- 20223/MM/DD NN:NN UT
- Attendees
  - Contact Information
- Action Items from previous meeting
- Updates since last Meeting:
  - Announcements
  - Release Notes
- Planning
- Other institutions plans and proposed topics
- Any other business?
- Conclusions/Action Items

Organization	Attendee
ALMA	Tomas Staig Rosita Hormann Jorge Avarias Camila Martinez
СТА	Igor Oya
All	Andrea Bulgarelli Arkadipta, Constantin Steppa, Dmitriy Kostunin, Dominik Neise , Federico Russo , Gianluca Ghiozzi, Hasmik Gasparyan, Isaias, Juang, Kevin Munari, Luca Castaldini , Nicolo Parmiggiani, Valerio Pastore , Vito Conforti , David Melkumyan , Tho mas Murach

## Contact Information

- Doodle: https://doodle.com/meeting/participate/id/boOQPvkb
- Zoom Details:
  - o Link:
  - o Pass:
- · Starting from scratch

## Announcements

- Maintenance
  - o ACS Command center properly handling Python container output
  - C++ Logging performance improvements
  - TAT tests stability (655/660 tests passing still few tests randomly failing)
     Use official Python site-packages directory (lib/pythonX.Y/site-packages)
  - - Symlink lib/python lib/pythonX.Y available for transition period
  - Characteristic Components in Python now properly inherit BACI properties from ancestors
     CORBA::Exception now inherits from std::exception

  - o Decouple ACS from some Eclipse dependencies using Tycho
  - Merge ExternalDependencies and JavaDependencies in a single directory (\$ALMASW INSTDIR/acsdeps)
  - Added report mechanism of Maven and Pip dependencies licenses
  - o Refactoring of NC Publisher in Java to better handle errors, including CORBA timeouts
  - EventConverter reliability
  - Python logging no longer hangs if ACS (manager) is not running
  - Manager pings clients and containers asynchronously
  - Fix to C++ NC consumer thread checking status
  - acsStartJava to support add-opens parameter
- Obsolescence Management
  - Removal of Loki library
  - o Java 17
  - o Maven (3.8.5)
  - o Eclipse (4.23)
  - Python Dependencies (24)

  - Java Dependencies (25)

     Jakarta EE / Hibernate 6 / Spring 6 / SpringBoot 3 / Tomcat 10
- C++ Modernization and Best Practices
  - o Some C++11 features adopted
  - Fixed warnings during compilation (g++ 8.5.0)
- Security
  - Component Caller Proposal and Implementation
- Projects
  - o Recovered coverage functionality for Python, Java and C++
  - O CDB API REST
  - O BACI Properties Configuration Tool
  - ACS Jar files and packages can be deployed with Maven and Twine through 'make deploy' target
  - C++ Logging replacement for ACE Log (study)
  - ALMA WSU: BulkData Benchmarking and tuning

# Release Notes common-2022JUN

- · Obsolescence management
  - Maven (3.8.5)
  - Eclipse (4.23)
  - Removal of loki library Replacement with standard C++11 functionality
  - Python Dependencies (10)
  - Java Dependencies (11)
- C++ Logging
  - Performance study
  - New C++ logging macro allowing to reuse logger instance
  - Performance improvement in logger XML parsing
- C++ modernization and best practices
  - The "using" statement was removed from header files
  - ACE\_TSS replaced by C++11 TLS (Thread Local Storage)
  - Loki singleton replaced by C++11 functionality
  - ACS exceptions passed by reference
- ACS Command Center to properly handle Python output
- Component Caller API security proposal
- BulkDataNTOpenDDS now aligned with several improvements from BulkDataNT (RTI DDS) implementation
- Modules' test stabilization (10+ additional tests now working properly)

#### COMMON-2022AUG:

- Maintenance
  - o RHEL 8 bug-fixes
  - Prevent flooding of logs from Castor
  - Prevent errors parsing log4j configuration files
  - Clean up of warnings in ACS' codebase
  - Component Caller fix for current version of Tornado
- Component Caller API Security Proposal
- · Component generator is now installed with ACS
  - Added Characteristic Component and BACI Properties support
- Maven and PyPI deploy version now configurable with ACS\_DEPLOY\_VERSION variable
- ACS Exception stack trace in Python should now be easier to read

## COMMON-2022OCT

- Maintenance
  - $^{\circ}$  Avoid pyenv rehash on ACS installation directories when there are no permissions
  - EventConverter now logs events being handled and problems during handling
  - Use official Python site-packages directory (lib/pythonX.Y/site-packages)
    - Symlink lib/python lib/pythonX.Y available for transition period
  - MonitoringSyncTool base schema fallback fixed
  - Codegen MANIFEST.MF no longer appears as modified after building ACS
    - Component generator improvements for Java
       Application and lead with a specific and blad with
- Python coverage support for 'make test' is enabled with ACS\_COVERAGE variable
  - Intended to use with build system only
- Obsolescence Management
  - Java Dependencies (14)
    - ACS JMS deprecated selector (csselector) replaced by ActiveMQ's selector
    - Extjars now being tracked as part of ExtProds with Pip
  - Python Dependencies (14)
    - Plus tracking of 68 transitive dependencies
  - ARCHIVE/ICD ExternalDependencies module installs third party dependencies using Maven and Pip

