

TCL Scripts: Important Configuration Files

coda@cdaq16:

Name	Location	Purpose
runstart_gui_epics.map	~/coda/scripts/EPICS_logging/Sessions/NPS/	Parameter map between epics.dictionary and TCL GUI runinfo()
epics.dictionary	~/coda/scripts/EPICS_logging/	Dictionary for EPICS
NPS_HV.dictionary	~/coda/scripts/EPICS_logging/	Dictionary for HV
default.flags	~/coda/config_files/NPS/	Read prescales settings
.runstart_NPS.saved	~/coda/scripts/	Load TCL GUI runinfo() of last run

- Figure out the structure of the TCL GUI (Relationships between different scripts and configuration files) 

TCL Scripts: Important Scripts

coda@cdaq16:

Name	Location	Main purposes
start_logruninfo.sh	~/coda/scripts/	<ul style="list-style-type: none">• Set environment variables• Run startEpicsLogger• Run runstart_gui.tcl
startEpicsLogger	~/coda/scripts/EPICS_logging/	<ul style="list-style-type: none">• Generate dictionary• Run epics_dictionary_parse.pl• Run epics_logger.sh
epics_dictionary_parse.pl	~/coda/scripts/EPICS_logging/	<ul style="list-style-type: none">• Generate .siglist and .list files from epics.dictionary
epics_logger.sh	~/coda/scripts/EPICS_logging/	<ul style="list-style-type: none">• Get EPICS variable logs
runstart_gui.tcl	~/coda/scripts/	<ul style="list-style-type: none">• TCL GUI main program• Read parameters, show GUI and make entry to logbook

- Figure out the structure of the TCL GUI (Relationships between different scripts and configuration files) 

TCL Scripts: GUI for NPS

```
[[coda@cdaq16 scripts]$ setenv nps_mode 1  
[git:fix_end_run*]  
[[coda@cdaq16 scripts]$ ./start_logruninfo.sh  
Run number is 316
```

Start of Run #316 Info Hall C: NPS

Script maintained by R. Michaels <rom@jlab.org>

RUN type/mode: Other

TARGET target type: Home

NPS deg

PS(enabled) ps1=0,ps2=0,ps3=0,ps6=0

COMMENT

CLICK HERE TO ACCEPT AND START THE RUN

- LH2
- LD2
- 10cm Dummy
- Optics #1 +/-7.5cm
- Optics #2 +/-3cm
- BeO
- Carbon Hole
- Carbon 0.5%
- Halo Target

SHMS arm angle

- Update the target list ✓
- Set correct environment for NPS ✓

TCL Scripts: GUI for COIN_NPS

```
[coda@cdaq16 scripts]$ setenv nps_coin_mode 1  
[git:fix_end_run*]  
[coda@cdaq16 scripts]$ ./start_logruninfo.sh  
Run number is 316
```

Start of Run #316 Info Hall C: COIN_NPS

Script maintained by R. Michaels <rom@jlab.org>

RUN type/mode:

TARGET target type:

HMS GeV deg

NPS deg

PS(enabled) ps1=0,ps2=0,ps3=0,ps6=0

COMMENT





CLICK HERE TO ACCEPT AND START THE RUN

- LH2
- LD2
- 10cm Dummy
- Optics #1 +/-7.5cm
- Optics #2 +/-3cm
- BeO
- Carbon Hole
- Carbon 0.5%
- Halo Target

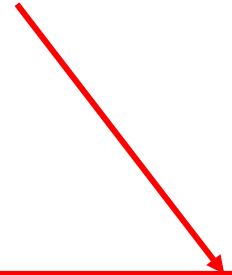
- Set correct environment for COIN_NPS

TCL Scripts


NPS Start_Run_316,Run_type=Other,target_type=Home,coda_ps=ps1=0,ps2=0,ps3=0,ps6=0 comment_text=TCL GUI code test,nps_theta=35.55,
Lognumber 4164489. Submitted by cdaq on Sat, 07/29/2023 - 20:14.

Logbooks: HCLOG
Tags: StartOfRun Autolog
Entry Makers: coda
Attached Files:  first_epics_2.results
 first_epics_30.results
 first_epics_HV.results
 coda-flags.dat

Run_type=Other
target_type=Home
coda_ps=ps1=0,ps2=0,ps3=0,ps6=0
comment_text=TCL GUI code test
nps_theta=35.55



```
; #####  
; ## These lines control what flags show up in the config GUI  
; GUI_FLAGS_CHK: fadcmodel10 fadcnothr cermodel10  
; GUI_FLAGS_VAL: fadcmode synccnt tscaler bufferlevel  
; #####  
; ** NO SPACES ALLOWED IN THE STRING **  
bufferlevel=10,cermodel10,edtmrate=300,edtmtarget=300,fadcmode=9,fadcmodel10,nped=0,ps1=0,ps2=0,ps3=0,ps4=-1,ps5=-1,ps6=0,synccnt=10000,tscaler=2
```

- Attach files to the logbook entry as we want 
- Two files need to update for NPS: epics.dictionary & HV.dictionary (Now using files for HMS)