Subject: Re: PV-Wave Interapplication Communication Question Posted by Mark D. Williams on Wed, 08 Dec 1999 08:00:00 GMT

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## Adrian Clark wrote:

> Dear All,

> I've written a number of C programs, each of which calls PV-Wave, performs

> some calculations, calls some PV-Wave routines etc, and then returns.

>

>

- > They work fine in isolation, with each opening a separate PV-Wave session,
- > running the commands then exiting. However, I wish to link all these
- > programs together and operate in a single PV-Wave session. i.e. to have
- > the first module open the PV-Wave session, and all subsequent modules to
- > connect to that session and do their calculation, rather than opening a new
- > session for each one. Has anybody any suggestions as to how to connect to
- > an already open PV-Wave session in a new process i.e. a process other
- > than the one that opened the session in the first place?

You have two options here (if you are on a UNIX platform). The first option, available only on UNIX is to use PV-WAVE's RPC (Remote Procedure Call) API, and its associated functions, to interface with PV-WAVE. Your first C program could start up PV-WAVE, and then call the PV-WAVE UNIX\_LISTEN function, which will listen and respond to RPC requests. I believe there are examples of this in \$VNI\_DIR/demo/interapp.

The second, and possibly more straightforward, method, would be to use the new Sockets OPI module, which is available as of PV-WAVE version 7.0. Using the Sockets OPI, you can communicate with PV-WAVE via the standard TCP/IP sockets API, and this option works on both UNIX and Windows NT platforms.

Regards, Mark Williams Resource Engineering, Inc.