ERIC BAILEY

DOTFILES

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Machines

SRUXPS

}

```
NixOS\ configuration
```

```
The SRUXPS configuration is an expression that takes, at least, config, lib, and pkgs.
```

```
\langle machines/sruxps/configuration.nix\ 1\rangle {\equiv}
    { config, lib, pkgs, ... }:
   let
       username = "e.bailey";
   in
   {
       \langle Import\ hardware\ config\ and\ modules\ 2 \rangle
       \langle Set\ the\ location\ to\ MSP\ 3 \rangle
       \langle Configure \ the \ LUKS \ devices \ 4 \rangle
       \langle Link \ some \ extra \ paths \ 5 \rangle
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       \langle Configure\ services\ 13 \rangle
       \langle \mathit{Configure\ user\ 14} \rangle
```

```
Import the hardware config and other Nix modules.
\langle Import\ hardware\ config\ and\ modules\ 2\rangle \equiv
                                                                            (1)
  imports = [
    <nixos-hardware/dell/xps/13-9380>
     ./hardware-configuration.nix
     ../../nix
     ../../modules/common.nix
     ../../modules/location.nix
     ../../modules/nixos.nix
     ../../modules/packages.nix
     <home-manager/nixos>
  ];
                                                                                      Describe the location module
\langle Set \ the \ location \ to \ MSP \ 3 \rangle \equiv
                                                                            (1)
  airportCode = "MSP";
  Configure the LUKS devices.
\langle Configure \ the \ LUKS \ devices \ 4 \rangle \equiv
                                                                            (1)
  boot.initrd.luks.devices = {
    cryptkey.device = "/dev/disk/by-uuid/603b64c6-8544-4b43-9b6a-7d8a08091514";
    cryptroot.device = "/dev/disk/by-uuid/a81783fe-31ec-4762-a845-4b5be1900e61";
    cryptroot.keyFile = "/dev/mapper/cryptkey";
    cryptswap = {
       device = "/dev/disk/by-uuid/565c0358-110e-4279-ba59-619cb2cc1ebf";
       keyFile = "/dev/mapper/cryptkey";
    };
  };
\langle Link \ some \ extra \ paths \ 5 \rangle \equiv
                                                                            (1)
  environment.pathsToLink = [
     "/lib/aspell"
     "/share/emacs/site-lisp"
     "/share/fish"
  ];
\langle \mathit{Configure the file systems 6} \rangle \equiv
                                                                            (1)
  fileSystems."/" = {
    device = "/dev/disk/by-uuid/3e6e5ef8-7c9d-4759-94bd-44ac093add8a";
    fsType = "ext4";
  };
  fileSystems."/boot" = {
    device = "/dev/disk/by-uuid/3898-907E";
    fsType = "vfat";
  };
\langle Configure\ Bluetooth\ 7 \rangle \equiv
                                                                            (1)
  hardware.bluetooth = {
    enable = true;
    extraConfig = "
       [General]
       Enable=Source, Sink, Media, Socket
  };
\langle Configure\ home-manager\ 8\rangle \equiv
                                                                            (1)
  home-manager.useUserPackages = true;
  home-manager.users."${username}" = args:
    import ./home.nix (args // { inherit pkgs; });
```

```
\langle Configure \ networking \ 9 \rangle \equiv
                                                                               (1)
  networking.hostName = "MSP-EBAILEY01";
\langle \mathit{Configure}\ \mathit{Nix}\ 10 \rangle {\equiv}
                                                                               (1)
  nix = {
     nixPath = [
       "nixos-config=/etc/nixos/configuration.nix"
       "nixpkgs-overlays=/etc/nixos/overlays"
     ];
     trustedUsers = [ "root" username ];
  };
\langle Configure \ overlays \ 11 \rangle \equiv
                                                                               (1)
  nixpkgs.overlays =
       path = <nixpkgs-overlays>;
     in
       with builtins;
       map (n: import (path + ("/" + n)))
            filter (
              n: match ".*\\.nix" n \neq null
              || pathExists (path + ("/" + n + "/default.nix"))
            )
               (attrNames (readDir path))
         )
       ++ (
         with (import <nurpkgs> {}).overlays; [
            git
            node
          ]
       );
\langle Configure \ sudo \ 12 \rangle \equiv
                                                                               (1)
  security.sudo = {
     enable = true;
     extraConfig = "
       ${username} ALL=(ALL) NOPASSWD: ALL
  };
\langle Configure \ services \ 13 \rangle \equiv
                                                                               (1)
  services.blueman.enable = true;
  services.fwupd.enable = true;
  # TODO: services.lorri.enable = true;
  services.xserver.monitorSection = "
     DisplaySize 406 228
```

```
\langle Configure \ user \ 14 \rangle \equiv
                                                                              (1)
  users.mutableUsers = false;
  users.users."${username}" = {
     name = username;
     hashedPassword = lib.fileContents (./. + "/secrets/${username}.hashedPassword");
     group = "users";
     extraGroups = [
       "audio"
       "disk"
       "docker"
       "http"
       "networkmanager"
       "systemd-journal"
       "video"
       "wheel"
     ];
     createHome = true;
     uid = 1001;
    home = "/home/${username}";
     shell = "/etc/profiles/per-user/${username}/bin/fish";
  };
home-manager configuration
\langle machines/sruxps/home.nix \ 15 \rangle \equiv
  { lib, pkgs, ... }:
  {
     \langle Import\ various\ program\ configs\ 16 \rangle
     \langle Configure \ the \ primary \ email \ account \ 17 \rangle
     \langle Install\ some\ user\ packages\ 18 \rangle
     _module.args.pkgs = lib.mkForce pkgs;
  }
```

```
\langle Import\ various\ program\ configs\ 16 \rangle \equiv
                                                                               (15)
  imports = [
     ../../config/bash.nix
     ../../config/bat.nix
     ../../config/browserpass.nix
     ../../config/bugwarrior.nix
     ../../config/direnv.nix
     ../../config/emacs
     ../../config/firefox.nix
     ../../config/fish
     ../../config/fzf.nix
     ../../config/git
     ../../config/gpg.nix
     ../../config/htop.nix
     ../../config/i3
     ../../config/jq.nix
     ../../config/kitty
     ../../config/man.nix
     ../../config/nixpkgs
     ../../config/rebar3.nix
     ../../config/taskwarrior
  ];
                                                                                           Configure Vim
\langle Configure \ the \ primary \ email \ account \ 17 \rangle \equiv
                                                                               (15)
  accounts.email.accounts.primary = {
     address = "e.bailey@sportradar.com";
     gpg.key = "EFD6F1EDC84D2FA935E38570462054AB8B682702";
     primary = true;
     realName = "Eric Bailey";
  };
\langle Install\ some\ user\ packages\ 18 \rangle \equiv
                                                                          (15) 19 \triangleright
  home.packages = with pkgs; (
     aws-iam-authenticator
       ec2instanceconnectcli
   Clementine<sup>1</sup> is a great music player.
                                                                                          ¹ https://www.clementine-player.
\langle Install\ some\ user\ packages\ 18 \rangle + \equiv
                                                                    (15) \triangleleft 18 \ 22 \triangleright
       clementine
   I haven't used Dhall in a while, but it's still interesting.
⟨* 20⟩≡
                                                                               21 ⊳
       dhall
       dhall-json
   I might need Docker Compose<sup>2</sup> again someday, but not lately.
                                                                                          2 https://docs.docker.com/compose/
                                                                          ⊲20 25⊳
       docker-compose
\langle Install\ some\ user\ packages\ 18 \rangle + \equiv
                                                                    (15) \triangleleft 19 \ 23 \triangleright
   \mathrm{iw}^3 is useful for trouble
shooting wireless issues, like in Trondheim.
                                                                                          3 https://wireless.wiki.kernel.org/
                                                                                          en/users/documentation/iw
```

