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# DOTFILES



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# Machines

## NiXPS

### NixOS configuration

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

```
<machines/nixps/configuration.nix 1>≡
{ config, lib, pkgs, ... }:
let
  username = "yurrriq";
in
{
  <Set the location to MSP 2>
  <Blacklist a few kernel modules 3>
  <Configure the LUKS device 4>
  <Configure the environment 5>
  <Configure the file systems 6>
  <Tweak hardware config 7>
  <Configure Bluetooth 8>
  <Configure PulseAudio and OpenGL 9>
  <Configure home-manager 10>
  <Configure networking 11>
  <Configure Nix 12>
  <Configure sudo 13>
  <Configure X Server 14>
  <Configure sops-nix 15>
  <Configure user 16>
}
```

Configure the [module](#).

FIXME

```
<Set the location to MSP 2>≡ (1)
airportCode = "MSP";
```

```
<Blacklist a few kernel modules 3>≡ (1)
boot.blacklistedKernelModules = [ "nouveau" "nvidia" "psmouse" ];
```

Configure the [LUKS](#)<sup>1</sup> devices.

1

```
<Configure the LUKS device 4>≡ (1)
boot.initrd.luks.devices.root.device = "/dev/nvme0n1p2";
```

```

<Configure the environment 5>≡ (1)
environment.homeBinInPath = true;
environment.pathsToLink = [
  "/lib/aspell"
  "/share/emacs/site-lisp"
  "/share/fish"
];

```

```

<Configure the file systems 6>≡ (1)
fileSystems."/ " = {
  device = "/dev/disk/by-uuid/024a1168-9949-4cb2-bbd1-4b19a9d49ef2";
  fsType = "ext4";
};

fileSystems."/boot" = {
  device = "/dev/disk/by-uuid/7574-B246";
  fsType = "vfat";
};

fileSystems."/var/lib/docker/plugins" = {
  device = "/var/lib/docker/plugins";
  fsType = "none";
  options = [ "bind" ];
};

fileSystems."/var/lib/docker/overlay2" = {
  device = "/var/lib/docker/overlay2";
  fsType = "none";
  options = [ "bind" ];
};

```

[NixOS/nixpkgs#24711](https://github.com/NixOS/nixpkgs/issues/24711)<sup>2</sup>

```

<Tweak hardware config 7>≡ (1)
hardware.bumblebee.enable = false;
hardware.nvidiaOptimus.disable = false;

```

Figure out wtf is going on here

<sup>2</sup> <https://github.com/NixOS/nixpkgs/issues/24711>

```

hardware.bumblebee.enable = true;
hardware.bumblebee.connectDisplay = true;
hardware.bumblebee.pmMethod = "bbswitch";
hardware.opengl.driSupport32Bit = true;
hardware.nvidia = {
  modesetting.enable = true;
  optimus_prime = {
    enable = true;
    nvidiaBusId = "PCI:1:0:0";
    intelBusId = "PCI:0:2:0";
  };
};
};

```

*<Configure Bluetooth 8>*≡ (1)

```

services.bluedevd.enable = true;
hardware.bluetooth = {
  enable = true;
  config = {
    General = {
      Enable = "Source,Sink,Media,Socket";
    };
  };
};

```

Tweak PulseAudio and OpenGL settings for Steam.

*<Configure PulseAudio and OpenGL 9>*≡ (1)

```

hardware.pulseaudio.support32Bit = true;
hardware.opengl.driSupport32Bit = true;

```

*<Configure home-manager 10>*≡ (1)

```

home-manager.useUserPackages = true;
home-manager.users."${username}" = args:
  import ./home.nix (args // { inherit pkgs; });

```

*<Configure networking 11>*≡ (1)

```

networking.firewall = {
  enable = true;
  allowedTCPPortRanges = [
    # { from = 8000; to = 8000; }
  ];
};

```

```

networking.hostName = "nixps";

```

*<Configure Nix 12>*≡ (1)

```

nix = {
  buildCores = 8;
  trustedUsers = [ "root" username ];
};

```

*<Configure sudo 13>*≡ (1)

```

security.sudo = {
  enable = true;
  extraConfig = "
    ${username} ALL=(ALL) NOPASSWD: ALL
  ";
};

```

```

<Configure X Server 14>≡ (1)
services.xserver = {
  displayManager.autoLogin = {
    enable = true;
    user = username;
  };
  dpi = 180;
};

```

adopt sops-nix

```

<Configure sops-nix 15>≡ (1)
# FIXME
# sops = {
#   gnupgHome = "/home/yurrriq/.gnupg";
#   secrets."${username}.hashedPassword" = {
#     format = "binary";
#     sopsFile = ./ + "/secrets/${username}.hashedPassword.enc";
#   };
#   sshKeyPaths = [];
# };

```

```

<Configure user 16>≡ (1)
users.mutableUsers = false;
users.users."${username}" = {
  name = username;
  hashedPassword = lib.fileContents (./ + "/secrets/${username}.hashedPassword");
  # FIXME: hashedPassword = lib.fileContents config.sops.secrets."${username}.hashedPassword".path;
  group = "users";
  extraGroups = [
    "audio"
    "disk"
    "docker"
    "http"
    "networkmanager"
    "systemd-journal"
    "video"
    "wheel"
  ];
  createHome = true;
  uid = 1000;
  home = "/home/${username}";
  shell = "/etc/profiles/per-user/${username}/bin/fish";
};

```

### home-manager configuration

```

<machines/nixps/home.nix 17>≡
{ lib, pkgs, ... }:
{
  <Import some modules 18>
  <Configure account 19>
  <Add some more user packages 20>
  _module.args.pkgs = lib.mkForce pkgs;
}

```



*⟨Import some modules 18⟩*≡ (17)

```
imports = [
  ../../config/bash.nix
  ../../config/bat.nix
  ../../config/browserpass.nix
  ../../config/direnv.nix
  ../../config/dunst.nix
  ../../config/emacs
  ../../config/firefox.nix
  ../../config/fish
  ../../config/fzf.nix
  ../../config/git
  ../../config/gpg.nix
  ../../config/htop.nix
  ../../config/jq.nix
  ../../config/kitty.nix
  ../../config/man.nix
  ../../config/nixpkgs
  ../../config/password-store.nix
  ../../config/rebar3.nix
  ../../config/starship.nix
  ../../config/taskwarrior
  ../../config/xmonad
];
```

*⟨Configure account 19⟩*≡ (17)

```
accounts.email.accounts.primary = {
  address = "eric@ericb.me";
  gpg.key = "F88372B24A806FF23BCB3A4E2DDDF8606958B3F9";
  primary = true;
  realName = "Eric Bailey";
};
```

*⟨Add some more user packages 20⟩*≡ (17)

```
home.packages = with pkgs; [
  appimage-run
  calibre
  fd
  frescobaldi
  musescore
  openscad
  powertop
  reaper
  steam
  tellico
  zoom-us
];
```

## SRUXPS

### NixOS configuration

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

```

<machines/sruxps/configuration.nix 21>≡
{ config, lib, pkgs, ... }:
let
  username = "e.bailey";
in
{
  <Set the location to MSP 22>
  <Configure the LUKS devices 23>
  <Configure vm.swappiness 24>
  <Add the coretemp kernel module 25>
  <Link some extra paths 26>
  <Configure the file systems 27>
  <Configure Bluetooth 29>
  <Configure home-manager 30>
  <Configure networking 31>
  <Configure Nix 32>
  <Configure sudo 33>
  <Configure services 34>
  <Configure user 35>
  virtualisation.docker.enable = true;
}

```

Describe the location module

```

<Set the location to MSP 22>≡ (21)
  airportCode = "MSP";

