

at [ESO Garching Headquarter](#)

The previous ACS workshop has been at the [ICALEPCS conference in 2005](#).

We have organized a new workshop, associated with basic and advanced training sessions.

With this Workshop we wanted to get together the ACS development teams and all ACS current and potential users.

The workshop had two tracks:

- Beginner track
- Advanced track

See here the [picture gallery](#)

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(\* 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 accelerator, Germany. The present Release of ACS is used at about 20 Institutes and installed on something like 100 computers (See: [ACS Users List](#)).

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## When

15th - 19th of January 2007

## Where

[ESO Garching Headquarter](#)

## What

A lot of participants, both beginners and expert ACS users, have registered for the workshop.

We had two partially parallel tracks to satisfy the needs of both groups of participants.

- A beginner track
- In depth workshops and discussions for experts.

The first day has been the *ACS Workshop*, where we have given the general status about ACS and all groups and projects using ACS have presented present the status of their projects.

We had here general high level discussions about how ACS is used in the various projects and what the community of users needs from ACS.

This has been a first opportunity to compare the work done by the various projects.

After that we had 4 days where we had

- Common sections of general interest, for example to introduce to everybody new features of ACS, like the Alarm System
- Introductory sections, explaining the general concepts of ACS for the newcomers (component/container, deployment concepts, baci). This will include extensive hands-on sections.
- Parallel workshops to get into the details of the usage of important ACS features. A lot of attention will be for example given to the usage of the error system and of the logging system. Or to topics like debugging techniques.
- Design workshops where we want to pull together different groups to discuss how they have designed parts of their system. Users will propose for discussion their design and implementation. We will analyse together the solution adopted and see what alternative and better solutions other users and the members of the ACS team can propose. This will allow to explore and discuss useful application design patters that use at the best the features of ACS (or to find areas where ACS needs to be improved and extended).

## Agenda!

The Workshop/Course has been 5 days.

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

We have made "real time" changes to the agenda during the meeting, if interesting topics came out during the discussions.

### Monday: ACS Workshop

Monday - ACS Workshop			
Time	Title	Link	Notes
10:00, 15m	Welcome coffee		
10:15, 15m	Introduction to the Workshop ( <a href="#">GianlucaChiozzi</a> , <a href="#">GianniRaffi</a> )	<a href="#">ACSWorkshop-Welcome.ppt</a>	
10:30,15m	Around the table: who is who!	<a href="#">ACSWorkshop-WholsWho.ppt</a>	
10:45,30m	ACS: status and latest development ( <a href="#">GianlucaChiozzi</a> )	<a href="#">ACSWorkshop-ACSStatus.ppt</a>	

11: 15,30m	ALMA: status of project, architecture ( <a href="#">JosephSchwarz</a> )	<a href="#">ACS_Course_ALMA_2007.ppt</a>	
11: 45,75m	Lunch at the Max Planck canteen		
13: 00,20m	APEX ( <a href="#">DirkMuders</a> )	<a href="#">ACS_at_APEX_2007.ppt</a>	
13: 20,20m	HPT - The Hexapod Telescope. Project status and ACS usage. Future projects. ( <a href="#">RolandLemke</a> )	<a href="#">HPT-2007.ppt</a>	
13: 40,20m	OAN - The 40m telescope. Project status and ACS usage. ( <a href="#">PabloDeVicente</a> )	<a href="#">ACS_2007_aries21.ppt</a>	
14: 00,20m	SRT - The Sardinia Radio Telescope. Project status and ACS usage. ( <a href="#">CarloMigoni</a> )	<a href="#">3_ACS_Worshop_SRT.ppt</a>	
14: 20,20m	AOT, TSRS-NG : Trieste Solar Radio System - New Generation and AOT collaboration with ACS. ( <a href="#">PaoloDiMarcantonio</a> )	<a href="#">acs_aot_workshop07.ppt</a>	
14: 40,20m	Cosylab: providing support for ACS development ( <a href="#">KlemenZagar</a> )	<a href="#">PRE-Cosylab_ACS.ppt</a>	
15: 00,30m	Coffe break		
15: 30,20m	ANKA synchrotron status report ( <a href="#">Klemen Zagar</a> )	<a href="#">ACSatANKAStatus.ppt</a>	
15: 50,20m	UTFSM: A model of university collaboration with ACS ( <a href="#">NicolasBarriga</a> )	<a href="#">UTFSM.pdf</a>	
16: 10,20m	EGO: Review of Non-Commercial Frameworks for Distributed Control Systems ( <a href="#">Bernhard Lopez</a> )	<a href="#">Frameworks_ACSWorkshop07_v1.ppt</a>	
16: 30,20m	ATM: ALMA software on atmospheric effects and their correction ( <a href="#">JuanPardo</a> )	<a href="#">ATM_ACS2007.ppt</a> <a href="#">PARDOACS2007.zip</a> : Complete presentation with movies from Juan PArdo	
16: 50,20m	Sharing ACS Components and drivers: status of the ACS shared SW repository and new ideas.		
17: 10,30m	ACS collaboration: round table.		

