at ICALEPCS 2005 Conference

Based on the success of the ACS 2004 Wokshop and of the Acs Discuss Telecons we are organising this workshop at the ICALEPCS 2005 Conference conference in Geneva.

With this Workshop we want to get together the ACS development teams and all ACS current and potential users, with the purpose of introducing ACS and discussing ACS present status, foreseen developments and how ACS is and can be used by projects other than ALMA.

This page is for discussing if, where and how to organise the workshop and to collect comments, suggestion and a list of potential participants. Averybody is invited to participate to the discussion.

(*) ACS is developed for the astronomical ALMA Project (while being a fully general framework for control and non-control applications). ACS is the result of a collaborative effort among the European Southern Observatory (ESO) (main partner- 4 FTE/year), National Radio Astronomy Observatory (NRAO), Socorro(1 FTE/year), Astronomical Observatory of Trieste (INAF-AOTs) (~1 FTE/year) and Cosylab Lmt. (~1 FTE/year). These Institutes share the intellectual property of ACS, which is freely available under the GNU LGPL public license (compatible with the use of commercial products, like ZLegacy /ACS.VxWorks). ACS is based on an initial kernel of software provided by JSI/Cosylab, which includes ABeans and has been in use on the ANKA accelarator, Germany. The present Release of ACS is used at about 20 Institutes and installed on something like 100 computers (See: ACS Users List).

TOC

When

08th and 09th (morning) of October 2005

Where

See the ZLegacy/ACS.ACSWorkshop2005Where

What

The main purpose of the workshop will be to discuss how ACS can be used for other projects than ALMA. Although ACS is developed for the ALMA and ALMA requirements drive the development, a number or other projects both inside and outside the ALMA partner organisations are using ACS or have shown an interest in using ACS.

Agenda!

The workshop will be 1 1/2 days (Saturday and the morning of Sunday). and will be divider in two parts:

- General presentations about ACS development status and future and presentations from the projects using ACS (Saturday)
- Tutorials and hands on sections (Sunday)

From the list of participants we have seen that the number of persons that have no experience of ACS and that are not already part of the user's community is higher than expected.

The actual splitting of the two parts in the two days will depend on the details of the agenda.

During the actual ICALEPCS Conference we will have further occasions for discussions between the various groups and there are a nunmber of papers related to ACS and its usage.

In the agenda for the workshop we try to avoid duplications with arguments presented at the conference.

The Agenda has been filled in according to the proposals of the attendees.

We will make "real time" changes to the agenda during the meeting, if interesting topics come out during the discussions.

Agenda:

Saturday		
Time	**Title**	**Notes**
08:30	**Bus CERN - Brunswick monument - ARCHAMPS Hotel Ibis**	
09: 00,15 m	Welcome coffee	
09: 20,15 m	Introduction to the Workshop (G.Chiozzi)	ACSWorkshop-Welcome.ppt
09: 35,15 m	Around the table: who is who!	ACSWorkshop-WhoIsWho.ppt
09: 50,10 m	Introduction to ACS. What is ACS? (G.Chiozzi)	We will try not to repeat the status paper in the conference, but some overlap is anavoidable, in particular considering that there are many participants new to ACS ACSWorkshop-ACSIntro.ppt
10: 00,15 m	Introduction to ACS. ACS technical highlights (H. Sommer)	ACSOverviewICALEPCS2005.ppt
Status of projects using ACS .		
10: 15,20 m	**Coffee Break**	Coffee breaks and lunches are ment also as an opportunity for people to know each other and the ACS team members and to talk of potential collaborations

Time	Topic	Materials
10:45,20 m	ALMA (A.Farris)	ACSinALMA.ppt There are also a number of presentations about ALMA at the conference
11:05,15 m	HPT (R.Lemke)	HPT-2005.ppt
11:20,25 m	OAN (P. De Vicente) (there is a paper/poster at the conference)	oan-ACS2005.ppt
11:45,10 m	SRT (SRT team)	SRT_notes.doc ACSintheSRTproject.ppt
11:55,15 m	Canadian 1.8 meters (D. Fugate)	RAO-ACS
12:05,90 m	**Lunch**	
13:35,15 m	VLT ACS-based proof of concept instrument (R.Cirami)	ACSVLT.ppt
13:50,15 m	Cosylab Projects and the LEGO Demonstration (K. Zagar)	PRE-Cosylab_ACS.ppt
14:05,15 m	Other groups using ACS: APEX, UTFMS (G.Chiozzi)	Some other groups using ACS could not come to the workshop. Here a short summary of their activities is given. ACS_at_APEX_2005.ppt UTFSM.ppt
14:20,15 m	microIOC (M.Plesko)	The micro Input Output Controller is a fanless and diskless PC104 based embedded computer, with pre-installed ACS or EPICS control system software. It is meant for heavy distributed systems or where the number of signals is too low to justify a costly VME system. microIOCforACS.ppt
	Discussions, Round tables .	
14:35,30 m	Comparison of ACS and EPICS. Can they work together? How? (M.Plesko)	Having worked with both EPICS and ACS and knowing both communities very well, I will try to give an objective comparison from my personal perspective, which is still very subjective. No benchmarks will be given, I will rather try to stress the good sides of both systems and optimal uses for each. Also, an example of how both systems can work together will be sketched. compareEPICSandACS.ppt
15:00,30 m	**Coffe Break**	
15:40,40 m ⚠ +2 0m	Beyond middleware: trends in software platforms (S. Wampler, K.Gillies)	A presentation will introduce the status of software platforms and middleware technogies, making a comparison of the available alternatives. A round table, open discussion, will follow OSGiIOCSlides.ppt beyondMiddleware.pdf
16:20,40 m ⚠ +2 0m	An Embedded Component Approach for Complex Control Systems.	Ricardo Sanz (Universitad Politecnica de Madrid) ACS_Sanz.pdf
17:00,25 m	Generic Telescope Interface (RolandLemke GianlucaChiozzi)	Short presentation of the status of the discussions and activities started withing the ACS user's community to develop a generic telescope architecture to be used by different projects. Try to work on a real example. Round table to discuss how to proceed. Wiki discussion: GenericInterfacesForRoboticTelescopes
17:25,15 m	LabView interface to ACS (EG O, Bernhard Lopes)	ACSandLabVIEW_v1r2.ppt

