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.

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← → ⁽ⁱ⁾ localhost:8088/r	nain/web/config/opcua	a.devices?7		
Ignition.	A НОМЕ	la STATUS	CONFIGURE	
SYSTEM Overview Backup/Restore	Devices			
Modules Projects Redundancy	Name No Devices	Туре	Description	1
Gateway Settings NETWORKING Gateway Network	→ Create new E	Device		

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.

O localhost:8088/mai	in/web/config/opcua.devices?12
Devices	Connect to devices that implement the Modbus TCP protocol.
Settings DPC CONNECTIONS Servers	Omron NJ Driver Connect to Omron NJ series PLCs.
Quick Client IOBILE Settings	 Opto 22 groov EPIC and SNAP PAC Connect to Opto 22 groov EPIC and SNAP PAC devices, firmware R9.2c or later.
Settings ENTERPRISE	 Siemens S7-1200

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.

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							USER MANUAL	SUPPOR	а ^
							💄 admin	Sign Ou	rt
Ignition.	🕈 НОМЕ	status الله	CONFIGUR	E			Launch Desig	gner 🦌	
SYSTEM Overview Backup/Restore Licensing Modules	New Devi	се							
Projects	General								
Redundancy Gateway Settings	Name			E					
NETWORKING Gateway Network	Description				particular and a second				_

Step 5

Complete the fields.

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Ignition.	♠ НОМЕ	Li STATUS CONFIGURE
SYSTEM Overview Backup/Restore Licensing Modules	New Device	e
Projects	General	
Redundancy Gateway Settings	Name	R1
NETWORKING Gateway Network Email Settings	Description	Warehouse #6 SNAP-PAC-R1
SECURITY Auditing	Enabled	✓ (default: true)
Users, Roles Service Security Security Zones	Opto 22 SNAP P	AC Settings
DATABASES Connections Drivers Store and Forward	Address	10.20.30.40 IPv4, IPv6, or Hostname (default: 192.168.1.100)
ALARMING General Journal	TCP/IP Port	22001 User configurable TCP/IP port (default: 22,001)
Notification On-Call Rosters Schedules	Timeout	3000 Timeout value in milliseconds (250 milliseconds minimum with no upper limit) (default: 3,000)
History Realtime OPC-UA SERVER	Data Scan Rate	1000 Data Scan Rate in milliseconds (default: 1,000)
Certificates	L	
Sottings		
OPC CONNECTIONS		Create New Device
Servers	And the second sec	

- 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.)

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SYSTEM Overview Backup/Restore Licensing			Devices				
Modules Projects			✓ Success	fully created new Device "R	1"		
Redundancy Gateway Settings			Name	Туре	Description	Enabled	Status
NETWORKING Gateway Network			RI	Upto 22 SNAP-PAC	warenouse #6 SNAP-PAC-R1	true	Connected
Email Settings			→ Create ne	w Device			_

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.

ГҮРЕ	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]	⊕
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.