Atlas Graphics

- Mission
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- Components
- Atlas Software Design
- Status

HEPVis

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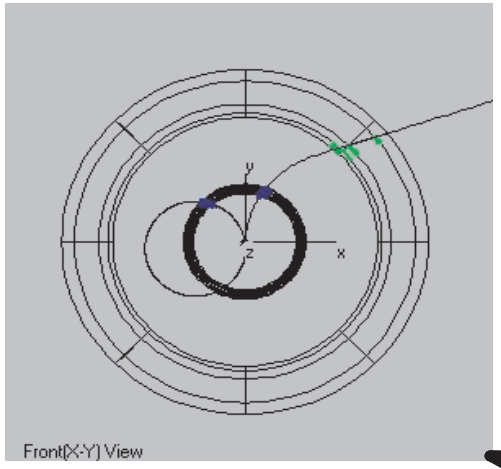
http://atlasinfo.cern.ch/Atlas/GROUPS/GRAPHICS/

Mission

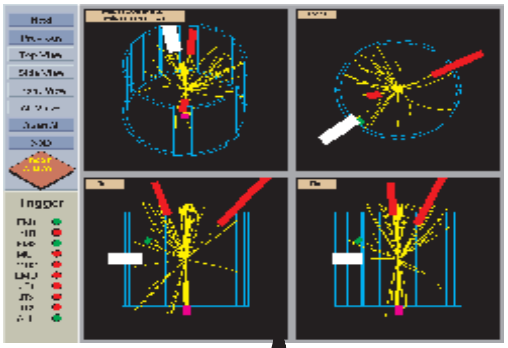
The aim of the Atlas Graphics is to enable visual representation of the objects existing in the Atlas software.

The Design of the Atlas Graphics is based on the believe that both requirements and graphics software abilities will be very broad at any time and will constantly evolve. The Atlas Event Displayshould be able to accommodate all that diversity and changes. This can be accomplished only by extreme **flexibility** and **modularity** of the core control structure.

The Atlas Graphics is part of the full Atlas software package.



Aravis



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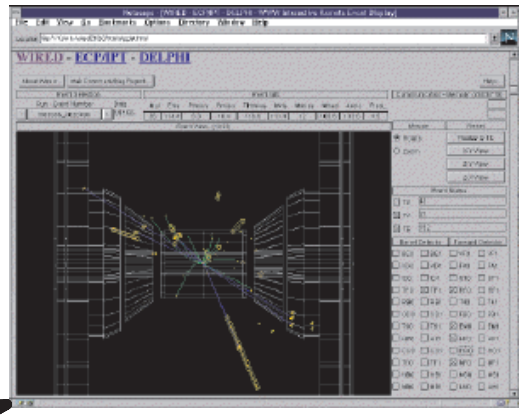

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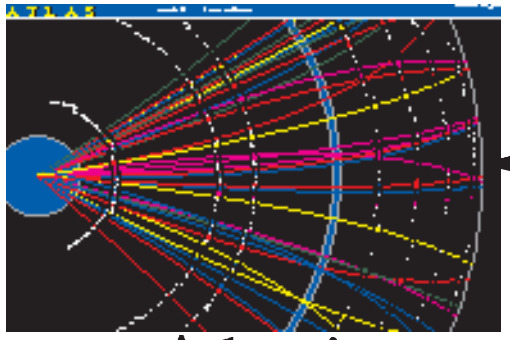
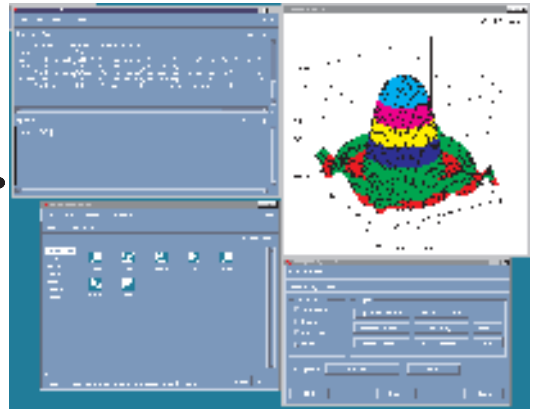
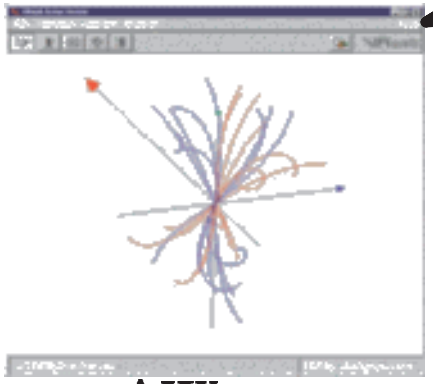


