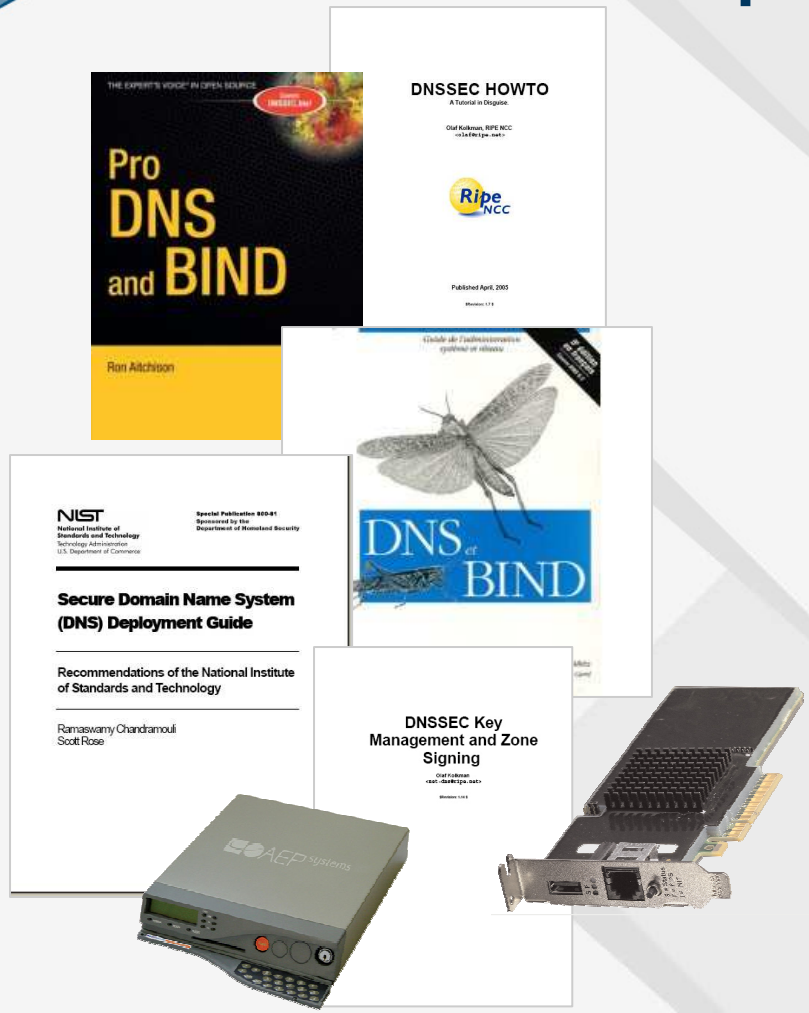
How to Deploy DNSSEC Without Losing Your Mind

Mark Beckett
Internetdagarna
October 21, 2008

SECURE 64

SOFTWARE CORPORATION

DNSSEC Deployment Challenges



Complexity

- Education, development, QA required

Security

- General purpose OS cannot protect keys
- Crypto cards are complicated
- Offline keys labor intensive

