Serco, CMDBuild experiences in the Aerospace Industry

CMDBuild day 2014

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CMDBuild®

serco

SERCO

(COMPANY BACKGROUND)

Delivering Essential Services Worldwide

- Sales €6bn
- Profit €300m
- Order Book €20bn

- Over 140,000 employees
- 50 countries
- 700 contracts

Europe
60%

Africa, Middle East & Asia
18%

The Americas
22%

- 420 Space staff in UK
- 370 Space staff in Europe
- 500 Space staff in US

FIRST *CONTACT*

(*ANALYSIS AND BACKGROUND 1/2*)

1st of August 2010

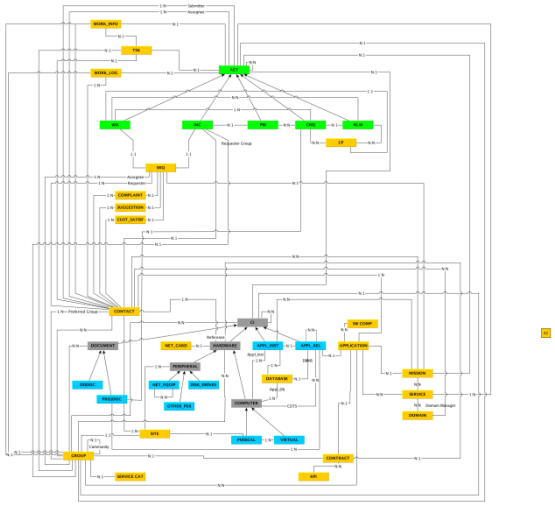
- Start of European Space Agency contract "*Operations and Maintenance of ESA PDGS" (O&M)*
  - The customer requested an ITIL approach to the contract (first time for a contract in ESA-ESRIN)
  - Serco proposed to use one of the most widely recognized and used IT Service Management tool (already used in Serco-UK). After 1,5 year of use, it was ITIL compliant and worked fine, ***but***:
    - It was not possible to customize it according to ESA desires, due to impacts on other clients
    - High yearly costs
    - Each individual module (e.g. reporting, statistics…) needs a dedicated license

FIRST *CONTACT*

(ANALYSIS AND BACKGROUND 2/2)

End of October 2011

- Serco (O&M contract) decided to conduct a survey of available CMDB applications (released as open source), as potential replacement of the application used at the time. After the trade-off analysis, the choice was:
  - CMDBuild (1.5)
- We designed a model, based on our service contract:
  - ESA liked it.
  - We started the development



FIRST CONTACT

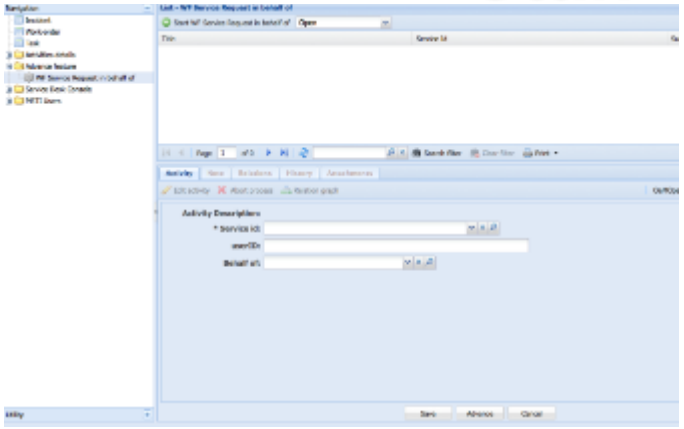
(*DEVELOPMENT AND OPERATIONS - MSTI*)

Development milestones:

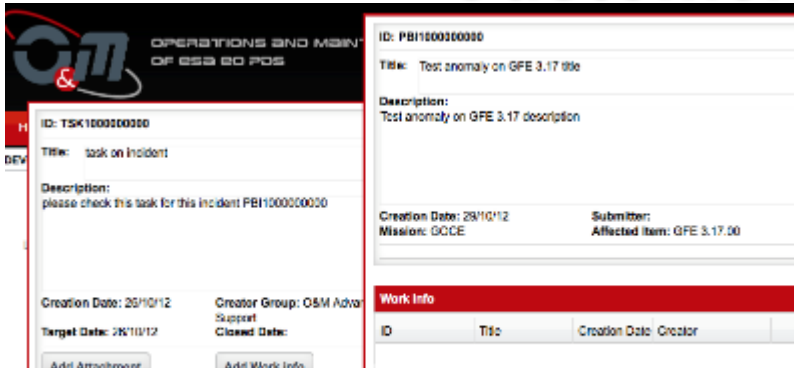
- *Staff interface*: CMDBuild 1.5 user interface.
- *Customer interface*: CMDBuild Liferay port-let customized to have an ad-hoc view.

The customer accepted the new tool and we went live with v1.0a

Staff



Customer

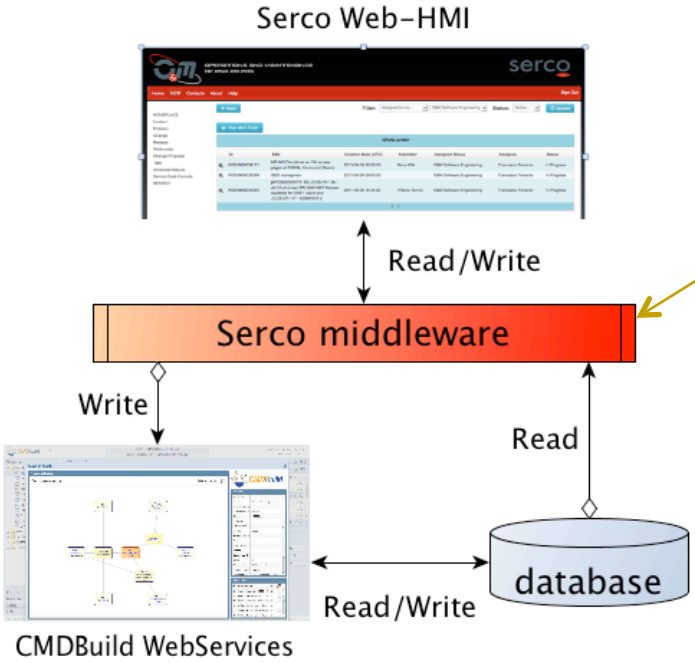


FIRST CONTACT

(*MSTI - EVOLUTIONs*)

To increase the tool performance and answer to new customer requirements after the first deployment, we started a new development phase. It introduced:

- New user HMI (a Liferay port-let), developed from scratch
- Serco custom middleware (between HMI and CMDBuild).



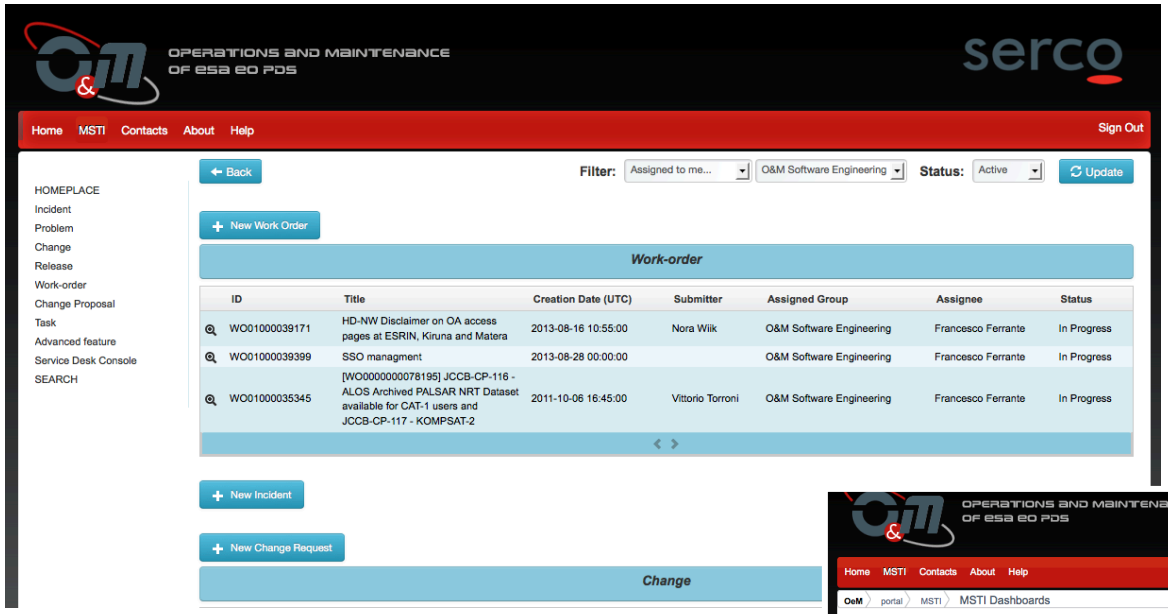
Specific functions:

