News about data acquisition and (on-line) analysis

Margareta Hellström
GSI-Darmstadt

Computing environment, DAQ, electronics

Computing & experiment preparation

- VMS is no longer supported! (accounts blocked)
- (AIX,) Linux, Win-NT supported
- PROFI accounts not for individual experiment use (except for MBS)

Data acquisition (DAQ) and electronics

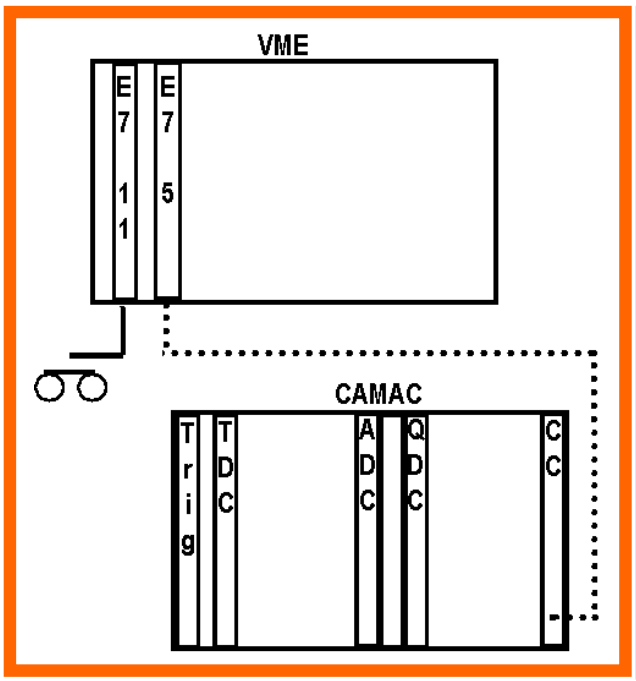
- Multi-Branch System MBS is standard
- FRS standard readout being modernized (move to VME, continued CAMAC support)
- RISING requires special solutions

(On-line) analysis

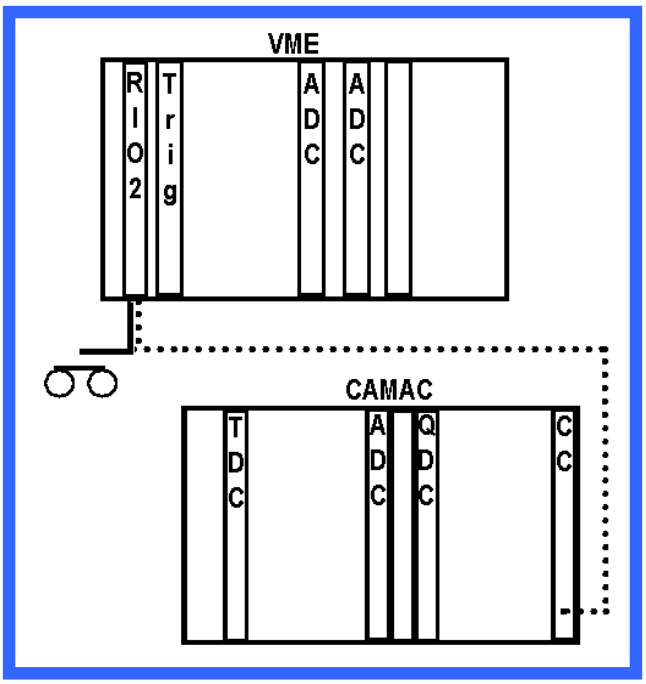
- Definite phase-out of GOOSY (end 2003)
- PAW can still be used (Linux)
- Go4 replacement “under construction”

Very important to discuss detector, DAQ and electronics requirements well in advance of your beamtime!

