

Socket script

Problem: How can we start several acquisitions at the same time on multiple minicrates?
The main issues is how do we run several graphical applications and give them commands?

Solution: Work around the problem. Each FEB application can start a so called socket server. This server can accept a list of commands defined in the application. This socket server can then be called locally from a python script. This local python script can in turn also launch a server so that several of them can be connected to from an external computer.

Installation

Copy the following files to the DAQ computers:

<https://dfs.cern.ch/dfs/experiments/babymind//Users/Patrik/Socket/socketScript.py>

<https://dfs.cern.ch/dfs/experiments/babymind//Users/Patrik/Socket/server.py>

And the following to the external run computers:

<https://dfs.cern.ch/dfs/experiments/babymind//Users/Patrik/Socket/client.py>

Also ensure that python 2.7 is installed.

socketScript -> Handle communication between socket server and DAQ PC. Requires the socket server socket address.

server -> Handle communication between external PC and DAQ PC.

client -> Handle communication between external PC and DAQ PC. Requires the DAQ PC IP-address.

User guide

- Start the FEB application on each of the DAQ computers.
- Select socket server and note down the socket address. (This is only used locally and can be the same on different computers)
- Change this value in the socketScript to reflect the socket address.
- Edit the socket address in socketScript.py and run it with `python socketScript.py`
- If you want to run this externally then run `server.py` as well and finally `client.py` on the external computer.