FermiMail

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Outline

- 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
- Demonstration of Client Configuration – MAPI, IMAP; various clients

- Getting Information, Help – Website, Seminars, Booth, Service Desk
- Supporting Content – Some FAQs, Acronyms

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+ 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.
- Impact on FermiMail: (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
  - Some Email features change: old state specific to legacy email systems
    - "+" addressing (username+SomeAddedText@fnal.gov) will no longer be supported.
    - Attachment limit set to 25 MB. (temporarily set at 55 MB during migrations)
- Other "Transition to FermiMail" Issues
  - Multiple email names: Some users have a long 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: 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 for "shared resource scheduling" (eg. Meeting rooms)
    - Side-by-side calendars view to look for common availability
  - Meeting room calendars are configurable to display free/busy or full details
    - Room calendars export- to- web process no longer required since anyone with a FermiMail email mailbox also has calendaring service.
- 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

- Email Data Migration: General Procedure
  - One block of users treated per week with 2-week and 1-week notice by email, 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)
  - Users do not have to be at Fermilab or even internet-connected on their migration day.
- 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.
    - If you continue to use your current email client, then you should still be able to access “local mail”
  - Local client features (such as filters) will NOT be migrated.
  - Sieve/Server-based filters will NOT be migrated.
- End-User Preparation:
  - Please watch for email that should arrive 1 and 2 weeks before your migration day.
    - Official notification 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.
  - Check the FermiMail web site for: pointers, migration progress, updated schedule, etc.

Overall FermiMail Schedule^

- Schedule: overview maintained on http://computing.fnal.gov/FermiMail

- Step 1: Route *all* Fermilab email through new AV/AS service ***– DONE: Aug 2***
  - New AV/AS service: cloud-based, 24x7x365 support, much improved quality
  - Experience: Issues while new service "learned" Fermilab email patterns, adjusted blacklists.

- Step 2: Route *all* Exchange email through Exchange 2010 system ***– DONE: Oct 25***
  - Mailboxes to be migrated in next step, after all intermediate deployment issues understood.
  - Experience: Issues for some users with Exchange 2007 email, esp. Mac and some phones.
    - Work-around list: web page above, ServiceDesk knowledgebase. All known issues have work-arounds.

- **Step 3**: Email Migration: limited by rate of getting users back up after migration
  - Exchange 2007 Users ***– BEGUN: Oct 31***
    - Experience: very low rate of corrupt "source" email. Some large attachments noted.
  - IMAP Server Users: about 3 months, begins after Exchange 2007 users migrated
  - Lotus Notes Users: *1 week in midst of IMAP Server User email migration*

- **Step 4**: Other Work/Transitions to Complete the FermiMail Deployment
  - Meeting Room Calendar Flag Days: 3 planned for Jan, Feb, and Mar 2012
  - BES Service Go-Live (30 users in FESS): *after these users have their email migrated.*
  - Gateway Migration: *After email migrations. Impacts Forward-Only email users*. April 2012?
  - Exchange IMAP Legacy Access: End legacy port access after Exchange 2007 migration

Tentative Email Migration Schedule^

- Exchange 2007 Users: *October 31, 2011 – early December 2011* ***– BEGUN: Oct 31***
  - ~1000 users now. Basically an upgrade. Performed across all D/S/C/E.
  - From email.fnal.gov (to email.fnal.gov)

- IMAP Server Users: *mid-December 2011 – March 2012 (sooner if all goes well)*
  - ~2025 users. *Schedule will be driven by actual IMAP migration rate, in the order shown.*
  - From imapserver1, imapserver2, and imapserver3 .fnal.gov (to email.fnal.gov)

  Proposed **IMAP** Migration Timeline by D/S/C (2011-2012)
  - **Dec**: CD
  - **Jan**: FESS*; then BSS, DIR, ESH*, FIN*, WDRS; then TD; start PPD
  - **Feb**: Finish PPD; then CMSC*, FCPA*; then AD, APC*, start Visitors
  - **Mar**: Finish Visitors, "Hard Cases"

  * = very few IMAP users in this D/S/C to be migrated

- Lotus Notes Users: *Week of January 9 or January 16, 2012*
  - ~150 email users. Schedule close to IMAP migration for BSS, FIN, DIR
  - From bssmail.fnal.gov (to email.fnal.gov)

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/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 *after* migration.
  - "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.

End-User Migration Suggestions

- Consider Your Email Client
  - IMAP client users: If possible, 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.
  - Large Attachments: save before migration. We cannot provide a list ahead of time.
- When to Switch Client, if you choose to do so
  - *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.
    - Some FermiMail clients will not work well with the existing email systems.
      - Old Exchange 2007 WebMail lacks support for non-MS IE browsers…. Other client compatibility issues
    - FermiMail support team concentrating on migration and users just migrated.
    - Windows: the supported and effective browser is Outlook 2010 using MAPI protocol.
- Tip: Optional "Spring Cleaning"
  - Clean-up/compact your mailbox, and archive old mail. NOT required for migration.
    - Some email clients: "compact folders" to actually free space occupied by deleted email.
    - "Archive" as used here does not mean tape archiving. It refers to client-side offline or nearline storage.
  - Please see the FermiMail web site for "archiving" suggestions… *coming soon*.

