

File Upload / Download Perl Scripts

- ▶ The five Perl scripts must be installed on the conference file server to enable authors and editors to upload and download manuscript and talk files.
- ▶ The file server must have an up-to-date version of Perl installed and be running an Apache Web server.
- ▶ The file server should have a fast CPU and RAID disk system, high speed network connectivity, and be backed up daily.
- ▶ Disk requirements: allow a minimum of 2.5 GB per 100 papers.
- ▶ It can be located at the host institution so long as network connectivity to the Proceedings Office at the conference is reliable and ~100 Mbps.

The Five Perl Scripts

- ▶ The files are available via the JACoW home page:

<http://jacow.org/>

by following the links labelled **SPMS** and **GPL Download** to:

<http://www-esh.fnal.gov/SPMS/>

- ▶ Download the current version of the Perl Scripts, presently at:

http://www-esh.fnal.gov/SPMS/Download_Files/Perl_Scripts_3.zip

Unzip the Five Files

► Unzip into the folder `Perl_Scripts_3` which will contain the 5 files:

- `distill`
- `editor.zipdownload`
- `iaoptions.config`
- `JACoW.file_upload`
- `metadistill`

Edit the Five Files

- ▶ Edit the first line of each file to invoke Perl on your installation.

- ▶ Change:

```
#!/u01/app/oracle/product/10.1.3.1/OracleAS_1/perl/bin/perl -w  
to
```

```
#!/usr/bin/perl -w (or similar, as appropriate)
```

- ▶ Only the configuration file `iaoptions.config` requires further editing.
- ▶ It contains a self-extracting POD file which gives guidance in addition to the comments associated with each option in the file.

The POD file

NAME

`iaoptions.config`

Main (and only) configuration file for JACoW.upload, editor.download, distill, metadistill etc.

DISTILL PARAMETERS

If the parameter "distill" is set to 1, any PS file uploaded by authors will be converted to PDF and shown, in order to help detecting errors immediately.

In order to have this distill feature working, you need an external tool to generate these PDF's. What the upload script will do is to place the PS in a certain directory, and wait for a generated PDF to appear in another (or an error log given).

You will need to tune the following parameters:

`dist_dir`: the directory where to place the PostScript file to be converted

`out_dir` : the directory where the distill script will expect the PDF or the LOG

Other tunable parameters could be the following ones (but we discourage doing it)

`distrole`: SPMS roles to distill for (default is 'AUTHOR')

`timeout` : seconds to wait for the PDF (default is 10 minutes!)

`sleep` : seconds to wait between every check (default is 5)

`proxy` : server needed to access the Internet, if needed by the file server default is empty, meaning no proxy needed. syntax is:

`http://proxy.domain.dom:port/`

User Definable Options

```
package iaoptions ;
my %script_options =(
    #
    # Common options
    #
    "root_dir"      =>"/tmp/",      # base dir where paper dirs are located
    "debug"         =>0,           # 1 shows useful info, 0 is for production
                                # 2 shows useful info *without* dumpValue

    #
    # Upload options
    #
    "max_size"      =>100000000,    # max bytes allowed: 0 is unlimited
    "check_type"    =>"pdf,ps,eps", # this_file_type's to check
    "uppercase"     =>"pdf,ps,eps", # which file types to uppercase
    "lowercase"     =>"",          # which file types to lowercase
    "upload_chmod"  =>0666,        # set this to "" or 0 in Window$
    "counter_length"=>4,          # count length for version (ABCD.0001.DOC)

    #
    # Distill options
    #
    "distill"       =>0,           # wether to distill (1) or not (0)
    "dist_dir"      =>"/var/lib/vmware/shares/watchedfolders/in/",
                                # base dir where paper are being distilled
    "out_dir"       =>"/var/lib/vmware/shares/watchedfolders/out/",
                                # base dir where the PDFs are expected
    "prefix"        =>'JACoW-',    # prefix for temporary PS file
    "infix"         =>'.AUTODISTILL', # infix for auto-distilled PDF, to be saved in the "file upload" area
    "distrole"      =>'AUTHOR',    # role (sent by the SPMS) to distill for. Any if empty
    "timeout"       =>600,        # timeout (seconds) after wich give up
    "sleep"         =>5,          # how much (seconds) to sleep between checks
    "proxy"         =>"",         # proxy server, syntax: http://proxy.domain.dom:port/
                                # leave empty if your server does not require any

    #
    # zipdownload part
    #
    "tmp_dir"       =>"/tmp/",      # temporary directory for the ZIP files
    "logext"        =>".JACoW_log",
    "loggen"        =>".general.JACoW_log",
    "lastext"       =>'< last >',

    "mask"          =>".JACoW_log", # comma-separated extensions of files not
                                # to show on the interface
    "forceview"     =>".general.JACoW_log", # comma-separated extensions of files
                                # to show regardless of the mask

    #
    # Dummy part
    #
    "dummy"         =>0           # dummy value to end the hash definition
);
```

Editing the Options in `iaoptions.config`

► Edit the following options as appropriate for your installation:

- `"root_dir"` path to directory on file server where files will be stored
- `"max_size"` set to 0 to accommodate large PostScript and talk files
- `"upload_chmod"` set to "" or 0 if using a MS Windows server
- `"distill"` set to 1 if using a Watched Folder
(of dubious value due to high incidence of bad PostScript files supplied by authors)
- `"dist_dir"` path to Watched Folder directory (must be created even if not used)
- `"out_dir"` path to PDF output directory (must be created even if not used)
- `"timeout"` adjust to suit speed of Distilling platform
- `"sleep"` adjust to suit speed of Distilling platform

Setting the SPMS System Parameters

- ▶ On the SPMS System Parameters page under Web Configuration:
 - Set the Author File Upload Script URL that points to the file `JACoW.file_upload` that should be installed in the Apache `/cgi-bin/` directory.
 - Set the Editor Download Script URL that points to the file `editor.zipdownload` that should be installed in the Apache `/cgi-bin/` directory.
- ▶ Once installed, test the file server by uploading and downloading some genuine or dummy files.
- ▶ Check that files with incorrect filenames are rejected.

Known Problems and Proposed Action

- ▶ The paper PDF and PostScript files uploaded by authors and editors are correctly checked for filename conformance and are converted to upper case filenames on the fly.
- ▶ Talk PDF files are not converted to upper case.
- ▶ This is not a problem on MS Windows file servers.
- ▶ It is a disaster on UNIX/Linux file servers as the following are accepted as distinct files:
 - TU201_TALK.PDF
 - TU201_TALK.pdf
 - TU201_Talk.pdf
 - TU201_talk.pdf
 - tu201_talk.pdf

and only TU201_TALK.PDF can be downloaded by the JPSP scripts, all others result in 0 byte files. For PAC09, only one of the 200 talks can be downloaded via SPMS or JPSP. Editing one line in the Perl download script fixes this, but there is no way without looking at the log or file server directly to know which is the most recent version if there are multiple filenames.

▶ ACTION:

- The SPMS and Perl script codes will be examined by Matt and Ivan.
- Convert talk file names to upper case upon upload as is done for the paper PDF files.