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DOTFILES

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```

$Software\ configuration$

```
Bash
Enable the Bash module, as well as autojump.
\langle \mathit{config/bash.nix} \rangle {\equiv}
{ ... }:
{
  programs.bash = {
     enable = true;
     enableAutojump = true;
  };
}
bat
Enable the bat<sup>1</sup> module.
                                                                                                https://github.com/sharkdp/bat
\langle \mathit{config/bat.nix} \rangle {\equiv}
{ ... }:
{
  programs.bat = {
     enable = true;
     config = {
   For the pager, use less.
\langle config/bat.nix \rangle + \equiv
       pager = "less -FR";
   Set the style to changes.
 \langle config/bat.nix \rangle + \equiv
        style = "changes";
   Use the Monokai Extended theme.
 \langle \mathit{config/bat.nix} \rangle + \equiv
        theme = "Monokai Extended";
```

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```
\langle config/bat.nix \rangle + \equiv }; };
```

Browserpass

```
\langle config/browserpass.nix \rangle \equiv
  { pkgs, ... }:
  {
    home.packages = with pkgs; [
      browserpass
    ];
    programs.browserpass = {
      enable = true;
      browsers = [ "firefox" ];
    };
  }
  bugwarrior\\
\langle config/bugwarrior.nix \rangle \equiv
  { config, pkgs, ... }:
  {
    home.packages = with pkgs; [
      bugwarrior
      pass
    ];
    imports = [
      ./taskwarrior
    xdg.configFile."bugwarrior/bugwarriorrc".text = ''
      [general]
      targets = sportradar_jira
      taskrc = ${config.home.homeDirectory}/.taskrc
      inline_links = False
      annotation_links = True
      annotation_comments = True
      legacy_matching = False
      log.level = DEBUG
      log.file = ${config.home.homeDirectory}/log/bugwarrior.log
      annotation_length = 80
      [sportradar_jira]
      service = jira
      jira.base_uri = https://jira.sportradar.ag
      jira.username = e.bailey
      jira.password = @oracle:eval:pass jira.sportradar.ag
      jira.query = assignee = e.bailey and resolution = unresolved
      jira.version = 8
      jira.add_tags = work
      jira.description_template = {{jiraid}}: {{jirasummary}}
```

```
'';
  }
  direnv
\langle config/direnv.nix \rangle \equiv
  { ... }:
  {
    programs.direnv = {
      enable = true;
      enableZshIntegration = false;
    };
  }
  Emacs
\langle config/emacs/default.nix \rangle \equiv
  { config, lib, pkgs, ... }:
  {
    imports = [
      ./packages.nix
    ];
    home.file.".emacs.d/init.el".source = ./init.el;
    home.sessionVariables = rec {
      EDITOR = ''emacsclient -nw -a \"\"'';
      GIT_EDITOR = EDITOR;
      VISUAL = ''emacsclient -cna \"\"'';
    };
    programs.emacs.enable = true;
    programs.fish.shellAliases = lib.mkIf (config.programs.fish.enable) rec {
      e = "emacsclient -na \"\"";
      ec = e + " -c";
      et = "emacsclient -nw -a \"\\"";
    };
    services.emacs.enable = ! pkgs.stdenv.isDarwin;
```

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}

```
\langle \mathit{config/emacs/packages.nix} \rangle \equiv
{ ... }:
{
  programs.emacs.extraPackages = epkgs: with {
     elpa = epkgs.elpaPackages;
     melpa = epkgs.melpaPackages;
     melpaStable = epkgs.melpaStablePackages;
    # org = epkgs.orgPackages;
  }; (
\langle \mathit{config/emacs/packages.nix} \rangle + \equiv
     with elpa; [
       mmm-mode
       rainbow-mode
     ]
```

```
\langle config/emacs/packages.nix \rangle + \equiv
 ) ++ (
   with melpa; [
     avy
     better-defaults
     # clj-refactor
     # clojure-mode
     # TODO: company-lsp
     # TODO: cquery
     crux
     dhall-mode
     direnv
     dockerfile-mode
     editorconfig
     elixir-mode
     emojify
     enh-ruby-mode
     # FIXME: erlang
     \verb|fill-column-indicator|\\
      fish-mode
     gap-mode
     go-mode
     graphviz-dot-mode
     haskell-mode
     helm-ag
     # TODO: hindent
     hl-todo
     htmlize
     idris-mode
     j-mode
     kubernetes-tramp
     # TODO: lsp-haskell
     # TODO: lsp-mode
     # TODO: lsp-ui
     magit
     markdown-mode
     multiple-cursors
     nix-mode
     paredit
     rainbow-delimiters
      robe
      rust-mode
      rvm
     smex
     tuareg
     use-package
     whitespace-cleanup-mode
     yaml-mode
   1
 ) ++ (
```

