User Tools Software Development Update

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Gemini Users Meeting, July 18, 2012
Outline

• Phase I/II project overview
• Current development plans
The goal of the Phase I/II project was to make the Phase II process easier

- Gemini’s response to the 2011 NSF review's recommendation that we focus on user tools
- A team of ~15 people worked ~7400 hours over one year
  - NGOs and users also participated
- Completed in June 2012
- All major features released on schedule
Major accomplishments of the Phase I/II Project

- Phase I Tool (PIT) rewritten
  - Improved interface
  - Text sections via LaTeX/Word
  - Capture intended instrument use (modes) in a structured way
Major accomplishments of the Phase I/II Project

- Phase I Tool (PIT) rewritten
- Overhauled ITAC software
  - Handle new document format
  - Improve performance

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Major accomplishments of the Phase I/II Project

- Phase I Tool (PIT) rewritten
- Overhauled ITAC software
- Automated GCAL settings in the OT
  - Update as the instrument configuration changes
Major accomplishments of the Phase I/II Project

- Phase I Tool (PIT) rewritten
- Overhauled ITAC software
- Automated GCAL settings
- Automated guide star selection in PIT/OT
  - All instruments/WFS
  - Magnitude limits adjust for conditions
Major accomplishments of the Phase I/II Project

- Phase I Tool (PIT) rewritten
- Overhauled ITAC software
- Automated GCAL settings
- Automated guide star selection in the OT

- Phase II templates
  - Complete observations sets
  - Configurations from Phase I filled in
  - Apply/Reapply to create observations, aid editing
The next PIT/OT releases will focus on polishing these new capabilities

• We are using the feedback from the recent questionnaires in our planning. Thanks!
  ▪ e.g. PIT
    • Make messages about guide star availability clearer
    • Clearer/easier manipulation of the PDF attachments
    • Make it easier to handle targets, create observations

• More requests for feedback will be sent out periodically

• Keep sending us suggestions
New software transition projects focus on increasing staff efficiency

- **ITAC Phase 2 Project**
  - Completes high-priority features for the new ITAC software
  - Goals: 1) reduce staff effort needed for the ITAC process; 2) make the ITAC meetings more efficient

- **Laser Clearing House (LCH) Project**
  - Simplify LGS scheduling and operations
  - Reduce staff effort needed to comply with Space Command rules
  - Make LGS shuttering safer and more reliable

- **OCS infrastructure project**
Improving the OCS infrastructure will allow the next major set of user improvements in the OT

- Prerequisite for future OT user improvements, eg.
  - Configuring calibration observations (eg. std star based on science)
  - Multiple observation editing
  - Improved undo/redo features
  - Iterators behave like static components
  - Acq steps part of science sequences
  - Better searching and reports
  - Significant UI changes

- Required to improve observing database performance, reliability, and scalability

- Timeline
  - Study and some development – 2012 to Q1 2013
  - 2013/2014 – implementation
Please send questions, suggestions, or comments at any time

• Submit a helpdesk ticket
  ▪ http://www.gemini.edu/sciops/helpdesk/

• Send email to bmiller@gemini.edu