```

Configure the *LUKS* devices.

```

<Configure the LUKS devices 23>≡ (21)
boot.initrd.luks.devices = {
  cryptkey.device = "/dev/disk/by-uuid/603b64c6-8544-4b43-9b6a-7d8a08091514";

  cryptroot = {
    device = "/dev/disk/by-uuid/c4e26a93-c0c9-4680-bb79-8c0ca47df96c";
    keyFile = "/dev/mapper/cryptkey";
  };

  cryptswap = {
    device = "/dev/disk/by-uuid/565c0358-110e-4279-ba59-619cb2cc1ebf";
    keyFile = "/dev/mapper/cryptkey";
  };
};

```

[https://docs.oracle.com/en/operating-systems/oracle-linux/7/admin/section\\_h4v\\_3yt\\_tr.html](https://docs.oracle.com/en/operating-systems/oracle-linux/7/admin/section_h4v_3yt_tr.html)

```

<Configure vm.swappiness 24>≡ (21)
boot.kernel.sysctl = {
  "vm.swappiness" = 1;
};

```

*<Add the coretemp kernel module 25>≡* (21)

```
boot.kernelModules = [
  "coretemp"
];
```

*<Link some extra paths 26>≡* (21)

```
environment.homeBinInPath = true;
environment.pathsToLink = [
  "/lib/aspell"
  "/share/emacs/site-lisp"
  "/share/fish"
  # FIXME: "/share/icons"
];
```

btrfs clean boot?

*<Configure the file systems 27>≡* (21) 28▷

```
fileSystems."/ = {
  device = "/dev/disk/by-uuid/71cfcb8a-13a9-49f0-b034-a9c8841be07b";
  fsType = "btrfs";
  options = [ "subvol=@ " "rw" "noatime" "compress=zstd" "ssd" "space_cache" ];
};

fileSystems."/home" = {
  device = "/dev/disk/by-uuid/71cfcb8a-13a9-49f0-b034-a9c8841be07b";
  fsType = "btrfs";
  options = [ "subvol=@home" "rw" "noatime" "compress=zstd" "ssd" "space_cache" ];
};

fileSystems."/nix" = {
  device = "/dev/disk/by-uuid/71cfcb8a-13a9-49f0-b034-a9c8841be07b";
  fsType = "btrfs";
  options = [ "subvol=@nix" "rw" "noatime" "compress=zstd" "ssd" "space_cache" ];
};

fileSystems."/var" = {
  device = "/dev/disk/by-uuid/71cfcb8a-13a9-49f0-b034-a9c8841be07b";
  fsType = "btrfs";
  options = [ "subvol=@var" "rw" "noatime" "compress=zstd" "ssd" "space_cache" ];
};

fileSystems."/boot" = {
  device = "/dev/disk/by-uuid/54D0-C859";
  fsType = "vfat";
};
```

*<Configure the file systems 27>+≡* (21) <27

```
fileSystems."/mnt/music" = {
  device = "192.168.1.147:/volume1/homes/eric/music";
  fsType = "nfs";
  options = [ "noatime" "noauto" "rw" "x-systemd.automount" ];
};
```

```

<Configure Bluetooth 29>≡ (21)
hardware.bluetooth = {
  enable = true;
  config = {
    General = {
      Enable = "Source,Sink,Media,Socket";
    };
  };
};

```

```

<Configure home-manager 30>≡ (21)
home-manager.useUserPackages = true;
home-manager.users."${username}" = args:
  import ./home.nix (args // { inherit pkgs; });

```

```

<Configure networking 31>≡ (21)
networking.hostName = "MSP-EBAILEY01";

networking.interfaces.wlp1s0.useDHCP = true;
networking.useDHCP = false; # NOTE: Deprecated, so set it false.

```

```

<Configure Nix 32>≡ (21)
nix.trustedUsers = [ "root" username ];

```

```

<Configure sudo 33>≡ (21)
security.sudo = {
  enable = true;
  extraConfig = "
    ${username} ALL=(ALL) NOPASSWD: ALL
  ";
};

```

```

<Configure services 34>≡ (21)
services.bluedevil.enable = true;

services.fwupd.enable = true;

services.lorri.enable = false;

services.tlp.enable = true;

services.xserver.displayManager.autoLogin = {
  enable = true;
  user = username;
};

services.xserver.monitorSection = "
  DisplaySize 406 228
";

```

```

<Configure user 35>≡
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*

```

<machines/sruxps/home.nix 36>≡
{ lib, pkgs, ... }:
{

  <Import various program configs 37>

  <Configure the primary email account 38>

  <Install some user packages 39>

  _module.args.pkgs = lib.mkForce pkgs;

}

```

```

<Import various program configs 37>≡ (36)
imports = [
  ../../config/bash.nix
  ../../config/bat.nix
  ../../config/browserpass.nix
  ../../config/bugwarrior.nix
  ../../config/direnv.nix
  ../../config/dunst.nix
  ../../config/emacs
  ../../config/firefox.nix
  ../../config/fish
  ../../config/fzf.nix
  ../../config/git
  ../../config/gpg.nix
  ../../config/htop.nix
  ../../config/jq.nix
  ../../config/kitty.nix
  ../../config/man.nix
  ../../config/nixpkgs
  ../../config/password-store.nix
  ../../config/rebar3.nix
  ../../config/starship.nix
  ../../config/taskwarrior
  ../../config/xmonad
];

```

Configure Vim

```

<Configure the primary email account 38>≡ (36)
accounts.email.accounts.primary = {
  address = "e.bailey@sportradar.com";
  gpg.key = "EFD6F1EDC84D2FA935E38570462054AB8B682702";
  primary = true;
  realName = "Eric Bailey";
};

```

```

<Install some user packages 39>≡ (36) 40>
home.packages = with pkgs; (
  [
    aws-iam-authenticator
    ec2instanceconnectcli

```

```

<Install some user packages 39>+≡ (36) <39 42>
progress

```

Clementine<sup>3</sup> is a great music player.  
I haven't used Dhall in a while, but it's still interesting.

<sup>3</sup> <https://www.clementine-player.org/>

```

<* 41>≡ 46>
  dhall
  dhall-json

```

I might need Docker Compose<sup>4</sup> again someday, but not lately.

<sup>4</sup> <https://docs.docker.com/compose/>

```

<Install some user packages 39>+≡ (36) <40 43>
  docker-compose

```

iw<sup>5</sup> is useful for troubleshooting wireless issues, like in Trondheim.

<sup>5</sup> <https://wireless.wiki.kernel.org/en/users/documentation/iw>

```

<Install some user packages 39>+≡ (36) <42 44>
  iw
  jdk

```

<https://github.com/Azure/kubelogin>

```

<Install some user packages 39>+≡
    kubectx
    kubelogin
    k9s
    stern

```

(36) <43 45>

[naal](https://github.com/yurrriq/naal)<sup>6</sup> is my tool for non-interactive AWS Azure login.

<sup>6</sup> <https://github.com/yurrriq/naal>

```

<Install some user packages 39>+≡
    # FIXME: naal

```

(36) <44 47>

It would be cool to play with [Next](https://next.atlas.engineer/)<sup>7</sup> some lazy day.

<sup>7</sup> <https://next.atlas.engineer/>

```

<* 41>+≡
    next

```

<41

[PulseAudio Volume Control](https://freedesktop.org/software/pulseaudio/pavucontrol/)<sup>8</sup> is useful for configuring Bluetooth audio.

<sup>8</sup> <https://freedesktop.org/software/pulseaudio/pavucontrol/>

```

<Install some user packages 39>+≡
    renderizer
    scc

```

(36) <45 48>

Try to improve battery life.

