

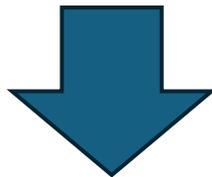
- Official Eudaq: <https://github.com/eudaq/eudaq>



- Rino Persiani: https://github.com/rinopersiani/eudaq_rino



- Jordan: https://github.com/jdamgov/eudaq_tb2024



Il codice di Rino non è up-to-date, quindi non lo è neanche quello di Jordan (?)
Quello di Jordan contiene il supporto per i FERS e vari moduli CAEN, quindi uso il suo

- **Pavia:** https://github.com/abragpv/eudaq_hidra
(ho «forkato» da Jordan)

- Ho configurato un PC con Ubuntu 24.04.2 LTS
- Per Eudaq uso la versione di Jordan da lui consigliata (che è la sua penultima)

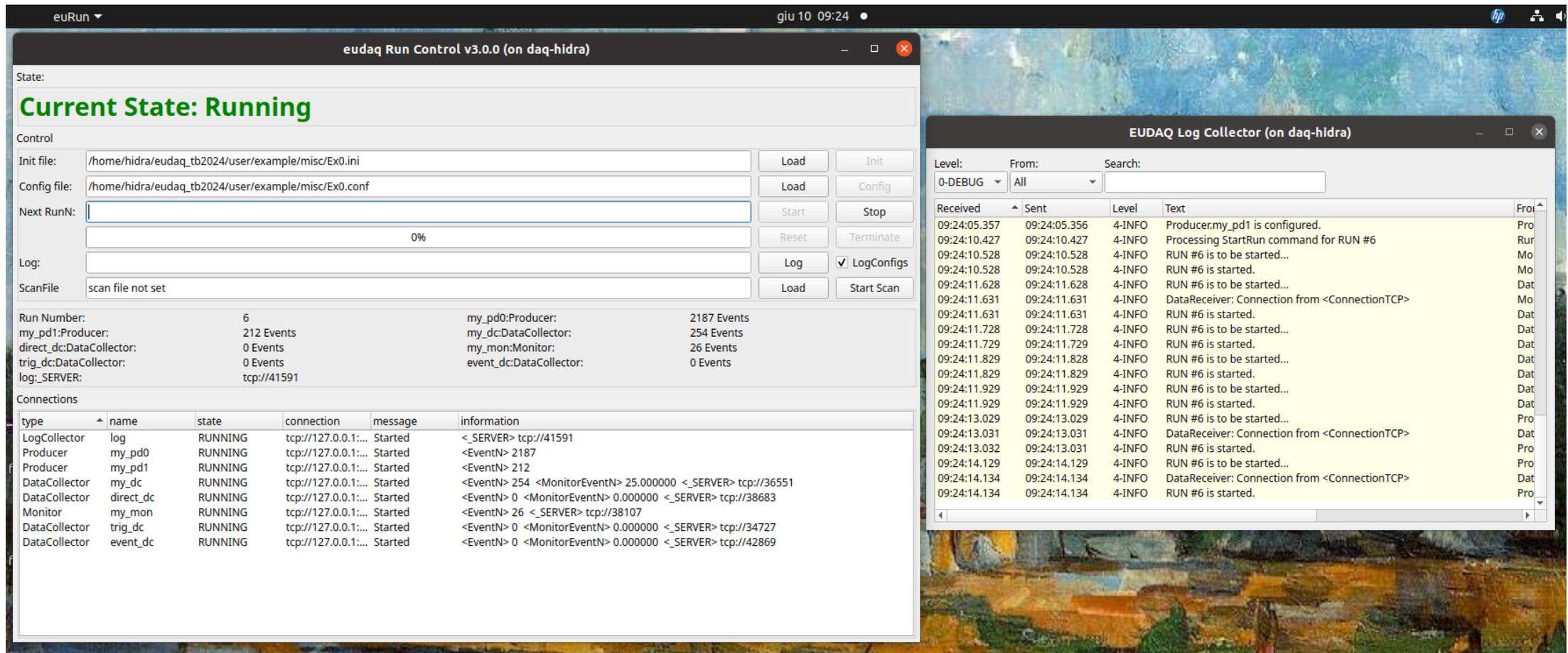
```
$ git clone -b v3.0.0 https://github.com/abragpv/eudaq_hidra.git  
$ cd eudaq_hidra  
$ mkdir build  
$ cd build
```

La compilazione non ha posto particolari problemi, ho solo dovuto installare alcune librerie e pacchetti che mancavano. Ho attivato ROOT come opzione per il monitor online.

```
$ cmake -D EUDAQ_BUILD_ONLINE_ROOT_MONITOR=ON -D EUDAQ_LIBRARY_BUILD_TTREE=ON ..  
$ make install
```

- Per vedere che tutto funzioni c'è un esempio di DAQ che va senza hardware generando un set di eventi casuali, una specie di dry run.