## Tuesday to Friday: ACS Course, Beginner's and Advanced tracks

- **Agenda:** <http://www.eso.org/~almamgr/AlmaAcs/OtherDocs/ACSPapersAndSlides/ACS-Course/index.html>

It is the first time we have an ACS Course with an advanced track in parallel to a beginner's track. Also in this case, please look at the agenda, while it is evolving, here:

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

The agenda for the two course tracks on a separate link. In this way we keep all standard ACS-Course presentations, documentation and examples in a single place under configuration control. The pages pointed by the link have been evolving in the past years at each ACS Course. During the course, the area has been updated in real time to make it possible for all course participants to always have the latest available presentations and examples.

## Course project

- This section is dedicated to the project we have developed as exercise in the Beginner's track. This has been a very interesting project touching a lot of important aspects of ACS but, more important, of the process to be used when developing with ACS.
- [ACSCourse-LegoTelescopeProject.ppt](#): Lego Telescope Project (50mm telescope). This Power Point presentation describes more in detail the scope of the project and the system that has been developed.
- [MODULES.tar.gz](#): Final source code for the project. All sources as taken from CVS.
- Little amateur movie of the final integration:
  - [Divx format](#), just ~42 Mb
  - [MPEG DVD format](#), ~300 Mb
- See here the [picture gallery](#)

## Summary of sessions / additional presentations

- Here people should write a summary of the major sessions, in particular of the sessions in the advanced track. We need in particular to have a list of suggestions/requests. We put here also slides and presentation material related to the advanced sessions.
- [ATM\\_C\\_Implementation.ppt](#): ALMA ATM: Design Workshop form J.Pardo.
- [rtosExample.tar.bz2](#): RTOS example (updated, see [rtosExample/doc/Readme.txt](#)). [ThomasJuerges](#)
- [ACSCourse-ZLegacy/ACS.AlarmSystem.pdf](#): Alarm system presentation. [AlessandroCaproni](#)

- [PRE-ACS\\_Reliability.ppt](#): Design Discussion: ACS Reliability. [KlemenZagar](#), Cosylab
- [ACS\\_Workshop-Advanced\\_track\\_notes-by\\_Thomas\\_Juerges.txt](#): Random notes of talks in the advanced track. [ThomasJuerges](#).

## Feedback from participants / problems

- Add here short feedback and suggestions or create sub-pages and link them here or add here reports for problems encountered during the Course.
- Feedback:
  - Reformat ACS contribution page and server to make it easier to access, update and search contributions. (from "ACS contribution" discussion")
- Problems:
  - jacorb problems handling pre-processor directives withing c-style comments (from M.Olberg)  
Added description to FAQ: [Main.FAQIdLimitations](#)
  - Python component error when using a class name different from the python file name (from [PaolaSivera](#)).  
Created action: [Action 002964](#)

## Who and registration

[This is the list of participans to the Workshop](#)

## Logistic

### How to reach ESO and the course premises

- See here: <http://www.hq.eso.org/about-eso/local-info/>
- With the new Metro Station of the U6 line there is now a direct connection between ESO and downtown Munich.
- The course will take place in the following rooms:
  - Council Room. 1st day, joint sessions and main sessions
  - Skylight room. Split session 1
  - E30, New portacabin. Split session 2, when needed.

### Course time-table

- The Workshop will start on Monday the 15th at 10:00, to allow people to fly in from Europe on the same day.
- The course will end on Friday the 19th ad 15:00, to allow people to fly out with the evening flights.  
The ACS team will stay available until 17:00 to discuss with late birds.

### Hotel reservation

- For logistic and hotel informations, please contact [ALMA Admin at ESO](#).
- We have make a block reservation for about 20 rooms at the [Hotel Knig Ludwig](#) in Garching

## Computing facilities

- The course will have practical sessions.  
Work will be done in groups of 3 to 4 people and PCs with ACS installed will be provided.

Here is the list, location and account created and ( i hope) already configured

N.	PC	Location	IP	account
1	pc004408	SkyLight	134.171.40.169	acsq1
2	pc004422	Council	134.171.40.168	acsq2
3	pc004436	Council	134.171.40.164	acsq3
4	pc004803	Council	134.171.40.156	acsq4
5	pc010119	SkyLight	134.171.40.167	acsq5
6	pc010121	SkyLight	134.171.40.166	acsq6
7	pc010123	Council	134.171.40.70	acsq7
8	pc010128	Council	134.171.40.159	acsq8

KDE is also configured with icons for acsqx accounts (firefox, thunderbird, openoffice, eclipse, acrobat, etc)

- You are welcome to come with your own Laptop.  
We will provide:
  - Scientific Linux + ACS installation images
  - VmWare Virtual Machines to be used with the free VmWare Player.

- If you plan to come with your laptop, please tic the corresponding field in the registration table [ZLegacy/ACS.ACSWorkshop2007-participants](#)
  - Hardware requirements for VmWare are (native installation is less demanding):
    - At least 10Gb free disk space
    - At least 1Gb ram
    - At least 1.7GHz
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## Discussion:

Please add below your comments or suggestions for an open discussion.

-- [GianlucaChiozzi](#) - 13 Oct 2006