PASEO Meeting

July 15-16, 2010 - Socorro, NM



EVLA User Support

Gustaaf van Moorsel

Atacama Large Millimeter/submillimeter Array
Expanded Very Large Array
Robert C. Byrd Green Bank Telescope
Very Long Baseline Array



Overview

- Outline of talk
 - Purpose of EVLA User Support
 - Organization of EVLA User Support
 - Scope of EVLA User Support
- Conclusions
 - We expect to be able to handle increased user support by:
 - Complete and easily navigable Web content
 - Modern helpdesk
 - Involvement of all scientific staff
 - We plan to support large volumes of data by:
 - Data transfer by disk shipment
 - Gain experience with parallelization using local cluster



User Support: Purpose

- Assist observers in the total end-to-end observing sequence:
 - Proposal preparation
 - Preparation of observing scripts
 - Data retrieval
 - Data reduction
- Provide information that is:
 - Correct
 - Complete
 - Up-to-date
- Help maximizing the quality of an experiment's scientific output
- Lowering the threshold for non-Radio Interferometry experts



User Support: Organization

- User Support Group was formed April 2010
 - 4 staff scientists (Goss, Mioduszewski, Momjian, van Moorsel)
 - I data analyst (Medlin)
- Before there was no dedicated User Support Group
- WIDAR, and OSRO/RSRO programs require a more structured approach
- Each staff scientist in the group has other responsibilities as well
- Can call on other scientists to participate in user support duties
- Responsibilities includes VLBA



Scope of User Support

- Web Content/Documentation
- Helpdesk
- Face-to-face assistance to visiting observers
- Observing script inspection, verification, and optimization
- User Training workshops etc
- Data dissemination



EVLA Web site

- Developed fall/winter 2009/2010
- Went online January 11, 2010 (shut-down of VLA correlator)
- Conforms to NRAO-wide structure/design
 - Easily navigable
 - Structure similar for VLBA page or ALMA page
- Still under development, but most important information is there, e.g.:
 - OSRO/RSRO description
 - Observation Preparation Tool (OPT)
 - Archive
 - Helpdesk
 - Receiver/antenna update status



EVLA Web site (2)

- Top level of page is fixed now; there may be small adjustments below top level
- Content usually responsibility of one staff expert, does not have to be in User Support Group
- We add/modify content if helpdesk requests suggest unclear or missing content

