



# ILC EDMS Status

Tom Markiewicz/SLAC  
Vancouver GDE/ALCPG – SiD Meeting  
23 July 2006





## Committee Members

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**John Ferguson – CERN**

**Lars Hagge \* - DESY**

**Tom Markiewicz\* - SLAC (Chair)**

**Richard Stanek\* - FNAL**

**Nobu Toge\* - KEK**

**Harry Weerts\* - Argonne**

**\* = present at Vancouver**



## Charge to the Committee

**The committee should recommend a specific web based software solution, which may mean an integrated collection of distinct software packages that will allow ILC collaborators worldwide to store, search for and retrieve various kinds of documents.**

**At least three basic kinds of documents must be handled:**

- 1. meeting/conference/seminar related files**
- 2. publications/white papers/notes and**
- 3. engineering documents:**
  - CAD drawings, cost estimates, vendor quotes, and QC documents.**



## Anti-Charge to the Committee

**The recommendation of other related virtual communication tools may be made if they enhance the functioning of the basic document management system. Such tools may include calendars, agendas, emailing lists, email notification, discussion forums, user-modifiable ("wiki") web pages for interactive working group documentation, etc. The recommendation or incorporation of these tools should be considered secondary to the selection of system that supports the core functions of storage, search and retrieval.**

**Project management tools (WBS, scheduling, resource planning) are outside the scope of current charge.**



# Access to Tools Through EDMS Web Page: Possible Solutions

**ILC** International Linear Collider

ilc\_dms\_selection:ilc\_dms\_selection\_home ILC WIKI

Edit this page Old revisions Recent changes Search

Trace: » members » possible\_solutions » files\_of\_relevant\_information » meetings » ilc\_dms\_selection\_home

**ILC DMS Selection Home Page**

Charge to the Committee  
Members  
Meetings  
Possible solutions  
Files of Relevant Information

Logged in as: Tom Markiewicz ilc\_dms\_selection/ilc\_dms\_selection\_home.txt · Last modified: 2005/11/28 20:12 by tom\_markiewicz

Edit this page Old revisions Logout Index Back to top

RSS XML FEED

[http://www.linearcollider.org/wiki/doku.php?id=ilc\\_dms\\_selection:ilc\\_dms\\_selection\\_home](http://www.linearcollider.org/wiki/doku.php?id=ilc_dms_selection:ilc_dms_selection_home)



# Access to Tools Through EDMS Web Page: Possible Solutions

## Possible Solutions

Table of Contents ▲

Edit

- Possible Solutions
  - InDiCo
  - CERN Document Server (CDS)
  - SLAC WBS Tool

### InDiCo

- [InDiCo Home Page](#)
- [The CERN InDiCo Server](#)

Note that ~20000 meetings recorded in the CERN CDS Agenda have been converted to InDiCo and are in the process (as of 2006.01.17) of being migrated to the InDiCo production server.

Slides presented during InDiCo demo at 2005.11.08 meeting of by Thomas Baron

- [Talk on InDiCo given at 2005.10.10 HEPiX meeting at SLAC by Thomas Baron.](#)

Proposed InDiCo Tree Structure for ILC and Related Questions

- [InDiCo Questions and Answers](#)
- [InDiCo Bugs Reported by Users](#)
- [InDiCo Wish List Items Submitted by Users](#)

- [ILC InDiCo Server](#)
- [ILC InDiCo Registration Page](#)
- [ILC InDiCo Help & Documentation](#)

- Note that the [main meeting user documentation](#) may not at first be evident among the many files meant to provide help to conference setup.

Edit

### CERN Document Server (CDS)

- [CERN Document Server, opening at Search Page](#)
- [Another point of access to CERN Document Server, with latest news](#)
- [CDS Software Consortium](#)

Demo of CERN Document System by Jean Yves Le Meur

- [ILC Document Server](#)

Edit

### SLAC WBS Tool

- [WBS Tool Home Page](#)
- [Example of htm code to display wbs](#)



# Status of ILC EDMS

## Recommendation of a product suite made:

- InDiCo – meeting management
- CERN Document Server – general documentation
- UGS TeamCenter – CAD and ILC “Lifecycle Management”  
(jargon for: part design, versions, manufactured instances, QC, installation, operation, maintenance & decommissioning)

