



Welcome

Friends

Gant Laborde
Infinite Red



Gant Laborde



@GantLaborde

A dandelion seed head is centered in the frame, its seeds radiating outwards. The background is a soft, out-of-focus sunset or sunrise, with warm orange and red tones at the bottom transitioning into a pale blue and white sky at the top. A horizontal white band runs across the middle of the image, serving as a backdrop for the text.

Developer Sanity

Environments can make deterministic code, nondeterministic



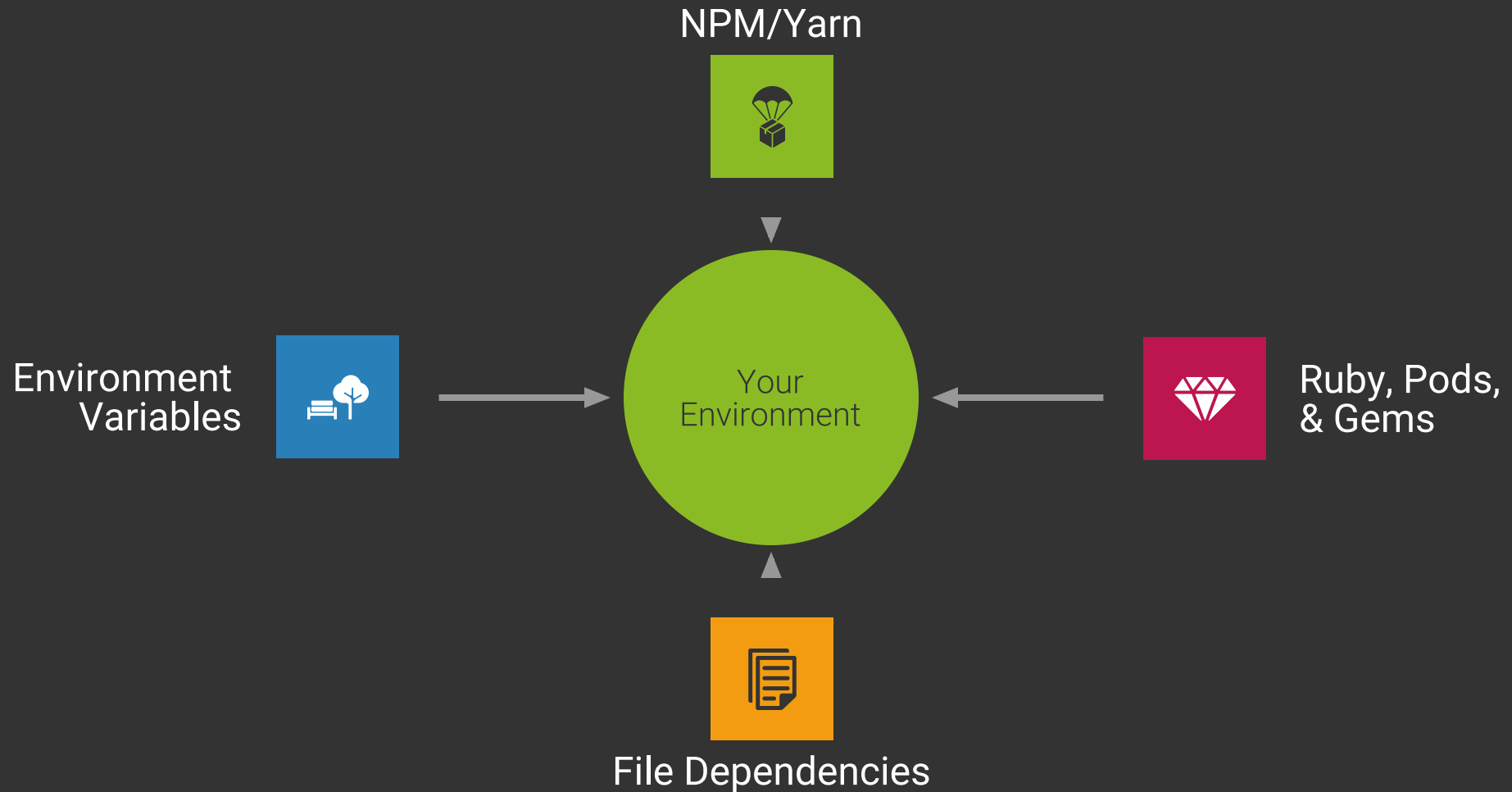
Story

The Last Straw



FASTLANE MONGO JAVA
FILES TYPESCRIPT SHELL
HOMEBREW PYTHON JEST TVOS
BROWSERS
