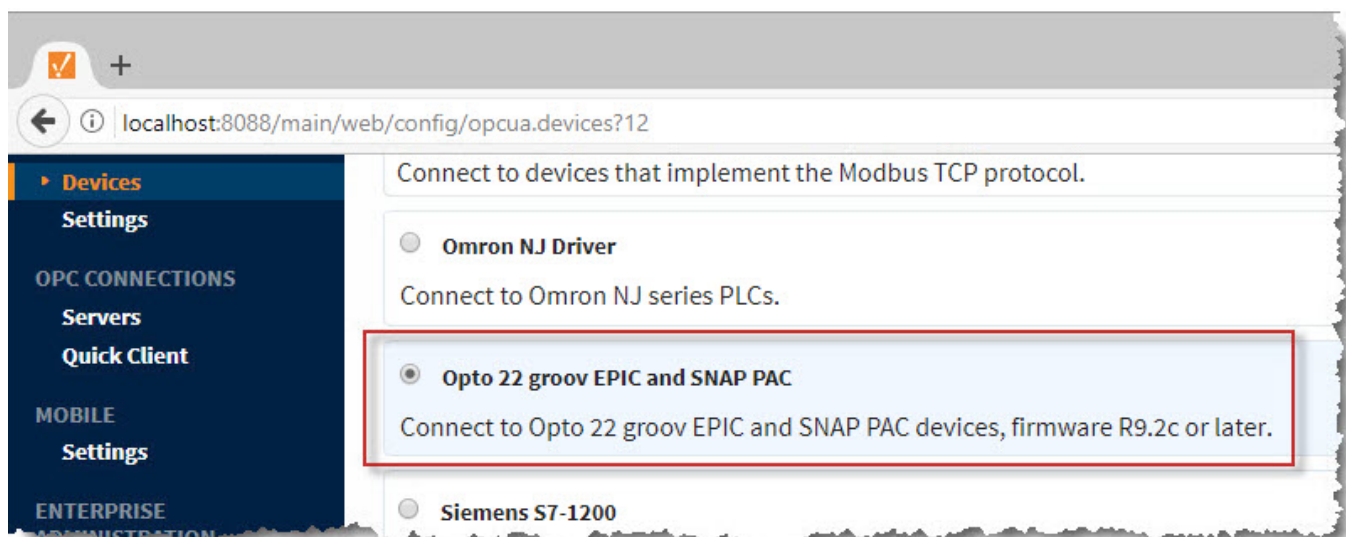
Step 2

Click the Devices link. The Devices webpage opens.



Step 3

On the Devices webpage, click Create new Device. Then, on the Add Device Step 1: Choose Type webpage, select Opto 22 groov EPIC and SNAP PAC.



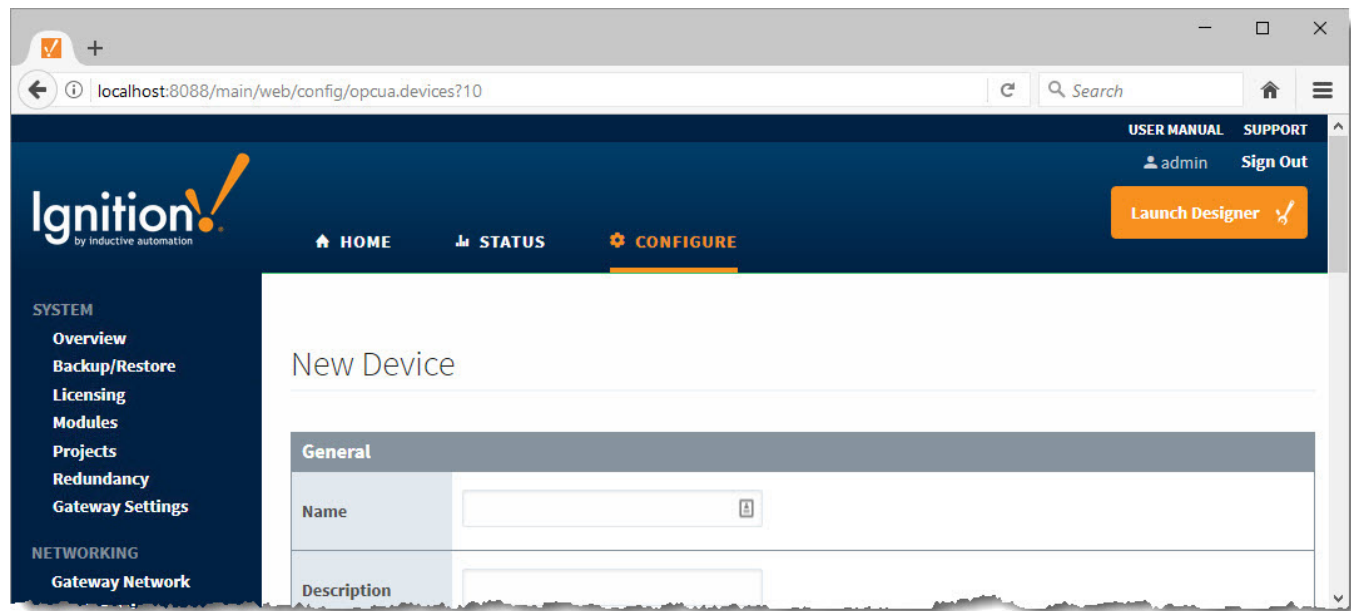
TIP: If you can't find the module, check the following:

- You uploaded the correct module (.modl) file.
- You're running the minimum required version of Ignition.
- You're using a supported Opto 22 product and firmware version.

For more information, see the Ignition Gateway's Logs (Status tab > Diagnostics > Logs).

Step 4

Click the Next button (at the bottom of the webpage). The New Device webpage opens.



Step 5

Complete the fields.

localhost:8088/main/web/config/opcu.devices?13

Ignition

by inductive automation

HOME STATUS **CONFIGURE**

SYSTEM

- Overview
- Backup/Restore
- Licensing
- Modules
- Projects
- Redundancy
- Gateway Settings

NETWORKING

- Gateway Network
- Email Settings

SECURITY

- Auditing
- Users, Roles
- Service Security
- Security Zones

DATABASES

- Connections
- Drivers
- Store and Forward

ALARMING

- General
- Journal
- Notification
- On-Call Rosters
- Schedules

TAGS

- History
- Realtime

OPC-UA SERVER

- Certificates
- Devices**
- Settings

OPC CONNECTIONS

- Servers

New Device

General	
Name	<input type="text" value="R1"/>
Description	<input type="text" value="Warehouse #6 SNAP-PAC-R1"/>
Enabled	<input checked="" type="checkbox"/> (default: true)

Opto 22 SNAP PAC Settings	
Address	<input type="text" value="10.20.30.40"/> IPv4, IPv6, or Hostname (default: 192.168.1.100)
TCP/IP Port	<input type="text" value="22001"/> User configurable TCP/IP port (default: 22,001)
Timeout	<input type="text" value="3000"/> Timeout value in milliseconds (250 milliseconds minimum with no upper limit) (default: 3,000)
Data Scan Rate	<input type="text" value="1000"/> Data Scan Rate in milliseconds (default: 1,000)

Create New Device

- **Name**
 - Friendly name for the Opto 22 device. Ignition uses this value to identify the device within the OPC-UA server.
- **Description**
 - Optional.
- **Enabled**
 - (Selected by default.) Enable reading and writing of the device's tags.
- **Address**
 - Hostname or IP address of the Opto 22 device.
 - Note: The module does not support controller redundancy.
- **TCP/IP Port**
 - Use the default port (22001).
- **Timeout**

- Amount of time the module waits for a response from the device. Value is in milliseconds; minimum timeout: 250 msec; no maximum. If your network is lossy or has high latency, you may want to increase the timeout value.
- **Data Scan Rate**
 - Controls the poll rate (that is, how often the module scans the device).
 - Note: When reading large amounts of data, increase the number of milliseconds to allow more time for reads.

