Functional Requirement

#### 1.1 Email Sending Function

\*\*Function Number: FR-01\*\*

\*\*Description:\*\* Users can compose and send emails. The system sends the email to the specified recipients and archives or backs up the email information.

\*\*Input:\*\*

- User login credentials

- Email content (subject, body, attachments, etc.)

- Recipient, CC, and BCC email addresses

- Send time

\*\*Output:\*\*

- Sent email record in the user's "Sent" folder

- Email successfully delivered to recipients

- Backup log records the email sending operation

- Archived emails are archived according to policy

#### 1.2 Email Receiving Function

\*\*Function Number: FR-02\*\*

\*\*Description:\*\* Users can receive emails from the email server and save them to the inbox, while updating the unread email count.

\*\*Input:\*\*

- User login credentials

- New emails on the email server

\*\*Output:\*\*

- New emails saved to the user's inbox

- Unread email count updated

- Backup log records the email receiving operation

- Archived emails are archived according to policy

#### 1.3 Email Formatting Function

\*\*Function Number: FR-03\*\*

\*\*Description:\*\* Users can format emails, including adjusting font, color, paragraph spacing, etc. The system saves the formatted email to the specified folder.

\*\*Input:\*\*

- User login credentials

- Selected email ID

- Formatting settings (e.g., font size, color, etc.)

\*\*Output:\*\*

- Formatted email saved to the user's corresponding folder

- Backup log records the email formatting operation

- Archived emails are archived according to policy

#### 1.4 Email Search Function

\*\*Function Number: FR-04\*\*

\*\*Description:\*\* Users can search for emails based on keywords. The system returns a list of emails that match the search criteria.

\*\*Input:\*\*

- User login credentials

- Search keywords (e.g., email subject, sender, date, etc.)

- Search scope (e.g., inbox, sent items, spam, etc.)

\*\*Output:\*\*

- List of emails that match the search criteria

- Backup log records the email search operation

- Archived emails are archived according to policy

#### 1.5 Email Folder Organization Function

\*\*Function Number: FR-05\*\*

\*\*Description:\*\* Users can create and manage email folders. The system organizes emails into different folders according to the new classification rules.

\*\*Input:\*\*

- User login credentials

- Email folder information (name, type, etc.)

- Email ID

\*\*Output:\*\*

- Updated email folder structure

- Emails moved to the new folder

- Backup log records the email folder organization operation

- Archived emails are archived according to policy

#### 1.6 Add New Contact Function

\*\*Function Number: FR-06\*\*

\*\*Description:\*\* Users can add new contact information. The system saves the contact information to the user's contact list.

\*\*Input:\*\*

- User login credentials

- Contact information (name, email address, phone number, etc.)

\*\*Output:\*\*

- New contact information saved to the user's contact list

- Backup log records the operation of adding a new contact

- Archived contact information is archived according to policy

#### 1.7 Manage Contacts Function

\*\*Function Number: FR-07\*\*

\*\*Description:\*\* Users can edit, delete, or search for contact information. The system updates the user's contact list.

\*\*Input:\*\*

- User login credentials

- Selected contact information (name, email address, phone number, etc.)

- Operation type (edit, delete, search)

\*\*Output:\*\*

- Contact information updated or deleted

- Search results returned

- Backup log records the contact management operation

- Archived contact information is archived according to policy

#### 1.8 Create Distribution Group Function

\*\*Function Number: FR-08\*\*

\*\*Description:\*\* Users can create new distribution groups. The system saves the distribution group information to the user's distribution group list.

\*\*Input:\*\*

- User login credentials

- Distribution group information (name, description, etc.)

- List of member contacts

\*\*Output:\*\*

- New distribution group information saved to the user's distribution group list

- Backup log records the operation of creating a distribution group

- Archived distribution group information is archived according to policy

#### 1.9 Edit Distribution Group Function

\*\*Function Number: FR-09\*\*

\*\*Description:\*\* Users can modify the name, description, and other related information of a distribution group. The system updates the distribution group information.

\*\*Input:\*\*

- User login credentials

- Selected distribution group information (name, description, etc.)

- Operation type (edit)

\*\*Output:\*\*

- Distribution group information updated

- Backup log records the operation of editing a distribution group

- Archived distribution group information is archived according to policy

#### 1.10 Delete Distribution Group Function

\*\*Function Number: FR-10\*\*

\*\*Description:\*\* Users can delete distribution groups. The system removes the distribution group information from the user's distribution group list.

