
Subject: Re: data acquisition, device control
Posted by [rivers](#) on Sat, 28 Jan 1995 21:28:44 GMT
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In article <3g8rj4\$smc@nps.navy.mil>, Richard Olsen <olsen@physics.nps.navy.mil> writes:

> We'd like to use IDL as a front-end for data acquisition on a PC,
> which basically means being able to talk to an A-D converter, and
> presenting the results in ~real time with IDL

>

> Has anyone done this, or something similar?

>

We do this in our projects at the National Synchrotron Light Source and many of the experimental groups building x-ray beamlines at the Advanced Photon Source at Argonne National Lab plan to use IDL as an important component of the operator interface for data acquisition and display.

It is all done with CALL_EXTERNAL. Many of these projects have two "threads" running. A real-time thread written in C handles the fast data acquisition and interrupt handling. The IDL thread gets data from the C thread and displays it. The IDL thread is widget driven and allows the operator to control the acquisition, display and data storage.

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