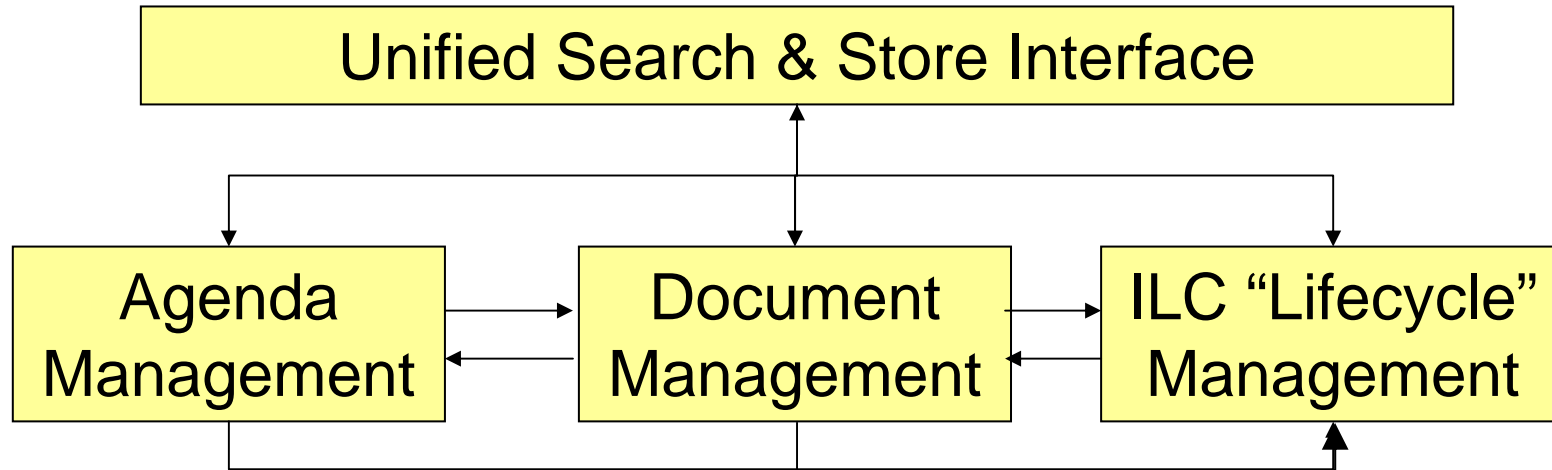
## ILC Specific servers have been commissioned

- InDiCo: <http://ilcagenda.cern.ch/>
- CDS: <http://ilcdoc.cern.ch/>
- Collaborative CAD among DESY/FNAL/INFN using DESY-hosted UGS TeamCenter in progress

## Planning for ILC-devoted configuration and technical support of these products with management of the big laboratories in progress



# Eventual Top Level Architecture







# Known Weaknesses in Decision

- Lack of integration between separate elements of system
  - **Integration Indico-CDS promised by CERN**
  - **Integration CDS-EDMS promised by DESY**
- Immature development of DESY Teamcenter system
  - **We have time**
  - **CERN may in the future be able to help**
- Same ambiguity between CDS and EDMS “work flow control” that exists in current CERN system
  - **Assume a “physics” (CDS) versus “engineering” (EDMS) split as has apparently been successful for LHC**



# Nutshell Reasoning behind Decisions

- Monolithic approach does not exist at DESY, CERN or Fermilab
- DESY EDMS has potential to integrate all needs, but this is  $\geq 2$  years away (imho)
  - **Use of this system for ILC will be “free” to all ILC users**
- CERN Indico & CDS are large scale supported systems with enough flexibility in configuration to handle any conceivable ILC need
  - **DocDB from Fermilab (BTev) rejected since:**
    - Not offered as Fermilab supported product for ILC
  - **Belief is that CERN CDS can be configured to be equally user friendly and with better support, scaling model**
- DESY/FNAL/XFEL tie-ins cannot be ignored



# InDiCo: Description

- Outgrowth of CDS Agenda server with improvements directed towards conferences & workshops with continued support for meeting series & lectures
- Active development by-and-for physicists with integration with other meeting services (VRVS, video nets, etc.) planned
- Tree-style organization with search engine to cut through tree

category | view: Indico style | manage | BARON, Thomas - logout

**"IT-UDS Group Meeting"** Thursday 25 August 2005 from 10:00 to 10:30  
chaired by Tim Smith (CERN) at CERN (513-1-024)

Time Table: Thursday 25 August 2005

Thursday 25 August 2005 [top](#)

10:00	<a href="#">Introduction (10)</a> (transparencies)	Tim Smith (CERN)
10:10	<a href="#">Video Conferencing with VRVS (10)</a> (transparencies)	Joao Correia Fernandes
10:20	<a href="#">Discussion (05)</a>	
10:25	<a href="#">Using Illustrator files with Powerpoint (10)</a>	Darudh Birker
10:35	<a href="#">Discussion (05)</a>	
10:40	<a href="#">Supporting the DG Office (10)</a> (more information; transparencies)	Tony Shave
10:50	<a href="#">Discussion (05)</a>	
10:55	<a href="#">IT BookShop: Past, Present and Future (10)</a> (transparencies)	Roger Woolnough and Jutta Megies
11:05	<a href="#">Discussion (05)</a>	

CERN | Powered by InDiCo 0.8.2 | [indico-support@cern.ch](mailto:indico-support@cern.ch) | Last modified 20 September 2005 | [HELP](#)

Integrated Digital Conference | BARON, Thomas - logout

Category Map for Home

- Committee Meetings
  - Finance Review Committee of CAST
  - Finance Review Committee of COMPASS
  - Joint CERN-Pakistan Committee
  - CERN-Russia Joint Working Group
  - CERN-US Committee
- Conferences
- Departments
  - ETT
    - ETT-DH Meetings
    - Audio-Video
    - CDS Section Meetings
    - Section Leaders Minutes
    - miscellaneous
  - IT
    - test
    - Groups
      - UDS
        - AVC section
        - CDS Section
        - CERN Serco Management Review Meetings
        - Group Meeting
        - Presentations
        - Section Leaders Meeting
- Experiments
  - CMS Meetings
    - CMSCC
      - SPIE International Congress On Optics And Optoelectronics, Photonics Applications In Industry And Research (PA-IV)- (Photonics Applications in Industry and Research)
- TEST Category

