Email Replacement Project

BCnet Conference April 18, 2008

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Topics

- Why Replace the Current System?
- In Scope Out of Scope
- Structure of Project
- Technical Infrastructure
- Automated Data Migration
- User Perspective: Who, what, when, how
- What we Learned
- Future Possibilities



High-level overview

SFU's implementation of new email/calendaring technology



Why we replaced the current system

Problems:

- Very outdated Webmail, Calendaring components
- Limited mobile syncing options
- Loss of control of our major communications asset (increased email forwarding to "better" systems, mostly US based)
- Technical challenges

Technology selected:

Zimbra Collaboration Suite (parent company Yahoo)



How we selected Zimbra

How

- Discovery (conferences, trade shows, literature, selection processes at other universities)
- Test instances for technical evaluation
- Pilot project for functional evaluation



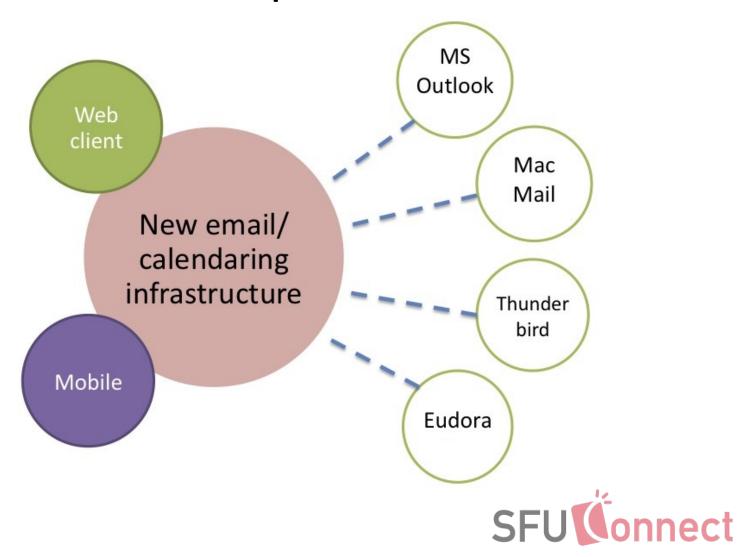
Why we selected Zimbra

Why

- Solved the major problems
- Restored leading edge experience & met expectations (reputation factor)
- Favourable cost
- Fit with existing technical infrastructure, scalability
- Rate of adoption elsewhere thriving Higher Ed user community
- Future potential



Scope – Replaced coloured components



Scope – Details

- Moved 50,000 email accounts to new system
- Moved 1300 Corporate Time calendar accounts
- Trained the support staff & end users
- Branded the new system SFUConnect
- Scaled the infrastructure & support to handle fully loaded conditions
- Retired the old Calendaring system
- Still to do Retire the old Email system



Out of Scope - What we did not do

Require desktop email clients to be retired

• Selectively, people continue to use clients with the new system.

Full Disaster Recovery (uninterrupted business continuity)

 Very costly. Separate IT initiatives are working towards DR as funding permits.

Alumni email service (@alumni.sfu.ca)

Still to be addressed; considering new options.



Structure of Project

Oversight:

• Steering Committee, Project Director, Project Manager

IT Services core team:

- Technical infrastructure
- Data migration
- Voluntary signup procedures
- Mass moves of students, calendaring users, all remaining accounts at end

