Cloning an ABB Totalflow Device Connection

ABB Totalflow Device Connections can be cloned using the ABB Totalflow APIs using simple scripts which are executable in the Ignition Designer Script Console.

> Requires release v4.0.19 or newer

Once you have configured and tested your base device connection to be cloned, use the scripts below to clone connections either on the same Edge device or on a clean Edge device.

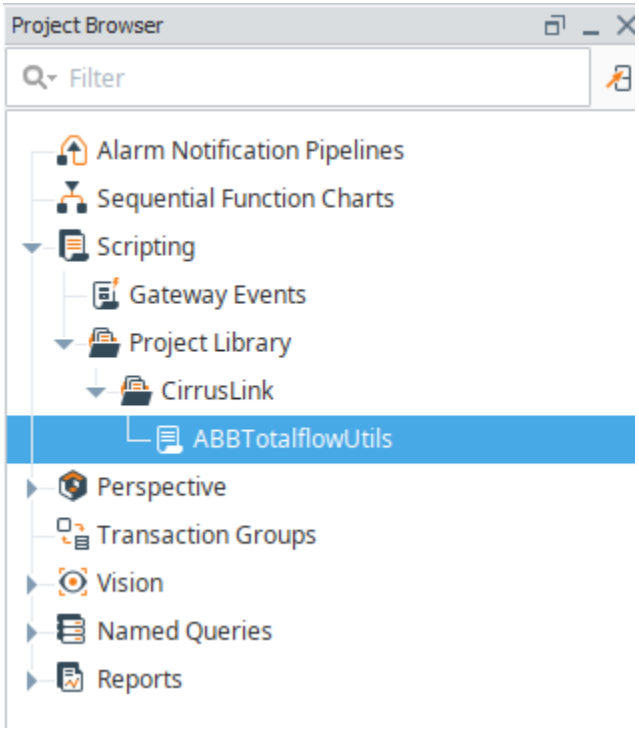
There are five script files available to make it easy to manage your device replications:

- ABBTotalFlowCloneDevice.py
  - This script allows you to clone a device connection to multiple new device connections
  - You will setup the unique configuration parameters for each new device in this script
- ABBTotalFlowSaveBaseDeviceToFile.py
  - The script allows you to save a device connection configuration to a file
  - This includes the Totalflow Applications, array Register Templates and Poll Groups
- ABBTotalFlowCreateDeviceFromFile.py
  - This script allows you to create and configure a device connection from file configurations
  - You will setup the the filepaths to each required configuration file in this script
- ABBTotalFlowRemoveDevice.py
  - This script allows you to remove device connections
- ABBTotalFlowDisableEnableDevice.py
  - This script allows you to enable or disable device connections