Atlantis

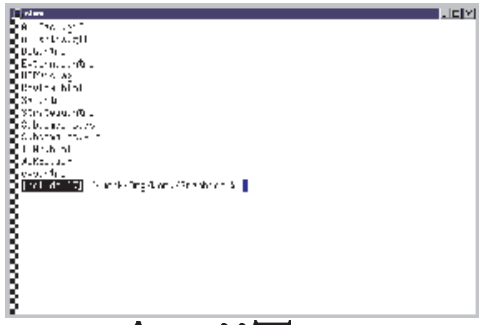
Arve



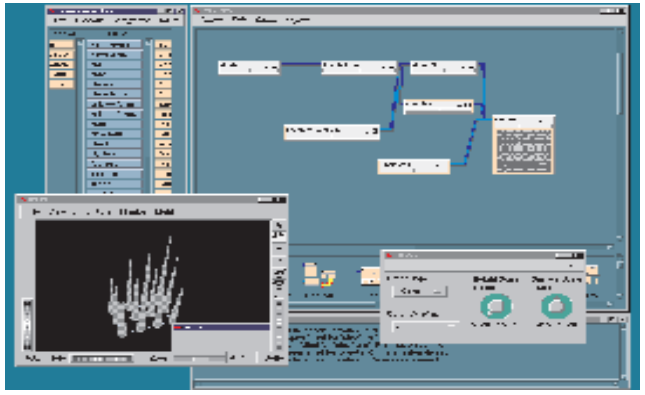
AHisto



AWave



AsciiText

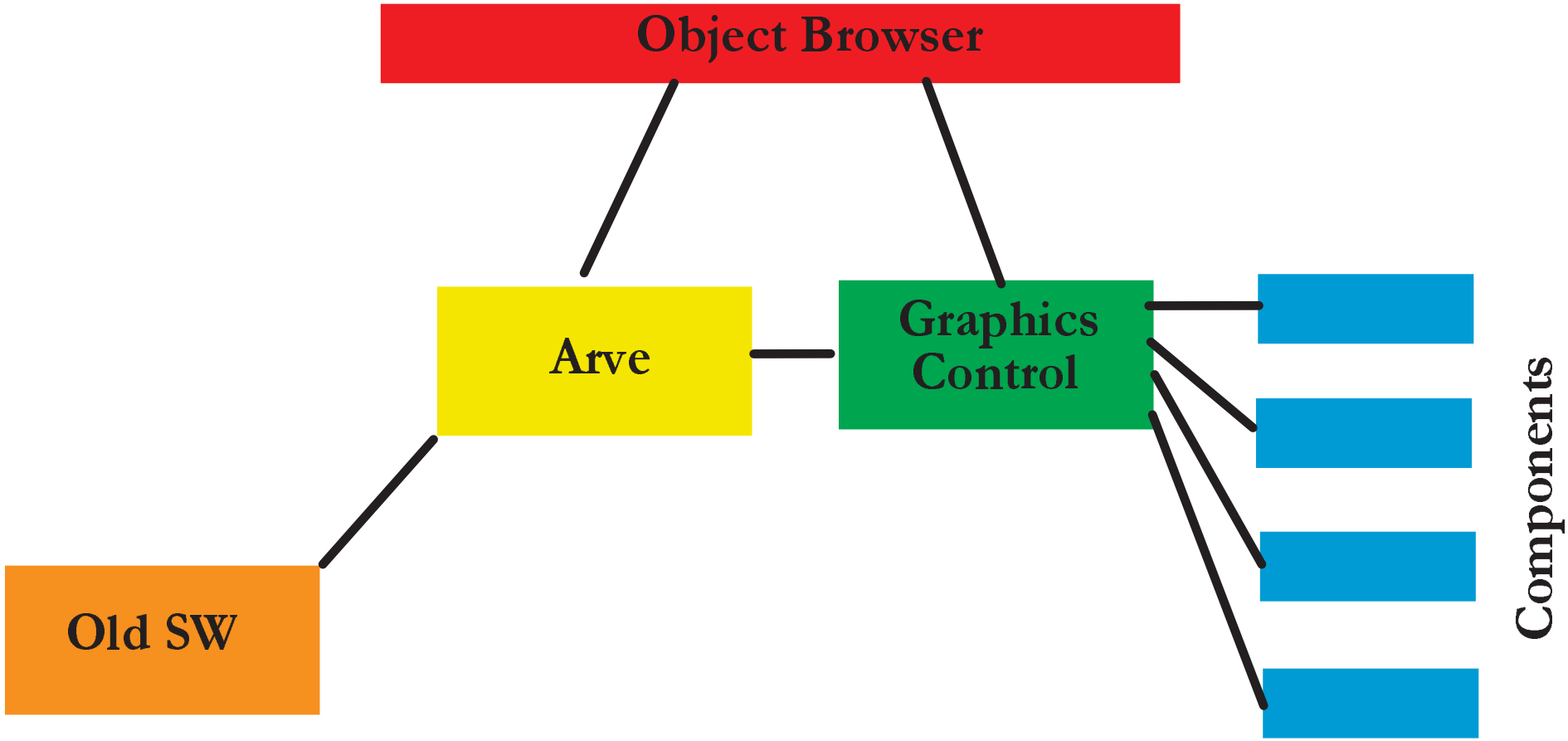


HBookTuple

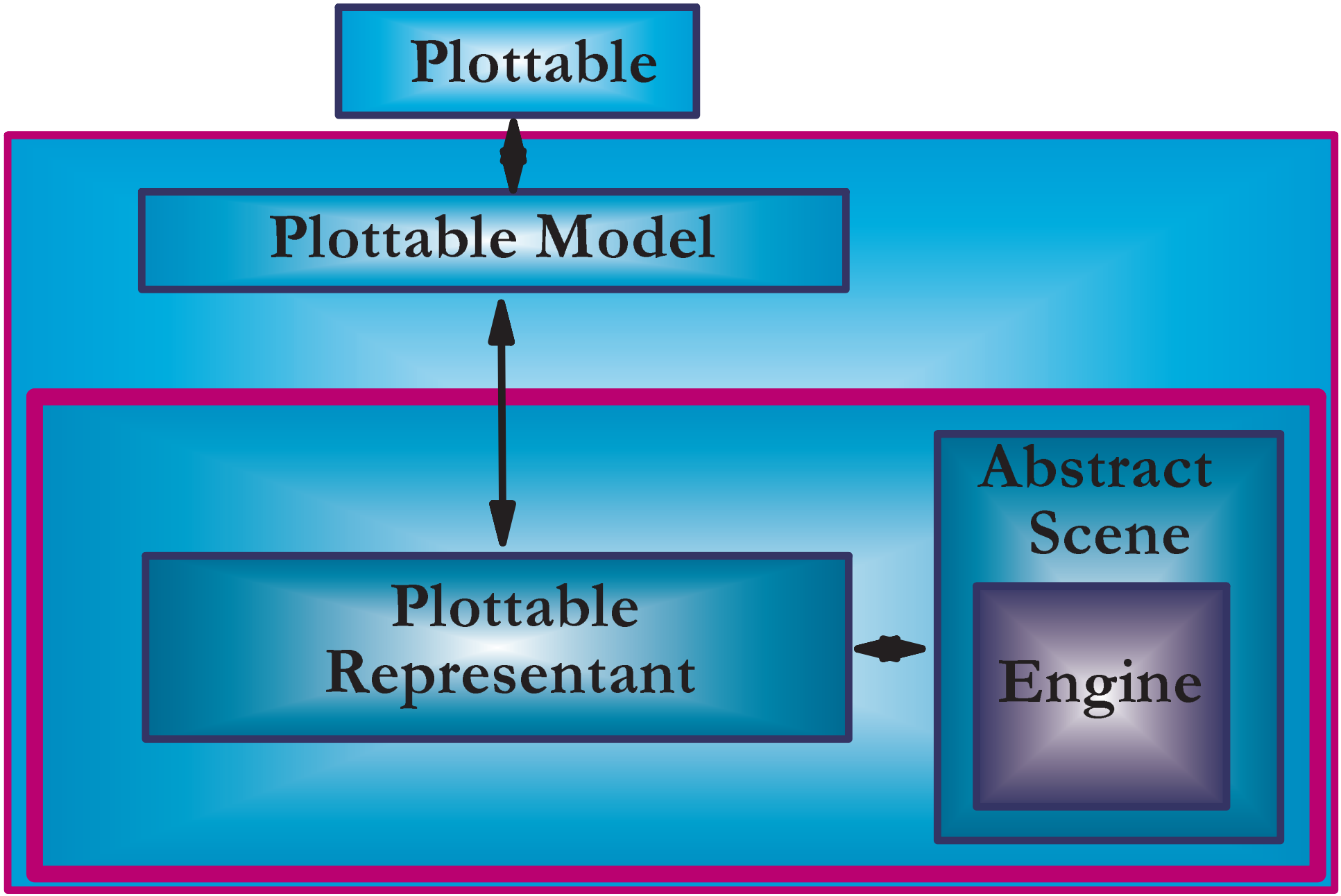
Components

- **Event Display**
  - *Aravis* - original *Arve* Graphics
  - *Atlantis* - HiTech Event Display
  - *AWIRED* - Web based
  - *AtlVis* - HEPVis
  - *AWave* - VRML 2.0, VRWave
- **Histograms**
  - *AHisto* - HEP-Explorer
  - *HBookTuple* - Paw
  - *ARoot* - Root
- **Misc**
  - *AsciiText* - textual output