 $(15) \triangleleft 22 \ 24 \triangleright$

 $\langle Install\ some\ user\ packages\ 18 \rangle + \equiv$

iw jdk

```
naal<sup>4</sup> is my tool for non-interactive AWS Azure login.
                                                                                             4 https://github.com/yurrriq/naal
\langle Install\ some\ user\ packages\ 18 \rangle + \equiv
                                                                       (15) ⊲23 26⊳
       naal
       networkmanager-openconnect
   It would be cool to play with Next<sup>5</sup> some lazy day.
                                                                                             5 https://next.atlas.engineer/
⟨* 20⟩+≡
                                                                                  \triangleleft 21
       next
\langle Install\ some\ user\ packages\ 18 \rangle + \equiv
                                                                       (15) ⊲24 27⊳
       openconnect
   Pulse
Audio Volume Control<br/>6 is useful for configuring Bluetooth
                                                                                             6 https://freedesktop.org/software/
                                                                                             pulseaudio/pavucontrol/
audio.
\langle Install\ some\ user\ packages\ 18 \rangle + \equiv
                                                                       (15) ⊲ 26 28 ⊳
       pavucontrol
        renderizer
       scc
   More Trondheim wireless debugging...
\langle Install\ some\ user\ packages\ 18 \rangle + \equiv
                                                                            (15) \triangleleft 27
       wirelesstools
       zoom-us
     ] ++ (
       with nodePackages; [
          aws-azure-login
  );
```