```

<Install some user packages 39>+≡
    powertop

```

(36) <47 49>

```

<Install some user packages 39>+≡
    zoom-us
    ] ++ (
        with nodePackages; [
            aws-azure-login
        ]
    )
);

```

(36) <48





# Modules

## Common

This module is a lambda that takes at least `pkgs` in its arguments.

```
<modules/common.nix 50>≡ 51>
{ pkgs, ... }:

{
```

Configure garbage collection (`gc`) and my personal [Cachix](https://cachix.org)<sup>9</sup>-based `binaryCaches`. <sup>9</sup><https://cachix.org>

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

```
<modules/common.nix 50>+≡ <50 52>
  nix = {
    binaryCaches = [
      "https://yurrriq.cachix.org"
      "https://yurrriq-nur-packages.cachix.org"
    ];
    binaryCachePublicKeys = [
      "yurrriq.cachix.org-1:evpJ5wKluf7Q0Ccv69VkIxCOtHgubrQX1Zpp3JAXLBE="
      "yurrriq-nur-packages.cachix.org-1:7kbjuGBUZcWf876g2cdelmIQXrXz0hpMVBqY0yyAv70="
    ];
    # TODO: daemonNiceLevel = 19;
    extraOptions = "
      experimental-features = flakes nix-command
    ";
    gc = {
      automatic = true;
      options = "-delete-older-than 30d";
    };
    optimise.automatic = true;
    package = pkgs.nixUnstable;
  };
```

Install the [Nerd Fonts](https://www.nerdfonts.com)<sup>10</sup> patched [Iosevka](http://be5invis.github.io/Iosevka)<sup>11</sup>.

`<modules/common.nix 50>+≡`

```

  fonts = {
    enableFontDir = true;
    fonts = with pkgs; [
      (nerdfonts.override { fonts = [ "Iosevka" ]; })
    ];
  };

```

`<51 53>`

<sup>10</sup> <https://www.nerdfonts.com>  
<sup>11</sup> <http://be5invis.github.io/Iosevka>

Enable system-wide Bash completion.

`<modules/common.nix 50>+≡`

```

  programs.bash.enableCompletion = true;

```

`<52 54>`

`<modules/common.nix 50>+≡`

```

}

```

`<53`

## *Packages*

`<modules/packages.nix 55>≡`

```

{ lib, pkgs, ... }:

```

`56>`

```

{

```

```
<modules/packages.nix 55>+≡                                     <55 57>
environment.systemPackages = with pkgs; (
  [
    aspell
    aspellDicts.en
    awscli
    bind
    cachix
    clac
    clementine
    coreutils
    # TODO: cquery
    curl
    expect
    gawk
    gcc
    gnumake
    gnused
    gnutar
    gzip
    httpie
    # TODO: http-prompt
    # TODO: idris
    lorri
    moreutils
    neofetch
    nixUnstable
    noweb
    pandoc
    prettyping
    ripgrep
    shellcheck
    shfmt
    silver-searcher # TODO: find helm-rg solution
    slack
    spotify
    stow
```

```

<modules/packages.nix 55>+≡                                     <56 58>
(
    texlive.combine {
        inherit (texlive) scheme-small
            datetime
            dirtytalk
            fmtcount
            framed
            fvextra
            hardwrap
            ifplatform
            latexmk
            minted
            titlesec
            todonotes
            tufte-latex
            xetex
            xstring
            ;
        inherit noweb;
    }
)

<modules/packages.nix 55>+≡                                     <57 59>
    tree
    unzip
    vim
    watch
    # wipe
    yq
]

<modules/packages.nix 55>+≡                                     <58 60>
) ++ (
    with python3Packages; [
        pygments
    ]

<modules/packages.nix 55>+≡                                     <59 61>
) ++ lib.optionals stdenv.isDarwin (
    [
        m-cli
        sourcetree
        onyx
    ] ++ (
        with chunkwm; [
            core
            ffm
            tiling
        ]
    )
)

```

```

<modules/packages.nix 55>+≡                                     <60 62>
    ) ++ lib.optionals stdenv.isLinux [
        dolphin
        libnotify
        libreoffice
        lm_sensors
        mtr
        networkmanager-openconnect
        nfs-utils
        openconnect
        paper-icon-theme
        pavucontrol
        playerctl
        # psmisc
        # pv
        qpdfview
        wireless-tools

```

Install **Tomb**<sup>12</sup> and related packages.

<sup>12</sup> <https://www.dyne.org/software/tomb/>

```

<modules/packages.nix 55>+≡                                     <61 63>
    file
    lsof
    tomb

```

```

<modules/packages.nix 55>+≡                                     <62 64>
    (signal-desktop.override { spellcheckerLanguage = "en_US"; })

```

```

<modules/packages.nix 55>+≡                                     <63 65>
    thunderbird
    xclip
    xorg.xbacklight
];

```

```

<modules/packages.nix 55>+≡                                     <64
}

```

## Location

```

<modules/location.nix 66>≡                                     67>
    { config, lib, ... }:

```

```

<modules/location.nix 66>+≡                                     <66 68>
    let
        airportCode = config.airportCode;
    in
    {

```

```

<modules/location.nix 66>+≡                                     <67 69>
        options.airportCode = lib.mkOption {
            default = "MSP";
            type = lib.types.enum [ "ATL" /* "LHR" */ "LJU" "MSP" "TRD" ];
        };

```

```

<modules/location.nix 66>+≡
    config = lib.mkMerge [

```

<68 70>

The Sportradar office in Minneapolis.

```

<modules/location.nix 66>+≡
(
    lib.mkIf (airportCode == "MSP") {
        location = {
            latitude = 44.98;
            longitude = -93.27;
        };
        time.timeZone = "America/Chicago";
    }
)

```

<69 71>

Cook Out on Ponce de Leon Ave.

```

<modules/location.nix 66>+≡
(
    lib.mkIf (airportCode == "ATL") {
        location = {
            latitude = 33.77;
            longitude = -84.37;
        };
        time.timeZone = "America/New_York";
    }
)

```

<70 72>

The Sportradar office in London.

```

<modules/location.nix 66>+≡
(
    lib.mkIf (airportCode == "LHR") {
        location = {
            latitude = 51.51;
            longitude = -0.09;
        };
        time.timeZone = "Europe/London";
    }
)

```

<71 73>

The Sportradar office in Ljubljana.

```

<modules/location.nix 66>+≡
(
    lib.mkIf (airportCode == "LJU") {
        location = {
            latitude = 46.09;
            longitude = 14.55;
        };
        time.timeZone = "Europe/Ljubljana";
    }
)

```

<72 74>

The Sportradar office in Trondheim.

```

<modules/location.nix 66>+≡
(
  lib.mkIf (airportCode == "TRD") {
    location = {
      latitude = 63.43;
      longitude = 10.40;
    };
    time.timeZone = "Europe/Oslo";
  }
)

<modules/location.nix 66>+≡
];

}

```

◁73 75▷

◁74

## NixOS

```

<modules/nixos.nix 76>≡
{ config, lib, pkgs, ... }:

{
  <Configure boot loader 77>
  <Configure fonts, keyboard, and locale 78>
  <Configure location 79>
  <Enable networkmanager 80>
  <Allow unfree packages 81>
  <Configure services 82>
  <Configure audio 84>
  system.stateVersion = "20.09";
  <Configure virtualisation 85>
}

<Configure boot loader 77>≡
boot = {
  cleanTmpDir = true;
  loader = {
    systemd-boot.enable = true;
    efi.canTouchEfiVariables = true;
  };
};

<Configure fonts, keyboard, and locale 78>≡
console.font = "Lat2-Terminus16";
console.keyMap = "us";
i18n.defaultLocale = "en_US.UTF-8";

<Configure location 79>≡
location.provider = "manual";

