

When Things Go Wrong

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ENERGY

Plan for the next few weeks

Topics to cover:

1. General overview
2. Workflow manager and DASMON listener – Installation & maintenance [this presentation]
3. Web monitor – Installation and maintenance
4. Autoreduction service – Installation and maintenance
5. Autoreduction setup through webmon – how-to and future vision
6. **The IHC call – when things go wrong & recovery strategies**
7. Vision for the future – what I would do differently

The IHC is calling... now what?

These are the top reasons to get called:

1. There are reduction errors

This is rarely your problem. Go to the monitor and look at the latest runs across all instruments. If most instruments are reducing data just fine, tell the IHC to call the CIS.

2. Recent runs are not appearing on the monitor

If there's a network issue, the AMQ clients might be stuck.

Restart the workflowmgr, dasmon_listener, AR services.

If that doesn't work, restart AMQ and restart those services again.

You may need to recover unprocessed runs.

3. The instrument status is not updating on the monitor

That's usually a DASMOM issue. Ask the IHC to call DAS.

4. User can't see his data

Ask them to log in...

5. 500

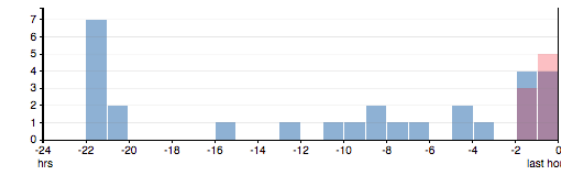
Someone touched something without letting you know...



You might need this link

HYS Monitor

home > hys > monitor live monitoring: status | runs | PVs



Align:Hu & SM in, 27 meV, check FR with flip 6.6 and comp 12.9 M off

Proposal: IPTS-22351 Run: 0
Status: Stopped Count rate: 20

Systems: Workflow

Last run: 245710 from IPTS-22351 created on Jan. 10, 2020, 10:50 a.m.

List of latest runs:

Show: 25 Search:

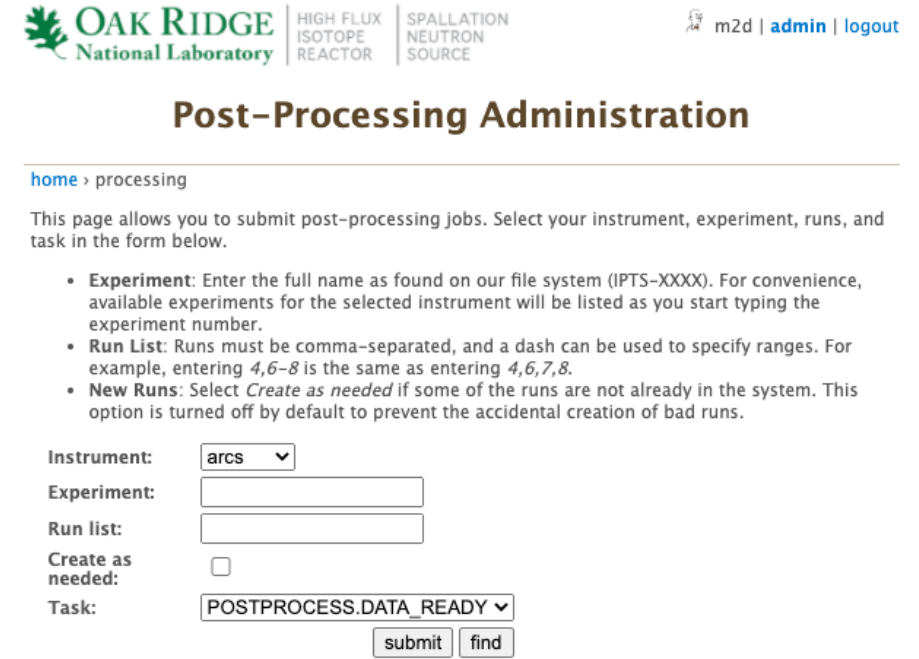
Run	Created on ▼	Status	Reduce
245710	Jan. 10, 2020, 10:50 a.m.	error	reduce
245709	Jan. 10, 2020, 10:47 a.m.	error	reduce
245708	Jan. 10, 2020, 10:40 a.m.	error	reduce
245707	Jan. 10, 2020, 10:36 a.m.	error	reduce
245706	Jan. 10, 2020, 10:28 a.m.	error	reduce
245705	Jan. 10, 2020, 10:24 a.m.	error	reduce
245704	Jan. 10, 2020, 10:23 a.m.	error	reduce
245703	Jan. 10, 2020, 10:20 a.m.	error	reduce
245702	Jan. 10, 2020, 8:09 a.m.	complete	reduce
245701	Jan. 10, 2020, 7:09 a.m.	complete	reduce
245700	Jan. 10, 2020, 7:04 a.m.	complete	reduce
245699	Jan. 10, 2020, 4:58 a.m.	complete	reduce
245698	Jan. 10, 2020, 3:58 a.m.	complete	reduce
245697	Jan. 10, 2020, 2:57 a.m.	complete	reduce
245696	Jan. 10, 2020, 2:47 a.m.	complete	reduce
245695	Jan. 10, 2020, 1:35 a.m.	complete	reduce
245694	Jan. 10, 2020, 12:35 a.m.	complete	reduce