Tools

- Display
- Overview
- Calendar
- ← Map
- Modify
- Admin
- Statistics



# ILC InDiCo Server: Status

ILC Home

MARKIEWICZ, Thomas - [logout](#)

Meetings Events Conferences TOOL

Categories:

- [Institutions](#) (31)
- [Machine Design](#) (18)
- [Detector Design & Physics Studies](#) (0)
- [Conference and Workshops](#) (3)
- [ILC-related Presentations Given at non-ILC Specific Events](#) (0)
- [Test Area](#) (6)

The **Indico** tool allows you to manage complex conferences, workshops, and time-tables of meetings, to attach multimedia files to each event item and to store the resulting agendas in a multi-level hierarchical tree. If you want to use it for CERN-related projects, please contact **Indico support**. Non-CERN institutes may install the Indico software locally under GNU General Public License (see the [project web site](#)).

CERN | Powered by **Indico 0.8.13** | [indico-support@cern.ch](mailto:indico-support@cern.ch) | [HELP](#)

Basic category “tree” implemented

“Managers” appointed for each category

Beta-testing in progress: ~500 meetings in system (up from 50 in March)

Questions fielded by local experts or punted to CERN when required

Start of a “Wish list,” “Bug List” & “Q&A” on EDMS wiki



# CERN Document Server: Description

<http://cdsware.cern.ch>

- Outgrowth of CERN Preprint & Library Server
- Used by many institutes world wide (GNU distribution)
- At CERN, more than 500 collections:

- All types of documents
- Public or private collections
- Approval process if desired
- 200,000 queries/month; ~1M records



CERN Document Server integrated digital library software is a flexible system to run an electronic preprint server, an online digital library or a document repository on the web. It is especially suited for the management of large and complex data systems.

#### Key features:

- ➔ configurable portal-like interfaces for hosting various kind of collections
- ➔ powerful search engine with Google-like syntax
- ➔ extensible metadata representation (MARC XML) to handle virtually any kind of document (articles, books, photos, videos and more)
- ➔ flexible document type submission and approbation workflow
- ➔ user personalization, including document baskets and email notification alerts
- ➔ multilingual interface (14 languages available), Unicode compliant (UTF-8)
- ➔ compliant to Open Archive Initiative protocol for metadata harvesting
- ➔ free software (GNU GPL)

Try the CERN server : <http://cdsweb.cern.ch/>  
Visit the project website : <http://cdsware.cern.ch/>  
Contact us : [cds.support@cern.ch](mailto:cds.support@cern.ch)

CDSware is a project of the CERN Document Server



... to run your document repositories



<http://cdsware.cern.ch/>

Powered by CDSware | <http://cdsware.cern.ch/>



#### Navigable collection tree



- Documents organized in collections
- Regular and virtual collection trees
- Customizable portalboxes for each collection
- At CERN, over 800,000 documents in 500 collections

#### Powerful search engine

- Specially designed indexes to provide Google-like search speed for repositories of up to 1,500,000 records
- Customizable simple and advanced search interfaces
- Combined metadata, fulltext and citation search in one go
- Results clustering by collection
- Flexible ranking capabilities

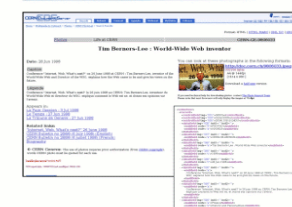


Multiple output formats : [HTML](#) [XML](#) [MARC](#) [OAI](#)

Powered by CDSware | <http://cdsware.cern.ch/>



#### Flexible metadata



- Standard metadata format (MARC)
- Unicode compliant (UTF-8)
- Handling articles, books, theses, photos, videos, museum objects, and more
- Customizable display and linking rules

#### User personalisation



- User-defined baskets of documents
- User-defined automated email alerts
- Basket sharing within user groups
- Search interface available in Catalan, Czech, German, Greek, English, Spanish, French, Italian, Norwegian, Portuguese, Russian, Slovak, Swedish, and Ukrainian translations

Powered by CDSware | <http://cdsware.cern.ch/>



# ILC Document Server: Status

ILC  
DOCUMENT  
SERVER

[Search](#) [Submit](#) [Personalize](#) [Help](#)

Home

## ILC Document Server

Search 77 records for:

any field

[Search Tips](#) :: [Advanced Search](#)

### Narrow by collection:

- [Publications & Notes](#) (68)  
[Articles & Preprints](#) (44) [Books & Reports](#) (24)
- [Engineering & Drawings](#) (0)
- [Conferences & Meetings](#) (0)
- [Multimedia & Arts](#) (9)  
[Pictures](#) (7) [Poetry](#) (2)

### Focus on:

- [ILC Institutions](#) (5)
- [Fermilab](#) (1) [SLAC](#) (4)
- [ILC Experiments](#) (2)
- [ALEPH](#) (1) [ISOLDE](#) (1)

## CERN Document Server

Over **800,000** bibliographic records, including **360,000** fulltext documents, of interest to people working in particle physics and related areas. Covers preprints, articles, books, journals, photographs, and much more.