<Enable networkmanager 80>≡
networking.networkmanager.enable = true;

<Allow unfree packages 81>≡
nixpkgs.config.allowUnfree = true;

```

(76)

(76)

(76)

(76)

(76)

Link/document this

```
<Configure services 82>≡ (76)
services = {
    fstrim.enable = true;

    logind.lidSwitch = "hibernate";

    kbfs.enable = true;

    redshift = {
        enable = true;
        temperature.night = 2300;
    };

    unclutter = {
        enable = false; # FIXME
        extraOptions = [ "exclude-root" "ignore-scrolling" ];
        threshold = 1;
        timeout = 1;
    };

<Configure Xserver 83>
};
```



*<Configure Xserver 83>*≡ (82)

```
xserver = {
  enable = true;

  autorun = true;

  displayManager = {
    lightdm.enable = true;
    session = [
      {
        name = "home-manager";
        manage = "window";
        start = "
          ${pkgs.runtimeShell} $HOME/.hm-xsession &
          waitPID=$!
        ";
      }
    ];
  };

  layout = "us";

  libinput = {
    enable = true;
    accelSpeed = "1.0";
    disableWhileTyping = true;
    naturalScrolling = false;
    tapping = true;
  };

  videoDrivers = [
    "intel"
  ];

  xkbOptions = "ctrl:nocaps,compose:ralt";
};
```

*<Configure audio 84>*≡ (76)

```
hardware.pulseaudio = {
  enable = true;
  extraModules = [ pkgs.pulseaudio-modules-bt ];
  package = pkgs.pulseaudioFull;
};

sound.enable = true;
```

*<Configure virtualisation 85>*≡ (76)

```
virtualisation = {
  docker = {
    enable = lib.mkDefault false;
    liveRestore = lib.mkDefault false;
  };
  podman = {
    enable = lib.mkDefault (!config.virtualisation.docker.enable);
    dockerCompat = lib.mkDefault true;
  };
};
```

Document podman vs dockerd

Fix rootless podman

*Darwin*

```

<modules/darwin.nix 86>≡ 87>
  { pkgs, ... }:

  {

```

```

<modules/darwin.nix 86>+≡ <86 88>
    nixpkgs.config.allowUnfree = true;

```

```

<modules/darwin.nix 86>+≡ <87 89>
    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      0
                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     0
                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
            ";
        };
    };
};

```

```

<modules/darwin.nix 86>+≡                                     <88 90>
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
  ";
};

```

Set `AppleKeyboardUIMode = 3` to enable full keyboard access, e.g. tab in dialogs. Disable press-and-hold, in favor of key repeat.

Dig through <https://github.com/mathiasbynens/dotfiles/blob/master/.macos>

```

<modules/darwin.nix 86>+≡                                     <89 91>
system.defaults.NSGlobalDomain = {
  AppleKeyboardUIMode = 3;

  ApplePressAndHoldEnabled = false;
  InitialKeyRepeat = 10;
  KeyRepeat = 1;

  NSAutomaticDashSubstitutionEnabled = false;
  NSAutomaticQuoteSubstitutionEnabled = false;
  NSAutomaticSpellingCorrectionEnabled = true;

  NSNavPanelExpandedStateForSaveMode = true;
  NSNavPanelExpandedStateForSaveMode2 = true;
};

```

```

<modules/darwin.nix 86>+≡                                     <90 92>
system.defaults.dock = {
  autohide = true;
  mru-spaces = false;
  orientation = "right";
  showhidden = true;
};

```

```
⟨modules/darwin.nix 86⟩+≡                                <91 93>
  system.defaults.finder = {
    AppleShowAllExtensions = true;
    FXEnableExtensionChangeWarning = false;
    QuitMenuItem = true;
  };
```

```
⟨modules/darwin.nix 86⟩+≡                                <92 94>
  system.defaults.trackpad.Clicking = true;
```

```
⟨modules/darwin.nix 86⟩+≡                                <93
  }
```

# Software configuration

## Bash

Enable the Bash module, as well as autojump.

```
<config/bash.nix 95>≡
{ ... }:

{

    programs.autojump.enable = true;

    programs.bash.enable = true;

}
```

## bat

Enable the `bat`<sup>13</sup> module.

<sup>13</sup> <https://github.com/sharkdp/bat>

```
<config/bat.nix 96>≡ 97▷
{ ... }:

{

    programs.bat = {
        enable = true;
        config = {

            For the pager, use less.
            <config/bat.nix 96>+≡ 96 98▷
                pager = "less -FR";

            Set the style to changes.
            <config/bat.nix 96>+≡ 97 99▷
                style = "changes";

            Use the Monokai Extended theme.
            <config/bat.nix 96>+≡ 98 100▷
                theme = "Monokai Extended";

            <config/bat.nix 96>+≡ 99▷
        };
    };

}
```

*Browserpass*

```

<config/browserpass.nix 101>≡
{ pkgs, ... }:

{

    home.packages = with pkgs; [
        browserpass
    ];

    programs.browserpass = {
        enable = true;
        browsers = [ "firefox" ];
    };

}

```

*bugwarrior*

```

<config/bugwarrior.nix 102>≡ 103▷
{ config, pkgs, ... }:

{

<config/bugwarrior.nix 102>+≡ <102 104>
    home.packages = with pkgs; [
        bugwarrior
    ];

<config/bugwarrior.nix 102>+≡ <103 105>
    imports = [
        ./password-store.nix
        ./taskwarrior
        ./password-store.nix
    ];
}

```

```

<config/bugwarrior.nix 102>+≡                                     <104 106>
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.bailey OR description ~ e.bailey OR c
jira.version = 8
jira.add_tags = work
jira.description_template = {{jiraid}}: {{jirasummary}}
";

<config/bugwarrior.nix 102>+≡                                     <105
}

```

## *direnv*

```

<config/direnv.nix 107>≡
{ ... }:

{

  programs.direnv = {
    enable = true;
    enableZshIntegration = false;
  };

}

```

*Dunst*

```

<config/dunst.nix 108>≡
{ pkgs, ... }:

{
  services.dunst = {
    enable = true;
    <Configure Dunst icon theme 109>
    settings = {
      global = {
        <Configure Dunst global settings 110>
      };
      <Configure Dunst shortcuts 111>
      <Configure Dunst urgency styling 112>
      <Configure critical Slack notifications 113>
    };
  };
}

<Configure Dunst icon theme 109>≡                                     (108)
iconTheme = {
  package = pkgs.paper-icon-theme;
  name = "Paper";
  size = "48x48";
};

```



*<Configure Dunst global settings 110>*≡ (108)

```
font = "Iosevka Term 10";
markup = "yes";
plain_text = "no";
format = "<b>%s</b>\n%b";
sort = "yes";
indicate_hidden = "yes";
alignment = "center";
bounce_freq = 0;
show_age_threshold = 30;
word_wrap = "yes";
ignore_newline = "no";
stack_duplicates = "yes";
hide_duplicates_count = "yes";
geometry = "700x5-0-70";
shrink = "no";
transparency = 15;
idle_threshold = 0;
follow = "keyboard";
sticky_history = "yes";
history_length = 15;
show_indicators = "no";
startup_notification = false;
dmenu = "/run/current-system/sw/bin/dmenu -p dunst:";
browser = "/etc/profiles/per-user/e.bailey/bin/firefox -new-tab";
icon_position = "left";
max_icon_size = 80;
frame_width = 0;
frame_color = "#8EC07C";
```

*<Configure Dunst shortcuts 111>*≡ (108)

```
shortcuts = {
    close = "mod1+space";
    close_all = "mod4+mod1+space";
    history = "ctrl+grave";
};
```

*<Configure Dunst urgency styling 112>*≡ (108)

```
urgency_low = {
    frame_color = "#3B7C87";
    foreground = "#3B7C87";
    background = "#2B313C";
    timeout = 4;
};
urgency_normal = {
    frame_color = "#5B8234";
    foreground = "#5B8234";
    background = "#2B313C";
    timeout = 6;
};
urgency_critical = {
    frame_color = "#B7472A";
    foreground = "#B7472A";
    background = "#191311";
    timeout = 8;
};
```

(Configure critical Slack notifications 113)≡ (108)

```
slack = {
  appname = "Slack";
  body = "*critical*";
  frame_color = "#B7472A";
  foreground = "#B7472A";
  background = "#191311";
  urgency = "critical";
};
```

## Emacs

(config/emacs/default.nix 114)≡

```
{ 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;

}
```

INSTALL some Emacs packages.