```
\langle config/emacs/packages.nix \rangle + \equiv
       with melpaStable; [
         ess
    );
  }
  Init File
\langle config/emacs/init.el \rangle \equiv
  (server-start)
  \langle config/emacs/init.el \rangle + \equiv
  (setq server-window 'pop-to-buffer-same-window)
  \langle config/emacs/init.el \rangle + \equiv
  (column-number-mode 1)
  \langle config/emacs/init.el \rangle + \equiv
  (add-to-list 'exec-path "/run/current-system/sw/bin")
  \langle config/emacs/init.el \rangle + \equiv
  (menu-bar-mode 0)
  (tool-bar-mode ❷)
  \langle config/emacs/init.el \rangle + \equiv
  (let ((font (if (eq system-type 'darwin)
                      "Iosevka-16"
                    "Iosevka-11")))
     (set-face-attribute 'default t :font font)
     (set-frame-font font nil t))
   \langle config/emacs/init.el \rangle + \equiv
  (require 'package)
   \langle config/emacs/init.el \rangle + \equiv
  (setq-default indent-tabs-mode nil
                    package-archives nil
                    package-enable-at-startup nil)
  \langle config/emacs/init.el \rangle + \equiv
  (package-initialize)
  (eval-when-compile
     (require 'use-package))
  (setq-default use-package-always-defer t
                    use-package-always-ensure t)
```

```
https://stackoverflow.com/a/18330742
\langle config/emacs/init.el \rangle + \equiv
(let ((backup-directory (concat user-emacs-directory "backup")))
  (unless (file-exists-p backup-directory)
    (make-directory backup-directory t))
  (setq backup-directory-alist `(("" . ,backup-directory))))
(setq auto-save-default
                                 t
      auto-save-interval
                                 200
      auto-save-timeout
                                 20
      backup-by-copying
                                 t
      delete-by-moving-to-trash t
      delete-old-versions
      kept-new-versions
      kept-old-versions
                                 2
      make-backup-files
                                 t
      vc-make-backup-files
                                 t
      version-control
                                 t)
  https://anirudhsasikumar.net/blog/2005.01.21.html Copyright
©2004-2011 Anirudh Sasikumar. All rights reserved.
\langle config/emacs/init.el \rangle + \equiv
(define-minor-mode sensitive-mode
  "For sensitive files like password lists.
It disables backup creation and auto saving.
With no argument, this command toggles the mode.
Non-null prefix argument turns on the mode.
Null prefix argument turns off the mode."
  ;; The initial value.
  nil
  ;; The indicator for the mode line.
  ;; The minor mode bindings.
  (if (symbol-value sensitive-mode)
      (progn
        ;; disable backups
        (set (make-local-variable 'backup-inhibited) t)
        ;; disable auto-save
        (if auto-save-default
             (auto-save-mode -1)))
    ;; resort to default value of backup-inhibited
    (kill-local-variable 'backup-inhibited)
    ;; resort to default auto save setting
    (if auto-save-default
        (auto-save-mode 1))))
\langle config/emacs/init.el \rangle + \equiv
(dolist (pattern '("^\\(/dev/shm/\\|/tmp/\\)"
                    "\\.\\(enc\\|gpg\\|hashedPassword\\)$"))
  (add-to-list 'auto-mode-alist (cons pattern 'sensitive-mode)))
```

```
\langle config/emacs/init.el \rangle + \equiv
(setq custom-file "~/.emacs.d/private/local/custom.el")
\langle config/emacs/init.el \rangle + \equiv
(load-theme 'wombat)
\langle config/emacs/init.el \rangle + \equiv
(global-set-key (kbd "C-x C-k") 'kill-this-buffer)
(global-set-key (kbd "s-u") 'revert-buffer)
\langle config/emacs/init.el \rangle + \equiv
(setq c-default-style
                                "k&r"
       c-basic-offset
       emacs-lisp-mode-hook '(fci-mode paredit-mode
                                  rainbow-delimiters-mode)
       js-indent-level
       text-mode-hook
                                 '(text-mode-hook-identify))
\langle config/emacs/init.el \rangle + \equiv
(setq-default fill-column 80)
\langle config/emacs/init.el \rangle + \equiv
(org-babel-do-load-languages
 'org-babel-load-languages
 '((shell . t)))
\langle config/emacs/init.el \rangle + \equiv
(use-package avy
  :demand
  :config
  (global-set-key (kbd "C-;") 'avy-goto-char)
  (global-set-key (kbd "C-1") 'avy-goto-char-2)
  (global-set-key (kbd "M-g f") 'avy-goto-line))
\langle config/emacs/init.el \rangle + \equiv
(use-package crux
  :demand
  :config (global-set-key (kbd "C-a") 'crux-move-beginning-of-line))
\langle config/emacs/init.el \rangle + \equiv
(use-package editorconfig
  :ensure t
  :config
  (editorconfig-mode 1))
\langle config/emacs/init.el \rangle + \equiv
(use-package emojify-mode
  :demand
  :config
  (global-emojify-mode)
  (global-emojify-mode-line-mode))
```

