



EUDAQ(2) status and prospects @ DESY

AIDA-2020 Final Annual Meeting
28/04/2020



EUDAQ2



EUDAQ2 Status

- EUDAQ2 runs stable and reliable since more than a year
- Reference paper: <https://iopscience.iop.org/article/10.1088/1748-0221/14/10/P10033>
- Currently at tagged version 2.4.2
- Provided producers:
 - AIDA/EUDET TLU
 - EUDET telescopes
 - PI-Stages
 - TimePix3
 - Caribou
- EUDAQ2 becomes more and more popular:
 - AidaStrip (Lycoris)
 - CALICE
 - CLIC (Caribou system)
 - ItK Strip
 - Mu3e
 - TOTEM
 - ATLAS BCM/RD42
 - ...
- Limited number of pull request
 - Need to ensure that we do not diverge too much
 - Please open pull requests if you enhanced EUDAQ
- We keep the software currently in an as is state, but are open to changes on request
- We need to improve incorporating changes
- Do we need to formalize EUDAQ2 a bit further? Collaboration, group with responsibilities, clear assignments?
- How to proceed with EUDAQ1.XX developments?

EUDAQ2 @ DESY

- Baseline DAQ system for our telescopes (DURANTA/DATURA and AZALEA (borrowed from CERN))
- Until the end of the year EUDAQ1, EUDAQ2 and both TLU versions are supported
- Starting 2021 we will stop supporting the EUDET-TLU as well as EUDAQ1
 - This requires a higher availability of AIDA-TLUs
 - We will not remove the hardware, usage on own risk
- DESY will stay committed to support EUDAQ2
- Trying to hire additional effort right now

State: **Current State: Running**

Control

Init file:

Config file:

Next RunN:

Log:

ScanFile: LogConfigs

Run Number: 34
my_pd1:Producer: 40 Events
my_dc:DataCollector: 52 Events

my_pd0:Producer: 280 Events
my_mon:Monitor: 5 Events

Connections

type	name	state	connection	message	information
LogCollector	log	RUNNING	tcp://127.0...	Started	<_SERVER> tcp://38615
Producer	my_pd0	RUNNING	tcp://127.0...	Started	<EventN> 280
Producer	my_pd1	RUNNING	tcp://127.0...	Started	<EventN> 40
Monitor	my_mon	RUNNING	tcp://127.0...	Started	<EventN> 5 <_SERVER> tcp://39431
DataCollector	my_dc	RUNNING	tcp://127.0...	Started	<EventN> 52 <MonitorEventN> 5.000000 <_SERVER> tcp://37593

AIDA-TLU Production @ DESY



- We made a cost estimate last autumn
- Production time (Fully assembled and tested) ~ 3 month
- Would most likely start with 10 pieces
→ More if there are a high number of requests
- Would like to *sell* them without making significant money
- Waiting for green light from David (testing of the updated version)

Quantity	Material/ piece	Production/ piece	Docu & CE	Costs/ total	Costs/ piece
1	1982	2562	850	5394	5394
5	1754	987	850	14555	2911
10	1704	808	850	25970	2597
20*	1650	750	850	48850	2443

Autumn 2019, CE certificate (3k EUR) additionally required