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.*
      - MeetingMaker data cannot be exported reliably into Exchange calendars. *We tried… and tried….*
      - Instructions with recommended procedures to save meeting room and personal calendar data will be provided.
    - Manual entry of data into Exchange calendars will be required.
      - Pre-migration room attributes/property options will be reviewed with stakeholders & admins.
    - Meeting Maker Migration: "Read- only access for X period of time after migration" being explored.
  - Exception: Lotus Notes calendar data IS being migrated as part of email migration by tool.

- 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 ***Jan – Mar 2012*** 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.

Demonstration

CONFIGURING EMAIL CLIENTS

Configuring MAPI Clients:

Parameters

- MAPI Protocol
  - Also known as Exchange mode, ActiveSync, etc.
  - Recommended. Delivers full functionality: Email, calendar, address book

- MAPI Configuration Parameters
  - Hostname: email.fnal.gov
  - Connection Security: SSL
  - Logon Network Security: Negotiate Authentication
  - Username: *<use your email username>*
  - Password: *<use your SERVICES password>*

Configuring MAPI Clients:

Outlook, Mac Mail, other…

- Outlook 2010 (Win 7) notes
  - Configuration only required if new to Outlook 2010 client
  - Very straight-forward client configuration in online client configurations docs
- Outlook 2011 (Mac OSX) notes
  - Configuration only required if new to Outlook 2011 client
  - Very straight-forward client configuration in online client configurations docs
- Mac Mail (Mac OSX) notes
  - Once configured, this will ALSO configure the iCal application for integrated calendaring.
  - Very straight-forward client configuration in online client configurations docs
- Transition Configuration: before your email migration takes place.
  - Most users: transition produced an error message → restart client and done.
  - Some clients using MAPI protocol with mailboxes on Exchange 2007:
    - Please see online work-arounds
    - Some Mac clients: works for most, not for a few… even with same client.
    - Some Android phone email apps

Configuring IMAP/SMTP Clients:

Parameters

- IMAP Protocol
  - Only handles email. Does not deliver calendar or address book functionality.
  - While the FermiMail implementation (Exchange 2010) handles IMAP protocol better than the previous Exchange 2007 system, IMAP still uses more shared resources than MAPI protocol.
  - TWO distinct protocols: IMAP for inbound email, SMTP for outbound email

- IMAP Parameters
  - Hostname: email.fnal.gov
  - Host Port: 993
  - Connection Security: SSL (also known as SSL/TLS)
  - Authentication Method: (Normal) Password
  - Username: *<your email username>*
  - Password: *<your SERVICES password>*

- SMTP Parameters
  - Hostname: email.fnal.gov
  - Host Port: 587
  - Connection Security: TLS (also known as STARTTLS)
  - Authentication Method: (Normal) Password
  - Username: *<your email username>*
  - Password: *<your SERVICES password>*

Configuring IMAP/SMTP Clients:

Thunderbird, other…

- Thunderbird v2 and v3 (Scientific Linux 4 and 5) notes – Old versions of T'Bird
  - Requires some "advanced" client configuration. See online client configurations docs.
- Thunderbird v7 (Mac OSX, …) notes – Modern versions of Thunderbird
  - Requires a little "advanced" client configuration. See online client configurations docs.
- *Mac Mail (Mac OSX)*
  - Please do not use IMAP protocol with Mac Mail and FermiMail. Has been tested, works.
- *Outlook 20xx (Windows, Mac OSX)*
  - Please do not use IMAP protocol with Outlook and FermiMail. Has been tested, works.
- Transition Configuration: before your email migration takes place.
  - Mac users using IMAP protocol on Exchange 2007: Use "webmail.fnal.gov" for the IMAP/SMTP hostname until your migration day.
  - Legacy IMAP port 143: Supported during migrations, then will be disabled.

Configuring OWA Clients:

Web Browsers

- OWA Protocol
  - https://email.fnal.gov
  - 99% of email client functionality supported. Almost exactly Outlook.
    - Exception: signing with digital certificates only with IE browser.
    - Exception: interface, like other web interfaces, lacks some “shortcuts”.
- Internet Explorer (Win 7)
  - IE8 tested and supported.
- Safari
  - Modern versions (Leopard, Snow Leopard) tested and supported.
- Firefox
  - Modern versions tested and supported.
  - Older versions in supported Linux releases tested.

Reference

SUPPORTING CONTENT

FermiMail Information, Help

- Information
  - Web Site: http://computing.fnal.gov/FermiMail
    - Includes an "Ask a Question" web form (information only)
    - Will 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
    - Client Configuration Focus: November 2, 2012
  - "Doctor Is In" Booth: WH Atrium, 11:30am – 1:30pm
    - November 1-2, 2012
  - FermiMail Outreach talks like this
    - Fermilab Today articles on 6/7/2011, 10/27/2011 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? – To be determined. Could be mid-late January 2012.
  - Requires migration of FESS users to Exchange 2010 first. Could be earlier if we setup FESS IMAP users later.
  - (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.
- Can I migrate early? Can I migrate myself?
  - No. The migration team will perform the migration in order to manage a consistent transition for 3000+ users. There is no plan for an “overlap” period in which you will be able to move mail yourself from the old account to the new account.

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.