FermiMail

Brown Bag Seminar: Linux Client Version

Rob Kennedy, Project Co-Manager

June 2011

Outline

- Outreach Talk: 30 min
  - FermiMail – What is it, who is affected?
  - FermiMail Clients – What is supported, what works?
  - FermiMail Service – Email, Calendar
  - Email Data Migration – How, when, end-user experience
  - Calendar Data and Other Migrations – What is involved
  - Getting Information, Help – Website, Seminars, Booth, Service Desk
- Client Demo: 30 min
  - Email Client Basics – Linux: Thunderbird
  - WebMail Client Basics – Linux: Firefox
  - Client Configuration – IMAP

FermiMail Service Features and Functions

SERVICE

FermiMail

- Consolidated, Integrated, Reliable Email and Calendar Service
  - For all Fermilab-supported Desktop OS's
- Benefits
  - Integrated e-mail, calendar, and address book functionality
  - Works with e-mail and webmail programs on Windows, Mac OS X, and Linux
  - High availability (> 99.9% up-time)
  - 24 x 7 x 365 support
  - Improved anti-virus/anti-spam protection
  - Users able to retrieve deleted e-mail themselves within 30 days of deletion
  - Conference room scheduling with direct booking and scheduling capability
  - Platform capable of future expansion: IM/presence, voice-mail integration, ….
- Who/what is impacted… and who/what is NOT impacted
  - All Email users: Exchange 2007, IMAP Servers, Lotus Notes email
  - Calendar users on Meeting Maker, Lotus Notes calendar
  - NOT impacted: Lotus Notes applications and documents *remain as is*.
  - NOT impacted: Listserv *remains as is*

FermiMail Clients

- Clients Supported for FermiMail by CD Desktop Support
  - Outlook 2010: Windows
  - Outlook 2011: Mac OS X
  - Apple/Mac Mail: Mac OS X
    - Calendar integration via iCal
  - WebMail: IE 8 on Windows
  - WebMail: Safari 3.5 on Mac OS X
  - Lab-owned Phones – Blackberry via BES, other models via ActiveSync
- Clients Tested for FermiMail by FermiMail Team, Known to Work
  - Thunderbird: Linux SLF ; Mac OS X
    - No calendar integration out of the box due to IMAP protocol used. E-mail only.
  - WebMail: Firefox 3.x/4.x on Linux SLF
    - WebMail provides email-calendar integration for Linux users.
  - Older Versions: *may* have caveats – Outlook 2007, …
- Other Clients/Devices… *many should work*.
  - Personal Phones, Other Email Clients: Basic config parameters are posted.
    - Does your model/service/client support "Exchange", "ActiveSync", or "IMAP"?
    - Service Desk can help at the level of stepping through the config parameters needed.
    - All email clients NOT mentioned above are in this category. Example: pine.
    - Some clients becoming unsupported: Entourage 2008 is replaced by Outlook 2011.

Email-Related Policies

- Email Accounts Policy (LINK) – who gets account, how email works
- MX Records Policy (LINK) – how email servers operate in FNAL.GOV.
- FermiMail Impact (Email Accounts policy as viewed May 25, 2011)
  - All Employees, Contractors, and Visitors *can* get a mailbox (as it is now).
    - "Fermilab will provide an email service for all employees, certain visitors and contractors, and retirees by request."
    - "Each employee will be provided with an email account. Fermilab employees must use name@fnal.gov as their work-related email address."
    - "… For convenience, a visitor or contractor may request an email address of name@fnal.gov be created and forwarded to their home institution. … the visitor or contractor can, with justification, request delivery to a Fermilab mailbox."
  - Employees Send/Receive Work-Related Email through FermiMail
    - "Employees must send and receive work-related email (including all email using the name@fnal.gov address) through the designated email servers."
    - Operative word: *THROUGH*.
    - The "designated servers" will be the FermiMail server.
    - Related to recent MX Records clean-up necessary to avoid per-MX Record service costs.