RUBY NPM WTF?!
WATCHMAN XCRUN ELIXIR NODE
EMBER-CLI PHOENIX
OPTIMIZER JQUERY DETOX POSTGRES SQL
REACT_NATIVE
REACT-NATIVE-CLI
YARN
COCOPODS
ENVIRONMENT_VARIABLES
KDS_DIDRDND
ANDROID_SDK
WATCHOS
JASMINE
LINTERS
SQLITE

Not a package manager



Terrible Quiz Time



Node

Which version of Node added Async/Await?



Phoenix

Which version of Phoenix removed the top-level “web” directory?



Node Again

Which version of Node added Object spread?



Ruby

Which version of Ruby added the safe navigation operator (&.)?



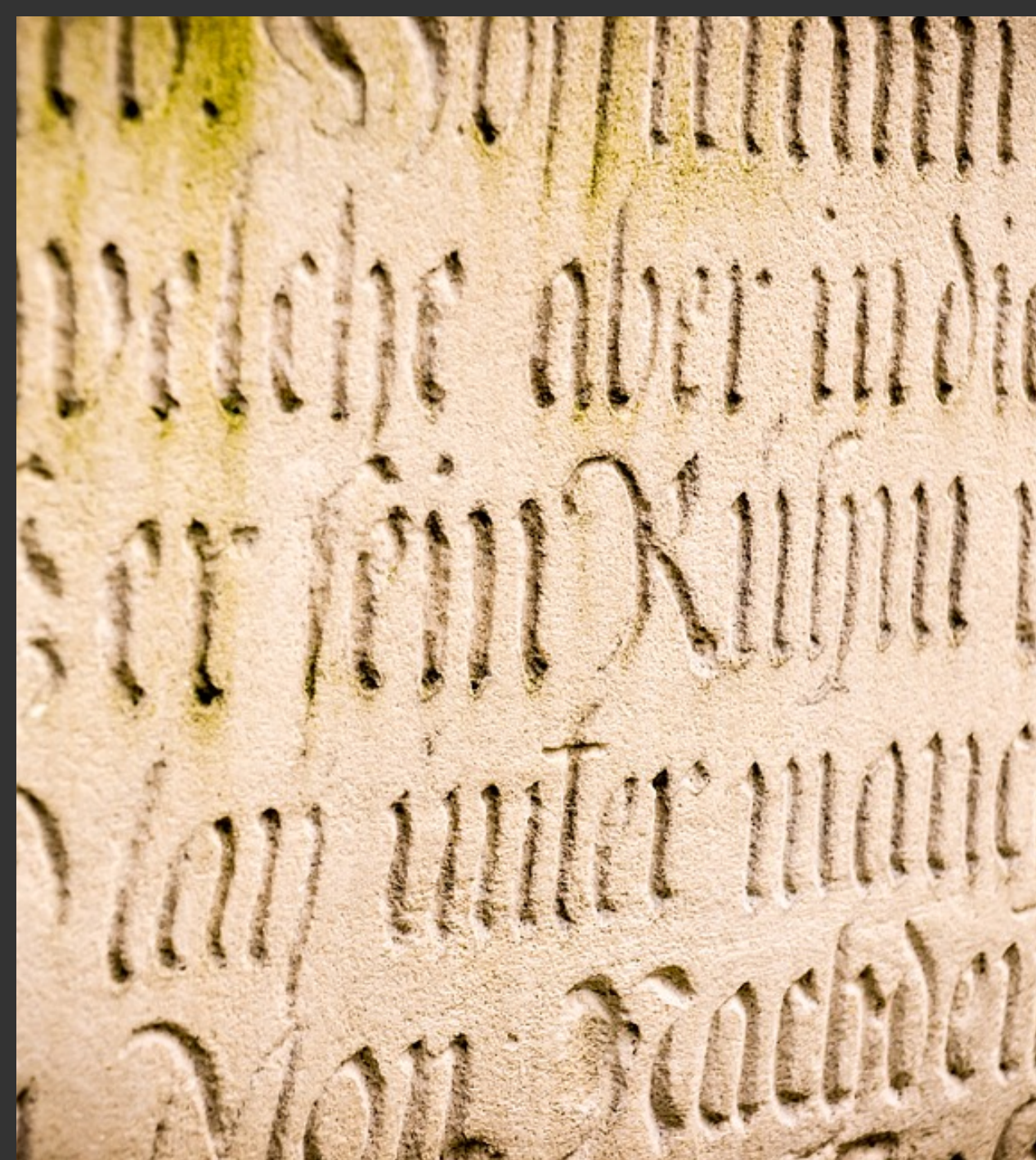
NPM

Which version did `npm i` start automatically updating the package-lock.json file?