Modules

Common

```
This module is a lambda that takes at least pkgs in its arguments.
\langle modules/common.nix 29 \rangle \equiv
                                                                        30⊳
  { pkgs, ... }:
  {
  Configure garbage collection (gc) and my personal Cachix<sup>7</sup>-based
                                                                                 7 https://cachix.org
binaryCaches.
https://yurrriq.cachix.org

    https://yurrriq-nur-packages.cachix.org

\langle \mathit{modules/common.nix}\ 29 \rangle + \equiv
                                                                   ⊲29 31⊳
    nix = {
       binaryCaches = [
         "https://yurrriq.cachix.org"
         "https://yurrriq-nur-packages.cachix.org"
       binaryCachePublicKeys = [
         "yurrriq.cachix.org-1:evpJ5wKluf7Q0Ccv69VkIxCOtHgubrqXlZpp3JAXLBE="
         "yurrriq-nur-packages.cachix.org-1:7kbjuGBUZcWf876g2cdelmIQXrXzOhpMVBqYOyyAv70="
       ];
      gc = {
         automatic = true;
         options = "-delete-older-than 30d";
      };
    };
  Installed the Nerd Fonts patched Iosevka .
                                                                                  Add Nerd Fonts link
\langle modules/common.nix 29 \rangle + \equiv
                                                                   ⊲30 32⊳
                                                                                  Add Iosevka link
    fonts = {
      enableFontDir = true;
       fonts = with pkgs; [
         (nerdfonts.override { withFont = "Iosevka"; })
       ];
    };
  Enable system-wide Bash completion.
\langle modules/common.nix \ 29 \rangle + \equiv
                                                                   ⊲31 33⊳
    programs.bash.enableCompletion = true;
```

```
\langle \mathit{modules/common.nix}\ 29 \rangle + \equiv
                                                                           ⊲32
Packages
\langle modules/packages.nix \ 34 \rangle \equiv
                                                                           35⊳
  { lib, pkgs, ... }:
  {
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                      ⊲34 36⊳
     environment.systemPackages = with pkgs; (
       aspell
         aspellDicts.en
         awscli
         bind
         cachix
         coreutils
         # TODO: cquery
         curl
         expect
         gawk
         gcc
         gnumake
         gnused
         gnutar
         # TODO: graphviz
         gzip
         httpie
         # TODO: http-prompt
         # TODO: idris
         kitty
         moreutils
         neofetch
         nix
         noweb
         pandoc
         prettyping
         ripgrep
         shellcheck
         shfmt
         silver-searcher # TODO: find helm-rg solution
         slack
         spotify
         stow
```

```
\langle modules/packages.nix~34\rangle + \equiv
                                                                         ⊲35 37⊳
            texlive.combine {
              inherit (texlive) scheme-small
                 datetime
                 dirtytalk
                 fmtcount
                 framed
                 fvextra
                 hardwrap
                 ifplatform
                 latexmk
                 minted
                 titlesec
                 todonotes
                 tufte-latex
                 xetex
                 xstring
              inherit noweb;
            }
          )
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                         ⊲36 38⊳
          tree
          unzip
          vim
          watch
          # wipe
       ]
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                         ⊲37 39⊳
     ) ++ (
       with haskellPackages; [
          cabal-install
          cabal2nix
          hpack
          stylish-haskell
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                         ⊲38 40⊳
     ) ++ (
       with nodePackages; [
          # TODO: bash-language-server
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                         ⊲39 41⊳
     ) ++ (
       with python3Packages; [
          pygments
       ]
```

```
\langle modules/packages.nix 34 \rangle + \equiv
                                                                           ⊲40 42⊳
     ) ++ lib.optionals stdenv.isDarwin (
          clementine
          m-cli
          sourcetree
          onyx
       ] ++ (
          with chunkwm; [
            core
            ffm
            tiling
       )
\langle modules/packages.nix~34\rangle + \equiv
                                                                           <41 43⊳
     ) ++ lib.optionals stdenv.isLinux [
       gnome3.networkmanagerapplet
       hicolor-icon-theme
       keybase-gui
       libreoffice
       qpdfview
       playerctl
       psmisc
\langle modules/packages.nix~34\rangle + \equiv
                                                                           42 44 ⊳
          signal-desktop.override {
            spellcheckerLanguage = "en_US";
       )
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                           ⊲43 45⊳
       thunderbird
       volumeicon
       xclip
       xorg.xbacklight
     ];
\langle modules/packages.nix \ 34 \rangle + \equiv
                                                                                 ⊲44
  }
Location
\langle modules/location.nix \ 46 \rangle \equiv
                                                                                 47⊳
  { config, lib, ... }:
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                           46 48 ⊳
  let
     airportCode = config.airportCode;
  in
  {
```

```
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                     447 49 ⊳
    options.airportCode = lib.mkOption {
       default = "MSP";
       type = lib.types.enum [ "ATL" /* "LHR" */ "LJU" "MSP" "TRD" ];
    };
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                      ⊲48 50⊳
    config = lib.mkMerge [
  The Sportradar office in Minneapolis.
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                      ⊲49 51⊳
         lib.mkIf (airportCode = "MSP") {
           location = {
              latitude = 44.98;
              longitude = -93.27;
           };
           time.timeZone = "America/Chicago";
  Cook Out on Ponce de Leon Ave.
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                      ⊲50 52⊳
         lib.mkIf (airportCode = "ATL") {
           location = {
              latitude = 33.77;
              longitude = -84.37;
           time.timeZone = "America/New_York";
         }
       )
  The Sportradar office in London.
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                      ⊲51 53⊳
         lib.mkIf (airportCode = "LHR") {
           location = {
              latitude = 51.51;
              longitude = -0.09;
           time.timeZone = "Europe/London";
         }
       )
  The Sportradar office in Ljubljana.
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                      ⊲52 54⊳
         lib.mkIf (airportCode = "LJU") {
           location = {
              latitude = 46.09;
              longitude = 14.55;
           };
           time.timeZone = "Europe/Ljubljana";
       )
```

```
The Sportradar office in Trondheim.
\langle modules/location.nix \ 46 \rangle + \equiv
                                                                          ⊲ 53 55 ⊳
         lib.mkIf (airportCode = "TRD") {
            location = {
               latitude = 63.43;
              longitude = 10.40;
            time.timeZone = "Europe/Oslo";
         }
       )
\langle modules/location.nix\ 46 \rangle + \equiv
                                                                               ⊲54
     ];
  }
NixOS
\langle modules/nixos.nix 56 \rangle \equiv
                                                                               57⊳
  { pkgs, ... }:
  {
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                          456 58⊳
     imports = with (import <nurpkgs> {}).modules; [
       pass
       tomb
     ];
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                          457 59 ⊳
