

Importing and exporting user files

Overview

We provide two scripts to facilitate the uploading and downloading of files for a tool. This allows users to upload their own input file to the tool via the web interface. The export script allows a user to download a tool simulation result directly from the tool via the web interface without accessing their home directory separately.

Import File

Overview

"importfile" is the command line tool that, when run, opens a pop-up window prompting the user to browse and select file that is then uploaded.

You can use this command to transfer one or more files from your desktop to your tool session via a web browser. This command causes a web page to pop up prompting you for various files on your desktop. Choose one or more files and submit the form. The files will be uploaded to your tool session and saved in the file names specified on the command line. You must have popups enabled for this to work properly.

Implementation

This script should be implemented as a background process in a non-rapture tool. Typically a pipe is used to run this script off the main process of the tool. The piped process should be monitored by the tool code for a response upon completion of the user's file upload. The script will continue to wait for a file to be uploaded indefinitely. Please code appropriately for this.

Help text

USAGE: /usr/bin/importfile [-f|--for text] [-l|--label text] file file ...

options:

-h or --help

Prints this help message.

-f or --for <text>

Short explanation of what the data will be used for; for example, "for CNTBands 2.0". If given, this text is inserted into the upload form to help explain what it will be used for.

-l or --label <text>

Prompt for subsequent file arguments using this label string. The default label just uses the file name.

-m or --mode acsii|binary|auto

In "binary" mode, files are transferred exactly as-is. In "ascii" mode, control-M characters are removed, which helps

IMPORTING AND EXPORTING USER FILES

when loading Windows files into the Linux environment. The default is "auto", which removes control-M from text files but leaves binary files intact.

-p or --provenance

Print more verbose results showing the provenance information for all files uploaded. Instead of a series of space-separated file names, this produces one line for each file showing the final file name and where it came from, which is either the file name on the user's desktop or @CLIPBOARD meaning that the user pasted information into the text entry area. For example:

```
foo.tgz <= gui15.tar.gz  
bar.txt <= @CLIPBOARD
```

--

Remaining arguments are treated as file names, even if they start with a -.

file

Uploaded file will be saved in this file name within your tool session. If file is @@ then the file is given the same name it had before it was uploaded. If no file arguments are included, the default is "@@", meaning upload a single file and use the name it had on the desktop.

You can use this command to transfer one or more files from your desktop to your tool session via a web browser. This command causes a web page to pop up prompting you for various files on your desktop. Choose one or more files and submit the form. The files will be uploaded to your tool session and saved in the file names specified on the command line.

This command returns a list of names for files actually uploaded.

Export File

Overview

You can use this command to transfer one or more files from your tool session to your desktop via a web browser. A separate web browser page is opened for each file. You must have popups enabled for this to work properly.

Implementation

This script can be implemented as a background process in a non-rapture tool. This allow the user to continue to use the tool while the file downloads to their machine in the background. Typically a pipe is used to run this script off the main process of the tool. This is optional

Help text

USAGE: /usr/bin/exportfile [-t|--timeout secs] [-d|--delete] [-m|--message file] [-f|--format raw|html] file file...

options:

-h or --help

Prints this help message.

-t or --timeout <seconds>

Forget about the file after this timeout. Default is 86,400 seconds (1 day).

-d or --delete

Delete the file after the timeout or when the tool is shut down. Should be used only with temporary files.

-m or --message

File containing a fragment of HTML text that will be displayed above the download. It might say "Here is your data," or "If you use this data, please cite this source."

-f or --format <type>

Choices are "raw" and "html". Default is "raw". The "html" format causes the server to rewrite links embedded within the HTML, so that images can be displayed and links can be

IMPORTING AND EXPORTING USER FILES

traversed properly.

--

Remaining arguments are treated as file names, even if they start with a -.

You can use this command to transfer one or more files from your tool session to your desktop via a web browser. A separate web browser page is opened for each file. You must have popups enabled for this to work properly.