Search 830,544 records for:

any field

[Search Tips](#) :: [Advanced Search](#)

### Narrow by collection:

- [Articles & Preprints](#) (679,720)  
[Published Articles](#) (256,196) [Preprints](#) (346,803) [Theses](#) (35,980) [Reports](#) (5,455) [CERN Internal Notes](#) (10,307) [Committee Documents](#) (26,428)
- [Books & Proceedings](#) (55,981)  
[Books](#) (32,686) [Proceedings](#) (15,489) [Standards](#) (7,806)
- [Presentations & Talks](#) (14,945)  
[Conference Announcements](#) (13,022) [Academic Training Lectures](#) (523) [Summer Student Lectures](#) (340) [General Talks](#) (1,387) [Videotapes](#) (299)
- [Periodicals & Progress Reports](#) (3,372)  
[Periodicals](#) (2,690) [Progress Reports](#) (682)
- [Multimedia & Outreach](#) (28,690)  
[Photos](#) (9,031) [Videos](#) (184) [Press](#) (16,001) [Audio Archives](#) (158) [Exhibition Objects](#) (179) [Brochures](#) (15) [Posters](#) (334) [HEP Institutes](#) (924) [Experiments at CERN](#) (733) [Internet Resources](#) (1,094)
- [Archives](#) (33,217)  
[CERN Archives](#) (47,094) [Pauli Archives](#) (3,711) [DSU Archives](#) (701) [SL Archives](#) (1,026) [AB Archives](#) (685)

### Focus on:

- [CERN Articles & Preprints](#) (36,447)
- [CERN Published Articles](#) (45,374) [CERN Preprints](#) (11,177) [CERN Theses](#) (2,470) [CERN Reports](#) (1,052)
- [Committee Documents](#) (26,428)
- [CERN Departments](#) (39,829)  
[Accelerator Technology \(AT\)](#) (4,451) [Accelerators & Beams \(AB\)](#) (14,466) [Finance \(FI\)](#) (616) [Human Resources \(HR\)](#) [Information Technology \(IT\)](#) (2,071) [Physics \(PH\)](#) (34,808) [Secretariat-General \(SG\)](#) (6,337) [Technical Support \(TS\)](#) (1,042)
- [CERN Experiments](#) (13,290)
- [LEP Experiments](#) (4,932) [LHC Experiments](#) (8,362)
- [CERN R&D Projects](#) (45)
- [CERN Accelerator R&D Projects](#) (45)
- [CERN Series](#) (2,941)
- [CERN Yellow Reports](#) (1,094) [Academic Training Lectures](#) (523) [Summer Student Lectures](#) (340)
- [General Talks](#) (1,387)

ILC Document Server :: [Search](#) :: [Submit](#) :: [Personalize](#) :: [Help](#)  
Powered by CDSware v0.9.0.20051220  
Maintained by [cds.support@cern.ch](mailto:cds.support@cern.ch)  
Last updated: 21 Feb 2006 11:10:23 CET

Site created so that ILC can understand how to best set “collection” types, “category” types and work flow (approval chain)  
NO ILC customizaton or testing done yet  
No ILC Beta tests of critical documents (BCD,RDR) or collections (TN-2006-0001)





# CDS Config to be decided for ILC

## Types

- Notes
- Files
- Preprints
- Reports
- Books
- Photos
- Optics Deck
- Meetings
- Contracts
- Publications
- Memos
- MOUs
- Contract

## Collections

- Working Group
- Lab Division
- Project
- Theses
- MAC
- EC
- Detector “Concept”
- Detector “Collaboration”
- Detector  
Concept/Subdetector
  - **SiD/Calorimeter (e.g.)**

Together with required “tag” info for each type of doc/collection



# Submitting MetaData with the File

Submit New Record

textual document (Article, Preprint, Thesis, etc) Submit New Record page: 1 2 3 4 SUMMARY(?)

Title:  
TestSubmission for SiD Demo

ALL author(s) of paper: (one per line)  
(in the form: Name, Initial(s))  
Markiewicz, T.

Affiliation:  
SLAC

Submission no(1): 1153306444\_13485 [next page](#)

Submit New Record

textual document (Article, Preprint, Thesis, etc) Submit New Record 1 page: 2 3 4 SUMMARY(?)

Language: English Number of pages (optional):

Date of creation (dd/mm/yyyy): 21/07/2006

Keywords (one per line):  
EDMS SiD

[previous page](#) Submission no(1): 1153306444\_13485 [next page](#)

Submit New Record

textual document (Article, Preprint, Thesis, etc) Submit New Record 1 2 3 4 SUMMARY(?)

Abstract  
Talk on EDMS for SiD Collaboration

[previous page](#) Submission no(1): 1153306444\_13485 [next page](#)

Submit New Record

textual document (Article, Preprint, Thesis, etc) Submit New Record 1 2 3 4 page: 4 SUMMARY(?)

Optional  
Author's Comments:  
This can be an onerous process

Optional  
Other reference number(s) (eg from other institutes):  
SLAC-PUB-2007-0001

[finish submission](#)

[previous page](#)

Submit New Record

textual document (Article, Preprint, Thesis, etc) Submit New Record 1 2 3 4 end of action SUMMARY(?)

Don't forget to click on the "End Submission" button when you have finished managing the files.

Please complete the form below to upload a new file.