    boot = {
       cleanTmpDir = true;
       loader = {
         systemd-boot.enable = true;
         efi.canTouchEfiVariables = true;
       };
     };
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                          458 60 ⊳
     i18n = {
       # consoleFont = "latarcyrheb-sun32";
       consoleFont = "Lat2-Terminus16";
       consoleKeyMap = "us";
       defaultLocale = "en_US.UTF-8";
    };
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                          459 61⊳
     location.provider = "manual";
```

```
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                    ⊲60 62⊳
    networking.networkmanager.enable = true;
\langle modules/nixos.nix \; 56 \rangle + \equiv
                                                                    ⊲61 63 ⊳
    nixpkgs.config.allowUnfree = true;
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                    programs = {
      pass = {
        enable = true;
         genphrase = true;
         git-helper = true;
        otp = true;
        update = true;
      };
      tomb = {
        enable = true;
         resize = true;
        slam = true;
      };
    };
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                    ⊲63 65⊳
    services = {
      logind.lidSwitch = "hibernate";
      kbfs.enable = true;
       redshift = {
         enable = true;
         temperature.night = 2300;
      unclutter = {
         enable = false; # FIXME
         extraOptions = [ "exclude-root" "ignore-scrolling" ];
         # FIXME
         threeshold = 1;
        timeout = 1;
      };
```

```
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                  ⊲64 66 ⊳
      xserver = {
        enable = true;
        autorun = true;
        desktopManager = {
           gnome3.enable = false;
           xterm.enable = false;
           default = "none";
        };
        displayManager.lightdm.enable = true;
        layout = "us";
        libinput = {
           enable = true;
           accelSpeed = "1.0";
           disableWhileTyping = true;
           naturalScrolling = false;
           tapping = true;
        };
        multitouch = {
           enable = true;
           ignorePalm = true;
           invertScroll = true;
        };
         videoDrivers = [
           "intel"
         ];
        windowManager = {
           default = "i3";
           i3.enable = true;
        xkbOptions = "ctrl:nocaps,compose:ralt";
      };
    };
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                  ⊲65 67⊳
    hardware.pulseaudio = {
      enable = true;
      extraModules = [ pkgs.pulseaudio-modules-bt ];
      package = pkgs.pulseaudioFull;
    };
    sound.enable = true;
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                  ⊲66 68⊳
    system.stateVersion = "19.09";
```

```
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                  ⊲67 69⊳
    virtualisation.docker.enable = true;
\langle modules/nixos.nix 56 \rangle + \equiv
                                                                       ⊲68
Darwin
\langle modules/darwin.nix 70 \rangle \equiv
                                                                       71 ⊳
  { pkgs, ... }:
  {
\langle modules/darwin.nix 70 \rangle + \equiv
                                                                  ⊲70 72⊳
    nixpkgs.config.allowUnfree = true;
\langle modules/darwin.nix 70 \rangle + \equiv
                                                                  ⊲71 73⊳
    services.chunkwm = {
      enable = true;
      extraConfig = "
        chunkc core::log_file /usr/local/var/log/chunkwm.log
         chunkc core::log_level info
        chunkc tiling::rule -owner "Cisco AnyConnect Secure Mobility Client" -state float &
        chunkc tiling::rule -owner Emacs -except "^$" -state tile &
      package = pkgs.chunkwm.core;
      plugins = {
        dir = "/run/current-system/sw/bin/chunkwm-plugins/";
         list = [ "ffm" "tiling" ];
         "tiling".config = "
           chunkc set desktop_padding_step_size
           chunkc set desktop_gap_step_size
                                                        0
           chunkc set global_desktop_mode
                                                        bsp
           chunkc set global_desktop_offset_top
                                                        0
           chunkc set global_desktop_offset_bottom
                                                        0
           chunkc set global_desktop_offset_left
                                                        0
           chunkc set global_desktop_offset_right
           chunkc set global_desktop_offset_gap
                                                        0
           chunkc set bsp_spawn_left
                                                        1
           chunkc set bsp_optimal_ratio
                                                        1.618
           chunkc set bsp_split_mode
                                                        optimal
           chunkc set bsp_split_ratio
                                                        0.66
           chunkc set window_focus_cycle
                                                        all
           chunkc set mouse_follows_focus
                                                        1
           chunkc set window_region_locked
                                                        1
      };
    };
```

```
\langle modules/darwin.nix 70 \rangle + \equiv
                                                              ⊲72 74⊳
    services.skhd = {
      enable = true;
      package = pkgs.skhd;
      skhdConfig = "
        alt - space : /Applications/kitty.app/Contents/MacOS/kitty -single-instance -d ~
        ctrl + alt + cmd - up
                                : chunkc tiling::window -warp north
        ctrl + alt + cmd - right : chunkc tiling::window -warp east
        ctrl + alt + cmd - down : chunkc tiling::window -warp south
        ctrl + alt + cmd - left : chunkc tiling::window -warp west
        shift + alt + cmd - up : chunkc tiling::window -focus north
        shift + alt + cmd - right : chunkc tiling::window -focus east
        shift + alt + cmd - down : chunkc tiling::window -focus south
        shift + alt + cmd - left : chunkc tiling::window -focus west
        ctrl + alt + cmd - e : chunkc tiling::desktop -equalize
        ctrl + alt + cmd - f : chunkc tiling::window -toggle float
        ctrl + alt + cmd - m : chunkc tiling::window -toggle fullscreen
        shift + cmd - 1 : chunkc tiling::window -send-to-desktop 1
        shift + cmd - 2 : chunkc tiling::window -send-to-desktop 2
        shift + cmd - 3 : chunkc tiling::window -send-to-desktop 3
        shift + cmd - 4 : chunkc tiling::window -send-to-desktop 4
        shift + cmd - 5 : chunkc tiling::window -send-to-desktop 5
        shift + cmd - 6 : chunkc tiling::window -send-to-desktop 6
    };
                                                                             Dig through https://github.
  Set AppleKeyboardUIMode = 3 to enable full keyboard access, e.g.
                                                                             com/mathiasbynens/dotfiles/
                                                                             blob/master/.macos
tab in dialogs. Disable press-and-hold, in favor of key repeat.
\langle modules/darwin.nix 70 \rangle + \equiv
                                                              ⊲73 75⊳
    system.defaults.NSGlobalDomain = {
      AppleKeyboardUIMode = 3;
      ApplePressAndHoldEnabled = false;
      InitialKeyRepeat = 10;
      KeyRepeat = 1;
      NSAutomaticDashSubstitutionEnabled = false;
      NSAutomaticQuoteSubstitutionEnabled = false;
      NSAutomaticSpellingCorrectionEnabled = true;
      NSNavPanelExpandedStateForSaveMode = true;
      NSNavPanelExpandedStateForSaveMode2 = true;
    };
\langle modules/darwin.nix 70 \rangle + \equiv
                                                              ⊲74 76⊳
    system.defaults.dock = {
      autohide = true;
      mru-spaces = false;
      orientation = "right";
      showhidden = true;
    };
```

