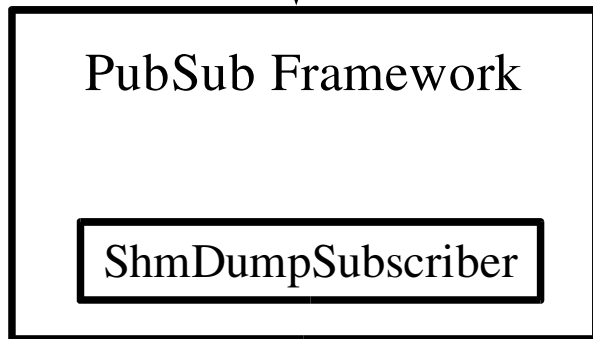


Working Scheme

HLT

(Ali)Root environment

raw data
copy



ROOT Interface Data Block



- Shared memory
- TCP exchange

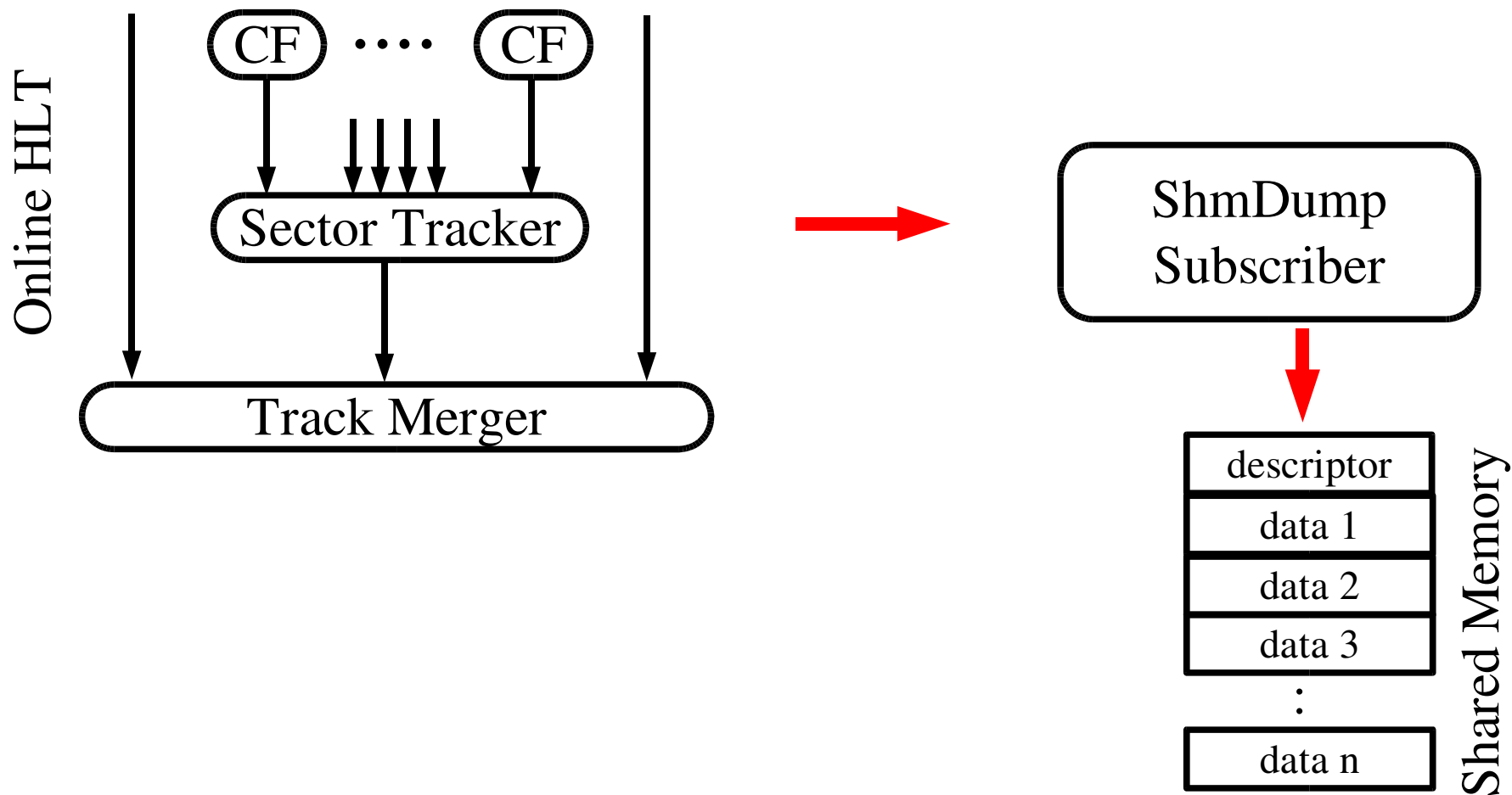
Online Monitor/
Analysis environment



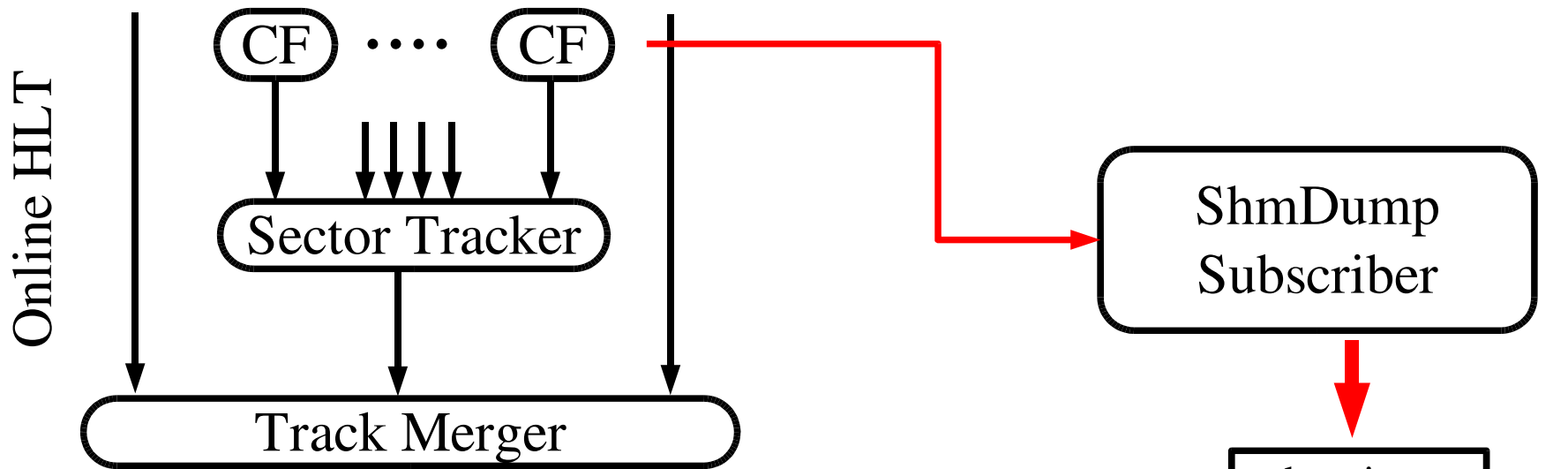
- arbitrary connection to anyanalysis components
- collect incoming data for one event

- exploit Offline Framework
- Root interactive mode