Other

Random downgrading to fix? Enforced upgrading to fix? How does a team manage all of this?



Quis custodiet
ipsos custodes?

Containers?

Deep Control Initiatives



Docker

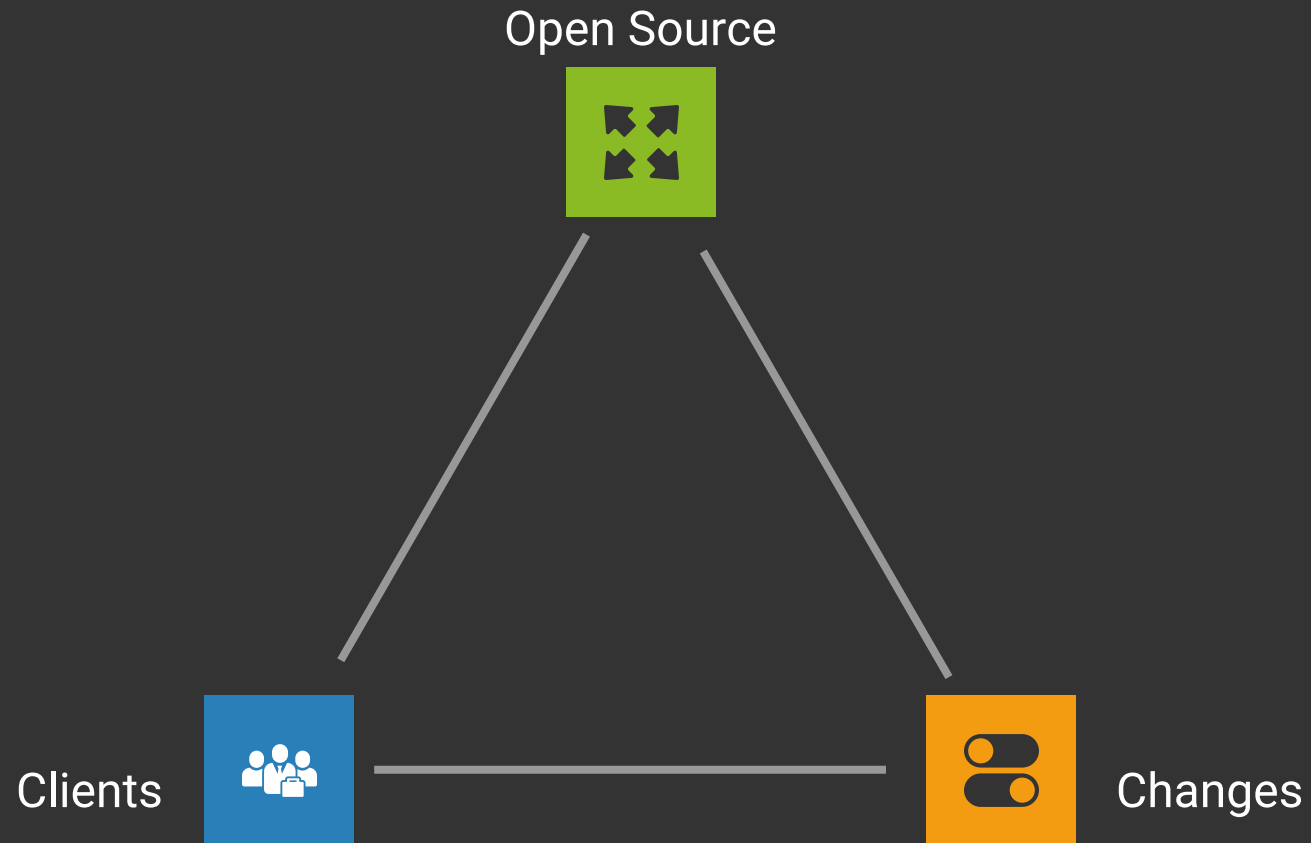


Open Container Initiative



Kubernetes

Issues With Deep Control



A close-up photograph of two hands, palms up, holding a tangled string of warm white LED lights. The hands are positioned in the center of the frame, with the fingers slightly spread. The string lights are coiled and draped across the palms, with several small, glowing white lights visible. The background is a clear, light blue sky. The overall mood is warm and gentle.