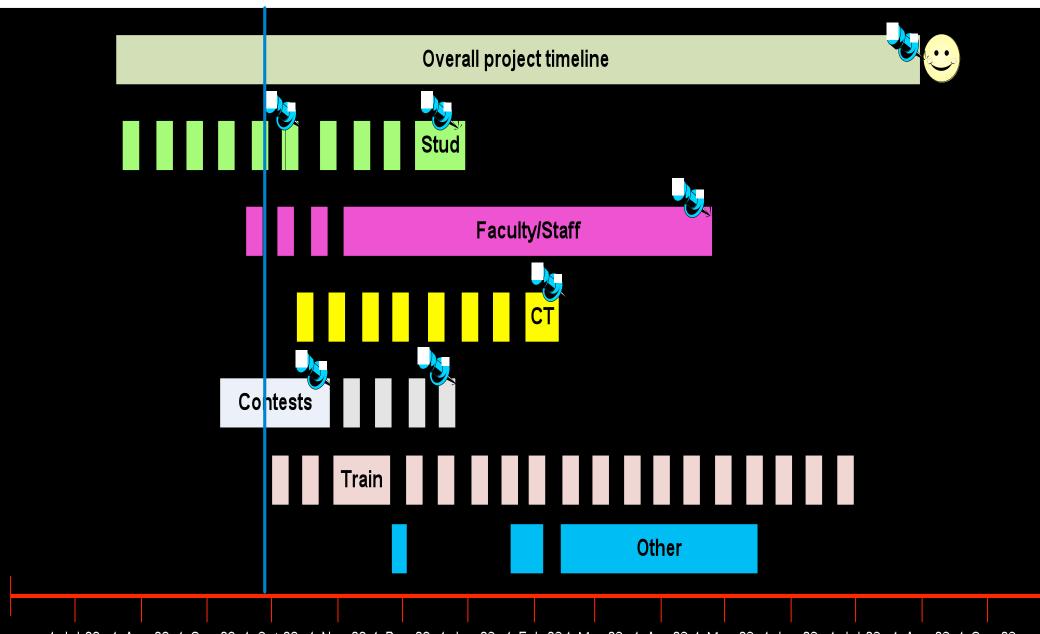
Departmental computer support staff:

Coordinating Faculty/Staff moves, providing support

TechHelp service for students:

• Providing student support





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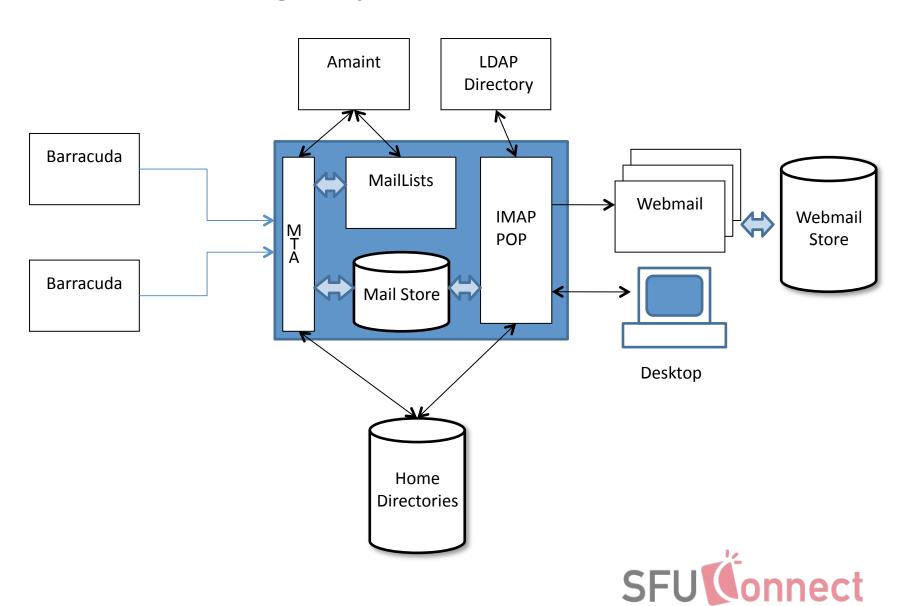
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Technical perspective

