

Customization & Tweaks

Make it yours

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D-Bus

`dbus-broker` is a drop-in replacement for the *libdbus* reference implementation, which aims "to provide high performance and reliability, while keeping compatibility to the D-Bus reference implementation".

Install `dbus-broker`:

```
pacman -S dbus-broker
```

Disable `dbus.service` and enable `dbus-broker.service` globally:

```
systemctl disable dbus  
systemctl enable dbus-broker
```

Reboot for the changes to take effect.

KDE Plasma Themes

Akava

<https://akava-design.github.io/>

```
yay -S breeze-blurred-git akava-kde-git akava-konsole-git kvantum-theme-akava-git
```

Layan

```
yay -S kvantum-theme-layan-git layan-cursor-theme-git layan-gtk-theme-git layan-kde-git tela-  
icon-theme-git
```

Aritim

Install Konsole theme with "Get new stuff" Feature from Konsole.

```
yay -S aritim-dark-gtk-git aritim-light-kde-git aritim-dark-kde-git aritim-light-gtk-git  
lightly-qt kora-icon-theme
```

Latte Dock

CAUTION: The developer of Latte announced his retirement from maintaining the project.

Dock based on Plasma frameworks that provides an elegant and intuitive experience for your tasks and plasmoids.

Installation

Install Latte Dock from AUR (most recent version)

```
yay -S latte-dock-git
```

Configuration

Borderless maximized windows

1. Right-click on Latte dock -> `Configure Latte` -> `Preferences` tab -> Behavior: Support borderless maximized windows in different layouts
2. Enable borderless windows for KWin:

```
kwriteconfig5 --file ~/.config/kwinrc --group Windows --key  
BorderlessMaximizedWindows true  
qdbus org.kde.KWin /KWin reconfigure
```

Widgets

Window Title

Install with KDE Widget "Get new stuff" feature.

Alternatively install via AUR:

```
yay -S plasma5-applets-window-title-git
```

Window Buttons Widget

Install via AUR:

```
yay -S plasma5-applets-window-buttons-git
```

Troubleshoot

Meta key doesn't open application launcher

```
kwriteconfig5 --file ~/.config/kwinrc --group ModifierOnlyShortcuts --key Meta  
"org.kde.lattedock,/Latte,org.kde.LatteDock,activateLauncherMenu"  
qdbus org.kde.KWin /KWin reconfigure
```

Additional Packages

Additional packages one might find useful to have installed on their system

File System Utilities

File system	Package	Creation command	Description
Btrfs	<code>btrfs-progs</code>	<code>mkfs.btrfs</code>	Btrfs filesystem utilities
VFAT	<code>dosfstools</code>	<code>mkfs.fat</code>	DOS filesystem utilities
exFAT	<code>exfatprogs</code>	<code>mkfs.exfat</code>	exFAT filesystem userspace utilities for the Linux Kernel exfat driver
F2FS	<code>f2fs-tools</code>	<code>mkfs.f2fs</code>	Tools for Flash-Friendly File System (F2FS)
ext4	<code>e2fsprogs</code>	<code>mkfs.ext4</code>	Ext2/3/4 filesystem utilities
HFS/HFS+	<code>hfsprogs</code> (AUR)	<code>mkfs.hfsplus</code>	User space utils to create and check Apple HFS/HFS+ filesystem
JFS	<code>jfsutils</code>	<code>mkfs.jfs</code>	JFS filesystem utilities
NILFS2	<code>nilfs-utils</code>	<code>mkfs.nilfs2</code>	A log-structured file system supporting continuous snapshotting
NTFS	<code>ntfs-3g</code>	<code>mkfs.ntfs</code>	NTFS filesystem driver and utilities
ReiserFS	<code>reiserfsprogs</code>	<code>mkfs.reiserfs</code>	Reiserfs utilities
UDF	<code>udftools</code>	<code>mkfs.udf</code>	Linux tools for UDF filesystems and DVD/CD-R(W) drives
XFS	<code>xfsprogs</code>	<code>mkfs.xfs</code>	XFS filesystem utilities

System Tools

Package	Description
<code>fwupd</code>	Simple daemon to allow session software to update firmware

