Translation(s): none

The XDG Base Directory Specification (XDGBDS) defines four categories of so called DotFiles and the corresponding directories in a users home directory that should be used for those. The categories are cache, configuration, data and runtime files. There is not yet a separate categorie for "state" files although such a categorie has been requested several times (see State proposal below).

Please refer to the specification for directory definitions and further details. Debian does not require that packages conform to the *XDGBDS* but strongly encourages upstreams to do so. Debian packages should not be patched for conformance to avoid unnecessary deviation from upstream and other distributions.

Tools and libraries

Debian contains several libraries for different languages that help to implement the XDGBDS:

- Haskell: DebianPkg: haskell-xdg-basedir
- Python: DebianPkg: python-xdg/python3-xdg
- C++/QT: DebianPackage: libqtxdg
- C: DebianPkg: libxdg-basedir
- C/Gnome: via glib)

These tools or libraries exists but are not yet packaged:

- xdgdirs Guile, Lisp, Scheme, ???

Status of Packages

Debian does not require packages to conform to the XDGBDS and there is not (yet) a coordinated effort to encourage upstreams to do so. But to avoid duplication of effort we can collect upstream bug reports here regarding XDGBDS conformance.

- emacs: upstream bug
- mplayer: upstream bug
- xmonad: upstream bug
- tmux: discussion+patch, rejection
- spacemacs (needs packaging): upstream bug
- ZSH: http://www.zsh.org/mla/workers/2013/msg00692.html
- Gimp: https://gitlab.gnome.org/GNOME/gimp/commit/60e0cfe, https://gitlab.gnome.org/GNOME/gimp/commit/483505f, https://bugzilla.gnome.org/show_bug.cgi?id=166643, https://bugzilla.gnome.org/show_bug.cgi?id=646644
- OpenSSH: https://bugzilla.mindrot.org/show_bug.cgi?id=2050
- GnuPG: https://bugs.gnupg.org/gnupg/issue1456
- dbus: https://gitlab.freedesktop.org/dbus/dbus/issues/46
- Pidgin: https://developer.pidgin.im/ticket/4911

A bigger list of bugs can be found in Arch Linux wiki: https://wiki.archlinux.org/index.php/XDG_Base_Directory

Bugs not yet filled/found: mplayer

Links

- Modify your application to use XDG folders - Blog post from Lionel Dricot
- Fedora initiative to make packages conform to XDGBDS
- Gnome Goal to conform to XDGBDS
- KDE site on XDGBDS
- XDG Base Directory in Arch wiki - long list of software that supports the spec

Proposal: STATE directory

This is a recurring request/complaint (see this or this) on the xdg-freedesktop mailing list to introduce another directory for state information that does not belong in any of the existing categories (see also home-dir.proposal. Examples for this information are:

- history files of shells, repls, anything that uses libreadline
- logfiles

- state of application windows on exit
- recently opened files
- last time application was run
- emacs: bookmarks, ido last directories, backups, auto-save files, auto-save-list

The above example information is not essential data. However it should still persist on reboots of the system unlike cache data that a user might consider putting in a TMPFS. On the other hand the data is rather volatile and does not make sense to be checked into a VCS. The files are also not the data files that an application works on.

A default folder for a future STATE category might be: $HOME/.local/state

Some questions that might help to distinguish between the different classes:

	DATA	**CONFIG**	**STATE**	**CACHE**	**RUNTIME**
sync across machines?	yes?	yes	no	no	no
manage in VCS (Git/SVN)?	no	yes	no	no	no
should be backed up?	yes	yes	yes	no	no
can live in tmpfs?	no	no	no	yes	yes?
contains much data?	yes	no	no	yes	no