17:45	**Bus ARCHAMPS - Brunswick monument - CERN**	

⚠️ ***The following presentations/discussions could not take place because we run out of time***

--:--, 20m	Libraries of Components /Devices/GUIs that we can share. (GianlucaChiozzi)	Round table to analyse the status of the shared CVS server and identify what other elements can be shared and reused by the various groups. Wiki discussion: ACSContributedCode
--:--, 20m	Simulators and simulation with ACS (proposed by Pablo)	Discussion concerning strategies for simulation. Simulation is very important to test the code. ACS provides different levels of support for simulation and we want to discuss here what is available, how it can be used and what is missing. (the IDL simulator will be also presented at the conference). A generic telescope simulator would be extremely useful for the development of applications.
--:--, 15m	ACS Error System (ACS, B. Jeram)	Error and exception handling strategies using the ACS error system.
--:--, 15m	ACS Configuration Database (G.Chiozzi)	Structure and usage of the ACS Configuration Database ACSWorkshop-CDB.ppt
--:--, 15m	End of day: summary and open discussion	

Sunday		
Time	**Title**	**Notes**

Tutorials
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08:30	**Bus CERN - Brunswick monument - ARCHAMPS Hotel Ibis**	
09:00,15 m	Summary of first day, questions and answers. Coffee	
09:15,15 m	ACS Thread classes (ACS, B. Jeram)	ACSWorkShop-ThreadsCPP.ppt
09:30,30 m	CERN Laser Alarm System: concepts, ACS adaptation and status (CERN, Katarina Sigerud) (ACS, A.Caproni)	LASER-ACS-WORKSHOP.ppt ICALEPCS2005-ZLegacy/ACS.AlarmSystem.ppt
10:00,30 m	**Coffee Break**	
10:30,20 m	BSD component Generation (HPT, Martin Paegert)	acsGenerator.ppt
10:50,15 m	ACS GUI building with Eclipse (Cosylab)	It would be nice to have here also a discussion about alternatives to Java. Various groups are using Qt and Python. We have seen also that LabView can be used.
11:05,20 m	Are we using ACS in the right way?	The various teams describe design issues in their systems. The ACS team tries to analyse how they think they should be implemented using at best ACS features. We discuss all together the best approach to the specific problems.
11:25, 30m	End of day: summary and open discussion	How should we proceed with ACS? What collaborations can we set up? ACS future plans
12:00	**Bus ARCHAMPS - CICG for the tutorial**	Lunch will be in Geneve

Each presentation includes time for discussion and questions. 10 minutes for a 30m presentation, 5 min for a 15m/20m presentation.

Conference Papers and Posters

There will be the following papers/postersrelated to ACS in the conference program :

Paper ID	Title	Authors
MO2.2-1I	The ALMA Computing Project Update and Management Approach	B.E. Glendenning, G. Raffi
WE2.4-6I	The ALMA Common Software ACS Status and Developments	G.Chiozzi, A.Caproni, B.Jeram, H.Sommer, M.Plesko, M.Sekoranja, K.Zagar, D.Fugate, S.Harrington, R.Cirami, P.Di Marcantonio
WE3A.3-6O	The ALMA Telescope Control System	A. Farris, R. Marson, J. Kern
WE4A.2-5O	A generic software interface simulator for ALMA common software	D. Fugate, G. Chiozzi, A. Caproni, B. Jeram, H. Sommer, S. Harrington
PO1.012-1	Development of the control system for the 40m radiotelescope of the OAN using the Alma Common Software	P. de Vicente, R. Bolao, L. Barbas
PO1.032-6	Transmitting huge amounts of data design implementation and performance of the bulk data transfer mechanism in ALMA ACS	P. Di Marcantonio, R. Cirami, B. Jeram, G. Chiozzi
PO1.100-8	Migration from ACS 1.1 to ACS 4 at ANKA	I. Kri~nar, W. Mexner, M. Pleako, M. `ekoranja
PO2.067-4	ALMA Correlator Real-Time Data Processor	J. Pisano, R. Amestica, J. Perez

(sorted by date)

-- GianlucaChiozzi - 22 Feb 2005