```
\langle config/emacs/init.el \rangle + \equiv
(use-package helm
  :demand
  :config
  (global-set-key (kbd "M-s-f") 'helm-do-grep-ag)
  (global-set-key (kbd "M-s-f") 'helm-do-grep-ag))
\langle config/emacs/init.el \rangle + \equiv
(use-package hl-todo
  :demand
  :config (global-hl-todo-mode t))
\langle config/emacs/init.el \rangle + \equiv
(use-package magit
  :demand
  :config (global-magit-file-mode t))
\langle config/emacs/init.el \rangle + \equiv
(use-package multiple-cursors
  :demand
  :config (global-set-key (kbd "C-S-c C-S-c") 'mc/edit-lines))
\langle config/emacs/init.el \rangle + \equiv
(use-package nix-mode
  :mode ("\\.nix\\'"))
\langle config/emacs/init.el \rangle + \equiv
(use-package noweb-mode
  :load-path "/run/current-system/sw/share/emacs/site-lisp"
  :mode ("\\.nw\\'")
  :demand)
\langle config/emacs/init.el \rangle + \equiv
(use-package robe
  :demand
  :mode ("\\.rb\\\"))
\langle config/emacs/init.el \rangle + \equiv
(use-package rvm
  :ensure t)
\langle config/emacs/init.el \rangle + \equiv
(use-package smex
  :demand
  :config
  (global-set-key (kbd "M-x") 'smex)
  (global-set-key (kbd "M-X") 'smex-major-mode-commands)
  (global-set-key (kbd "C-c C-c M-x") 'execute-extended-command))
\langle config/emacs/init.el \rangle + \equiv
(use-package tuareg
  :mode ("\\.ml\\'" "\\.mli\\'"))
\langle config/emacs/init.el \rangle + \equiv
(use-package whitespace-cleanup-mode
  :demand
  :config (global-whitespace-cleanup-mode t))
```

```
Firefox
\langle \mathit{config/firefox.nix} \rangle \equiv
  { pkgs, ... }:
  {
    programs.firefox = {
      enable = true;
      extensions = with (import <nur> { inherit pkgs; }).repos.rycee.firefox-addons; [
        https-everywhere
        privacy-badger
      ];
    };
  }
  fish
\langle config/fish/default.nix \rangle \equiv
  { lib, pkgs, ... }:
  {
    imports = [
      ./abbrs.nix
      ./aliases.nix
    ];
    home = {
      packages = with pkgs; [
        autojump
      ];
      sessionVariables = {
        SHELL = "fish";
        TERMINAL = "kitty";
      };
    };
    programs.fish = let inherit (lib.strings) fileContents; in {
      enable = true;
      interactiveShellInit = fileContents ./interactiveShellInit.fish;
      promptInit = ''
        ${fileContents ./sushi/fish_prompt.fish}
        ${fileContents ./sushi/fish_right_prompt.fish}
      shellInit = fileContents ./shellInit.fish;
    };
  }
```

```
\langle config/fish/abbrs.nix \rangle \equiv
{ ... }:
{
  programs.fish.shellAbbrs = rec {
    # Kubernetes
    kc = "kubectl";
    kns = "kubens";
    kt = "kubetail";
    # Nix
    nb = "nix build";
    nbn = "${nb} --no-link";
    # ripgrep
    rga = "rg --hidden --iglob !.git";
    rgf = "rg -F";
    rgi = "rg -i";
    rgn = "rg --no-heading";
    rgs = "rg -S";
    # tree
    trea = "tree -a";
  };
}
\langle config/fish/aliases.nix \rangle \equiv
{ ... }:
{
  programs.fish.shellAliases = rec {
    gpg = "gpg2";
    k = "clear";
    1 = "ls -Glah";
    11 = "ls -Glh";
    ls = "ls -G";
    # Old Darwin habits
    pbcopy = "xclip -sel clipboard";
    pbpaste = "${pbcopy} -o";
  };
}
```

```
\langle config/fish/shellInit.fish\rangle \equiv
for p in /run/current-system/sw/bin ~/bin
    if not contains $p $fish_user_paths
        set -U fish_user_paths $p $fish_user_paths
    end
end
set -U fish_user_paths /run/wrappers/bin $fish_user_paths
function fish_title
  echo "$PWD | $_" | sed "s | $HOME | ~ | g"
\langle config/fish/interactiveShellInit.fish \rangle \equiv
function clone
  function __update
    test -d $argv[1]; and cd $argv[1]; and git fetch --all; and git pull
  end
  function __usage
    echo "Usage: clone [username] [repository] [[destination]]"
  set --local num_args (count $argv)
  if test $num_args -ge 2
    set --local user $argv[1]
    set --local repo $argv[2]
    if test $num_args -eq 2
      set dest ~/src/$user/$repo
    else if test $num_args -eq 3
      set dest $argv[3]/$user/$repo
      __usage
    end
    echo $dest
    git clone git@github.com:$user/$repo.git $dest; or __update $dest; or __usage
  else
    __usage
  end
end
```

```
\langle config/fish/interactiveShellInit.fish \rangle + \equiv
function latest -d 'Print the latest tag (on GitHub) for a given user and repo.'
  # TODO: __usage
  set --local num_args (count $argv)
  if test $num_args -eq 2
    set --local user $argv[1]
    set --local repo $argv[2]
    http https://api.github.com/repos/$user/$repo/tags | jq '.[0].name'
  end
end
\langle config/fish/interactiveShellInit.fish\rangle + \equiv
command -sq fluidsynth; and function playmidi
    fluidsynth -i ~/lib/arachno-soundfont/Arachno\ SoundFont\ -\ Version\ 1.0.sf2 $argv
end
\langle config/fish/interactiveShellInit.fish \rangle + \equiv
command -sq kitty; and function icat
    kitty +kitten icat
end
```