Package	Description
htop	Interactive process viewer
impression	A straight-forward modern application to create bootable drives.
libimobiledevice	Library to communicate with services on iOS devices using native protocols
lshw	A small tool to provide detailed information on the hardware configuration of the machine
man-db	A utility for reading man pages
power-profiles-daemon	Makes power profiles handling available over D-Bus
radeontop	View AMD GPU utilization for total activity percent and individual blocks

Multimedia

Package	Description
aegisub	A general-purpose subtitle editor with ASS/SSA support
amberol	Plays music, and nothing else
blanket	Improve focus and increase your productivity by listening to different sounds
eartag	Simple music tag editor
handbrake	Multithreaded video transcoder
identity	Compare multiple versions of an image or video
makemkv	DVD and Blu-ray to MKV converter
mediainfo-gui	Supplies technical and tag information about media files
mousai	Simple application for identifying songs
paleta	Extract the dominant colors from any image
soundconverter	A simple sound converter application for GNOME
tube-converter	An easy-to-use video downloader
video-trimmer	Trim videos quickly

Productivity

Package	Description
<code>apostrophe</code>	A distraction free Markdown editor for GNU/Linux made with GTK+

Developer Tools

Package	Description
<code>devtoolbox</code>	Development tools at your fingertips
<code>escambo</code>	An HTTP-based APIs test application for GNOME
<code>gitg</code>	GNOME GUI client to view git repositories
<code>ohmsvg</code>	SVG optimizer
<code>playhouse</code>	A Playground for HTML/CSS/JavaScript
<code>share-preview</code>	Preview and debug websites metadata tags for social media share
<code>textpieces</code>	Transform text without using random websites
<code>visual-studio-code-bin</code>	Editor for building and debugging modern web and cloud applications
<code>webfontkitgenerator</code>	Create <code>@font-face</code> kits easily

Misc Tools

Package	Description
<code>extension-manager</code>	A native tool for browsing, installing, and managing GNOME Shell Extensions
<code>gnome-obfuscate</code>	Censor private information
<code>newsflash</code>	Desktop application designed to complement an already existing web-based RSS reader account
<code>p7zip</code>	Command-line file archiver with high compression ratio
<code>teamviewer</code>	All-In-One Software for Remote Support and Online Meetings

zsh configuration

`zsh` configuration as provided on a standard Manjaro install with some additions

General settings

```
## Options section

setopt correct                # Auto correct mistakes
setopt extendedglob          # Extended globbing. Allows
using regular expressions with *

setopt nocaseglob            # Case insensitive globbing
setopt rcexpandparam         # Array expansion with
parameters

setopt nocheckjobs           # Don't warn about running
processes when exiting

setopt numericglobsort       # Sort filenames numerically
when it makes sense

setopt nobeep                # No beep
setopt appendhistory          # Immediately append history
instead of overwriting

setopt histignorealldups      # If a new command is a
duplicate, remove the older one

setopt autocd                # if only directory path is
entered, cd there.

setopt inc_append_history     # save commands are added to
the history immediately, otherwise only when shell exits.


zstyle ':completion:*' matcher-list 'm:{a-zA-Z}={A-Za-z}'      # Case insensitive tab
completion

zstyle ':completion:*' list-colors "${(s..)LS_COLORS}"          # Colored completion
(different colors for dirs/files/etc)

zstyle ':completion:*' rehash true                                # automatically find new
executables in path

# Speed up completions

zstyle ':completion:*' accept-exact '*(N)'

zstyle ':completion:*' use-cache on
```

```

zstyle ':completion:*' cache-path ~/.zsh/cache
HISTFILE=~/.zhistory
HISTSZIE=10000
SAVEHIST=10000
#export EDITOR=/usr/bin/nano
#export VISUAL=/usr/bin/nano
WORDCHARS=${WORDCHARS//\/[&.;]} # Don't consider certain
characters part of the word

