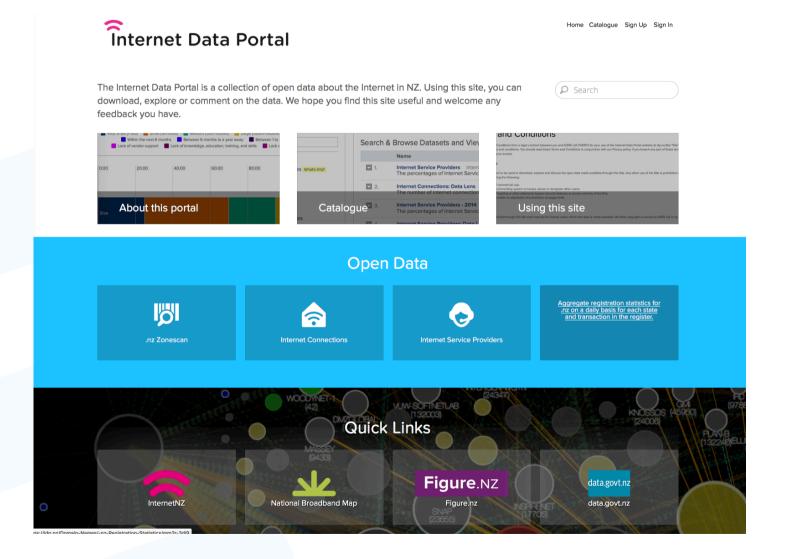


### **Internet Data Portal**

Jay Daley, .nz

# https://idp.nz



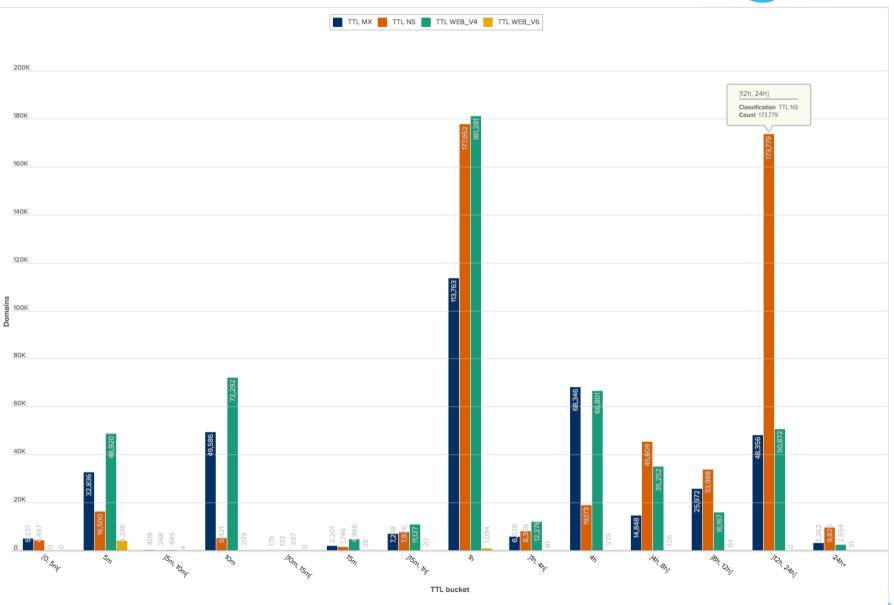


#### What is it

- Repository for Internet data relating to NZ
- All open data
- Place to explore
- Forum to discuss
- · ... and more

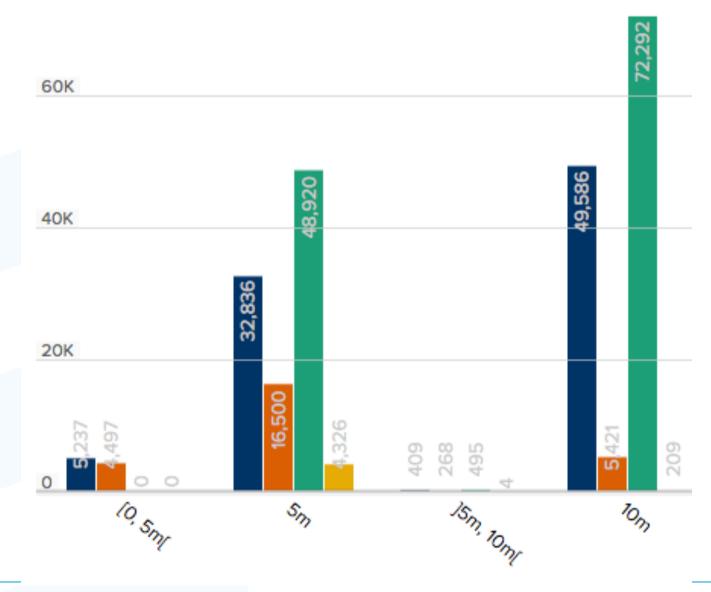


# .nz Zone Scan - TTL August





### **Zoomed in**





# **Underlying data**

Classification	Metric <b>⊕</b> ∷≡	Count Type	Count <b>⊕</b> :≡
TTL MX	[0, 5m[	Domains	5,276
TTL MX	5m	Domains	35,362
TTL MX	]5m, 10m[	Domains	447
TTL MX	10m	Domains	56,298
TTL MX	]10m, 15m[	Domains	171
TTL MX	15m	Domains	3,449
TTL MX	]15m, 1h[	Domains	5,497
TTL MX	1h	Domains	131,345
TTL MX	]1h, 4h[	Domains	6,028
TTL MX	4h	Domains	68,775



## The product

- Chose Socrata
   US based
   SaaS running on AWS
- Requirements
   Decent catalogue
   Chart designer
   API access (OData in particular)
- Alternatives rejected
   CKAN
   DKAN



#### **Current datasets**

- .nz Zone Scan
   Run monthly
   Looks for 50+ indicators
   Aggregate stats uploaded after each scan
- .nz Registration data
   Transaction per day by type of transaction
   Domains in each state
   Aggregate stats uploaded each day
- Other
   Web Index from Web Foundation republished
   NZ ISP Survey from StatisticsNZ



## Long vs Wide

- Wide has one column per measure Year, Fibre, ADSL, VDSL, Cable
- Long has fewer columns that encode more Year, Access Type, Connections
- We use Long, which means
   Many more rows
   Need tools that handle clustering
   More flexibility in analysis



#### .nz Zone Scan data structure

- Fields (excluding admin fields)
   Classification, Metric, Count Type, Count
- Classification/Metric examples

TTL\_MX [0, 5m[

TTL\_MX 5m

Domain Errors Domains with broken delegation

Domain Errors Domains with inconsistent glue

DNSSEC Domains with DS records

DNSSEC Key Algorithm RSA/SHA-1

 Count Type is one of Domains, Servers, Hosts, Nameservers, DNSKEY



### .nz Reg stats data structure

Fields

Day, Parent Level Domain, Measure, Measure Type, Count

Measure/Measure Type examples

Due for renewal State

Pending release State

Created Transactions

Cancelled Transactions

Parent Level Domain examples
 nz, co.nz, org.nz, ac.nz, kiwi.nz, geek.nz



## **Thanks**

Find it at https://idp.nz

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www.nzrs.net.nz

