# User Manual - Login System

## Introduction

The login system is designed to ensure that only authorised users can access the application. This manual details how to use the login interface, as well as possible actions in case of errors.

## Login Interface

*The login window includes the following elements:*

1. User field: allows you to enter the registered user name.
2. Password field: Allows the user's password to be entered.
3. Login' button: Starts the credentials validation process.
4. Error Message: Appears in red if the credentials entered are incorrect.

## User Instructions

### 1. Login

1- Open the application.

2-In the User field, enter your username.

3-In the Password field, enter your password.

4-Click on the 'Login' button.

- If the credentials are correct, a success message will appear and you will be taken to the next screen of the application.
- If the credentials are incorrect, a red error message will be displayed stating:'Incorrect credentials, try again.

### 2. Unsuccessful Attempts

The system allows a maximum of **5 login attempts**.
If you reach the limit of failed attempts:

- A **pop-up message** will appear stating:
  *'Too many failed attempts. The application will be closed.'*
- The application will automatically close to protect security.

**Error Handling**
**Common Messages:**

1. **Incorrect Credentials**
   The message *‘Incorrect credentials, try again.’* indicates that the credentials entered do not match any registered user. Verify your username and password.
2. **Too Many Attempts**
   If you enter incorrect credentials **5 times** in a row, the system will block access and close the application.

**Recommendations**

1. **Secure Passwords**
   Make sure you use a strong password that combines:
   - Uppercase letters
   - Lowercase letters
   - Numbers
   - Special characters
2. **Password Recovery**
   If you do not remember your credentials, contact your system administrator to reset them.
3. **Secure Logout**
   To close the login window without attempting to log in, use the standard operating system functions to close the application.

**Login Example**

1. **Successful Case:**
   - User logs in:
     - **User:** admin
     - **Password:** password123
   - The system validates the credentials and displays:
     *‘Login successful.’*
   - The main system window opens.
2. **Failed Case:**
   - User logs in:
     - **User:** admin
     - **Password:** incorrect
   - The system displays the message:
     *‘Incorrect credentials, try again.’*

    - If this occurs **5 consecutive times**, the application closes automatically.

**Additional Notes**

- **Privacy:** The password is not visible while typing, as the field is protected with a masked input format.
- **Security:** All passwords are securely verified by a validation system *(not stored in plain text)*.
- **Auto-Close:** If the application closes due to too many failed attempts, you will have to restart to try again.

**User Manual - Telnet Interface**

This manual describes the operation of the **Telnet interface** designed to connect to a server using a specified IP address and port. The interface allows you to make a Telnet connection and return to the main program menu if necessary. With this guide, you will be able to use the Telnet interface effectively and solve common problems during the connection process.

## 1. Description of the Interface

The **Telnet interface configuration window** consists of the following elements:

1. **Field ‘IP Address 1’**: Allows you to enter the IP address of the server you wish to connect to.
2. **Port field**: Allows you to enter the port used for the connection.
3. **Connect button**: Starts the Telnet connection process.
4. **Back button**: Returns to the main program window.

## 2. Start Telnet Connection

To start the Telnet connection, follow these steps:

1. Enter a valid **IP address** in the ‘IP Address 1’ field.
2. Enter the corresponding **port** in the ‘Port’ field.
3. Click the **‘Connect’** button.
    - If the connection is successful, a new Telnet window will open.
    - If an error occurs, a message will be displayed indicating the reason for the problem.

### 3. Error Messages

During the connection process, error messages may appear. The following are some common messages and their description:

1. **‘Please enter a valid IP address and port.’**
   This message appears when the IP address or port fields contain incorrect or empty values.
2. **‘Error connecting: {message}’**
   This message appears when the connection to the specified server cannot be established. Verify the IP address and port and try again.

### 4. Back Button

The **‘Back’** button allows you to return to the main menu of the program.

**Button functions:**

- Closes the current window.
- Opens the main program window.

### 5. Example of Use

The following is a practical example of how to use the Telnet interface:

1. Open the Telnet configuration window.
2. Enter the **IP address:** *‘192.168.1.10’.*
3. Enter the **port:** *‘23’.*
4. Click the **‘Connect’** button.
   - If the connection is successful, the Telnet window will open.
5. To return to the main menu, click the **‘Back’** button.

