Consumer Monitors

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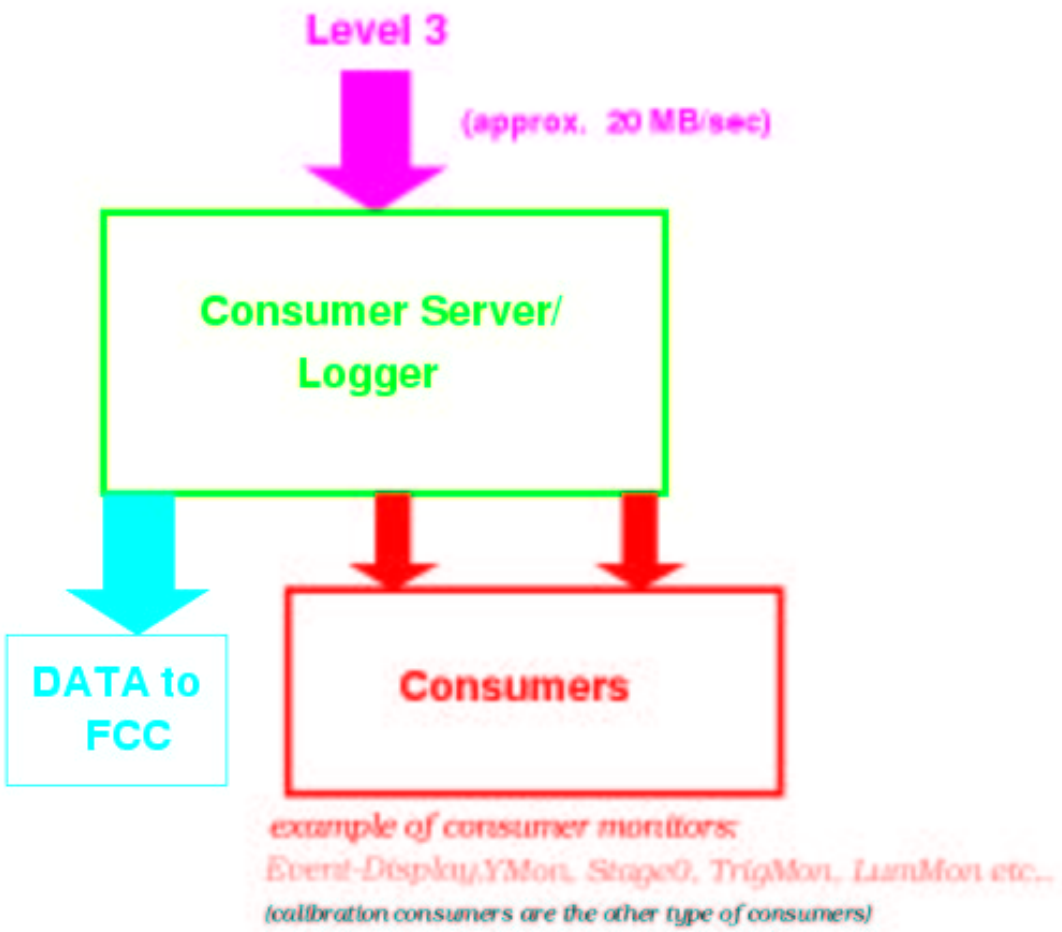
ACE Training

- Consumer Framework Overview
- Consumer Online Monitor Operation at Control Room

