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EAGLEYE QRD & PDR®
INTEGRATION MANUAL / V0.1





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EAGLEYE QRD

This manual explains the Eagleye QRD *(QUALITY REPORT DESIGNER)* application in terms of:

- (A) How to integrate and establish a connection with the Eagleye PDR *(PORTABLE DATA RECORDER)* device.
- (B) How to report field data recorded by the Eagleye PDR.
- (C) Configuration and operational logic of the Eagleye QRD automated reporting system.

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(C) Eagleye QRD Automated Reporting System: 14

Contact: 40

Note: To ensure clarity, actual software interface screenshots are used instead of physical device photos.

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SECTION A:
INTEGRATION WITH EAGLEYE PDR

Detecting the Eagleye PDR Device IP Address

STEP 1:

To establish a network connection between **Eagleye QRD** and the **PDR**, the device's IP address must be identified. Follow these steps to find the IP address:

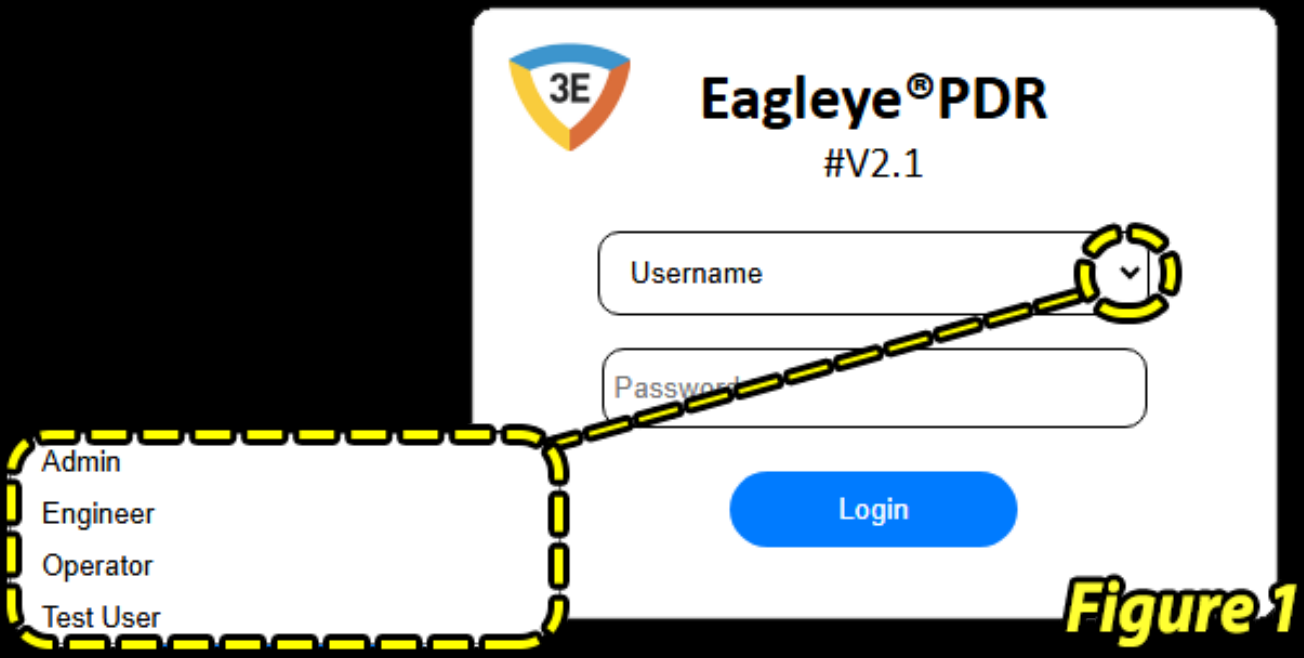


Figure 1

Select the **Username** on the **Eagleye PDR** login screen and enter the **Password** to log in.

Note: The default password for all users is 123, which can be changed later.

