

JACoW SPMS Conference Database Installation Instructions

1. Create an Oracle 9i (Release 2) or later database or use an existing Oracle database. Recommendation: Use or create a database optimized for OLTP. *Note: Oracle Text is required; verify that it is installed before proceeding.*
2. Verify the database time zone is set properly and automatically adjusts for daylight saving time if appropriate for your local. (select dbtimezone from dual). SPMS stores all timestamps at UTC zero. Database synchronization is based on the assumption the conference database's clock is set correctly, including the time zone.
3. To enable the use of the larger time zone data file, do the following:
 - a. Shut down the database.
 - b. Set the environment variable ORA_TZFILE to the full path name of the location for the timezlg.dat file.
 - c. Restart the database.
4. Log into your Oracle database as a privileged user and run the SQL script: Create_Schema_Owner.sql.
5. Skip this step if you are configuring a standalone conferences or the conference database residing in the same Oracle instance as the main repository. Create a TNS Alias that points to the main JACoW Repository at CERN. The JACoW Administrator at CERN provides the connection information along with the username and password.
6. Create a DAD, with a stored password, in the Oracle/Apache web server that points to the schema created in the previous step. Note the name of the DAD, as you will need it later. Suggested DAD name is the conference short name and year (e.g. pac05 or fel05). Note the value of the NLS_LANG parameter in the DAD configuration section. It should match the value in the database. For example.

```
nls_lang = american_america.WE8ISO8859P1
```

You can determine the NLS setting of the database using the following SQL statement.

```
select value, name
from v$parameter
where name like 'nls%';
```

VALUE	NAME
american	nls_language
america	nls_territory

!! Try the Basic Authentication in all DADs

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- Optional but recommended. Create a 2nd DAD, with a stored password, in the Oracle/Apache web server that points to the schema created in the previous step. Modify the 2nd DAD to include the option `error_style = GatewayDebug`. Suggested DAD name is the conference short name, year and debug (e.g. `pac05_debug` or `fel05_debug`). Restrict use of this DAD to administrators. This DAD will generate a core dump when SPMS crashes.
- Login into the Schema that will hold the JACoW database and application (created in step 4).
- Skip this step if your conference database resides in the same Oracle instance as your conference database or you are installing a standalone database. Note: Most conferences in the JACoW series will not skip this step. Run the script: `Create_DB_Link.sql`.

!! test the database link with “`select count(*) from SCHEMA.country_codes@DBLINK;`” for example.

- Run the script `Create_Repository.sql`. The scripts accept tablespace names for indexes and data. The script that creates the InterMedia indexes prompts for two tablespaces each for data and indexes (four total). InterMedia indexes use several tables to store data, some of them perform better with larger block sizes, which is why you have the option to use a 2nd tablespaces. If you wish you may store all InterMedia data in the same tablespace or in separate ones.
- The `Create_Repository.sql` script will prompt for information it needs. Follow the instructions carefully. You’ll need to know the following prior to running this script. The virtual directory (from step 6) of the conference URL (this is usually in the form of `/pls/DAD-NAME/`), the HTML & SSL port number (defaults are 80 and 443) and the node name of your SMTP outgoing email server. Examine the LOG files for errors. If you wish to drop all database objects and start over, run the script `Drop_All.sql`. *Note: Make certain you are in the correct schema. This script will drop all objects in the current schema.*
- Access the SPMS Web interface via the URL: <http://NODE.DOMAIN/VDIR/repository.html>, where NODE.DOMAIN is the machine name of the server, including the port. VDIR is the virtual directory of the DAD configured in step 6. The format of the virtual directory is `/pls/DAD/` where DAD is the name of the Data Access Descriptor created in step 6. Do not capitalize any part of the URL.

!! Look into error logs or ssl engine logs for the secured ssl URL checkt, that there no errors and the URL is really encrypted.
- Enter `jacow` as the username and `jacowdb` as the password. *Note: If you wish to change the master password execute the following in SQL*Plus: `update control set jacow_pwd = '&new_password';`*

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14. Click the System Parameters link. Review every parameter and set it to appropriate values.

15. The URL for user access into SPMS for your conference is:

<http://NODE.DOMAIN/VDIR/jacow.html>.

!! Well if it is the only application you can set the default page for that DAD to jacow.html

16. Download the Perl files from the SPMS download page into the Apache's cgi-bin (or other appropriately configured directory). Go to the System Parameters page and access the Web Configuration section. Set the values for "Author File Upload Script" and "Editor Download Script" to the **full** URL of the Perl files. Note: The file upload and download scripts may run on any node, not necessarily the database node.

!! Check for the environment variable PERL5LIB and take a look to the called perl to get the correct perl lib pathes

!! Looking for missing modules and get them from CPAN, like [File::Spec](#) etc.

17. Edit the two Perl scripts and set the root_dir parameter to the location of the root directory of the file storage location.

18. Go to the Dtree home directory (<http://www.destroydrop.com/javascripts/tree/>) to download the Dtree JavaScripts. Copy the files in the JavaScript directory to a directory on the Apache web server. Set the parameter for "DTree JavaScript URL" on the Web Configuration section of SPMS. Note: This parameter defaults to use CERN's copy of Dtree scripts.

19. Supply the JACoW Administrator with the node name of the Web Server running your version of SPMS. The administrator must add your node name to the list of valid referring nodes in the conference repository. Without the node name, the SPMS repository will not allow a user to update their profile.