SFU's implementation of new email/calendaring technology



Legacy Architecture

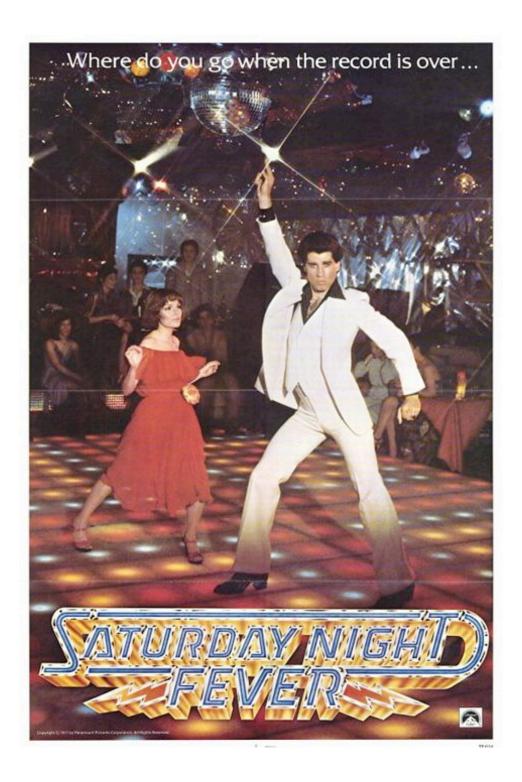


Single server - vulnerable to system failure – expensive to replace





Several dated components



Our Email infrastructure was fully understood by one person – me







Technical Objectives

Fault tolerant

Easily expandable to support greater capacity

Web-centric, with integrated Calendaring

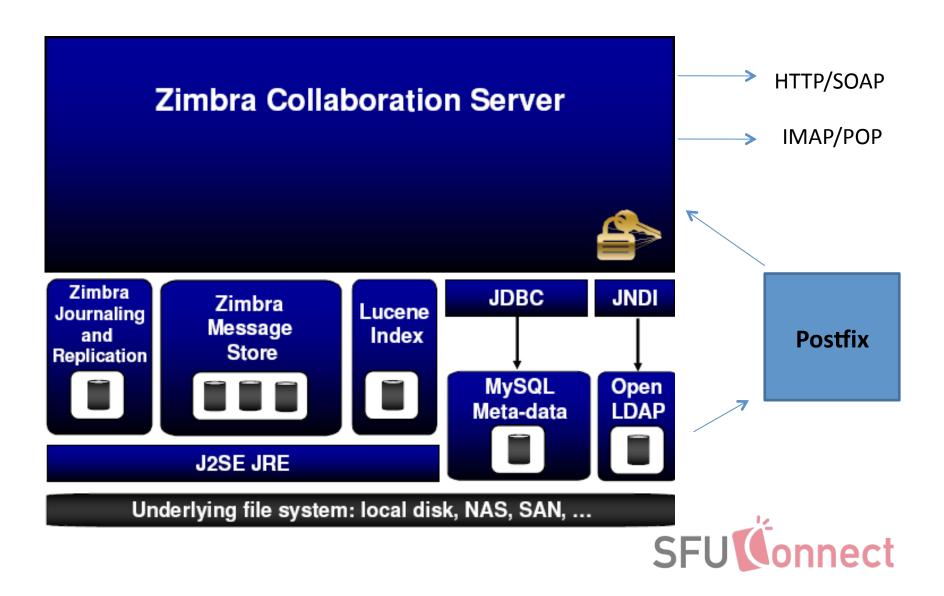
Mobile Support

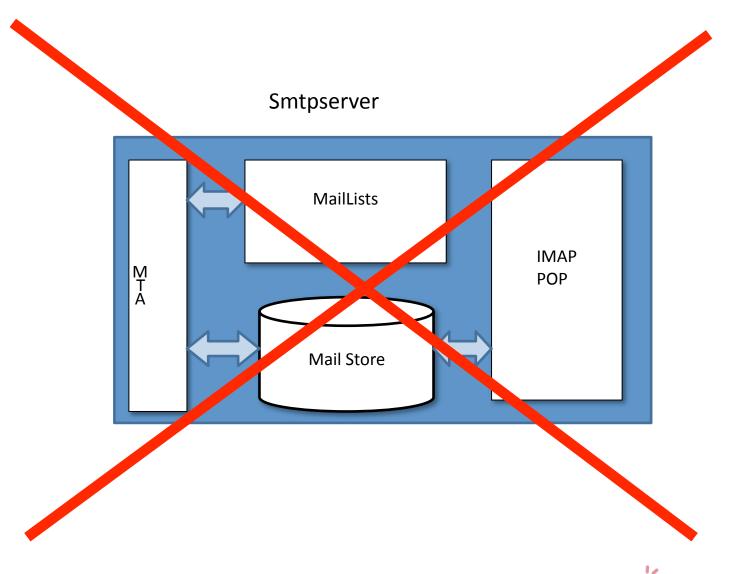
Minimal loss of existing functionality (excellent maillist support, solid POP/IMAP/SMTP, antispam)