# User Manual - Customer Management

## Introduction

This client management system allows you to perform basic actions on registered users, such as **creating, listing, modifying, and deleting them**. It includes three main modules:

1. **Client Management**: Initial window to navigate between the options for creating and listing users.
2. **User Creation**: Window to add a new user to the system.
3. **User List**: Window to view, edit, and delete existing users.

## 1. Main Window: Customer Management

The main window acts as an access point for the system functionalities.

**Available Options:**

- **Create User**: Opens the window to add a new user.
- **List Users**: Opens the window that shows all the users registered in the system.

## 2. Create User

**Access:**
From the main window, click on the **'Create User'** button to open this functionality.

**Creation Interface:**
The window allows you to enter the information required to register a new user. It includes the following fields:

1. **First name**: Enter the user's first name.
2. **Surname**: Enter the user's surname.
3. **E-mail**: Valid e-mail address for the user.
4. **Username**: Unique username.
5. **Password**: Password to access the system.
6. **Role**: Select the user's role *(e.g., Administrator, Technician)*.
7. **DNI**: National Identity Card, consisting of **8 numbers and 1 letter**.
8. **Date of Birth**: Select the date of birth from a calendar.
9. **Telephone**: **9-digit telephone number**.

# Instructions to Create a User

1. Complete all required fields.
2. Click the **‘Create User’** button.
   - If any fields are not complete or contain errors, a message will be displayed indicating the problem. Correct the errors and try again.
3. If everything is correct, a **confirmation message** will be displayed with the user details created.

**Important Validations:**

- **DNI**: Must be in the format **8 numbers followed by a letter** (e.g., 12345678A).
- **Telephone**: Must be a valid **9-digit number** (e.g., 987654321).
- All fields are **required**.

### 3. List of Users

**Access:**
From the main window, click on the **‘List Users’** button.

**Listing Interface:**
The window displays a **table** containing all registered users.

**Available Columns:**

- **ID**: Unique identifier of the user.
- **First name**
- **Surname**
- **Email**
- **Username**
- **Password**
- **Role**
- **Date of Birth**
- **Telephone**

### Available Options:

1. **Edit User**
   Each row includes an **Edit** button, which allows you to modify the data of the selected user.

2. **Delete User**
   Each row includes a **Delete** button, which deletes the selected user after confirmation.

**Back Button:**
Return to the main window.

**Flow of Use:**

1. **Create a User**
   - From the main window, select **Create User**.
   - Complete all fields and validate the information entered.
   - Click **Create User** to save the record.
2. **List Users**
   - From the main window, select **List Users**.
   - View the list of registered users.
   - To **edit** or **delete** a user, use the corresponding buttons in the Actions column.

## Common Error Messages:

- **‘Please complete all fields.’**
- **‘The DNI must have 8 numbers followed by a letter.’**
- **‘The phone number must have 9 numbers.’**

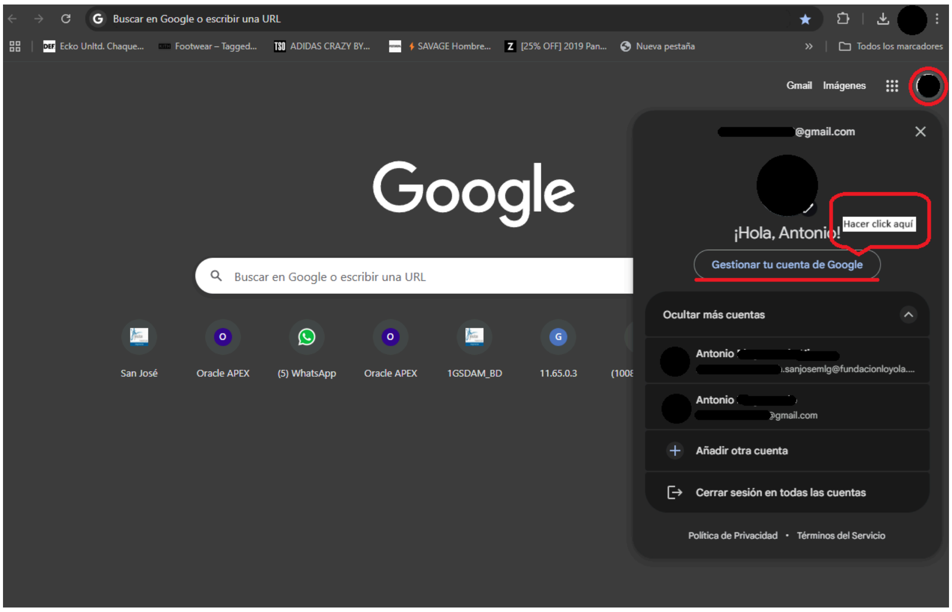
## Recommendations:

- Before creating a user, **check all data** to avoid errors later.
- For administrative roles, be sure to assign **strong credentials**.
- Always **check the data** when listing users to keep the database up to date.