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STEP 2:

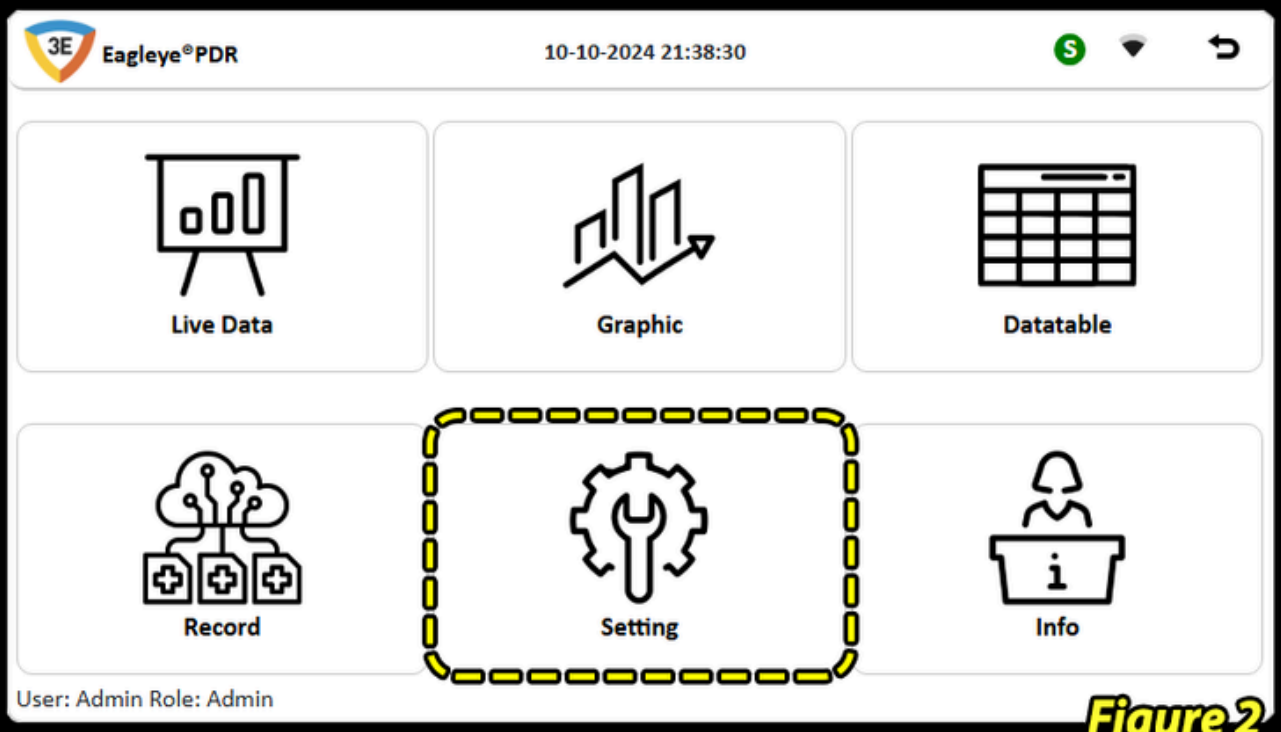


Figure 2

From the *Main Screen* that opens after logging in, select the *Setting* tab.

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STEP 3:

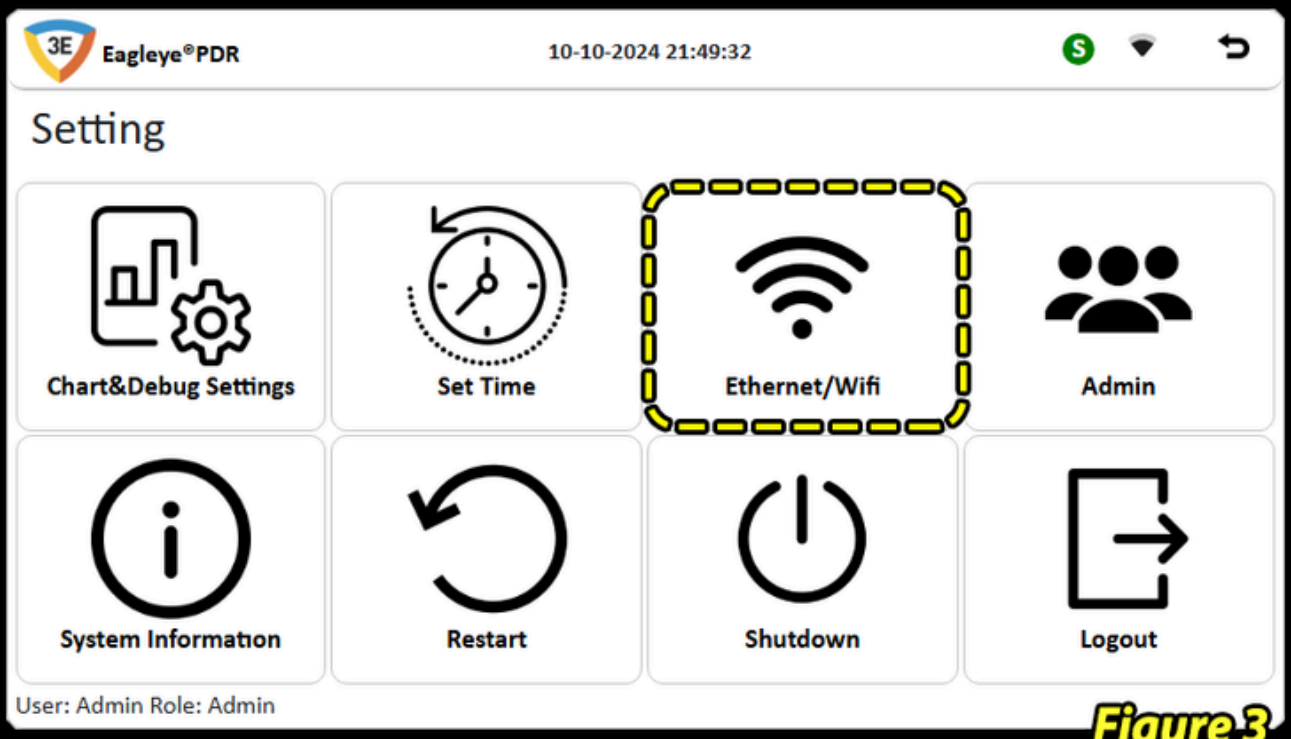


Figure 3

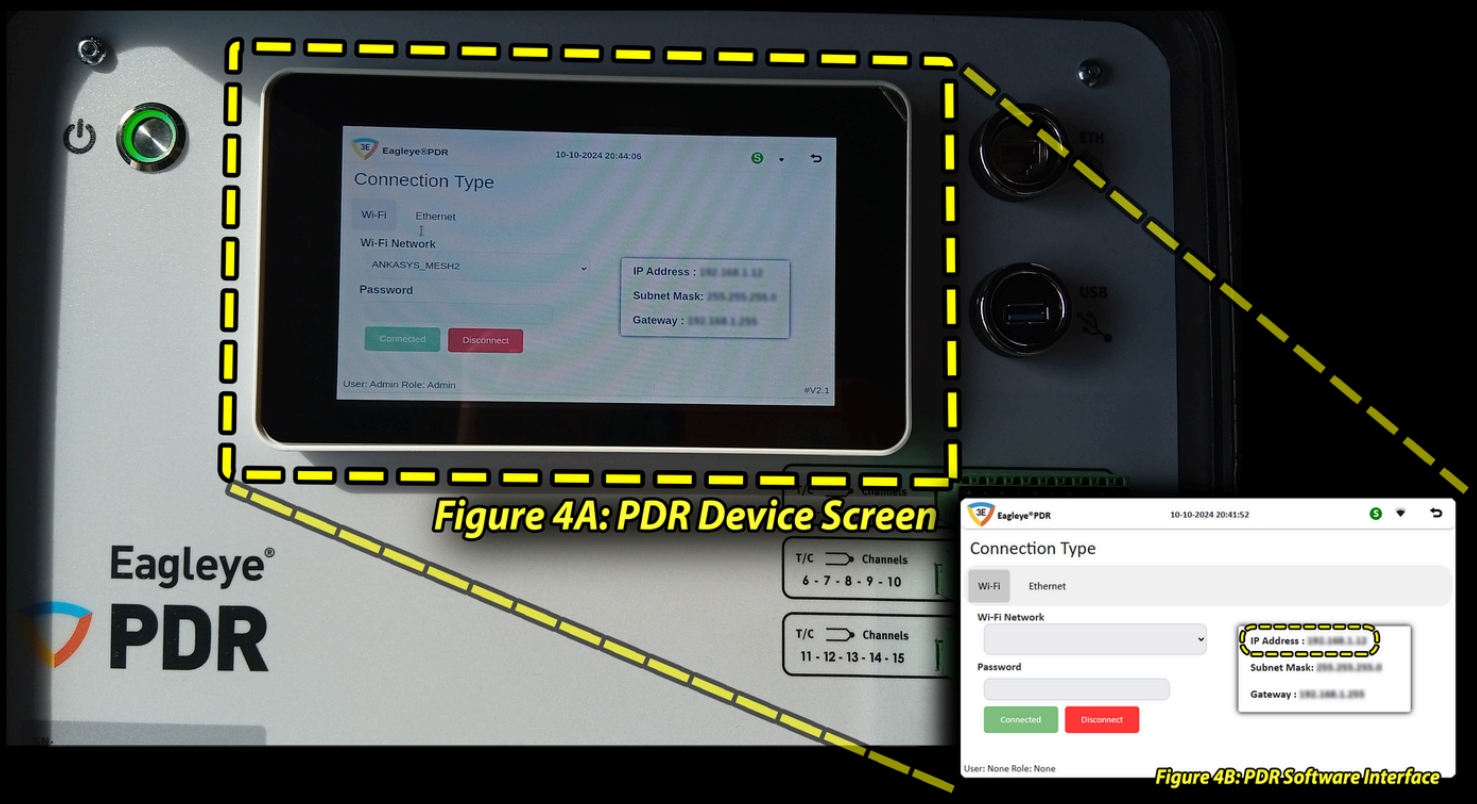
Navigate to the *Ethernet / Wifi* tab.

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STEP 4:



The IP address of the **Eagleye PDR** device is