```
\langle config/fish/interactiveShellInit.fish \rangle + \equiv
command -sq kubectl; and begin
    function kcexec
        argparse -N 2 --name=kcexec 'r/replica=' -- $argv
        or return
        if not set -q _flag_replica
            set -l _flag_replica 0
        end
        kubectl exec -it (kubectl get pod -o jsonpath="{.items[$_flag_replica].metadata.name}" -l app.kubernetes.io/n
    end
    function kcnodepods -d 'List all pods on a given node'
        argparse --name=kcnodepods \
        -N 1 -X 1 \
        'n/namespace=?' \
        'w/watch' \
        -- $argv
        or return
        set -1 kubectl_flags
        if set -q _flag_namespace
            set kubectl_flags $kubectl_flags --namespace=$_flag_namespace
        else
            set kubectl_flags $kubectl_flags --all-namespaces
        end
        if set -q _flag_watch
            set kubectl_flags $kubectl_flags --watch
        end
        set kubectl_flags $kubectl_flags --field-selector=spec.nodeName=$argv[1]
        eval kubectl get pods $kubectl_flags
    end
    function cpo -d 'Get the name of the Cilium pod running on a given node'
        command kubectl get pods \
        --field-selector spec.nodeName=$argv[1] \
        --namespace kube-system \
        --output jsonpath='{.items[0].metadata.name}' \
        --selector k8s-app=cilium
    function cpods -d 'Get the name of every Cilium pod'
        command kubectl get pods \
        --namespace kube-system \
        --output jsonpath='{range .items[*]}{@.metadata.name}{"\n"}' \
        --selector k8s-app=cilium
    end
    # TODO: Add option to print server versions too.
    function k8s::versions
        printf "kubectl %s\n" (command kubectl version --client --short)
        printf "helm %s\n" (command helm version --client --short)
```

```
command helmfile --version
         printf "kops %s\n" (command kops version)
    end
end
\langle config/fish/interactiveShellInit.fish \rangle + \equiv
# FIXME: functions rvm >/dev/null 2>&1; and rvm default
\langle \mathit{config/fish/interactiveShellInit.fish}\rangle + \equiv
if string match -r '.*k8s-\d+$' "$buildInputs"
    set fish_greeting (k8senv)
else
    set fish_greeting
end
\langle config/fish/interactiveShellInit.fish \rangle + \equiv
command -sq task; and command -sq jq; and function tj \
  -d 'Open the Jira ticket associated with a Taskwarrior task'
  test (count $argv) -ne 1; and return
  open (task $argv[1] export | jq -r '.[0].jiraurl')
end
```

```
\langle config/fish/sushi/fish\_prompt.fish \rangle \equiv
function fish_prompt
    set -1 code $status
    if set -q IN_NIX_SHELL
        set symbol "λΠ "
        set symbol "λ "
    end
    if git::is_repo
        set -1 branch (git::branch_name ^/dev/null)
        set -1 ref (git show-ref --head --abbrev | awk '{print substr($0,0,7)}' | sed -n 1p)
        if git::is_stashed
            echo -n -s (white)"^"(off)
        echo -n -s (red)"("(off)
        if git::is_dirty
            printf (white)"*"(off)
        if command git symbolic-ref HEAD > /dev/null ^/dev/null
            if git::is_staged
                printf (cyan)"$branch"(off)
            else
                printf (yellow)"$branch"(off)
            end
        else
            printf (dim)"$ref"(off)
        end
        for remote in (git remote)
            set -1 behind_count (echo (command git rev-list $branch..$remote/$branch ^/dev/null | wc -1 | tr -d " "))
            set -1 ahead_count (echo (command git rev-list $remote/$branch..$branch ^/dev/null | wc -1 | tr -d " "))
            if test $ahead_count -ne 0; or test $behind_count -ne 0; and test (git remote | wc -1) -gt 1
                echo -n -s " "(orange)$remote(off)
            end
            if test $ahead_count -ne 0
                echo -n -s (white)" +"$ahead_count(off)
            if test $behind_count -ne 0
                echo -n -s (white)" -"$behind_count(off)
            end
        end
        echo -n -s (red)") "(off)
    end
    if test "$code" = 0
        echo -n -s (red)"$symbol"(off)
    else
```

```
echo -n -s (dim)"$symbol"(off)
   end
end
\langle \mathit{config/fish/sushi/fish\_right\_prompt.fish} \rangle \equiv
# ----- [ Colors ]
function orange
   set_color -o ee5819
end
function yellow
  set_color -o b58900
end
function red
   set_color -o d30102
end
function cyan
   set_color -o 2aa198
end
function white
   set_color -o fdf6e3
end
function dim
   set_color -o 4f4f4f
function off
   set_color -o normal
```

```
\langle config/fish/sushi/fish\_right\_prompt.fish\rangle + \equiv
# ------[ Git ]
function git::is_repo
   test -d .git; or command git rev-parse --git-dir >/dev/null ^/dev/null
end
function git::branch_name
   git::is_repo; and begin
       command git symbolic-ref --short HEAD ^/dev/null;
       or command git show-ref --head -s --abbrev | head -n1 ^/dev/null
   end
end
function git::is_dirty
   git::is_repo; and not command git diff --no-ext-diff --quiet --exit-code
end
function git::is_staged
   git::is_repo; and begin
       not command git diff --cached --no-ext-diff --quiet --exit-code
   end
end
function git::is_stashed
   git::is_repo; and begin
       command git rev-parse --verify --quiet refs/stash >/dev/null
end
\langle config/fish/sushi/fish\_right\_prompt.fish\rangle + \equiv
# ----- [ AWS ]
function aws::current_profile
   if set -q AWS_PROFILE
       printf "$AWS_PROFILE"
   else if set -q AWS_DEFAULT_PROFILE
       printf "$AWS_DEFAULT_PROFILE"
   end
end
```

