

Ignition SCADA to SLC5/04 or PLC5 on Data Highway Plus network

This document provides information to configure Ignition HMI software running in a computer connected via Ethernet Network with an ANC-100e or USB using a ANC-120e to communicate with a SLC5/04 or PLC5 on a Data Highway Plus network.

Ignition software from Inductive Automation ® is a powerful industrial software platform built for SCADA, MES and IIoT applications.

Visit <https://inductiveautomation.com> for more information about Ignition software

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Note: Before proceeding, make sure

- ✓ ANC-120e Driver is installed (*Only if using ANC-120e*)
- ✓ Network Adapter is correctly configured to access ANC-120e or ANC-100e
- ✓ ANC-120e is connected to the computer and DH+ network or ANC-100e is connected to the same Ethernet network or directly to your computer, and to the DH+ network.

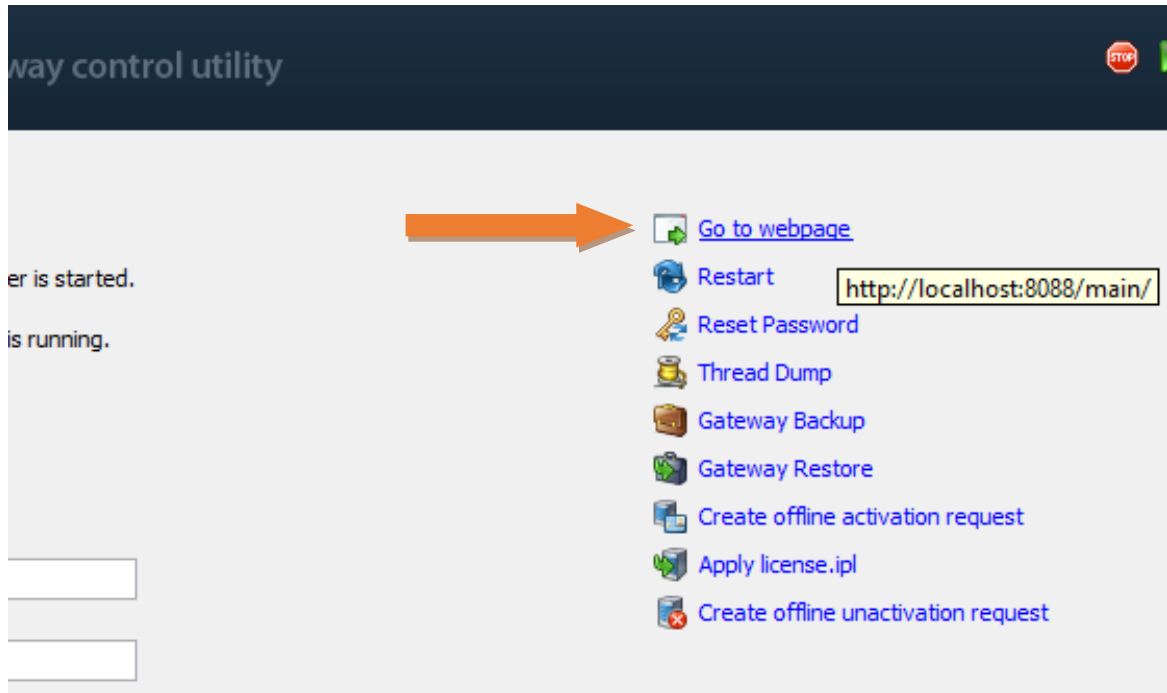
For this example:

ANC-100e IP address = 192.168.0.230

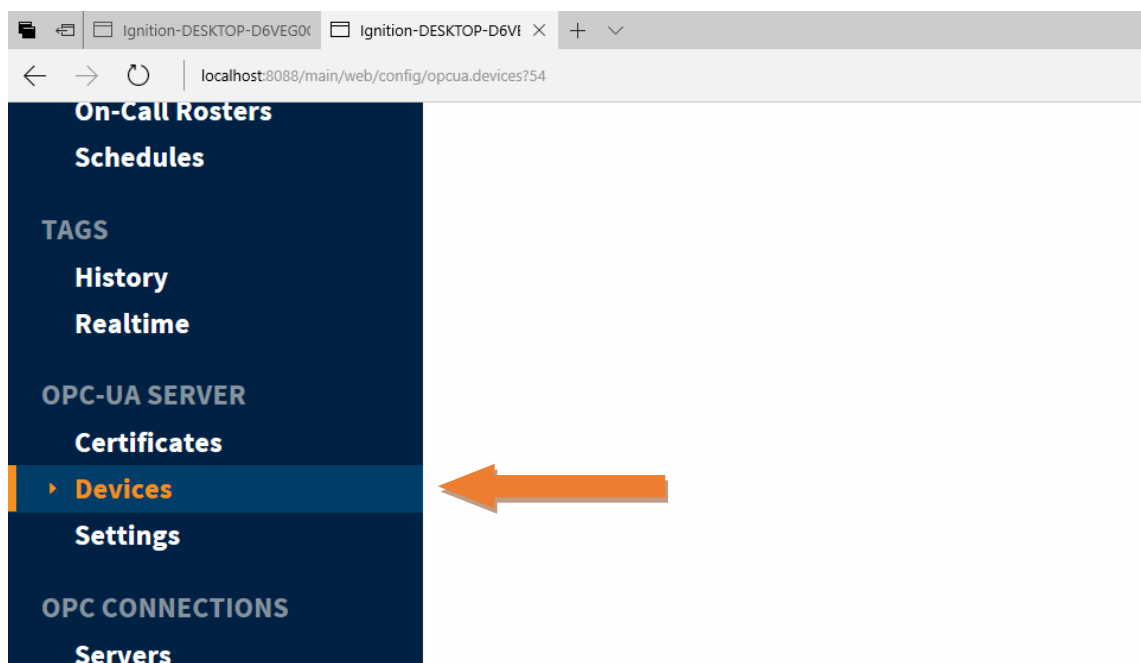
SLC5/04 DH+ node = 03

Ignition Version 7.9.3

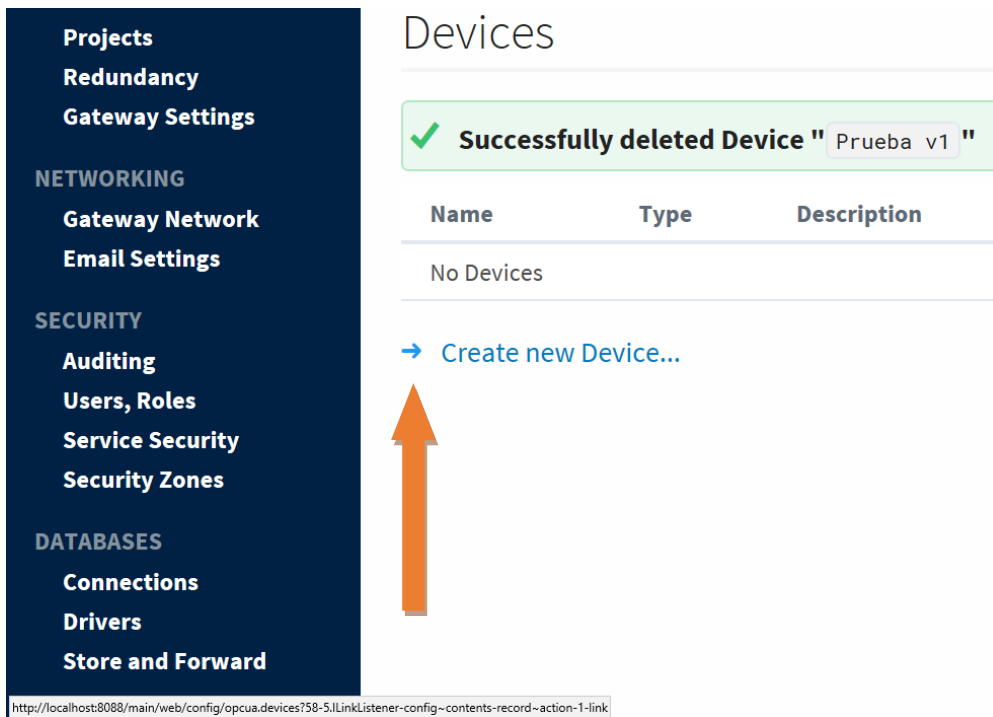
1. Open the “*Ignition Gateway Control Utility*” and click on “Go to webpage”



