

Questionnaire User Guide

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General Usage

The questionnaire is a form that is filled out between the experiment POC and the controls POC. IT contains the requested setup for every aspect of the experiment, including the motors, lasers, cameras and vacuum components.

The questionnaire is available [here](#) through the pswwww interface. There is a questionnaire for each run and the proposal catalog lists all of the experiments. Note, some experiments are listen in multiple runs.

```
$ epicsarch-qs exp_name
```

If no hutch is passed it will extract from the experiment name.

Optional Args

- path - allows user to specify a specific path for an archfile to be created/updated
 - If no path is provided it will default to:
Default path: /cds/group/pcds/dist/pds/[HUTCH]/misc/
- dry-run - prints preview to the console of what will be included in the experiment archfile

```
(epicsarch_dev) [ctsoi@psbuild-rhel7-02 misc]$ epicsarch-qs xppl1006821 --dry-run
INFO:happi.backends.qs_db:No device information found under 'trig'
INFO:happi.backends.qs_db:No device information found under 'ao'
INFO:happi.backends.qs_db:No device information found under 'ai'

#*diag_x
#XPP:USR:MMC:04.RBV
*lp_stat
*cryo_temp_base
XPP:XCS:TCT:01:GET_TEMP_D
*cryo_temp_sample
XPP:XCS:TCT:01:GET_TEMP_C
*cryo_temp_table
XPP:XCS:TCT:01:GET_TEMP_B
HXR:PRT:01:MMS:01.RBV
*jungfrau_y
```

- softlink - updates the softlink to the epicsArch_experiment_specific.txt

```
lrwxrwxrwx 1 ctsoi gu 59 Feb 28 11:21 epicsArch_XPP_exp_specific.txt -> /cds/group
/pcds/dist/pds/xpp/misc/epicsArch_xppx1003221.txt
```

- linkpath - provides user with the option to supply custom file path for softlink.
- cds items - gets current data from the questionnaire API via psdm client

```

from pcdsutils import QuestionnaireClient
client = QuestionnaireClient()
client.getProposalDetailsForRun("run21", "X-10016")
{"proposal_id": "X-10016", "Proposal": "X-10016", "contr-camera-4-wave":
  "IR", "contr-usercomp-2-location": "Hutch", "contr-camera-2-wave":
  "IR", "contr-usercomp-1-conn": "ethernet", "contr-camera-3-wave":
  "IR", "contr-camera-3-rate": "30", "contr-usercomp-2-purpose": "control
  of tape drive motors, syringe pump, sample shaker", "contr-camera-
  1-purpose": "inline view", "contr-camera-4-purpose": "x-ray interac-
  tion side view", "contr-camera-1-wave": "IR", "contr-camera-3-purpose":
  "tape overview", "contr-camera-2-purpose": "sample deposition", "c-
  ontr-usercomp-1-location": "Hutch", "contr-motors": "'2 Newport XPS
  motors, motors will be user provided, need channels on XPS motor contr-
  oller 6 Newport XPS motors, motors and XPS controller will be user pr-
  ovided, all motors will be controlled via EPICS from beam line", "c-
  ontr-camera-1-rate": "30", "contr-usercomp-2-conn": "ethernet", "contr-
  camera-4-wave": "IR", "contr-usercomp-1-purpose": "control of func-
  tion generator, syringe pump", "contr-camera-2-rate": "30", "xray-op-
  mode-1": "SASE", "xray-pulse-energy": "Maxima", "xray-mode-descr": "we
  will use the pulse picker to use 30 or 200 depending on the Rayonix
  binning mode", "xray-pulse-1": "40", "xray-xrt-single-shot": "Yes",
  "xray-focal-1": "3", "xray-energy-1": "5000", "xray-reprate": "30",
  "xray-standby": "No", "xray-mode": "Continuous", "xray-split": "Not N-
  eeded", "xray-stdcfg": "MFX Std Cfg #3 - Droplet on Tape", "xray-
  onchroa": "No", "pcdssetup-motors-5-location": "MFX sample table",
  "pcdssetup-motors-11-purpose": "EVO Laser Neveplate", "pcdssetup-motor-
  s-45-name": "Trig Y", "pcdssetup-camera-3-alias": "IRSide", "pcdssetu-
  p-trig-9-polarity": "negative", "pcdssetup-motors-11-location": "MFX
  sample table", "pcdssetup-a0-1-name": "Inrad", "pcdssetup-motors-7-m-
  agn-identity": "Newport", "pcdssetup-trig-9-purpose": "OPD Inhibit",
  "pcdssetup-motors-2-stageidentity": "Newport", "pcdssetup-trig-8-na-
  e": "EVOQ_trig", "pcdssetup-camera-2-type": "Monta-G45B", "pcdssetu-
  p-motors-17-location": "MFX sample table", "pcdssetup-a0-5-channel":
  "3", "pcdssetup-trig-7-pulse": "MFX-LAS-EVR-B1-TRIG4", "pcdssetup-m-
  otors-3-pulse": "MFX-USR-MMS-63", "pcdssetup-motors-13-purpose": "OPD

