What the Nix?!
What is Nix?!
The Declarative Trinity

The Operating System

IS

IS NOT

Nix

The Package Manager

IS

IS

IS NOT

The Language
The Package Manager

$ terraform --version
Command 'terraform' not found, but can be installed with:
sudo snap install terraform
$nix-shell -p terraform
...
[nix-shell:~]$ terraform --version
Terraform v1.2.2
on linux_amd64
The Language

Or “JSON with functions”

```json
{
    "names": [ "Bryan", "Tweag", "We" ],
    "whoLovesNix": [ "Bryan loves Nix!", "Tweag loves Nix!", "We loves Nix!" ]
}

{
    names = [ "Bryan" "Tweag" "We" ];
    loveNix = a: "${a} loves Nix!";
    whoLovesNix = builtins.map loveNix names;
}
```
The Operating System

{ config, pkgs, ... }:

{
    services.httpd.enable = true;
    services.httpd.adminAddr = "bryan.honof@tweag.io";
    services.httpd.virtualHosts.localhost.documentRoot = "/memes";
}

Why do we Nix?!
Why do we I Nix?!
nixos-rebuild --rollback switch
How do we Nix?!
curl -L https://nixos.org/nix/install | sh -s -- --daemon

Yes, I know... Don’t pipe directly into bash.
{ pkgs ? import <nixpkgs> {} }

pkgs.mkShell {
  packages = [
    pkgs.terraform
    pkgs.skopeo
    pkgs.kubectl
  ];
}

$ nix-shell
these paths will be fetched (0.07 MiB download, 0.20 MiB unpacked):
  /nix/store/…-skopeo-1.8.0
  /nix/store/…-terraform-1.2.2
  ...
copying path '/nix/store/…-skopeo-1.8.0' from 'https://cache.nixos.org'...  
  ...
[nix-shell:~]$
A Gentle Introduction to Nix
2023-02-06, 14:00–14:50, B.3.037

Do you have a colleague or friend that just can’t stop talking about Nix? How it’s reproducible, the future of software. Why it’s so much better than the other tools out there. He just won’t stop talking about it. And now, you’ve given in. You decided to give it a try, but where to start?

If the above is you, this talk is for you! Bryan will give his best attempt at giving a gentle introduction to Nix. After this talk, you hopefully understand Nix’s values, and where to find more help if you happen to need it.

Using Nix to generate Docker images
2023-02-07, 12:30–12:35, D Aud

In this ignite talk, I will expose quickly the benefits of not writing Dockerfiles but rather using Nix expressions to generate Docker images.