



Contribution ID: 16

Type: Oral Presentation

On your Marks ... Flex, Buff and VGOS, partly even in real-time

Monday, 14 March 2016 14:30 (15 minutes)

Modern, VGOS and general purpose radio-astronomical digital back ends (DBEs), will produce enormous amounts of data, posing some challenges for the recorders. Fortunately, the availability of ever faster digital hardware has also meant that capturing these large data streams on - relatively speaking - general purpose hardware has become quite feasible.

Currently there are two models of ethernet packet recorders in use: MIT Haystack's Mark6 and the FlexBuff, developed in the European VLBI Network (EVN). As the hardware has become more and more commercial-off-the-shelf (COTS) so has grown the importance of software support; in fact, these newer recorders are full software recorders.

As such the usability and performance of such a recorder is completely defined by the functionality of the software running on it. In this talk I would like to introduce the capabilities of EVN's software jive5ab on this class of recorders and what extra benefits it may have for dealing with recorded ethernet data.

Besides these mundane recording aspects, I would like to present, on behalf of Stuart Weston (Warkworth, New Zealand) and Simone Bernhart (IGG Bonn), an application of the features of the jive5ab recording software for real-time recording of IVS R1 sessions.

In this test the scans were recorded on Warkworth's Mark5B+ but also, in parallel and in real-time, at the cluster in Bonn. This has proven to work and provides a measurable increase in turn-around time for correlation with a minimum of hassle if more stations [w/c]ould do this.

Primary author: Mr VERKOUTER, harro (Joint Institute for VLBI ERIC, Dwingeloo)

Co-authors: Dr BERNHART, Simone (Institute of Geodesy and Geoinformation, Bonn University); Mr WESTON, Stuart (Institute for Radio Astronomy & Space Research, Auckland University of Technology)

Presenter: Mr VERKOUTER, harro (Joint Institute for VLBI ERIC, Dwingeloo)

Session Classification: Oral1: Advances in VGOS Stations and Technology

Track Classification: 1: Advances in VGOS Stations and Technology