Auditability

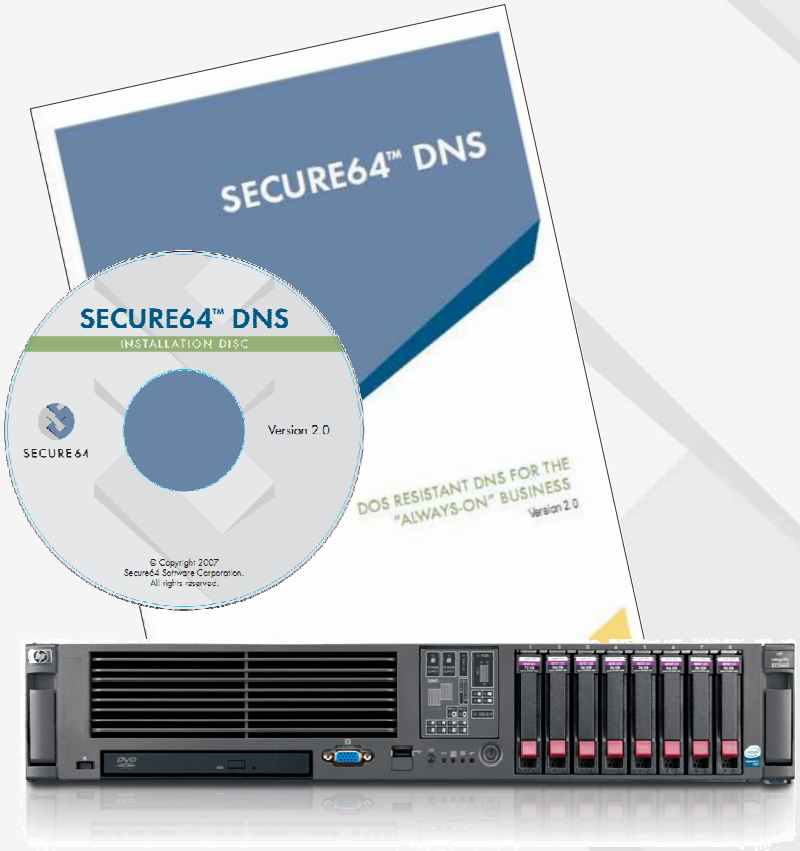
- What zones are signed?
- What keys are about to expire?

Scalability

- Signing performance with large or numerous zones
- Offline key management
- Meeting update interval SLAs