#### COMMON-2022DEC

- · Prevent exceptions in BDNT destructor
- · New function available to delegate default handling (logging) of CORBA exceptions, std::exception and non-standard exceptions
- New flag in acsMakeCheckUnresolvedSymbols script which suggests candidate libraries for missing symbols

## COMMON-2023APR

- Maintenance
  - $\,^{\circ}\,$  Small fix in generic handling of anonymous exceptions
  - Lowered log priority for optional BACI property parameters
  - MonitoringSyncTool to jump dummy parents in schema hierarchy
  - o buildPython script improvements in problems detection
  - o Characteristic Components in Python now properly inherit BACI properties from ancestors
  - Rename of non-standard internal files and classes in C++ logging system
- Obsolescence
  - Java 17 compatibility
  - TMCDB Explorer to make use of JPA Criteria API
- ACE/TAO retrieved from GitHub
- CORBA::Exception now inherits from std::exception
- EventConverter supports custom metadata in events and configuration of redis channel prefix/suffix
- Support for test coverage reports in Python, C++ and Java

## COMMON-2023JUN

- Decouple ACS from some Eclipse dependencies using Tycho
- CDB API REST available
- BACI Properties Configuration Tool available
- ACE/TAO patches are now applied to cloned repositories directory structure
- Optional Maven execution during installation of ACS JAR files using MAKE\_NOMAVEN environment variable
- Merge ExternalDependencies and JavaDependencies in a single directory
- <artifact>-flattened-pom.xml files are not present after running make
- Maven GroupId can now be configured with ACS\_DEPLOY\_GROUP environment variable
- Fix cdbWrite not handling strings correctly in some cases
- ACS Makefile POM files should allow parameterized repository ID
- Implement ComponentCaller API access policies

## COMMON-2023AUG

- CDB API REST service implemented
- BPCT
  - o Extended functionality to work with CDB API REST
  - Script to generate YAML configuration files from a currently configured CDB
- acsStartRemoteTmcdb script now has two additional options
  - o --no-services: should only start up the containers.
  - --no-containers: should only start up the services.
- Fixed bugs related to CDB script commands (cdbRead and cdbjClearCache).
- · Added report mechanism of Maven and Pip dependencies licenses
- · Reduced critical zone protection block in loggingService, resulting in cleaner code and slight performance improvement
- Refactoring of NC Publisher in Java to better handle errors, including CORBA timeouts

## COMMON-2023OCT

- Upgrade Jakarta EE, Hibernate 6.x, Spring 6.x, SpringBoot 3.x and Tomcat 10.x|11.x
- EventConverter: Improved handling of connection error to Redis
- PySimpleClient and requests package import together causes to wait for ACS manager
- ACS Maven commands should be made in batch-mode
- Upgrade Tycho and Eclipse versions for COMMON
- Notification Channel problems in thread checking NC status
- Java: Replace deprecated "new Type" for primitive wrapper classes in ACS
- Manager should ping clients asynchronously
- acsStartJava to support add-opens parameter
- Correct some ACS Phase A tests
- Misc
- o ALMA WSU
- ° RHEL 9 / 10
- o Java 21 / 25
- 2023DEC
  - Python (3.12)
  - PyEnv (2.3.28) + (virtualenv plugin support)
  - Python Dependencies (TBD)
  - Java Dependencies (TBD)
- 2024APR
  - ° ACE/TAO
  - OmniORBpy
- 2024JUN+
  - Python Dependencies (TBD)
  - Java Dependencies (TBD)
  - C++ Logging replacement for ACE Log
- ACS to use capabilities from C++14, C++17 or C++20 standard
  - For CTA, it will be good to upgrade to C++17 or C++20.
  - o Tomas Staig will send an email to other institutions to understand if have concerns or something special to consider.
- The community wants to access the ACS documentation. The proposed idea is to have relevant information for the 2024FEB release.
- ACS Workshop
  - Overall, the idea of having a new workshop is good. However, we will email the ACS community with a poll about what topics should be
    presented in this workshop, and the community will choose.
  - It was requested that the video sessions of past workshop sessions be uploaded and the broken links in the confluence pages where these links are updated.
- Old Twiki links
  - Some information is saved in the old twiki; when necessary, the information in the twiki can be requested, and the information will be
    uploaded to confluence so that everyone can have access.

Send emails to other institutions about C++ upgrade.
ACS documentation for the 2023FEB release
Send an email to ACS community with poll about ACS workshop topics
Share the link about code coverage (in confluence) with the community.