```
\langle config/fish/sushi/fish\_right\_prompt.fish\rangle + \equiv
# ------ [ Kubernetes ]
function k8s::current_context
   command kubectl config current-context
end
function k8s::current_namespace
   command kubectl config view --minify -o jsonpath='{.contexts[0].context.namespace}'
end
function k8s::current_user
   command kubectl config view --minify -o jsonpath='{.users[0].name}' \
       string replace "@sportradar.com" ""
end
\langle config/fish/sushi/fish\_right\_prompt.fish \rangle + \equiv
# ----- [ Right Prompt ]
function fish_right_prompt
   set -1 cwd (basename (prompt_pwd))
   if git::is_repo
       set root_folder (command git rev-parse --show-toplevel ^/dev/null)
       set parent_root_folder (dirname $root_folder)
       set cwd (echo $PWD | sed -e "s|$parent_root_folder/||")
   end
   printf (yellow)"("(dim)$cwd(yellow)") "(off)
   set -l aws_profile (aws::current_profile)
   test -n "$aws_profile";
   and printf (dim)"{"(yellow)(aws::current_profile)(dim)"} "(off)
   command -sq kubectl; and begin
       if [ "e.bailey" = (k8s::current_user) ]
           printf (dim)"["(off)
       else
           printf (red)"["(off)
       printf (yellow)(k8s::current_context)(off)
       set -1 k8s_namespace (k8s::current_namespace)
       test -n "$k8s_namespace";
       and printf (dim)"/"(yellow)"$k8s_namespace"(off)
       if [ "e.bailey" = (k8s::current_user) ]
           printf (dim)"] "(off)
       else
           printf (red)"] "(off)
       end
   end
   printf (dim)(date +%H(yellow):(dim)%M(yellow):(dim)%S)(off)
end
```

```
fzf
\langle \mathit{config/fzf.nix} \rangle \equiv
  { ... }:
  {
    programs.fzf = {
       enable = true;
       enableZshIntegration = false;
    };
  }
  Git
\langle \mathit{config/git/default.nix} \rangle \equiv
  { config, lib, pkgs, ... }:
  {
    imports = [
       ./aliases.nix
       ./config.nix
       ./packages.nix
    ];
    programs.git = {
       enable = true;
       ignores = [
         n*~n
         ".DS_Store"
       ];
       lfs.enable = true;
    } // (
       with config.accounts.email.accounts.primary; {
         signing.key = gpg.key;
         userEmail = address;
         userName = realName;
      }
    );
  }
```

```
\langle \mathit{config/git/packages.nix} \rangle \equiv
{ lib, pkgs, ... }:
  home.packages = with pkgs; (
    diff-pdf
      git
      git-lfs
      github-cli
      kdiff3
      nix-prefetch-git
      nix-prefetch-github
      sops
    ] ++ (
      lib.optionals pkgs.stdenv.isLinux [
        # git-cola
      ]
    ) ++ (
      with gitAndTools; [
        git-crypt
        # gitflow
        hub
        lab
      ]
    ) ++ (
      with nodePackages; [
        codeowners
        diff-so-fancy
      ]
   )
 );
}
```

```
\langle config/git/config.nix \rangle \equiv
{ config, ... }:
{
 programs.git.extraConfig = {
   color = {
     diff-highlight = {
       oldNormal = "red bold";
       oldHighlight = "red bold 52";
       newNormal = "green bold";
       newHighlight = "green bold 22";
     };
     diff = {
       meta = 227;
       frag = "magenta bold";
       commit = "227 bold";
       old = "red bold";
       new = "green bold";
       whitespace = "red reverse";
     };
      status = {
       added = "green";
       changed = "yellow";
       untracked = "cyan";
     };
   };
   commit.template = "${config.xdg.dataHome}/git/commit.template";
   core.pager = "diff-so-fancy | less --tabs=4 -RFX";
   credential = {
     helper = "pass-git-helper";
     useHttpPath = true;
   };
   diff = {
     sopsdiffer = {
       textconv = "sops -d";
     };
     tool = "kitty";
   };
   difftool = {
     kitty.cmd = "kitty +kitten diff $LOCAL $REMOTE";
     prompt = false;
      trustExitCode = true;
   };
   rerere.enabled = true;
   ui.color = true;
 };
```

```
xdg.configFile."pass-git-helper/git-pass-mapping.ini" = {
    source = ./git-pass-mapping.ini;
  };
  xdg.dataFile."git/commit.template" = {
  source = ./commit.template;
  };
}
```

