

FELIX status and plans

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Current status: Valencia partition

Fixing problems with our partition:

- Elink misconfiguration between SWROD and FELIX
- Supervisord orchestrator malfunctioning

0x1510001806000000
vs
0x1000000806000000

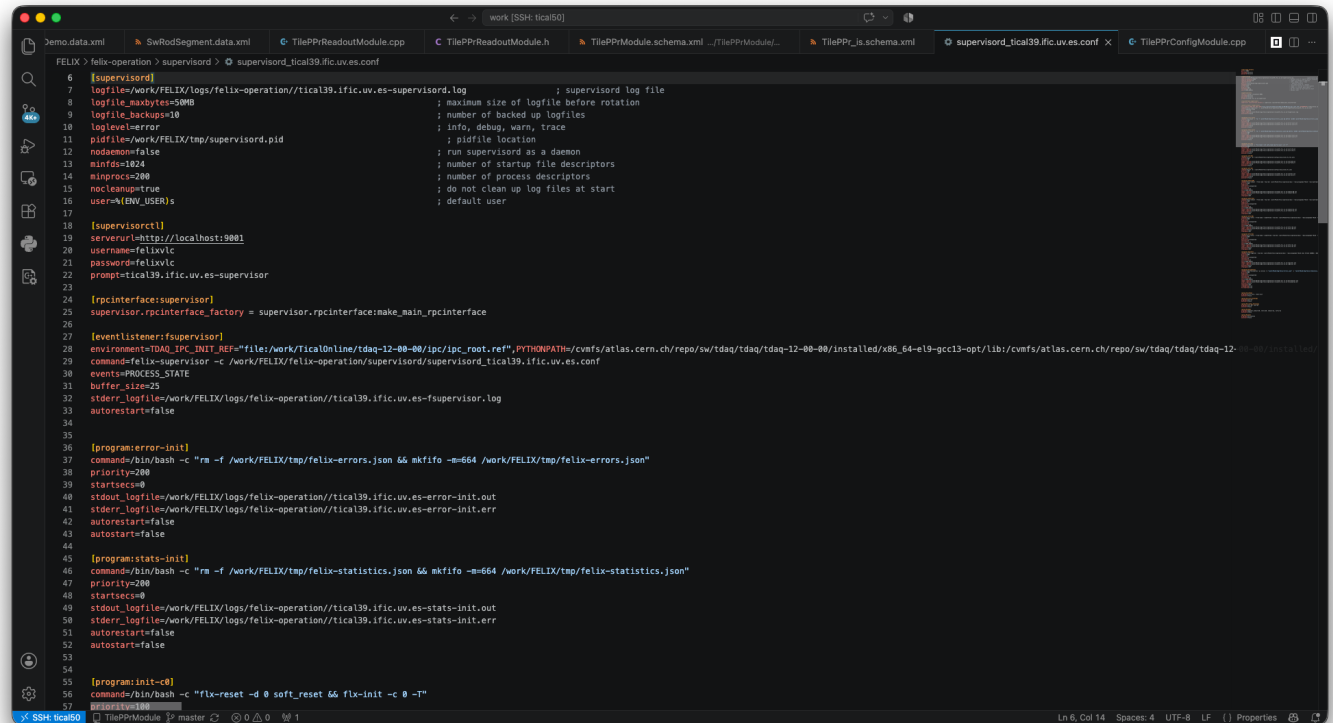
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Multiple applications
have to be run
concurrently to run the
FELIX DAQ system

Supervisord
orchestrator: Third-party
application included in
FELIX distribution. It runs
applications like: *felix-
tohost, felix-toflx...*