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Errors!

The dangerous admin page

- We use this to resubmit a range of runs for which the DAS message got lost.
- The DAS has recently been updated to resubmit when the original request failed. This will help.
- Pick the instrument, and start typing the experiment number. The combo box uses ONCat for auto-completion.
- The “create as needed” checkbox is dangerous, because it WILL create new run entries.
- When clicking submit, a sanity check is run to verify that the runs you asked for don’t already exist as part of another IPTS.
- The “find” button simply runs through the run entries and lists out missing runs. It doesn’t write anything.



The screenshot shows the 'Post-Processing Administration' interface. At the top, there's a header with the Oak Ridge National Laboratory logo, 'HIGH FLUX ISOTOPE REACTOR', 'SPALLATION NEUTRON SOURCE', and user links 'm2d | admin | logout'. Below the header, the title 'Post-Processing Administration' is centered. A breadcrumb trail shows 'home > processing'. A paragraph explains the page's purpose: 'This page allows you to submit post-processing jobs. Select your instrument, experiment, runs, and task in the form below.' Below this, three bullet points provide instructions: 'Experiment' (full name as found on file system), 'Run List' (comma-separated, dash for ranges), and 'New Runs' (select 'Create as needed' if runs are not already in the system). The form itself has fields for 'Instrument' (a dropdown menu showing 'arcs'), 'Experiment' (a text input), 'Run list' (a text input), 'Create as needed' (a checkbox), and 'Task' (a dropdown menu showing 'POSTPROCESS.DATA_READY'). At the bottom right of the form are 'submit' and 'find' buttons.

OAK RIDGE National Laboratory | HIGH FLUX ISOTOPE REACTOR | SPALLATION NEUTRON SOURCE | m2d | [admin](#) | [logout](#)

Post-Processing Administration

[home](#) > processing

This page allows you to submit post-processing jobs. Select your instrument, experiment, runs, and task in the form below.

- **Experiment:** Enter the full name as found on our file system (IPTS-XXXX). For convenience, available experiments for the selected instrument will be listed as you start typing the experiment number.
- **Run List:** Runs must be comma-separated, and a dash can be used to specify ranges. For example, entering 4,6-8 is the same as entering 4,6,7,8.
- **New Runs:** Select *Create as needed* if some of the runs are not already in the system. This option is turned off by default to prevent the accidental creation of bad runs.

Instrument:

Experiment:

Run list:

Create as needed: ☐

Task:

The most annoying errors

#1. PV entries come in at a high rate. These are only used for instrument monitoring and are deleted after 2 hours.

The postgres IDs will eventually run out!

```
ALTER SEQUENCE pvmon_pv_id_seq RESTART WITH 1;
```

#2. The way the services are set up tends to leave old processes behind after a restart. Always check otherwise restarting might not fix the problem.