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# Challenges and Benefits of DNSSEC for Africa

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# Outline

- Brief on KeNIC

- Why DNSSEC?

- Where Are We in Africa?

- Challenges

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# Brief On KeNIC

- KENIC was borne through a broad based consultative process of the "Local Internet Community" with an aim to institute a local non-profit organization to manage and operate the .KE ccTLD;

- KENIC was established to, among others:

  – Act as a trustee for the .ke country-code-top-level-domain;

  – Become the .ke domain administrative contact as well as technical contact.

"You are Kenyan! Are you DOT KE?"

# Benefits of DNSSEC

- Recently discovered vulnerabilities in the DNS combined with technological advances have greatly reduced the time it takes an attacker to hijack any step of the DNS lookup process and thereby take over control of a session to, for example, direct users to their own deceptive Web sites for account and password collection. The only long-term solution to this vulnerability is the end-to-end-deployment of a security protocol called DNS Security Extensions – or DNSSEC.

- Data integrity and authenticity;

- Secure e-commerce transactions;

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# Where are we in Africa?

- Capacity building exercises – trainings and awareness;

- Already signed: .na

- DNSSEC Testbeds, .ke, .tz, .za

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# Challenges

- Limited awareness
- Lack of need by the Internet community
- Tools for signing – some complex, require lots of technicalities

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# Asanteni!

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