Early adopters invest 4-6+ man-months to deploy, ½ full time person to maintain

Secure64 DNS Signer



DNSSEC Made Simple and Secure

Simple

- Automated key management, rollover, signing, re-signing

Secure

- Malware-immune OS
- FIPS 140-2 compliant (pending)
- Keys protected by TPM

Auditable

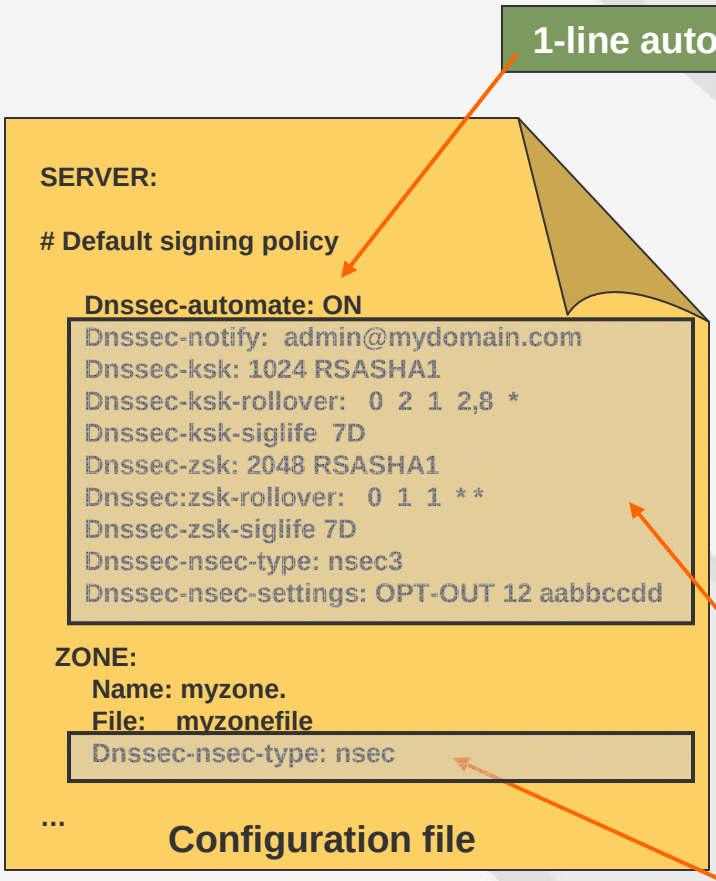
- Key and zone status reports, alerts

Scalable

- High performance signing algorithms
- Incremental zone signing

Secure64 DNS Signer makes it easy to deploy DNSSEC correctly and securely

Simple to Configure



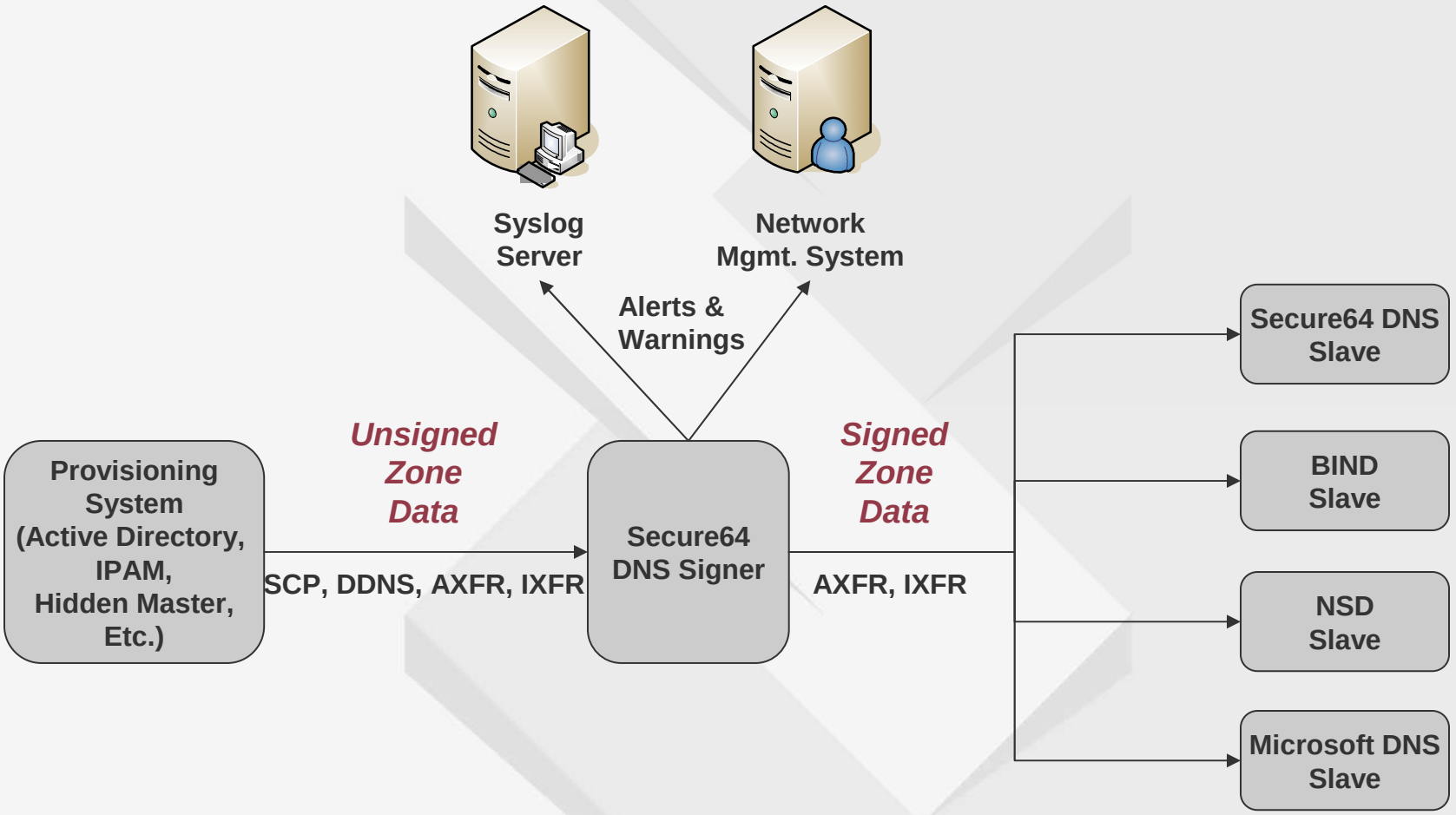
- Simply specify your signing policy or use built-in best-practice defaults
  - Key sizes, algorithms, rollover period
  - Signature lifetime
  - NSEC or NSEC3
  - Opt-in, opt-out
- Secure64 DNS Signer automatically handles:
  - Key generation
  - Zone signing, re-signing
  - Key rollover
  - NSEC/NSEC3 maintenance
  - Chain of trust maintenance

