Functional Requirement

### 1.1 Email Sending Function

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

\*\*Description:\*\* Users can send emails to one or more contacts and optionally add attachments. The system sends the email to the target address and automatically processes the email according to the archiving policy.

\*\*Input:\*\*

- User ID

- Email subject

- Email body

- Recipient list

- Attachments (optional)

\*\*Output:\*\*

- Prompt indicating successful email sending

- Email archiving/deletion status

- Backup log records

### 1.2 Email Receiving Function

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

\*\*Description:\*\* The system detects new emails arriving in the user's inbox, automatically processes the emails according to the archiving policy, and saves the emails to the user's inbox.

\*\*Input:\*\*

- User ID

- Email subject

- Email body

- Sender ID

\*\*Output:\*\*

- Prompt indicating successful email receiving

- Email archiving status

- Backup log records

### 1.3 Email Formatting Function

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

\*\*Description:\*\* Users can format existing emails, and the system saves the formatted email to the user's mailbox.

\*\*Input:\*\*

- User ID

- Email ID

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

\*\*Output:\*\*

- Formatted email

- Email archiving status

- Backup log records

### 1.4 Email Search Function

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

\*\*Description:\*\* Users can search for emails in their mailbox using keywords, and the system displays the search results to the user.

\*\*Input:\*\*

- User ID

- Search keywords

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

\*\*Output:\*\*

- List of emails that match the criteria

- Backup log records

### 1.5 Email Folder Organization Function

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

\*\*Description:\*\* Users can move or copy emails to a specified folder, and the system updates the folder structure to reflect the new email organization status.

\*\*Input:\*\*

- User ID

- Email ID

- Target folder ID

\*\*Output:\*\*

- Prompt indicating successful email move/copy

- Folder structure update

- Backup log records

### 1.6 Contact Management Function

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

\*\*Description:\*\* Users can add, modify, or delete contact information, and the system updates the contact list and distribution group information accordingly.

\*\*Input:\*\*

- User ID

- Contact information (e.g., name, email address, etc.)

- Operation type (e.g., add, modify, delete)

\*\*Output:\*\*

- Prompt indicating successful contact management

- Updated contact list and distribution group information

- Backup log records

### 1.7 Add New Contact Function

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

\*\*Description:\*\* Users can add new contact information and optionally add the contact to a specific distribution group.

\*\*Input:\*\*

- User ID

- Contact details (e.g., name, email address, etc.)

\*\*Output:\*\*

- Prompt indicating successful addition of the contact

- Updated distribution group information (if applicable)

- Backup log records

### 1.8 Edit Contact Information Function

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

\*\*Description:\*\* Users can edit contact information and optionally adjust the contact's membership in distribution groups.

\*\*Input:\*\*

- User ID

- Contact ID

- Edited contact information

\*\*Output:\*\*

- Prompt indicating successful contact editing

- Updated distribution group information (if applicable)

- Backup log records

### 1.9 Delete Contact Function

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

\*\*Description:\*\* Users can delete contact information, and the system updates the contact list and distribution group information.

\*\*Input:\*\*

- User ID

- Contact ID

\*\*Output:\*\*

- Prompt indicating successful contact deletion

- Updated contact list and distribution group information

- Backup log records

### 1.10 Create Distribution Group Function

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

\*\*Description:\*\* Users can create a new distribution group and optionally add contacts to the new group.

\*\*Input:\*\*

- User ID

- Distribution group name

- Member contact list (optional)

\*\*Output:\*\*

- Prompt indicating successful creation of the distribution group

- Updated distribution group list and related contact group membership information

- Backup log records

### 1.11 Add Members to Distribution Group Function

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

\*\*Description:\*\* Users can add contacts to an existing distribution group, and the system updates the group's member list.

\*\*Input:\*\*

- User ID

- Distribution group ID

- Member contact list

\*\*Output:\*\*

- Prompt indicating successful addition of members

- Updated distribution group member list

- Backup log records

### 1.12 Remove Members from Distribution Group Function

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

\*\*Description:\*\* Users can remove members from a distribution group, and the system updates the group's member list.

\*\*Input:\*\*

- User ID

- Distribution group ID

- Member contact list

\*\*Output:\*\*

- Prompt indicating successful removal of members

- Updated distribution group member list

- Backup log records

### 1.13 Set Reminder Task Function

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

\*\*Description:\*\* Users can set reminders for emails or calendar events, and the system reminds users to perform or view the specified tasks according to the settings.

\*\*Input:\*\*

- User ID

- Email or calendar event ID

- Reminder time

- Reminder method

\*\*Output:\*\*

- Prompt indicating successful reminder task setting

- Updated reminder task list

- Backup log records

### 1.14 Administrator Create Email Account Function

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

\*\*Description:\*\* Administrators can create new email accounts and set the initial archiving policy and backup log settings for the account.

\*\*Input:\*\*

- Administrator ID

- New email account details (e.g., username, password, email address, etc.)

\*\*Output:\*\*

- Prompt indicating successful creation of the email account

- Record of new email account information

- Backup log records

### 1.15 Administrator Delete Email Account Function

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

\*\*Description:\*\* Administrators can delete email accounts, and the system removes the account information from the database.