Light Touch

The background of the image is a vibrant sunset sky with a warm orange and yellow color palette. Numerous hot air balloons of various shapes and sizes are scattered across the sky, some appearing as dark silhouettes and others as lighter, glowing shapes. In the lower portion of the image, the silhouettes of trees and a tall, lattice-like tower are visible against the bright sky. A white rectangular box is centered in the middle of the image, containing the text.

Simple Small Solution

Solidarity

Simple for You



Enforce CLI and Versions



Enforce ENV Variables



Enforce Files or Directories



Enforce any Shell Output

Fans in Tech



“I’ve never worked on a team that didn’t need an environment checker, and I’m betting you haven’t either. Use Solidarity” - Trevor Brindle



“It’s like a meta-package manager” - Jamon Holmgren



“When I joined the Justice League, Aquaman wasted days trying get up and running because of a fastlane bug. I wish we had Solidarity” - Wonder Woman

Solidarity uses Solidarity

- Enforce NPM
- Enforce Node ≥ 7.6
- Enforce Yarn ≥ 1
- Enforce TypeScript Folders

```
{  
  // I'm JSON5 so I support comments  
  "$schema": "./solidaritySchema.json",  
  "requirements": {  
    "NPM": [{ "rule": "cli", "binary": "npm" }],  
    "Yarn": [{  
      "rule": "cli",  
      "binary": "yarn",  
      "semver": "^1.0.0",  
      "version": "--version"  
    }],  
    "Node": [{  
      "rule": "cli",  
      "binary": "node",  
      "semver": "≥ 7.6.0",  
      "error": "Upgrade to latest node ≥ 7.6 please."  
    }],  
    "TypeScript Active": [  
      { "rule": "dir", "location": "./src", "error": "Did you get this code from npm? Try github!" },  
      { "rule": "dir", "location": "./dist", "error": "You haven't compiled. Run the build script!" }  
    ]  
  }  
}
```

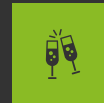
Keep it Simple

```
gantman@gant-pro: ~/Documents/Projects/js/rn/nod  
$
```

Go beyond package managers

**Snapshot, scan, and check crucial
parts for your project environments
in one place.**

MacBook



Light Touch



Cross Platform



Time Saving

CLI Checks

- cli

- version

- semver

- line

- platform

- error

Environment Variable Checks

- variable
- platform

- error

File/Dir Checks

- location
- platform
- error

Shell

- match
- platform

- error

Custom?

- plugin

- name

- error

- platform

- (OTHER)



What Else?

A close-up photograph of a person's hand holding a camera lens. The lens is held in a way that the aperture is open, revealing a scenic view of a lake, mountains, and a blue sky with clouds. The word "Snapshots" is overlaid in white text across the center of the image.

Snapshots

Snapshot CLI

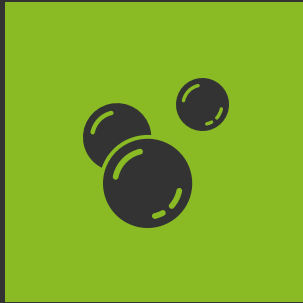
Now loading latest environment

- ✓ Keep node 9.3.0
- ✓ Keep xcrun 36
- ✓ Setting react-native to '2.0.1'
- ✓ Setting react-native line 2 to '0.39.2'
- ✓ Keep code-push 2.0.1-beta
- ✓ Keep npm 5.7.1
- ✓ Keep xcodebuild 9.2
- ✓ Setting yarn to '1.3.2'
- ✓ Keep pod 1.3.1

