

Trust Management



**A Simple, Scalable
Solution to Internet Client
Security...
Or is it???**

Panelists



- Li Gong, Javasoft
- Blair Dillaway, Microsoft
- Bob Blakley, IBM
- **Format:**
 - Individual speakers + Questions
 - Group Q & A

Trust Management



- PolicyMaker [BFL96, 98] (AT&T)
- REFEREE [CFLRS97] (AT&T & W3C)
- Extends the ACL model
 - ACL = yes/no
 - Trust = multi-dimensional
 - | *X trusts Y under conditions Z*
 - | Model applies **policy** to trust decisions

Public Key Trust



■ Models

- PGP (web of trust) = key-centric
- PKIX (X.509) = certificate-centric
- Chains (Fuzzy) = rooted vs. cross-certificates

■ Real world applications

- PGP, SSL, S/MIME, Code signing

Issues for this panel



- Authentication vs. Authorization
 - Publisher vs. Permissions the code needs
- Granularity means complexity
- PKI is not fully-baked
 - Certificate POLICY
 - Package-level revocation?
 - Immature legal framework
 - Incomplete standards