

Why Web-based?

- Easy authentication and authorization
- Simplicity of selecting recipient groups
- But: don't get all the nice features of a full mail client

How does it work?

1. XMUP queries on Colleague server
2. Queries run nightly and results are download to Emily Carr
3. Script parses data files and updates MySQL tables
4. MySQL tables used to drive other applications

1. XMUP Queries

- Currently 44 queries
- Use the DOWNLOAD application (from Cedarville College)
- Usually one file (or entity) per script
- Output a CSV (comma-separated) data file
- (but XMUP deprecated in R18)

(Sample XMUP query)

```
SELECT DEPTS BY @ID WITH @ID
DOWNLOAD DEPTS @ID \
DEPTS.DESC \
DEPTS.ACTIVE.FLAG \
HEADING FIELD.NAMES \
FILE _ARCHIVE_ DEPTS.DAT \
OVER WRITING \
NO.PAGE \
FORMAT QUOTE \
QUOTE.CHAR "|"
```

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2. Nightly cron jobs

- Automatic process on Colleague server executes XMUP queries and gathers all the results into one compressed file
- Another process on ECI server connects via Secure FTP and downloads the data files

(Sample Data File)

```
|@ID|,|DEPTS.DESC|,|DEPTS.ACTIVE.FLAG|  
|1FD|,|First Year Foundation|,|A|  
|ANI|,|Animation|,|A|  
|AV|,|Audio Visual|,|A|  
|BRD|,|Board|,|A|  
|CAT|,|Centre for Art and Technology|,|A|  
...
```

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3. Parsing the data

- A Perl script + a mapping file...

(Sample mapping)

```
DATAFILE: "DEPTS.DAT"  
COLUMN: ID VARCHAR(10)  
COLUMN: DEPTS_DESC VARCHAR(30)  
COLUMN: DEPTS_ACTIVE_FLAG VARCHAR(8)  
PRIMARY KEY: ID
```

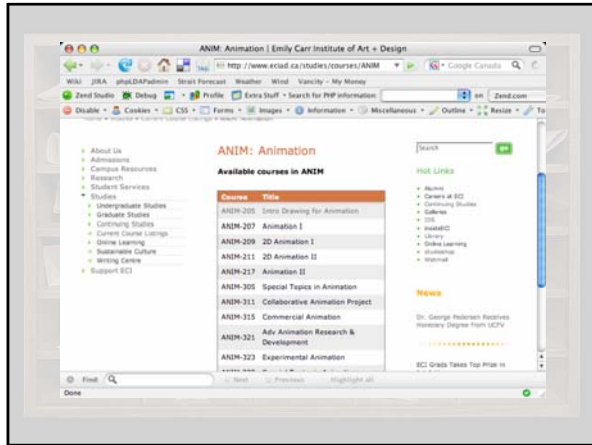
3. Parsing the data

- A Perl script + a mapping file
- All data stored in a MySQL 5 database
- Most tables simply wiped and reloaded but larger tables use "versioning"

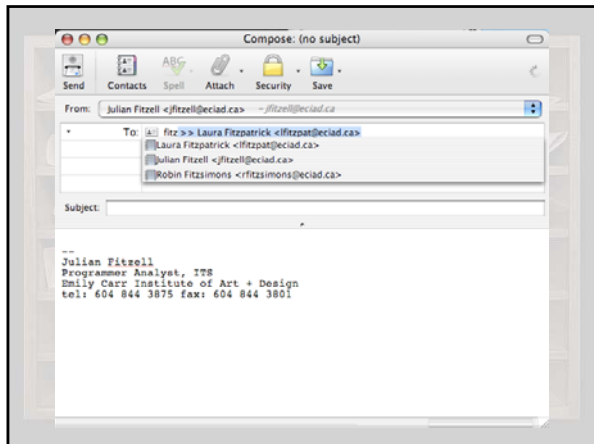
ID	DEPTS_DESC	DEPTS_ACTIVE_FL
1FD	First Year Foundation	A
ANI	Animation	A
AV	Audio Visual	A
BRD	Board	A
CAT	Centre for Art and Technology	A
CCT	Contract Training	A
CEP	CE Prerequisites	A
CFA	CE Fine Arts	A
CGI	General Interest	A
CMP	Computers	A
CNA	Continuing Studies - Admin	A
COM	Communication Design	A
PER	PE Professional Performance	A