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- To do this it has a configuration file with this applications and the parameters to be used.
- This file is generated with a function called *felix-supervisord-generate*



```
6 [supervisord]
7 logfile=/work/FELIX/logs/felix-operation/tical39.ific.uv.es-supervisord.log ; supervisor log file
8 logfile_maxbytes=50MB ; maximum size of logfile before rotation
9 logfile_backups=10 ; number of backed up logfiles
10 loglevel=error ; info, debug, warn, trace
11 pidfile=/work/FELIX/tmp/supervisord.pid ; pidfile location
12 nodaemon=false ; run supervisord as a daemon
13 minfds=1024 ; number of startup file descriptors
14 minprocs=200 ; number of process descriptors
15 noclean=true ; do not clean up log files at start
16 user=%(ENV_USER)s ; default user
17
18 [supervisorctl]
19 serverurl=http://localhost:9001
20 username=felixvc
21 password=felixvc
22 prompt=tical39.ific.uv.es-supervisor
23
24 [rpcinterface:supervisor]
25 supervisor.rpcinterface_factory = supervisor.rpcinterface:make_main_rpcinterface
26
27 [eventlisteners:supervisor]
28 environment:TDAG_IPC_INIT_REF="file:/work/TicalOnline/tdag-12-00-00/ipc_rost.ref",PYTHONPATH=/cvmfs/atlas.cern.ch/repo/sw/tdag/tdag-12-00-00/installed/x86_64-el9-gcc13-opt/lib/cvmfs/atlas.cern.ch/repo/sw/tdag/tdag-12-00-00/installed
29 command=felix-supervisor -c /work/FELIX/felix-operation/supervisord/supervisord_tical39.ific.uv.es.conf
30 events=PROCESS_STATE
31 buffer_size=25
32 stderr_logfile=/work/FELIX/logs/felix-operation/tical39.ific.uv.es-supervisor.log
33 autorestart=false
34
35 [program:error-init]
36 command=/bin/bash -c "rm -f /work/FELIX/tmp/felix-errors.json && mkfifo -m664 /work/FELIX/tmp/felix-errors.json"
37 priority=200
38 startsecs=0
39 stdout_logfile=/work/FELIX/logs/felix-operation/tical39.ific.uv.es-error-init.out
40 stderr_logfile=/work/FELIX/logs/felix-operation/tical39.ific.uv.es-error-init.err
41 autorestart=false
42 autostart=false
43
44 [program:stats-init]
45 command=/bin/bash -c "rm -f /work/FELIX/tmp/felix-statistics.json && mkfifo -m664 /work/FELIX/tmp/felix-statistics.json"
46 priority=200
47 startsecs=0
48 stdout_logfile=/work/FELIX/logs/felix-operation/tical39.ific.uv.es-stats-init.out
49 stderr_logfile=/work/FELIX/logs/felix-operation/tical39.ific.uv.es-stats-init.err
50 autorestart=false
51 autostart=false
52
53
54
55 [program:init-cel]
56 command=/bin/bash -c "f1x-reset -d 0 soft_reset && f1x-init -c 0 -T"
57
```

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Problems with configuration file:

- *feconf* - Uploads a pre-defined E-link configuration file (.jelc or .elc format) to a FELIX card. But in our partition it asks for .yelc files
- *felix-toflx* and *felix-register* - Appear with unrecognized arguments
 - This problem comes from the felix-supervisord-generate function itself! <https://gitlab.cern.ch/atlas-tdaq-felix/felix-starter/-/blob/master/etc/supervisord.conf.jinja> (template that appears in FELIX User manual)

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Possible approaches:

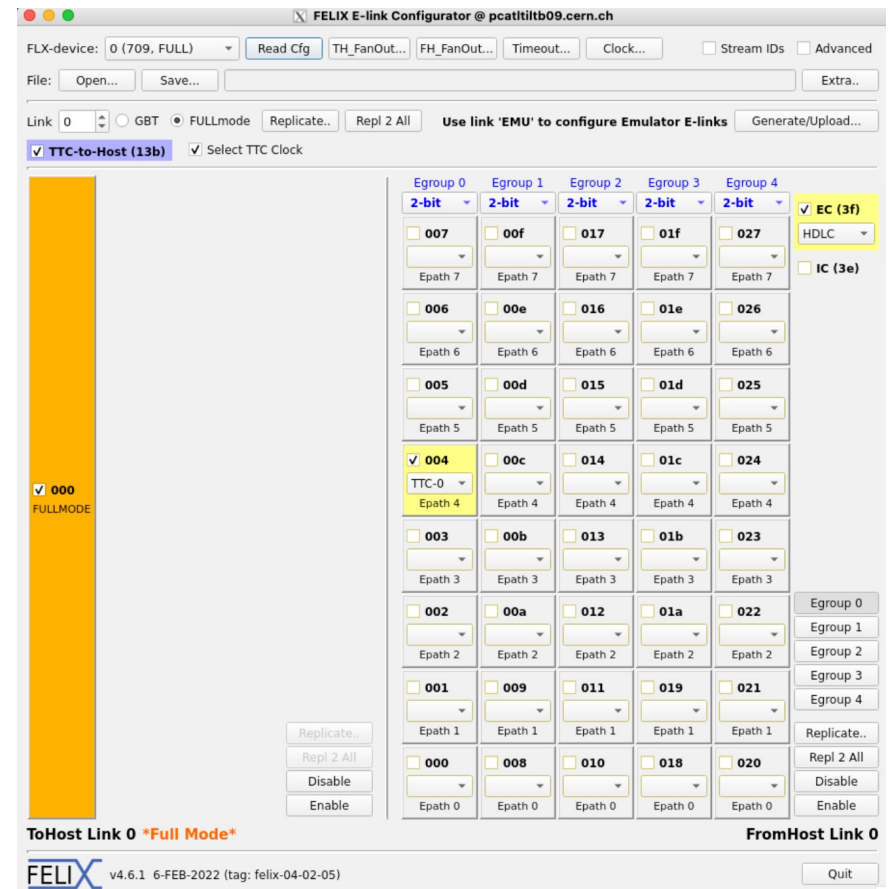
- Write a ticket to ATLAS FELIX - Users support
- Talk with Toni
- Update FELIX System: current Firmware, 5.3, is deprecated by Felix team

Currently on standby

Current task: FELIX FULL mode

Configure SWROD to read FELIX on FULL mode

- Use LTI-TTC on the downlink and FULL mode on the uplink



Current task: TilePPr FSM

Introduce the TilePPr into our FSM architecture

- Appearing in the GUI and going through all the states
- Doing something simple like leaving a message
- Some work started by Toni