Il dry run funziona!



The screenshot displays the 'eudaq Run Control v3.0.0 (on daq-hidra)' application window. The main status area shows 'Current State: Running' in green text. Below this, there are control buttons for 'Load', 'Init', 'Config', 'Start', 'Stop', 'Reset', 'Terminate', 'Log', and 'LogConfigs'. A progress bar indicates 0% completion. The 'Log' field is empty, and the 'ScanFile' field shows 'scan file not set'.

At the bottom of the control window, a table lists the status of various components:

Run Number:	6	my_pd0:Producer:	2187 Events
my_pd1:Producer:	212 Events	my_dc:DataCollector:	254 Events
direct_dc:DataCollector:	0 Events	my_mon:Monitor:	26 Events
trig_dc:DataCollector:	0 Events	event_dc:DataCollector:	0 Events
log_SERVER:	tcp://41591		

Below the table is a 'Connections' section with a table listing active connections:

type	name	state	connection	message	information
LogCollector	log	RUNNING	tcp://127.0.0.1:...	Started	<_SERVER> tcp://41591
Producer	my_pd0	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 2187
Producer	my_pd1	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 212
DataCollector	my_dc	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 254 <MonitorEventN> 25.000000 <_SERVER> tcp://36551
DataCollector	direct_dc	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 0 <MonitorEventN> 0.000000 <_SERVER> tcp://38683
Monitor	my_mon	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 26 <_SERVER> tcp://38107
DataCollector	trig_dc	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 0 <MonitorEventN> 0.000000 <_SERVER> tcp://34727
DataCollector	event_dc	RUNNING	tcp://127.0.0.1:...	Started	<EventN> 0 <MonitorEventN> 0.000000 <_SERVER> tcp://42869

Overlaid on the right side of the control window is the 'EUDAQ Log Collector (on daq-hidra)' window. It shows a log of events with columns for 'Received', 'Sent', 'Level', and 'Text'. The log entries are as follows:

Received	Sent	Level	Text
09:24:05.357	09:24:05.356	4-INFO	Producer.my_pd1 is configured.
09:24:10.427	09:24:10.427	4-INFO	Processing StartRun command for RUN #6
09:24:10.528	09:24:10.528	4-INFO	RUN #6 is to be started...
09:24:10.528	09:24:10.528	4-INFO	RUN #6 is started.
09:24:11.628	09:24:11.628	4-INFO	RUN #6 is to be started...
09:24:11.631	09:24:11.631	4-INFO	DataReceiver: Connection from <ConnectionTCP>
09:24:11.631	09:24:11.631	4-INFO	RUN #6 is started.
09:24:11.728	09:24:11.728	4-INFO	RUN #6 is to be started...
09:24:11.728	09:24:11.728	4-INFO	RUN #6 is started.
09:24:11.829	09:24:11.828	4-INFO	RUN #6 is to be started...
09:24:11.829	09:24:11.829	4-INFO	RUN #6 is started.
09:24:11.929	09:24:11.929	4-INFO	RUN #6 is to be started...
09:24:11.929	09:24:11.929	4-INFO	RUN #6 is started.
09:24:13.029	09:24:13.029	4-INFO	RUN #6 is to be started...
09:24:13.031	09:24:13.031	4-INFO	DataReceiver: Connection from <ConnectionTCP>
09:24:13.032	09:24:13.031	4-INFO	RUN #6 is started.
09:24:14.129	09:24:14.129	4-INFO	RUN #6 is to be started...
09:24:14.134	09:24:14.134	4-INFO	DataReceiver: Connection from <ConnectionTCP>
09:24:14.134	09:24:14.134	4-INFO	RUN #6 is started.

- Ho avuto un primo contatto con Fabrizio, Iacopo e Zhidong.
Zhidong è disponibile a lavorare sul monitor online
- Ora si tratta di costruire una catena elettronica semplice per familiarizzare con Eudaq.
- L'hardware attualmente disponibile è:
 - QDC V792 (2)
 - TDC V775N
 - I/O register V977 
 - Bridge V2718
 - Bridge V3718 
 - Adattatore A4818 per i bridge 