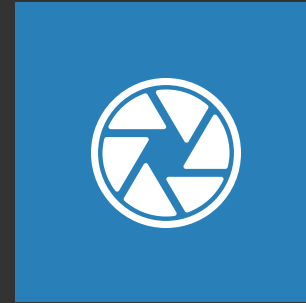
Now loading latest environment

- ✓ Keep node 9.3.0
- ✓ Keep xcrun 36
- ✓ Keep react-native 2.0.1
- ✓ Keep react-native line 2 at 0.39.2
- ✓ Keep code-push 2.0.1-beta
- ✓ Keep npm 5.7.1
- ✓ Keep xcodebuild 9.2
- ✓ Keep yarn 1.3.2
- ✓ Keep pod 1.3.1

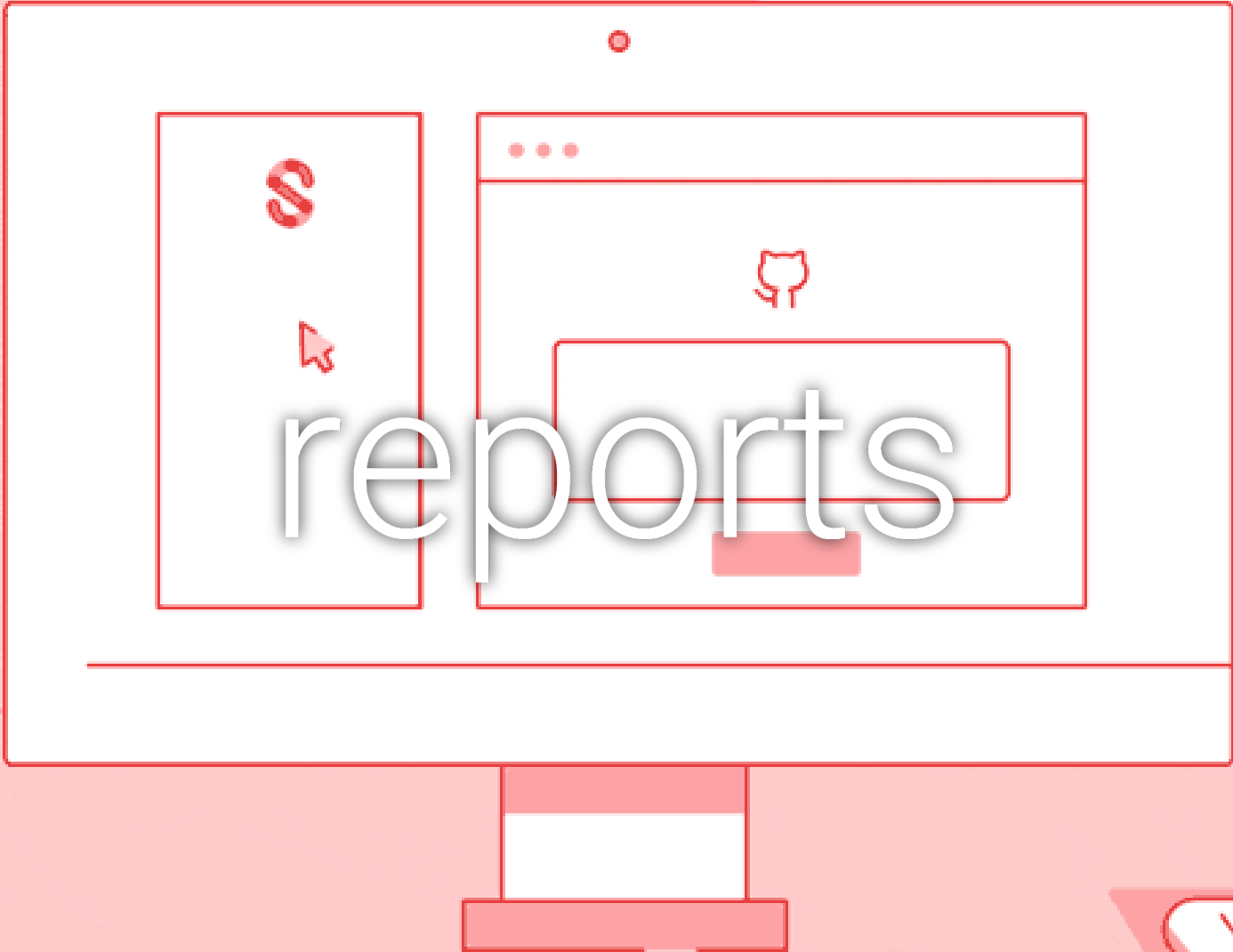
Simple!