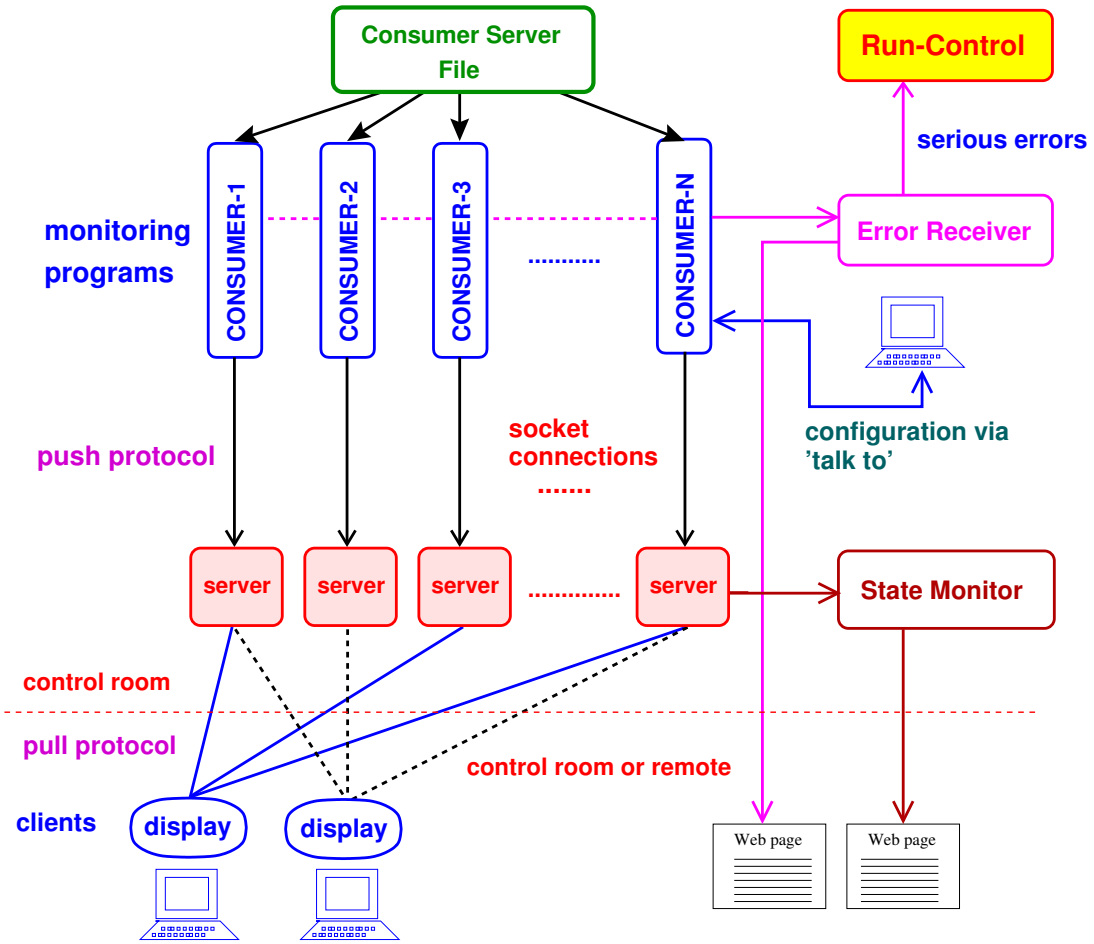
CDF RUN II Consumer Home Page
http://www-cdfonline.fnal.gov
/consumer/home/consumer_home.html

How consumers get data?



1. **Level 3**
   - **Final level of event filtering.**
2. **Consumer Server / Logger (CSL)**
   - **Writes events passing Level 3 to disk.**
   - **Serves events to consumers.**