1	Add Main Document	
2	Z:\NLC\Talks\2006-07-23\	Browse...
3	Click to send file	

[End Submission](#)

Submission no?: 1153306444\_13485



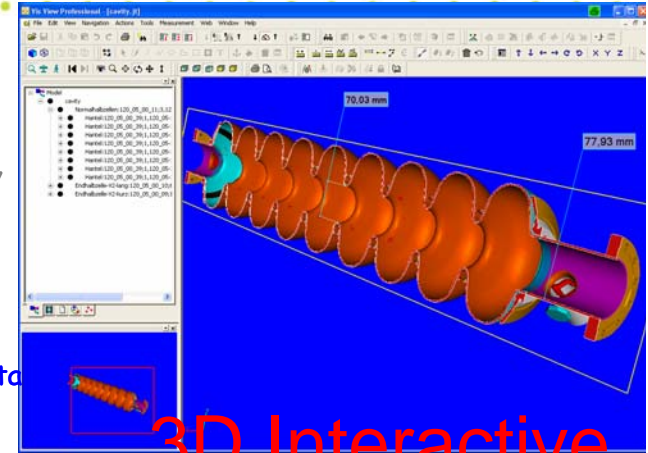
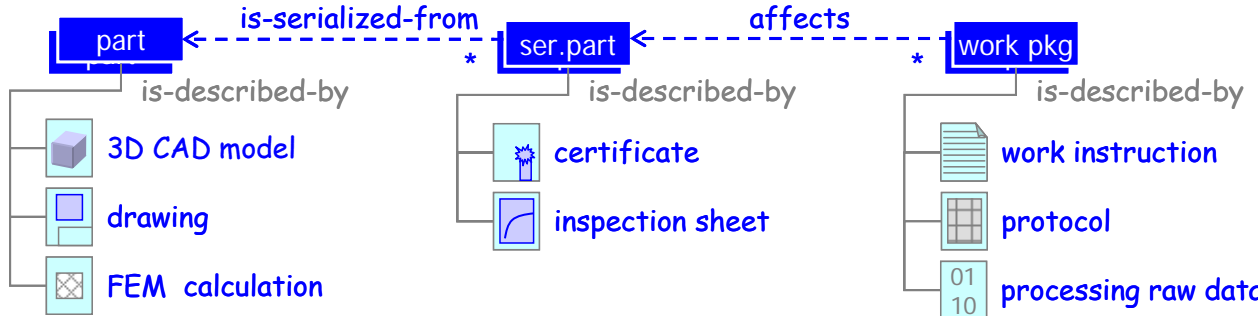


# Team Center EDMS

**design view**  
hierarchy of assemblies & parts

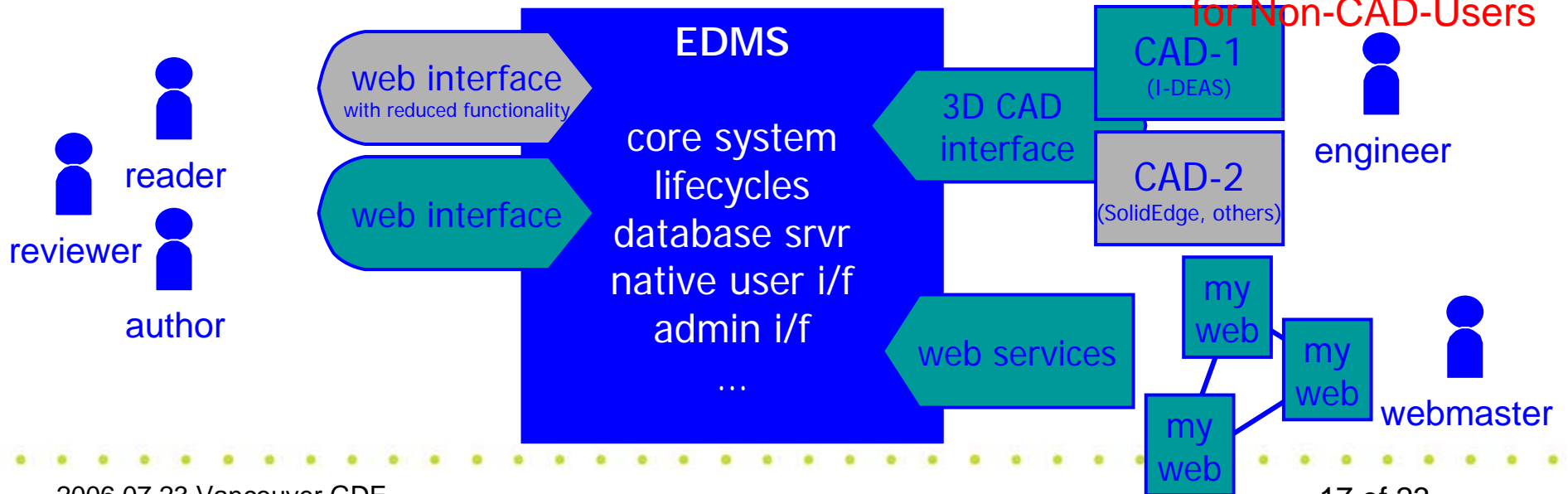
**manufacturing view**  
hierarchy of serialized parts

