Gen2 Project Status Update

Subaru Users Meeting 2010

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Quick Project Review: Generation 2 Observation Control System

GOALS

- Improved user interfaces and observation workflow
- Improve efficiency of observation
- Provide a more flexible language for observation scripting
- Easier troubleshooting for everyone
- Easier failure handling and maintenance for staff

AND (but)

- Minimize impact to observation schedule, staff
- Keep costs down

What's New?

- Completion of SOSS Compatibility Mode
- Night engineering verification of most instruments
- Operator training
- Service observations for SPCAM, HDS, MOIRCS
- Proposed transition schedule confirmed by DCM

What is Gen2 SOSS Compatibility Mode?

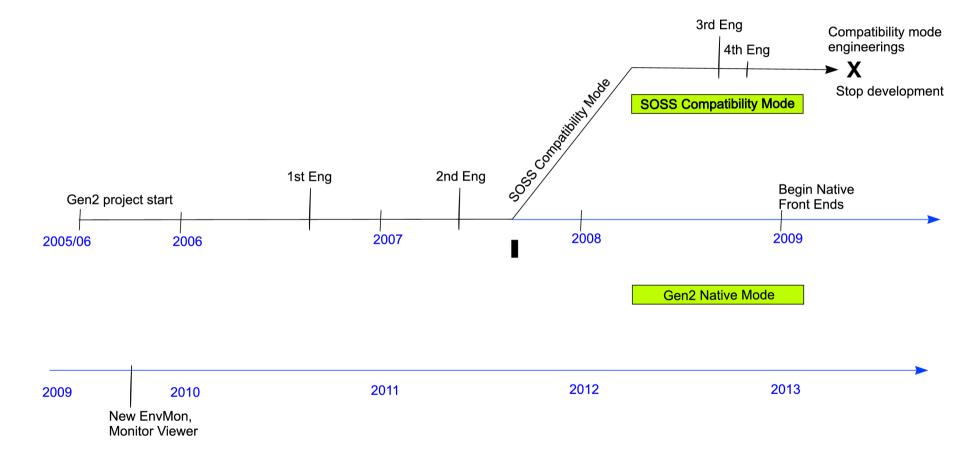
It is a mode of running Gen2 that allows:

- Use of OPE (observation) files
- Use of existing skeleton files (with minor changes)
- Use of PARA files for parameter checking
- Use of existing interfaces on the instrument side (i.e. DAQtk protocol)
- Provide most of the current SOSS user interfaces, adapted to work with Gen2
- Preserves frame id ordering, etc.

Purpose of SCM

- Allows phased transition to Gen2 without significant disruption to observation
- Support scientists, operators and observers see a familiar interface → minimal training to start using Gen2
- Supports older instruments for their life span
- Doesn't require current SOSS computers → cost savings in future
- Inspires confidence through familiarity!

Gen2 Development Timeline



2009 Engineering Summary

- We performed several full or partial engineering nights in 2009 to test Gen2/SCM
- Some nights we had bad weather or full moon; it's mostly OK for OCS engineering
- Our engineering plan was to cover as many skeleton files and modes of operation as possible (for each instrument)
- As the year progressed, many bugs were fixed and operation became smoother and smoother

Instruments Confirmed w/SCM

Confirmed 2009:

- HDS
- SPCAM
- FOCAS
- COMICS
- MOIRCS
- IRCS
- AO188
- WAVEPLATE
- HICIAO

Not Confirmed (brief test only):

- FMOS
- K3D

Engineering Thank You:

- Terada, Hiroshi
- Tomono, Daigo
- Tajitsu, Akito
- Letawsky, Michael
- Nakata, Fumiaki
- Potter, Robert
- Hatakeyama, Alan
- Hattori, Takashi
- Birchall, Daniel
- Tait, Philip

- Fujiyoshi, Takuya
- Garay, Alanna
- Tanaka, Makoto
- Lemmen, Michael
- Suzuki, Ryuji
- Tamura, Naoyuki
- Minowa, Yosuke
- And more!
- OCS team appreciates their great support, input and patience!

Gen2 in 2010

- Gen2 transition plan approved by DCM
 - In semester 10A Gen2/SCM will be used as "much as possible" for staff time, engineering and service observations
 - If semester 10A use is successful then Gen2/SCM will be used for open use observation in 10B, after mirror recoating.
- Fine tuning of observations, error reporting, etc.
- FMOS confirmation, additional training for staff, close support for observations

Gen2 in 2010, cont.

- Concurrently, OCS team will begin (with input from advisory committee) on several areas of "pure Gen2":
 - some prototype GUIs (current candidates are graphical observation plan editor and better instrument/status monitor)
 - Better quick look
 - collaborate with Telescope Division to increase efficiency of telescope commands via new telescope tasks
 - support for HSC on OCS side?

Request for your input!

- Pure Gen2 user interfaces and workflow are still under consideration
- Your ideas and input are requested
- Please send your thoughts to gen2@naoj.org

- Thank you for your time!
- Questions?