Step 6

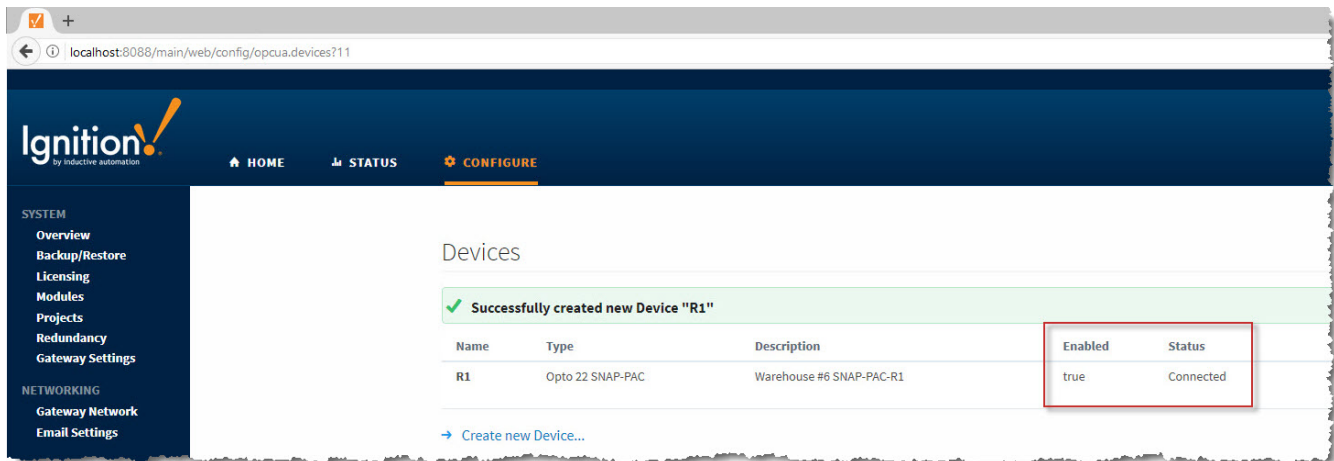
Click Create New Device. The Devices webpage opens.

Make sure that Enabled is "true"

Wait until the Status is "Connected" (This may several seconds, depending on the source and number of tags.)

TIP: If the status doesn't change to "Connected," check the following:

- The controller's IP address is correct in the module's configuration.
- The controller is active on the network.
- The controller has tags to report. (If there are no tags in the controller, you can resolve the issue by starting a PAC Control strategy that uses the controller as its control engine.)



Get Tags from the Opto 22 Device

The Opto 22 groov EPIC and SNAP PAC Driver module can:

- Scan all tags (Simple to use; lower performance as all tags are scanned; does not support tables.)
- Scan specific tags (Requires setup in PAC Control; enables you to get and write table data; offers best performance since only the tags you need are scanned. For details, see [Scanning Specific Tags.](#))

There are two ways to browse all tags:

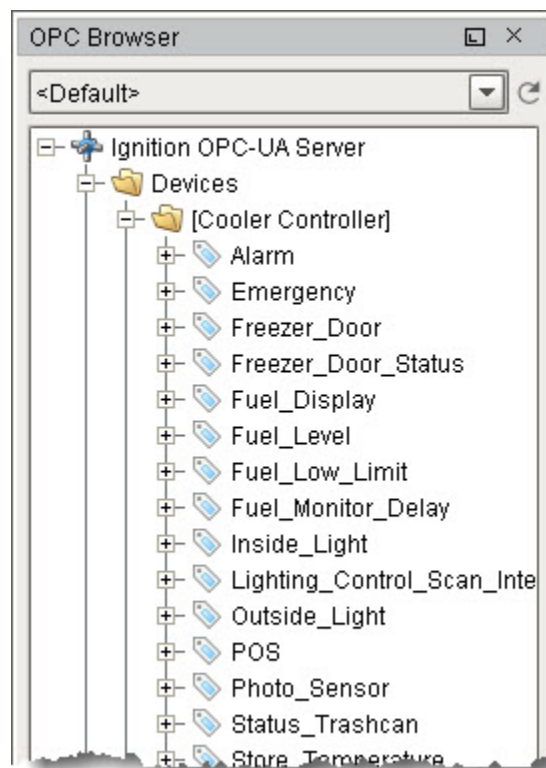
- **From Ignition's Configure tab**
 - Select OPC Connections > Quick Client, and then expand the folders to find the tags from the Opto 22 device's tags.

OPC Quick Client

TYPE	ACTION	TITLE
Server	refresh	Ignition OPC-UA Server
Object		Devices
Object		[Cooler Controller]
Tag	[s][r][w]	Alarm
Tag	[s][r][w]	Emergency
Tag	[s][r][w]	Freezer_Door
Tag	[s][r][w]	Freezer_Door_Status
Tag	[s][r][w]	Fuel_Display
Tag	[s][r][w]	Fuel_Level
Tag	[s][r][w]	Fuel_Low_Limit

- **From Ignition Designer's Design Mode**

- In the menu bar, click View > Panels, and then select OPC Browser. In the OPC Browser panel, expand the folders to find the Opto 22 device's tags.



Troubleshooting

- If you can't find a tag, check that the strategy is running in the Control.
- If you don't see tags for tables, that's because you can get table data only when you scan for specific tags. For details, see [Scanning Specific Tags.](#))

- Check the Ignition Gateway Logs (Status tab > Diagnostics > Logs) for messages about the issue you're experiencing.
- For more troubleshooting tips, see see [Scanning Specific Tags](#).