Custom Rules



Snapshot CLI



reports

The illustration shows a computer monitor with a white screen and a red border. On the screen, there is a web interface with a sidebar on the left containing a red circular icon with a white 'e' and a red mouse cursor icon. The main content area has a red header bar with three dots, a red cat icon, and a red rectangular box. The word 'reports' is written in a large, white, sans-serif font across the center of the screen. To the left of the monitor is a white cylindrical container with four red pens. To the right is a white computer mouse. The background is a light pink color with several darker pink abstract shapes.



OLIVER
25

ALOE
CRISTATO
ALOE

VE


```
$ solidarity report
```

```
[9:28:28]
```

```
# ⚠ Environment Report:
```

```
### System
```

System Basics	Value
OS	macOS High Sierra 10.13.3
CPU	x64 Intel(R) Core(TM) i7-4870HQ CPU @ 2.50GHz
Report Info	3/22/2018, 9:28:38 AM (in 2.73s)

```
### Commands
```

Binary	Location	Version	Desired
applesimutils	/usr/local/bin/applesimutils	0.5.12	*ANY*
yarn	/usr/local/bin/yarn	1.3.2	1.3.2
npm	/usr/local/bin/npm	5.7.1	5.7.1
code-push	/usr/local/bin/code-push	2.0.1-beta	2.0.1-beta
react-native	/usr/local/bin/react-native	0.39.2	0.39.2
react-native	/usr/local/bin/react-native	2.0.1	2.0.1
watchman	/usr/local/bin/watchman	4.7.0	*ANY*
node	/usr/local/bin/node	9.3.0	9.3.0
xcrun	/usr/bin/xcrun	36	36
detox	/usr/local/bin/detox	*UNKNOWN*	*ANY*
xcodebuild	/usr/bin/xcodebuild	9.2	9.2
pod	/Users/gantman/.rbenv/shims/pod	1.3.1	1.3.1

```
$ solidarity report
# 🚩 Environment Report:
-----

### System

| System Basics | Value |
| ----- | ----- |
| OS | macOS High Sierra 10.13.1 |
| CPU | x64 Intel(R) Core(TM) i7-3770 CPU @ 3.40GHz |
| Report Info | 2017-12-12 11:38:43 (in 0.49s) |

### Commands

| Binary | Location | Version | Desired |
| ----- | ----- | ----- | ----- |
| node | /usr/local/bin/node | 8.6.0 | >=7.6.0 |
| npm | /usr/local/bin/npm | 5.5.1 | *ANY* |
| yarn | /usr/local/bin/yarn | 1.3.2 | ^1.0.0 |

### Filesystem

| Location | Type | Exists |
| ----- | ----- | ----- |
| ./src | Dir | ✓ YES |
| ./dist | Dir | ✓ YES |
-----
```

Easy

Write Preview

🚩 Environment Report:

System

System Basics	Value
OS	macOS High Sierra 10.13.1
CPU	x64 Intel(R) Core(TM) i7-3770 CPU @ 3.40GHz
Report Info	2017-12-12 11:38:43 (in 0.49s)

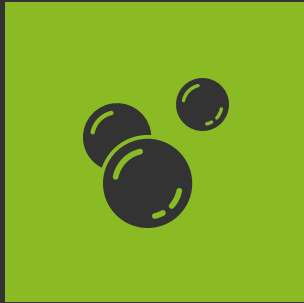
Commands

Binary	Location	Version	Desired
node	/usr/local/bin/node	8.6.0	>=7.6.0
npm	/usr/local/bin/npm	5.5.1	ANY
yarn	/usr/local/bin/yarn	1.3.2	^1.0.0

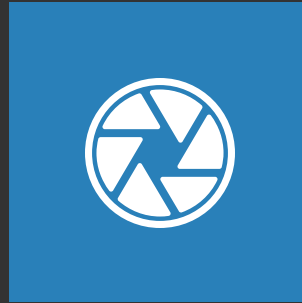
Filesystem

Location	Type	Exists
./src	Dir	✓ YES
./dist	Dir	✓ YES

Simple!



Custom Rules



Snapshot CLI



Reports



Next?



You

Experiment with Me?