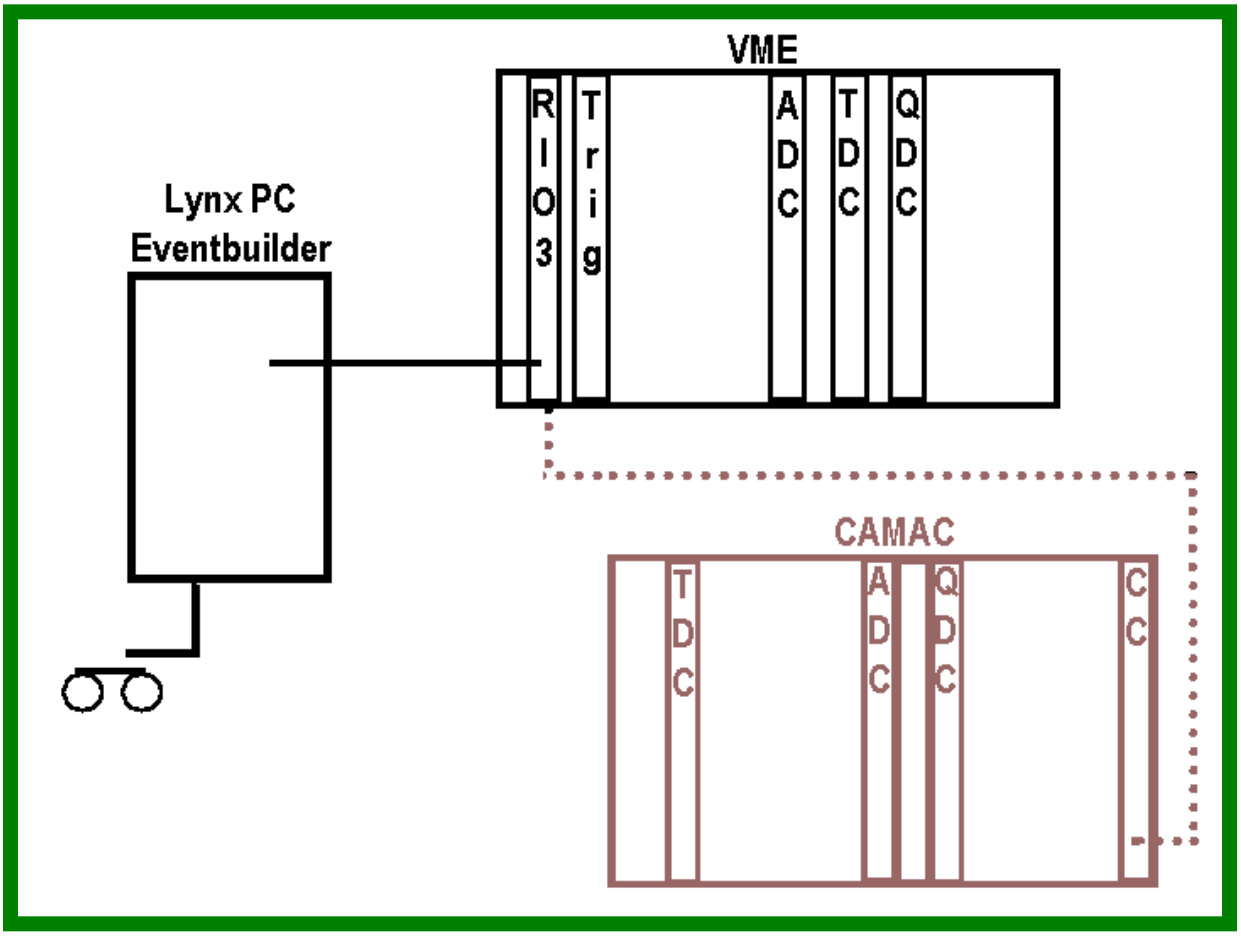
OLD



NOW (TESTS)



NEAR FUTURE



VME modules available at the FRS

CPUs:

2 CES RIO-2 processors

to come:
1 CES RIO-3 processor

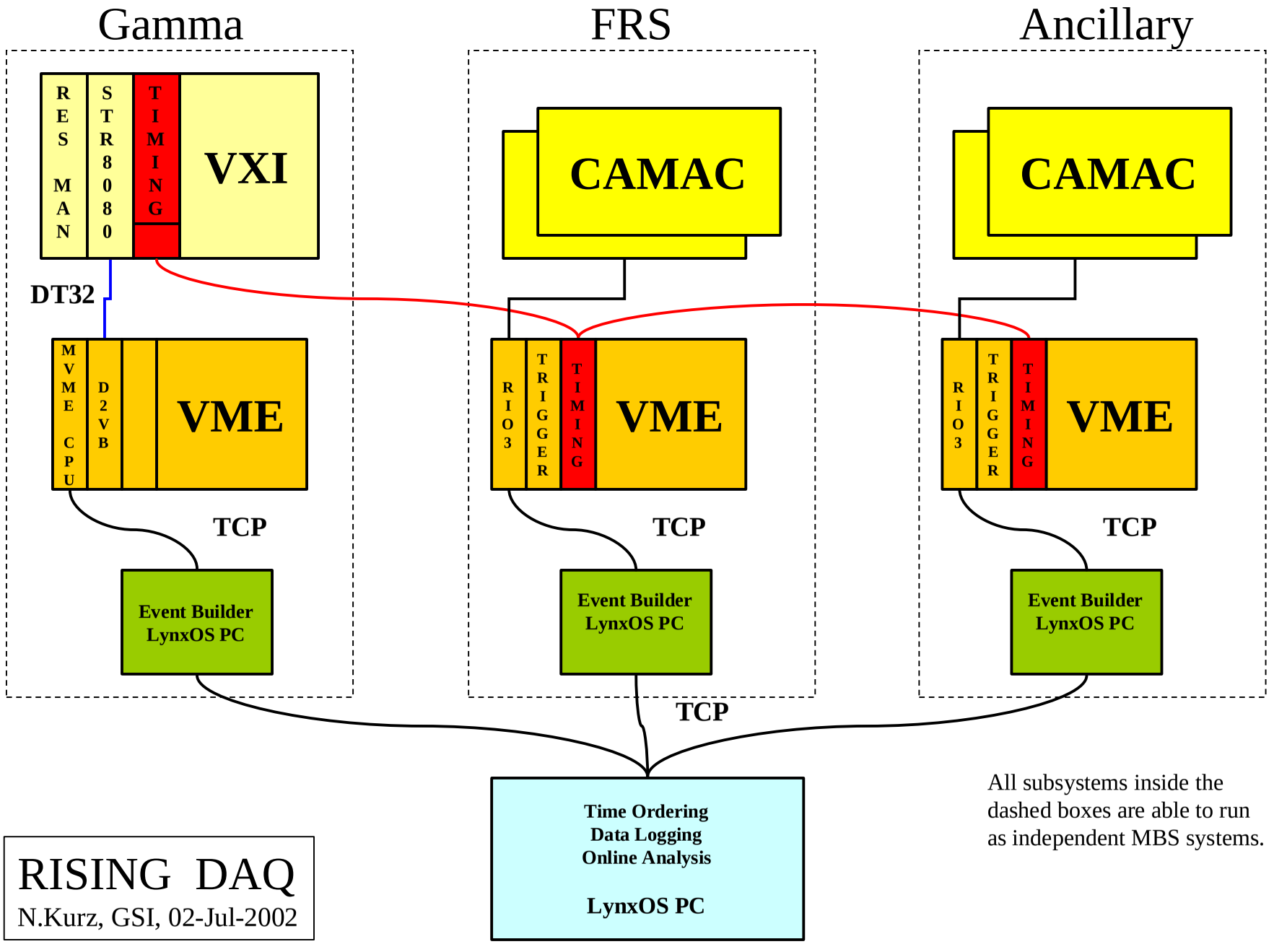
modules:

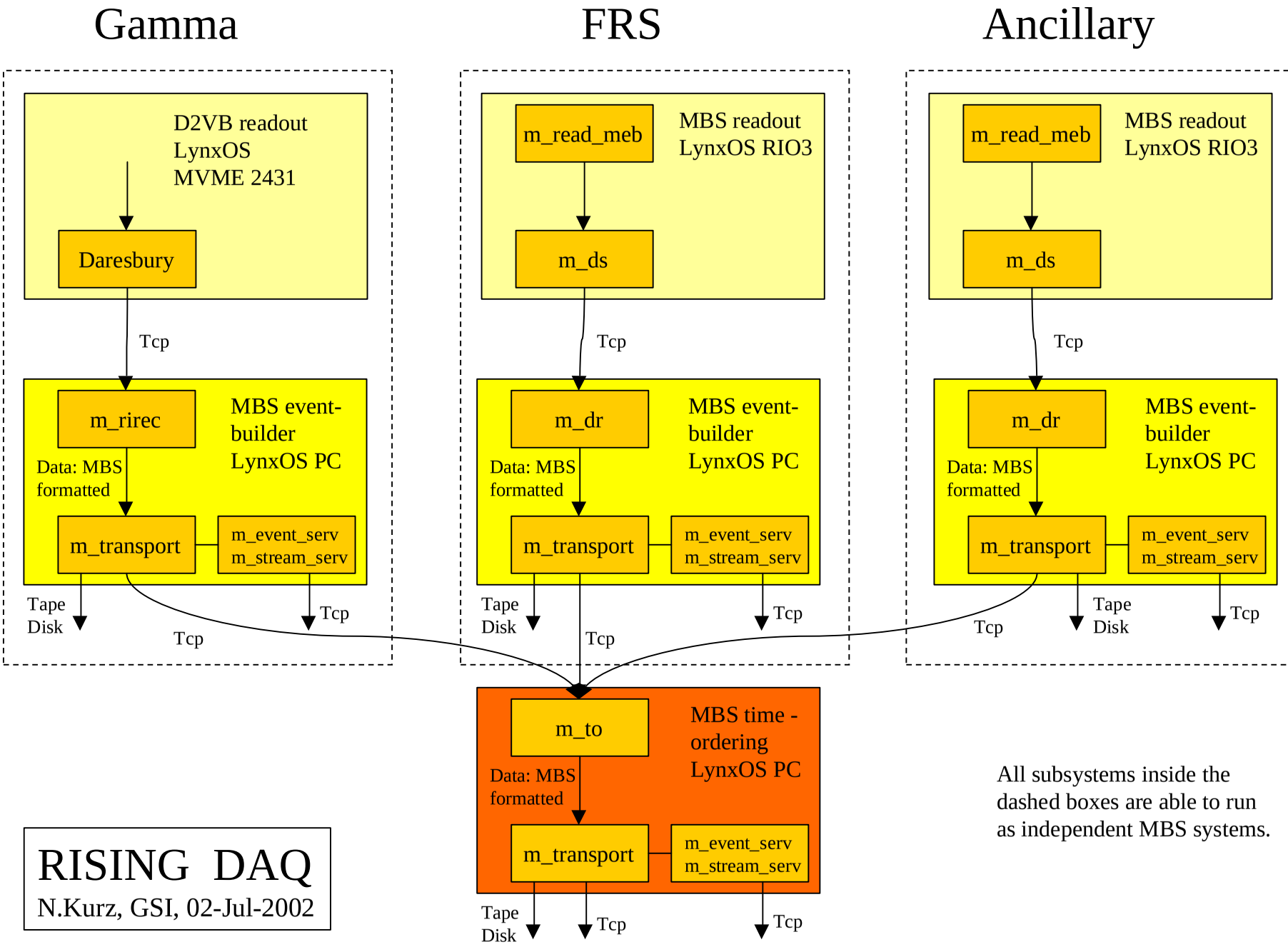
2 CAEN V785 32-ch peak sensing ADCs

2 CAEN V775 32-ch TDCs

1 CAEN V792 32-ch charge ADC (QDC)

1 CAEN V830 scaler


Gamma
FRS
Ancillary
RES MAN
STR8080
TIMING
VXI
CAMAC
CAMAC
DT32
MVME CPU
D2VB
VME
RIO3
TRIGGER
TIMING
VME
RIO3
TRIGGER
TIMING
VME
TCP
TCP
TCP
Event Builder LynxOS PC
Event Builder LynxOS PC
Event Builder LynxOS PC
TCP
Time Ordering
Data Logging
Online Analysis
LynxOS PC
All subsystems inside the dashed boxes are able to run as independent MBS systems.
RISING DAQ
N.Kurz, GSI, 02-Jul-2002


Gamma
FRS
Ancillary
D2VB readout
LynxOS
MVME 2431
Daresbury
Tcp
m_rirec
MBS event-
builder
LynxOS PC
Data: MBS
formatted
m_transport
m_event_serv
m_stream_serv
Tape
Disk
Tcp
Tcp
m_read_meb
MBS readout
LynxOS RIO3
m_ds
Tcp
m_dr
MBS event-
builder
LynxOS PC
Data: MBS
formatted
m_transport
m_event_serv
m_stream_serv
Tape
Disk
Tcp
Tcp
m_read_meb
MBS readout
LynxOS RIO3
m_ds
Tcp
m_dr
MBS event-
builder
LynxOS PC
Data: MBS
formatted
m_transport
m_event_serv
m_stream_serv
Tcp
Tape
Disk
Tcp
m_to
MBS time -
ordering
LynxOS PC
Data: MBS
formatted
m_transport
m_event_serv
m_stream_serv
Tape
Disk
Tcp
Tcp
RISING DAQ
N.Kurz, GSI, 02-Jul-2002
All subsystems inside the
dashed boxes are able to run
as independent MBS systems.

GSI ONLINE OFFLINE OBJECT ORIENTED

* Go4 is the new GSI standard analysis tool
* It is a development based on ROOT
* A Go4 for "standard" FRS operation is being developed

For more information, visit the Go4 website:

http://go4.gsi.de