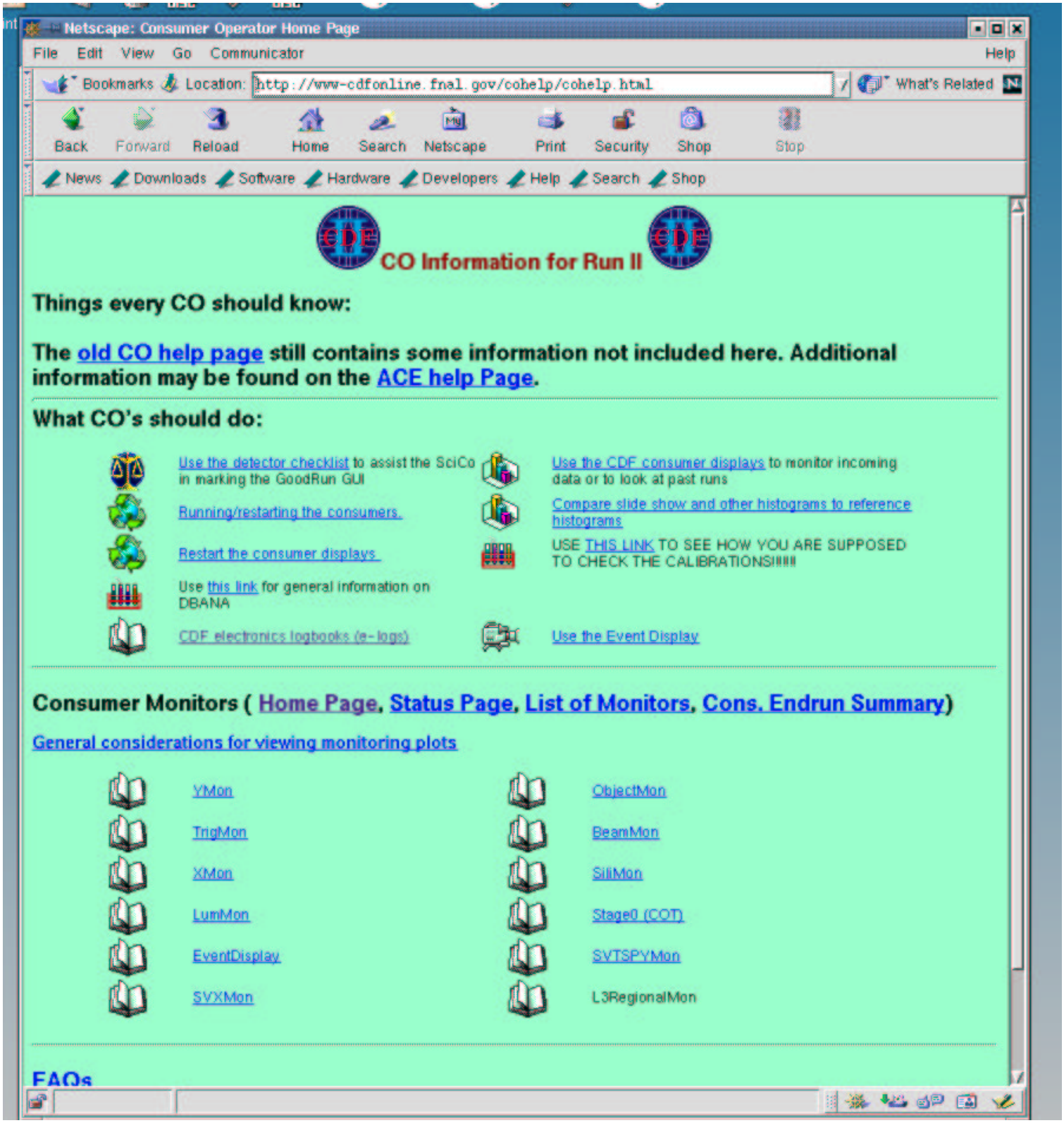
Consumer Framework Components



1. **Consumer**
   - **Analyse and monitor the event data from CSL.**
   - **Send error messages to the error receiver.**
2. **Server**
   - **Receives ROOT objects from consumer via socket.**
   - **Reports the status of consumers to the state manager.**
3. **Display (HistoDisplay)**
   - **Receives ROOT objects from server via socket.**
   - **Updates objects (histograms, tables, etc.) on canvas.**