**conditioning view**  
sequence of work packages



## Product Lifecycle Mgmt

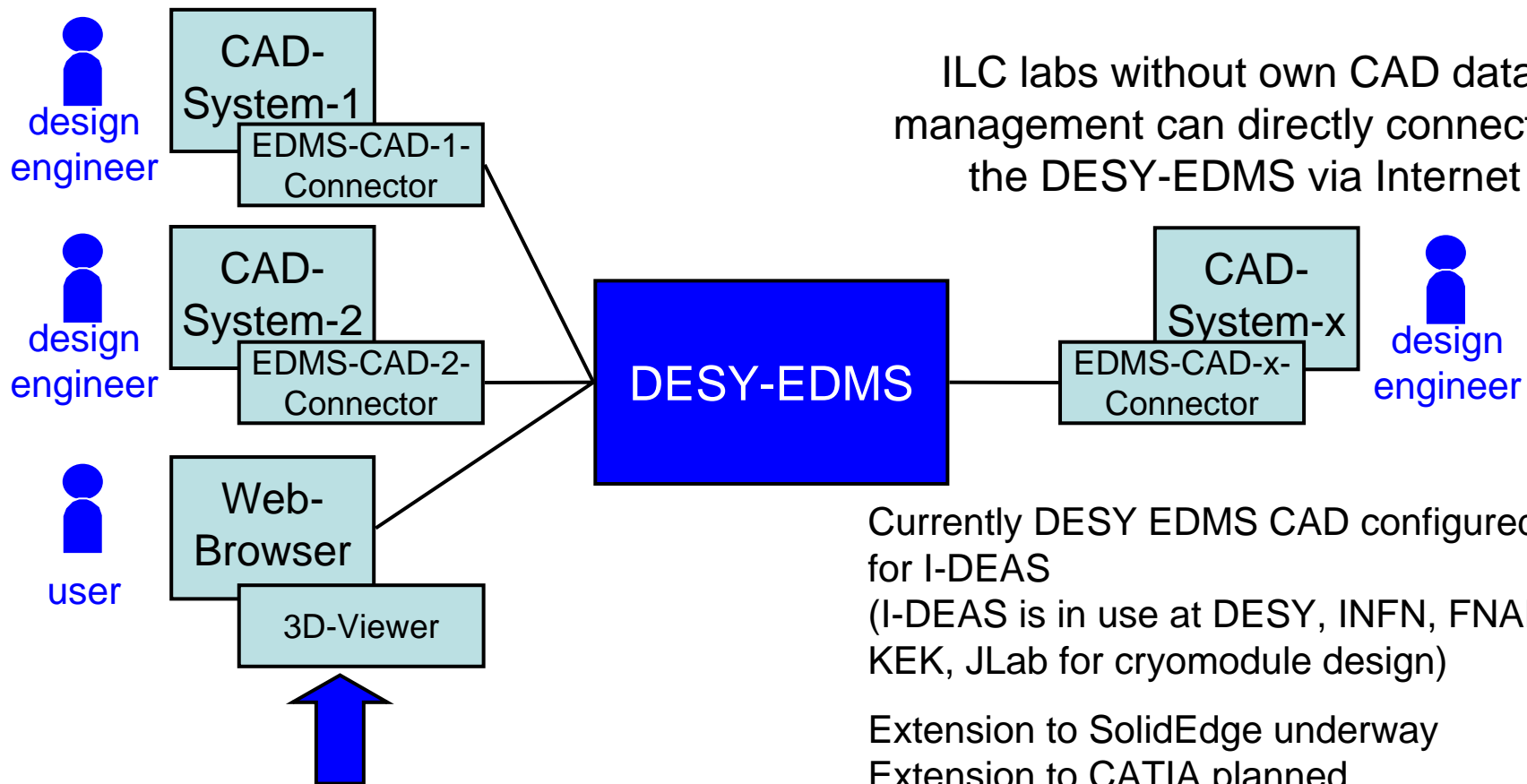
3D Interactive Visualization for Non-CAD-Users





# ILC CAD and Engineering DMS

DESY operates a Web-based EDMS with Multi-CAD connectors



ILC labs without own CAD data management can directly connect to the DESY-EDMS via Internet

Currently DESY EDMS CAD configured for I-DEAS (I-DEAS is in use at DESY, INFN, FNAL, KEK, JLab for cryomodule design)