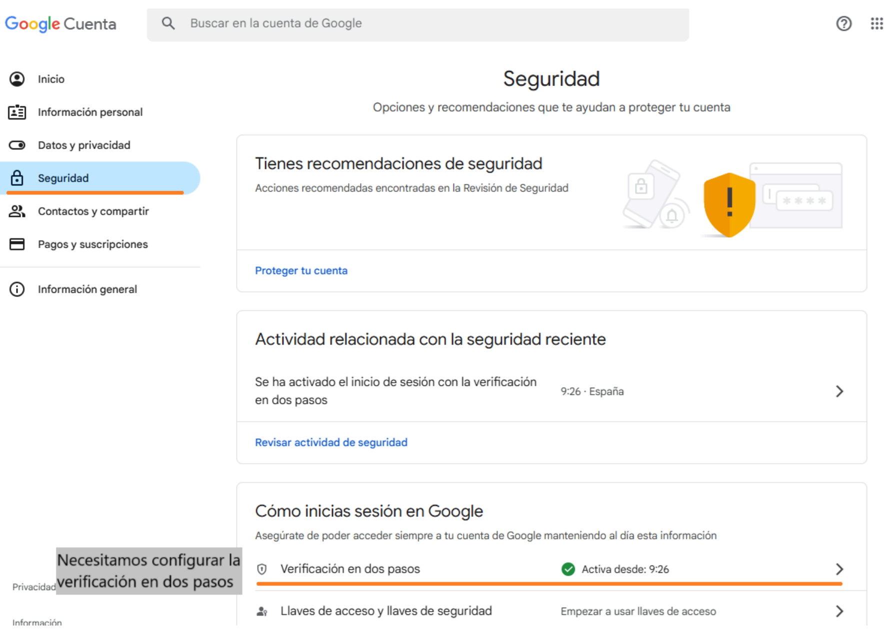
# User Manual - E-Mail Addresses

Before anything else, we need to create an application password. Here are the steps:

First, click on “account management”, where the image shows.




Once in the account management section, we go to the security tab:

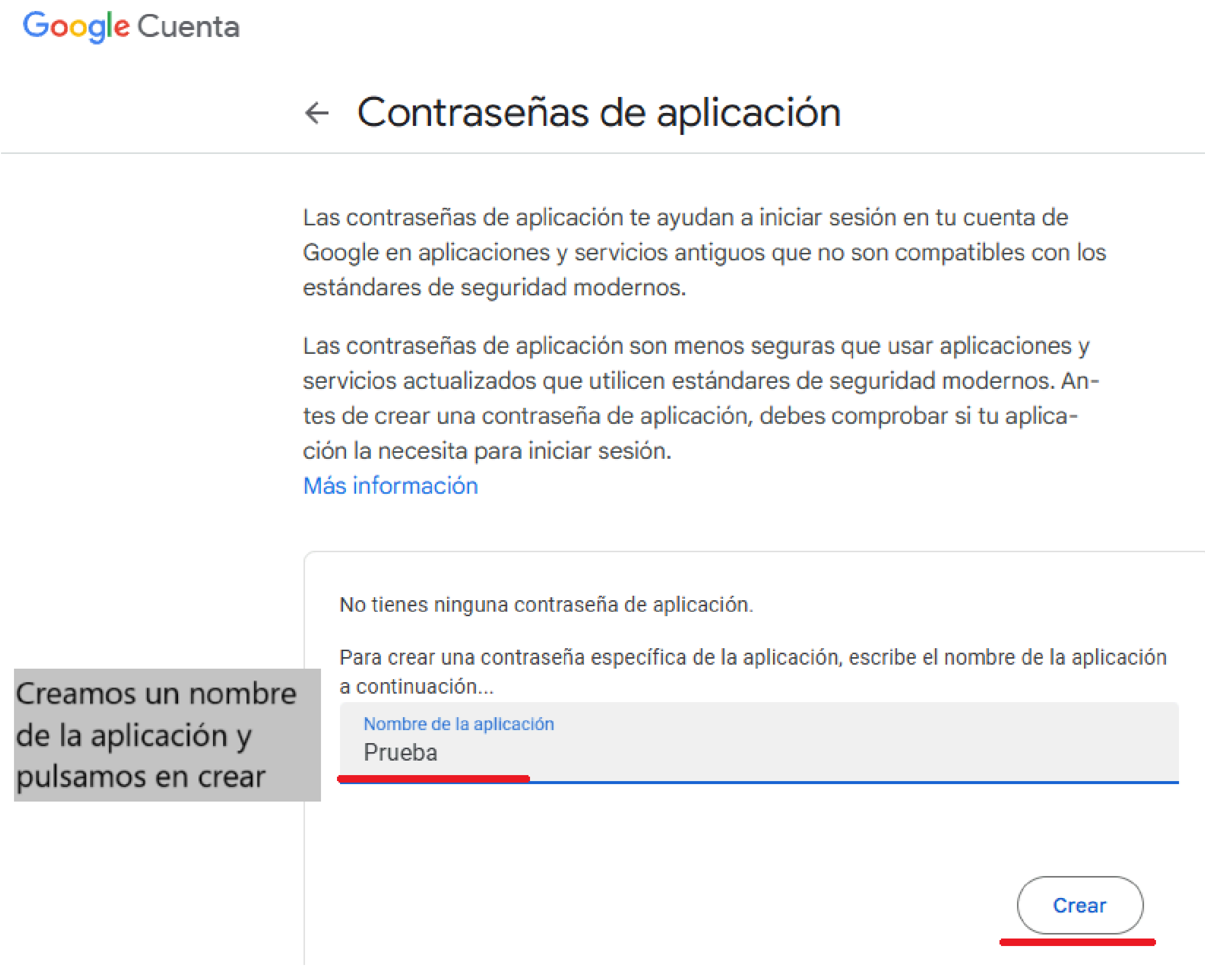



First, we need to configure the two-step verification.

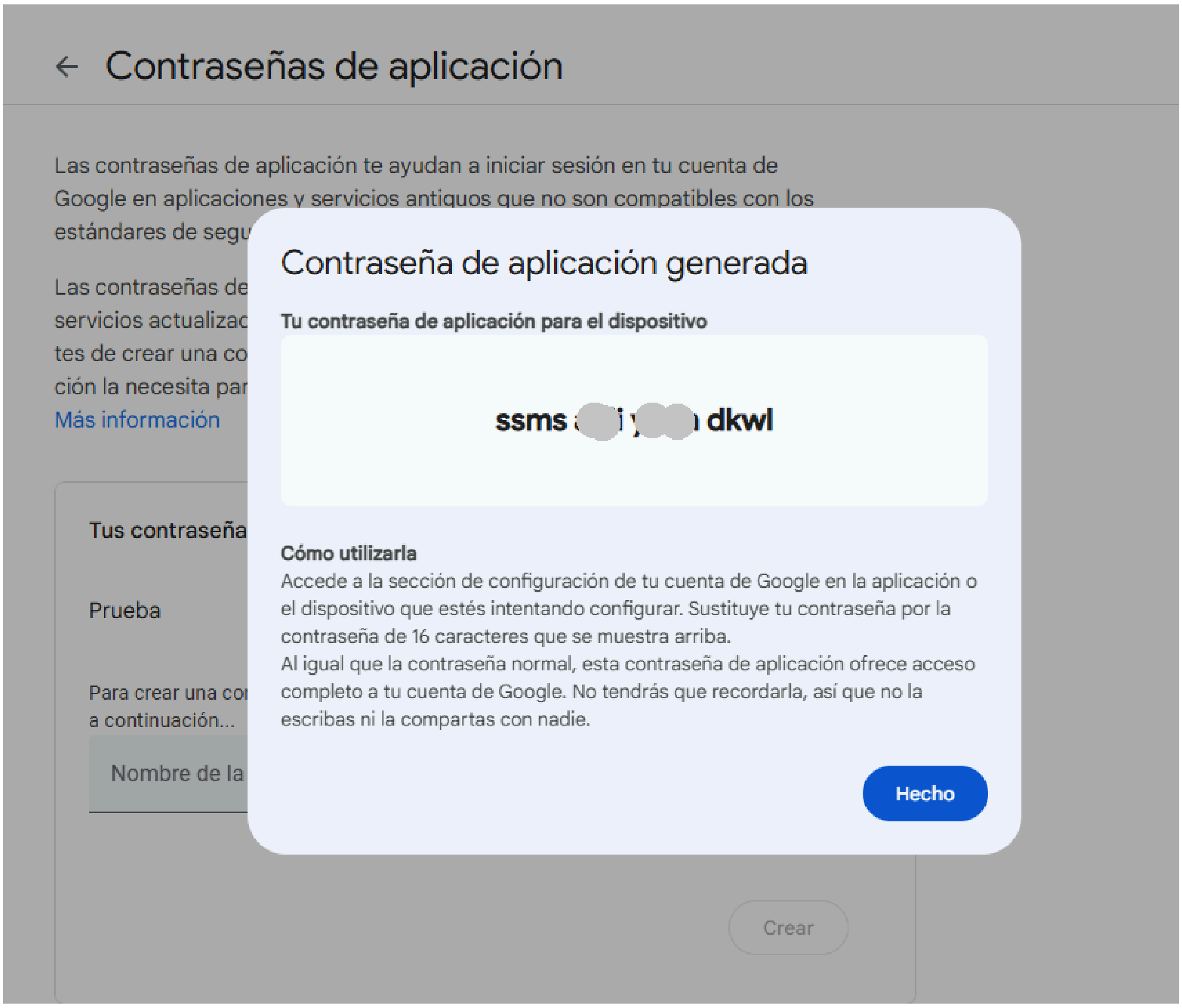
Once the verification has been configured, we click on the next link to create a password application.