$Software\ configuration$

```
Bash
```

```
Enable the Bash module, as well as autojump.
\langle config/bash.nix 79 \rangle \equiv
  { ... }:
  {
     programs.bash = {
        enable = true;
        enableAutojump = true;
     };
  }
bat
Enable the bat<sup>8</sup> module.
                                                                                                   8 https://github.com/sharkdp/bat
\langle config/bat.nix | 80 \rangle \equiv
                                                                                        81 ⊳
  { ... }:
   {
     programs.bat = {
        enable = true;
        config = {
   For the pager, use less.
\langle config/bat.nix \ 80 \rangle + \equiv
                                                                                  ⊲80 82⊳
           pager = "less -FR";
   Set the style to changes.
\langle \mathit{config/bat.nix} \ 80 \rangle + \equiv
                                                                                  ⊲81 83⊳
           style = "changes";
   Use the Monokai Extended theme.
\langle \mathit{config/bat.nix} \ 80 \rangle + \equiv
                                                                                  ⊲82 84⊳
          theme = "Monokai Extended";
\langle \mathit{config/bat.nix} \ 80 \rangle + \equiv
                                                                                        ⊲83
       };
     };
  }
```

Browserpass

./taskwarrior

];

```
\langle config/browserpass.nix 85 \rangle \equiv
   { pkgs, ... }:
   {
     home.packages = with pkgs; [
        browserpass
      ];
     programs.browserpass = {
        enable = true;
        browsers = [ "firefox" ];
     };
   }
bugwarrior\\
\langle \mathit{config/bugwarrior}.\mathit{nix} \ 86 \rangle {\equiv}
                                                                                         87⊳
   { config, pkgs, ... }:
   {
\langle config/bugwarrior.nix \ 86 \rangle + \equiv
                                                                                   ⊲86 88⊳
     home.packages = with pkgs; [
        bugwarrior
        pass
     ];
\langle \mathit{config/bugwarrior}.\mathit{nix} \ 86 \rangle + \equiv
                                                                                   ⊲87 89⊳
      imports = [
```

```
\langle config/bugwarrior.nix 86 \rangle + \equiv
                                                                   ⊲88 90⊳
    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 OR reporter = e.bailey) OR (summary ~ e.baley OR description ~ e.bailey OR c
      jira.version = 8
      jira.add_tags = work
      jira.description_template = {{jiraid}}: {{jirasummary}}
\langle \mathit{config/bugwarrior}.\mathit{nix} \ 86 \rangle + \equiv
                                                                       ⊲89
direnv
\langle config/direnv.nix 91 \rangle \equiv
  { ... }:
  {
    programs.direnv = {
      enable = true;
      enableZshIntegration = false;
    };
  }
```