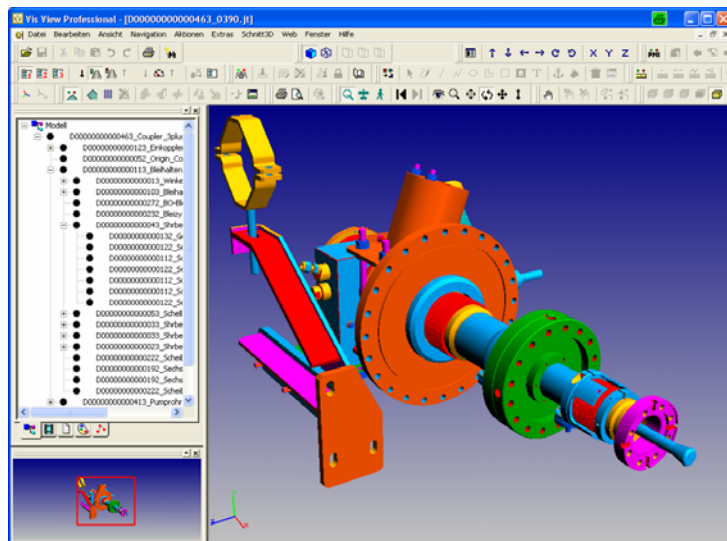
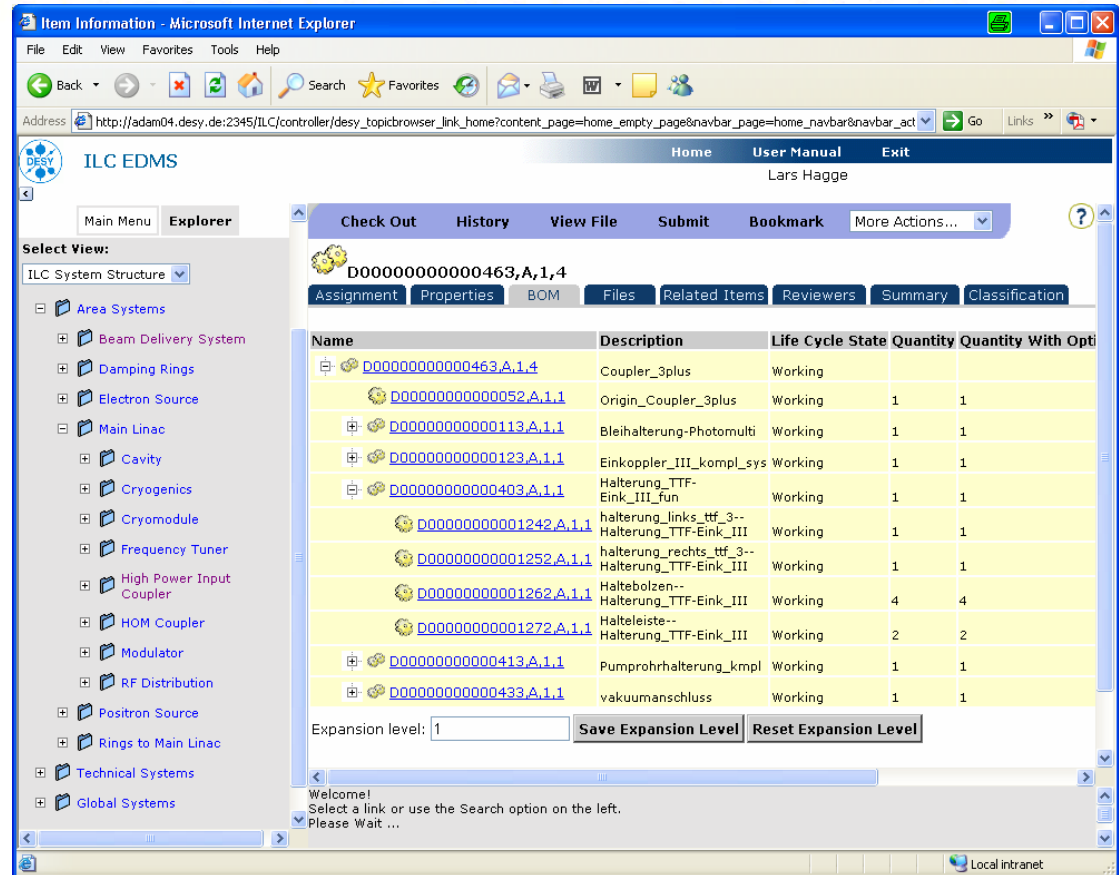
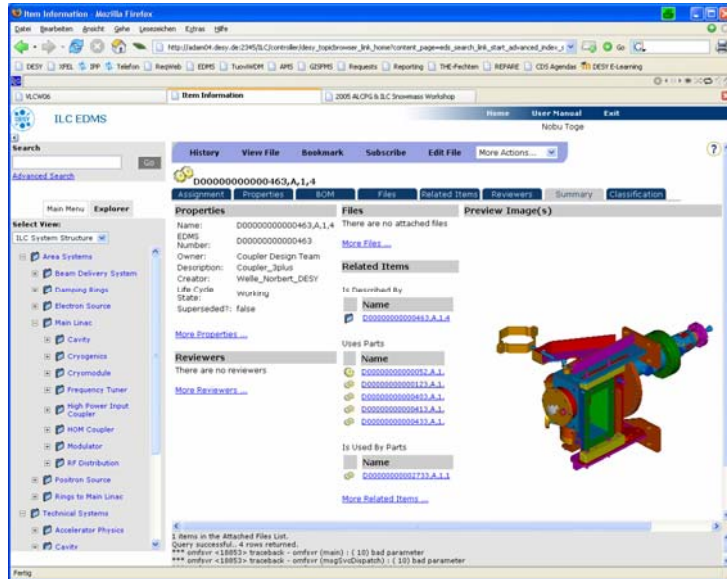
Extension to SolidEdge underway  
Extension to CATIA planned

“Drawings” (as opposed to integrated 3-D assemblies) from ANY CAD product can be stored

any lab can access the EDMS by Web browser and viewers



# DESY EDMS Web Client showing part data



- component summary tab (top left)
- bill of material (top right)
- JT viewer with 3D Data (bottom left)



# Teamcenter Document Tree



# Document summary showing attached files, related documents, status and reviewers, and main menu bar

The screenshot shows the ILC EDMS interface in Mozilla Firefox. The main content area displays a table of items related to 'ILC GDE BCD,A,1'. The table has columns for Name, Description, Class, Creator, and Creation Date. Below the table are buttons for 'Search And Add', 'Create and Add', 'Add From Bookmarks', 'Remove', 'Update Relationship', and 'View Relationship'. A sidebar on the left contains a 'Main Menu' and an 'Explorer' view showing a project organization tree with nodes for Institutions (Argonne Nat'l Lab, CERN, DESY, Fermilab, KEK, LAL, SLAC), Management (Change Control Board (CCB), GDE Exec Committee), and a search bar.