Open Source but supported



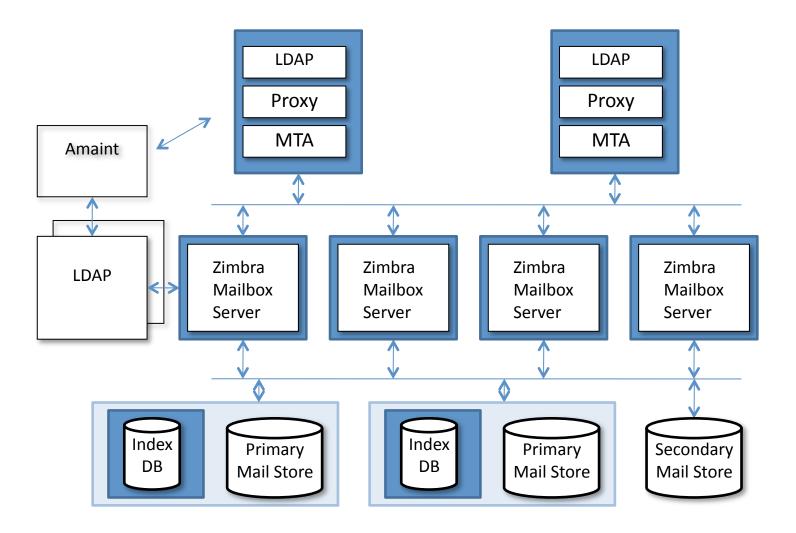
Zimbra Server Architecture







Zimbra Multi-Server Architecture





Developed Automated Migration Scripts

Web Forms for self-signup

Automated migration process for legacy
Webmail data

User-triggerable migration of desktop Eudora/Mac Mail/Thunderbird data



End-user perspective

SFU's implementation of new email/calendaring technology



Who: Stakeholders

Computer support staff

Staff

Faculty

Students

Retirees

Others



What: New technology

Before introduction of SFU Connect:

- Dated SFUwebmail system
- POP / IMAP desktop clients
- Forwarding to other web clients
- No integrated calendar system

New technology

- New advanced web client: collaborative suite of tools
- Single calendar system at SFU



When? 1 year implementation timeline

Started as email pilot

Voluntary signup

Moved specific groups on set date

 Students, external accounts, IT Services "Nudging" of technical support

Final deadline cutoff



How: Obtaining buy-in

Involved stakeholders in the evaluation process

• Pilot, feedback survey, presentations to departmental technical support

Community involvement through contests

Naming contest, logo contest

Training support "safety net"

- Provided regular schedule of free drop-in training sessions (end-users)
- Help & resources website (separate technical & end-user sites)

Marketing:

- Own website, SFU websites, mass email messages, Information monitors, posters, handouts
- Self sign-up process helped reach high awareness in short time



How: Voluntary student signup

Encouraged students to sign themselves up and have their data migrated

- Migrations occurred at midnight
- Last message to old system & first welcome message to new system ensured people didn't get lost
- Advertized via posters, handouts, TV screens, online
- About 25% signed up
- New system became well known before the student mass move at Xmas



How: Engaging departmental computer support staff

Spent a great deal of time on communication:

- Monthly information meetings
- Introductory and advanced demos
- Technical wiki
- Regular information and status reports via Email
- Appreciation event planned, sponsored by project Steering Committee



How: Voluntary staff / faculty signup

Gave departmental support staff control of signing up their faculty and staff

- Many approached it in a very systematic way
- Others were more reactive
- Gradually started hearing from support staff that they had reached the limits of their influence
- Moved into direct marketing mode, with emails to end users, presentation to Deans/VPs



How/When: Moving calendaring users

Moved all users at once, on (Feb) Friday 13th!

Concentrated attention in sensitive business offices

Support

- Produced "Differences" and "Best practices" doc'n; pre- and post-migration training sessions
- Support staff on high alert, concentrated attention "on the floor" after cutover
- Daily debriefing sessions with core team

Emergency performance tweaks

• Made emergency technical performance improvements the week after cutover



Lessons Learned

It helps to have a product that sells itself

Give sensitive business offices maximum attention, but don't assume entire user base has same requirements

Buy-in of departmental level computer support staff crucial

Selectively allowing faculty/ staff to keep favourite email clients reduced resistance to change and increased "faculty reassuring faculty"

Fine tuning your infrastructure "as you go" is suitable for thrill seekers only!



Future Possibilities

Authenticated Instant Messaging (Chat)

Document sharing

File storage

Best practices for mobile syncing & calendaring, including shared calendars

"Zimlets" for Alerts, Tips and Tricks, Course Resources

Potential to be major online hub for SFU