- User profile/profiling
- Staff custom views
- Customers custom views
- Dashboards
- …..

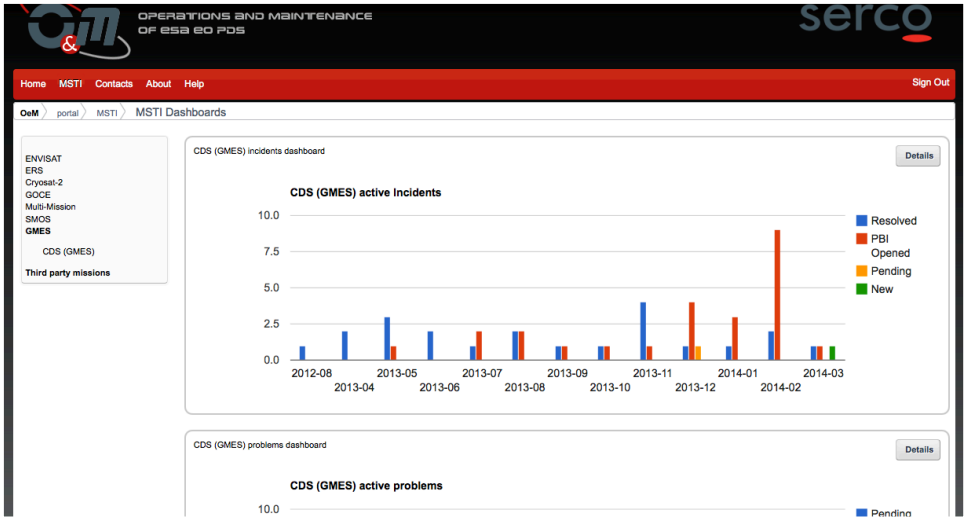
FIRST CONTACT

(*MSTI - EVOLUTION RESULTS*)

- Liferay port-let: re-written user-interface (due to customer constraints/wishes)
- Dashboards: new feature



