# .nz Registrar Portal

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# Quick background

- Standalone web application

- Launched in January 2015

- Replaced section of main web site with registrar transaction data

- Started phase 2 dev in April 2016

- No usage stats

# Original objectives

## Influencing registrars

- Reduce support costs
  Financial: late payments, invoice resends, etc
  Technical: registration system errors

- Increase .nz sales by helping registrars to
  … find new markets / customers / sales
  … improve their sales process
  … understand their customers better
  … retain customers by timely intervention

- Improve quality of TLD by nudging registrars
  … improve quality WHOIS data
  … manage DNS better
  … act quickly on phishing / compromised sites

# Things it musn't do

- Create a class of registrars who don't use EPP and our proprietary equivalent
- Allow one part of a registrar to work in an uncoordinated way with another part
- Do things in private that we should do in public
- Provide a new way to attack a domain
- Substantially increase support costs

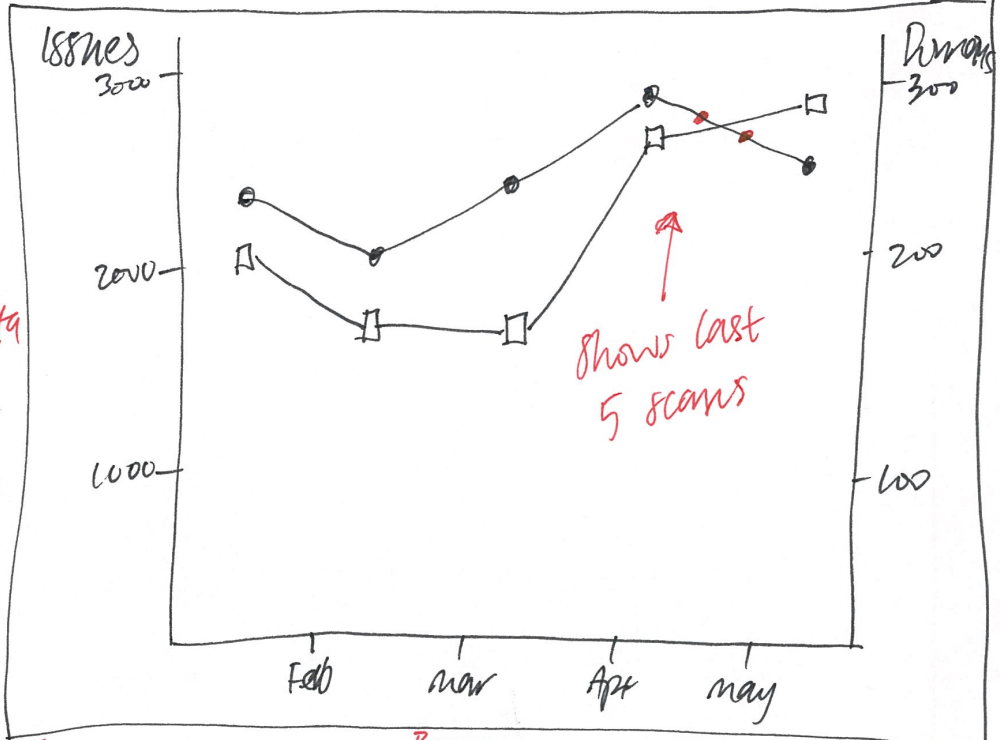**So no functionality that duplicates EPP !**

# LIVE DEMO

# Recap

- ## Transaction data
  Split into sections – each with specific aim
  Gentle gamification

- ## Opportunities
  Lists they can use to upsell, cross-sell, retain
  No tracking, no pushing, up to them to use

- ## Quality
  Bad WHOIS data – nightly text pattern matching
  SRS/EPP errors – straight from system
  Zone errors – from our weekly zone scan
  Compromised / phishing sites – external feeds

Zonescan Issues & Affected Domains

2425    273

| Registry Total | Issues | Domains |
|---|---|---|
| | 195,468 | 16,289 |
| Critical | 17 | 17 |
| Error | 1672 | 108 |
| Warning | 715 | 146 |
| Notice | 21 | 2 |

*Only data from current scan*

*Shows last 5 scans*

Issues — 3000, 2000, 1000
Domains — 300, 200, 100
Feb  Mar  Apr  May

*Red*  *Pink*  *Beige*  *Blue*

| Domain | C | Errors | Warnings | Notices | Date |
|---|---|---|---|---|---|

*+ usual download*

*full issue text on hover*

*click on column to filter*

*+ search*

# Technical info

- Ruby on Rails web app

- AmCharts for charting

- Standalone PostgreSQL database

- Threat intelligence feeds:
  Shadowserver compromised sites for .nz (free)
  Openphish Premium (free)
  APWG BlockList (through paid membership)

# Plans and underlying tech

- Anonymous ranking
"You are #1 WORST for quality"

- Support role splits within registrars
Access controlled roles

- Access to more registrant data
2FA

- Industry categorisation
Using our machine learning tools

# Possible future

- Probabilistic modelling of cancellations
  Renewal intervention points

- Extend model to domain 'value'
  Historical lifetime value of domain names.
  Projected value of recently acquired domains/registrants (if we can build model)
  Historical lifetime value of registrants

- Refine algorithm for detecting portfolios
  Understand portfolio customers
  Registrants with growing / falling portfolios

# Thanks

**Any questions?**

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