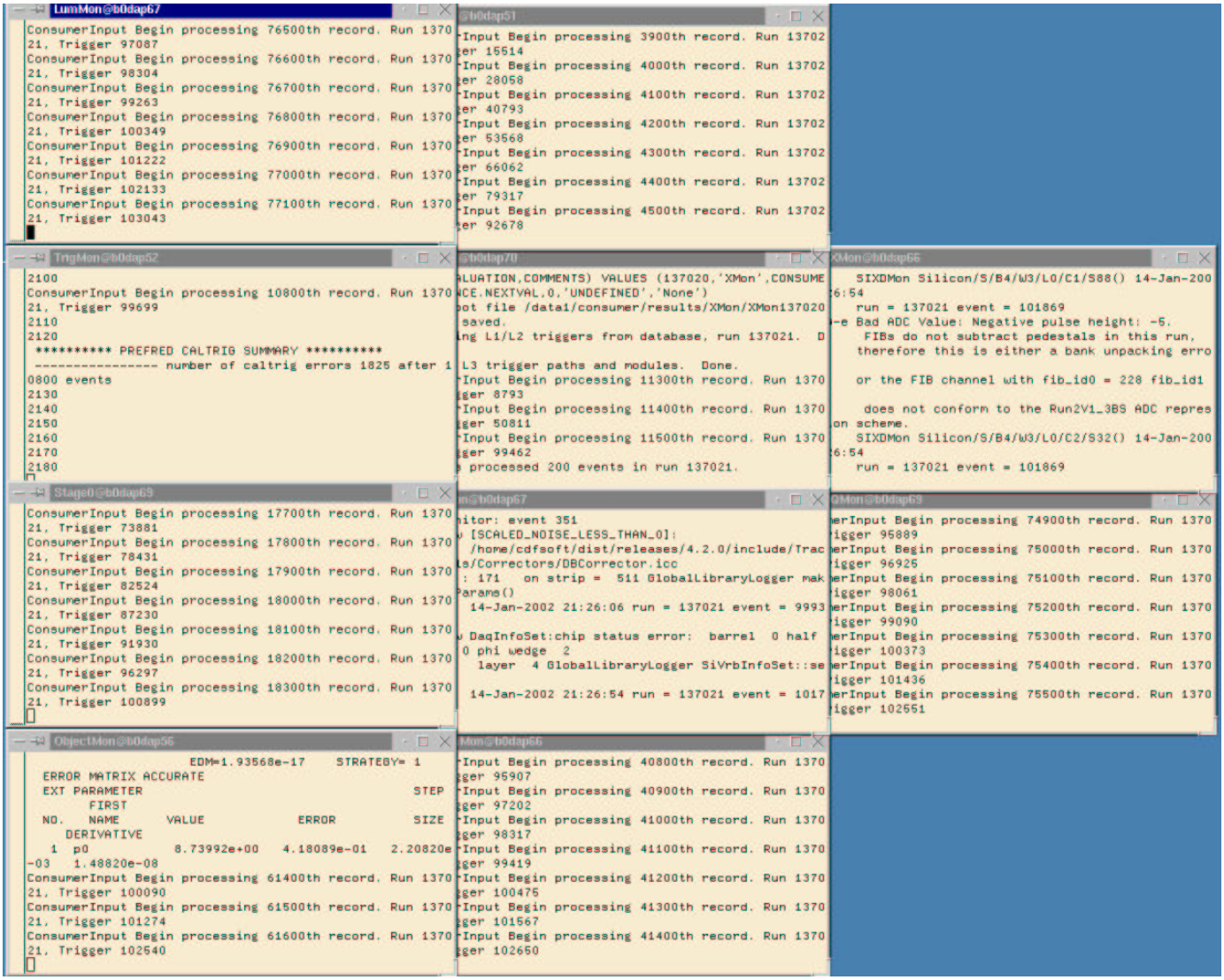
CO Help Page

http://www-cdfonline.fnal.gov/cohelp/cohelp.html



How to start consumer monitors

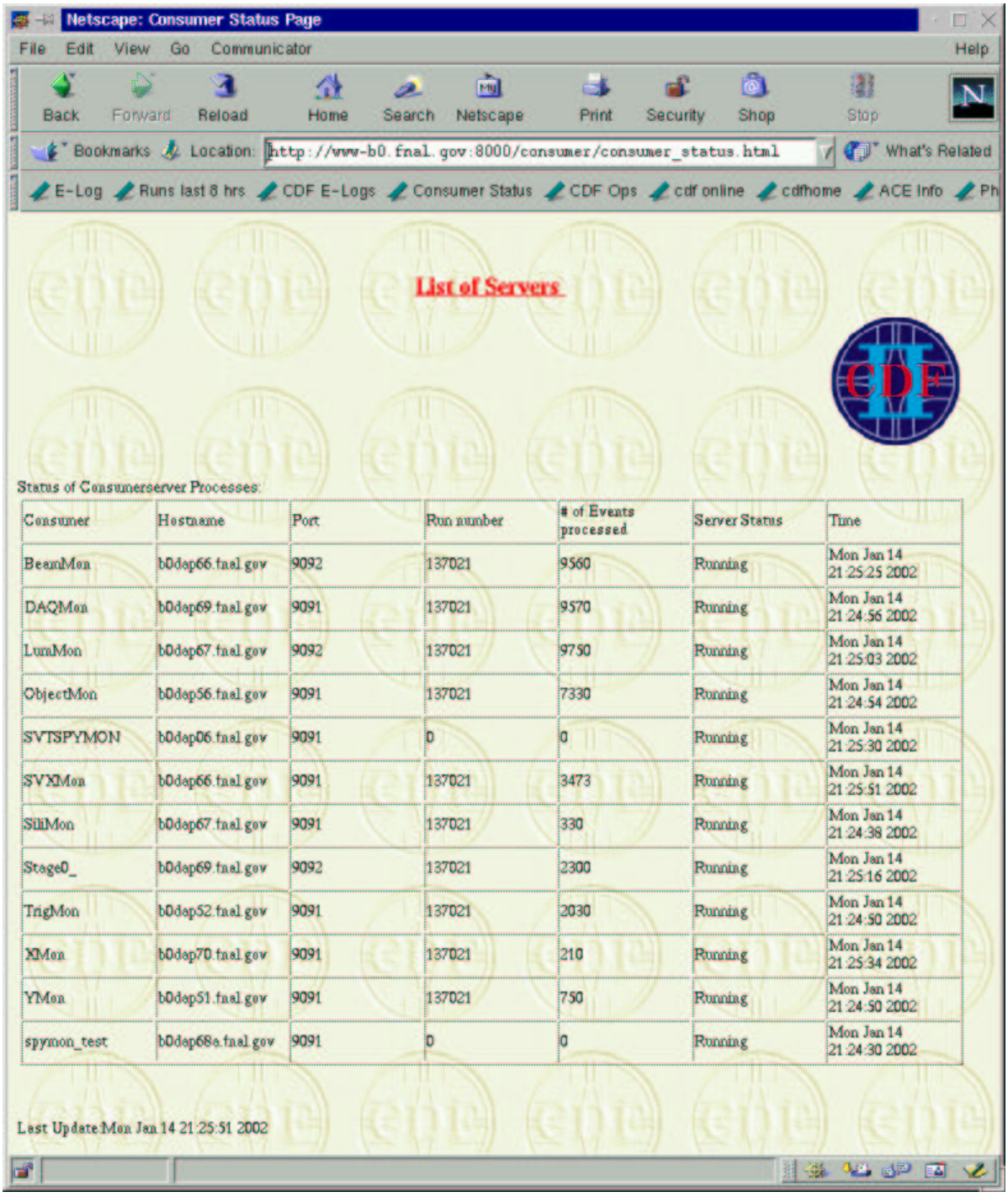
1. Go to /cdf/people1/cdfdaq/consumer_scripts directory on b0dap51
   (Type : cd consumer_scripts)
2. Type : ./startMon.sh All $< PartitionID >$
3. Server for each consumer start automatically.