Customer/Staff interface



Customer dashboards

EVOLUTION

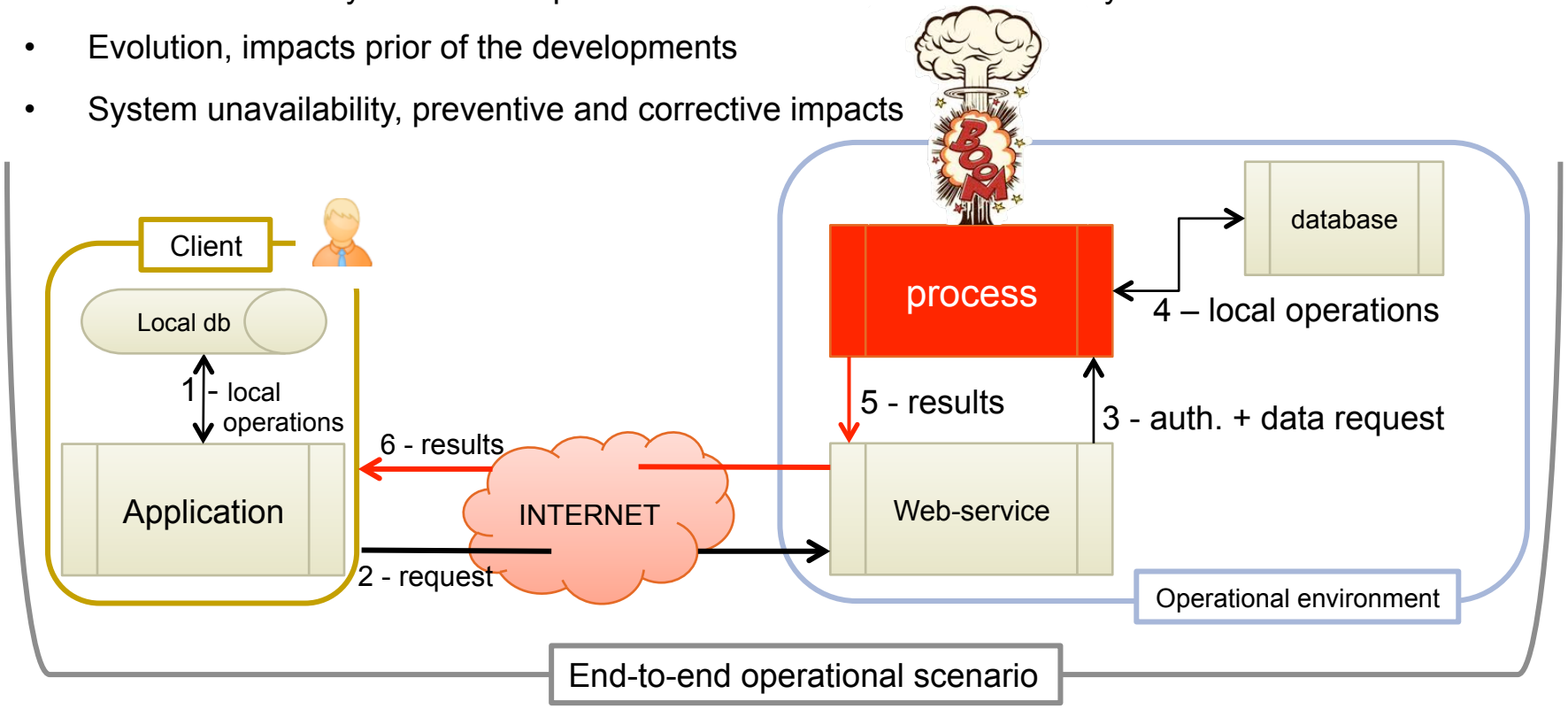
(MSTI – NEW IMPLEMENTATION)

Architectural Model of a Ground Segment for a Space Mission

In the frame of the Master of Science and Space Technology (University of Tor Vergata), Serco has tutored a trainee to implement, using CMDBuild, a Payload Data Ground Segment architectural model with focus toward Operations and Maintenance. The new model was integrated in to MSTI.

The aim was to identify and model operational scenarios in order to identify:

- Evolution, impacts prior of the developments
- System unavailability, preventive and corrective impacts



