

CTA interoperability workshop

Previous activities report

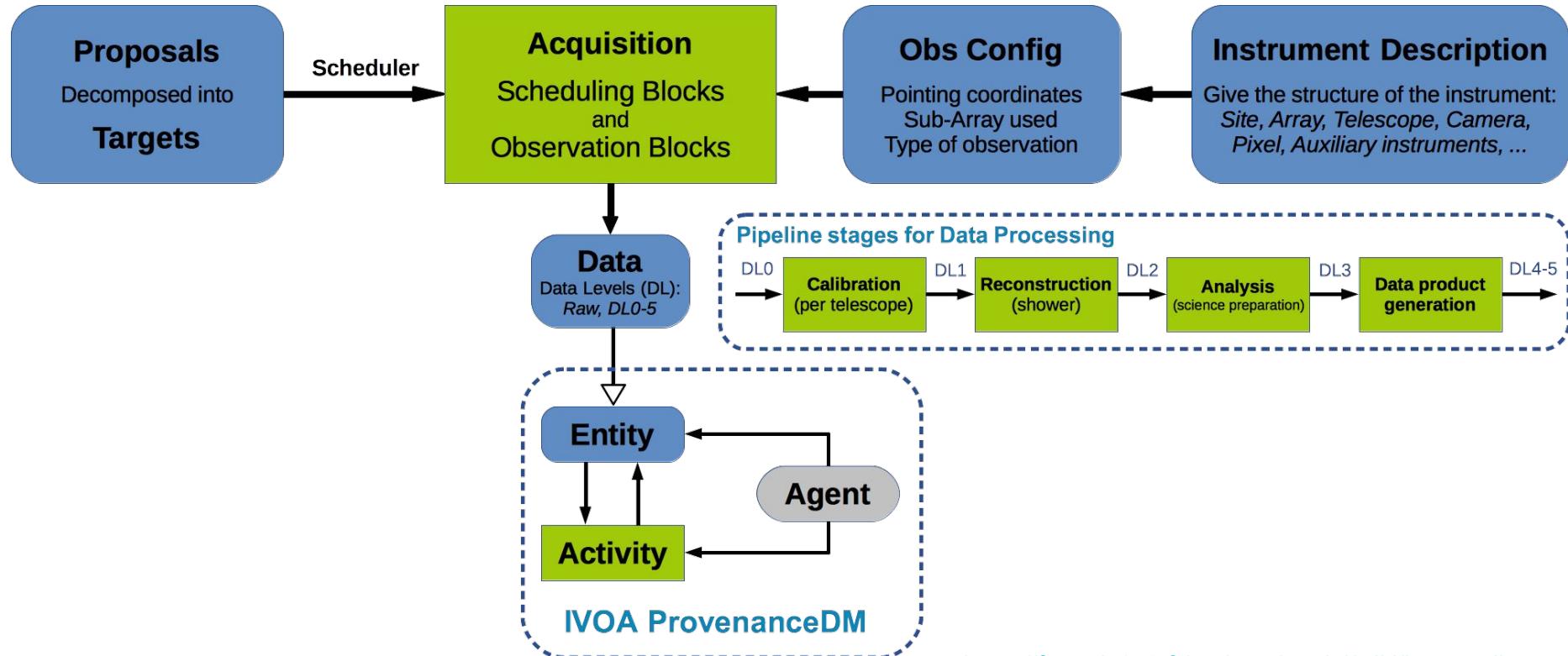


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François Bonnarel, Mireille Louys (CDS), Catherine Boisson (LUTH)

CTA Data Access and Virtual Observatory (VO)