```

Key Bindings

```

## Keybindings section
bindkey -e
bindkey '^[[7~' beginning-of-line # Home key
bindkey '^[[H' beginning-of-line # Home key
if [[ "${terminfo[khome]}" != "" ]]; then
    bindkey "${terminfo[khome]}" beginning-of-line # [Home] - Go to beginning of
line
fi
bindkey '^[[8~' end-of-line # End key
bindkey '^[[F' end-of-line # End key
if [[ "${terminfo[kend]}" != "" ]]; then
    bindkey "${terminfo[kend]}" end-of-line # [End] - Go to end of line
fi
bindkey '^[[2~' overwrite-mode # Insert key
bindkey '^[[3~' delete-char # Delete key
bindkey '^[[C' forward-char # Right key
bindkey '^[[D' backward-char # Left key
bindkey '^[[5~' history-beginning-search-backward # Page up key
bindkey '^[[6~' history-beginning-search-forward # Page down key

# Navigate words with ctrl+arrow keys
bindkey '^[[0c' forward-word #
bindkey '^[[0d' backward-word #
bindkey '^[[1;5D' backward-word #
bindkey '^[[1;5C' forward-word #
bindkey '^H' backward-kill-word # delete previous word with
ctrl+backspace

```

```
bindkey '^[[Z' undo
```

```
# Shift+tab undo last action
```

Aliases

```
## Alias section
alias ls='ls --color=auto'
alias ll='ls -lahF'
alias cp='cp -i' # Confirm before overwriting
something
alias df='df -h' # Human-readable sizes
alias free='free -m' # Show sizes in MB
alias gitu='git add . && git commit && git push'
```

Theming

```
# Theming section
autoload -U compinit colors zcalc
compinit -d
colors

# Color man pages
export LESS_TERMCAP_mb=$'\E[01;32m'
export LESS_TERMCAP_md=$'\E[01;32m'
export LESS_TERMCAP_me=$'\E[0m'
export LESS_TERMCAP_se=$'\E[0m'
export LESS_TERMCAP_so=$'\E[01;47;34m'
export LESS_TERMCAP_ue=$'\E[0m'
export LESS_TERMCAP_us=$'\E[01;36m'
export LESS=-R
```

Plugins

```
## Plugins section: Enable fish style features
# Use syntax highlighting
source /usr/share/zsh/plugins/zsh-syntax-highlighting/zsh-syntax-highlighting.zsh
```

```
# Use history substring search
source /usr/share/zsh/plugins/zsh-history-substring-search/zsh-history-substring-search.zsh

# bind UP and DOWN arrow keys to history substring search
zmodload zsh/terminfo
bindkey "$terminfo[kcuu1]" history-substring-search-up
bindkey "$terminfo[kcud1]" history-substring-search-down
bindkey '^[[A' history-substring-search-up
bindkey '^[[B' history-substring-search-down

source /usr/share/zsh/plugins/zsh-autosuggestions/zsh-autosuggestions.zsh
ZSH_AUTOSUGGEST_BUFFER_MAX_SIZE=20
ZSH_AUTOSUGGEST_HIGHLIGHT_STYLE='fg=8'
```

Terminal Window Title

```
# Set terminal window and tab/icon title
#
# usage: title short_tab_title [long_window_title]
#
# See: http://www.faqs.org/docs/Linux-mini/Xterm-Title.html#ss3.1
# Fully supports screen and probably most modern xterm and rxvt
# (In screen, only short_tab_title is used)
function title {
    emulate -L zsh
    setopt prompt_subst

    [[ "$EMACS" == *term* ]] && return

    # if $2 is unset use $1 as default
    # if it is set and empty, leave it as is
    : ${2=$1}

    case "$TERM" in
        xterm*|putty*|rxvt*|konsole*|ansi|mlterm*|alacritty|st*)
            print -Pn "\e]2;${2:q}\a" # set window name
            print -Pn "\e]1;${1:q}\a" # set tab name
```

```

;;
screen*|tmux*)
    print -Pn "\ek${1:q}\e\\" # set screen hardstatus
    ;;
*)
    # Try to use terminfo to set the title
    # If the feature is available set title
    if [[ -n "$terminfo[fsl]" ]] && [[ -n "$terminfo[tsl]" ]]; then
        echoti tsl
        print -Pn "$1"
        echoti fsl
    fi
    ;;
esac
}

ZSH_THEME_TERM_TAB_TITLE_IDLE="%15<..<%~%<<" #15 char left truncated PWD
ZSH_THEME_TERM_TITLE_IDLE="%n@%m:%~"

# Runs before showing the prompt
function mzc_termsupport_precmd {
    [[ "${DISABLE_AUTO_TITLE:-}" == true ]] && return
    title $ZSH_THEME_TERM_TAB_TITLE_IDLE $ZSH_THEME_TERM_TITLE_IDLE
}

# Runs before executing the command
function mzc_termsupport_preexec {
    [[ "${DISABLE_AUTO_TITLE:-}" == true ]] && return

    emulate -L zsh

    # split command into array of arguments
    local -a cmdargs
    cmdargs=("${(z)2}")
    # if running fg, extract the command from the job description
    if [[ "${cmdargs[1]}" = fg ]]; then
        # get the job id from the first argument passed to the fg command
        local job_id jobspec="${cmdargs[2]#%}"
        # logic based on jobs arguments:

```

```

# http://zsh.sourceforge.net/Doc/Release/Jobs-_0026-Signals.html#Jobs
# https://www.zsh.org/mla/users/2007/msg00704.html
case "$jobspec" in
  <->) # %number argument:
    # use the same <number> passed as an argument
    job_id=${jobspec} ;;
  ""|%|+) # empty, %% or %+ argument:
    # use the current job, which appears with a + in $jobstates:
    # suspended:+:5071=suspended (tty output)
    job_id=${(k)jobstates[(r)*:+:*]} ;;
  -) # %- argument:
    # use the previous job, which appears with a - in $jobstates:
    # suspended:-:6493=suspended (signal)
    job_id=${(k)jobstates[(r)*:-:*]} ;;
  [?]* ) # %?string argument:
    # use $jobtexts to match for a job whose command *contains* <string>
    job_id=${(k)jobtexts[(r)*${(Q)jobspec}*)]} ;;
  *) # %string argument:
    # use $jobtexts to match for a job whose command *starts with* <string>
    job_id=${(k)jobtexts[(r)${(Q)jobspec}*)]} ;;
esac

# override preexec function arguments with job command
if [[ -n "${jobtexts[$job_id]}" ]]; then
  1="${jobtexts[$job_id]}"
  2="${jobtexts[$job_id]}"
fi
fi

# cmd name only, or if this is sudo or ssh, the next cmd
local CMD=${1[(wr)^(=*|sudo|ssh|mosh|rake|-*)]:gs/%/%%}
local LINE="${2:gs/%/%%}"

title '$CMD' '%100>...>$LINE%<<'
}

autoload -U add-zsh-hook
add-zsh-hook precmd mzc_termsupport_precmd
add-zsh-hook preexec mzc_termsupport_preexec

```

.nvmrc detection

```
# place this after nvm initialization!
autoload -U add-zsh-hook
load-nvmrc() {
    local node_version="$(nvm version)"
    local nvmrc_path="$(nvm_find_nvmrc)"

    if [ -n "$nvmrc_path" ]; then
        local nvmrc_node_version=$(nvm version "$(cat "${nvmrc_path}")")

        if [ "$nvmrc_node_version" = "N/A" ]; then
            nvm install
        elif [ "$nvmrc_node_version" != "$node_version" ]; then
            nvm use
        fi
    elif [ "$node_version" != "$(nvm version default)" ]; then
        echo "Reverting to nvm default version"
        nvm use default
    fi
}
add-zsh-hook chpwd load-nvmrc
load-nvmrc
```

npm completions

```
_zbnc_npm_command() {
    echo "${words[2]}"
}

_ zbnc_npm_command_arg() {
    echo "${words[3]}"
}

_ zbnc_no_of_npm_args() {
    echo "$#words"
}
```

```

_zbnc_list_cached_modules() {
    ls ~/.npm 2>/dev/null
}

_zbnc_recursively_look_for() {
    local filename="$1"
    local dir=$PWD
    while [ ! -e "$dir/$filename" ]; do
        dir=${dir%/*}
        [[ "$dir" = "" ]] && break
    done
    [[ ! "$dir" = "" ]] && echo "$dir/$filename"
}

_zbnc_get_package_json_property_object() {
    local package_json="$1"
    local property="$2"
    cat "$package_json" |
        sed -nE "/^ \\"$property\\": \{$/,/^ \},?$/p" | # Grab scripts object
        sed '1d;$d' | # Remove first/last lines
        sed -E 's/    "([^\"]+)" : "(.+)",?/\1=>\2/' # Parse into key=>value
}

_zbnc_get_package_json_property_object_keys() {
    local package_json="$1"
    local property="$2"
    _zbnc_get_package_json_property_object "$package_json" "$property" | cut -f 1 -d "="
}

_zbnc_parse_package_json_for_script_suggestions() {
    local package_json="$1"
    _zbnc_get_package_json_property_object "$package_json" scripts |
        sed -E 's/(.+)=>(.)/\1:$ \2/' | # Parse commands into suggestions
        sed 's/\(:\)[^\]]/\&/g' | # Escape ":" in commands
        sed 's/\(:\)$[^\]]/\&/g' # Escape ":" without a space in commands
}

_zbnc_parse_package_json_for_deps() {