Consumer Status Page

1. **Before attach a consumer to HistoDisplay, make sure that the consumer appears on the consumer status page (minimum 10 events).**

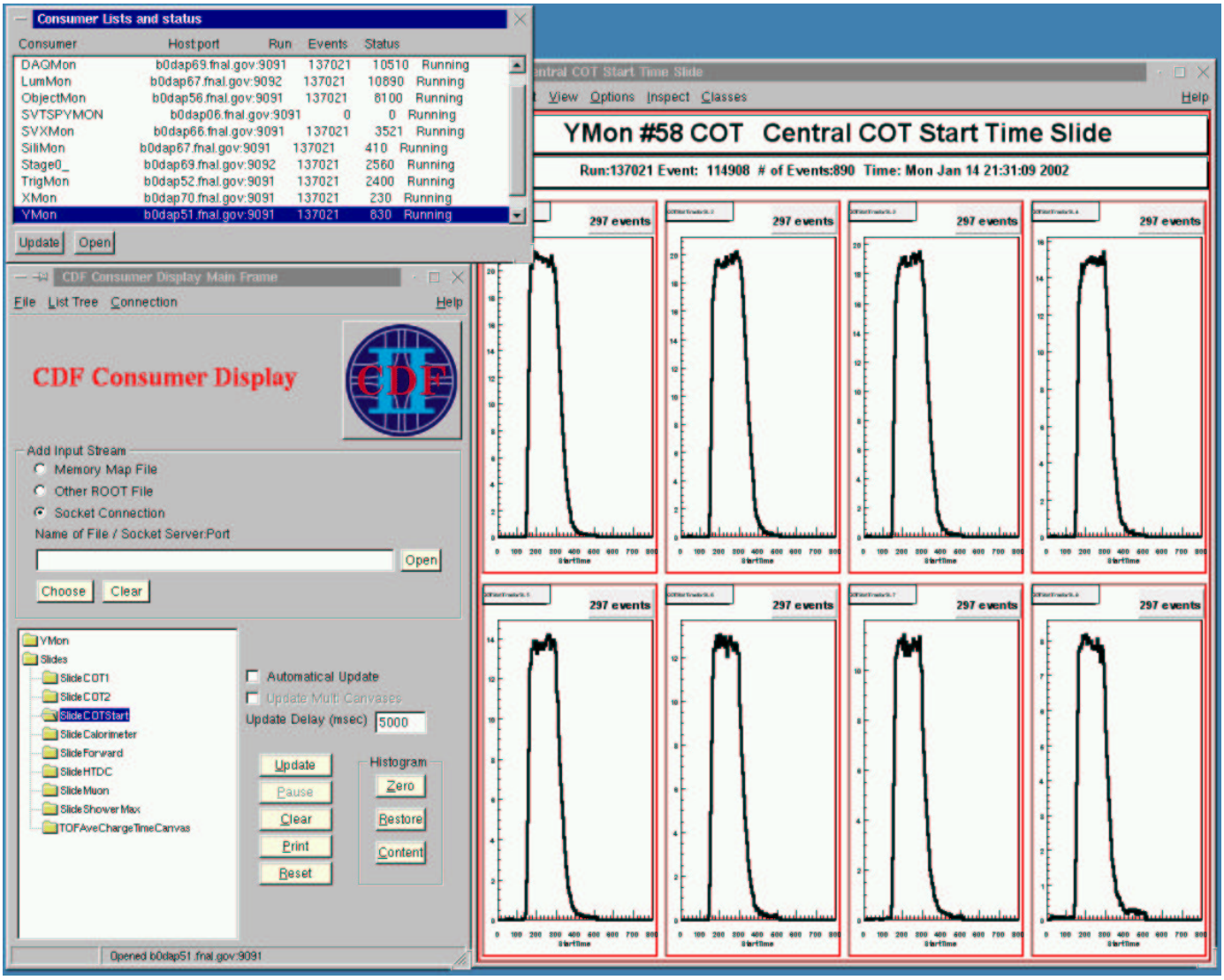
http://www-cdfonine.fnal.gov/consumer/consumer_status.html