Add to Your Project

`npm i solidarity --save`
create a `.solidarity` file full of rules

Try or Publish a Tech Plugin

`npm i solidarity --save`
`npm i solidarity-react-native --save`
`npm run solidarity snapshot`

Write a Cool Plugin

A plugin to give cool new rules?
Checking Licenses?
Creating Cool New Reports?

Give Feedback

I would not need this but <3

Hey, I love this! Features plz!

Solidarity Plugins

How to “Next Step” with Solidarity

Tech Plugins

Solidarity Plugins

- [Ember CLI](#)
- [React-Native](#)
- Elixir - Coming Soon...

Be sure to add your plugins here in alphabetical order

[How to write a Solidarity Plugin](#)

You already know the
parts for your tech stack

Why copy-pasta?

Tech Plugins



Tech Plugins



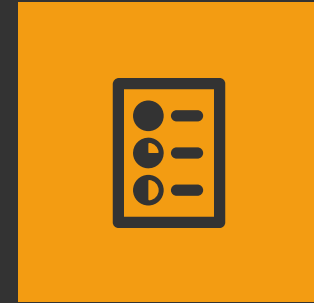
Custom Plugin Powers



Create your own rule



Control how to snapshot



Control how to report

```
gantman@Gant-Pro: ~  
$ solidarity create plugin  
? Plugin name? (we will add the namespacing for you) █
```



Answer basic
questions



Simple!



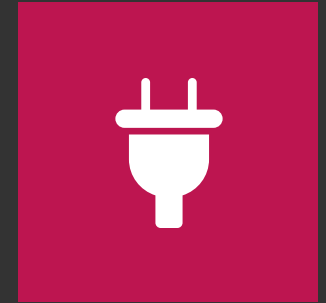
Custom Rules



Snapshot CLI



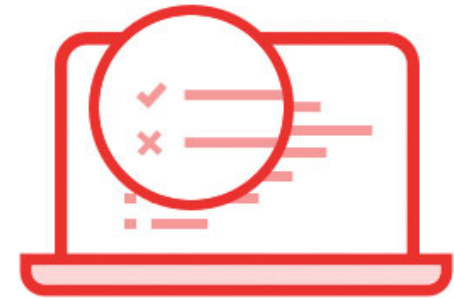
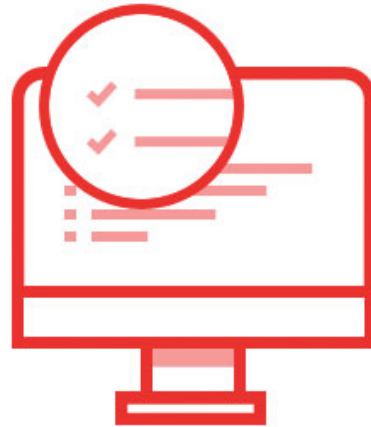
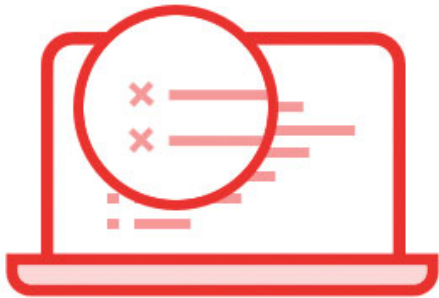
Reports



Plugins



solidarity





Gant Laborde



Kevin
VanGelder



Matt
Thompson



Steve Kellock



Timo Sand



AJ Robertson



Joko Susilo



Campion Fellin



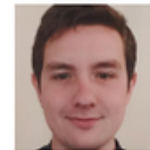
Sia



dduncan



Brandon Dean



Grigori



Imran Brown



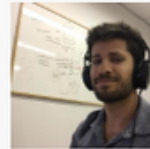
Nicolas
Charpentier



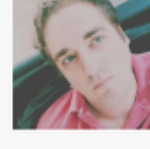
Will Raxworthy



Markus
Mikonsaari



Bnaya Peretz



Christian
Johannessen



Jenna Fucci



Trevor Brindle



Morgan



Jamon
Holmgren



Patrick Kempff





WORK

CAPABILITIES

COMMUNITY

COMPANY

BLOG

CONTACT

We create beautiful, functional apps with the latest technology

We help startups and businesses build a better product for the future.

SEE OUR WORK





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Gant Laborde

Chief Technology Strategist at
Infinite Red

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Slides: <https://bit.ly/2GWeufy>