.nz Registrar Portal

Jay Daley
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
• **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

<table>
<thead>
<tr>
<th>Registry</th>
<th>Total</th>
<th>Issues</th>
<th>Domain</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2,425</td>
<td>2,73</td>
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<tr>
<td>Critical</td>
<td>17</td>
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<tr>
<td>Error</td>
<td>1,672</td>
<td>108</td>
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<tr>
<td>Warning</td>
<td>715</td>
<td>146</td>
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<tr>
<td>Notice</td>
<td>21</td>
<td>2</td>
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#### Issues 3000

- Feb: [Graph Data]
- Mar: [Graph Data]
- Apr: [Graph Data]
- May: [Graph Data]

**Shows last 5 scans**

### Domain Issues

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<tr>
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**Click on column to filter**

**Full issue text on hover**

**+ Search**

**Usual download**
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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          www.nzrs.net.nz