Expiring & Revoking Email

For the purpose of this email, “expired” means “marked as deleted by a scheduled process”. This scheduled expiration process runs every 4 hours ( 4am, 8am, noon, 4pm, 8pm, midnight – in UTC time).

* This process should not mark emails as deleted until the date of their expiration has passed in EVERY world-wide time zone. For example, say that the system clock is in UTC (it always is) and the user’s time is in US/Central (UTC -0600). Since the time farthest forward from UTC is Pacific/Apia and Pacific/Midway (both UTC -1100), an email marked for deletion on “Jan 15, 2012” should not be deleted until this day has completely passed in that time zone. So, that means the time should be 11am Jan 16, 2012 in UTC time before anything is deleted (more realistically the deletion will happen at noon of the next day considering the crontab schedule). Or in the user’s time (US/Central), the delete will happen at 5am Jan 16, 2012.
* Since files are deleted *after* a day is done, all references to future expiration time should make it clear that the email will expire after that date, not on that date.
* Emails should not be treated as if they are deleted anywhere in the user interface until the scheduled process marks them as deleted. This way the expired / not expired behavior will not flip-flop based on the user’s time zone settings.
* Since a user sets an expiration **date** and not an expiration **time**, the future expiration date listed in the interface should never list a corresponding time and should not change as a user’s time zone changes.
* A revoked email will behave similarly to an expired email except that:
  + Messages that tell the user content has been deleted should make it clear that the email was revoked and not expired.
  + Some pages will display less data about the deleted email to the recipients since the sender wishes for it to be wiped out.

# Inbox

Whether expired or revoked, the email should no longer appear in the inbox.

# Sent Mail

Whether expired or revoked, the email should no longer appear in the inbox.

# Cabinets

Attachments to the expired or revoked email should no longer appear in the cabinet view. However, if the same file was attached to another email or that exact file was selected and “added to filesync cabinet”, those copies should stick around.

# Drafts

Drafts should now expire according to normal rules. If expired, the email should no longer appear in the drafts list.

# Email Delivery Tracking

The only section of the email delivery tracking page affected should be the “Email Deletion” section.

* While the email is in place, states “Scheduled for: \_\_\_\_”. Scheduled deletion date should be “never” or a date without a time.
* If the email has expired, states “expired on \_\_\_\_” (a date WITH an exact time)
* If the email was deleted, states “revoked by sender on \_\_\_\_\_” (a date WITH an exact time)

# Email Policies

Users should no longer see this link. However, if they do manually enter the url to this page, they should simply see a message that says “This email has been removed from the system; you can no longer adjust its settings.” None of the form information should be seen.

# Email Activity Log

When the scheduled deletion job expires old emails, the expiration should be audit logged. That log message should be available in the email activity log. When a user revokes an email, that fact should also be logged and available from the audit trail or email activity log.

# Email View

Whether expired or revoked, the email view page should continue to show up, and it should continue to show links to the activity log and delivery tracking pages to its sender.

* If expired: show header information and attachment links. No longer provide attachment links or the email body. No longer provide links to the email policy page. Show the date and time it was expired.
* If revoked & email is viewed by sender, follow the same rules as the “if expired” scenario above.
* If revoked & email is viewed by recipient, hide all information on the page other than the subject (page title). Show a warning message on the page “This email was revoked by its sender on \_\_datetime\_\_”.
* If expired or revoked, no one should be able to reply to or forward the email (this would cause errors when the body or attachments could not be found)

# Real-world Email Download Link

If the user is logged in, this link will act as a direct download link. See the next section for details.

If the user is not logged in, this link will take the user to the email view page for the email in question. Once on the page, the appropriate attachment should be highlighted to draw the user’s attention to it. If the email was revoked, the attachment will not be highlighted because the attachment isn’t present.

# Direct Download Link

A direct download link is a URL of the form: <ip>/stream/download/<fileid>/filename.extension. If the user gets a hold of one of these links and visits it, he should get in response a 404 error page with the following text: “This email was revoked by its sender on \_\_datetime\_\_”.

# Account Quota Footer

The user’s account quota should not include the sizes of any email bodies or attachments that have been revoked or expired.

# Outlook Plugin

The Outlook Plugin should not be able to show secure email bodies of emails that have expired! If the user tries, they should get a clear message telling them it has expired.