Emacs

```
\langle config/emacs/default.nix 92 \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;
  }
\langle config/emacs/packages.nix 93 \rangle \equiv
                                                                        94⊳
  { ... }:
  {
    programs.emacs.extraPackages = epkgs: with {
      elpa = epkgs.elpaPackages;
      melpa = epkgs.melpaPackages;
      melpaStable = epkgs.melpaStablePackages;
       # org = epkgs.orgPackages;
    }; (
\langle \mathit{config/emacs/packages.nix} \ 93 \rangle + \equiv
                                                                   ⊲93 95⊳
      with elpa; [
        mmm-mode
         rainbow-mode
       1
```

```
\langle \mathit{config/emacs/packages.nix} \ 93 \rangle + \equiv
                                                                ⊲94 96⊳
    ) ++ (
      with melpa; [
        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
        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: 1sp-haskell
        # TODO: 1sp-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
    ) ++ (
```

```
\langle config/emacs/packages.nix 93 \rangle + \equiv
                                                                                 ⊲95
       with melpaStable; [
          ess
        ]
     );
  }
Init File
\langle config/emacs/init.el 97 \rangle \equiv
                                                                                 98⊳
  (server-start)
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                            ⊲97 99⊳
   (setq server-window 'pop-to-buffer-same-window)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                          ⊲98 100⊳
  (column-number-mode 1)
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                          ⊲99 101⊳
  (add-to-list 'exec-path "/run/current-system/sw/bin")
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                         ⊲100 102⊳
  (menu-bar-mode 0)
  (tool-bar-mode 0)
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                         ⊲101 103⊳
  (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 97 \rangle + \equiv
                                                                         ⊲102 104⊳
   (require 'package)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                         ⊲103 105⊳
   (setq-default indent-tabs-mode nil
                    package-archives nil
                    package-enable-at-startup nil)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                         ⊲104 106⊳
   (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 97 \rangle + \equiv
                                                               ⊲105 107⊳
  (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
                                     +
         delete-by-moving-to-trash t
         delete-old-versions
         kept-new-versions
                                     6
                                     2
         kept-old-versions
         make-backup-files
                                     t
         vc-make-backup-files
         version-control
                                     t)
  https://anirudhsasikumar.net/blog/2005.01.21.html Copyright
©2004-2011 Anirudh Sasikumar. All rights reserved.
\langle config/emacs/init.el~97 \rangle + \equiv
                                                               ⊲106 108⊳
  (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. " \ensuremath{\text{\square}} "
    ;; The minor mode bindings.
    nil
    (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 97 \rangle + \equiv
                                                               ⊲107 109⊳
  (dolist (pattern '("^\\(/dev/shm/\\|/tmp/\\)"
                       "\\.\\(enc\\|gpg\\|hashedPassword\\)$"))
    (add-to-list 'auto-mode-alist (cons pattern 'sensitive-mode)))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                               ⊲108 110⊳
  (setq custom-file "~/.emacs.d/private/local/custom.el")
```

```
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲109 111 ⊳
  (load-theme 'wombat)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲110 112⊳
   (global-set-key (kbd "C-x C-k") 'kill-this-buffer)
  (global-set-key (kbd "s-u") 'revert-buffer)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲111 113⊳
                                   "k&r"
  (setq c-default-style
         c-basic-offset
         emacs-lisp-mode-hook '(fci-mode paredit-mode
                                     rainbow-delimiters-mode)
         is-indent-level
         text-mode-hook
                                   '(text-mode-hook-identify))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲112 114⊳
  (setq-default fill-column 80)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲113 115⊳
  (org-babel-do-load-languages
    'org-babel-load-languages
    '((shell . t)))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲114 116⊳
  (use-package avy
     :demand
     :config
     (global-set-key (kbd "C-;") 'avy-goto-char)
     (global-set-key (kbd "C-'") 'avy-goto-char-2)
     (global-set-key (kbd "M-g f") 'avy-goto-line))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲115 117⊳
  (use-package crux
     :demand
     :config (global-set-key (kbd "C-a") 'crux-move-beginning-of-line))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲116 118⊳
  (use-package editorconfig
     :ensure t
     :config
     (editorconfig-mode 1))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                     ⊲117 119⊳
  (use-package emojify
     :demand
     :config
     (global-emojify-mode)
     (global-emojify-mode-line-mode))
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                      ⊲118 120⊳
   (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~97 \rangle + \equiv
                                                                      ⊲119 121⊳
  (use-package hl-todo
     :demand
     :config (global-hl-todo-mode t))
```

```
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                        ⊲120 122⊳
  (use-package magit
     :demand
     :config (global-magit-file-mode t))
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                        ⊲121 123⊳
  (use-package multiple-cursors
     :demand
     :config (global-set-key (kbd "C-S-c C-S-c") 'mc/edit-lines))
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                        ⊲122 124⊳
  (use-package nix-mode
     :mode ("\\.nix\\'"))
\langle \mathit{config/emacs/init.el~97} \rangle + \equiv
                                                                        ⊲123 125⊳
  (use-package noweb-mode
     :load-path "/run/current-system/sw/share/emacs/site-lisp"
     :mode ("\\.nw\\'")
     :demand)
\langle config/emacs/init.el 97 \rangle + \equiv
                                                                        ⊲124 126⊳
  (use-package robe
     :demand
     :mode ("\\.rb\\'"))
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                        ⊲125 127⊳
  (use-package rvm
     :ensure t)
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                        ⊲126 128⊳
  (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 97 \rangle + \equiv
                                                                        ⊲127 129⊳
  (use-package tuareg
  :mode ("\\.ml\\'" "\\.mli\\'"))
\langle config/emacs/init.el~97 \rangle + \equiv
                                                                               ⊲128
  (use-package whitespace-cleanup-mode
     :demand
     :config (global-whitespace-cleanup-mode t))
```

```
Firefox
\langle config/firefox.nix \ 130 \rangle \equiv
  { pkgs, ... }:
  {
    programs.firefox = {
      enable = true;
      extensions = with (import <nur> { inherit pkgs; }).repos.rycee.firefox-addons; [
         https-everywhere
        privacy-badger
      ];
    };
  }
fish
\langle \mathit{config/fish/default.nix} \ 131 \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 \ 132 \rangle \equiv
  { ... }:
  {
     programs.fish.shellAbbrs = {
       \langle Kubernetes \ fish \ abbreviations \ 133 \rangle
        (Nix fish abbreviations 134)
       \langle ripgrep \ fish \ abbreviations \ 135 \rangle
     };
  }
\langle Kubernetes \ fish \ abbreviations \ 133 \rangle \equiv
                                                                               (132)
  kc = "kubectl";
  kcd = "kubectl drain -delete-local-data -ignore-daemonsets";
  kcnp = "kubectl get pods -field-selector=spec.nodeName=";
  kns = "kubens";
  kt = "kubetail";
\langle Nix \ fish \ abbreviations \ 134 \rangle \equiv
                                                                               (132)
  nb = "nix build";
  nbd = "nix build -dry-run";
  nbn = "nix build -no-link";
  nbo = "nix build -o";
\langle ripgrep \ fish \ abbreviations \ 135 \rangle \equiv
                                                                               (132)
  rga = "rg -hidden -iglob !.git";
  rgf = "rg -F";
  rgi = "rg -i";
  rgn = "rg -no-heading";
  rgs = "rg -S";
\langle config/fish/aliases.nix \ 136 \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 \mathit{config/fish/shellInit.fish} \ 137 \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"
  end
\langle config/fish/interactiveShellInit.fish\ 138 \rangle \equiv
                                                                     139 ⊳
  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]]"
    end
    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
      else
         __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\ 138 \rangle + \equiv
                                                                   ⊲138 140⊳
  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\ 138 \rangle + \equiv
                                                                    ⊲139 141⊳
  command -sq fluidsynth; and function playmidi
       fluidsynth -i ~/lib/arachno-soundfont/Arachno\ SoundFont\ -\ Version\ 1.0.sf2 $argv
  end
\langle config/fish/interactiveShellInit.fish\ 138 \rangle + \equiv
                                                                    ⊲140 142⊳
  command -sq kitty; and function icat
       kitty +kitten icat
  end
\langle \mathit{config/fish/interactiveShellInit.fish~138} \rangle + \equiv
                                                                   ⊲141 143⊳
  command -sq kubectl; and begin
       # 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\ 138 \rangle + \equiv
                                                                    ⊲142 144⊳
  # FIXME: functions rvm >/dev/null 2>&1; and rvm default
\langle config/fish/interactiveShellInit.fish\ 138 \rangle + \equiv
                                                                   ⊲143 145⊳
  set fish_greeting
\langle \mathit{config/fish/interactiveShellInit.fish~138}\rangle + \equiv
                                                                          ⊲144
  command -sq task; and command -sq jq; and function tj \setminus
    -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\ 146 \rangle \equiv
  function fish_prompt
      set -1 code $status
      if set -q IN_NIX_SHELL
          set symbol "λΠ "
      else
          set symbol "\lambda "
      end
      if git::is_repo
          set -l branch (git::branch_name ^/dev/null)
          set -l ref (git show-ref -head -abbrev | awk '{print substr($0,0,7)}' | sed -n 1p)
          if git::is_stashed
              echo -n -s (white)"^"(off)
          echo -n -s (red)"("(off)
          if git::is_dirty
              printf (white)"*"(off)
          end
          if command git symbolic-ref HEAD > /dev/null ^/dev/null
              if git::is_staged
                   printf (cyan)"$branch"(off)
                   printf (yellow)"$branch"(off)
              end
          else
              printf (dim)"$ref"(off)
          end
          for remote in (git remote)
              set -l behind_count (echo (command git rev-list $branch..$remote/$branch ^/dev/null | wc -l | tr -d " "
              set -l ahead_count (echo (command git rev-list $remote/$branch..$branch ^/dev/null | wc -l | 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)
              end
              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
148⊳
  function orange
     set_color -o ee5819
  function yellow
     set_color -o b58900
  end
  function red
     set_color -o d30102
  function cyan
     set_color -o 2aa198
  end
  function white
     set_color -o fdf6e3
  end
  \quad \hbox{function dim} \quad
     set_color -o 4f4f4f
  end
  function off
     set_color -o normal
  end
```

```
\langle config/fish/sushi/fish\_right\_prompt.fish\ 147 \rangle + \equiv
                                                   ⊲147 149⊳
  function git::is_repo
      test -d .git; or command git rev-parse -git-dir >/dev/null ^/dev/null
  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
  end
\langle \mathit{config/fish/sushi/fish\_right\_prompt.fish} \ 147 \rangle + \equiv
                                                            ⊲148 150⊳
         _____ Г 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
                                                            ⊲149 151⊳
\langle config/fish/sushi/fish\_right\_prompt.fish\ 147 \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\ 147 \rangle + \equiv
                                                                    ⊲150
                     ------ [ 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)
           end
           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 config/fzf.nix 152 \rangle \equiv
  { ... }:
  {
    programs.fzf = {
      enable = true;
      enableZshIntegration = false;
    };
  }
```

