

Related Domains By DNS (RDBD)

draft-brotman-rdbd-03

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Summary

- -03 substantively the same but lots of editorial changes based on feedback received
- Implemented more and deployed on small set of small domains
 - <https://github.com/sftcd/rdbd-deebeedeerrr/>
 - Python code + bash scripts to create zone file fragments
 - (Bash script) wrapper for dig for viewing
 - Signature creation and verification included
- It works:-)

Example

```
$ ./dig-wrapper.sh RDBD tolerantnetworks.ie

; <<>> DiG 9.11.5-P4-5.1ubuntu2-Ubuntu <<>> RDBD tolerantnetworks.ie
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 22965
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;tolerantnetworks.ie. IN RDBD

;; ANSWER SECTION:
tolerantnetworks.ie. 3600 IN RDBD UNRELATED my-own.com
tolerantnetworks.ie. 3600 IN RDBD RELATED my-own.ie
tolerantnetworks.ie. 3600 IN RDBD RELATED my-own.net
tolerantnetworks.ie. 3600 IN RDBD RELATED tolerantnetworks.com Sig: good KeyId: 50885 Alg: 8 Sig:
i04agbJqhhEGE6x+6G1QeGe+Ji/gFeVNrfmNnbPg2w1wPv17jnzJ9g1mdTYk2em7obcuayMornBZbq0RslBDR2cHloJh/
Uejekhji7M7oQTxwi0gr07VXfw+tkbpN1jAl6uCW0uq0C7OT5JxA7tle8SdRetvriJhGb02oXo3vRmgAWeOISzZjPjEt3h1vN8uSbPRHB/
C0c5yfHH++FGvJmAjFgJniN/tTnKestE7s6RkUaVzcW9xgyZpVzSTsk/
whUfThvf+oVp5AWoga75DA1nQK7fS9qjsuar409aW1+O32Tu4dMDC5TGXU2og3bQx1RWWp3ilnHZ9sdDbv4oOLpg==
tolerantnetworks.ie. 3600 IN RDBD RELATED https://tolerantnetworks.com/rdbdeze.json
```

Our goal: progress (a flavour of) this if it'd be deployed

Questions/Comments?

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(Next 2 slides are from IETF-105 in case someone needs a refresh)

Summary

- Declare or disavow a relationship between names in the DNS
 - New RRTYPE (RDBD)
- Does not imply trust nor other semantics
- Tag field for +/- and to allow later extensibility

```
dept-example.com. IN 3600 RDBD 1 example.com.
```

```
dept-example.com. IN 3600 RDBD 0 bad-example.com.
```

- Optional signature mechanism modelled on DNSSEC

Use Cases

- Anti-abuse analysis
- Marketing department uses outside vendor
- Creating new domains
- Chart relationships between absorbed entities
- Internet surveys/research
- Independently operating regional offices