https://myaccount.google.com/apppasswords

Instructions to create the password:




Create a name for the app and click on “Create”.




Once the password is generated, all you have to do is click on “Done”.

# User Manual - Sending a Message

This manual describes the functionality of the message-sending window using the SMTP protocol through the Gmail server. The interface allows users to send emails by specifying the recipient, subject, message, and optionally attaching files.

1. Interface Description

The message-sending window includes the following elements:

- **'Recipient' Field**: Allows you to enter the recipient's email address.
- **'Subject' Field**: Allows you to enter the email subject.
- **'Message' Field**: Text area where you write the body of the message.
- **Attachment Selection**: Allows you to attach a file up to 10 MB.
- **'Send' Button**: Sends the email.
- **'Back' Button**: Returns to the main program window.

2. Attaching a File

To attach a file:

1. Click the **'Select'** button to open the file explorer.
2. Select the file you wish to attach.
3. The name of the selected file will appear in the corresponding field.
   **Note**: The attachment size must not exceed 10 MB.

3. Sending the Email

To send an email:

1. Enter the recipient's email address in the **'Recipient'** field.
2. Enter the email subject in the **'Subject'** field.
3. Write the message in the **'Message'** area.
4. If necessary, attach a file by clicking the **'Select'** button.
5. Click the **'Send'** button.

**Possible Outcomes:**

- If the email is successfully sent, a confirmation message will appear.
- In case of an error, a message will be displayed indicating the cause of the problem.

**4. 'Back' Button**
The **'Back'** button allows you to return to the main program window.

- When you click this button, the message-sending window closes.
- The main window automatically opens.

**5. Usage Example**
The following describes a typical use case:

1. Enter **'user_destination@gmail.com'** in the **'Recipient'** field.
2. Enter **'Message Test'** in the **'Subject'** field.
3. Write **'This is a test message.'** in the **'Message'** area.
4. *(Optional)* Attach a small file by clicking **'Select'**.
5. Click the **'Send'** button.
6. Check the confirmation message: **'Email sent successfully.'**
7. Click the **'Back'** button to return to the main window.

**6. Troubleshooting**
Common problems and their solutions:

- **Error: 'Email format is incorrect'**
  Ensure the email address entered is valid.

- **Error: 'The attachment exceeds 10 MB'**
  Select a smaller file.

- **Error: 'SMTP server error'**
  Verify that your internet connection is active and that the account being used has SMTP access enabled.

- **Unexpected Error**
  Review the error details and contact the system administrator if the problem persists.

**User Manual - Email Reception**
This manual describes the functionality of the email reception window within the system. The interface allows users to view received emails, navigate between folders, and perform actions such as deleting messages or returning to the main menu.

## 1. Interface Description

The email reception window consists of the following sections:

- **Header**:
  Displays the current functionality title: **'Message Reception'**.

