# Functional Requirement

1.1 Email Sending Function

Function ID: FR-01

Description: Users can compose and send emails to designated contacts or distribution groups. The system must validate recipient addresses and, after successful transmission, store a copy of the email in the sender’s archive.

Input: Email subject, body, recipients (contacts or distribution groups), optional attachment (single file ≤500 MB).

Output: Complete email delivered to recipient’s mailbox, copy stored in sender’s archive, and email-sending log recorded.

1.2 Email Receiving Function

Function ID: FR-02

Description: The system polls the mail server periodically, detects and receives new emails, performs security scans, categorizes them into the inbox, and updates the unread-email counter.

Input: Mail-server configuration, email metadata (sender, timestamp, digital signature).

Output: Compliant emails fully downloaded to user’s inbox, unread counter updated, and reception-timestamp log created.

1.3 Email Editing Function

Function ID: FR-03

Description: Users can edit email drafts, including modifying recipients, body formatting, and attachments, with real-time spell-checking and version-history preservation.

Input: Email draft, recipient changes, body-format adjustments, attachment-management actions.

Output: Revised draft saved to the drafts folder, and version-change log recorded.

1.4 Email Management Function

Function ID: FR-04

Description: Administrators can perform bulk operations such as archiving, cleanup, and status correction on emails, while logging all actions to the audit trail.

Input: Email filter criteria, archiving policy, cleanup rules, status-adjustment parameters.

Output: Email status/category updated, management actions written to audit log, and completion report generated.

1.5 Email Search Function

Function ID: FR-05

Description: Users can search emails using keywords, date ranges, sender/recipient, attachment type, etc. The system returns matching emails with highlighted keywords.

Input: Search keywords, filters (date, sender, recipient, attachment type, email status).

Output: Matching email list, keyword highlighting, exportable search results.

1.6 Email Deletion Function

Function ID: FR-06

Description: Users may delete emails via normal deletion (moved to recycle bin) or permanent deletion (bypassing the bin); deletion actions are logged.

Input: Selected emails, deletion mode (normal or permanent), deletion confirmation.

Output: Email status updated, moved to recycle bin or permanently deleted, audit log entry.

1.7 Email Archiving Function

Function ID: FR-07

Description: Users can archive emails into category paths; the system retains original access links and updates indexes to support archive searches.

Input: Selected emails, archive path (project, type, time, etc.), custom tags.

Output: Emails moved to archive, shortcut links maintained, archive log recorded.

1.8 Task Creation Function

Function ID: FR-08

Description: Users can create new tasks; the system supports task subject entry, due-date setting, linked emails, and contact binding while generating a unique task code.

Input: Task subject, description, due date, linked emails, bound contacts/distribution groups.

Output: New task entry stored in task list, system-generated task code, status “Not Started.”

1.9 Task Management Function

Function ID: FR-09

Description: Administrators can bulk-manage tasks, including reassignment, status adjustment, and priority changes, synchronizing updates to the email system and calendar.

Input: Task filters, management action type (reassign, status correction, priority change).

Output: Task attributes updated, audit log generated, and affected users notified of changes.

1.10 Task Deletion Function

Function ID: FR-10

Description: Users can delete tasks via soft delete (retained 30 days) or hard delete (immediate purge), with deletion logs kept.

Input: Selected tasks, deletion mode (soft or hard), secondary confirmation.

Output: Task status updated, related data cleaned, audit log recorded.

1.11 Task Completion Function

Function ID: FR-11

Description: Users can mark tasks as complete and upload result files; the system auto-links related emails and generates completion notifications.

Input: Selected task, result files (batch upload allowed, ≤2 GB each), optional completion note.

Output: Task status set to “Completed,” related emails archived, completion report generated and sent.

1.12 Task Reminder Setup Function

Function ID: FR-12

Description: Users can set reminder rules for tasks, including first alert time, recurrence, and notification channel, which are queued in the scheduler.

Input: Selected task, first alert time, recurrence rule, notification method (system message/email/SMS).

Output: Reminder rule bound to task, schedule generated, user receives alerts.

1.13 Contact Addition Function

Function ID: FR-13

Description: Users can add contacts to their personal address book; the system validates email formats, accepts extended info, and syncs distribution-group memberships.

Input: Contact name, email, phone, department/position, group selection, avatar.

Output: Contact stored in address book, group memberships updated, creation log recorded.

1.14 Contact Management Function

Function ID: FR-14

Description: Users can edit contact info, remove from groups, or delete contacts; the system syncs updates across all modules and logs actions.

Input: Contact selection, action type (edit, remove from group, delete), modification details (e.g., email, phone).

Output: Contact info updated, group memberships adjusted, audit log recorded.

1.15 Contact Search Function

Function ID: FR-15

Description: Users can search contacts with fuzzy matching and department/group filters; the system displays contact cards with quick-action links.

