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---- PSNC - JIVE meeting, 1-2 September 2008                      ------
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1). WFM presentation
          - prototype now working and demonstrated
            - added more robust data entry forms, removed "globe" visualization

2). Vlbi Broker presentation
          - how to merge correlated data
            - JIVE to merge data
          - what happens with unfinished/ waiting tasks ?
            ? JIVE to create exit status messages (tcy does not recall decision)

3). Networking part (Trocha, Dolata)
a).       - introduction about monitoring tools
          - presentation of perfsonaras possible networking solution in fabric
          - monitoring based on:
                  - bandwidth utilization
                  - packet loss
                  - delay
          - prototype system to be expanded:
                  - install measurement points:
                    - Poznan (curently in place)
                    - JIVE (PSNC to work with Boven@JIVE)
                    - Torun (PSNC to contact Torun)


b). Implementation in Fabric
          - design presentation
          - requirements
          - current status

          Remarks (Paul)
                  - net in jive is point to point between RT and Jive
                  - very little to do in terms of measuring bandwidth, etc
                  - they cannot agree on testing bandwidth every hour

                  - measurements will be run based on WFM requests
                  - what we want to monitor is outside Jive ( TN <-> Grid )


3). Jive presentations (Mark)
          - introduction of software correlator
          - design description
          - changes
                  - output data has changed (some meta data added)
                  - problems with delay table
                  - computation of delay table is not so much time consuming
          - current status

          - Different projects which overlaps
                  - Scarie
          - AutoBAHN
                  - bandwidth on demand service - across domains
                  - demo on the supercomputing


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DISCUSSION:


Software Correlator
          - problems with delay table calculation
                  - solution : take start and end time from CCF
                  -             take delay code out from the correlator
          - what data format should be used to store data in data archive
          - how can we bridge the gap between different programing languages
          - user accounts ?
          -

Network discussion:
          - how we can increase hardware resources
          - jive and perfsonar -> talk to Paul
          - jive will install perfsonar with support of networking people
                  - deadline:    asap
                  -
          - there will be one machine where TN, vex2ccf and gridFtp will be installed
          - Jive -> 6 node cluster
          - hw correlator has some limits in terms of bandwidth
          -
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WFM discussion
          1. Problems with files on the TN nodes
                  - how we can specified file paths
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                         a).     ip address and port
                                 local file name

                         b).     possibility of adding new resources


        - configuration files can be moved to one central location
        - location of TR node can changed
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        - TN from WFM design view (PSNC should add:)
                - Ip address
                - port number
                -

        Data merging:
                - central service at jive
                - when data is ready notification should be sent to central jive service
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        Error handling:
                - Vlbi Broker should handle correlator errors (how ? -> open issues)
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===== DAY 2
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Discussion:

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        1). Problems with soap
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        2). TN
                - when TN will be ready
                - check whether client code in python can be configured using some features
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        3). Starting the correlator
                - changes in CCF
                        - change start and end time
                        - fill in the input files  (data sources)
                        - fill in the output files
                        - delay model - we can leave it as it is
                - two arguments of correlator 1. ccf file 2. vex file
                - if there is an error, std out and err should be sent to admin
                -

        4). Check the vex ccf service
        5). CCF -> channels are missing, they can be changed
        6). changing services port to 8080
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Future steps:

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1). Run the prerecorded data correlation (non real time case)
2). Use mark5 simulator and test RT real time scenario
3). The last step would be to use real RT
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Final presentation:
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        - Charles needs to think it over
        - will focus on communications first
        - mark will test the correlator (15th of Sep) - reservation
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Final goal
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        - correlate 4 stations, data rate at 128Mb/s
        - final deadline -> before summertime, April, workshop in June
        - at least 2 clusters for correlation, changes in VLBI Broker required
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====== TO DO LIST
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PSNC:

 1). Update of CCF file, update of CCF editor
 2). Update of JobInfo structure: we should add gridFtp location
 3). Removing data chunks from gridFTP server
 4). Further development of WFM and VLBI Broker
 5). Installing of perfSONAR in Poznan, Torun
 6). Vlbi Broker will store experiments in database
         - it will be responsible for notifying TN

 JIVE:
 1). Implementation of Correlated Data Service:
         - responsible for downloading correlated data chunks
         - responsible for removing correlated data chunks from gridFTP server
         - PSNC will be responsible for designing an interface and creating a WSDL file for the service
 2). Correlator should remove data from the environment after correlation
 3). Changes in TN (to be adopted to new wsdl)
 4). Installing perfSONAR at Jive (support from PSNC is available)

Open issues (to be discussed):
         - what happens to stalled tasks, what is a timeout
                     ====> not likely to happen. We should check the exit code

         - when TN should be informed about new experiment (after submission or just before experiment start -
           who will be responsible for storing submitted experiments in that case)
                 ====> vlbi broker is resposible for storing experiments
                                    and sending info to TN just before the experiment start

Deadline:
         - 6.10 - test date
         - the other attempt - the beginning of December
         - preparing second cluster
         - P29 document: short text description, source code
         - Networking part in WFM - December - prototype
                                 - end of January
                             (send paragraph of text saying what will be ready at the end of December
                             - what will be done at the end of January
                             - stating that it will be a prototype version
                             - (write it as an email)
                             - 3 paragraphs:
                                     1. what we agreed to have in deliverable
                                     2. December - fake data
                                     3. January - perfsonar data
                                     deadline -> asap

Teleconferences:
         - 23.10.2008 14.00   (skype or evo)
         - the second one in December