\*\*Input:\*\*

- User login credentials

- Selected distribution group information

\*\*Output:\*\*

- Distribution group information removed from the user's distribution group list

- Backup log records the operation of deleting a distribution group

- Archived distribution group information is archived according to policy

#### 1.11 Set Reminder Task Function

\*\*Function Number: FR-11\*\*

\*\*Description:\*\* Users can set reminders for tasks or calendar events. The system saves the reminder task information and associates it with the selected task or calendar event.

\*\*Input:\*\*

- User login credentials

- Selected task or calendar event ID

- Reminder task details (reminder time, reminder method, etc.)

\*\*Output:\*\*

- Reminder task information saved and associated with the selected task or calendar event

- Backup log records the operation of setting a reminder task

#### 1.12 Manage Reminder Tasks Function

\*\*Function Number: FR-12\*\*

\*\*Description:\*\* Users can edit, delete, or search for reminder tasks. The system updates the reminder task information.

\*\*Input:\*\*

- User login credentials

- Selected reminder task information

- Operation type (edit, delete, search)

\*\*Output:\*\*

- Reminder task information updated or deleted

- Search results returned

- Backup log records the operation of managing reminder tasks

#### 1.13 Register Archiving Policy Function

\*\*Function Number: FR-13\*\*

\*\*Description:\*\* Administrators can register archiving policies. The system saves the archiving policy information to the policy library.

\*\*Input:\*\*

- Administrator login credentials

- Archiving policy details (archiving object, policy type, retention period, etc.)

\*\*Output:\*\*

- Archiving policy information saved to the policy library

- Backup log records the operation of registering an archiving policy

#### 1.14 Modify Archiving Policy Function

\*\*Function Number: FR-14\*\*

\*\*Description:\*\* Administrators can modify archiving policies. The system updates the archiving policy information.

\*\*Input:\*\*

- Administrator login credentials

- Selected archiving policy information

- Modification details

\*\*Output:\*\*

- Archiving policy information updated

- Backup log records the operation of modifying an archiving policy

#### 1.15 Query Archived Emails Function

\*\*Function Number: FR-15\*\*

\*\*Description:\*\* Users can query archived emails. The system returns a list of archived emails that match the query criteria.

\*\*Input:\*\*

- User login credentials

- Query keywords (e.g., email subject, sender, archiving date, etc.)

- Query scope

\*\*Output:\*\*

- List of archived emails that match the query criteria

- Backup log records the operation of querying archived emails

#### 1.16 Delete Expired Emails Function

\*\*Function Number: FR-16\*\*

\*\*Description:\*\* Users can delete expired emails. The system removes expired emails from the user's email folders.

\*\*Input:\*\*

- User login credentials

- List of expired emails

\*\*Output:\*\*

- Expired emails removed from the user's email folders

- Backup log records the operation of deleting expired emails

- Archived emails are archived according to policy

#### 1.17 Create Email Account Function

\*\*Function Number: FR-17\*\*

\*\*Description:\*\* Users can apply to create an email account. The system generates temporary account information and notifies the administrator for approval. After the administrator approves, the account is officially created.

\*\*Input:\*\*

- User registration information (username, email address, contact information, etc.)

- Administrator login credentials

- Approval decision

\*\*Output:\*\*

- A new email account is created and assigned to the user

- The system generates and saves the user's initial password

- The user is notified on how to securely obtain the initial password

- The administrator's approval log records the new account creation operation

- Backup log records the operation of creating an email account

#### 1.18 Manage Email Accounts Function

\*\*Function Number: FR-18\*\*

\*\*Description:\*\* Administrators can edit, delete, or search for email account information. The system updates the email account list.

\*\*Input:\*\*

- Administrator login credentials

- Selected email account information

- Operation type (edit, delete, search)

\*\*Output:\*\*

- Email account information updated or deleted

- Search results returned

- Backup log records the operation of managing email accounts

#### 1.19 Delete Email Account Function

\*\*Function Number: FR-19\*\*

\*\*Description:\*\* Administrators can delete email accounts. The system removes the account information from the user list.

\*\*Input:\*\*

- Administrator login credentials

- Selected email account information

\*\*Output:\*\*

- Email account information removed from the user list

- Backup log records the operation of deleting an email account

- Archived account information is archived according to policy

#### 1.20 Personal Email Archiving Function

\*\*Function Number: FR-20\*\*

\*\*Description:\*\* Users can archive personal emails. The system moves the emails to the archiving directory.

\*\*Input:\*\*

- User login credentials

- Selected email ID

\*\*Output:\*\*

- Emails archived to the specified directory

- Backup log records the email archiving operation

#### 1.21 Server Email Archiving Function

\*\*Function Number: FR-21\*\*

\*\*Description:\*\* Administrators can archive emails on the server. The system moves the emails to the archiving directory.

