VLBA Software Requirements for Modification of Graphical User Interface of VLBA Resources in Proposal Submission Tool (PST)

Description of new capability:

A modification of the Graphical User Interface for the VLBA Resources page is requested.

Summary of software subsystems expected to be affected by new capability:
Proposal Submission Tool

Operational implications: This change to the gui is expected to make it simpler for the proposer to fill out needed information in the resource.

Detailed description of requirements for each software subsystem:

Software subsystem: Proposal Submission Tool
Subsystem scientist: Mark Claussen
Required date for deployment in production: 1 January 2013
Description of required functionality:

We would like to add a fourth column (in addition to Stations, Observing Parameters, and Correlation Parameters) in the VLBA Resources. This may necessitate making the Stations column a bit narrower. Under the new column, which is to be labeled "Special Features", we would like to transfer the following: checkboxes "Full Polarization", "Pulsar Gate", "Conversion to Mark 4". (While moving the "Conversion to Mark 4", change the label to "Output Format Conversion to Mark 4".) Thus, Correlation Parameters would still have the entry boxes "Correlator Passes #" (which should change to "Number of Correlator Passes"), "Integration Period (sec)", "Spectral Points / BBC", and "No. of Fields" (which should change to "No. of Phase Centers per Pointing"). Finally we would like to completely remove the pull-down entries "Sample Rate" and "Bits / Sample" from the "Observing Parameters" column.

There are some other problems in the pull-down entries. If the Legacy System is selected, the maximum bandwidth should be 16 MHz; currently there are available entries 32, 64, and 128 MHz, all which are not available in the Legacy System. Also, for the Legacy System, 8 Baseband Channels at 16 MHz is legal; 16 Baseband Channels at 8 MHz is legal (both give an aggregate bit rate of 512 Mbps), but 16 Baseband Channels at 16 MHz is not legal (i.e. the hardware cannot do this). This gives 1024 Mbps which the VLBA cannot do.

Proposed schedule (including testing and documentation):