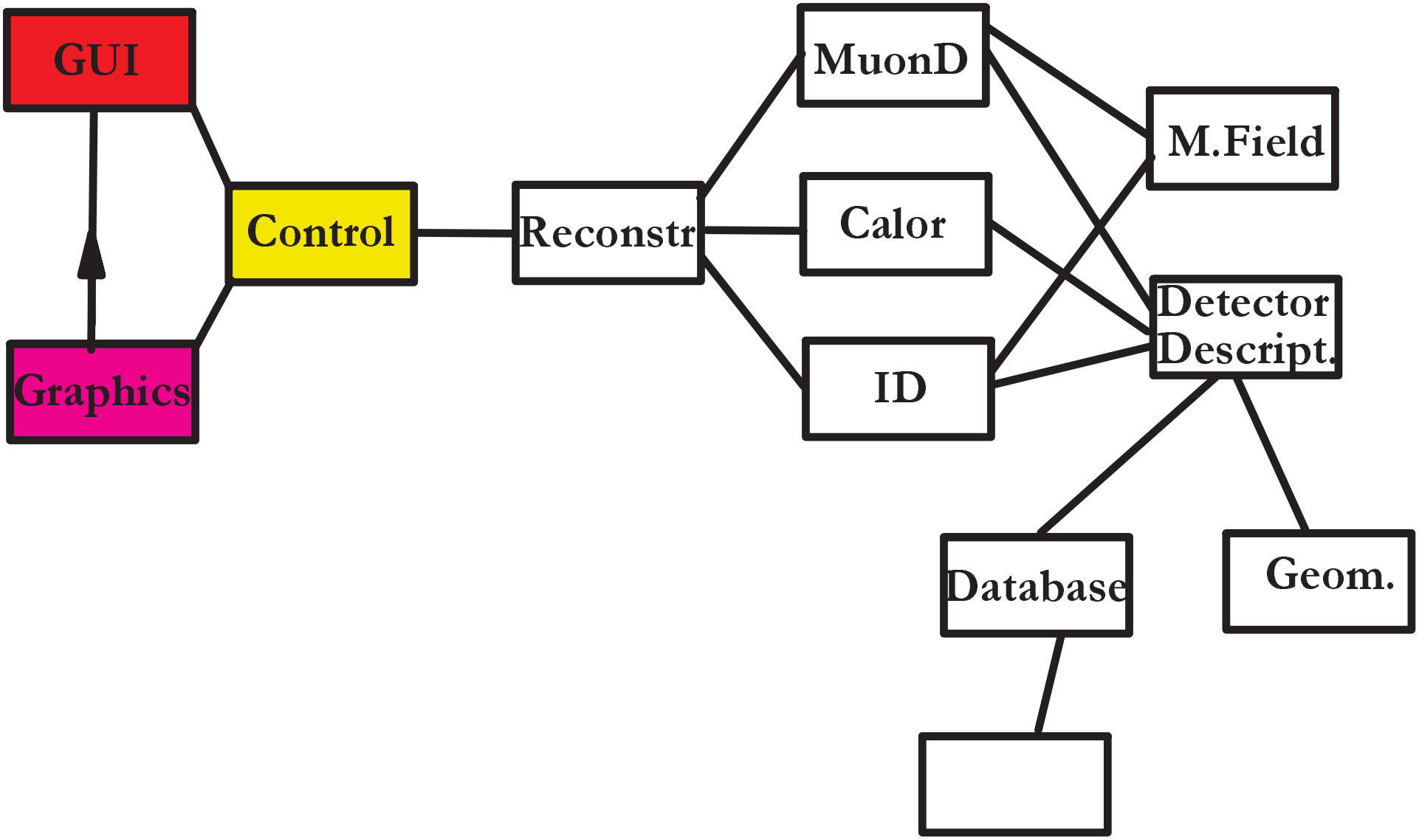
Design



Component

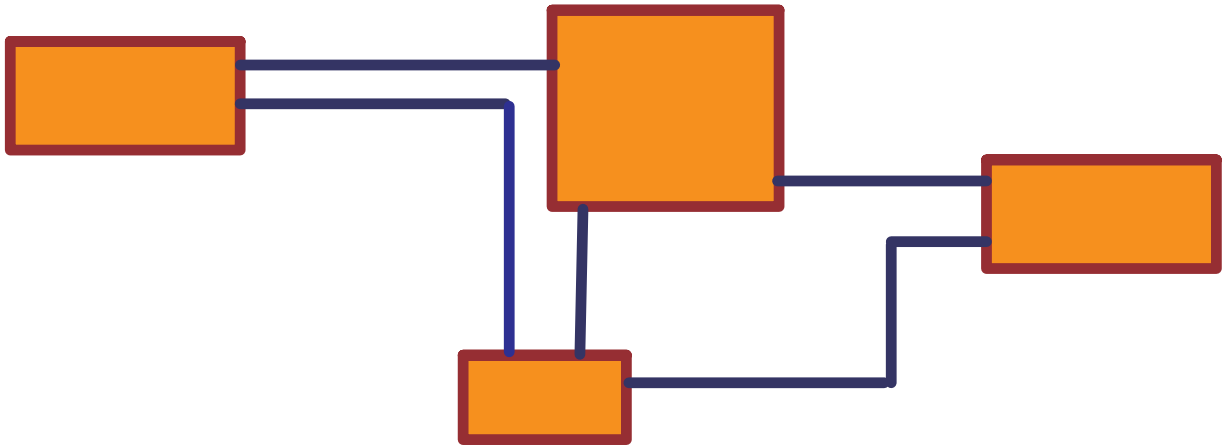

Plottable
Plottable Model
Plottable Representant
Abstract Scene
Engine

Atlas Software Design



Control

Atlas is evaluating the possible use of the Component Based Framework for the Control.