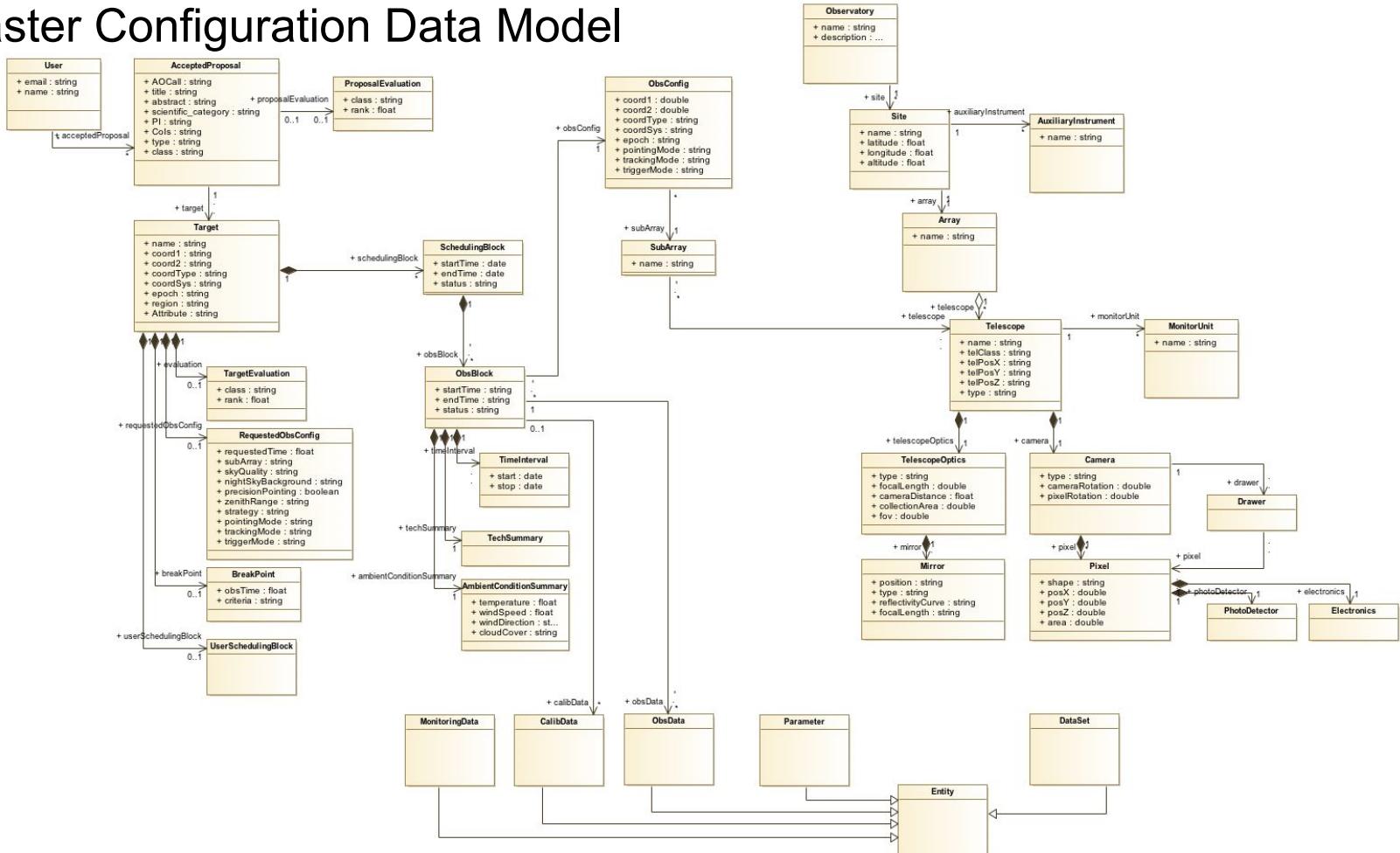
- Discussed in the **CTA Data Model group**
 - after earlier discussion (see Mireille's presentation)
- One of the result was the **CTA Master Configuration Data Model**
 - evolution of previous diagrams
- **Prototype** to test VO technologies for CTA
 - CTA internal document (presents VO standards and prototype technical structure)
 - ObsCore description adapted to CTA
 - ObsTAP server implemented (using DaCHS)
 - Web interface developed to query the ObsTAP server : TAP Distiller
 - <https://voparis-cta-test.obspm.fr>
 - Web interface to further process data : OPUS
 - <https://voparis-uws-test.obspm.fr> – [ADASS XXX proceedings]

