Haystack Status

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Projects

- Mark6 Recorders
- SDK 9.X for Mark5's
- RDBE Development
- Trials

Mark6

- Ongoing Trials
  - Four RDBE-H systems
    - Each generating 2Gbps Mark5B formatted data
    - 8Gbps aggregate data rate
    - 30 sec. duration on / 30 secconds off
  - Mark6
    - Writing the data to a single disk module
      - Burst mode functionality
  - Controlled by RM6_CC application
    - Converts sked observing schedule to XML
    - RDBE / Mark6 Control

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Mark6

- Stress Testing
  - Input data rates of 4 / 8 / 16 Gbps
    - VDIF formatted
    - 8224 bytes
  - Writing out to 1 (8) / 2 (16) / 4 (32) disk modules (disks)
  - 24 hour recordings sessions
  - 15 minutes recording durations
  - Goal is to stress and quantify software / system

SDK9.X

- Mark5A/5B/5B+ systems
  - Now supports SDK9.2
  - USNO has upgraded 1 system
    - After processing backlog will upgrade 3 more
- Conduant just released SDK9.3
  - 32 and 64 bit kernel support
  - New xbar version for Amazon / XF2 controllers
  - Under Test

RDBE Development

- Firmware version 3.0
  - PFB
  - Tsys
  - Pulse cal extraction
  - Attenuator control
  - GPS-1pps internal timing comparison
  - Data format VDIF
    - Complex data
    - Multiple channels / thread
  - VTP compliant
  - 2 or 4Gbps output
    - Single Port

Trials

- Broadband Dev
  - Westford to GGAO 12 meter baseline tests
    - QRFH Feeds
    - RDBE-H -> Mark5C
    - FS Control
- EHT session just completed
  - SMA/JCMT, SMTO, CARMA, Pico Veleta, APEX, and Plateau de Bure
  - RDBE-S / Mark5C
  - ibob / Mark5B+ and phase array processor

Thank you / Questions?

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