Connection to the data flow



Connectivity example 1



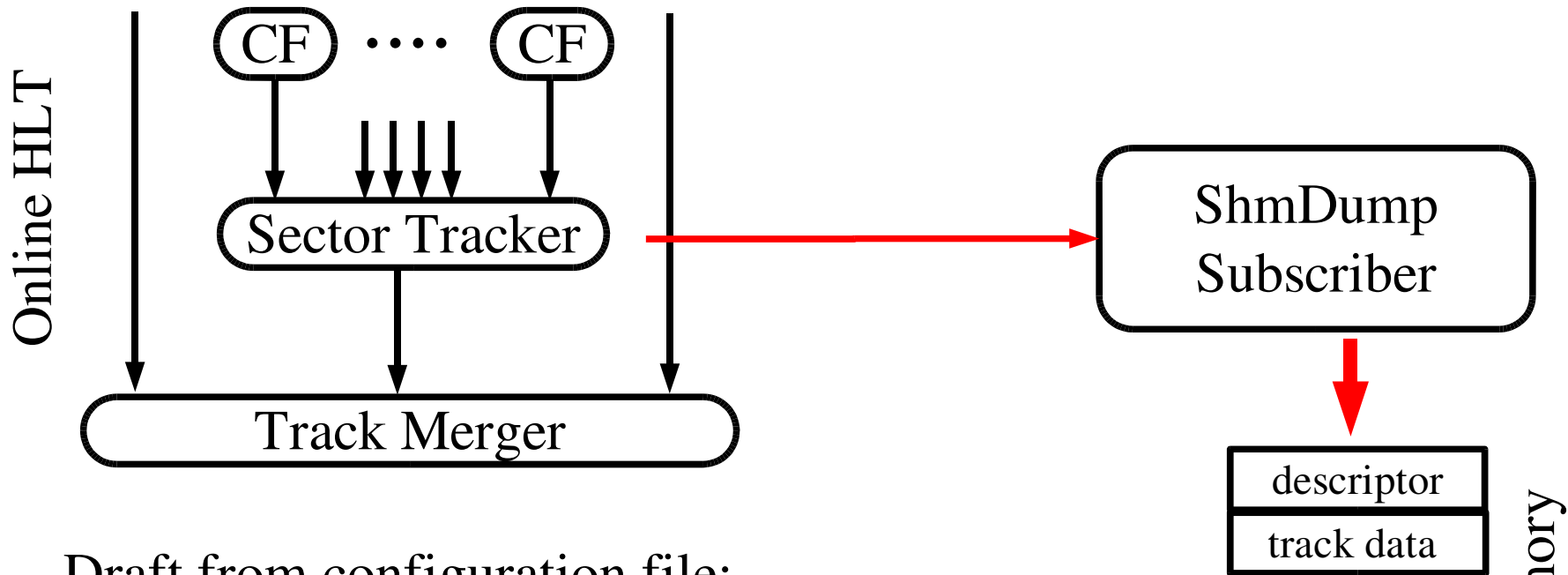
Draft from configuration file:

```
<Proc ID="SDSSC" type="snk">
  <Parent>ClusterFinder0</Parent>
  <Parent>ClusterFinder1</Parent>
  <Parent>ClusterFinder2</Parent>
  <Parent>ClusterFinder3</Parent>
  <Parent>ClusterFinder4</Parent>
  <Parent>ClusterFinder5</Parent>
  <Cmd> ...ShmDumpSubscriber </Cmd>
  <Node>0</Node>
</Proc>
```