```

	Alias	PV Base	Type
	inrad	MFX-USR-a0:10	analog output
	laser_shutter_opo	MFX-USR-a0:16	analog output
	laser_shutter_ev01	MFX-USR-a0:17	analog output
	laser_shutter_ev02	MFX-USR-a0:12	analog output
	laser_shutter_ev03	MFX-USR-a0:13	analog output
	tape_x_mv	MFX-USR-MMS:41	motors
	laser_opo_neveplate	MFX-USR-MMS:09	motors
	laser_ev0_neveplate	MFX-USR-MMS:11	motors
	laser_opo_x	MFX-LAS-PIC:01	motors
	laser_opo_y	MFX-LAS-PIC:02	motors
	nav_zoom	MFX-USR-MMS:17	motors
	Inj_X	MFX-USR-MMS:25	motors
	Inj_Y	MFX-USR-MMS:26	motors
	SleeveZ1	MFX-USR-MMS:45	motors
	SleeveZ2	MFX-USR-MMS:46	motors
	SleeveT1	MFX-USR-MMS:42	motors
	SleeveT2	MFX-USR-MMS:43	motors
	jetty	MFX-USR-MMS:44	motors
	still	MFX-USR-MMS:47	motors
	tapek_old	MFX-USR-LIG:07	motors
	epixY	MFX-USR-LIG:08	motors
	nav_focus	MFX-USR-MMS:18	motors
	Overview_trig	MFX-REC-EVR-B2-TRIG1	triggers
	Maniscus_trig	MFX-REC-EVR-B2-TRIG3	triggers
	Inline_trig	MFX-REC-EVR-B2-TRIG6	triggers
	Deposition_trig	MFX-REC-EVR-B2-TRIG9	triggers
	Slide_trig	MFX-REC-EVR-B2-TRIG4	triggers
	XrayStile_trig	MFX-LAS-EVR-B1-TRIG7	triggers
	Pacemaker_trig	MFX-LAS-EVR-B1-TRIG4	triggers
	EVOQ_trig	MFX-LAS-EVR-B1-TRIG5	triggers
	Inhibit_trig	MFX-LAS-EVR-B1-TRIG6	triggers

- level - more for developers and troubleshooting, allows the user to specify a debugging level.

```

DEBUG:hutch_python.epics_arch:Set logging level of 'epicsarch-qs' to
'DEBUG'
DEBUG:hutch_python.epics_arch:
epicsarch-qs test script, git
INFO:happy.backends.qs_db:No device information found under 'trig'
INFO:happy.backends.qs_db:No device information found under 'ai'
DEBUG:hutch_python.epics_arch:!Alias Match in questionnaire and archf
ile! Updating PV: *sam_th, XPP:USR:MMS:17
DEBUG:hutch_python.epics_arch:!Alias Match in questionnaire and archf
ile! Updating PV: *sam_xr, XPP:USR:MMS:18
band DEBUG
DEBUG:hutch_python.epics_arch:!Alias Match in questionnaire and archf
ile! Updating PV: *sam_y, XPP:USR:MMS:25
DEBUG:hutch_python.epics_arch:!Alias Match in questionnaire and archf
ile! Updating PV: *sam_z, XPP:USR:MMS:24
DEBUG:hutch_python.epics_arch:!Alias Match in questionnaire and archf
ile! Updating PV: *swivel_x, XPP:USR:MMS:19
DEBUG:hutch_python.epics_arch:!Alias Match in questionnaire and archf
ile! Updating PV: *swivel_z, XPP:USR:MMS:20

```

Useful Info:

EngGen_04032024.pptx