

From jclasen@not.iac.es Fri May 15 14:08:45 2009
Date: Fri, 15 May 2009 14:08:45 +0100 (WEST)
From: Jacob Clasen <jclasen@not.iac.es>
To: Jeppe Jønch Andersen <jja@astro.ku.dk>
Subject: Status

Hej Jeppe,

Som lovet en lille mail. Jeg har skrevet det paa internationalt, saa jeg kan cutte-og-paste det ind i senere dokumenter ;-)

Jeg ville ogsaa vaere meget glad hvis du kunne komme med et estimat paa hvor meget arbejdstid (ikke kalenderdage) det vil ta' dig at faerdiggoere de ting vi snakkede om igaar.

Det er det sidste stykke information jeg behoever for at faerdiggoere en opdateret statusrapport til Johannes og Thomas.

Under alle omstaendigheder kan jeg forstaa at Johannes kan styre lidt mere naar vi kommer til August? Det betyder vel ogsaa at saa er den vaerste ferie for baade dig og mig overstaaet?

Mange hilsener, Jacob.

- Logging at the NOT

We have a log system that uses the UNIX syslog. On each computer the syslog configuration is:

```
# Save Sequencer messages
local0.* @marissa.not.iac.es
```

The loghost is 'marissa' and the syslog.conf on that looks like this:

```
# Save SEQUENCER messages
local0.* /var/log/talker
```

which means that all log messages goes to one host in the file /var/log/talker. Depending on the level of information and importance there are 3 levels of logging "DEBUG", "WARNING", "ERROR" and "INFO". Selfexplanatory except maybe for the "INFO" which is used for descriptive messages about what is going on with the systems for the observers general orientation.

These commands are used to log from shell scripts:

```
'/usr/bin/logger -p local0.debug -t "scriptname" "[NOTE]: My note" '
'/usr/bin/logger -p local0.debug -t "scriptname" "[DEBUG]: My note" '
'/usr/bin/logger -p local0.debug -t "scriptname" "[ERROR]: My note" '
```

...and from a C program:

```
openlog("alfosc.xbin", LOG_CONS, LOG_LOCAL0);
```

("alfosc.xbin" is the name of the program that logs. In this case the sequencer command for setting the x binning for the ALFOSC CCD)

```
syslog(LOG_ERR, "[ERROR]: FIFO receive error");
```

for writing in the log.

CCD3 must be able to comply with this.

- WCS (World Coordinate System) information in FITS headers

The FITS images must be populated to special headers that define the WCS of the observation. These will be created in the external FITS information program. Different variables are needed for the computation of the headers:

RA, DEC, field angle (available from the TCS)
xbin, ybin, xstart, ystart, xsize, ysize (available from CCD3)

Now, the CCD3 program should issue an Ivy bus message requesting the creation of the WCS header. The external FITS information program will then make it and place it in the database result table together with the rest of the external information. The CCD3 program will then "SELECT" it for writing into the actual image file.

The Ivy message must do two things 1) signal the point in time where the WCS header creation must begin. 2) provide the detector geometry information described above.

This is the suggested form the Ivy bus message should have:

ccd3.fits.extinfo.wcs.xbin=1.ybin=1.xstart=1.ystart=1.xsize=2048.ysize=2048

- CCD3 command list and protocol

In order to develop applications (external commands and status displays) that communicate with the controller (via the CCD3 program) it is needed that a complete list of commands that can be sent/given to the CCD3 program is made. The communications technique (protocol) used in sending the commands and receiving answers must also be described.

- Commented FITS header

Document attached to the mail.

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=====
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=====

```

```

  \  /      \  /      \  /      \  /      \  /      \  /      \  /
 (oo)      (o-)      (@@)      (xx)      (- -)      ( )      (00)
 //|||\   //|||\   //|||\   //|||\   //|||\   //|||\   //|||\
 bug       bug       bug/w     dead     bug       blind     bug after
                                     bug     sleeping     bug       seeing a
                                                                 female
                                                                 bug
=====

```

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