EDMS for the ILD

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Overview

- What is an EDMS? Purpose & Benefits
- Structure; short overview
- Current tasks
- Summary

Goal of the ILD Community

- Provide a complete documentation of the detector and test systems in a framework which is long lasting and maintainable.
- Document support is more than just a repository:
  - Structured storage of documents
  - Linking of documents of all sorts
  - Connection of documents with attributes (accessibility, visibility, status within life cycle, dependence on other documents)
  - Support project documentation throughout its complete life: design, prototyping, building, operation, decommissioning.

EDMS

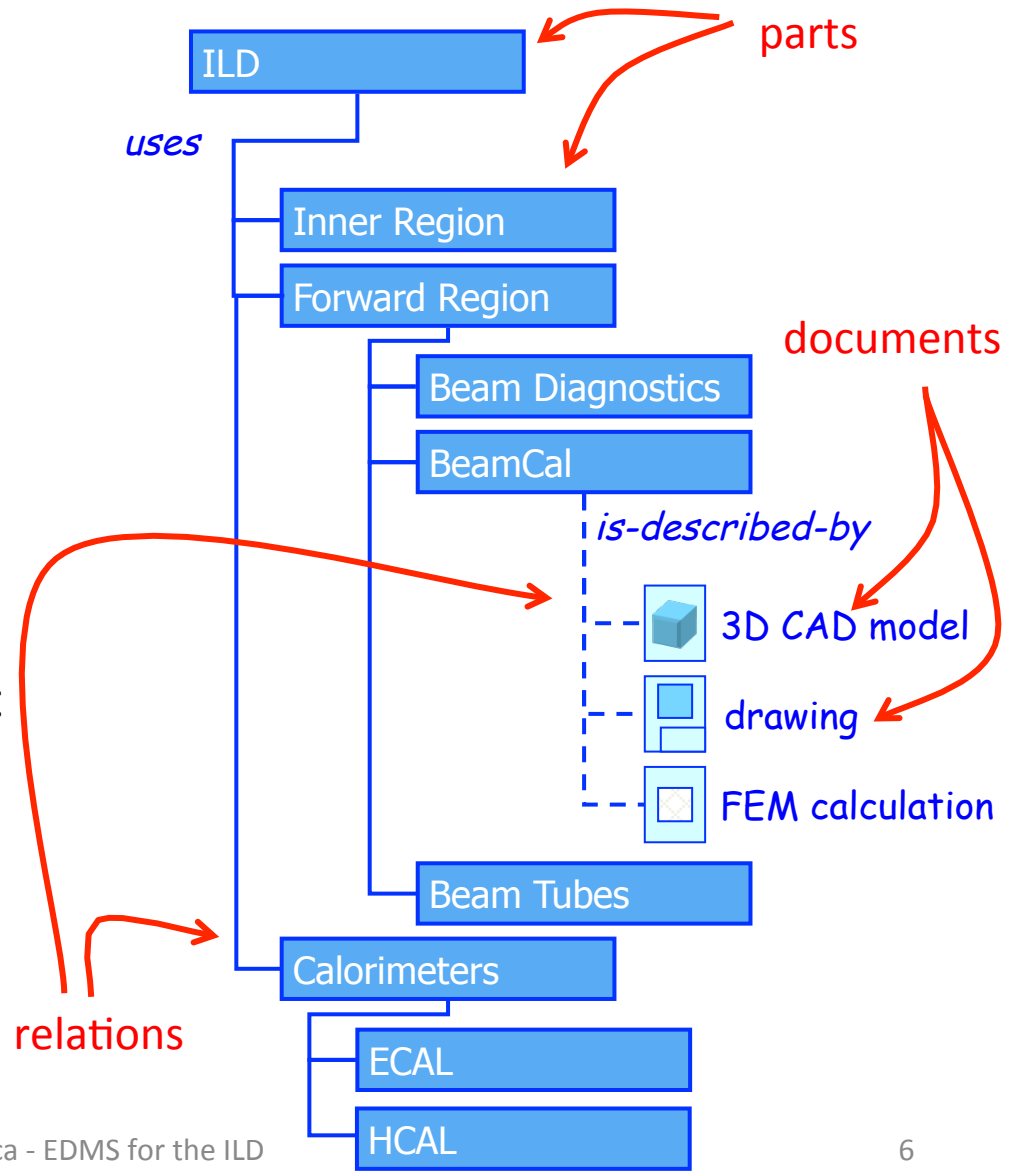
- An Engineering Data Management System EDMS is a framework providing functionality for the following purposes, e.g.:
  - Document Management
  - 3D CAD Data Management
  - Configuration, Version and Change Control
  - Workflow Management
  - Visualization and Digital Mock-up and Mark-up
- An EDMS has to be configured specific to the project
  - document types and relations, system structure, access rights, workflow, user interface, external interfaces
  - an ongoing effort throughout the project lifetime.

