ILC Project Tools:
ILCAgenda and ILCDoc

Maura Barone[1,2]

1- Fermi National Accelerator Laboratory (FNAL),
P.O.Box 500, Batavia, IL 60510-0500, USA

2- Global Design Effort

The International Linear Collider (ILC) Global Design Effort is now in the process of building an integrated set of project tools for communications, data archiving, engineering, costing, scheduling, and project management. In this article, we will focus on two project tools we adopted for meeting planning and document archiving: Indico and Invenio respectively.

1 Introduction: Indico and Invenio

One of the biggest challenges for the global and world-wide International Linear Collider (ILC) collaboration is to exchange information effectively. A key need is to ensure that the scientific and technical content can be archived for long-term preservation and easy retrieval. This requires the use of advanced electronic communication systems and Web applications. Figure 1 shows the three ILC/GDE project tools that will be used as Electronic Document Management Systems.

The adopted meeting planning tool is Indico [2], a conference management system.

Figure 1: The suite of Electronic Document Management Systems for the ILC Global Design Effort

For the document archival we selected Invenio [3], an integrated digital library system. Both tools are Web-based applications produced by the CERN Document Server Software Consortium [4]. Their Web interface follows the latest HTML standards and guarantees maximum compatibility with all browsers. Indico and Invenio are distributed under the GNU General Public License and the software is delivered as Open Source. Technically, they run on the Apache/Python Web application server. They use Zope Object Database (Indico) and MySQL (Invenio) to store conference and document metadata. They use the US Library of Congress standards for bibliographic information description and comply with the Open Archive Initiative metadata harvesting protocol (OAI-PMH). Both tools provide an advanced user delegation mechanism.

2 ILCAgenda

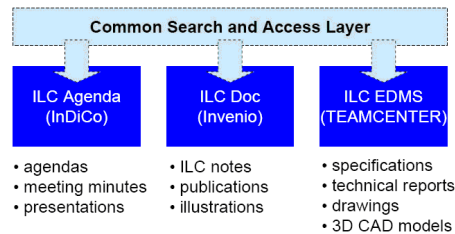The ILC implementation of the digital conferencing software (Indico) is named ILCAgenda and it can be reached at `http://ilcagenda.linearcollider.org/`. Events in ILCAgenda

are organized in a hierarchical tree structure of categories reflecting the organization of the project and designed to insure the maximum flexibility and access to the information. Managers have been appointed for each category. Authorized users can submit talks and presentations through the easy-to-use Web interface.

ILCAgenda is in operation since March 2006. As of August 2007, it hosts about 8,000 talks and the average number of scheduled meetings per month is approximately 75.

3   ILCDoc

The ILC implementation of the digital library system (Invenio) is named ILCDoc and it can be reached at `http://ilcdoc.linearcollider.org/`. ILCDoc contains documents with textual or graphic information such as technical notes, preprints, schedules or images. Documents can be submitted by any authorized user via an intuitive Web interface and are organized in navigable collection trees. The tree structure in ILCDoc is very similar to the one in ILCAgenda and reflects the current organization of the project. ILCDoc features a search engine that allows searches across different collections and type of documents through customizable simple or advanced interfaces. In addition to searching in document metadata, such as title, author, keywords and date, it is possible to search the full-text. The ILCDoc search engine also allows searches through the public information submitted to ILCAgenda. This very important feature implies all the presentations and materials from the many ILC meetings are captured, archived and can be easily accessed.

ILCDoc was launched last February at the BILCW07 workshop at Beijing. In the following months it was extensively used for the archival of all the ILC Reference Design Report (RDR) volumes and the related documentation.

4   Conclusion

The implementation of ILCAgenda and ILCDoc is an essential step forward in developing the set of tools needed by the ILC collaboration to work together effectively. These tools provide easy retrieval of the electronic documents and guarantee their long-term availability.

5   Acknowledgments

We are grateful to the ILC EDMS Committee, for recommending the tools to adopt and helping in their ILC implementation: T. Markiewicz (SLAC) chair, J. Ferguson (CERN), L. Hagge (DESY), R. Stanek (Fermilab), N. Toge(KEK) and H. Weerts (Argonne). We also thanks the CERN Indico and Invenio teams, in particular T. Baron and D. Bourillot (CERN, Indico), J.-Y. Le Meur and T. Simko (CERN, Invenio), for hosting ILCAgenda and ILCDoc on CERN servers and for their extremely valuable advice and support.

References

[1] Slides:
    `http://ilcagenda.linearcollider.org/contributionDisplay.py?contribId=519&sessionId=30&confId=1296`

[2] CDS Indico `http://cdsware.cern.ch/indico/`

[3] CDS Invenio `http://cdsware.cern.ch/invenio/`

[4] CERN Document Server Software Consortium `http://cdsware.cern.ch/`