

EPICS Collaboration Meeting



Contribution ID: 21

Type: Oral

Progress of the EPICS Transition at the ISIS Accelerators

Sunday, 8 October 2023 12:45 (15 minutes)

The ISIS Neutron and Muon Source accelerators have been controlled using Vsystem running on OpenVMS / Itaniums, while beamlines and instruments are controlled using EPICS. We outline the work in migrating accelerator controls to EPICS using the pvAccess protocol with a mixture of conventional EPICS IOCs and custom Python-based IOCs primarily deployed in containers on Linux servers. The challenges in maintaining operations with two control systems running in parallel are discussed, including work in migrating data archives and maintaining their continuity. Semi-automated conversion of the existing Vsystem HMIs to EPICS and the creation of new EPICS control screens required by the Target Station 1 upgrade are reported. The existing organisation of our controls network and the constraints this imposes on remote access via EPICS and the solution implemented are described. The successful deployment of an end-to-end EPICS system to control the post-upgrade Target Station 1 PLCs at ISIS is discussed as a highlight of the migration.

Topic

EPICS 7

Primary author: FINCH, Ivanfinch (STFC ISIS)

Presenter: FINCH, Ivanfinch (STFC ISIS)

Session Classification: EPICS Upgrades

Track Classification: Please click on session to see scheduled talks.: Projects using EPICS