Benefits of the EDMS

- Provide a central document storage and a platform for lifecycle management:
  - enable members of the ILD collaboration to access and contribute project information independent of their location.
  - enable engineers at the different laboratories to collaboratively design components using 3D CAD tools.
  - enable physicists to participate in design processes from the very beginning by viewing the developing CAD models.
  - provide teams, committees, boards with workspaces for work-in-progress document management.
  - support change control of the ILD baseline during the engineering design phase.
  - protect confidential information and intellectual property against unauthorized access.

EDMS Structure: the basics

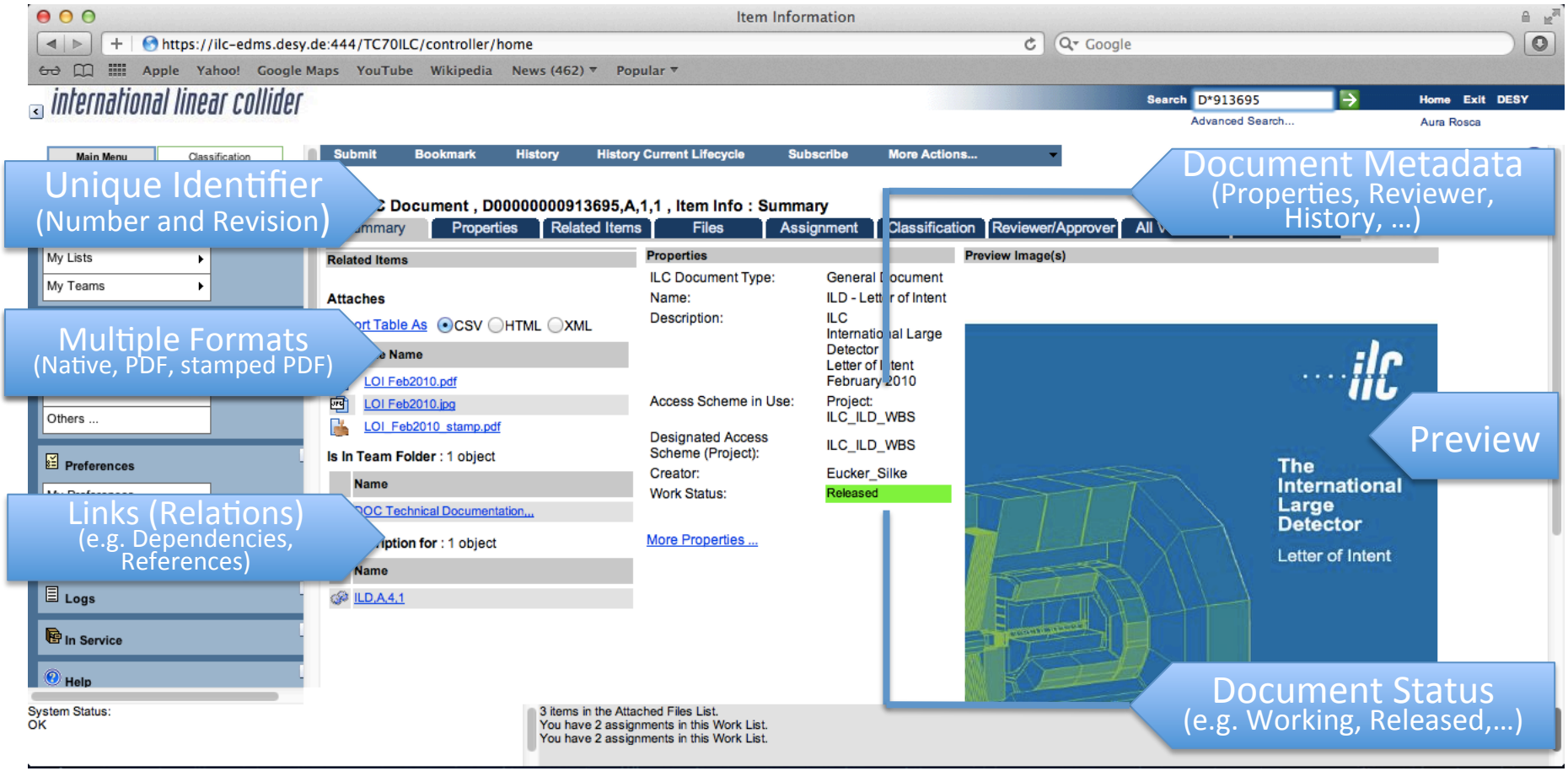
- A WBS divides the work into a logical hierarchy of parts.
- parts
  - assemblies + components (or BOM, bill of materials).
- documents
  - information containers that describe the elements of the WBS.
  - have files attached
    - for editing and viewing, e.g. DOC and PDF
- documents and parts are collectively called EDMS items.
- relations
  - link EDMS items together



