.AT’s Anycast Service RcodeZero DNS

A registry diversification history

2019-09-05 · Richard Wein · CEO
15 years ago....

Yet another single product domain registry
A CEO & Board Risk analysis showed...

- More regulation?
- Technical risks
- Dependency on 1 product
- And some other findings...
The solution: Diversification!

Related business

Related business

Related business

Related business

.at
The solution: Diversification!
The solution: Diversification!
The solution: Diversification!

2003

enum.at
net.communications

ipcom

CERT.at
AUSTRIAN TRUST CIRCLE

2019

2020
The solution: Diversification!
The solution: Diversification!
nic.at – Registry for .at-Domains

- .at-Domains since 1988 (Registry since 1998)
- More than 1.3 M .at-Domains
- More than 60 employees
- Two locations in Salzburg and Vienna
- www.nic.at
ipcom – Anycast for everybody

Anycast for TLDs, ISPs and enterprises

Unicast

Anycast

www.rcodezero.at
What is RcodeZero Anycast DNS?

See full video at www.rcodezero.at
Product history of RcodeZero DNS

• Small (internal) Anycast networks for .at
  – If we can do it at small scale, we can do it at larger scale

• Backend Registry Operator for gTLDs
  – Offer the “full package”

• High quality DNS became a burden for TLDs / ISPs / Enterprises
  – Secondary DNS can be a product

• DNSSEC is complex
  – (Smaller) registrars like to outsource it
RcodeZero DNS today ...

... a global & competitive Anycast service

Status: August 2019
Clients

Registries:
• 15 TLD registries
• More than 13 M DUM

Internet Service Provider:*
• As Secondary & Primary Anycast
• As reseller product for their own customers

* ~ 740,000 DUM

Status: August 2019
18 locations worldwide

Ongoing expansion of new locations
TLD Anycast
Advantages at a glance

- **DNSSEC included free of charge**
- **Comprehensive DNS query statistics via graphical web interface**
- **Two independent DDoS mitigation services for the RcodeZero DNS network**
- **DNS software from various vendors (BIND, NSD, optional Knot and Yadifa)**
- **24 x 7 hotline**
- **Zone transfer check (“golden records check”)**
Always amongst the Top10

External name service monitoring proves that RcodeZero DNS is one of the most reliable Anycast services and a trusted global provider.

Source: https://www.dnsperf.com (from 20.08.2019)
There are many companies on the market ...
RcodeZero DNS – our USPs
A global competitive partner with high customer intimacy

- Transparent costs – no query limits
- Personal support and 24x7 emergency hotline
- New features based on customers’ needs
- On the same wavelength – from TLD operator to TLD operator
What others say about RcodeZeroDNS

Marc Van Wesemael, EURid General Manager:

“We are delighted to start this cooperation with nic.at as they have proved to be a reliable provider of many registry services. As the registry manager of .eu and its variants in other scripts we are committed to look for excellence in everything that we do. And excellence and state of the art services are what nic.at can offer.”

EURid: 3,6 M DUM

Roelof Meijer, SIDN’s CEO, explains the reasons why they decided for RcodeZero DNS:

“We were impressed by nic.at’s technical know-how and flexibility, as well as their readiness to develop their product further based on our needs.”

SIDN: 6,8 M DUM
Brochure
Summary / Recommendation

• Anycast is state of the art for TLDs
  – Very useful, but complex to build
  – Don’t build it just for yourself (we wouldn’t have done it for .at only either)

• Combine several Anycast networks or vendors
  – Increase diversity
  – Combine geo coverage
  – Organizational resilience

• Talk to us – we are happy to serve you
www.rcodezero.at

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https://youtu.be/y0if6D6IC4o