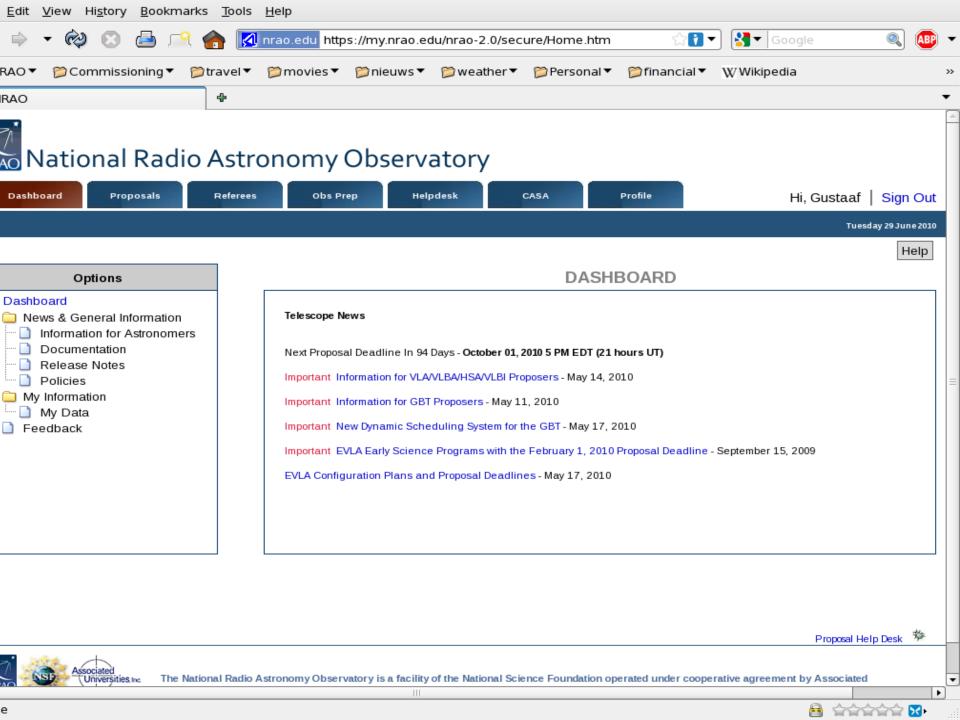


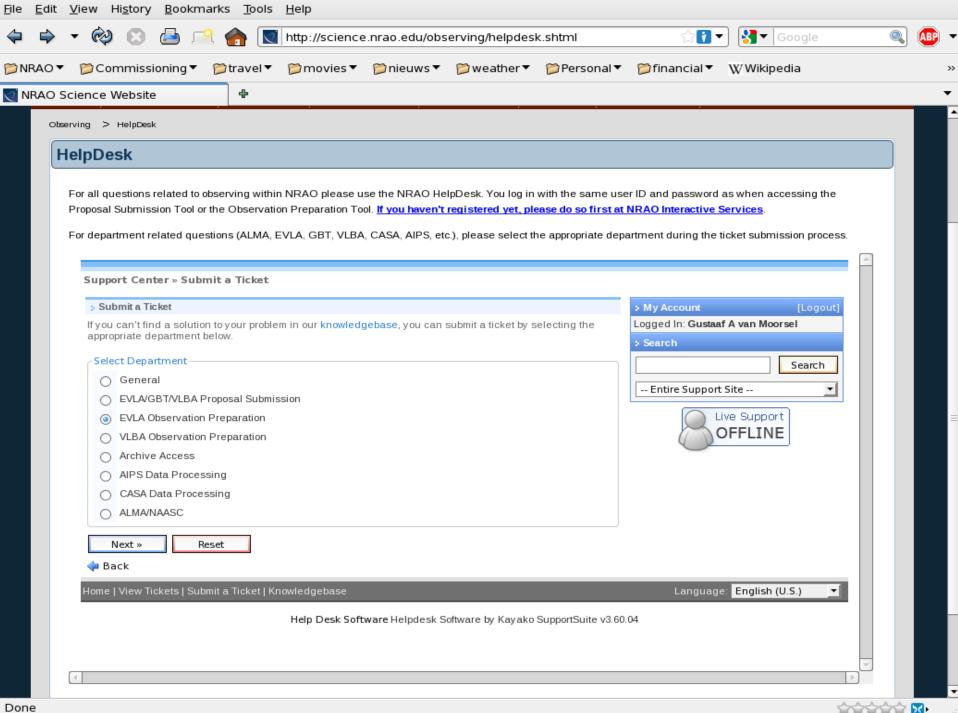


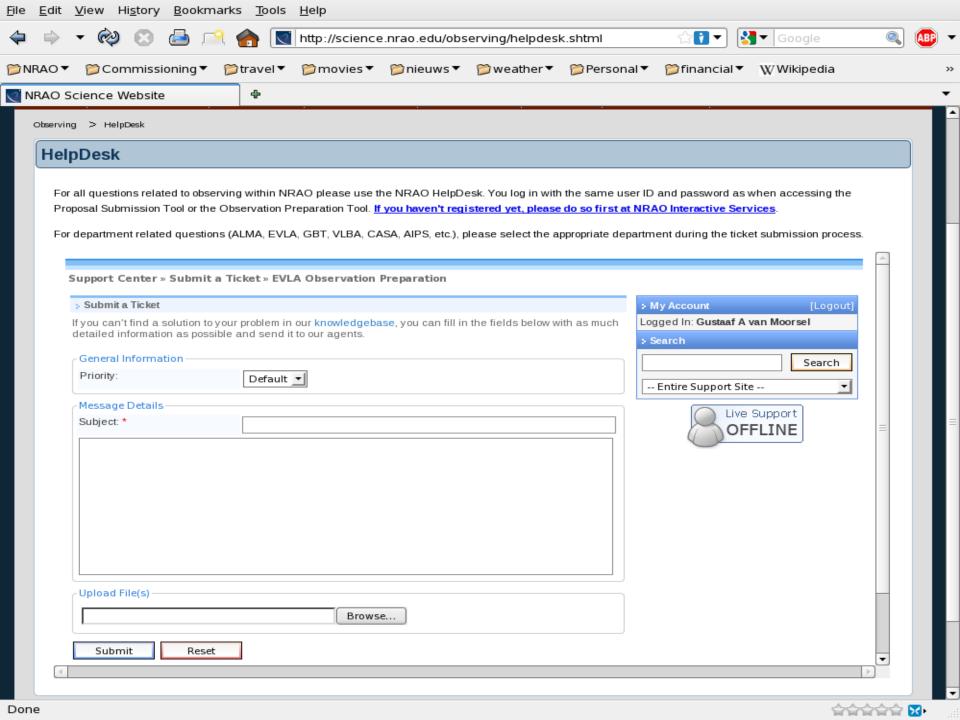
NRAO Helpdesk

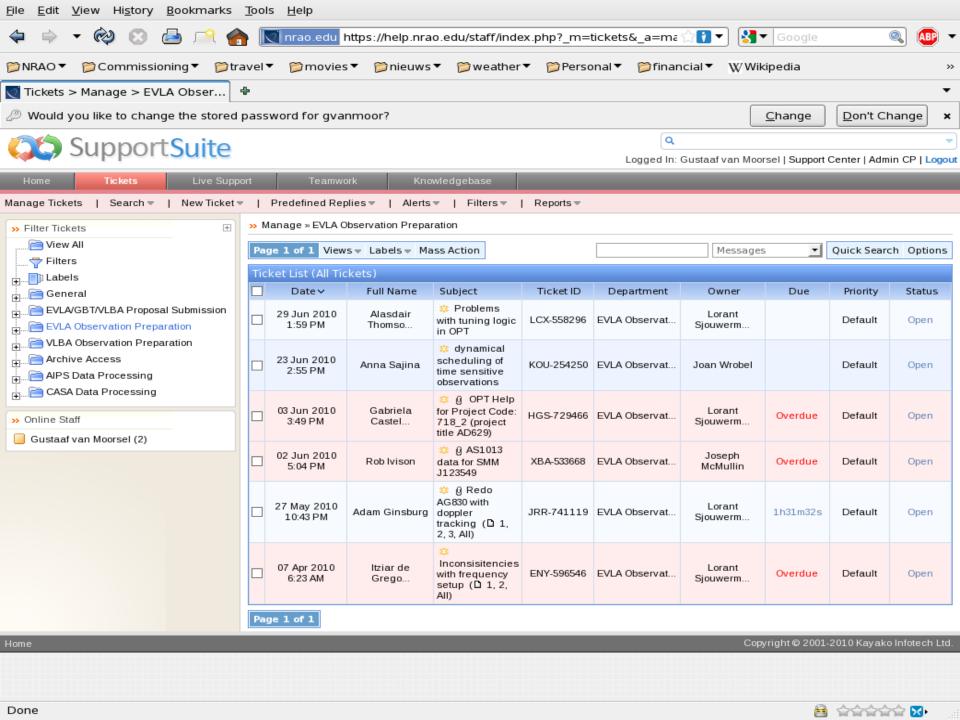
- For all NRAO scientific support
- Accessed by signing in on my.nrao.edu (like Proposal Submission Tool, Observation Preparation Tool)
- User selects from a number of 'Departments'
- EVLA observing is one of those Departments
 - E.g. proposal preparation, EVLA observation preparation
- After submission ticket goes to triage person
 - now: Department lead but eventually Data Analyst
 - Keeps ticket or assigns it to someone else
 - At times lots of back and forth between user and staff
- After resolution, close.











Helpdesk Advantages

- Unlike e-mail system, no tickets get lost
- Easy overview of open tickets
- Total exchange with user in one place
- Threshold for submission low
- Alerts etc. highly configurable
- Knowledge Base
 - As user types question knowledge base is searched
 - Knowledge base has to be developed from scratch by writing 'articles'
 - First two articles are already in place
 - Eventually: integrate with Web content



Assistance to Visiting Observers

- Upon request, we assign a staff scientist for consultation
- As before, a number of powerful workstations is available
- Cluster is primarily for our own testing and development purposes:
 - Pipeline testing and use
 - Parallelization testing and benchmarking
 - Advise outside facilities about cluster purchase
- Expected number of visitors is hard to predict:
 - In 2003, with fixed date observing: 200 visitors/year
 - Has decreased since, presumably because of more powerful user's desktops
 - This year little interest: dynamic scheduling makes timing of visit difficult



Observing Script Verification

- Given the ever varying observing constraints, each script submitted with the Observation Preparation Tool is inspected locally before entering the dynamic queue
- Currently this is almost exclusively done by the Observation Preparation
 Tool scientist
- Once the system stabilizes we expect this to become a Data Analyst responsibility
- The role of the Observation Preparation Tool itself in script verification will increase



User Training/Workshops

- One of the responsibilities of the User Support Group is to organize user training
- Main event is our bi-annual Synthesis Imaging Workshop the last one took place last month
- Keeping in mind that our resources are limited, is there any other form of user training we should engage in?



Data Dissemination

- Currently OSRO data (< 40 GB) are being downloaded by the observer over the internet
- This becomes impractical for data sizes (>> 100 GB) expected when wider bandwidths becomes part of regular observing
- For the next 12 months we are able to handle requests
- For the time after that, we are in the process of developing a plan for shipping data on hard disks