```



```

local package_json="$1"
_zbnc_get_package_json_property_object_keys "$package_json" dependencies
_zbnc_get_package_json_property_object_keys "$package_json" devDependencies
}

_zbnc_npm_install_completion() {

# Only run on `npm install ?`
[[ ! "$(_zbnc_no_of_npm_args)" = "3" ]] && return

# Return if we don't have any cached modules
[[ "$(_zbnc_list_cached_modules)" = "" ]] && return

# If we do, recommend them
_values "$(_zbnc_list_cached_modules)

# Make sure we don't run default completion
custom_completion=true
}

_zbnc_npm_uninstall_completion() {

# Use default npm completion to recommend global modules
[[ "$(_zbnc_npm_command_arg)" = "-g" ]] || [[ "$(_zbnc_npm_command_arg)" = "--global" ]] &&
return

# Look for a package.json file
local package_json="$(_zbnc_recursively_look_for package.json)"

# Return if we can't find package.json
[[ "$package_json" = "" ]] && return

_values "$(_zbnc_parse_package_json_for_deps "$package_json")

# Make sure we don't run default completion
custom_completion=true
}

_zbnc_npm_run_completion() {

```

```

# Only run on `npm run ?`
[[ ! "$(_zbnc_no_of_npm_args)" = "3" ]] && return

# Look for a package.json file
local package_json="$(_zbnc_recursively_look_for package.json)"

# Return if we can't find package.json
[[ "$package_json" = "" ]] && return

# Parse scripts in package.json
local -a options
options=(${(f)"$(_zbnc_parse_package_json_for_script_suggestions $package_json)"} )

# Return if we can't parse it
[[ "$#options" = 0 ]] && return

# Load the completions
_describe 'values' options

# Make sure we don't run default completion
custom_completion=true
}

_zbnc_default_npm_completion() {
  compadd -- $(COMP_CWORD=$((CURRENT-1)) \
    COMP_LINE=$BUFFER \
    COMP_POINT=0 \
    npm completion -- "${words[@]}" \
    2>/dev/null)
}

_zbnc_zsh_better_npm_completion() {

# Store custom completion status
local custom_completion=false

# Load custom completion commands
case "$(_zbnc_npm_command)" in

```

```

i|install)
    _zbnc_npm_install_completion
    ;;
r|uninstall)
    _zbnc_npm_uninstall_completion
    ;;
run)
    _zbnc_npm_run_completion
    ;;
esac

# Fall back to default completion if we haven't done a custom one
[[ $custom_completion = false ]] && _zbnc_default_npm_completion
}

compdef _zbnc_zsh_better_npm_completion npm

```

Final `.zshrc`

```

source /usr/share/nvm/init-nvm.sh

source ~/.zsh/1_general.zsh
source ~/.zsh/2_keybindings.zsh
source ~/.zsh/3_aliases.zsh
source ~/.zsh/4_theming.zsh
source ~/.zsh/5_plugins.zsh
source ~/.zsh/6_termwin_func.zsh
source ~/.zsh/7_nvmrc.zsh
source ~/.zsh/8_npm_completion.zsh

```

powerlevel10k prompt theme

```

yay -S zsh-theme-powerlevel10k-git nerd-fonts-jetbrains-mono
echo 'source /usr/share/zsh-theme-powerlevel10k/powerlevel10k.zsh-theme' >> ~/.zshrc

```

Plymouth

Plymouth replaces boot messages with a pretty splash screen.