ESA DSI CONTRACT

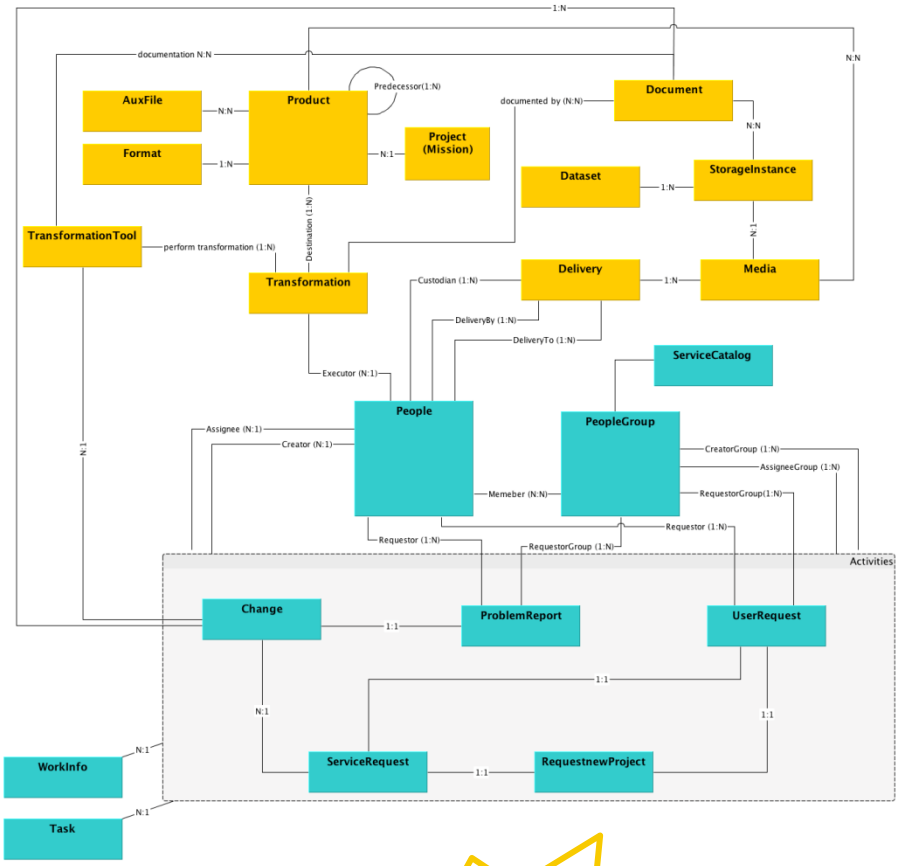
(*DATA SERVICE INITIATIVE - MODEL*)

CMDBuild based application was also proposed for the ESA ITT: **Data Service Initiative (DSI)**

This project uses the CMDB to manage Satellite Products. It is a Product Configuration Control system.

Main concept is to substitute the software with dataset/storage instance/media/products to track all modification performed on a product.

The model is operational but in continuous evolution depending on specific operational needs that are arising.