Git

```
\langle \mathit{config/git/default.nix}\ 153 \rangle {\equiv}
  { config, lib, pkgs, ... }:
  {
     imports = [
       ./aliases.nix
       ./config.nix
       ./packages.nix
     ];
    programs.git = {
       enable = true;
       ignores = [
         "*<sub>~</sub>"
         ".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} \ 154 \rangle {\equiv}
  { lib, pkgs, ... }:
    home.packages = with pkgs; (
         diff-pdf
         git
         git-lfs
         github-cli
         kdiff3
         nix-prefetch-git
         {\tt 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 155 \rangle \equiv
  { config, pkgs, ... }:
  {
    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 = "${config.xdg.dataHome}/git/commit.template";
      core.pager = "diff-so-fancy | less -tabs=4 -RFX";
      credential = {
        helper = "${pkgs.gitAndTools.pass-git-helper}/bin/pass-git-helper";
        useHttpPath = true;
      };
      diff = {
        sopsdiffer = {
          textconv = "sops -d";
        };
        tool = "kitty";
      };
      difftool = {
        kitty.cmd = "kitty +kitten diff $LOCAL $REMOTE";
        pdfdiffer.cmd = "diff-pdf -view \"$LOCAL\" \"$REMOTE\"";
        prompt = false;
        trustExitCode = true;
      };
      rerere.enabled = true;
      ui.color = true;
```

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

```
\langle config/git/aliases.nix \ 156 \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 config/gpg.nix \ 157 \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;
       maxCacheTt1 = 3600;
    };
  }
htop
\langle config/htop.nix 158 \rangle \equiv
  { ... }:
  {
    programs.htop.enable = true;
  }
i3
\langle \mathit{config/i3/default.nix}\ 159 \rangle {\equiv}
                                                                           160 ⊳
  { config, lib, pkgs, ... }:
  {
```

```
\langle \mathit{config/i3/default.nix}\ 159 \rangle + \equiv
                                                                 ⊲159 161⊳
    home.packages = with pkgs; [
      flameshot
      i3lock
      rofi
      rofi-pass
    ];
                                                                                 \mathbf{T}
  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\ 159 \rangle + \equiv
                                                                 ⊲160 162⊳
    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
```

⊲161 163⊳

Use Solarized Dark colors.⁹ $\langle config/i3/default.nix\ 159 \rangle + \equiv$ 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";

};

};

}; **}**;

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

```
\langle config/i3/default.nix\ 159\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 ${config.xdg.dataHome}/i3/matrix.png
              "${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;
          };
    };
  }
```