Optional parameters to override defaults

Can be applied system-wide or zone by zone

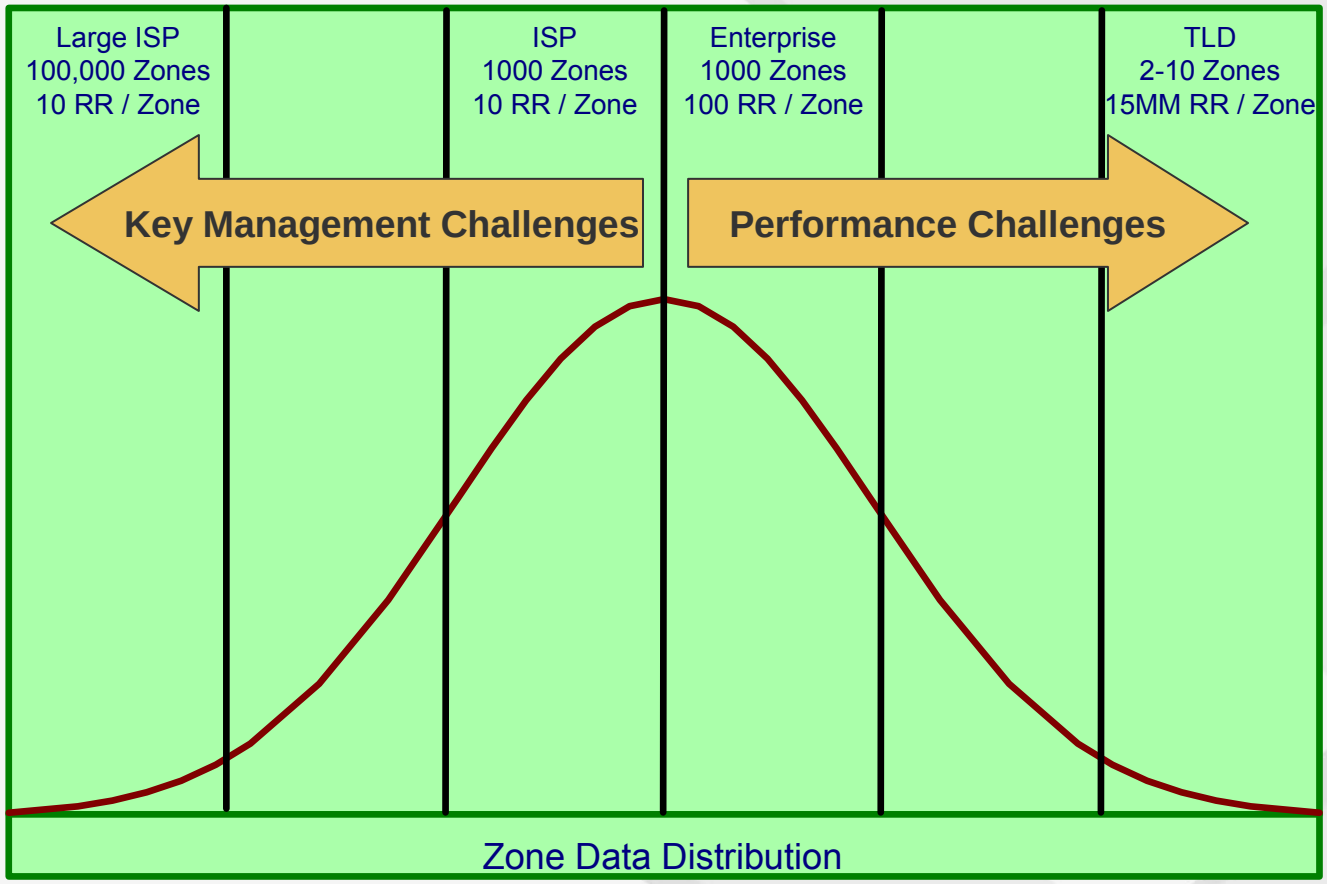
DNSSEC can be deployed in days, not months

Compatible With Current Infrastructure



Secure64 DNS Signer is compatible with your existing DNS and network management systems

