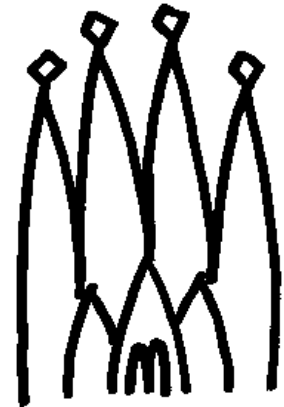

What's new in version 4 of GAUDI

LHCb Software Week
5-7 April 2000
P. Mato / CERN



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- ◆ What's new in GAUDI
- ◆ Review of Progress
- ◆ Status of Release

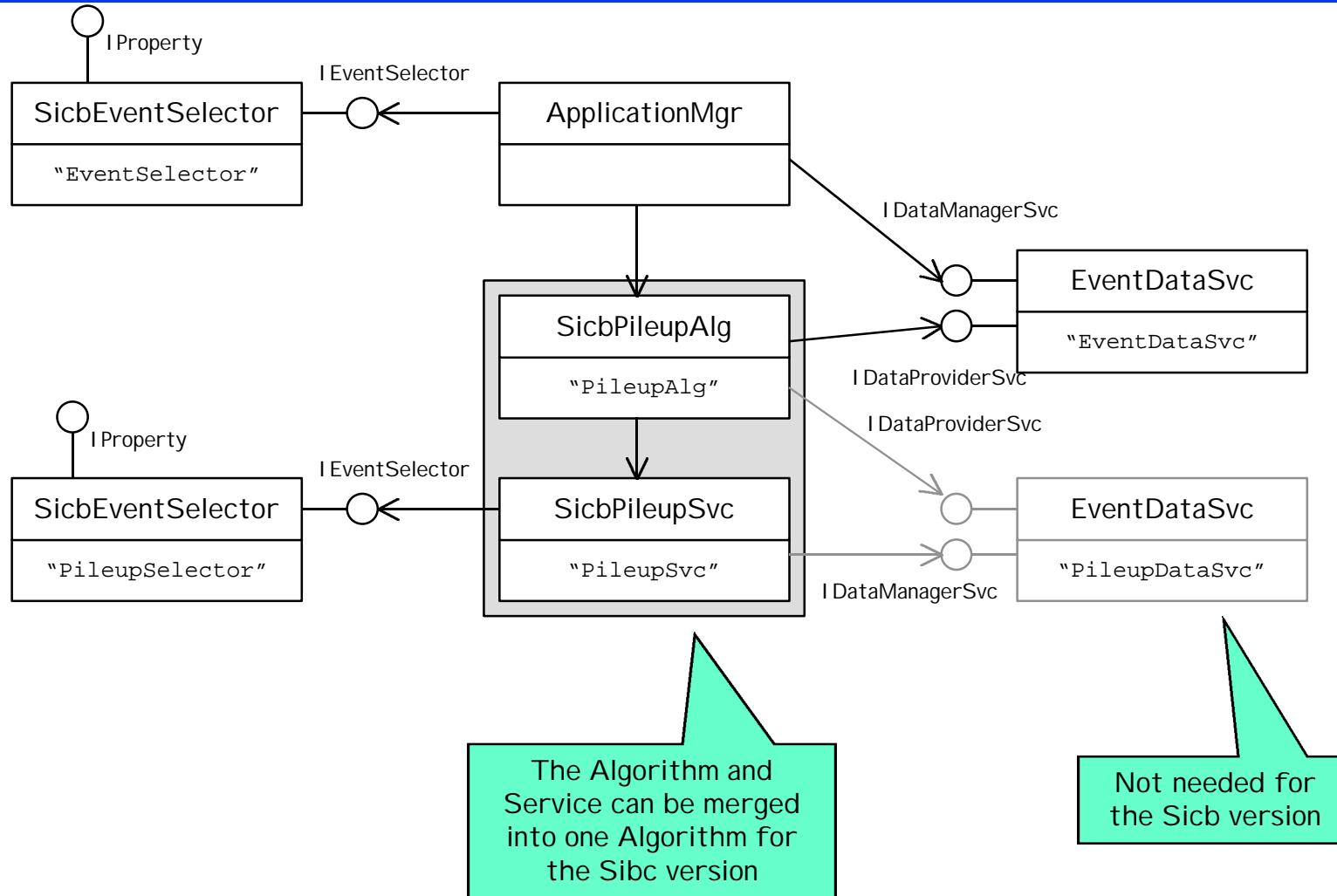
What's new in GAUDI

- ◆ A number of undesired “features” has been fixed
- ◆ Data Access
- ◆ Data Persistency (Markus's talk)
- ◆ Event Model (covered yesterday)
- ◆ Detector Description (covered yesterday)
- ◆ Histograms (Pavel's talk)
- ◆ Visualization (Guy's talk)
- ◆ Dynamic Loading (Markus's talk)
- ◆ Framework Services

Data Access

- ◆ Overcoming deficiencies in EventSelector (SI Cb specific implementation).
 - Handling EOF
 - Handling more than one jobID or file
 - Bookkeeping database interface (old database)
 - Improved abstract interface
- ◆ Pileup support
 - Interfaced to the Sicb "merge" routine (not yet fully working)

Pileup Architecture



Framework Services

◆ JobOptionsSvc

- Support for "#IFDEF" "#ENDIF"
- Support for "environment variables"

◆ RandomNumberSvc

- First version available. Not yet save/restore available.

◆ ChronoSvc

- Utility service for measuring elapsed time and produce statistics at the end of the job.