⊲162

$i\Im status$

```
Use some Solarized Dark colors for good, bad, and
degraded. ^{10}
                                                                                   10 https://github.com/
                                                                                   tobiaszwaszak/i3wm/blob/9c097f3/
\langle config/i3status/config 164 \rangle \equiv
                                                                         165 ⊳
                                                                                   i3status.conf
  general {
       colors = true
       color_good = "#859900"
       color_bad = "#dc322f"
       color_degraded = "#cb4b16"
       interval = 5
       output_format = "i3bar"
  }
\langle config/i3status/config 164 \rangle + \equiv
                                                                   ⊲164 166⊳
  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 = "D %1min %5min %15min D"
       max_{threshold} = 9
  }
  order += "battery all"
  battery all {
       format = "%status %percentage %remaining"
   Show the battery percentage without decimals.
\langle config/i3status/config 164 \rangle + \equiv
                                                                  ⊲165 167⊳
       integer_battery_capacity = true
   Use the last full capacity, instead of the design capacity. Refer to
the man page<sup>11</sup> for more details.
                                                                                   11 https://i3wm.org/i3status/
                                                                                   manpage.html#_battery
\langle config/i3status/config\ 164 \rangle + \equiv
                                                                   ⊲166 168⊳
       last_full_capacity = true
```

```
\langle config/i3status/config 164\rangle + \equiv
                                                                      ⊲167
      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}\ 169 \rangle {\equiv}
  { ... }:
  {
    programs.jq.enable = true;
  }
kitty
\langle config/kitty/default.nix 170 \rangle \equiv
  { ... }:
  {
    xdg.configFile."kitty/kitty.conf".source = ./kitty.conf;
    xdg.configFile."kitty/diff.conf".text = "
      pygments_style monokai
  }
```

```
\langle \mathit{config/kitty/kitty.conf} \ 171 \rangle {\equiv}
                                                                             172 \triangleright
  font_family Iosevka
  bold_font Iosevka Medium
  italic_font Iosevka Italic
  bold_italic_font Iosevka Medium Italic
\langle config/kitty/kitty.conf 171 \rangle + \equiv
                                                                      ⊲171 173⊳
  font_size 12.0
  scrollback_lines -1
\langle config/kitty/kitty.conf 171 \rangle + \equiv
                                                                      ⊲172 174⊳
  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 171 \rangle + \equiv
                                                                      ⊲173 175⊳
  editor emacsclient -nw -a ""
\langle \mathit{config/kitty/kitty.conf} \ 171 \rangle + \equiv
                                                                      ⊲174 176⊳
  term xterm
\langle config/kitty/kitty.conf 171 \rangle + \equiv
                                                                             ⊲175
  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 \mathit{config/man.nix}\ 177 \rangle {\equiv}
  { ... }:
  {
     programs.man.enable = true;
  }
nixpkgs
\langle \mathit{config/nixpkgs/default.nix}\ 178 \rangle {\equiv}
  { ... }:
  {
     nixpkgs.config = import ./nixpkgs-config.nix;
     xdg.configFile."nixpkgs/config.nix".source = ./nixpkgs-config.nix;
  }
\langle \mathit{config/nixpkgs/nixpkgs\text{-}config.nix}\ 179 \rangle {\equiv}
     allowBroken = false;
     allowUnfree = true;
     allowUnsupportedSystem = false;
rebar3
\langle config/rebar3.nix \ 180 \rangle \equiv
  { ... }:
  {
     xdg.configFile."rebar3/rebar.config".text = "
       {plugins, [rebar3_hex]}.
  }
```

Taskwarrior

```
Config
```

```
\langle config/taskwarrior/default.nix\ 181 \rangle \equiv
                                                                                        182 ⊳
   { config, lib, pkgs, ... }:
   {
```

SINCE HOME-MANAGER GENERATES A READ-ONLY .taskrc file, and using contexts¹² requires Taskwarrior to be able to modify the it, use the following hacky workaround.

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

Set \$TASKRC to ~/.taskrc-dirty, which must contain at least include ~/.taskrc.

```
\langle config/taskwarrior/default.nix\ 181 \rangle + \equiv
                                                                        ⊲181 183⊳
     home.sessionVariables = {
       TASKRC = "~/.taskrc-dirty";
     };
```

Define short Taskwarrior shell aliases.

```
\langle config/taskwarrior/default.nix\ 181 \rangle + \equiv
                                                               ⊲182 184⊳
    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-manager¹³.

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

```
\langle config/taskwarrior/default.nix\ 181 \rangle + \equiv
                                                             ⊲183 185⊳
    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";
          };
        };
   };
};
```

```
LINK the on-exit Git hook.
                                                                                        ref section
\langle config/taskwarrior/default.nix\ 181 \rangle + \equiv
                                                                            ⊲184
     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. 14
                                                                                       ^{14} -exit immediately upon fail-
                                                                                       ure, treat -Unset variables as an
\langle config/taskwarrior/on-exit-qit.sh\ 186 \rangle \equiv
                                                                            187⊳
                                                                                       error, disable -file globbing, and
  #! /usr/bin/env bash
                                                                                       fail if any part of a pipeline fails
                                                                                       (-o pipefail).
  set -eufo pipefail
   Run in debug mode<sup>15</sup>, if the environment variable DEBUG is nonempty.
                                                                                       ^{15}\,\mathrm{i.e.}\, echo commands
\langle config/taskwarrior/on-exit-git.sh\ 186 \rangle + \equiv
                                                                      ⊲186 188⊳
  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 \ensuremath{\text{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\ 186 \rangle + \equiv
                                                                     ⊲187 189⊳
  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\text{-}exit\text{-}git.sh\ 186 \rangle + \equiv
                                                                      ⊲188 190⊳
                                                                                       message if running in debug mode.
  if git -C "$data" diff -quiet; then
                                                                                       git diff exits with status code 0 if
       if [ -n "${DEBUG:-}" ]; then
                                                                                       there are no differences between the
            echo 'No changes to commit'
                                                                                       working tree and the index.
       fi
       exit 0
   If present, stage the changes or die trying.
\langle config/taskwarrior/on-exit-git.sh\ 186 \rangle + \equiv
                                                                      ⊲189 191⊳
  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 with a log message describing the

```
\langle config/taskwarrior/on-exit-git.sh\ 186 \rangle + \equiv \lhd 190\ 192 \triangleright with a local elif! git -C "$data" commit -qm "$command: ${args$$ task $command}$"; the names of the interval of the standard of the interval of the interval
```

If running in debug mode, print a brief summary of the commit.

```
 \langle config/taskwarrior/on\text{-}exit\text{-}git.sh \ 186\rangle + \equiv \\ \text{elif [ -n "$\{DEBUG:-\}" ]; then} \\ \text{git -C "$data" log -oneline -1} \\ \text{fi}
```

Glossary

module "Each NixOS module is a file that handles one logical aspect of the configuration, such as a specific kind of hardware, a service, or network settings." $^{16}\ 6$

A cronyms

 $LUKS\,$ Linux Unified Key Setup 6

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.

$To ext{-}Do$

Describe the location module	6
Configure Vim	ć
Add Nerd Fonts link	11
Add Iosevka link	11
Dig through https://github.com/mathiasbynens/dotfiles/	
blob/master/.macos	20
ref section	55