\*\*Input:\*\*

- Administrator ID

- Email account ID

\*\*Output:\*\*

- Prompt indicating successful deletion of the email account

- Removal of email account information

- Backup log records

### 1.16 Administrator Set Account Permissions Function

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

\*\*Description:\*\* Administrators can set permissions for email accounts, and the system updates the account permission information.

\*\*Input:\*\*

- Administrator ID

- Email account ID

- Permission settings

\*\*Output:\*\*

- Prompt indicating successful account permission setting

- Updated account permission information

- Backup log records

### 1.17 Personal Email Archiving Function

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

\*\*Description:\*\* Users can archive emails to a specified archiving folder, and the system automatically adjusts the email status according to the archiving policy.

\*\*Input:\*\*

- User ID

- Email ID

- Target archiving folder ID

\*\*Output:\*\*

- Prompt indicating successful email archiving

- Updated archiving status of the email

- Backup log records

### 1.18 Search Personal Archives Function

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

\*\*Description:\*\* Users can search for archived emails using keywords, and the system displays the search results to the user.

\*\*Input:\*\*

- User ID

- Search keywords

- Search scope (e.g., different archiving folders)

\*\*Output:\*\*

- List of archived emails that match the criteria

- Backup log records

### 1.19 Server Email Archiving Function

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

\*\*Description:\*\* Administrators can archive emails to a specified archiving folder on the server, and the system automatically adjusts the email status according to the archiving policy.

\*\*Input:\*\*

- Administrator ID

- Email ID

- Target archiving folder ID

\*\*Output:\*\*

- Prompt indicating successful email archiving

- Updated archiving status of the email

- Backup log records

### 1.20 Email Flow Capture Function

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

\*\*Description:\*\* Administrators can set capture parameters, and the system captures and stores email flow data according to the parameters.

\*\*Input:\*\*

- Administrator ID

- Capture time period

- Capture rules

\*\*Output:\*\*

- Prompt indicating successful email flow data capture

- Updated archiving status of the captured data

- Backup log records

### 1.21 Policy-Based Archiving Function

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

\*\*Description:\*\* Users can archive emails to a specified archiving folder according to a predefined archiving policy.

\*\*Input:\*\*

- User ID

- Email ID

- Archiving policy ID

\*\*Output:\*\*

- Prompt indicating successful email archiving

- Updated archiving status of the email

- Backup log records

### 1.22 Handling Expired Emails Function

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

\*\*Description:\*\* The system automatically handles expired emails according to a predefined policy, and users can also manually adjust the handling method.

\*\*Input:\*\*

- User ID

- Expired email ID

- Handling method (e.g., archive or delete)

\*\*Output:\*\*

- Prompt indicating successful handling of expired emails

- Updated email status

- Backup log records

### 1.23 File-Level Backup Function

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

\*\*Description:\*\* Users can back up individual or multiple files or emails, and the system saves the backup data to a specified location.

\*\*Input:\*\*

- User ID

- File or email ID

- Target backup location ID

\*\*Output:\*\*

- Prompt indicating successful backup of the file or email

- Updated status of the backup data

- Backup log records

### 1.24 Full-Database Backup Function

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

\*\*Description:\*\* Administrators can perform a full-database backup, and the system copies all data to a specified location.

\*\*Input:\*\*

- Administrator ID

- Target backup location ID

\*\*Output:\*\*

- Prompt indicating successful full-database backup

- Updated status of the backup data

- Backup log records

### 1.25 Time-Based Data Recovery Function

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

\*\*Description:\*\* Users or administrators can recover data based on a specific time point recorded in the backup logs, including emails, calendar events, contacts, etc.

\*\*Input:\*\*

- User ID or Administrator ID

- Data type

- Recovery time point

\*\*Output:\*\*

- Prompt indicating successful data recovery

- Status of the recovered data

- Recovery log records

### 1.26 Backup Log Recording Function

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

\*\*Description:\*\* The system records detailed information of each data operation, including emails, calendar events, contacts, etc.

\*\*Input:\*\*

- Operation type

- Operation object

- Operation result

\*\*Output:\*\*

- Backup log entry record

- Updated status of the backup log

### 1.27 Recovery Log Recording Function

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

\*\*Description:\*\* The system records detailed information of each data recovery operation.

\*\*Input:\*\*

- Recovery type

- Recovery object

- Recovery result

\*\*Output:\*\*

- Recovery log entry record

- Updated status of the recovery log

### 1.28 View Backup Log Function

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

\*\*Description:\*\* Users or administrators can view the backup logs recorded by the system.

\*\*Input:\*\*

- User ID or Administrator ID

- Log entry ID

\*\*Output:\*\*

- Detailed information of the backup log entry

- Updated status of viewing the log

### 1.29 View Recovery Log Function

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

\*\*Description:\*\* Users or administrators can view the recovery logs recorded by the system.

\*\*Input:\*\*

- User ID or Administrator ID

- Log entry ID

\*\*Output:\*\*

- Detailed information of the recovery log entry

- Updated status of viewing the log