```
\langle config/git/aliases.nix \rangle \equiv
{ config, lib, ... }:
{
  programs.fish.shellAbbrs = lib.mkIf (config.programs.fish.enable) {
    g = "git":
    gd = "git d";
    gdc = "git dc";
    gs = "git st";
  programs.git.aliases = rec {
    bm = "branch --merged";
    bnm = "branch --no-merged";
    ca = "commit --amend";
    cam = "${ca} -m";
    can = "${ca} --no-edit";
    cans = "${can} -S";
    cas = "${ca} -S";
    casm = "${cas} -m";
    cm = "commit -m";
    co = "checkout";
    cob = "${co} -b";
    cs = "crypt status";
    cse = "crypt status -e";
    csm = "commit -S -m";
    csu = "crypt status -u";
    d = "diff";
    dc = "diff --cached":
    ds = "diff --stat";
    ffco = "flow feature checkout";
    ffr = "flow feature rebase";
    ffs = "flow feature start";
    frf = "flow release finish";
    frfs = "flow release finish -s";
    frs = "flow release start";
    r = "reset";
    rb = "rebase";
    rba = "rebase --abort";
    rbc = "rebase --continue";
    rbi = "rebase --interactive";
    rbs = "rebase --skip";
    rest = "reset";
    rh = "reset --hard";
    sa = "stash apply";
    sk = "stash --keep-index";
    sl = "stash list";
    sp = "stash pop";
    spa = "stash --patch";
    ss = "stash save";
    st = "status -s";
    stat = "status";
    tree = "log --all --graph --oneline";
  };
}
```

```
GPG
```

```
\langle \mathit{config/gpg.nix} \rangle {\equiv}
  { config, ... }:
  {
     programs.gpg = {
       enable = true;
       settings = {
          default-key = config.accounts.email.accounts.primary.gpg.key;
         keyid-format = "long";
         no-emit-version = true;
       };
     };
     services.gpg-agent = {
       enable = true;
       defaultCacheTtl = 600;
       enableSshSupport = true;
       maxCacheTtl = 3600;
    };
  }
  htop
\langle \mathit{config/htop.nix} \rangle {\equiv}
  { ... }:
  {
     programs.htop.enable = true;
  }
  i\beta
\langle config/i3/default.nix \rangle \equiv
  { config, lib, pkgs, ... }:
  {
   \langle config/i3/default.nix \rangle + \equiv
     home.packages = with pkgs; [
       {\tt flameshot}
       i3lock
       rofi
       rofi-pass
     ];
```

Т

```
o use i3status-rust:
{ pkgs, ... }:
{
  home.packages = with pkgs; [
    font-awesome-ttf
    i3status-rust
  ];
  xsession.windowManager.i3.bars = [
      fonts = [ "Iosevka" "FontAwesome 12" ];
      statusCommand = "${pkgs.i3status-rust}/bin/i3status-rs ${config.xdg.configHome}/i3/status.toml";
      # colors = { ... };
    }
  ];
}
\langle config/i3/default.nix \rangle + \equiv
  services.compton.enable = true;
  xdg.configFile."i3status/config".source = ../i3status/config;
  xdg.dataFile."i3/matrix.png".source = ./matrix.png;
  xsession.enable = true;
  xsession.windowManager.i3 = {
    enable = true;
    config =
      let
```

```
Use Solarized Dark colors.<sup>2</sup>
\langle config/i3/default.nix \rangle + \equiv
       colors = rec {
         background = "#002b36";
          focused = {
           border = "#002b36";
           background = "#586e75";
            text = "#fdf6e3";
           indicator = "#268bd2";
           childBorder = ""; # "#285577";
         };
          focusedInactive = {
           border = "#002b36";
           background = "#073642";
           text = "#839496";
           indicator = "#073642";
           childBorder = ""; # "#5f676a";
          };
         unfocused = {
           border = "#002b36";
           background = "#073642";
           text = "#839496";
           indicator = "#073642";
           childBorder = ""; # "#222222";
         };
         urgent = {
           border = "#002b36";
           background = "#dc322f";
           text = "#fdf6e3";
           indicator = "#002b36";
           childBorder = ""; # "#900000";
         };
       };
       barColors = {
          inherit (colors) background;
          focusedWorkspace = {
           border = "#b58900";
           background = "#b58900";
           text = "#002b36";
         };
          inactiveWorkspace = {
           border = "#073642";
           background = "#002b36";
           text = "#839496";
          separator = "#586e75";
          statusline = "#839496";
         urgentWorkspace = {
           border = "#dc322f";
           background = "#dc322f";
           text = "#fdf6e3";
         };
```

};

2 https://github.com/tobiaszwaszak/ i3wm/blob/9c097f3/config

```
\langle config/i3/default.nix \rangle + \equiv
        modifier = "Mod4";
      in {
        bars =
          {
            fonts = [ "Iosevka" ];
            statusCommand = "${pkgs.i3status}/bin/i3status";
            colors = barColors;
          }
        ];
        inherit colors;
        fonts = [ "Iosevka 12" ];
        keybindings = lib.mkOptionDefault {
          "XF86MonBrightnessDown" = "exec xbacklight -dec 10";
          "XF86MonBrightnessUp" = "exec xbacklight -inc 10";
          "XF86AudioMute" = "exec --no-startup-id amixer set Master 1+ toggle";
          "XF86AudioLowerVolume" = "exec --no-startup-id amixer set Master 5%-";
          "XF86AudioRaiseVolume" = "exec --no-startup-id amixer set Master 5%+";
          "XF86AudioPrev" = "exec playerctl previous";
          # "XF86AudioPlayPause" = "exec playerctl play-pause";
          "XF86AudioPlay" = "exec playerctl play-pause";
          # "XF86AudioPause" = "exec playerctl play-pause";
          "XF86AudioNext" = "exec playerctl next";
          "${modifier}+Escape" = ''
            exec i3lock -i ${config.xdg.dataHome}/i3/matrix.png
          ۱۱;
          "${modifier}+Shift+minus" = "move scratchpad";
          "${modifier}+minus" = "scratchpad show";
          "${modifier}+Tab" = "exec --no-startup-id rofi -show window";
          "${modifier}+d" = ''
            exec --no-startup-id "rofi -combi-modi run,window,drun -show combi -modi combi"
          "${modifier}+space" = ''
            exec --no-startup-id "rofi -combi-modi run,window,drun -show combi -modi combi"
          "Print" = "exec flameshot gui":
        };
        inherit modifier;
      };
 };
}
```