Input: Search keywords, filters (department, group, last-contact time, completeness).

Output: Contact list, highlighted matches, action links (send email, create task, etc.).

1.16 Contact Deletion Function

Function ID: FR-16

Description: Users can delete contacts; the system removes associations with groups and tasks and logs the deletion.

Input: Contact selection, deletion confirmation.

Output: Contact removed from address book, associations dissolved, audit log recorded.

1.17 Distribution Group Creation Function

Function ID: FR-17

Description: Administrators can create distribution groups by selecting contacts, setting group permissions, and syncing to all related modules.

Input: Group name, description, member selection, permission configuration.

Output: Group info stored, member relationships synced, permissions activated.

1.18 Distribution Group Management Function

Function ID: FR-18

Description: Administrators can edit group properties, modify members, or delete groups, synchronizing changes to related emails and tasks.

Input: Group selection, action type (edit, modify properties, delete), member changes, permission adjustments.

Output: Group info updated, related emails/tasks synced, audit log recorded.

1.19 Distribution Group Search Function

Function ID: FR-19

Description: Users can search groups by acronym, fuzzy match, and filter by creation time, member count, or type, with shortcuts for mailing and join requests.

Input: Search keywords, filters (creation time, member count, group type).

Output: Group list, highlighted matches, action links (view details, send email, request to join).

1.20 Distribution Group Deletion Function

Function ID: FR-20

Description: Administrators can delete groups, dissolve member relationships, handle references in tasks and emails, and record deletion logs.

Input: Group selection, deletion confirmation.

Output: Group removed, member relationships dissolved, audit log recorded.

1.21 Admin Account Creation Function

Function ID: FR-21

Description: Super-admin can create other admin accounts, configure permissions and security settings, and send activation emails.

Input: Admin name, login ID, password, role, permission assignment, security verification method.

Output: Admin account created, permissions synced, activation email sent.

1.22 Admin Permission Management Function

Function ID: FR-22

Description: Admins can adjust other admins’ permissions; the system validates changes and logs all modifications to the audit trail.

Input: Target admin account, permission changes (role adjustment, module rights, time limits).

Output: Permissions updated, related modules synced, change notifications sent.

1.23 Admin Account Deletion Function

Function ID: FR-23

Description: Super-admin can delete admin accounts after verifying operability and perform an irreversible data-wipe process.

Input: Admin account selection, deletion confirmation.

Output: Admin account removed, permissions invalidated, audit log recorded.

1.24 Email Archiving Policy Setup Function

Function ID: FR-24

Description: Admins can define archiving policies based on time, content, and email type, applying them to the archiving engine.

Input: Policy name, scope, archiving conditions (time, content, type), storage parameters.

Output: Policy activated, email-handling flow updated, policy execution log generated.

1.25 Email Archive Management Function

Function ID: FR-25

Description: Admins can bulk-manage archives by filtering on date, type, etc., and perform archiving or cleanup.

Input: Archive filters (date, type, department), management actions (archive, cleanup, status correction).

Output: Archive status updated, storage adjusted, audit log recorded.

1.26 Email Archive Search Function

Function ID: FR-26

Description: Users can search archives with multi-dimensional filters, highlight matches, and export results.

Input: Archive selection, search keywords, filters (time, sender, tags, path).

Output: Archived email list, highlighted matches, exportable (e.g., PDF).

1.27 Email Archive Deletion Function

Function ID: FR-27

Description: Admins can delete archives via logical or physical deletion, ensuring legal hold-period compliance.

Input: Archived email selection, deletion mode (logical or physical), deletion confirmation.

Output: Archive status updated, storage freed, audit log recorded.

1.28 Attachment Upload Function

Function ID: FR-28

Description: Users can upload attachments in emails or tasks; the system supports multi-format recognition, virus scanning, and encrypted storage.

Input: Email/task edit interface, file selection (multi-select/drag-drop), format validation.

Output: Attachment encrypted and stored, email/task link updated, upload log recorded.

1.29 Attachment Management Function

Function ID: FR-29

Description: Users can manage attachments—delete, migrate, or edit metadata—while keeping references to emails/tasks synchronized.

Input: Attachment selection, action type (delete, migrate, edit metadata), confirmation.

Output: Attachment status updated, references synchronized, operation log recorded.

1.30 Task Assignment Function

Function ID: FR-30

Description: Users can assign tasks to contacts or groups; the system enforces permissions, notifies recipients, and logs assignments.

Input: Task selection, assignee (contact or group), handover parameters (time, permissions).

Output: Task owner updated, assignee notified, assignment log generated.

1.31 Attachment Recovery Function

Function ID: FR-31

Description: Users can recover attachments from the archive; the system verifies permissions and re-establishes links to original emails/tasks.

Input: Attachment selection, recovery destination, confirmation.

Output: Attachment restored to target location, original email/task updated, recovery log recorded.