FermiMail Service

- Service Description:
  - Mailbox Space Quotas
    - Employees: 1 GB and 2 GB tiers. (a few tiers go higher. Only 103 of 2778: > 2 GB usage)
    - Visitors: 128 MB fixed tier. (2293 of 2945, 78% of Visitors forward email off-site)
  - Transition to FermiMail: Grandfathering for Space
    - Initial tier assignment will be based on current usage
    - Small impact overall considering how few large-space users there are.
  - No Central Email Archive Feature (as it is now)
    - No tape backup for email . No "undelete" possible by email administrators.
    - Users will be able to retrieve deleted e-mail themselves within 30 days of deletion
- Other "Transition to FermiMail" Issues
  - Multiple email names
    - Some people have a "long name" and a "short name" (historical)
    - One name will be the mailbox name, and the other(s) will be a mail alias. (as it is now)
  - Exceptions for Policies, Service Limits
    - To help smooth transition, may be requested from CIO.

Calendar Service

- Service Description:
  - Integral part of FermiMail service
    - Anyone with a FermiMail email mailbox also has calendaring service.
  - Calendaring-specific clients are no longer required.
    - Full Featured WebMail Calendaring in FermiMail (in addition to Outlook-like clients)
    - Web browser clients are available across Fermilab-supported Desktop OS's.
    - Meeting room availability can be viewed and reservations made (if user has permission) via numerous FermiMail clients, across Fermilab-supported Desktop OS's.
  - Modern calendaring features supported
    - Calendaring built specifically to handle "resource scheduling" (eg. Meeting rooms)
      - May be applicable to other resources requiring "shared" scheduling
    - Side-by-side calendars view to look for common availability
  - Local procedure to export calendars to web for "world-read" access.
    - Permit everyone, not just FermiMail users, to see calendar, if desired.
- Calendaring Integration
  - Integration Saves Time and Effort
    - Eliminates error-prone task to copy/paste to/from email and calendars.

Getting to FermiMail from current mix of email and calendar services

MIGRATION

Email Data Migration

- Step 1: Route *all* Fermilab email through new AV/AS service
  - New AV/AS service: cloud-based, 24x7x365 support, much improved quality.
  - Applies to all Fermilab email: inbound, outbound, and email forwarding through fnal.gov
  - Current estimate: mid-June 2011.
- What email will… and what email won't… be migrated by FermiMail Team
  - Only email server resident data will be migrated.
  - Locally stored email will NOT be migrated.
    - Most "local mail" is just cache… no need to migrate. Example: Outlook OST files, Thunderbird cache
    - Some users intentionally store mail locally though in PST files, which will NOT be migrated by team.
  - Local client features (filters) will NOT be migrated.
    - Users may have to recreate them if changing clients or using parameters tied to old email server.
- Email Data Migration: General Procedure
  - One block of users treated per week with 1-week notice by email and letter, plus reminders.
  - Overnight email data migration from old to new server on set "migration days".
    - User email delivery delay during this overnight migration. Nothing lost.
  - User comes up next day with new email account receiving email
    - Client configuration changes required in some cases (see later slide)
    - Old email store remains for a time in case there are any data migration issues
  - Users do not have to be at Fermilab or even internet-connected on their migration day.
    - If this still presents a hardship, then we may reschedule their migration within some limits.

Tentative Migration Schedule

(has slipped a bit since slide written)

- Schedule: will be maintained on http://computing.fnal.gov/FermiMail
- Step 2: Exchange 2007 Users: *July 2011*
  - ~725 users. Basically an upgrade, performed across all D/S/C/E.
  - From email.fnal.gov (to email.fnal.gov)
- IMAP Server Users: *August– October 2011*
  - ~2025 users. *Schedule will be driven by actual IMAP migration rate*
  - From imapserver1, imapserver2, and imapserver3 .fnal.gov

  Proposed **IMAP** Migration Timeline by D/S/C (2011)
  - **Aug**: CD, FESS*; then BSS, DIR, ESH*, FIN*, WDRS; then TD
  - **Sep**: PPD, CMSC*, FCPA*; then start Visitors
  - **Oct**: Visitors; then AD, APC*

  * = very few IMAP users in this D/S/C to be migrated
- Lotus Notes Users: *August 2011*
  - ~150 email users. Schedule close to IMAP migration for BSS, FIN
  - From bssmail.fnal.gov

End-User Migration Preparation

- Watch for "When"
  - Check the FermiMail web site for:
    - Pointers on what to do before and during your migration day, how to learn more about FermiMail.
    - Migration progress, forecasted migration time for your email server and D/S/C.
  - Please watch for email and letter that should arrive 1 to 2 weeks before your migration day.
    - Official notification to users when their specific email account will be migrated to FermiMail with instructions.
    - We will also send reminders a few days before your migration day, by email only.