Name	Description	Class	Creator	Creation Date
ILC GDE BCD,A,1	Baseline Configuration of the ILC: Table of Content	ILC Document	Hagge_Lars_DESY	19.07.2006 01:33:53
ILC GDE BCD.doc	ILC GDE BCD.doc	Microsoft Word Document	Hagge_Lars_DESY	19.07.2006 01:40:04
ILC GDE BCD.pdf	ILC GDE BCD.pdf	PDF Presentation	super user	19.07.2006 01:47:04
01_Baseline Paramters for the ILC A,1	Baseline Parameters for the ILC	ILC Document	Hagge_Lars_DESY	14.07.2006 20:21:36
02_ILC Electron Source Description A,1	Description of the e- source	ILC Document	Hagge_Lars_DESY	16.07.2006 01:42:09
BCD Perspectives A,1	Nobu Toge about BCD Perspectives at Snowmass 2005	ILC Document	Hagge_Lars_DES	

## Document with related items

This screenshot shows the detailed 'Properties' view of the 'ILC GDE BCD,A,1' document. It includes sections for 'Properties', 'File Name', 'Preview Image(s)', 'Related Items', 'Reviewers', and 'Relates To Documents'. The 'Properties' section lists Name, Owner (WJP Vault), and Description. The 'File Name' section shows 'ILC GDE BCD.pdf' and 'ILC GDE BCD.doc'. The 'Reviewers' section lists Hagge\_Lars\_DESY, Markiewicz\_Thomas\_SLAC, and Toge\_Nobu\_KEK. The 'Relates To Documents' section lists '01\_Baseline Paramters for the ILC A,1', '02\_ILC Electron Source Description A,1', and 'BCD Perspectives A,1'. A sidebar on the left contains 'Lists', 'Create', and 'Preferences' options.

Name	Description	Class	Creator	Creation Date
ILC GDE BCD,A,1	Baseline Configuration of the ILC: Table of Content	ILC Document	Hagge_Lars_DESY	19.07.2006 01:33:53
ILC GDE BCD.pdf	ILC GDE BCD.pdf	PDF Presentation	super user	19.07.2006 01:47:04
ILC GDE BCD.doc	ILC GDE BCD.doc	Microsoft Word Document	Hagge_Lars_DESY	19.07.2006 01:40:04
01_Baseline Paramters for the ILC A,1	Baseline Parameters for the ILC	ILC Document	Hagge_Lars_DESY	14.07.2006 20:21:36
02_ILC Electron Source Description A,1	Description of the e- source	ILC Document	Hagge_Lars_DESY	16.07.2006 01:42:09
BCD Perspectives A,1	Nobu Toge about BCD Perspectives at Snowmass 2005	ILC Document	Hagge_Lars_DES	



# Implementation Plans & Time Scale

Near term: Given moderate resources,

- **Configure CDS according to work group (area, technical, detector) needs/desires and beta test critical (BCD,RDR) documents**
- **Tie together CDS and InDiCo and enable search**
- **Bells & whistles on InDiCo (eg: time zone awareness)**

Longer Term: With continuing resources

- **Common authentication protocol**
- **Configuration of TeamCenter “Teams” and “Product Breakdown Structure”**
  - Cognizance of RDR matrix, WBS, ILC Org chart, etc.
- **Extension of Teamcenter to more institutions and more CAD systems**
- **Tie together TeamCenter with InDiCo/CDS tools**



## Other Issues

- Backfilling important collections of papers and talks
- “Enforcement” of use; abandon legacy systems
- Tie in with wiki-based ILC web sites through URLs
- Better documentation
- Better error reporting/status thereof
- Better user feel
- ILC (or Si D, GLC, ..) “branding”





# Politics and Implementation

## Teamcenter and DESY Support:

- **Barry will write DESY a letter specifying that ILC will adopt Teamcenter**
- **Two devoted support people will be hired solely for ILC**

## InDiCo-CDS and CERN Support:

- **Upon DG mandate, independent committee chaired by James Purvis advises CERN to **ADOPT ILC SOLUTION** for CERN use**
  - See ILC EDMS Wiki for full report
- **DG , due to 600-person 2006-10 layoffs, rejects advice and asks ILC for \$\$ for 2 FTEs to support these tools**
- **Barry will write DG to**
  - Confirm that CERN will continue system (hardware) support
  - Say that ILC will provide its own application support and request continued collegial collaboration in application development

New ILC Web-Specialist Maura Barone will configure/support CDS

Barry will continue negotiations with FNAL, SLAC, KEK, etc. for more IT support