

#### Current eVLBI practice user correlator observing schedule parameters earth orientation in VEX format parameters field system controls antenna BBC & and acquisition samplers correlator control including model calculation Mk4 formatter output data Mk4 data Mk5 Mk5 in Mk5prop form recorder playback over TCPIP huib 21/3/06

#### **FABRIC** components user correlator **GRID** parameters resources data observing schedule in VEX format earth orientation parameters field system correlator control controls antenna resource allocation including model and acquisition and routing **DBBC** calculation VSI output data **FABRIC** PC-EVN The GRID VSIe?? #2 on?? huib 21/3/06 3/35 FABRIC kick-off meeting 22 Mar 2006

# Discussion data acquisition



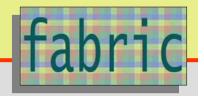
- Can it be completely COTS
  - · Shape of recorder modules for disk mode
- How to interface to DBBC project?
  - · Will it use the formatter? No formatter
  - Will it work with old BBCs?
  - Ari interfaces with DBBC project
- Control data acquisition through normal FS?
  - Includes control DBBC
- Getting fringes with PCEVN
  - · Early deliverable
  - · PC-EVN on Onsala, Mk5 on second station, almost trivial
  - Is our toy system to test protocol, very useful system!
- VSIe or Mk4 for data format or something new?
  - New features in eVLBI data streams necessary?
    - · ID of telescope, frequency and all that

# Data acquisition 2



- Interface to eMERLIN correlator
  - · It is not asynchronous, limitations exist
  - · Will be a concern for E-LOFAR
  - · Bryan will write a note

# On distributed computing



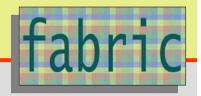
- Topology of network
  - Slice data in frequency, time or differently?
  - · No matter how you do it, a time/freq slice needs to go only 1 way
- What are the Grid resources
  - Calibrate the require amount of computing
- Dynamical allocation possible?
- Interaction with observing schedule
- Interface for routing data
  - · Multicast implementation on acquisition module

### Distributed correlation



- · Correlator model centrally generated?
  - · Or calculate at every node
- Plan for merging data back together
- How to get uvw coordinates in data
- Monitor progress centrally

### **Plans**



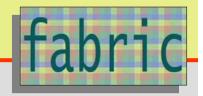
#### MRO

- Hired undergraduate
- Strategic documents
- · Contact Onsala & JIVE to help demonstration
- Interact with DBBC project

#### JBO

- Timing constraints on e-MERLIN correlator
- Hire staff
- Strategic documents
- Protocol work continues
- Think on interface
- Timesheets

### **Plans**



#### · 0S0

- Worry about PC/EVN demo
- · Manpower? Still under consideration
- Could be used for DBBC

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#### · MPI

- Hibernate on manpower
- Looking on what MRO decides

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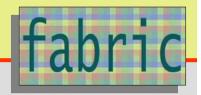
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#### ASTRON

- Hour demonstration
- Strategic document
- Interact with JBO

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### **Plans**



#### PSNC

- Manpower already available
- Analysis of Grid for eVLBI
- Connect with JIVE
- Exchange documentation with JIVE on existing part
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#### JIVE

- Hire postdoc for data display and testing
- Write document for correlator functionality
- · Setup some reporting wiki and e-mailing interfaces, exploder
- Start hour administration
- Establish working relation with PSNC
- Distribute thoughts on logical topology
- · Study documentation on PSNC virtual lab

# Interfaces



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## **Action Items**



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## Action 2



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