- Consider Your Client
  - **When to Switch Client**: *If* you choose to switch clients, please do the switch *after migration*
    - Be sure FermiMail works with a familiar client first, to help isolate causes of any incidents.
    - Old Exchange 2007 WebMail lacks support for non-MS IE browsers…. Other client compatibility issues
  - IMAP client users: please consider switching to a native protocol client like Outlook or WebMail. Benefits: integrated email & calendar *and* improved performance.
  - Lotus Notes users: you will no longer be able to use your notes client for email and calendaring. If you are on Windows, then we recommend use of Outlook 2010 after migration.
  - Unsupported client users: please consider advantages of switching to a supported client, such as greater functionality, more opportunities for support, simpler future migrations.

- Tip: Optional "Spring Cleaning"
  - Clean-up/compact your mailbox, and archive old mail. NOT required for migration.
    - Some email clients: "compact folders" to free space occupied by deleted email.
  - Please see the FermiMail web site for suggestions… *coming soon*.

End-User Migration Experience

- Migration Day Notes
  - You may experience an off-hours ***delay*** in e-mail delivery as your email data is copied.
  - Please test your FermiMail account as soon as possible. Report issues to the Service Desk.
- Exchange 2007/Outlook Users: After migration, just restart your client.
- WebMail Users: After migration, and refresh your web browser/page.
- IMAP Servers and Exchange 2007/IMAP Protocol Users:
  - Thunderbird, some Mac Mail users, a few Outlook users. How to tell is on FermiMail web site.
  - Client re-configuration is required for IMAP-based email clients.
  - "Do it yourself" client configuration is supported with web-based instructions, if you prefer or if you are configuring a "personal device or other client".
  - Feel free to request help via the Service Desk.
- Lotus Notes Users:
  - Your email AND contacts list will be migrated.
  - A new client and client configuration is required for email and calendaring.
  - See FermiMail site for parameters and pointers for new users of Outlook 2010.
  - Feel free to request help via the Service Desk.
- Personal Devices and Other Clients:
  - If ActiveSync or "Exchange mode" being used, see "Exchange/Outlook Users" section above.
  - If IMAP being used, see "IMAP … Users" section above.

Calendar Data and Other Migrations

- User Calendar Data (Meeting Maker, Lotus Notes)
  - User Calendar Data will not be migrated for users.
    - *Cannot automatically migrate all calendar data from Meeting Maker to Exchange.*
    - FermiMail team will post recommended procedure for users to archive and/or recreate their own calendar data in Exchange.
- Meeting Room Reservation Data (Meeting Maker, Lotus Notes)
  - FermiMail team will coordinate, but not perform, reservation data move.
    - Meeting Room reservation processes varies across D/S/C.
    - FermiMail team is developing migration procedures consistent with current known reservation processes, working with room owners.
    - FermiMail team will coordinate with room owners to establish a few "Flag Days" for reservation data moves, tentatively planned for ***Aug-Sep 2011*** timeframe, to maintain a consistent reservation process for end-users.
  - Migration of reservation data will be performed by room owners.
- Lotus Notes IM
  - Lotus Notes users will be given accounts for Fermilab IM about when Lotus Notes email data is migrated to preserve their level of function integration.

FermiMail Information, Help

- Information
  - Web Site: http://computing.fnal.gov/FermiMail
    - Includes an "Ask a Question" web form (information only)
    - May 31: updated with much more information.
    - Will continue to be updated with migration progress, calendar migration info, FAQ.
    - Note: http://computing.fnal.gov/Email describes *current* email service, NOT FermiMail
  - Brown Bag Seminars: WH-1W, 12noon-1pm ~50% slides, ~50% demo,Q&A
    - Windows Focus: June 15, July 18, August 22
    - Mac OS X Focus: June 17, July 20, August 24
    - Linux SLF Focus: June 24, July 22, August 26
  - "Doctor Is In" Booth: WH Atrium, 11:30am – 1:30pm
    - June 8-9, July 13-14, August 17-18
  - FermiMail Outreach talks like this
    - Fermilab Today article on 6/7/2011 provides a brief overview
- Getting Help
  - Service Desk: http://servicedesk.fnal.gov and x2345
  - "Doctor Is In" Booth

