README

This file conforms to the **VHIST** format developed at the Max-Planck-Institute for Neurological Research with Klaus-Joachim-Zuelch-Laboratories of the Max Planck Society and the Faculty of Medicine of the University of Cologne, Cologne, Germany (MPINF).

VHIST is an open specification, a detailed description and some related tools are available under the terms of an OpenSource license, http://www.nf.mpg.de/vhist.

Please see the **LEGAL NOTICE** below before proceeding.

When you use VHIST at your institute, you can adjust the content of this page by changing the **title.txt** file in the res directory of your VHIST installation.

The general idea behind VHIST is to provide a robust and simple means for documenting a step of a workflow (e.g. quantification of a PET image volume, or (automated) image processing using SPM) by logging all relevant information: which files were used, which files were written, what software package was used with what parameters. VHIST was conceived for usage on top of existing workflows: ideally, you only have to add one line to an existing batch script.

VHIST files can act like a container for arbitrary chunks of information: you can embed log-files, (binary) image and header data. VHIST also conforms to the PDF-1.5 standard and can be used with standard PDF browsers (embedded data appears as embedded files in PDF browsers, each addition to an existing workflow file strictly retains all previous information).

However, particular care was taken to facilitate extraction and processing of data (embedded files, in particular the automatically generated XML summary of a workflow step) in an automated fashion and entirely independent of PDF specifics: the human-readable summaries for each workflow step have only been provided as a convenience. A program written in the Python programming language (xtract.py, 30 lines, can be found at the beginning of this file when opened with a text editor) has been attached to this document: it is sufficient (apart from a suitable Python distribution) to extract all relevant information from this file.

LEGAL NOTICE

This file may contain legally privileged and confidential information intended solely for scientific use at the Max-Planck-Institute for Neurological Research with Klaus-Joachim-Zuelch-Laboratories of the Max Planck Society and the Faculty of Medicine of the University of Cologne (MPINF). All data is property of MPINF and may not be used in any way without prior written confirmation. If you have received this file in error or if you are in doubt, please notify Email: security@nf.mpg.de.

\$Id: title.txt 2705 2013-04-22 09:17:01Z ahuesgen \$

```
Title: Copying a File
Added: 2013-06-25 10:56:36
Host: stibbons, User: ahuesgen
Command: ["cp", "input.txt", "intermediate.txt"]
returnValue: 0
requiredTime [sec]: {"system": 0.000, "user": 0.020, "elapsed": 0.030}
cwd: /daten/ahuesgen/projects/vhist/www/examples
--- INPUT FILE(S) ------
File: input.txt
Path: /daten/ahuesgen/projects/vhist/www/examples
Filetype: text/plain
Embedded: yes, MD5: e59ff97941044f85df5297e1c302d260
Size: 12 Bytes, Last Modified: 2013-06-25 10:07:39
--- OUTPUT FILE(S) ------
File: stdout.log
Path: /tmp/tmpwcvnty-pyvhist-2013-06-25_10-56-36/tmp9csxhm
Description: stdout and stderr
Embedded: yes, MD5: d41d8cd98f00b204e9800998ecf8427e
Size: 0 Bytes, Last Modified: 2013-06-25 10:56:36
File: intermediate.txt
Path: /daten/ahuesgen/projects/vhist/www/examples
Filetype: text/plain
Embedded: yes, MD5: e59ff97941044f85df5297e1c302d260
Size: 12 Bytes, Last Modified: 2013-06-25 10:56:36
--- SUMMARY FILE ------
Embedded workflow summary (XML): ws_summary.xml
Size: 3112 Bytes, MD5: a96861dda85a336875738448dc39a12d
```

```
Title: Copying a File a Second Time
Added: 2013-06-25 10:56:41
Host: stibbons, User: ahuesgen
Command: ["cp", "intermediate.txt", "output.txt"]
=== User-defined arguments ==================================
returnValue: 0
requiredTime [sec]: {"system": 0.000, "user": 0.020, "elapsed": 0.050}
cwd: /daten/ahuesgen/projects/vhist/www/examples
--- INPUT FILE(S) ------
File: intermediate.txt
Path: /daten/ahuesgen/projects/vhist/www/examples
Filetype: text/plain
Embedded: yes, MD5: e59ff97941044f85df5297e1c302d260
Size: 12 Bytes, Last Modified: 2013-06-25 10:56:36
--- OUTPUT FILE(S) ------
File: stdout.log
Path: /tmp/tmpjyvP2P-pyvhist-2013-06-25_10-56-40/tmptiDBKe
Description: stdout and stderr
Embedded: yes, MD5: d41d8cd98f00b204e9800998ecf8427e
Size: 0 Bytes, Last Modified: 2013-06-25 10:56:40
File: output.txt
Path: /daten/ahuesgen/projects/vhist/www/examples
Filetype: text/plain
Embedded: yes, MD5: e59ff97941044f85df5297e1c302d260
Size: 12 Bytes, Last Modified: 2013-06-25 10:56:41
--- SUMMARY FILE ------
Embedded workflow summary (XML): ws_summary.xml
Size: 3195 Bytes, MD5: 9aa957f26c90e10489eb6e739ea8cc71
```