

STAR Analysis Framework*

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The analysis framework in STAR (called STAF) generally provides the interface between the physicists doing data analysis and the off-line computing facilities. STAF provides an encapsulation for data analysis algorithms permitting the integration of components provided by many physicists with those components which provide the rest of the computing environment, i.e., data access, user interface, control logic, etc.

This framework, developed in C++ and following an interface standard for component software (CORBA)‡ was released to the collaboration during the summer and process of moving the pre-existing simulation and analysis software into the new framework is nearly complete.

There are many components to this framework as shown in figure 1 and some of the major ones are:

- DUI - unix-like user interface to the hierarchical data structures
- DIO - interface to disk, network and tape data input & output
- AMI - interface to user-written analysis code
- TBR - table browser for viewing data

A new user interface based on Tcl/Tk is being developed for STAF (and the whole STAR off-line environment) at UW, called the STAR Offline Notebook (figure 2). This will provide a graphic interface to the available set of programs and off-line activities. This interface should permit more reliable usage of the off-line software as well as enabling non-experts to play a significant role in the simulations and data analysis activities.

Besides its current use for STAR simulations software, STAF is being used for analysis of actual cosmic-ray test data in the STAR System Test environment**.

Footnotes and References

* <http://www.rhic.bnl.gov/STAR/star.html>

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‡ <http://www.omg.org/orb.htm>

** See separate report on STAR system test.

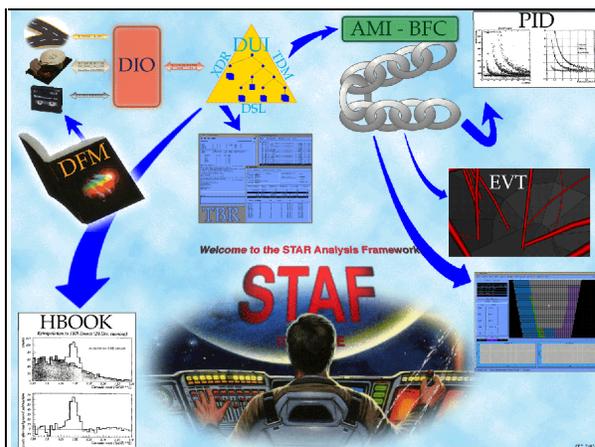


Fig. 1. Artistic rendition of a scientist controlling the components of the STAR analysis framework.



Fig. 2. Screen view of STAR Offline Notebook. Programs or activities are selected by clicking on the notebook tabs.