

SPMS and Regional Support Center Activities in North America

Matt Arena, Fermilab

Agenda

- ▣ Overview of SPMS
- ▣ SPMS History & Statistics
- ▣ SPMS @ Fermilab
- ▣ Users, Roles & Privileges (Fine-grained Access)
- ▣ System Parameters
- ▣ Repatriation
- ▣ New Affiliation Maintenance

Overview

- ▣ SPMS is a tool for event management . *
- ▣ Available under General Public License (GPL)
Maintains a Central Repository of affiliations and profiles. *
- ▣ Initial data downloaded from repository when a conference is created.
- ▣ Periodic synchronization to maintain consist profiles.

* <http://accelconf.web.cern.ch/AccelConf/JACoW/Documents/SPMS.html>

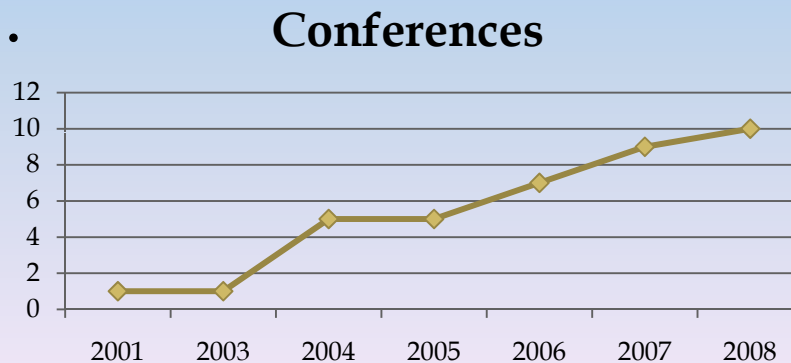
Overview *

- ▣ Scientific Program Module
 - Submission of contributions
 - Editing, Refereeing
 - Reports
- ▣ Event Management Modules
 - Delegate, Industrial Exhibition, Students etc.
 - Registration management
 - Management of hotel bookings and deposits
- ▣ Automated post-conference proceedings production

*<http://accelconf.web.cern.ch/AccelConf/JACoW/Documents/SPMS.html>

History & Statistics

- ▣ 45 conferences have/are/will use SPMS. See http://oraweb.cern.ch/pls/jacow/Conf_List.html for a complete list.
- ▣ A few (BIW, Cool, FEL) used SPMS and later joined JACoW.
- ▣ Others (Aspen, Real Time Computing) are not involved with JACoW.



SPMS @ Fermilab

- ▣ SPMS fully supported at Fermilab.
- ▣ Fermilab continues its support of conference databases for North America, however conferences are responsible for supplying the server for file uploads.
- ▣ Upgrading the database to 10g on a bigger box with more memory.
- ▣ One member of my group (Jim Fromm) also assists in the support of InDiCo.

Users, Roles & Privileges

- ▣ In the beginning...
 - Users were granted privileges.
 - Privilege “tests” were hard-coded into SPMS. For example the editor privilege was required for the editor module.
 - Drawbacks...
 - ▣ Not easy to change the privilege required for a module or section of code.
 - ▣ Granting and revoking privileges for a large group was tedious and often required duplicate data entry.

Users, Roles & Privileges

- ▣ 1st evolution – the addition of functional roles.
 - Users are now added to functional roles/groups such as editors, program committee, organizing committee, etc.
 - These groups are assigned privileges within SPMS
 - Advantages...
 - ▣ Large groups can have privileges granted/revoked very quickly.
 - ▣ No duplicate data entry.
 - ▣ Administrator can create infinite number of functional roles.

Users, Roles & Privileges

- ▣ We can do better
- ▣ Fine-grained access (testing now in [development](#)).
- ▣ Privileges are now assigned to individual web pages by deriving the web page name from the Apache environment variable.
- ▣ The administrator can fine-tune which privileges can access specific pages.
- ▣ The default access configuration is maintained in the repository and initialized when new instances are created.

Users, Roles & Privileges

- ▣ Advantages to fine-grained access
 - Administrators can create infinite privileges.
 - No more hard-coding privilege tests within SPMS.
 - Access can be defined at the page level or module level. For example `regist_maint.%` versus `editor.email`
- ▣ Disadvantages to fine-grained access
 - Any module or web page that has no restriction defined is open to the public.
 - Administrator must test changes to mappings.

Users, Roles & Privileges

- ▣ How does this affect the developers?
 - `common.header` routine changed to a function
 - ▣ Extracts the web page name from the environment variables.
 - ▣ Checks for privileges based on page name and user and returns a Boolean.
 - ▣ Displays the “Insufficient Privilege” message if necessary (programmer may suppress the message).
 - New `common.public_header` for those times you don't care about privilege (e.g. while logging in or displaying an error message).

Users, Roles & Privileges

- ▣ How does the affect the developer
 - New maintenance table named Applications.
 - To secure an entire package enter package name plus dot percent. (e.g. regist_maint.%)
 - To secure select procedures within a package enter package name plus dot procedure (e.g. editor.qa).
 - Pages with an entry are open to the public.
 - Developer should consider isolating functionality into distinct packages.

System Parameters

- ▣ Re-group based on proposed documentation.
- ▣ Data structure changing in SPMS
 - Shifting parameters to a separate package
 - More efficient parameter database I/O
- ▣ Proposal: Link SPMS functionality to specific SPMS system parameters.
 - For example, one can not enable file upload until the upload CGI script parameter is set.

Repatriation

- ▣ Ajax routines developed for the repository a while ago to import conference metadata.
- ▣ Requires execution of a script (written by Volker) during proceedings generation to load keywords into the conference database.
- ▣ Not many conferences run the script (why?).
- ▣ We need a procedure/policy to notify the repository admin to initiate the upload.

Questions

- ▣ Questions, issues, discussion before we discuss New Affiliation Maintenance.

New Affiliation Maintenance

- ▣ Old procedure
 - Users request a new affiliation.
 - Request remains in a separate queue until processed by the administrator.
 - A dummy affiliation attached to the users' profile until approved by the administrator.

New Affiliation Maintenance

- ▣ Pros

- Junk stays out of the repository until corrected/verified.
- Garbage can be deleted.

New Affiliation Maintenance

▣ Cons

- Users adding multiple authors with the same new affiliation had to make multiple requests.
- Annoying for the user.
- Deleted “garbage” caused another issue with orphaned profiles. Dummy record remains as it is usually attached to a contribution.

New Affiliation Maintenance

- ▣ SPMS updated.
- ▣ New affiliation requests are:
 - added immediately to the master list of affiliations,
 - “Tagged” for the administrator to review.
 - Edited to correct errors (if necessary).
- ▣ Administrator then Approves the request or Merges it into an existing affiliation.

New Affiliation Maintenance

▣ Issues

- What to do with the true “garbage” request that can not be fixed or merged?
- If the affiliations is attached to profile that is in use it can not be deleted due to database R/I.

▣ My proposal

- Once efforts to contact the author fails then perform a force delete on the profile and affiliation.

New Affiliation Maintenance

- ▣ Force deleting a profile has issues that must be understood and approved.
 - Any co-author with that affiliation will be deleted from a contribution,
 - Any contribution owned by or has the primary author with that affiliation will be deleted,
 - Any profile with that affiliation will be deleted.
 - Any account with no profile data will be deleted.
 - This “delete” will occur in every conference connected to the main repository!!!

New Affiliation Maintenance

- ▣ Discussion