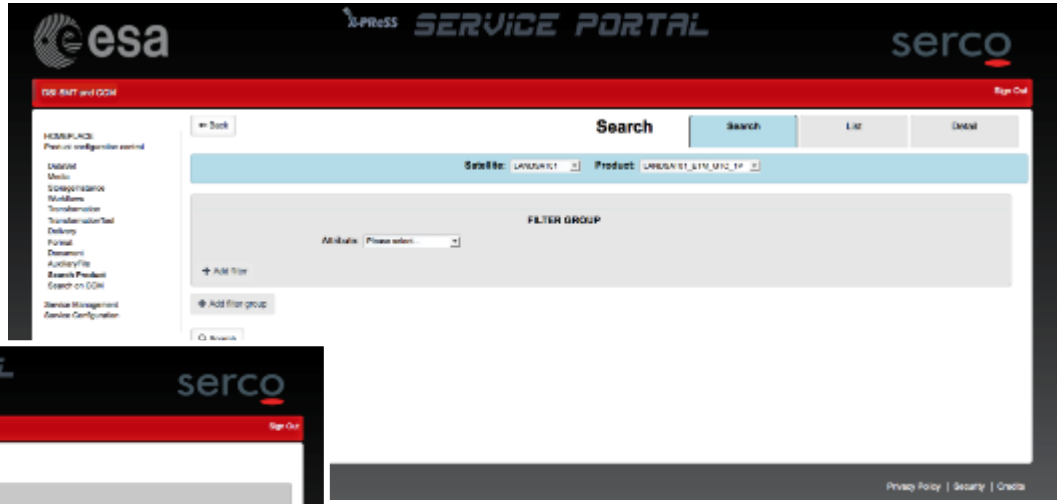


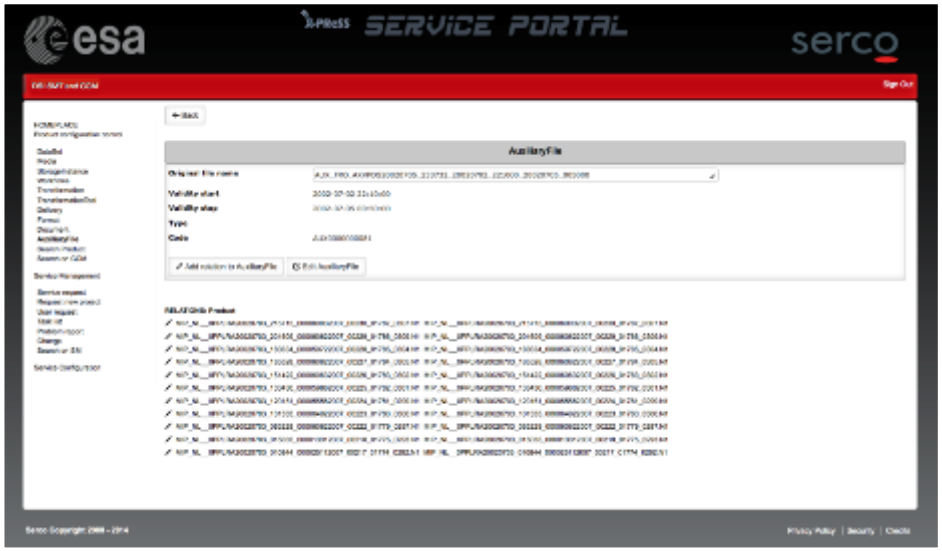
CMDBuild 2.1.7

ESA DSI CONTRACT

(*DATA SERVICE INITIATIVE - HMI*)

- **HMI was modified for project specific requirements, e.g.:**
  - Product search
  - Auxiliary File search
- **Specific dashboards**
- **Specific reports**





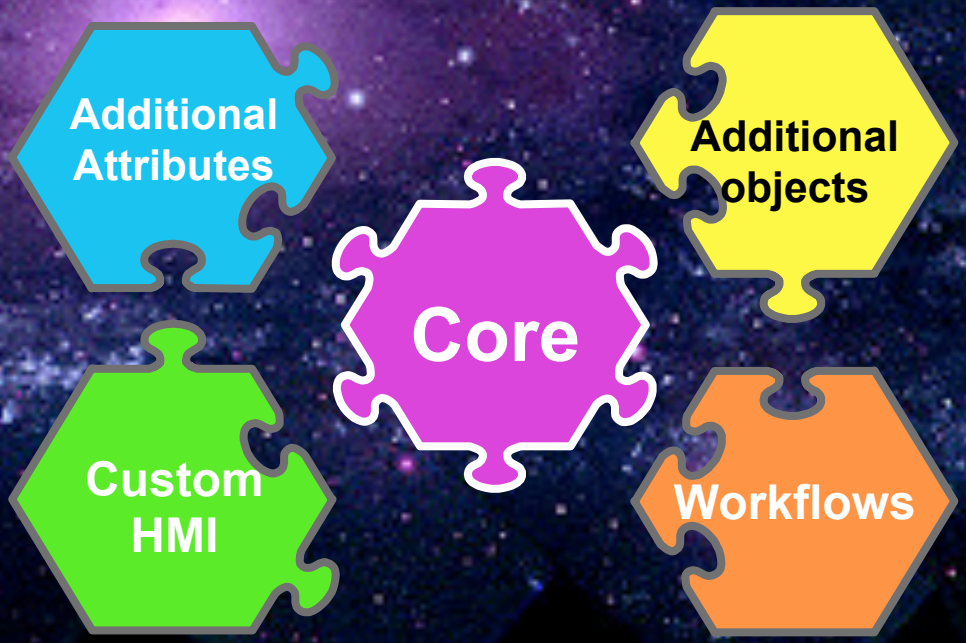
NEXT STEPs

CoSMo → Centralized Service Management

To support all of our (current and future) customers we aim to develop:

- Unique model-CORE, common for all clients
- Unique HMI-CORE, common for all clients
- Go to CMDBuild 2.1.8 and forward ..

Starting from COREs the model/HMI is enhanced/evolved as per client specific requirements



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