

# ifarm data syncs

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I showed Henry how to rsync the data files to the ifarm

He added it to cheat sheet (I added a comment)

For this to work for others whose name isn't "Purschke", we need to wait for the "eic" group to be added to the accounts

We tried all we could think of (permissions should be ok and all), but Henry couldn't create files in the area.

Next week.

(please resist the temptation to just rsync somewhere else; the idea of rsync is that you only transfer files that aren't there yet)

Over the weekend (stay logged in from my home desktop, eliminate the stand-up time) I'll keep doing it

# Henry's automated capture scripts (1)

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I showed Henry how to rsync the data files to the ifarm; he added it to cheat sheet (I added a comment)

Henry and I had a night session about the "MQTT" feature that will "broadcast" the run parameters on an MQTT topic. I showed Henry a sort-of template "receiver" script that I used to populate the sPHENIX run database. Here is the RunControl report:

```
{"run": [
  { "what": "main", "runnumber":539, "type": "new", "runtype": "junk", "time": 1777697479 , "events": 2
},
  {"what": "host",
    "hostentry": [
      { "name": "localhost", "serverID": 0, "events": 2, "readingTime": 1777697479,
"logging": 1},
      { "name": "localhost", "serverID": 1, "events": 2, "readingTime": 1777697479,
"logging": 1},
      { "name": "localhost", "serverID": 2, "events": 9, "readingTime": 1777697479,
"logging": 1},
      { "name": "localhost", "serverID": 3, "events": 22, "readingTime": 1777697479,
"logging": 1}
    ]
  }
]
```

The RCDAQs also broadcast what only they know.

I suggest to take said receiver script, remove the DB writing part, and do what we need to do.

Then run said receiver script from systemd so it's always there

# Henry's automated capture scripts (2)

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If that is too involved, there are alternatives:

rc has “hooks” (scripts to be executed at begin/endrun) that might turn out to be easier

There's a comprehensive set of commands to manage that:

```
rc_add_beginrun_command [command]    add a command to the list that gets executed at rc_begin
rc_add_endrun_command [command]      add a command to the list that gets executed at rc_end
rc_remove_beginrun_command [command] remove this command from the list that gets executed at rc_begin
rc_remove_endrun_command [command]   remove this command from the list that gets executed at rc_end
rc_show_beginrun_commands            show the commands that get executed at rc_begin
rc_show_endrun_commands              show the commands that get executed at rc_end
rc_clear_beginrun_commands            clear the list of commands executed at rc_begin
rc_clear_endrun_commands              clear the list of commands executed at rc_end
```

That obviously works at the run control level.

The command has access to all info it can possibly want by way of environmental variables

You **must not** use rc\_client commands – deadlock (we are called from a rc\_... command)


# Run automation

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I updated the “one\_hour” script to end /reconfigure / new run if we see the astropix stall.

I’m running it right now, we had one instance –

Leftover debug print,  
run nr - AP events



```
run is going for 2258 seconds -- will end after 3540 seconds
562    18936
run is going for 2308 seconds -- will end after 3540 seconds
562    19038
run is going for 2358 seconds -- will end after 3540 seconds
Astropix is frozen at 19038 events, ending run
ending the run at Sat May  2 12:33:56 PM EDT 2026
carbon - Run 562 end requested
carbon:1 - Run 562 end requested
carbon:2 - Run 562 end requested
carbon:3 - Run 562 end requested
reconfig astropix...
```

We’ll see if we get too many false positives

Bobae – can we get rid of all the chatter from the config script?

# My to-do list:

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- Install the event libraries on the ifarm (easy but I need to find the time)
- Look at or else roll back the version after the KCU monitoring crash (we suspect Akshaya's addition just b/c it's the latest change, but that's just an assumption)
- I still have the stall of the temp/humi readout in Prometheus (or elsewhere) on my list to look at
- Didn't get around to even look at the equivalent of the MPOD reading (that is super-stable) for the SFIL SiPM-biases