```

<config/emacs/packages.nix 115>≡
{ pkgs, ... }:

{

  home.packages = with pkgs; [
    graphviz
    sqlite
  ];

  programs.emacs.extraPackages = epkgs: (
    with epkgs.elpaPackages; [
      <elpa packages 116>
    ]
  ) ++ (
    with epkgs.melpaPackages; [
      <melpa packages 117>
    ]
  );
}

```

### *ELPA Packages*

```

<elpa packages 116>≡
  mmm-mode
  rainbow-mode

```

(115)

*MELPA Packages**<melpa packages 117>*≡

(115)

```

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
erlang
fill-column-indicator
fish-mode
frames-only-mode
gap-mode
go-mode
graphviz-dot-mode
haskell-mode
helm-ag
# TODO: hindent
hl-todo
htmlize
idris-mode
j-mode
lfe-mode
kubernetes-tramp
# TODO: lsp-haskell
# TODO: lsp-mode
# TODO: lsp-ui
magit
markdown-mode
multiple-cursors
nix-mode
nyan-mode
org-roam
dash
f
s
emacsql
emacsql-sqlite3
paredit
rainbow-delimiters
# robe
rust-mode
# rvm
smex
terraform-mode
tuareg
use-package
whitespace-cleanup-mode

```

yaml-mode

### *Init File*

```

<config/emacs/init.el 118>≡ 119>
  (server-start)

<config/emacs/init.el 118>+≡ <118 120>
  (setq server-window 'pop-to-buffer-same-window)

<config/emacs/init.el 118>+≡ <119 121>
  (column-number-mode 1)

<config/emacs/init.el 118>+≡ <120 122>
  (add-to-list 'exec-path "/run/current-system/sw/bin")

<config/emacs/init.el 118>+≡ <121 123>
  (menu-bar-mode 0)
  (scroll-bar-mode 0)
  (tool-bar-mode 0)

<config/emacs/init.el 118>+≡ <122 124>
  (let ((font "Iosevka-10"))
    (set-face-attribute 'default t :font font)
    (set-frame-font font nil t))

<config/emacs/init.el 118>+≡ <123 125>
  (require 'package)

<config/emacs/init.el 118>+≡ <124 126>
  (setq-default frames-only-mode t
                 indent-tabs-mode nil
                 package-archives nil
                 package-enable-at-startup nil)

<config/emacs/init.el 118>+≡ <125 127>
  (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>

```
<config/emacs/init.el 118>+≡<126 128>
(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   t
      kept-new-versions     6
      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

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```
<config/emacs/init.el 118>+≡<127 129>
(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.
  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)))))
```

```
<config/emacs/init.el 118>+≡<128 130>
(dolist (pattern '("^\\(/dev/shm/\\|/tmp/\\)"
                  "\\.(enc\\|pgp\\|hashedPassword\\)$"))
  (add-to-list 'auto-mode-alist (cons pattern 'sensitive-mode)))
```

```
<config/emacs/init.el 118>+≡<129 131>
(setq custom-file "~/.emacs.d/private/local/custom.el")
```

```

<config/emacs/init.el 118>+≡                                     <130 132>
  (load-theme 'wombat)

<config/emacs/init.el 118>+≡                                     <131 133>
  (global-set-key (kbd "C-x C-k") 'kill-this-buffer)
  (global-set-key (kbd "s-u") 'revert-buffer)

<config/emacs/init.el 118>+≡                                     <132 134>
  (setq c-default-style      "k&r"
        c-basic-offset      4
        emacs-lisp-mode-hook '(fci-mode paredit-mode
                                rainbow-delimiters-mode)
        js-indent-level      2
        text-mode-hook       '(text-mode-hook-identify))

<config/emacs/init.el 118>+≡                                     <133 135>
  (setq-default fill-column 80)

<config/emacs/init.el 118>+≡                                     <134 136>
  (org-babel-do-load-languages
   'org-babel-load-languages
   '((shell . t)))

<config/emacs/init.el 118>+≡                                     <135 137>
  (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))

<config/emacs/init.el 118>+≡                                     <136 138>
  (use-package crux
    :demand
    :config (global-set-key (kbd "C-a") 'crux-move-beginning-of-line))

<config/emacs/init.el 118>+≡                                     <137 139>
  (use-package editorconfig
    :ensure t
    :config
    (editorconfig-mode 1))

<config/emacs/init.el 118>+≡                                     <138 140>
  (use-package emojiify)

<config/emacs/init.el 118>+≡                                     <139 141>
  (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))

<config/emacs/init.el 118>+≡                                     <140 142>
  (use-package hl-todo
    :demand
    :config (global-hl-todo-mode t))

```

```

<config/emacs/init.el 118>+≡ <141 143>
  (use-package magit
    :demand
    :config (global-magit-file-mode t))

<config/emacs/init.el 118>+≡ <142 144>
  (use-package multiple-cursors
    :demand
    :config (global-set-key (kbd "C-S-c C-S-c") 'mc/edit-lines))

<config/emacs/init.el 118>+≡ <143 145>
  (use-package nix-mode
    :mode ("\\.nix\\'"))

<config/emacs/init.el 118>+≡ <144 146>
  (use-package noweb-mode
    :load-path "/run/current-system/sw/share/emacs/site-lisp"
    :mode ("\\.nw\\'")
    :demand)

<config/emacs/init.el 118>+≡ <145 147>
  (use-package nyan-mode
    :demand
    :config (nyan-mode 1))

<config/emacs/init.el 118>+≡ <146 148>
  (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))

<config/emacs/init.el 118>+≡ <147 149>
  (use-package tuareg
    :mode ("\\.ml\\' " \\.mli\\'"))

<config/emacs/init.el 118>+≡ <148>
  (use-package whitespace-cleanup-mode
    :demand
    :config (global-whitespace-cleanup-mode t))

```



*Firefox*

*<config/firefox.nix 150>*≡

```
{ pkgs, ... }:

{

  programs.firefox = {
    enable = true;
    extensions = with pkgs.nur.repos.rycee.firefox-addons; [
      browserpass
      darkreader
      https-everywhere
      lastpass-password-manager
      privacy-badger
    ];
    profiles = {
      default = {
        settings = {
          # http://kb.mozillazine.org/About:config_entries
          "browser.ctrlTab.recentlyUsedOrder" = false;
          "browser.newtabpage.activity-stream.asrouter.userprefs.cfr.addons" = false;
          "browser.newtabpage.activity-stream.asrouter.userprefs.cfr.features" = false;
          "browser.newtabpage.activity-stream.feeds.section.topstories" = false;
          "browser.newtabpage.activity-stream.feeds.snippets" = false;
          # FIXME: "browser.newtabpage.activity-stream.improvesearch.topSiteSearchShortcuts.havePinned" = null;
          "browser.newtabpage.activity-stream.section.highlights.includePocket" = false;
          "browser.newtabpage.activity-stream.showSearch" = false;
          # FIXME: "browser.newtabpage.pinned" = "[]";
          # FIXME: "browser.search.defaultenginename" = "DuckDuckGo";
          # FIXME: "browser.search.defaulturl" = "https://duckduckgo.com/?q=";
          "browser.search.hiddenOneOffs" = "Google,Bing,Amazon.com,eBay,Twitter,Wikipedia (en)";
          # FIXME: git "browser.search.selectedEngine" = "DuckDuckGo";
          "browser.search.suggest.enabled" = false;
          "browser.startup.page" = 3;
          "browser.tabs.unloadOnLowMemory" = true;
          "browser.urlbar.placeholderName" = "DuckDuckGo";
          "extensions.activeThemeID" = "firefox-compact-dark@mozilla.org";
          "font.size.variable.x-western" = 12;
          "signon.rememberSignons" = false;
        };
      };
    };
  };
}
```