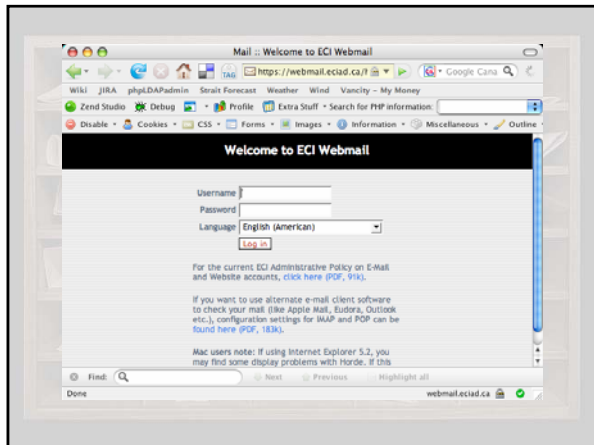
4. Applications use data

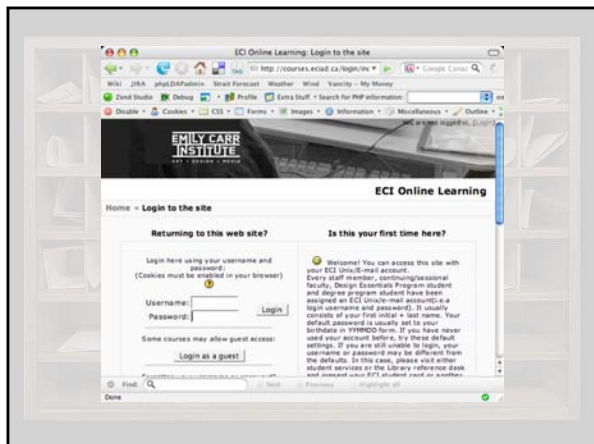
- MySQL tables used by many applications:











```
root@otswald:/usr/local/eci - ssh - 70x21 - 第1
##### /usr/local/bin/eciuseradd #####
##
## NAME:  Julian Fitzell (0032025)
## TYPE:  staff (Programmer Analyst)
##
#####
This person already has an account 'jfitzell'.
Reset password to birthdate (YYYYMMDD) ? [y/n]:
|
```

4. Applications use data

- MySQL tables used by many applications:
 - Course listings
 - Employee directory
 - Email directory (LDAP)
 - Authentication (LDAP)
 - Account management
- MySQL tables are **READ ONLY**
- Data is up to 24 hours delayed

Problems

- Only serves faculty and only on a per-section basis
- No record of emails sent (no accountability)
- Lack of niceties like Sent mailbox, spell-checking, formatted mail, etc.

What Next?

- Other recipient groups
- Queued sending (large mailouts)
- HTML mail
- Storing sent mails
- Replace XMUP (eek!!)

Emails from Colleague

- Colleague doesn't know our email account names
- Specially formatted LO email field in Colleague
- LDAP directory used for delivery

Fitzell, Julian ID: 0002025 COM

Its Rm 311

Demographics

Mail Label Name
1 Julian Fitzell

2

Address Hierarchy MAIL Mailing Address
Julian Fitzell
ECIAD
Its Rm 311

Mail Codes 1

E-Mail Type/Add 3 LO e0032025@eciad.ca

Miscellaneous

Salutation Mr. Fitzell

Personalized Salutations

Author 1 Salutation

Controller E-Mail Type/Add Value 3/3

Sample LDAP Entry

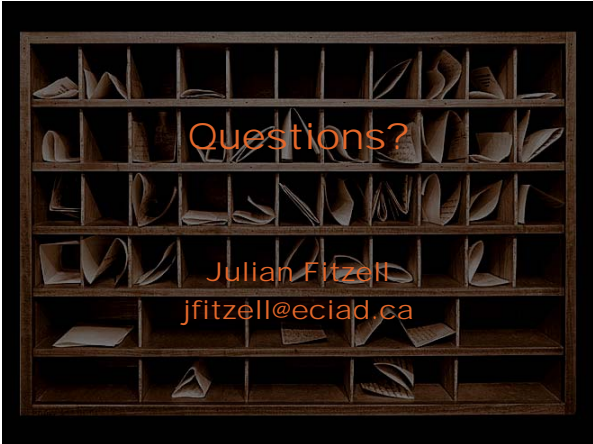
```
# jfitzell, People, eciad.ca
dn: uid=jfitzell,ou=People,dc=eciad,dc=ca
uid: jfitzell
cn: Julian Fitzell
givenName: Julian
sn: Fitzell
...
eduPersonAffiliation: STAFF
eduPersonAffiliation: DEPARTMENT-DRA
mail: jfitzell@eciad.ca
mailLocalAddress: e0032025@eciad.ca
mailRoutingAddress: jfitzell@eciad.ca
```

Sendmail Configuration

```
define(`confLDAP_DEFAULT_SPEC', ` -w 3
-h "ldap1.eciad.ca ldap2.eciad.ca"
-b "ou=People,dc=eciad,dc=ca"
-d "cn=sendmail,ou=Applications,dc=eciad,dc=ca"
-M simple
-P "/etc/mail/ldap-secret")dnl

dnl #Which domains require LDAP mail routing
LDAPROUTE_DOMAIN("eciad.ca eciad.bc.ca")dnl

dnl #Enable the ldap_routing feature
FEATURE(`ldap_routing')dnl
```



Questions?

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