```
Use some Solarized Dark colors for good, bad, anddegraded.<sup>3</sup>
                                                                                   3 https://github.com/tobiaszwaszak/
                                                                                    i3wm/blob/9c097f3/i3status.conf
\langle config/i3status/config\rangle \equiv
  general {
       colors = true
       color_good = "#859900"
       color_bad = "#dc322f"
       color_degraded = "#cb4b16"
       interval = 5
       output_format = "i3bar"
  }
\langle config/i3status/config \rangle + \equiv
  order += "path_exists VPN"
  path_exists VPN {
       format = "□"
       format_down = ""
       path = "/proc/sys/net/ipv4/conf/tun0"
  }
  order += "wireless _first_"
  wireless _first_ {
       format_up = "%essid"
  order += "load"
  load {
       format = "%1min %5min %15min"
       format_above_threshold = "0 %1min %5min %15min 0"
       max_{threshold} = 9
  }
  order += "battery all"
  battery all {
       format = "%status %percentage %remaining"
   Show the battery percentage without decimals.
\langle config/i3status/config\rangle + \equiv
       integer_battery_capacity = true
   Use the last full capacity, instead of the design capacity. Refer to
the man page<sup>4</sup> for more details.
                                                                                   4 https://i3wm.org/i3status/
                                                                                    manpage.html#_battery
\langle config/i3status/config\rangle + \equiv
       last_full_capacity = true
```

```
\langle \mathit{config/i3status/config}\rangle + \equiv
         low_threshold = 10
         status_bat = "\omega"
         status_chr = "4"
         status_full = "O"
         status_unk = "[]"
         threshold_type = "time"
    }
    order += "tztime trondheim"
    tztime trondheim {
         format = "□□ %a %H:%M"
         hide_if_equals_localtime = true
         locale = "nb_NO.UTF-8"
         timezone = "Europe/Oslo"
    }
    order += "tztime local"
    tztime local {
         jq
\langle \mathit{config/jq.nix} \rangle {\equiv}
  { ... }:
  {
    programs.jq.enable = true;
  }
  kitty
\langle \mathit{config/kitty/default.nix} \rangle {\equiv}
  { ... }:
  {
    xdg.configFile."kitty/kitty.conf".source = ./kitty.conf;
    xdg.configFile."kitty/diff.conf".text = ''
    pygments_style monokai
'';
  }
```

```
\langle config/kitty/kitty.conf \rangle \equiv
  font_family Iosevka
  bold_font Iosevka Medium
  italic_font Iosevka Italic
  bold_italic_font Iosevka Medium Italic
  \langle config/kitty/kitty.conf \rangle + \equiv
  font_size 12.0
  scrollback_lines -1
  \langle config/kitty/kitty.conf \rangle + \equiv
  foreground #839496
  background #002b36
  color0 #073642
  color1 #dc322f
  color2 #859900
  color3 #b58900
  color4 #268bd2
  color5 #d33682
  color6 #2aa198
  color7 #eee8d5
  color8 #002b36
  color9 #cb4b16
  color10 #586e75
  color11 #657b83
  color12 #839496
  color13 #6c71c4
  color14 #93a1a1
  color15 #fdf6e3
  \langle config/kitty/kitty.conf \rangle + \equiv
  editor emacsclient -nw -a ""
  \langle config/kitty/kitty.conf \rangle + \equiv
  term xterm
  \langle config/kitty/kitty.conf \rangle + \equiv
  macos_option_as_alt yes
  kitty_mod ctrl+shift
  map kitty_mod+enter new_window_with_cwd
  map kitty_mod+k combine : clear_terminal scrollback active : send_text normal \x0c
  man
\langle config/man.nix \rangle \equiv
  { ... }:
  {
    programs.man.enable = true;
  }
```

```
nixpkgs
\langle \mathit{config/nixpkgs/default.nix} \rangle {\equiv}
  { ... }:
  {
     nixpkgs.config = import ./nixpkgs-config.nix;
    xdg.configFile."nixpkgs/config.nix".source = ./nixpkgs-config.nix;
  }
   \langle config/nixpkgs/nixpkgs-config.nix \rangle \equiv
     allowBroken = false;
    allowUnfree = true;
    allowUnsupportedSystem = false;
  }
  rebar3
\langle config/rebar3.nix \rangle \equiv
  { ... }:
  {
     xdg.configFile."rebar3/rebar.config".text = ''
     {plugins, [rebar3_hex]}.
'';
  }
   Taskwarrior
   Config
\langle config/taskwarrior/default.nix\rangle {\equiv}
  { config, lib, pkgs, ... }:
  {
```

};

SINCE HOME-MANAGER GENERATES A READ-ONLY .taskrc FILE, and using contexts⁵ requires Taskwarrior to be able to modify the it, use the following hacky workaround.

⁵ https://taskwarrior.org/docs/ context.html