*fish*

```

<config/fish/default.nix 151>≡
{ config, lib, pkgs, ... }:

{

  imports = [
    ./abbrs.nix
    ./aliases.nix
  ];

  home = {
    packages = with pkgs; [
      exa
    ];
    sessionVariables = {
      SHELL = "fish";
      TERMINAL = "kitty";
    };
  };

  programs.autojump.enable = true;

  programs.fish =
    let
      inherit (lib.strings) fileContents;
    in
    {
      enable = true;
      interactiveShellInit = fileContents ./interactiveShellInit.fish;
      promptInit = lib.mkIf (!(config.programs.starship.enable)) "
        ${fileContents ./sushi/fish_prompt.fish}
        ${fileContents ./sushi/fish_right_prompt.fish}
      ";
      shellInit = fileContents ./shellInit.fish;
    };
}

```

### *Fish abbreviations*

“abbr manages abbreviations - user-defined words that are replaced with longer phrases after they are entered.

For example, a frequently-run command like `git checkout` can be abbreviated to `gco`. After entering `gco` and pressing `Space` or `Enter`, the full text `git checkout` will appear in the command line.”<sup>14</sup>

*<config/fish/abbrs.nix 152>*≡  
`{ ... }:`

```
{
  programs.fish.shellAbbrs = {
    <AWS Azure login abbreviation 153>
    <Kubernetes fish abbreviations 154>
    <Nix fish abbreviations 155>
    <ripgrep fish abbreviations 156>
  };
}
```

<sup>14</sup> abbr - manage fish abbreviations.  
 URL <https://fishshell.com/docs/current/cmds/abbr.html>

`NAAL`<sup>15</sup> IS COOL AND ALL, BUT...

... it's a bad habit too. the `aal` abbreviation makes being not so sneaky a bit less annoying.

*<AWS Azure login abbreviation 153>*≡ (152)  
`aal = "aws-azure-login -no-prompt";`

<sup>15</sup> <https://github.com/yurrriq/naal>

`kubect`l IS VERY CUMBERSOME to type all the time. Using fish abbreviations, save some precious keystrokes. It's definitely *worth the time*.

*<Kubernetes fish abbreviations 154>*≡ (152)  
`kc = "kubectl";`  
`kcd = "kubectl drain -delete-local-data -ignore-daemonsets";`  
`kcnp = "kubectl get pods -field-selector=spec.nodeName=";`  
`kcx = "kubectl -context";`  
`kgno = "kubectl get nodes";`  
`kn = "kubens";`  
`kns = "kubens";`  
`kt = "stern";`  
`kx = "kubectx";`

IT'S USEFUL TO RUN `nix build` with various flags. Why not save some keystrokes for those tasks, too?

*<Nix fish abbreviations 155>*≡ (152)  
`nb = "nix build";`  
`nbd = "nix build -dry-run";`  
`nbn = "nix build -no-link";`  
`nbo = "nix build -o";`

I'M NOT QUITE USED TO all the `ripgrep` flags yet. I'm also a lazy typist, so define some memorable abbreviations.

“Searches case insensitively if the pattern is all lowercase. Search case sensitively otherwise.”<sup>16</sup>

<sup>16</sup> Andrew Gallant. `rg` - man page.  
URL <https://www.mankier.com/1/rg>

```
<ripgrep fish abbreviations 156>≡ (152) 157>
  rg = "rg -S";
```

```
<ripgrep fish abbreviations 156>+≡ (152) <156 158>
  rga = "rg -hidden -iglob !.git";
  rgf = "rg -F";
```

“Never print the file path with the matched lines”, and “[s]uppress line numbers.”<sup>17</sup>

<sup>17</sup> Andrew Gallant. `rg` - man page.  
URL <https://www.mankier.com/1/rg>

```
<ripgrep fish abbreviations 156>+≡ (152) <157 159>
  rgin = "rg -IN";
```

```
λ rg -IN name: helmfile.d/*.yaml | sort -u
- name: cert-manager
- name: cluster-autoscaler
- name: elastalert
- name: elasticsearch-client
- name: elasticsearch-curator
- name: elasticsearch-exporter
- name: elasticsearch-master
- name: external-dns
- name: fluentd-elasticsearch
- name: hubble
- name: kibana
- name: kube-resource-report
- name: metrics-server
- name: nginx-ingress-core
- name: prometheus-operator
```

```
<ripgrep fish abbreviations 156>+≡ (152) <158
  rgn = "rg -no-heading";
```

```
<config/fish/aliases.nix 160>≡
{ ... }::

{

  programs.fish.shellAliases = rec {
    gpg = "gpg2";

    k = "clear";

    l = "exa -color=auto -G";
    ll = "exa -color=auto -Gla";

    # Old Darwin habits
    pbcopy = "xclip -sel clipboard";
    pbpaste = "${pbcopy} -o";
  };

}
```

*<config/fish/shellInit.fish 161>≡*

```
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
```

*<config/fish/interactiveShellInit.fish 162>≡*

*163>*

```
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
```

```

<config/fish/interactiveShellInit.fish 162>+≡ <162 164>
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

<config/fish/interactiveShellInit.fish 162>+≡ <163 165>
command -sq aws; and command -sq jq; and \
function describe-cert -d 'List the domains for a given ACM certificate'
    test (count $argv) -ne 1; and return
    aws acm describe-certificate --certificate-arn $argv[1] |
    jq -r '.Certificate | .SubjectAlternativeNames[]'
end

<config/fish/interactiveShellInit.fish 162>+≡ <164 166>
command -sq fluidsynth; and function playmidi
    fluidsynth -i ~/lib/arachno-soundfont/Arachno\ SoundFont\ -\ Version\ 1.0.sf2 $argv
end

<config/fish/interactiveShellInit.fish 162>+≡ <165 167>
command -sq kitty; and function icat
    kitty +kitten icat $argv
end

<config/fish/interactiveShellInit.fish 162>+≡ <166 168>
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

    function kcterm -d 'Terminate a Kubernetes node'
        test (count $argv) -ne 1; and return
        kubectl get node -o jsonpath='{.spec.providerID}' $argv[1] |
        cut -d '/' -f5 |
        xargs aws ec2 terminate-instances --instance-ids
    end
end

<config/fish/interactiveShellInit.fish 162>+≡ <167 169>
# FIXME: functions rvm >/dev/null 2>&1; and rvm default

<config/fish/interactiveShellInit.fish 162>+≡ <168 170>
set fish_greeting

```

```
<config/fish/interactiveShellInit.fish 162>+≡ <169
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
```

*(config/fish/sushi/fish\_prompt.fish 171)*≡

```
function fish_prompt
  set -l code $status

  if set -q IN_NIX_SHELL
    set symbol "λΠ "
  else
    set symbol "λ "
  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)
    end

    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)"$branch"(off)
      else
        printf (yellow)"$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 $behind_count -ne 0; and test (git remote | wc -l) -gt 1
        echo -n -s " "(orange)$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)
  end
end
```



```
    else
        echo -n -s (dim)"$symbol"(off)
    end
end
```

