OPC-UA servers

General information and the links to the installers for the OPC-UA servers, compatible with CentOS 7, can be found at http://lhcb-online.web.cern.ch/lhcb-online/ecs/lhcb-ecs/DCSEquipment.html ☞.

CAEN and Wiener

Follow the instructions reported in the user manuals to install and run the OPC-UA servers. The run directories are installed under /home/lbrich/OpcUa/, where is CAEN or Wiener.

You need to change _OPCUA_CAEN.Config.ConnInfo (_OPCUA_Wiener.Config.ConnInfo) with the port that you can find by using **sudo netstat -ltnp** (there are two ports relative to the OPC server: one used to communicate with the crate, the other one in listening for the client). Useful documentation is here http://jcop.web.cern.ch/jcop-framework-caen-devices ☞.

When creating devices in WinCC, use the simulation driver. Then run the OPC server and start the client. A message about certificates should appear in the logviewer. Go on SysMgm->Driver OPC->OPC UA Certificates. An entry in the Not Accepted text box should be present. Move the certificate to the Accepted box by using the arrow.

Go on SysMgm->Driver OPC->OPC UA Client->Manage (under subscriptions field). In Monitored items, select:
Use TimeStamp from: Server
Data change filter: Status,Value

Download the **systec_can** driver (systec_can-0.9.0p-12.cc76.x86_64.rpm) and reboot.
modprobe systec_can (in case of errors use insmod)
If dmesg complains about boot loader install systec_can-0.9.8p-3.cc76.x86_64.rpm
Install socketcan_utils-2920d417315f14397f683e5e368520421c8a9702.0.0-0.x86_64.rpm
Install OpcUaCanOpenServer-2.2.3-46cc7.x86_64.rpm
Install uaexpert-bin-centos7-x86_64-gcc4.8.2-v1.4.2-256.rpm (an opc-ua client)

The xml config file will be created when pressing create OPC config on the ELMB node in the WinCC project. Place the config file in the run directory for the ELMB OPC server.

If modprobe is not working: sudo insmod /usr/lib/modules/3.10.0-957/extra/systec_can.ko

See also https://twiki.cern.ch/twiki/bin/view/LHCb/RichUpDCS

-- GiovanniCavallero - 2019-08-14

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