VLA Software Requirements for Update of VLA Resources in Proposal Submission Tool (PST)

Description of new capability:

An update to the VLA Resources in the PST is required. At the last deadline (1 Auguset 2012), there were two independent tools, GOST and the SRCT which proposers used to define their correlator resources and setups for general observing (GOST) and for shared risk observing (the SRCT). For general observing the user saved a screen-shot of GOST; for the SRCT a catalog ID number and resource ID number along with the resource name were copied by the user to the PST resources under the SRO backend.

The functionality of GOST and the SRCT needs to be merged with or into the PST.

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

Operational implications: This new capability will obviate the need for the user to launch separate tools to set up correlator resources as well as copy some of the results to the PST by hand, with the resulting possibility of error.

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:

1. GOST functionality to be implemented in the PST:
   a. When "General Observing" is selected under "Back End" in the Resources section of the PST, a GOST (or similar) introductory screen should be displayed, i.e. there should be no default to one of the 3 GOST selections.
   b. The user should be able to select among the 3 GOST (or similar) screens: i) wideband, ii) spectroscopy, and iii) subarrays.
   c. The data from GOST function needs to be saved in the PST database when the user "Saves" a given Resource.The information that the user saves should be displayed on the proposal cover sheet – the format of this is still to be determined. It may be that the easiest way, especially for spectroscopy, is to use the GOST (or something similar to the) screen itself. Such a screen could be displayed only on mouse-over or mouse-click on a title (i.e. not always displayed on the cover sheet – however this does not address what happens

when the proposal is printed). Wideband setups and subarrays can probably use the current cover sheet format.

    d. Information about receiver bands selected from the GOST-like inputs should be checked against the data from the "Receiver" pull-down menu and a warning pop-up should be displayed. Discrepancies between these two should cause the proposal to fail validation.

    e. The current checking capabilities of GOST should be implemented in the PST (for example, the dump times and data rates should be checked as they are in GOST).

    f. If the GOST capability shows that a given setup is "Shared Risk" (as opposed to "Standard"), then an error should be displayed (as a pop-up), and such a setup should not be able to be saved as a Resource.

Proposed schedule (including testing and documentation):

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

2. SRCT functionality to be implemented in the PST:
    a. When "Shared Risk Observing" is selected under "Back End" in the Resources section of the PST, the RCT (or SRCT) should be invoked.
    b. The user will then use the RCT to create a resource catalog and resource.
    c. When the user finishes (normally) with the RCT, and "Saves" the Resource in the PST, the catalog ID number and the resource ID number should be copied to the PST database.
    d. The catalog ID number and the resource ID number should be listed on the proposal cover sheet for each resource.
    e.   It would be nice (and an enhancement, not a requirement) for the catalog ID number and resource ID number on the cover sheet of the PST to be links back to the RCT, so that a technical reviewer could recover the catalog and resource without entering those IDs by hand.
    f. A warning shoud be displayed if an attempt to Save a "Shared Risk Observing" Resource is made without a catalog ID and resource ID. If there is a "Shared Risk Resource" without these IDs, the proposal should fail validation.

Proposed schedule (including testing and documentation):