Mark 5 Memo #096 MASSACHUSETTS INSTITUTE OF TECHNOLOGY HAYSTACK OBSERVATORY

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TO: Distribution

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SUBJECT: Conduant V100 Controller Card SDK 9.2 Upgrade (Mark5A/B) with Debian Etch

This document describes the options for a Mark5 system containing a V100 StreamStor controller card and its limitations with operations moving forward.

Limitations

Support for the V100 card, in terms of firmware upgrades has stopped. Therefore if the Mark5 system you have contains a V100 board you will not be able to fully utilize greater than 2TB HDD in a Mark5 Disk Module. The Mark5 system will be able to record on the larger disk modules but only up to 16TB of the total capacity before over writing the data at the start of the disk module. It is therefore recommended that you do not use greater than 16TB disk modules for operations.

Mark5 Application

The newest version of Mark5 application, version 3.0.1, is still compatible with your system and allows you to use the features associated with the release. Specifically support for greater than 1024 scans on a disk module.

It is assumed that your Mark5 system has been at least upgraded to SDK9.2. If it has not, please upgrade your system before proceeding to the next steps.

Download the Mark5 Application from the Haystack Website Mark5 Downloads page http://www.haystack.edu/tech/vlbi/mark5/downloads.html.

 Download the <u>Mark5 Application Package</u> and the <u>Release Notes</u> a. mark5_3.0.1-i386.deb

To install the new Mark5 application, as root, simply execute the following command:

dpkg -i mark5-3.0.1-i386.deb

The new Mark5 application has been installed. Please refer to the new command set (v1.13) for updates to support both > 1024 scans and new features.

To enable greater than 1024 scans on your system the reset=erase command can be used, or the standalone utility SSErase with the "-u l", option to enable 64k scan support. For the new usage options for SSErase, please use SSErase -h.

NOTE: While the correlators are going thru the upgrade process to support larger than 16TB disk modules it is initially recommended that the disk modules are erased with the old 1024 maximum number of scans. To erase the disk module that you are shipping to a correlator, until notified to revert to the standard reset=erase command, issue:

reset=erase : s