Consumer	Hostname	Port	Run number	# of Events processed	Server Status	Time
BeamMon	b0dap66.fnal.gov	9092	137021	9560	Running	Mon Jan 14 21:25:25 2002
DAQMon	b0dap69.fnal.gov	9091	137021	9570	Running	Mon Jan 14 21:24:56 2002
LumMon	b0dap67.fnal.gov	9092	137021	9750	Running	Mon Jan 14 21:25:03 2002
ObjectMon	b0dap56.fnal.gov	9091	137021	7330	Running	Mon Jan 14 21:24:54 2002
SVTSPYMON	b0dap06.fnal.gov	9091	0	0	Running	Mon Jan 14 21:25:30 2002
SVXMon	b0dap66.fnal.gov	9091	137021	3473	Running	Mon Jan 14 21:25:51 2002
SiliMon	b0dap67.fnal.gov	9091	137021	330	Running	Mon Jan 14 21:24:38 2002
Stage0_	b0dap69.fnal.gov	9092	137021	2300	Running	Mon Jan 14 21:25:16 2002
TrigMon	b0dap52.fnal.gov	9091	137021	2030	Running	Mon Jan 14 21:24:50 2002
XMon	b0dap70.fnal.gov	9091	137021	210	Running	Mon Jan 14 21:25:34 2002
YMon	b0dap51.fnal.gov	9091	137021	750	Running	Mon Jan 14 21:24:50 2002
spymon_test	b0dap68a.fnal.gov	9091	0	0	Running	Mon Jan 14 21:24:30 2002