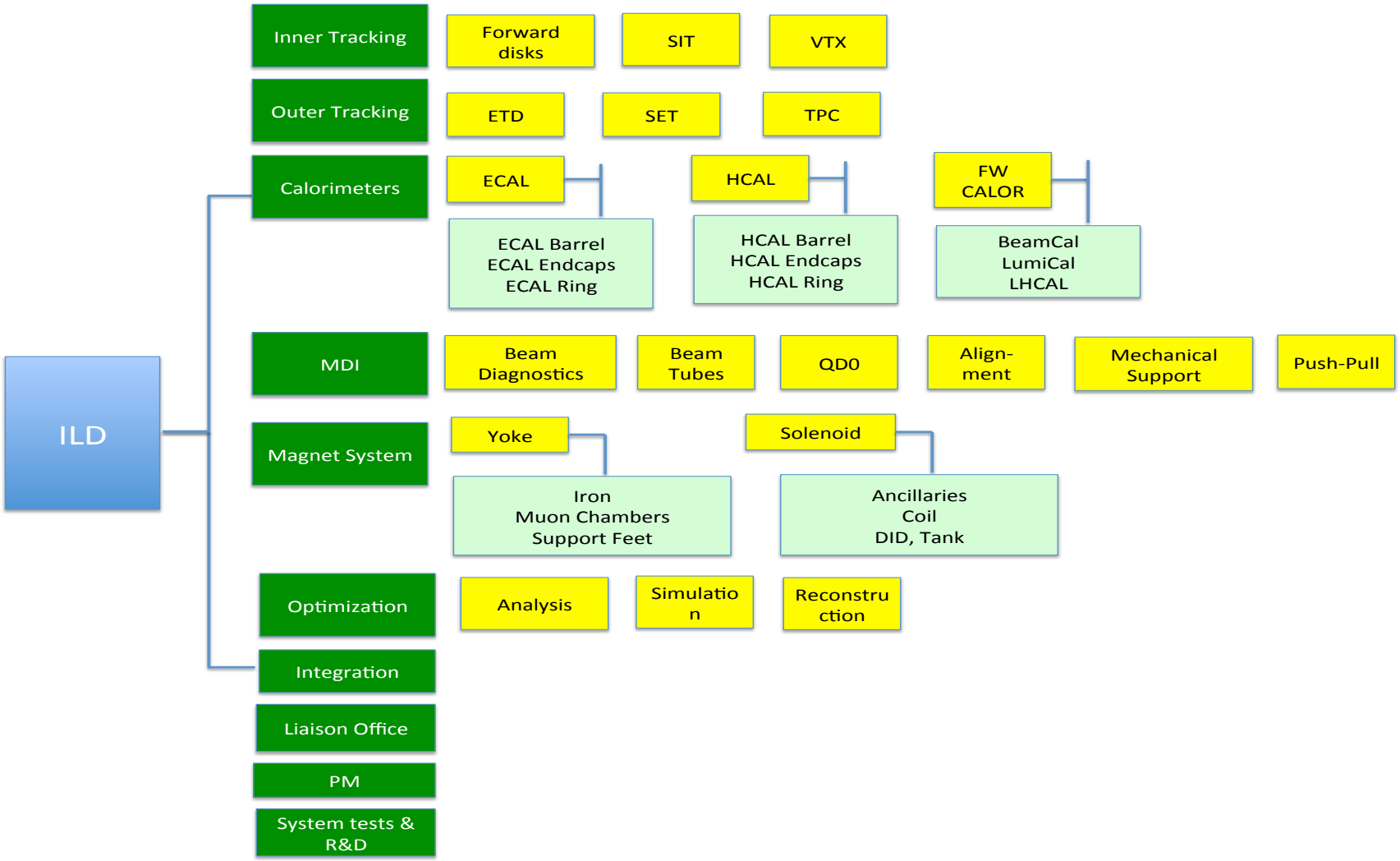
Mandatory Documents

- We need to define what documents should be prepared for all WBS nodes – most relevant documents, related to the official baseline:
  - Parameter lists
  - Detector description
  - Component lists
  - Component specifications
  - Calculations
- Other documents should be linked with keywords:
  - Reports, presentations, etc.

Example: A Document in EDMS



Overview on ILD Structure



Current Tasks

- Implement the WBS structure just shown
- Get approved list of keywords (search categories)
- Implement a review and approval process for the finalization of the DBD report.
  - process analysis to clarify the workflow, roles and responsibilities.
- Compare the 3D models used in physics simulation and the engineering CAD models.

Current Tasks

- We need to collect available documents and put them in EDMS
  - Send your documents to me, I will put them in EDMS.
- Already received the ILD CAD design model, I will make it available in the EDMS after the ILD meeting.

Using EDMS: First Steps

- EDMS-URL: http://ilc-edms.desy.de
- Request your EDMS account at ilc-edms-support@desy.de
- Start using the system – and address all the questions to ipp-support@desy.de or send me an e-mail at aura.rosca@desy.de.

Summary

- EDMS is a tool to track and control data related to the design and construction of the ILD detector.
- EDMS provides functionality for managing documents and CAD data, and for performing version control and change management.

- EDMS has been used (and proved successful) to drive critical processes, such as reviews, complex and distributed CAD collaboration, and fabrication and inspection processes.