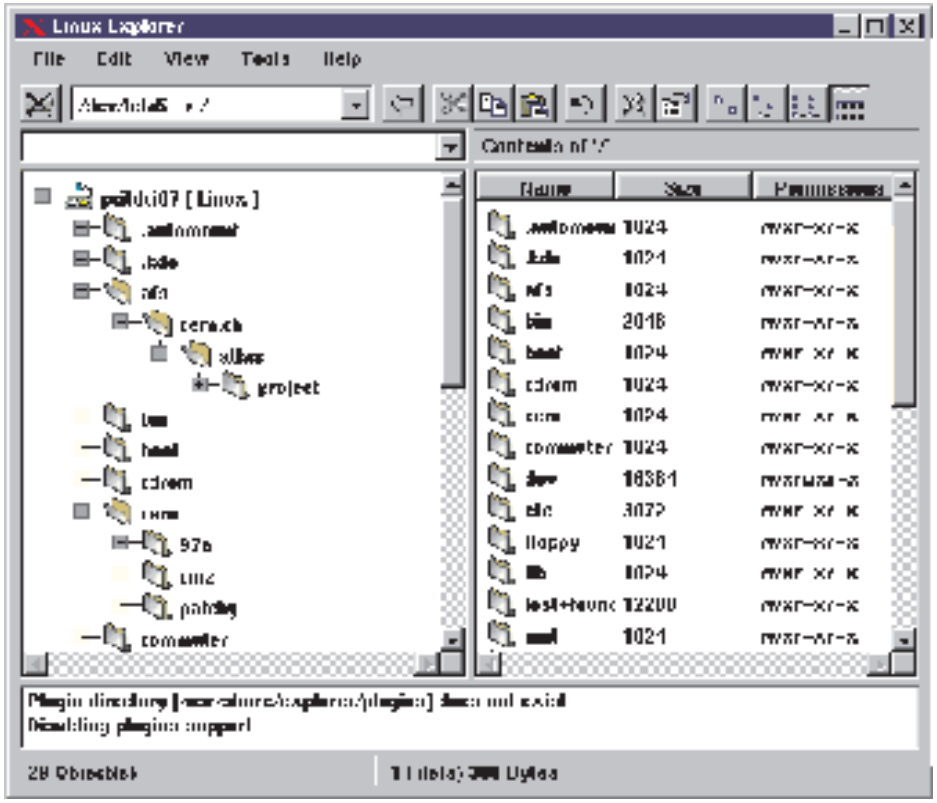
Design of the Graphics system is compatible with such choise. Only small changes are needed.

Object Browser

Access to OODB will be performed by Object Browser.

Files ---> Objects
Folders ---> Collections
Operations ---> AbstracScenes

Access to Objects public features.



Current simulated accessible via Zebra->OODB bridge..

Problems

Packages / Operating Systems / Compilers / Libraries availability & interoperability.

Solution: Automatic package selection via package handling mechanism and coding rules.

Hardly compatible choises of Packages philosophy.

Solution: Bridges for making packages conformant to Atlas Graphics design.

Framework-like Packages trying to solve all problems.

Solution: Extraction of wanted graphical functionality.

Status

Atlas Control: Alpha in 1st Q 98.

Database Access: G3 data nearly available.

Graphics:

Design: Passed Review.

Control: Basic infrastructure exists.

AbstractScenes: Simple ones interfaced, others worked on.

PlottableModels: Only examples so far.

Beta till the end of 1998.