descriptor
cluster data 1
cluster data 2
cluster data 3
cluster data 4
cluster data 5
cluster data 6

Shared Memory

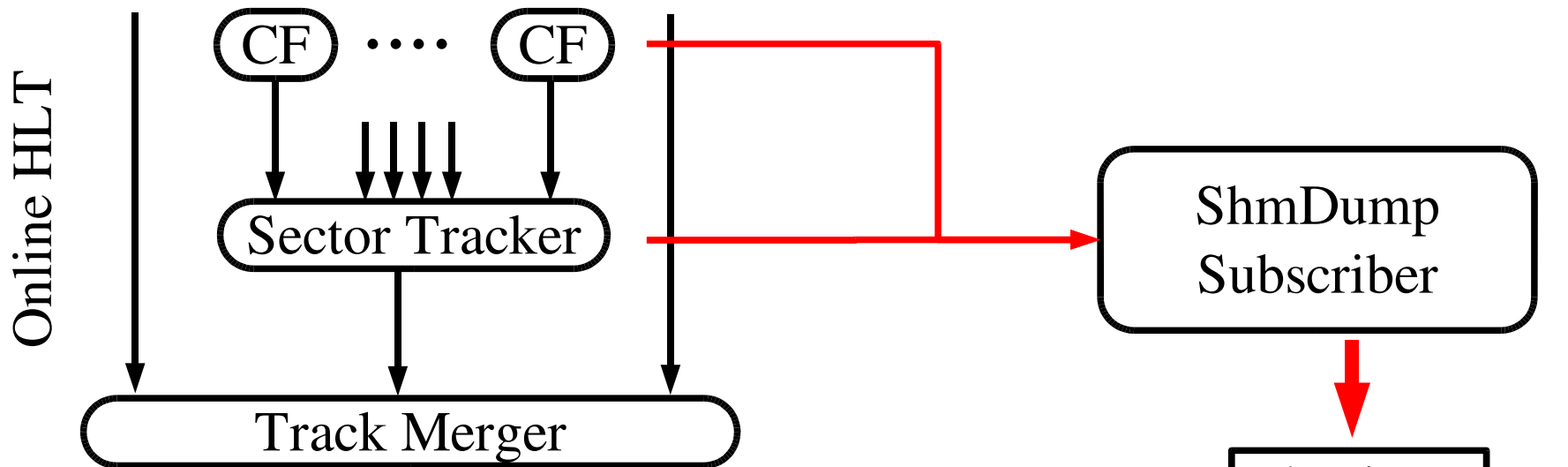
Connectivity example 2



Draft from configuration file:

```
<Proc ID="SDSSC" type="snk">  
  <Parent>SectorTracker</Parent>  
  <Cmd> ...ShmDumpSubscriber </Cmd>  
  <Node>0</Node>  
</Proc>
```

Connectivity example 3



Draft from configuration file:

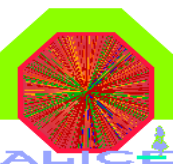
```
<Proc ID="SDSSC" type="snk">
  <Parent>ClusterFinder0</Parent>
  <Parent>ClusterFinder1</Parent>
  <Parent>ClusterFinder2</Parent>
  <Parent>ClusterFinder3</Parent>
  <Parent>ClusterFinder4</Parent>
  <Parent>ClusterFinder5</Parent>
  <Parent>SectorTracker</Parent>
  <Cmd> ...ShmDumpSubscriber </Cmd>
</Node>0</Node>
```

descriptor
cluster data 1
cluster data 2
cluster data 3
cluster data 4
cluster data 5
cluster data 6
track data

Shared Memory

TCP Port DumpSubscriber

- DumpSubscriber publishes data whenever a client connects to the provided port
- the client can run on another machine than the HLT cluster
- a webbrowser interface displays the current HLT configuration, the user can choose the components to connect to
- an arbitrary number of DumpSubscribers can be run on the HLT cluster



Status and outlook

- ready for a TPC Online display
- interface defined
- ShmDumpSubscriber ready
- Extension of Online display to support track and raw data investigation has to be done
- TCP version of the DumpSubscriber on the way
- TPC Monitoring tools