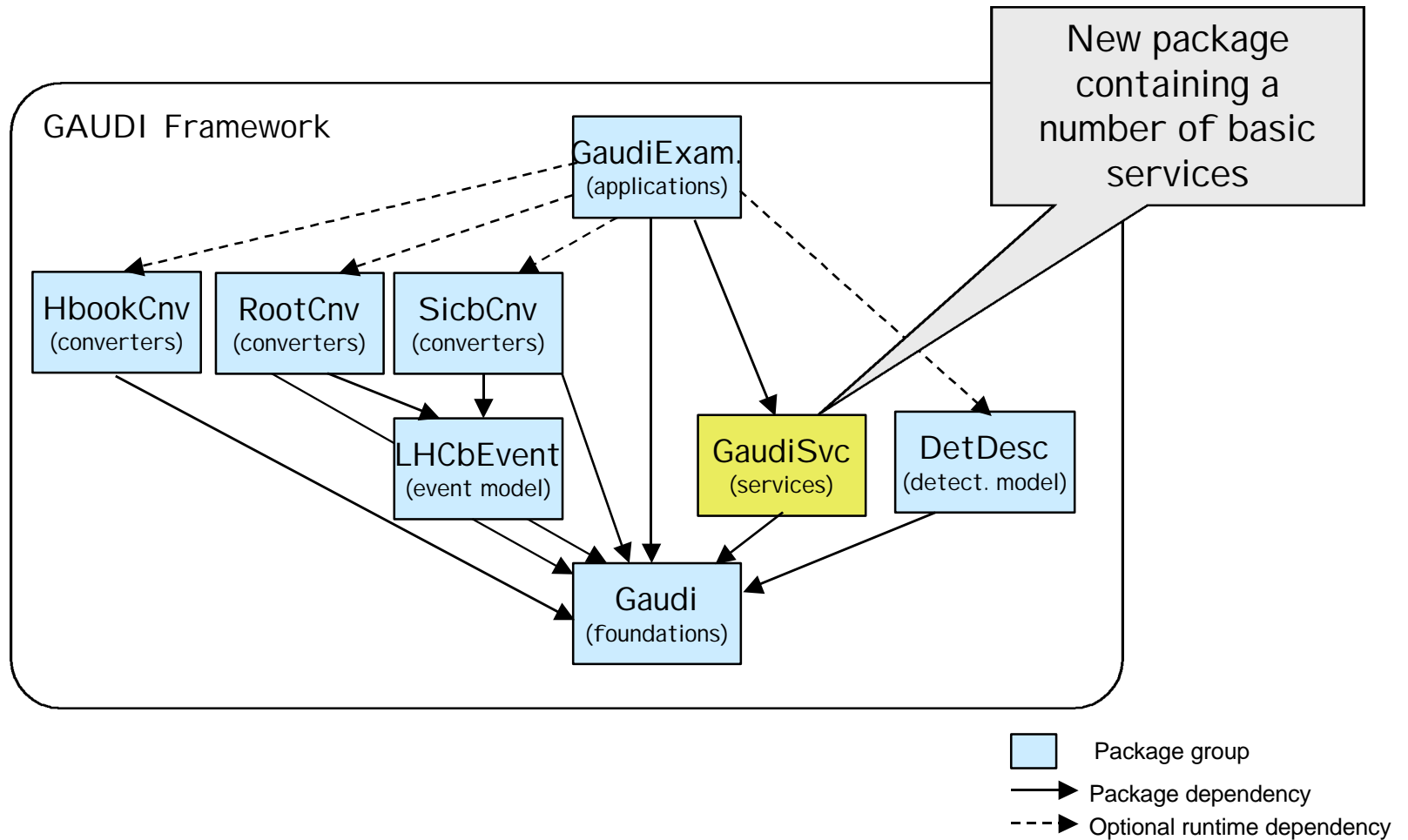
◆ Gaudi Exceptions

- Base class defined.
- The `Algorithm::execute()` inside a try/catch clause

Units

- ◆ Adopted GEANT4/CLHEP system of units in GAUDI v3
 - mm, ns, MeV,...
- ◆ Better conformance to the CLHEP units
 - Sicb Converters
 - XML files
 - Particle properties
 - Examples
 - etc.

Re-packaging



What will not be on the Release

- ◆ New ROOT version
- ◆ Event collections
- ◆ Monitoring utilities (property browser, data store browser, ...)
- ◆ “Tools” and “Toolbox”
- ◆ Re-structuring of ApplicationMgr
- ◆ Deployment of Bug tracking tool

Review of work

ID	Task Name	Qtr 4, 1998				Qtr 1, 1999			Qtr 2, 1999			Qtr 3, 1999			Qtr 4, 1999			Qtr 1, 2000			Qtr 2	
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
1	Architecture Design	■																				
7	Development Release 1		■																			
15	Development Release 2					■																
66	Development release 3							■														
107	Release 3																				◆	
108	Development Release 4													■								
154	Release 4																				◆	

Task List (from last November)

	Task	V4	Status
Data Access	Support for native ROOT files		next release
	Event Selector	✓	done
	Event Collections		next release
	Data dictionary based converters		DBCnv
Event Model	Containers with multi-access patterns		delayed
	Study and implement event pileup	✓	done
	Consolidation and new Sicb converters	✓	done
Detector	Transport service	✓	done
	Populate XML files with G3 data		change strategy
	Specification Alignment and calibration DB model	✓	exists
Framework	Algorithm and Service browser		delayed
	Property browser		delayed
	Job statistics service	✓	done
	Re-structure Application Mgr		next release
	Incident signaling to Algorithms & Services		next release
	Implement "Paths" and "Filters"		done by ATLAS

Task List (from last November)

	Task	V4	Status
Analysis	Formalization of “Associators”		next release
	Formalization of “Tools”		next release
	Minimization library (service)		started
	Implement new interface to Histograms	✓	done
Framework	Error code management		delayed
	Gaudi Exceptions	✓	done
	Dynamic libraries. Consolidation.	✓	done
	Deployment of a bug tracking tool		next release

Status of release 4

- ◆ All packages are working in the DEV area
- ◆ Very minor changes needed
- ◆ Last commit next Monday
- ◆ Working on new version of User's Guide
- ◆ Public release by the end of next week