Installation

```
yay -S plymouth ttf-dejavu
```

Configuration

Enabling Plymouth requires editing the `HOOKS` array in `/etc/mkinitcpio.conf`. Depending on what your initramfs is based on the hooks slightly differ.

Busybox

If your initramfs is busybox-based (default in Arch Linux), add the `plymouth` hook **after** the `base` and `udev` hooks:

ATTENTION: When using the `encrypt` hook to unlock encrypted devices during boot, place it **after** the `plymouth` hook in order to receive a passphrase prompt, e.g.:

```
HOOKS=(base udev plymouth autodetect keyboard keymap consolefont modconf block encrypt
lvm2 filesystems fsck)
```

```
HOOKS=(base udev plymouth ...)
```

Systemd

If your initramfs is systemd-based (i.e. to make use of `systemd-cryptenroll`), add the `plymouth` hook **after** the `base` and `systemd` hooks:

ATTENTION: When using the `sd-encrypt` hook to unlock encrypted devices during boot, place it **after** the `plymouth` hook in order to receive a passphrase prompt, e.g.:

```
HOOKS=(base systemd plymouth autodetect keyboard sd-vconsole modconf block sd-encrypt
lvm2 filesystems fsck)
```

```
HOOKS=(base systemd plymouth ...)
```

Theming

A great selection of Plymouth themes can be found [on the AUR](#).

To list available Plymouth themes (alternatively `ls /usr/share/plymouth/themes`):

```
plymouth-set-default-theme -l
```

Set the Plymouth theme and rebuild (`-R`) the initramfs, e.g. BGRT (keeps firmware logo and displays a spinner in a similar fashion to Windows):

TIP: When unlocking a LUKS encrypted root file system during boot the passphrase prompt replaces the firmware logo. To prevent this install and set the following theme instead:

```
yay -S plymouth-theme-bgrt-better-luks
sudo plymouth-set-default-theme -R bgrt-better-luks
```

```
sudo plymouth-set-default-theme -R bgrt
```

Reboot and enjoy!

Reinstall preparation

Backup

Folders in `/home`

- `.dosbox` (DOSBox configs)
- `.local/bin` (local scripts)
- `.mozilla` (Firefox profile)
- `.ssh` (SSH keys and configs)
- `DOS` (DOSBox root)
- `DOSGAMES` (ISO images)
- Downloads
- Run Sync NAS script to save Documents, Pictures, Music and Video
- Possible Windows game saves beneath `.wine` prefix

Configs

Folding@Home

Folding@Home config: `/etc/foldingathome/config.xml`

HandBrake

Export Configs via GUI

VS Code

Use Cloud Sync extension with GitHub

Qt Wayland

Display server

To utilize Wayland for Qt-based applications install the `qt5-wayland` and `qt6-wayland` packages. Optionally, also install `qt5ct` and `qt6ct` if you're on a non-KDE desktop environment.

Then set the `QT_QPA_PLATFORM` environment variable to:

- `wayland` for the wayland plugin
- `xcb` for the X11 plugin
- `qt6ct` for running Qt6-based applications on non-KDE desktop environments
- `qt5ct` for running Qt5-based applications on non-KDE desktop environments

TIP: It may prove useful to set multiple values separated by `;`. In case one is not available, the next one is used.

```
QT_QPA_PLATFORM="wayland;qt5ct;xcb"
```

Use KDE dialogs

If some applications (e.g. Telegram) don't use default KDE dialogs, set the following environment variable:

```
QT_QPA_PLATFORMTHEME="flatpak"
```

Removing unused packages (orphans)

Orphans can accumulate as packages are removed via `pacman -R` instead of `pacman -Rs`, `makedepends` or packages removing dependencies in subsequent versions. These can accumulate over time and waste space

To recursively remove packages that are not required by other packages (including their configuration files) installed on the systems use the following command:

Parameter	Description
<code>-Q</code>	Query the local database
<code>-t</code>	List packages not required by any other installed package (<code>-tt</code> to also list packages installed as optional dependencies)
<code>-d</code>	List packages installed as dependencies
<code>-q</code>	Show less information (e.g. only package names, useful for piping)
<code>-R</code>	Remove packages
<code>-n</code>	Also remove configuration files
<code>-s</code>	Remove unneeded packages recursively

```
pacman -Qtdq | pacman -Rns -
```