Automation Networks

Ignition SCADA to SLC5/04 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 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

Ignition by Inductive Automation is a trademark of Inductive Automation, LLC.

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.
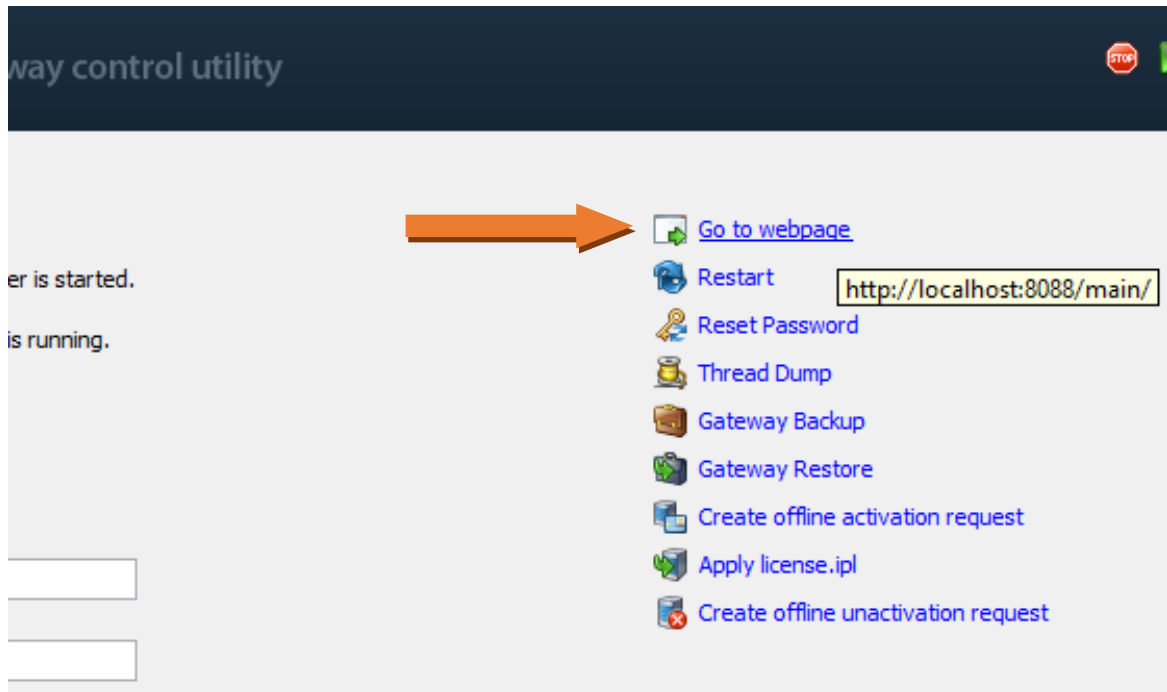
For this example:
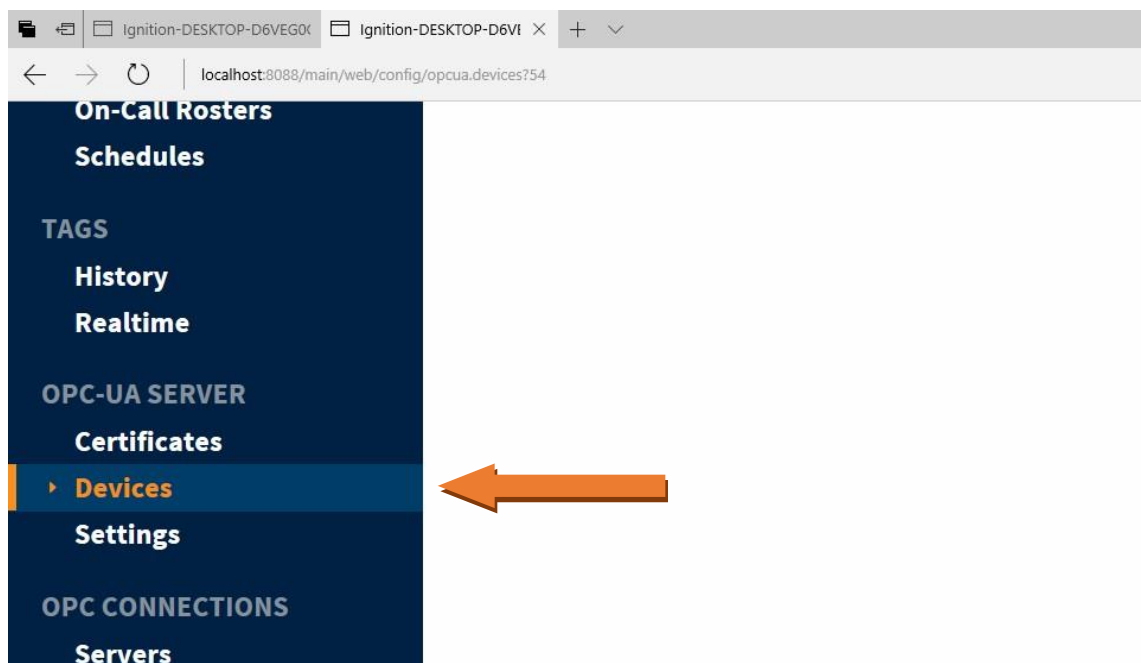   *ANC-100e* IP address = *192.168.0.230*
      SLC5/04 DH+ node = *03*
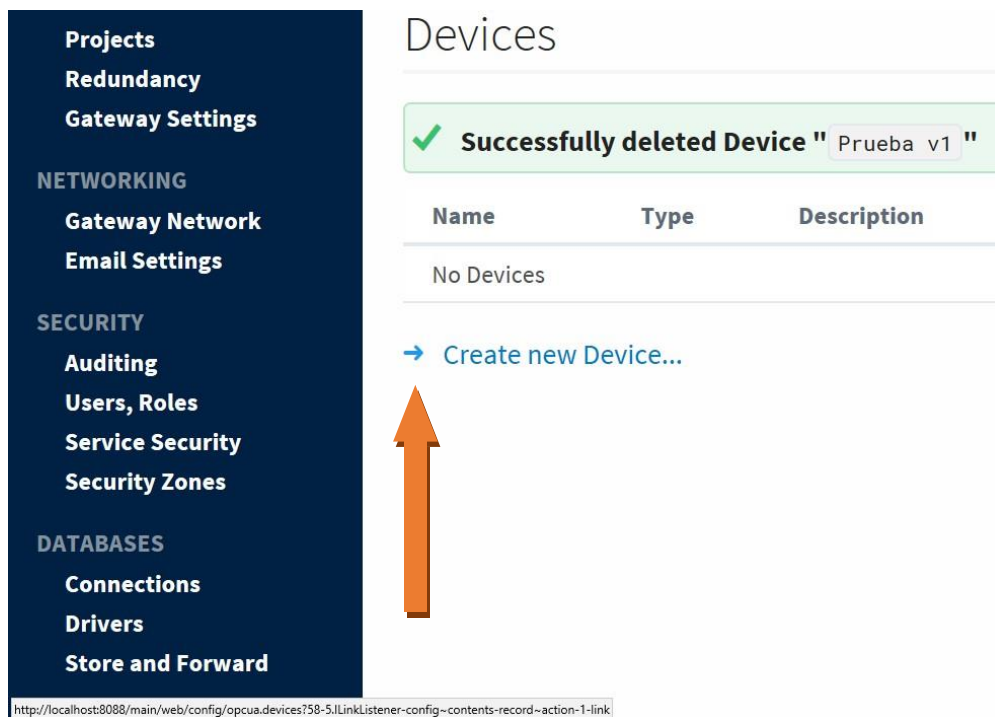   *Ignition Version 7.9.3*