\*\*Input:\*\*

- Administrator login credentials

- Selected email ID

\*\*Output:\*\*

- Emails archived to the specified directory

- Backup log records the email archiving operation

#### 1.22 Email Flow Capture Function

\*\*Function Number: FR-22\*\*

\*\*Description:\*\* Users can capture email flow data. The system saves the captured data to the data warehouse.

\*\*Input:\*\*

- User login credentials

- Email flow type (sent, received, forwarded, etc.)

- Time range

\*\*Output:\*\*

- Email flow data saved to the data warehouse

- Backup log records the email flow capture operation

#### 1.23 Policy-Based Archiving Function

\*\*Function Number: FR-23\*\*

\*\*Description:\*\* Users or administrators can archive data entities according to archiving policies. The system moves the data entities to the archiving directory.

\*\*Input:\*\*

- User or administrator login credentials

- Selected data entity ID

- Archiving policy information

\*\*Output:\*\*

- Data entities archived to the specified directory

- Backup log records the archiving operation

#### 1.24 Record Backup Log Function

\*\*Function Number: FR-24\*\*

\*\*Description:\*\* The system automatically records backup logs after completing operations. Administrators can view backup logs.

\*\*Input:\*\*

- System operation type (email sending, receiving, archiving, etc.)

- Operation time

- Operator ID

- Operation object

\*\*Output:\*\*

- Backup log entries generated and saved

- Administrators can view the latest backup log entries

#### 1.25 Execute Data Backup Function

\*\*Function Number: FR-25\*\*

\*\*Description:\*\* Administrators can back up specified data entities. The system saves the backup data to the backup server or local storage.

\*\*Input:\*\*

- Administrator login credentials

- Selected data entity ID

\*\*Output:\*\*

- Data entities successfully backed up to the specified location

- Backup log records the data backup operation

#### 1.26 Restore Backup Data Function

\*\*Function Number: FR-26\*\*

\*\*Description:\*\* Administrators can restore backed-up data entities. The system updates the restored data entities to the system.

\*\*Input:\*\*

- Administrator login credentials

- Selected backup data entity ID

\*\*Output:\*\*

- Backup data entities successfully restored to the system

- Restore log records the data restore operation

#### 1.27 Record Restore Log Function

\*\*Function Number: FR-27\*\*

\*\*Description:\*\* The system automatically records restore logs after completing data restore operations. Administrators can view restore logs.

\*\*Input:\*\*

- System restore operation type (email restore, calendar restore, contact restore, etc.)

- Restore time

- Restorer ID

- Restore object

\*\*Output:\*\*

- Restore log entries generated and saved

- Administrators can view the latest restore log entries

#### 1.28 View Backup and Restore Logs Function

\*\*Function Number: FR-28\*\*

\*\*Description:\*\* Administrators can view backup and restore logs in the system. The system displays a list of logs.

\*\*Input:\*\*

- Administrator login credentials

- Filter conditions (e.g., operation type, time range, etc.)

\*\*Output:\*\*

- List of backup and restore logs

- Administrators can view the details of each log entry

- Log export file

#### 1.29 Administrator Permission Allocation Function

\*\*Function Number: FR-29\*\*

\*\*Description:\*\* Administrators can allocate permissions to users. The system updates the user's permission settings.

\*\*Input:\*\*

- Administrator login credentials

- Selected user ID

- Permission type (e.g., email sending, receiving, archiving, etc.)

- Validity period

\*\*Output:\*\*

- User's permission settings updated

- Backup log records the permission allocation operation

- Archived permission allocation information is archived according to policy

#### 1.30 Administrator Permission Modification Function

\*\*Function Number: FR-30\*\*

\*\*Description:\*\* Administrators can modify user permissions. The system updates the user's permission settings.

\*\*Input:\*\*

- Administrator login credentials

- Selected user ID

- Permission type (e.g., email sending, receiving, archiving, etc.)

- Modification details

\*\*Output:\*\*

- User's permission settings updated

- Backup log records the permission modification operation

- Archived permission modification information is archived according to policy

#### 1.31 Administrator Permission Revocation Function

\*\*Function Number: FR-31\*\*

\*\*Description:\*\* Administrators can revoke user permissions. The system updates the user's permission settings.

\*\*Input:\*\*

- Administrator login credentials

- Selected user ID

- Permission type (e.g., email sending, receiving, archiving, etc.)

\*\*Output:\*\*

- User's permission settings updated

- Backup log records the permission revocation operation

- Archived permission revocation information is archived according to policy