FAQ

- What happens to our documents/applications in Lotus Notes? – nothing.
  - Only the email and calendar functionality of Lotus Notes will be replaced by FermiMail.
  - Lotus applications and document storage will remain as is, as far as FermiMail is concerned.
  - Lotus client program will still work for applications, just not for email and calendaring.
  - Lotus applications that use email to notify users will still be able to send email, as it is now.
- When will BES be deployed? – Current estimate: Early August 2011
  - Requires migration of FESS users to Exchange 2010 first.
  - (Only FESS has arranged for BES service, a costed add-on feature.)
- I will not be at Fermilab due to vacation/leave/travel for my migration day. Help!
  - Users do not have to be present at Fermilab for their migration day. They do not even have to be in internet-connected with Fermilab on their migration day.
  - We ask that Fermilab email users try out their email service reasonably soon after their migration day, but that is not required. It is to help manage support workload.
- I have far more than x GB of email. Help!
  - We are grandfathering all current Fermilab email users into email storage tiers matched to their current usage.
  - While we suggest users clean/compact/archive their email, we are *NOT* requiring it.
  - Interesting notes from our user base study:
    - The number of “huge mailbox” users is actually relatively small. Sample: mostly managers ;^).
    - Most Visitors forward their email offsite according to current email server settings.

Acronyms and Nomenclature

- ActiveSync – More properly **Exchange ActiveSync**. "… provides push synchronization of contacts, calendars, tasks, and email between ActiveSync-enabled servers and devices." ActiveSync is commonly used with hand-held devices such as cellphones. Provides enterprise features like remote wipe.
- BES – Blackberry Enterprise Server. This interacts with the Exchange 2010 Server on behalf of its Blackberry phone clients. This is a costed feature beyond the standard FermiMail service, available to D/S/C by arrangement.
- FermiMail: A high-availability integrated email, calendar, and contact service. It is being deployed in Summer 2011 by the Computing Division's Exchange Server 2010 Migration Project, referred to as the FermiMail team in this talk.
- IMAP – An e-mail protocol. Using IMAP instead of MAPI does not allow email and calendar integration.
- MAPI – Native "Exchange" API and protocol which handles e-mail, calendar, and address book commands. MAPI is commonly used with some email clients on desktop computers. Client configurations often call this the "Exchange" protocol.

Demonstation

CLIENTS AND CONFIGURATION

June 2011 FermiMail Demo Context

- FermiMail Production System not released for use yet
  - About to enter Acceptance Testing. Forecast: ready by end of June.
- Demonstration Caveat
  - Demonstration based on use of a small development instances of FermiMail (no outbound email configured).
  - Hostnames, URLs in this demonstration are specific are to that test instance. Please, DO NOT try using these… they will not work for you.
  - Auto-discovery (auto-reconfigure of Outlook and similar clients) cannot be demonstrated until production FermiMail is released.
- Demonstration Emphasis
  - Preview of FermiMail clients across Desktop OS's
  - Walk-through Email or Webmail basics
    - Just quickly show the other's interface due to time constraints
  - Client Configuration: general information, as posted

Linux: WebMail via Firefox

- Start-up/Login
  - No configuration is required for WebMail
- Browse Email
- Create a Message
- Reply/Reply-all/Forward a Message
- Organize Messages into Folders
- Delete and Purge/Recover a Message
  - Purge/Recover are functions of the “undelete buffer” in FermiMail
- Set a Vacation Message
- Caveats
  - Email digital signing and encryption is not available for non-IE WebMail browsers. This is the only feature known to be lacking in Linux WebMail.
  - This feature IS still available in the Thunderbird client on Linux, though calendaring integration is not available under Thunderbird (IMAP limitation).

Linux: Thunderbird

(Limited to IMAP Email functionality)

- Start-up/Login
  - Assuming client is already configured for FermiMail.
- Browse Email
- Create a Message
- Reply/Reply-all/Forward a Message
- Organize Messages into Folders
- Delete and Purge/Recover a Message
  - Not accessible to Thunderbird users, AFAIK
- Set a Vacation Message
  - No interface for this in Thunderbird.

Linux: Client Configuration

- Procedures on http://computing.fnal.gov/FermiMail
  - Will be updated as we gain more experience with production FermiMail system, and address user questions.
- Thunderbird (and all IMAP clients)
  - See “IMAP mail client configuration”
  - Manual configuration required and demonstrated on web site with screenshots.