- **Folder List**:
  Enables folder selection to filter emails.
  Includes a **'New Folder'** button to add a custom folder.

- **Email List**:
  Displays available emails organized into the following columns:

  - **Read**: Indicates whether the email has been read (checked box).
  - **Sender**: The sender's email address.
  - **Subject**: The email's title or subject.
  - **Date**: The date the email was received.
- **Action Buttons**:

  - **Delete**: Deletes the selected email.
  - **Back**: Returns to the system's main menu.

## 2. Main Functionality

### Email Viewing

- Emails are displayed in a list in the main section.
- Each email includes its read status, sender, subject, and reception date.

### Folder Selection

- Use the **'Folders'** section to select the desired folder via the dropdown menu.

### Delete Email

- Select an email from the list.
- Click the **'Delete'** button to remove the selected message.

### Return to Main Menu

- Click the **'Back'** button to return to the system's main window.

## 3. 'Delete' Button

The **'Delete'** button allows you to remove the selected email from the list.

**Steps to use this button:**

1. Select the email you want to delete.
2. Click the **'Delete'** button.
3. In some cases, a confirmation window may appear to prevent accidental deletions.
   **Note**: Ensure an email is selected before attempting to delete it.

## 4. 'Back' Button

The **'Back'** button allows you to return to the system's main menu.

**When clicking this button:**

- The current email reception window will close.
- The main system window will automatically open.

## 5. Usage Example

Follow these steps for a typical use case of the email reception window:

1. Open the email reception window.
2. Select a folder from the dropdown menu (e.g., **'Inbox'**).
3. View the available emails in the displayed list.
4. Select an email and click the **'Delete'** button to remove it.
5. Click the **'Back'** button to return to the main system menu.

## 6. Troubleshooting

**Common Problems and Solutions:**

- **The email is not deleted:**
  Verify that you have selected an email before clicking **'Delete'**.
- **Folders are not displayed:**
  Ensure your connection to the mail server is active.
- **Error returning to the main menu:**
  Check that the main system window is correctly configured.

# User Manual - Log Management

## Introduction

The log management functionality allows users to view, filter, and generate reports on system activities. This tool is essential for tracking actions, conducting audits, and maintaining a history of events.

## Log Management Interface

The Log Management window contains the following main elements:

**Interface Elements:**

- **Filter Combobox:**
    - **User:** Filter logs by a specific user.
    - **Log:** Filter by a specific type of recorded action.
    - **Date:** Filter logs by a specific date.
- **Log Table:**
  Displays activity records in a table format with the following columns:
    - **User:** The name of the user who performed the action.
    - **Date:** The date and time of the event.
    - **Action:** A description of the recorded activity.
- **Action Buttons:**
    - **Create File:** Generates a file with the current records for export or saving.
    - **Refresh Data:** Reloads the log table with the most recent data.
- **Title:**
  A header indicating that you are in the **Log Management** section.

## Usage Flow

### 1. Viewing Logs

- When the window opens, the log table displays recent activity records.
- The table includes details such as the user's name, the action date, and a brief event description.

### 2. Filtering Logs

You can use the dropdown filters to narrow the displayed logs:

- **By User:** Select a username from the first dropdown to view only actions performed by that user.
- **By Log Type:** Use the second dropdown to filter by a specific type of action (e.g., Login or User Creation).
- **By Date:** Filter the records by selecting a date in the third dropdown.

### 3. Creating a File

- Click the **Create File** button.
- A file containing the currently visible records in the table will be generated.
- This file can be used as a backup or to share the event history.

### 4. Refreshing Data

- Click the **Refresh Data** button to reload the logs in the table.
- This action is useful if new activities have been recorded in the system while you are using the window.

## Technical Details

### Sample Data

When opening the log management section, the table will load the following example records:

| User | Date | Action |
|---|---|---|
| Juan | 1 day ago | Login |
| María | Today | User Creation |
| Carlos | 5 days ago | Data Deletion |

## Common Errors and Solutions

1. **Filters do not show results:**
    - **Cause:** Filters are configured but lack logic to modify the table data.
    - **Solution:** This behavior will be improved in future updates.
2. **File is not generated when clicking "Create File":**
    - **Cause:** The method associated with the button does not yet include file generation logic.
    - **Solution:** Contact the developer to implement this functionality.

## Recommendations

- Use the filters to narrow the range of records and simplify analysis.
- Refresh the data before generating a file to ensure the most recent records are included.