HEPiX Spring 2024 Workshop



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EPICS archiver infrastructure at ESS

Wednesday 17 April 2024 09:50 (25 minutes)

ESS is getting ready for its next major milestone, which we call 'beam on dump,' where we will commission the full LINAC at the end of this year.

Although ESS is not yet completed, we have already built most of the IT infrastructure to support the control system for the accelerator, target, and neutron instruments.

System experts, operators, and beam physicists are already requesting to archive a lot of signals to understand, operate, and optimize their systems.

The control system being built with EPICS, we have deployed the open-source EPICS archiver appliance deployed on the technical network computing infrastructure to archive more than 700k PVs at 14 Hz and store up to 6TB of data per day.

We use CEPH for both block storage for those VMs and shared filesystem for the archiver appliance storage backend.

This presentation will walk you through the technical details of this implementation, some challenges we have faced, improvements we have made, as well as upcoming challenges

Desired slot length

20 min

Speaker release

Yes

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Session Classification: Storage and file systems

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