



DNSSEC: Registrar
Challenges

A horizontal banner with a dark blue background. On the left, there is a glowing blue globe. The text "DNSSEC: Registrar Challenges" is written in large, white, sans-serif font across the center. The background features a grid pattern and some faint binary code.

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Who is Afilias?

- Provides a world class technical solution
- Scale/Knowledge/Experience of 19 million+ registrations

Generic & Sponsored TLDs



Country Code TLDs





Technical Considerations

- Integration of a new party to bundled registration services
 - DNS Operators
- DNS operation transfers with DNSSEC
 - Ensuring continuing DNS service
- DNSSEC implementation best practices
 - Importing and exporting public key information
 - Functionally separating DNS services from registration services



Integrate DNS Operators

- Registrars routinely bundle a variety of services with their registration services
 - DNS services, web hosting, email
- Supporting external DNS operators required only managing name server information (NS records)
 - Straightforward entry of a domain name
- Signing is ordinarily associated with DNS operations
 - For third party operators, DNSSEC requires that public key information be copied from the operator to registrar

A blue banner with a globe on the left and binary code (0s and 1s) on the right. The text "DNS Operation Transfer" is written in white, bold, sans-serif font across the center.

DNS Operation Transfer

- Today, achieving 100% uptime of DNS services during a DNS operation transfer is achieved with a careful coordination of old and new name server information for a domain
 - If there is a failure to coordinate properly the result is a timeout, a mostly mundane error condition
- With DNSSEC, best practices for DNS transfers is under development
 - Essential point is the risk of validation failure if not coordinated properly, which is not mundane

A blue banner with a globe on the left and binary code (0s and 1s) on the right. The text "DNSSEC Best Practices" is written in white, bold, sans-serif font across the center.

DNSSEC Best Practices

- Support the import and export of the public key
- Functionally separate DNS services from registration services
 - Support the import of a new NS resource record set without discontinuing existing DNS services
 - Continue DNS services until explicitly told to stop
 - Setup new DNS services in advance of transfer
 - Support export of domain's zone file



Thank You!