This is the CirrusLink utilities file to be imported into Ignition Designer

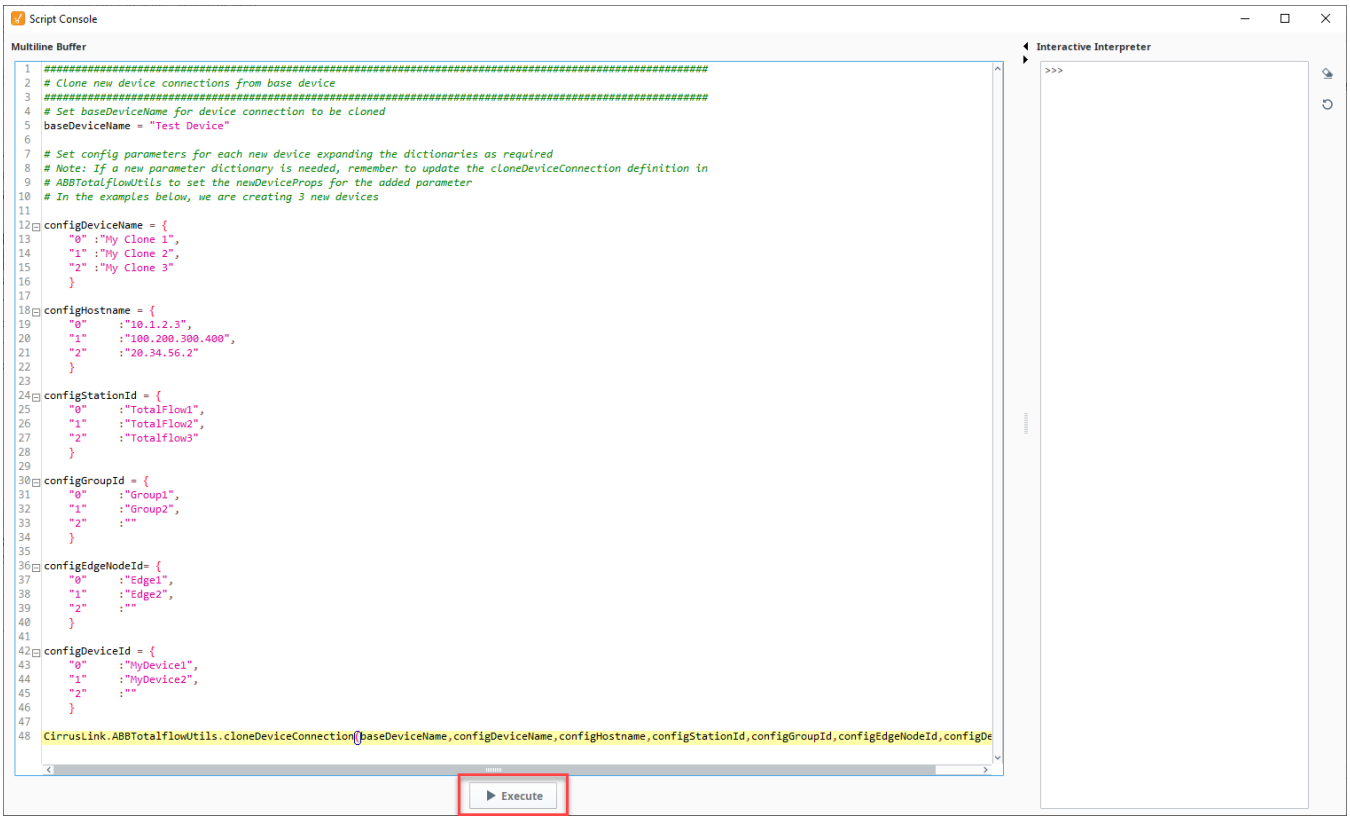
ABBTotalflowUtils.zip

Open Ignition Designer and from the File menu import the ABBTotalflowUtils.zip file. You will see the script under Scripting > Project Library > CirrusLink



Open the Tools > Script Console and copy the script from each file as needed, set the configuration parameters required within each script and select Execute

This example shows the ABBTotalflowCloneDevice script




```
##################################################################################################
# Clone new device connections from base device
##################################################################################################
# Set baseDeviceName for device connection to be cloned
baseDeviceName = "Test Device"

# Set config parameters for each new device expanding the dictionaries as required
# Note: If a new parameter dictionary is needed, remember to update the cloneDeviceConnection definition in
# ABBTotalflowUtils to set the newDeviceProps for the added parameter
# In the examples below, we are creating 3 new devices

configDeviceName = {
    "0" :"My Clone 1",
    "1" :"My Clone 2",
    "2" :"My Clone 3"
    }

configHostname = {
    "0"     :"10.1.2.3",
    "1"     :"100.200.300.400",
    "2"     :"20.34.56.2"
    }

configStationId = {
    "0"     :"TotalFlow1",
    "1"     :"TotalFlow2",
    "2"     :"Totalflow3"
    }

configGroupId = {
    "0"     :"Group1",
    "1"     :"Group2",
    "2"     :""
    }

configEdgeNodeId= {
    "0"     :"Edge1",
    "1"     :"Edge2",
    "2"     :""
    }

configDeviceId = {
    "0"     :"MyDevice1",
    "1"     :"MyDevice2",
    "2"     :""
    }

CirrusLink.ABBTotalflowUtils.cloneDeviceConnection(baseDeviceName,configDeviceName,configHostname,configStationId,configGroupId,configEdgeNodeId,configDe
```

Verify the cloned devices are complete and able to connect

If you have any questions regarding these scripts, please contact support@cirrus-link.com for assistance.