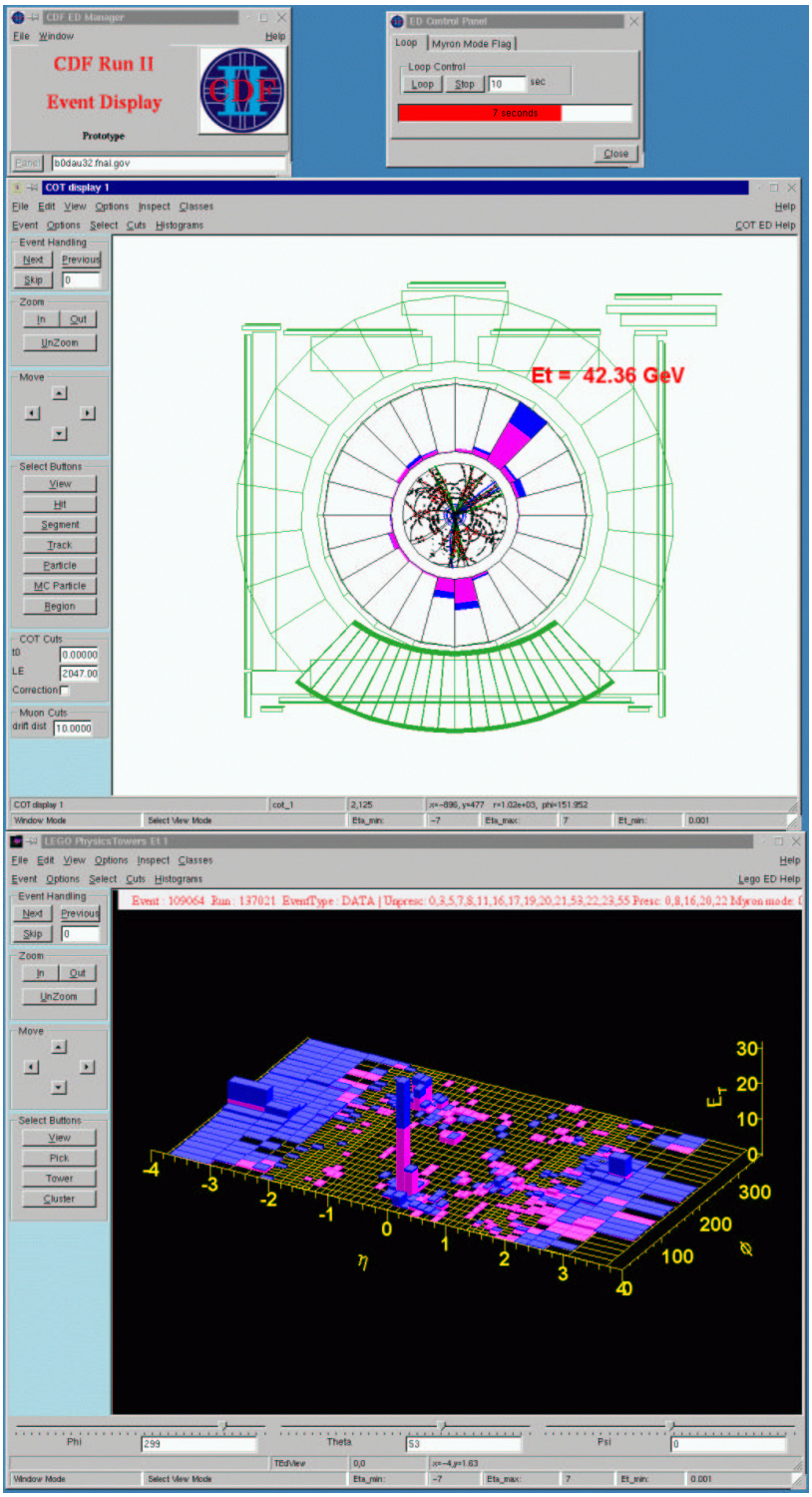
How to start HistoDisplay

1. Go to /cdf/people1/cdfdaq/consumer_scripts directory on b0dap51
2. Type : ./startDisplay.sh All
3. HistoDisplays appear on top and bottom screens of b0dap52, 55 and 56



How to start Event Display

1. **Go to /cdf/people1/cdfdaq/consumer_scripts directory on b0dap50 (left most terminal).**
2. **Type : ./startEvd.sh** $< PartitionID >$



Odds and Ends

- Tell the CO the partition ID on which you start taking data. In general, it is a good idea to tell CO when you are starting/stopping a run.
- If you close partition, or restart run_control, one needs to restart all the consumer monitors in order for monitors to receive events from newly started partition. Please notify CO in that case.
- Check “UseLevel3Manager” is enabled in the Run Control. If not, conumers can not start running.

- Please help out (work with) CO people when you have time.
- Old root files (monitor output files) can be found in /data1/consumer/results/xxxxMon area and older root files can be found in /cdf/cdf-cf-data1/cdf_cf/results/xxxxMon area. One can use the same HistoDisplay GUI as used on online to view these root files.

Odds and Ends. Cont.

- **About SVXMon Auto HRR:**
  You will get an alarm from RUN_CONTROL, if you are running with silicon and if SVXMon is not running. Please make sure SVXMon is running in that case.

- **SVXMon does not process any data if silicon is not integrated in data taking. If YMon is not processing events during cosmic run or shot-setup run (even though other monitors seem to be getting events), do not worry. It is probably because it is configured to run "physics" mode and YMon is looking for minimum biased events. In that case, YMon will start processing events when the really physics data taking starts.**

- **When you find any problems in consumer monitors in general, please notify us, consumerframework people:**
  (send mail to maeshima@fnal.gov, page:online monitor 266-2705, etc...).