



DNSSEC Implementation in .BG

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DNSSEC Workshop Stockholm, 20 October 2008

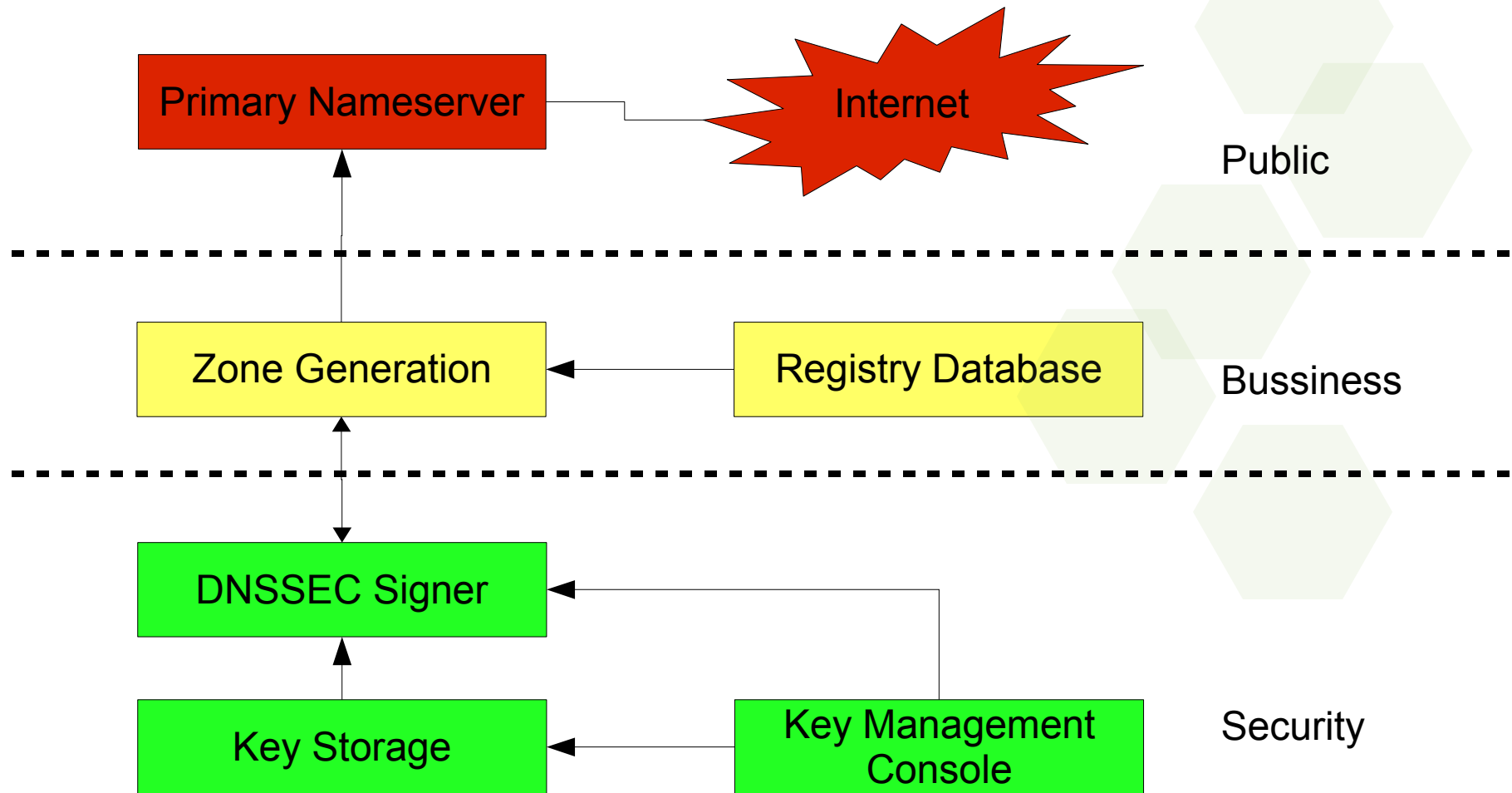
Timeline

- September 2005 – initial implementation design
- September 2006 – DNSSEC signing infrastructure setup complete, initial platform testing, few BG subdomains signed
- January 2007 – BG zone signed in production
- October 2007 – Delegation signing user interface in production, DNSSEC at .BG considered complete.

Design Goals

- Software design goals
 - Use publicly available, open source DNSSEC tools (BIND9, RIPE DISI)
 - Build proprietary glue software, tailored to the specifics of the Registry
- Key signing platform design goals
 - Readily available off the shelf components
 - Simple configuration
 - Constrain costs, reduce time to implement
 - Adequate security

.BG Zone Signing Architecture



Registrant Interface

- Fully integrated into Registry system.
- Digital signature certificate as the only authentication method.
- DS records treated the same as NS records.
- Only DS records processed/stored.
- Accept only published hash algorithms.
- Only syntax checks. Will issue only warnings if keys do not match.
- No additional fees to enable DNSSEC.

Statistics and Observations

- Over 95 DNSSEC enabled zones in .BG as of October 2008
- Resistance by ISPs and DNS service providers due to lack of competence and fear of increased workload
- No immediate interest in DNSSEC deployment by Government agencies. But there is progress.
- End-users do not see immediate benefits of DNSSEC.

Thank You

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