Designed for Scalability

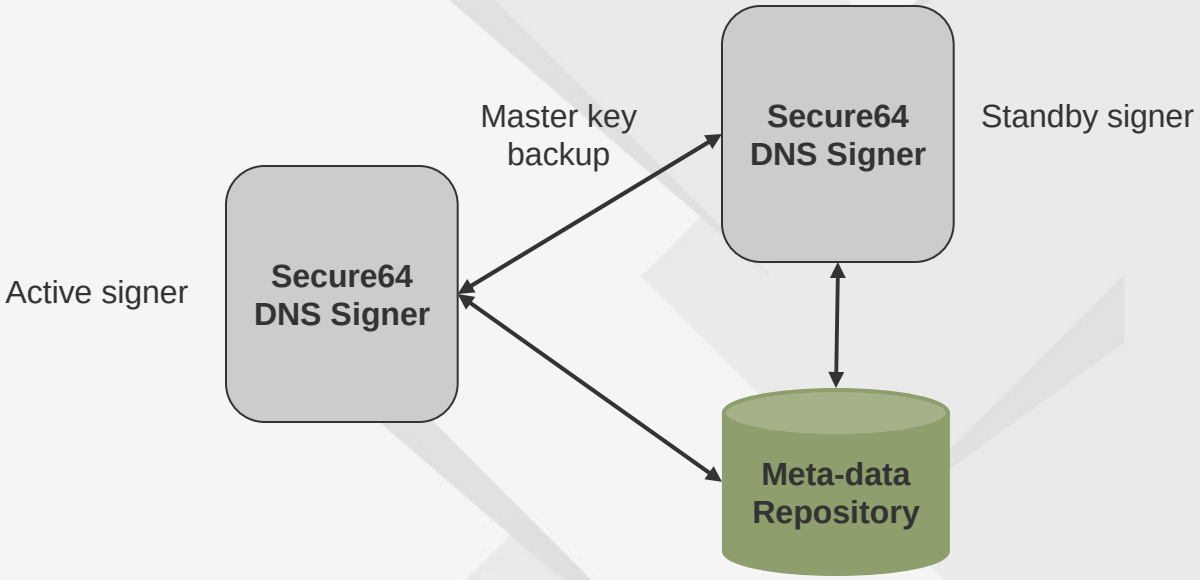


Dynamic data

- Active Directory & DHCP
- New delegations

Secure64 DNS Signer is designed to handle even the most demanding environments

Secure Key Backup and Restore



Meta-data Repository

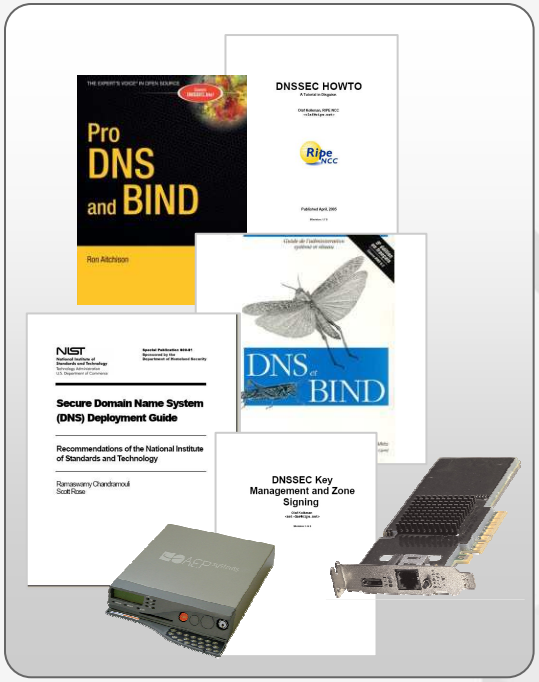
- Contains KSKs, ZSKs, system state
- Stored on any networked device
- Automatically updated after every re-signing event
- Encrypted with master key

