

## Collector/Router

This is very simple application, which helps distribute events to DataLogger and Distributor. It is just a toy needed for tests, which can be very useful to monitor data rates.

### Current functionality:

- Receives events from multiple sources
- Sends them to two clients (DataLogger and Distributor)
- If one client doesn't exist or it is slower then some of the events are not sent
- It can be stopped and started any time
- It prints statistic information as well as status of the connection to the clients

### Documentation:

d0ola:~d0run/documents/dlu\_quick\_guide.html

### Start:

Login as d0run on d0ola and setup environment:

```
> setup D0RunII -f NULL
> setup ace v4_6
> cd bin/OSF1
```

and start executable:

```
> collector
```

### Stop:

^C or kill

### Help:

```
> collector -help
```

### Contact:

Dorota Genser, [dorota@fnal.gov](mailto:dorota@fnal.gov), phone x**8746**

```
>
> pwd
/home/d0run
> source ,d0env_init
**unsetup D0RunII current NULL
***setup D0RunII current NULL
** using architecture/compiler combo OSF1V4-KCC_3_3 **
> cd bin/OSF1
> pwd
/home/d0run/bin/OSF1V4-KCC_3_3
> collector
----- Collector/Router -----
Server port      : 52210
Datalogger address : 'localhost:52215'
Distributor address : 'localhost:52100'
AlarmServer address : 'localhost:52150'
DLU > (3071711) Status -> -- start Status
11:44:07.233104 -----
              events | MBytes | lost | RATES  ( MBytes/sec)  OPEN
              |      |      |      | AVR | Cur | max
C/R           0 | 0.00e+00 | 0 | -1.00 | -1.00 | -1.00
DataLogger    0 | 0.00e+00 | 0 | -1.00 | -1.00 | -1.00 - NO
Distributor   0 | 0.00e+00 | 0 | -1.00 | -1.00 | -1.00 - NO
status        INFO : Collector -> connection to DataLogger is closed
status        INFO : Collector -> connection to Distributor is closed
```

## DataLogger

This is the prototype of the DataLogger and it has most of the functionality needed for the Run II.

### Short summary of current functionality:

- Receives events from multiple sources
- Writes them to files based on the run number and stream ID
- Handles multiple runs and streams.
- Understands COOR commands
- Creates metadata files (together with the data file) and run summary files (in current directory) needed for the bookkeeping

### Documentation:

d0ola:~d0run/documents/dl\_quick\_guide.html

### Start:

Login as d0run on d0ola and do:

```
> setup D0RunII -f NULL
> setup ace v4_6
> cd bin/OSF1
```

and start executable:

```
> datalogger
```

### Stop:

^C or kill

### Help:

```
> datalogger -H
```

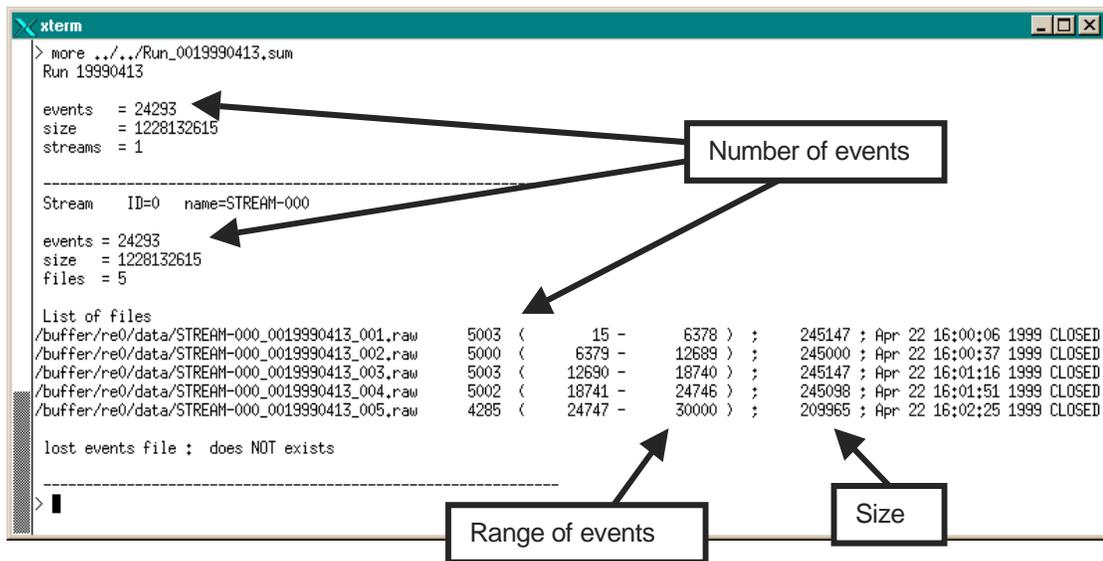
### Contact:

Dorota Genser, [dorota@fnal.gov](mailto:dorota@fnal.gov), phone x8746

### Output:

- Data files are written to **/buffer/re1/data** as a default. Filename like:  
STREAM-001\_0019990503\_001.raw  
Stream name Run No partition
- Metadata file - this is the text file with the information about the data file (*<data file name>* **.md**). This file contains number of events written, size of the file, time file was open and closed etc.

- Event catalog file - this is the text file with the information about all written events (*<data file name>.events*). This file is not very useful right now because event information sent to DataLogger is not valid.
- Run summary file is created in the current directory and it has a short summary of the whole run: number of events, total size, streams and files written. This information is also printed on the screen when the Run is closed.



## Distributor

This application is an interface to the monitoring processes (EXAMINE).

### Current functionality:

- Receives events sent by collector/router or other source
- Receives requests from the monitoring process which include setup information
- Stores events for each monitor process and sends them per request

### Documentation:

d0ola:~d0run/documents/dd\_quick\_guide.html

### Start:

Login as d0run on d0ola or d0linux01 and:

```
> setup D0RunII -f NULL
> setup ace v4_6
> cd bin
```

and run script

```
> start_dist -d 0
```

and for the distributor with the additional process, which is reading data file and sending events to the distributor

```
> start_lvl3_file
```

The start\_dist and start\_lvl3\_file are the scripts that should be used as a templates for the users if they want to use their own files or other setting.

### Stop:

```
kill <pid>
```

### Contact:

Gerald Guglielmo, [gug@fnal.gov](mailto:gug@fnal.gov), phone x6455

```
xterm
> pwd
/home/d0run/bin/OSF1V4-KCC_3_3
> ddttoy_dd -d 0
max mb: 1000 current: 0 basic unit: 5
(1218211) ... creating Stream Manager
max mb: 1000 current: 0 basic unit: 5
DIST> [16:17:45.22611011] connecting to localhost:52150
D0me> (1218211) IPC_Handle::connect -> failed
DIST_E> [16:17:45.22777511] failed to connect to localhost:52150 will continue anyway
max mb: 1000 current: 0 basic unit: 5
DIST> [16:17:50.46980012] Stream_Man Status Message
DIST> [16:18:06.09638312] Stream_Man Status Message
DIST> [16:18:15.05501712] Stream_Man Status Message
DIST_E> [16:18:16.05483912] Conn not open for send alarm messageDIST> [16:18:18.44154312] Str
DIST_E> [16:18:19.44095712] Conn not open for send alarm messageDIST> [16:18:20.48744012] Str
DIST_E> [16:18:21.48574712] Conn not open for send alarm message█
```