*<config/fish/sushi/fish\_right\_prompt.fish 172>≡* *173>*

```
# ----- [ 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
end
```

```
function off
    set_color -o normal
end
```

```

<config/fish/sushi/fish_right_prompt.fish 172>+≡ <172 174>
# ----- [ 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
end

```

```

<config/fish/sushi/fish_right_prompt.fish 172>+≡ <173 175>
# ----- [ 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

```

```

<config/fish/sushi/fish_right_prompt.fish 172>+≡ <174 176>
# ----- [ 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

```

```

<config/fish/sushi/fish_right_prompt.fish 172>+≡
# ----- [ Right Prompt ] <175
function fish_right_prompt
    set -l 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 -l 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*

```

<config/fzf.nix 177>≡
{ ... }::

{

    programs.fzf = {
        enable = true;
        enableZshIntegration = false;
    };

}

```

*Git*

```

<config/git/default.nix 178>≡
{ config, lib, pkgs, ... }:

{
  imports = [
    ./aliases.nix
    ./config.nix
    ./packages.nix
  ];

  programs.git = {
    enable = true;
    ignores = [
      "**/"
      ".DS_Store"
    ];
    lfs.enable = true;
  } // (
    with config.accounts.email.accounts.primary; {
      signing.key = gpg.key;
      userEmail = address;
      userName = realName;
    }
  );
}

```

```

<config/git/packages.nix 179>≡
{ 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
      ]
    )
  );
}

```

```

<config/git/config.nix 180>≡
{ 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";
      };
    };

    difftool = {
      pdfdiffer.cmd = "diff-pdf -view \"$LOCAL\" \"$REMOTE\"";
      prompt = false;
      trustExitCode = true;
    };

    pull.ff = "only";

    rerere.enabled = true;

    ui.color = true;
  }
}

```

```
url."git@gitlab.sportradar.ag:" = {  
    insteadOf = "https://gitlab.sportradar.ag/";  
};  
};  
  
xdg.configFile."pass-git-helper/git-pass-mapping.ini" = {  
    source = ./git-pass-mapping.ini;  
};  
  
xdg.dataFile."git/commit.template" = {  
    source = ./commit.template;  
};  
};  
}
```

*Aliases*

`<config/git/aliases.nix 181>≡`

```
{ config, lib, ... }:
```

```
{
```

```
  programs.fish.shellAbbrs = lib.mkIf (config.programs.fish.enable) {
```

```
    g = "git";
```

```
    gd = "git d";
```

```
    gdc = "git dc";
```

```
    gm = "git merge";
```

```
    gs = "git st";
```

```
    gt = "git tree";
```

```
  };
```

```
  programs.git.aliases = rec {
```

```
    ap = "add -p";
```

```
    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";
```

```
    cnm = "commit -nm";
```

```
    co = "checkout";
```

```
    cob = "${co} -b";
```

```
    cp = "cherry-pick";
```

```
    cpa = "${cp} -abort";
```

```
    cpc = "${cp} -continue";
```

```
    cs = "crypt status";
```

```
    cse = "crypt status -e";
```

```
    csm = "commit -S -m";
```

```
    csu = "crypt status -u";
```

```
    d = "diff";
```

```
    dad = "add";
```

```
    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*

```

<config/gpg.nix 182>≡
{ 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 = 28800;
    enableSshSupport = true;
    maxCacheTtl = 28800;
  };

}

```

## *htop*

```

<config/htop.nix 183>≡
{ ... }:

{

  programs.htop.enable = true;

}

```

*jq*

*<config/jq.nix 184>*≡

```
{ ... }:  
  
{  
  
  programs.jq.enable = true;  
  
}
```

*<config/kitty.nix 185>*≡

```
{ pkgs, ... }:  
  
{  
  
  programs.kitty = {  
    enable = true;  
    extraConfig = "  
      include theme.conf  
    ";  
    font = {  
      name = "Iosevka Term";  
      package = (pkgs.nerdfonts.override { fonts = [ "Iosevka" ]; });  
    };  
    keybindings = {  
      "kitty_mod+enter" = "new_window_with_cwd";  
      "kitty_mod+k" = "  
        combine : clear_terminal scrollback active : send_text normal \x0c  
      ";  
    };  
    settings = {  
      editor = "emacsclient -nw -a """;  
      font_size = 24;  
      kitty_mod = "ctrl+shift";  
      scrollback_lines = -1;  
      shell = ".";  
      term = "xterm";  
      window_border_width = 0;  
    };  
  };  
};  
  
xdg.configFile."kitty/theme.conf".source = builtins.fetchurl {  
  url = "https://raw.githubusercontent.com/dexpota/kitty-themes/c4bee86ce8372d3426620e27086d6afa6873a98c/themes/S  
sha256 = "0vwjcyd0asqrbs4437k2b80lqlanl79q03kk4pjnfdf379jklrm4";  
};  
  
}
```

*man*

$\langle \text{config/man.nix } 186 \rangle \equiv$

```
{ ... }:  
  
{  
  
  programs.man.enable = true;  
  
}
```

*nixpkgs*

$\langle \text{config/nixpkgs/default.nix } 187 \rangle \equiv$

```
{ ... }:  
  
{  
  
  nixpkgs.config = import ./nixpkgs-config.nix;  
  
  xdg.configFile."nixpkgs/config.nix".source = ./nixpkgs-config.nix;  
  
}
```

$\langle \text{config/nixpkgs/nixpkgs-config.nix } 188 \rangle \equiv$

```
{  
  allowBroken = false;  
  allowUnfree = true;  
  allowUnsupportedSystem = false;  
}
```

*<config/password-store.nix 189>*≡

```
{ config, pkgs, ... }:

{
  home.packages = with pkgs; [
    gitAndTools.pass-git-helper
  ];

  programs.password-store = {
    enable = true;
    package = pkgs.pass.withExtensions (exts: with exts; [
      pass-genphrase
      pass-otp
      pass-tomb
      pass-update
    ]);
    settings = {
      PASSWORD_STORE_DIR = "${config.home.homeDirectory}/.password-store";
    };
  };
}
```

*rebar3*

*<config/rebar3.nix 190>*≡

```
{ ... }:

{

  xdg.configFile."rebar3/rebar.config".text = "
    {plugins, [rebar3_hex]}.
  ";
}
```

*Starship*

Starship<sup>18</sup> is the minimal, blazing-fast, and infinitely customizable prompt for any shell!

<sup>18</sup><https://starship.rs>

```
(config/starship.nix 191)≡
{ lib, ... }:
{
  programs.starship = {
    enable = true;
    settings = {
      add_newline = false;
      character = {
        success_symbol = "[λ](bold green)";
        error_symbol = "[λ](bold red)";
      };
      format = builtins.concatStringsSep " " (
        lib.splitString "\n" "
          $username
          $hostname
          $shlvl
          $kubernetes
          $directory
          $git_branch
          $git_commit
          $git_state
          $git_status
          $hg_branch
          $docker_context
          $package
          $cmake
          $dart
          $dotnet
          $elixir
          $elm
          $erlang
          $golang
          $helm
          $java
          $julia
          $nim
          $nodejs
          $ocaml
          $perl
          $php
          $purescript
          $python
          $ruby
          $rust
          $swift
          $terraform
          $zig
          $nix_shell
          $conda
          $memory_usage
        "
      );
    };
  };
}
```

```

    $aws
    $gcloud
    $openstack
    $env_var
    $crystal
    $cmd_duration
    $custom
    $lua
    $jobs
    $battery
    $time
    $line_break
    $status
    $character
    "
);
git_branch.symbol = "⌚ ";
git_commit.tag_disabled = false;
git_status = {
    ahead = "↑ "${count}";
    behind = "↓ "${count}";
    diverged = "↕ ↑ "${ahead_count} ↓ "${behind_count}";
    staged = "+${count}";
};
kubernetes.disabled = false;
nix_shell = {
    format = "via [${symbol}${state}]($style) ";
    impure_msg = "ι";
    pure_msg = "ρ";
    symbol = "⌚";
};
stats.disabled = false;
time.disabled = false;
};
};
}

```

## Taskwarrior

### Config

```

<config/taskwarrior/default.nix 192>≡ 193>
{ config, lib, pkgs, ... }:

{

```

Install **Timewarrior**<sup>19</sup>.