displayed in the ***bottom right corner*** of the Ethernet / Wifi tab.

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STEP 5:

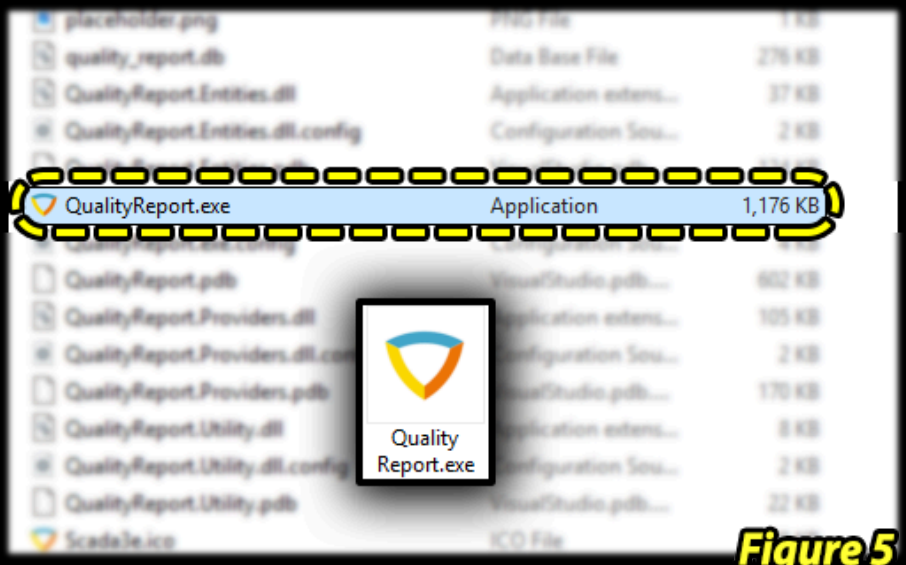


Figure 5



Figure 6

Launch **QualityReport.exe** *(See Figure 5)*.