```
Set $TASKRC to ~/.taskrc-dirty, which must contain at least
include ~/.taskrc.
\langle config/taskwarrior/default.nix \rangle + \equiv
  home.sessionVariables = {
```

Define short Taskwarrior shell aliases.

TASKRC = "~/.taskrc-dirty";

```
\langle config/taskwarrior/default.nix \rangle + \equiv
 programs.fish.shellAliases = lib.mkIf (config.programs.fish.enable) rec {
   p = "task ls limit:page";
   pp = tbd;
   t = "task limit:page";
   ta = "task add";
   tbd = "task burndown.daily";
   te = "env VISUAL=$EDITOR task edit";
   tl = "task list";
   tm = "task mod";
 };
```

Configure Taskwarrior, using home-manager⁶. $\langle config/taskwarrior/default.nix \rangle + \equiv$

```
programs.taskwarrior = {
  enable = true;
  colorTheme = "solarized-dark-256";
  config = {
    context.other = "jiraurl.none or -work";
    context.work = "jiraurl.any or +work";
    uda = {
      jiracreatedts = {
       label = "Created At";
       type = "date";
      jiradescription = {
       label = "Jira Description";
       type = "string";
      jiraestimate = {
       label = "Estimate";
       type = "numeric";
      jirafixversion = {
       label = "Fix Version";
       type = "string";
      };
      jiraid = {
       label = "Jira Issue ID";
        type = "string";
      jiraissuetype = {
       label = "Issue Type";
        type = "string";
      };
      jirastatus = {
       label = "Jira Status";
        type = "string";
      };
      jirasummary = {
       label = "Jira Summary";
        type = "string";
      jiraurl = {
       label = "Jira URL";
```

type = "string";

}; **}**; **}**; **}**;

6 https://github.com/rycee/ home-manager

exit 0

```
LINK the on-exit Git hook.
                                                                                      ref section
\langle config/taskwarrior/default.nix \rangle + \equiv
  xdg.dataFile."task/hooks/on-exit-git.sh" = {
    executable = true;
    source = ./on-exit-git.sh;
  };
}
on-exit Git hook
FIRST, use a fairly portable Bash shebang, and be safe.<sup>7</sup>
                                                                                      <sup>7</sup>-exit immediately upon failure,
                                                                                      treat -Unset variables as an er-
\langle config/taskwarrior/on-exit-git.sh \rangle \equiv
                                                                                      ror, disable -file globbing, and
                                                                                      fail if any part of a pipeline fails
#! /usr/bin/env bash
                                                                                      (-o pipefail).
set -eufo pipefail
   Run in debug mode<sup>8</sup>, if the environment variable DEBUG is nonempty.
                                                                                      <sup>8</sup> i.e. echo commands
\langle config/taskwarrior/on-exit-git.sh \rangle + \equiv
if [ -n "${DEBUG:-}" ]; then
    set -x
fi
Parse the command line arguments.
   Don't include the api version, rc file, or Taskwarrior version.
                                                                                      N.B. The positional arguments are
                                                                                      formatted as foo:bar, where foo is
api="${1#api:}"
                                                                                      the name of the argument, and bar is
                                                                                      the value.
rc="${4#rc:}"
version="${6#version:}"
   Parse and store the values of the arguments, args, command, and
data directory.
\langle config/taskwarrior/on-exit-git.sh \rangle + \equiv
args="${2#args:}"
command="${3#command:}"
data="${5#data:}"
THROUGHOUT THIS SCRIPT, run git as if it were started in the
Taskwarrior data directory, i.e. git -C "$data".
                                                                                      If there are no changes, exit suc-
                                                                                      cessfully, printing an informative
\langle config/taskwarrior/on-exit-git.sh \rangle + \equiv
                                                                                      message if running in debug mode.
                                                                                      git diff exits with status code 0 if
if git -C "$data" diff --quiet; then
                                                                                      there are no differences between the
    if [ -n "${DEBUG:-}" ]; then
                                                                                      working tree and the index.
         echo 'No changes to commit'
    fi
```

```
If present, stage the changes or die trying.
\langle config/taskwarrior/on\text{-}exit\text{-}git.sh \rangle + \equiv
elif ! git -C "$data" add -A; then
    echo 'Failed to add files to the index'
    exit 100
   Try to commit the changes, or else.
                                                                                     Quietly store the current contents
                                                                                     of the index in a new commit, along
\langle config/taskwarrior/on-exit-git.sh \rangle + \equiv
                                                                                     with a log message describing the
elif ! git -C "$data" commit -qm "$command: ${args#task $command}"; then changes.
    echo 'Failed to record changes to the repository'
    exit 101
   If running in debug mode, print a brief summary of the commit.
\langle config/taskwarrior/on-exit-git.sh \rangle + \equiv
elif [ -n "${DEBUG:-}" ]; then
    git -C "$data" log --oneline -1
```

Bibliography

Rafael J. Wysocki. CPU Performance Scaling - The Linux Kernel documentation. URL https://www.kernel.org/doc/html/v4.19/admin-guide/pm/cpufreq.html#cpu-performance-scaling-in-linux.

To-Do

	ref section															40
_																