Master key

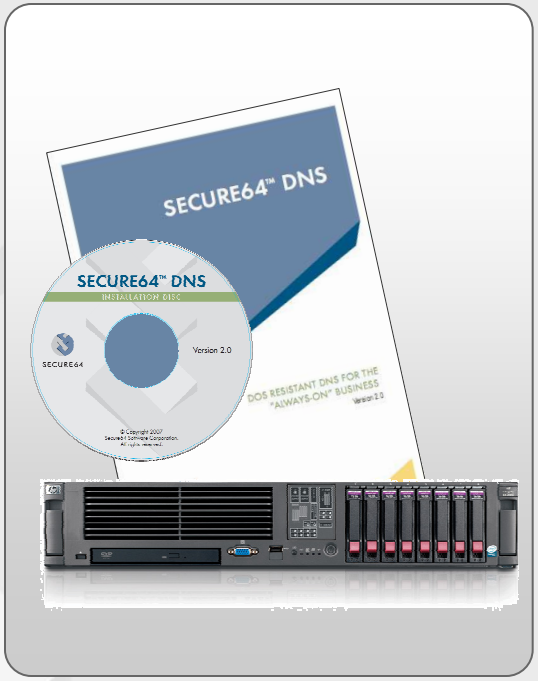
- Backed up to another trusted platform
- Restores meta-data repository to any other trusted platform

Allows quick failover to backup signer

Summary



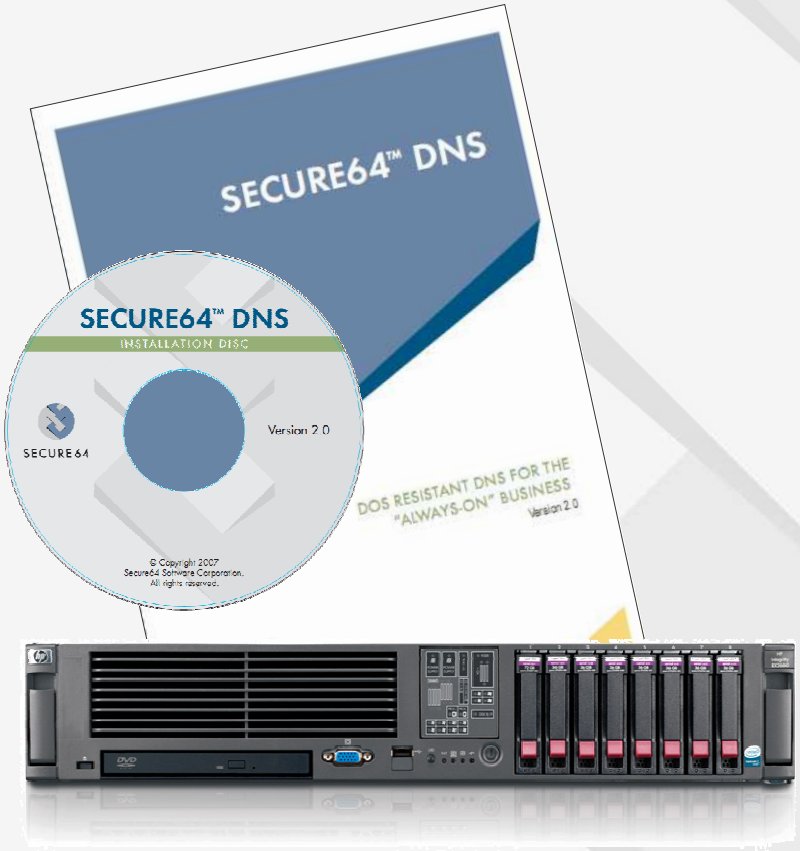
Manual	Item	Secure64 DNS Signer
	Simple	✓
	Security	✓
	Auditable	✓
	Scalable	✓



- Deploys in < 1 week
- Eliminates scripting & programming
- Reduces operating costs
- Eliminates errors

Secure64 DNS Signer makes it easy to deploy DNSSEC correctly and securely

Thank You!



For more information

Visit our booth at Internetdagarna

Booth #32

Visit our website

www.secure64.com

View our Secure64 YouTube videos

"Protecting your Business with DNSSEC"

"DNSSEC Deployment Options"

Contact us for demos or to evaluate

sales@secure64.com

Secure64 DNS Signer makes it easy to deploy DNSSEC correctly and securely