

LDAP related development at *Carnegie Mellon*

- OpenLDAP and SQL
- LDAP everywhere
- Cyrus SASL development

LDAP and SQL

- Currently, metadir.andrew.cmu.edu is an OpenLDAP 2.0 with ldbm
- Slurpd replication is used to ~4 identical replicas
- No foreign key constraints, LDAP interface is “hard” for certain users
- Plus, we have an Oracle site license

LDAP and SQL (2)

- Problems with SQL backend
 - How to do replication if we want to write directly to the database
 - How to make the database schema good for LDAP but also usable for other access
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LDAP everywhere

- Administrative applications need information from data stores
- How many access protocols should any one programmer need to use?
- Lots of applications have inherent lists of resources (users, mailboxes, machines, etc.)
- Privilege delegation/authorization
 - we want help desk people to be able to check quotas, but not modify them

LDAP everywhere

- PTS backend is an example we've implemented
 - Exports AFS users and groups, read-only
 - Hopefully will ease our group transition
- Where do we run the LDAP server?
- How tightly do we integrate the backend to the instrumented application?

Cyrus SASL development

- Bug fixes, bug fixes, bug fixes
 - DIGEST-MD5 DES fixed (finally!)
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- SASL API standardization
 - Allow interactions in server API to support async programming models
 - Library/application interaction changes?
 - Move `sasl_set_alloc()` into callbacks?
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Cyrus SASL auxprops

- SunONE (Chris Newman) fixes to code
- auxprop API not well understood
 - Server-side API for retrieving user attributes
 - Most popular is “userpassword”--cleartext password
 - More general so that expensive lookups can get everything a server might need
- Currently, the “sasldb” plugin is the only auxprop plugin we ship

An LDAP auxprop plugin?

- OpenLDAP ships with one possible auxprop implementation
- Lots of interest in an LDAP auxprop for things like Cyrus IMAP (get passwords, groups, etc.)
- Generic auxprop plugin that communicates to a separate process
- Process caches connections, handles uid/dn mapping

Cyrus SASL

- I'll take any questions
- ... compliments
- ... complaints
- ... abuse
- ... whatever