In the Quality Report application, select the ***Settings*** tab from the top panel *(See Figure 6)*.

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STEP 6:

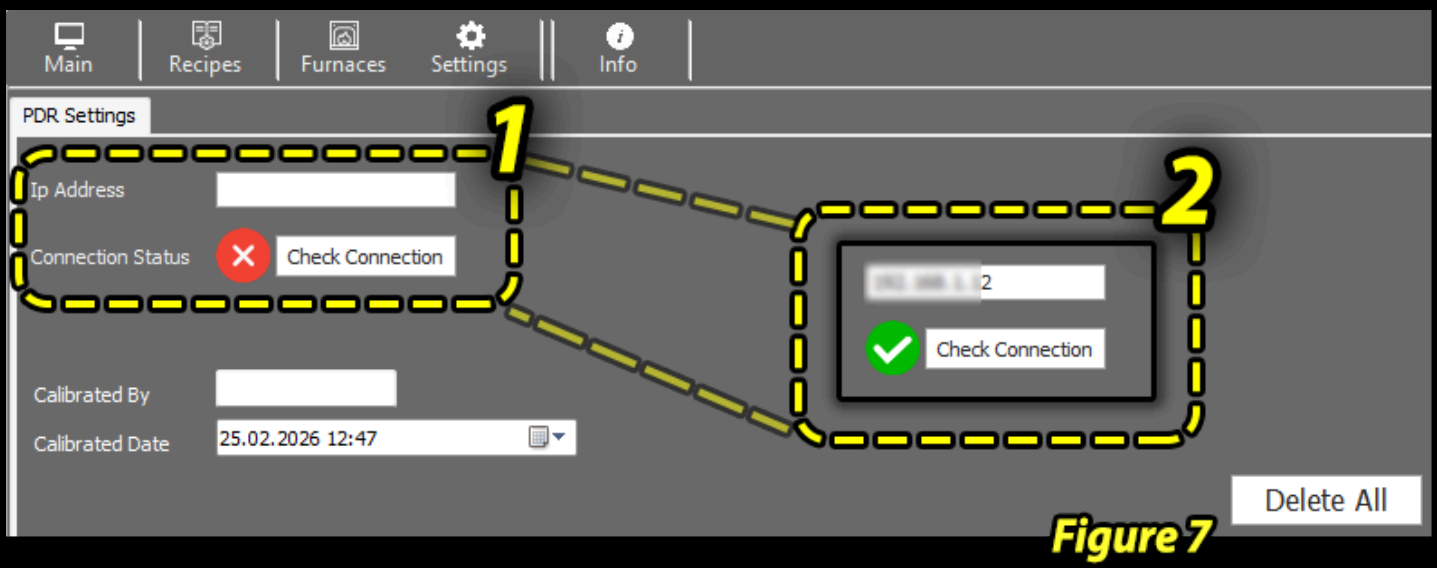


Figure 7

Enter the **IP Address** and click the **Check Connection** button to integrate Eagleye *PDR* and *QRD*.