<sup>19</sup> <https://timewarrior.net>

```

<config/taskwarrior/default.nix 192>+≡ <192 194>
    home.packages = with pkgs; [
        timewarrior
    ];

```

SINCE HOME-MANAGER GENERATES A READ-ONLY `.taskrc` FILE, and using `contexts`<sup>20</sup> requires Taskwarrior to be able to modify the it, use the following hacky workaround.

<sup>20</sup> <https://taskwarrior.org/docs/context.html>

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

```
<config/taskwarrior/default.nix 192>+≡                                     <193 195>
  home.sessionVariables = {
    TASKRC = "~/.taskrc-dirty";
  };
```

DEFINE short Taskwarrior shell aliases.

```
<config/taskwarrior/default.nix 192>+≡                                     <194 196>
  programs.fish.shellAliases = lib.mkIf (config.programs.fish.enable) rec {
    p = "task ls limit:page";
    po = "timew summary :week";
    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";
    tw = "timew";
  };
```

CONFIGURE TASKWARRIOR, using [home-manager](https://github.com/rycee/home-manager)<sup>21</sup>.

<sup>21</sup> <https://github.com/rycee/home-manager>

`<config/taskwarrior/default.nix 192>+≡`

`<195 197>`

```

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*.<sup>22</sup>

<sup>22</sup> See next subsection.

```
<config/taskwarrior/default.nix 192>+≡                                     <196 198>
  xdg.dataFile."task/hooks/on-exit-git.sh" = {
    executable = true;
    source = ./on-exit-git.sh;
  };

<config/taskwarrior/default.nix 192>+≡                                     <197
  xdg.dataFile."task/hooks/on-modify.timewarrior" = {
    executable = true;
    source = let inherit (pkgs.timewarrior) version; in
      with pkgs; stdenv.mkDerivation {
        pname = "taskwarrior-on-modify.timewarrior";
        inherit version;
        nativeBuildInputs = [ makeWrapper ];
        src = fetchurl {
          url = "https://raw.githubusercontent.com/GothenburgBitFactory/timewarrior/v${version}/ext/on-modify.timewarrior";
          sha512 = "sha512-CaaELr0JaDJ/LNvwUGDQUQP0KE0apGkJMycD9ujv0DWgftQzoYkw/JCDPChreT4xCEJ303sAx4NpUqb+260orw==";
        };
        dontUnpack = true;
        installPhase = "
          install -m755 $src $out
          substituteInPlace $out -replace "/usr/bin/env " "${python3}/bin/";
        ";
      };
  };
};
}
```

### *on-exit Git hook*

FIRST, use a fairly portable Bash shebang, and be safe.<sup>23</sup>

<sup>23</sup> `-e` exit immediately upon failure, treat `-u` unset variables as an error, disable `-f` file globbing, and fail if any part of a pipeline fails (`-o pipefail`).

```
<config/taskwarrior/on-exit-git.sh 199>≡                                     200>
#! /usr/bin/env bash
```

```
set -eufo pipefail
```

Run in debug mode<sup>24</sup>, if the environment variable `DEBUG` is nonempty. <sup>24</sup> i.e. echo commands

```
<config/taskwarrior/on-exit-git.sh 199>+≡                                     <199 201>
if [ -n "${DEBUG:-}" ]; then
  set -x
fi
```

PARSE the command line arguments.

Don't include the **api** version, **rc** file, or Taskwarrior **version**.

```
i="${1#api:}"
rc="${4#rc:}"
rsion="${6#version:}"
```

N.B. The positional arguments are formatted as **foo:bar**, where **foo** is the name of the argument, and **bar** is the value.

Parse and store the values of the arguments, **args**, **command**, and **data** directory.

```
<config/taskwarrior/on-exit-git.sh 199>+≡<200 202>
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"**.

```
<config/taskwarrior/on-exit-git.sh 199>+≡<201 203>
if git -C "$data" diff -quiet; then
    if [ -n "${DEBUG:-}" ]; then
        echo 'No changes to commit'
    fi
    exit 0
```

If there are no changes, **exit** successfully, printing an informative message if running in debug mode. **git diff** **exits** with status code **0** if there are no differences between the working tree and the index.

If present, stage the changes or die trying.

```
<config/taskwarrior/on-exit-git.sh 199>+≡<202 204>
elif ! git -C "$data" add -A; then
    echo 'Failed to add files to the index'
    exit 100
```

Try to commit the changes, or else.

```
<config/taskwarrior/on-exit-git.sh 199>+≡<203 205>
elif ! git -C "$data" commit -qm "$command: ${args#task $command}"; then
    echo 'Failed to record changes to the repository'
    exit 101
```

Quietly store the current contents of the index in a new commit, along with a log message describing the changes.

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

```
<config/taskwarrior/on-exit-git.sh 199>+≡<204>
elif [ -n "${DEBUG:-}" ]; then
    git -C "$data" log -oneline -1
fi
```

*xmonad*

*<config/xmonad/default.nix 206>*≡

```
{ pkgs, ... }:

{

  home.file.".xmonad/matrix.png".source = ./matrix.png;

  home.packages = with pkgs; [
    flameshot
    # font-awesome_4
    i3lock
    haskellPackages.xmobar
  ];

  programs.rofi = {
    enable = true;
    font = "Iosevka Term 18";
    pass = {
      enable = true;
      stores = [ "~/.password-store" ];
    };
    theme = "purple";
  };

  services.network-manager-applet.enable = true;

  services.pasystay.enable = true;

  services.picom.enable = true;

  services.stalonetray = {
    enable = false;
    config = {
      background = "#001e26";
      decorations = "none";
      dockapp_mode = "none";
      geometry = "5x1-860-0";
      grow_gravity = "NE";
      icon_gravity = "NE";
      icon_size = 43;
      kludges = "force_icons_size";
      no_shrink = false;
      skip_taskbar = true;
      sticky = true;
      transparent = false;
      window_layer = "bottom";
      window_strut = "none";
      window_type = "dock";
    };
  };

  xdg.configFile."xmobar/xmobarrc".source = ../xmobar/xmobarrc;
```

```
xsession = {  
  enable = true;  
  pointerCursor = {  
    package = pkgs.vanilla-dmz;  
    name = "Vanilla-DMZ-AA";  
    size = 36;  
  };  
  scriptPath = ".hm-xsession";  
  windowManager.xmonad = {  
    enable = true;  
    enableContribAndExtras = true;  
    config = ./xmonad.hs;  
  };  
};  
  
}
```

# *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.”<sup>25</sup> 5

<sup>25</sup> <https://nixos.org/nixos/manual/index.html#sec-writing-modules>



# *Acronyms*

*LUKS* Linux Unified Key Setup [5](#), [10](#)





## *Bibliography*

abbr - manage fish abbreviations. URL <https://fishshell.com/docs/current/cmds/abbr.html>.

Andrew Gallant. rg - man page. URL <https://www.mankier.com/1/rg>.

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*

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