DNSSEC In Operation

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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

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

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!