# S/MIME Dane Demo

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### **Background**

- Slow Uptake of DNSSEC
- Need killer-app
- DANE!! SMIMEA!!
- But still slow uptake
- Windows still king
- Outlook still king
- Kaminsky 2009 shoehorn DNSSEC into Outlook
- What about via Outlook Address book?
- Bingo! LDAP to DNSSEC validating convertor
- We now have any-2-any encrypted email

## DEMO HERE (Pray)

### What Happened

- 1. Outlook queries its address book for information on dtest01@dnssek.info including S/MIME certificate.
  One of the LDAP entries points to local LDAP server at 127.0.0.1 port 390.
- 2. LVDT.EXE is a minimal, from scratch, LDAP server listening on port 390 that converts LDAP requests into DNS lookups.
- 3. DNS responses from 'Net are DNSSEC validated by LVDT.EXE and only then converted back into a LDAP response for Outlook's Address book to use. Outlook uses returned certificate to encrypt email.

#### Resources

- IETF draft-ietf-dane-smime
- lvdt.dc.org
- smimea@zx.com