CTA Master Configuration Data Model

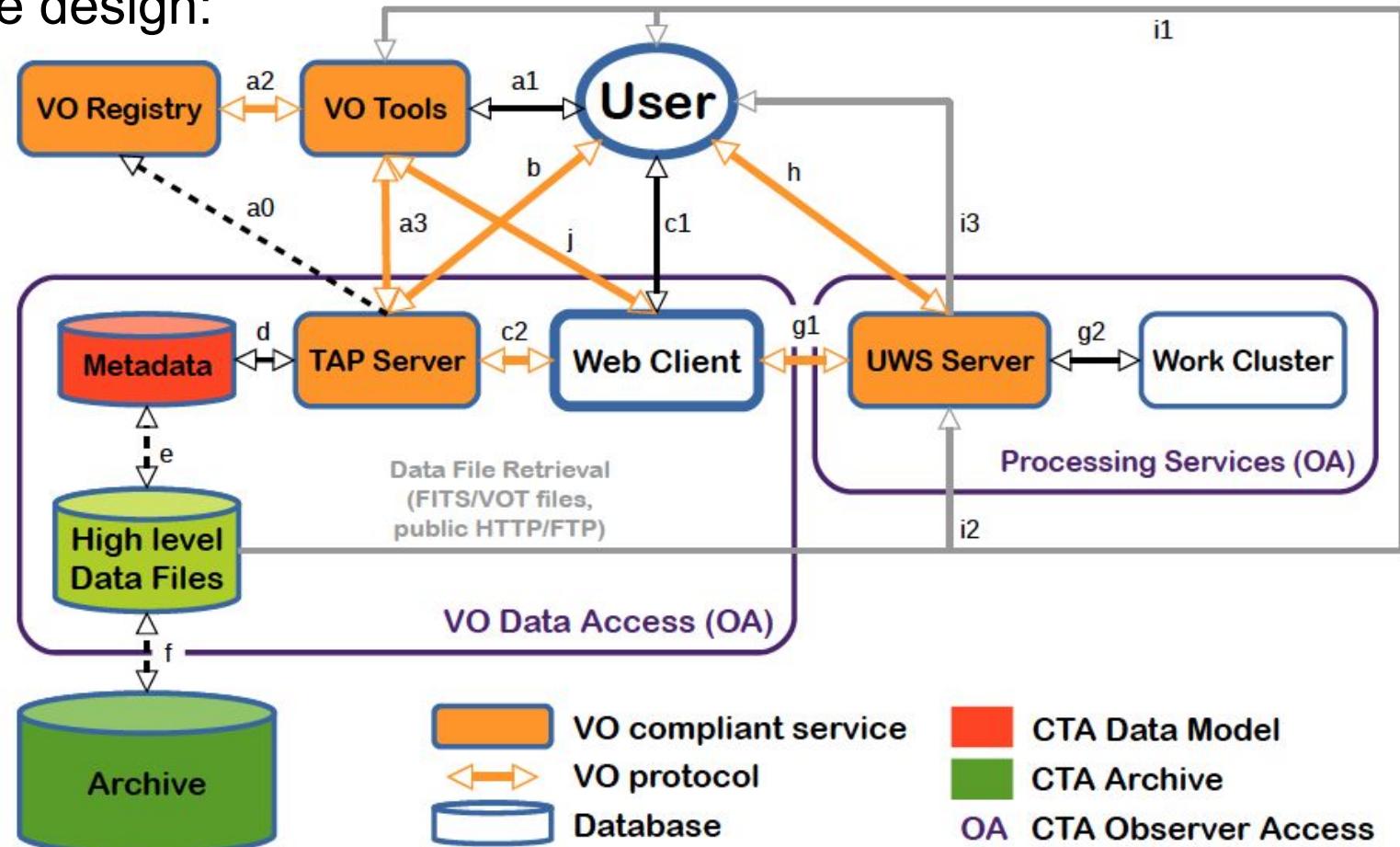


https://forge.in2p3.fr/projects/model/wiki/Latest_diagram

CTA Master Configuration Data Model



Prototype design:



H.E.S.S. Public Data Release VO Access



<https://hess-dr.obspm.fr> / <https://www.mpi-hd.mpg.de/hfm/HESS>

H.E.S.S. is a system of Imaging Atmospheric Cherenkov Telescopes that investigates cosmic gamma rays in the energy range from 10s of GeV to 10s of TeV. The instrument allows scientists to explore gamma-ray sources with intensities at a level of a few thousandths of the flux of the Crab nebula (the brightest steady source of gamma rays in the sky).



OPUS → <https://voparis-uws-test.obspm.fr>
[ADASS XXX proceedings]

The screenshot shows the OPUS interface with the following components:

- Job List:** A table showing a list of jobs for "gammapy_spectra". The columns are Type, Start Time, Destruction Time, Phase, Details, and Control.
- Details Panel:** Shows the status of the first job: COMPLETED. It includes a "Properties" section and a "Parameters" section with a "Results" button highlighted by a red circle and a blue arrow pointing to it.
- Job Results:** A panel showing download links for "spectrum" and "spectrum_preview".
- Process Flow Diagram:** A diagram showing the workflow between various OPUS services like opus_antiproto_whole, opus_uwscopy, opus_jobcopy, etc.
- Spectrum Plot:** A log-log plot of flux density vs Energy. The y-axis is "flux density (1/cm²/s/TeV)" ranging from 10^{-15} to 10^{-8} . The x-axis is "Energy [TeV]" ranging from 10^0 to 10^1 . The plot shows a power-law-like decay with several data points and error bars.

Observatoire de Paris 2021. Based on [Django](#), [jQuery](#) and [Bootstrap](#).

TAP Distiller → <https://voparis-cta-test.obspm.fr>