

Conference Presentation Synopsis

DNSSEC - Replacing Hope with Certainty

In traditional DNS systems the user can only hope that DNS data is being safely delivered to its customers. Where reputation, commercial interests or security (commercial or national) is at stake such risks may be unacceptable.

The new generation of DNSSEC standards, colloqually known as DNSSEC.bis, are the result of significant investment by the DNS community over the past several years and are now ready for widescale deployment. The presentation covers the theory behind DNSSEC.bis and looks at its operational impact when running DNS servers. Zone signing, Chains of trust, Key and Zone Signing Keys, Dynamic DNS and security and key-rollover procedures are all covered from both a practical and theoretical standpoint as well as a brief overview of the cryptographic techniques used.

While Sweden is the first TLD to announce that from late 2005 the .se domain will be DNSSEC signed it is unreasonable to suppose that all domains will be secured overnight. Nevertheless DNSSEC can yield significant advantages now for communities of interest while continuing to provide transparent service to the wider Internet. The experimental DNSSEC Lookaside Validation (DLV) service offers further possibilities to either participate in one of the public trials or to create a secure Intranet or "community of interest" using a dedicated DLV configuration.

The presentation provides both a thorough grounding in DNSSEC, including the possible disadvantages, and will allow the user to select the best method to implement this essential new technology.