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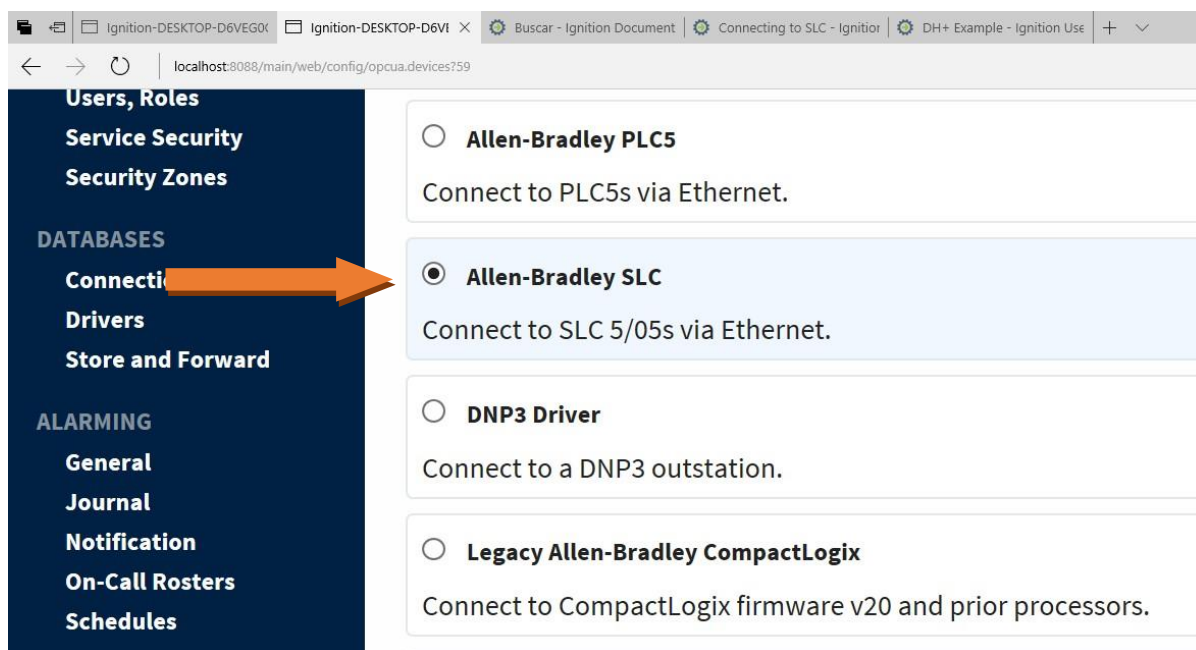

2. Login to the configuration setting and go to the "**OPC-UA SERVER**" section on the left area of the screen and click on **"Devices"**

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"

5. 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

6. Click "**Create New Device**"

General		
Name	SLC ✕	⬅
Description		
Enabled	☑ (default: true)	

Connectivity		
Hostname	192.168.0.230	⬅
Timeout	2000 (default: 2,000)	
Browse Cache Timeout	240000 (default: 240,000)	
Connection Path	1,1,2,3 ✕	⬅

☐ Show advanced properties

Create New Device ⬅

7. 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

8. To test the connection, go to **"OPC Connections"** -> **"Quick Client"**

TAGS
History
Realtime

OPC-UA SERVER
Certificates
Devices
Settings

OPC CONNECTIONS
Servers
▸ **Quick Client**

Server   Address   V

Subscription name :

Subscription 1

9. 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

10. To read a tag, use the "**[r]**" option to its left

11. 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 on Data Highway Plus.