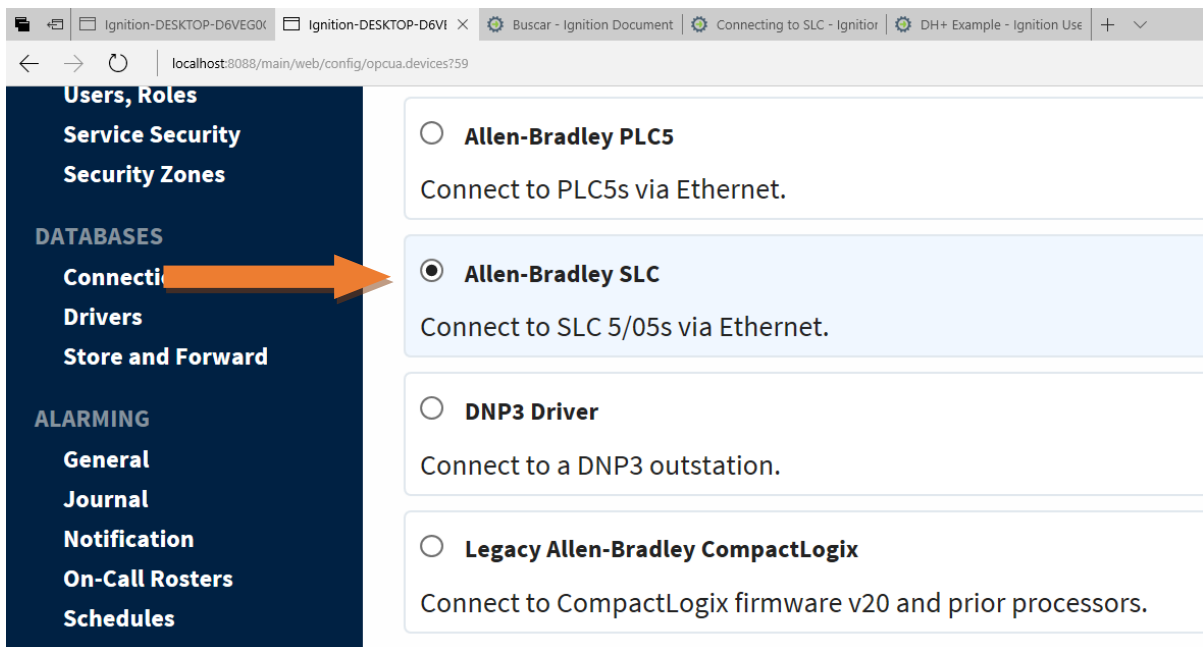
2. Login to the configuration setting and go to the “*OPC-UA SERVER*” section on the left area of the screen and click on “*Devices*”




3. Click on the blue arrow on “Create New Device...”





4. On the “Add Device Step 1: Choose Type” screen, select “Allen-Bradley SLC” or “Allen-Bradley PLC5”, depending on your case, and click Next. In our case, we are selecting “Allen-Bradley SLC”



- On the New Device page, leave all the default values and type in the following fields:
“Name”: SLC (or the name you would like the device to have)
“Hostname”: type the IP address of the ANC-100e (default is 192.168.0.230)
“Connection Path”: 1,1,2,NN
Where NN is the node address of the target DH+ device
(03 for our example, so the resulting connection path is: 1,1,2,3)
- Click “Create New Device”

General	
Name	<input type="text" value="SLC"/> 
Description	<input type="text"/>
Enabled	<input checked="" type="checkbox"/> (default: true)

Connectivity	
Hostname	<input type="text" value="192.168.0.230"/> 
Timeout	<input type="text" value="2000"/> (default: 2,000)
Browse Cache Timeout	<input type="text" value="240000"/> (default: 240,000)
Connection Path	<input type="text" value="1,1,2,3"/> 

Show advanced properties

[Create New Device](#) 

- The “Devices” page is displayed showing the SLC device is added to Ignition. The Status will show as “Disconnected” for a brief period of time and then Connected

Devices

✓ Successfully created new Device "SLC"

Name	Type	Description	Enabled	Status	
SLC	Allen-Bradley SLC		true	Disconnected: Determining Protocol	More ▾ edit

Devices

✓ Successfully updated Device "SLC"

Name	Type	Description	Enabled	Status	
SLC	Allen-Bradley SLC		true	Connected: Protocol: DHRIO	More ▾ edit

- To test the connection, go to “OPC Connections” -> “Quick Client”

The screenshot shows the Ignition software interface. On the left is a dark blue navigation menu with the following items: TAGS, History, Realtime, OPC-UA SERVER, Certificates, Devices, Settings, OPC CONNECTIONS, Servers, and Quick Client (highlighted with an orange arrow). On the right is the 'Quick Client' configuration window, which has a table with columns 'Server', 'Address', and 'V'. Below the table is a 'Subscription name' field with the text 'Subscription 1' entered. An orange arrow points from the 'Quick Client' menu item to the configuration window.

- In the “*OPC Quick Client*” screen, browse the “Devices” folder to find your device. You can expand it to see all the filenames and tags

OPC Quick Client

TYPE	ACTION	TITLE
Server	refresh	[-] Ignition OPC-UA Server
Object		[-] Devices
Object		[-] [SLC]
Object		[+] B3
Object		[+] B9
Object		[+] C5
Object		[+] F8
Object		[-] N7
Tag	[s][r][w]	[+] N7:0
Tag	[s][r][w]	[+] N7:1
Tag	[s][r][w]	[+] N7:2
Tag	[s][r][w]	[+] N7:3
Tag	[s][r][w]	[+] N7:4

- To read a tag, use the “[r]” option to its left
- If you can read the tags in your DH+ device, then you have successfully configured your ANC-100e or ANC-120e and Ignition software to communicate with a SLC5/04 or PLC5 on Data Highway Plus.