

Accessing the LIS Database: the Job Submission Interface (JSI)

Goal

The Job Submission Interface (JSI) is a secure Java application that allows researchers to:

- write, submit and view job requests (and corresponding outputs);
- track the status of the job requests in process ('received', 'processing', 'set for review', 'refused', etc.); and
- access the history of all job requests ever sent.

The first exercise is an introduction to the JSI to ensure the ability to launch and use it successfully.

Activity

Launch the Job Submission Interface (JSI) application and logon to it with your LIS account.

Submit a simple program to display the following text in your output (or listing): “Your program has run successfully”.

Track the status of your job.

View the resulting listing.

Go to the Job Library window and discard the job; use the advanced search tool to get it back.

Guidelines

Once connected to the Job submission Interface, there are three main tasks that may be carried out:

- Submit jobs through the Job Session window.
 - Select a project (LIS, LWS or LES).
 - Select a statistical package (SAS, SPSS or Stata).
 - When submitting a job (Job Session window), always add a subject line.
 - Write your code.
 - Click on the submit button.
 - Note that for security reasons, the output of all job requests will be returned to the email registered in LISSY even if the submission is processed through the JSI. That way, each LIS user will be informed if someone is using his/her user ID and password.
- Work with Today's Jobs (Today Jobs window.)
 - Watch the status of jobs currently sent to LISSY in the 'jobs in process' panel (top-left).
 - View the jobs returned by LISSY.
 - Click on a job in the 'jobs returned' panel (bottom-left).
 - Click on the 'view job' button.

- Click on the 'job text' or 'listing' tabs, respectively, of the right panel to see the request and its output.
- Re-submit a selected job by clicking on the 'edit in job submission' button at the bottom-right of the window.
- Manage (view, clean and search) all job requests ever sent in the Job Library window.
 - View jobs sent over a specific time period.
 - Clean the library by discarding useless job requests ('discard' button).
 - Search jobs by keywords.
 - Re-submit a selected job by clicking on the 'edit in job submission' button at the bottom-right of the window.
- SAS tends to generate rather long listings. The Luxembourg Income Study recommends the use of the statement **OPTIONS NONOTES NOSOURCE NODATE NOCENTER LABEL NONUMBER LS=200 PS=MAX;** to shorten LISSY output.
- Errors due to format syntax often occur in SAS, especially while merging different datasets. This is especially true of older data sets. In order to avoid this, you may use the SAS programming option: **OPTIONS NOFMterr;**
- LISSY sends back a listing respectively combining both the output and the log files generated by SAS. This way a simple way to display the sentence “Your program has run successfully” is to use the command **%PUT "yourtext"** that writes your text in the SAS log file.

Program

```
OPTIONS NONOTES NOSOURCE;
```

```
%PUT "Congratulations! Your message was received.";
```

Comments

- All listings from LISSY begin with a “Notice to users”. The remaining part of the listing is the actual listing generated by SAS (output and log files).
- Note that for security reasons, the output of all job requests will be returned to the email registered in LISSY even if the submission is processed through the JSI. That way, each LIS user will be informed if someone is using his/her *user ID* and *password*.
- To preserve the confidentiality of information pertaining to individuals and/or households in the micro-databases, LISSY prohibits the use of SAS commands such as **print**, **%sysexec**. If those commands are used LISSY will display a dialog box along with an error message explaining the violation:

Your job has been set for manual review

- In addition to checking for illegal commands, LISSY also filters submissions based on the usage of sequences of commands and/or variables that would end up breaching the rules on data confidentiality. For instance, using commands that display frequencies on continuous variables (e.g., income variables) will be detected by LISSY. LISSY automatically puts such jobs in a security review area to be manually reviewed by the staff. You will be alerted about the result of the manual review.
- If the size of a listing is larger than a given limit for a statistical package, the job is also automatically put in the security review area to ensure that there is no attempt to identify individual-level micro-data. Again, you will be alerted about the result of such review.