When the **Check Connection** button is clicked, the connection status is displayed as follows:

1. Connection error → ✗ *(X mark)*
2. Connection established → ✓ *(Check mark)*

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SECTION B: REPORTING

Reporting Real-Time Raw Field Data via Eagleye QRD

STEP 1:

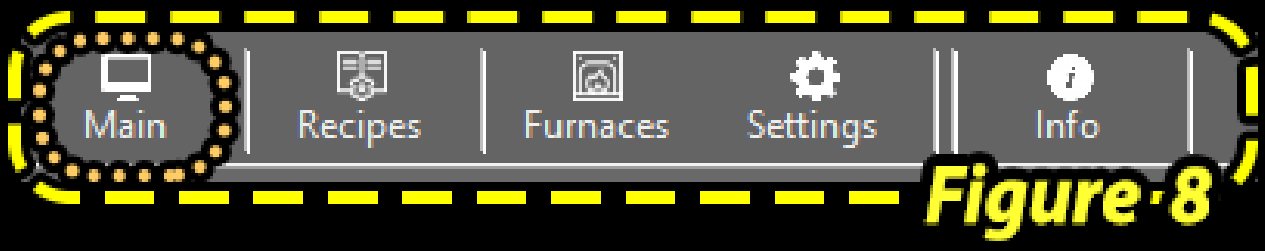


Figure 8

Launch *Quality Report* application and navigate to the *Main* tab.

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STEP 2:

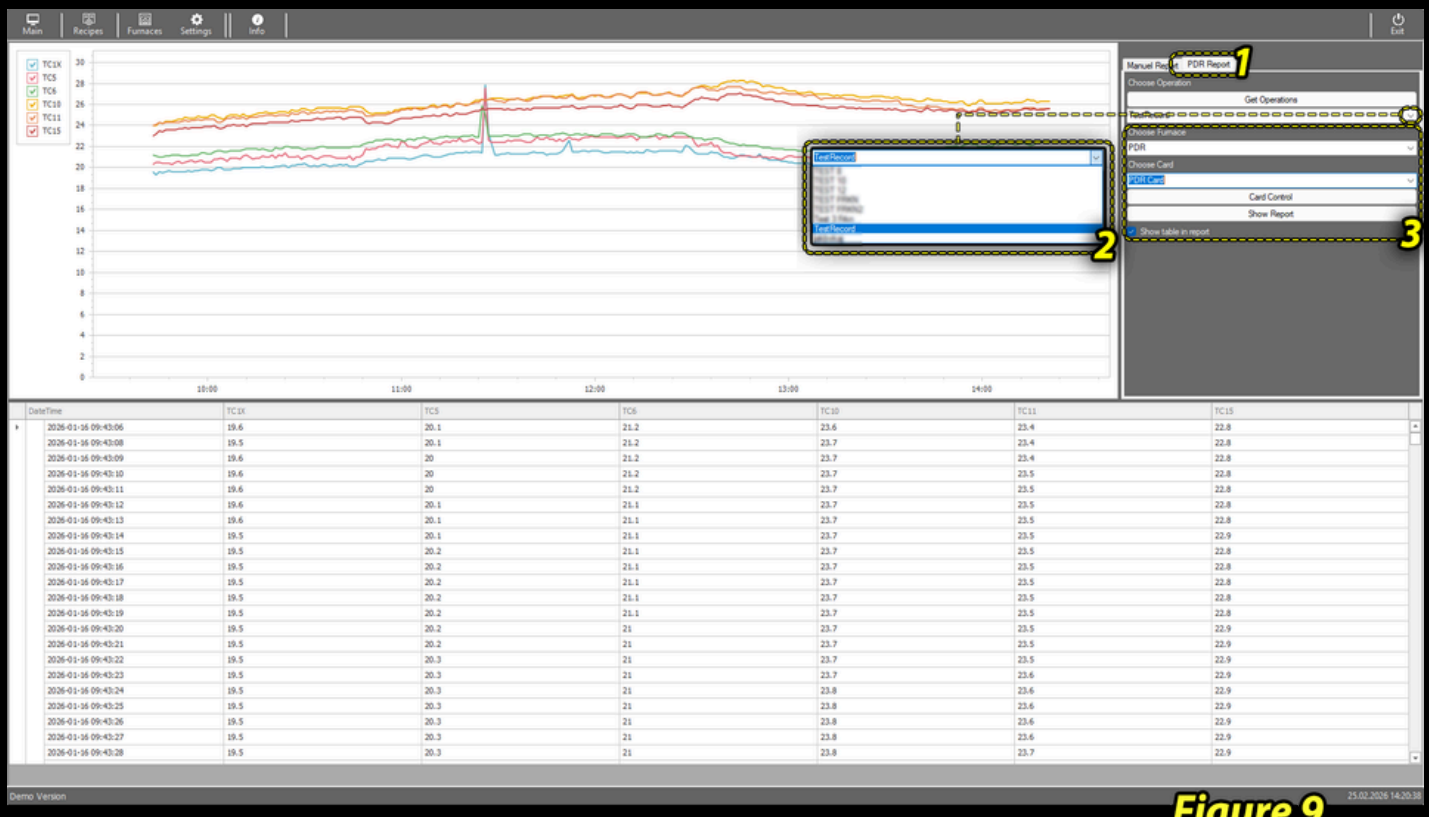


Figure 9

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STEP 2:

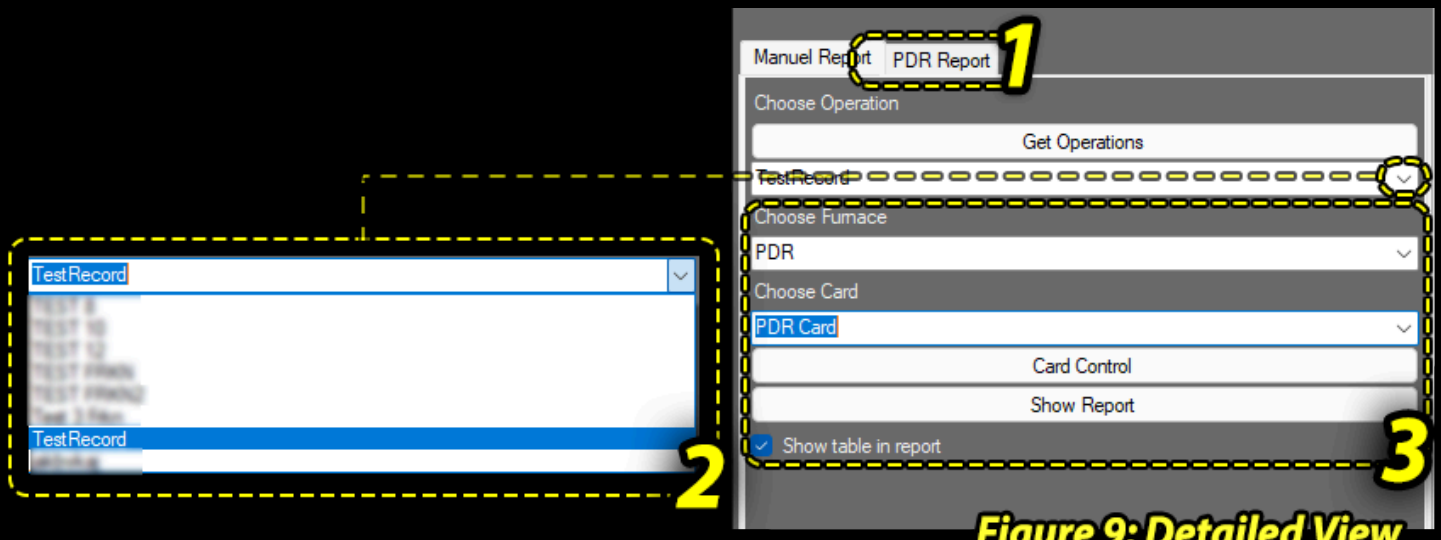


Figure 9: Detailed View

1. Select the **PDR REPORT** tab in *Section 1*.

2. From the dropdown menu in *Section 2*, select the **Operation** to be reported.

3. *In Section 3*, select the specific **Furnace** utilized during the PDR Operation; the system will now display the data as both charts and tables.

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STEP 3:

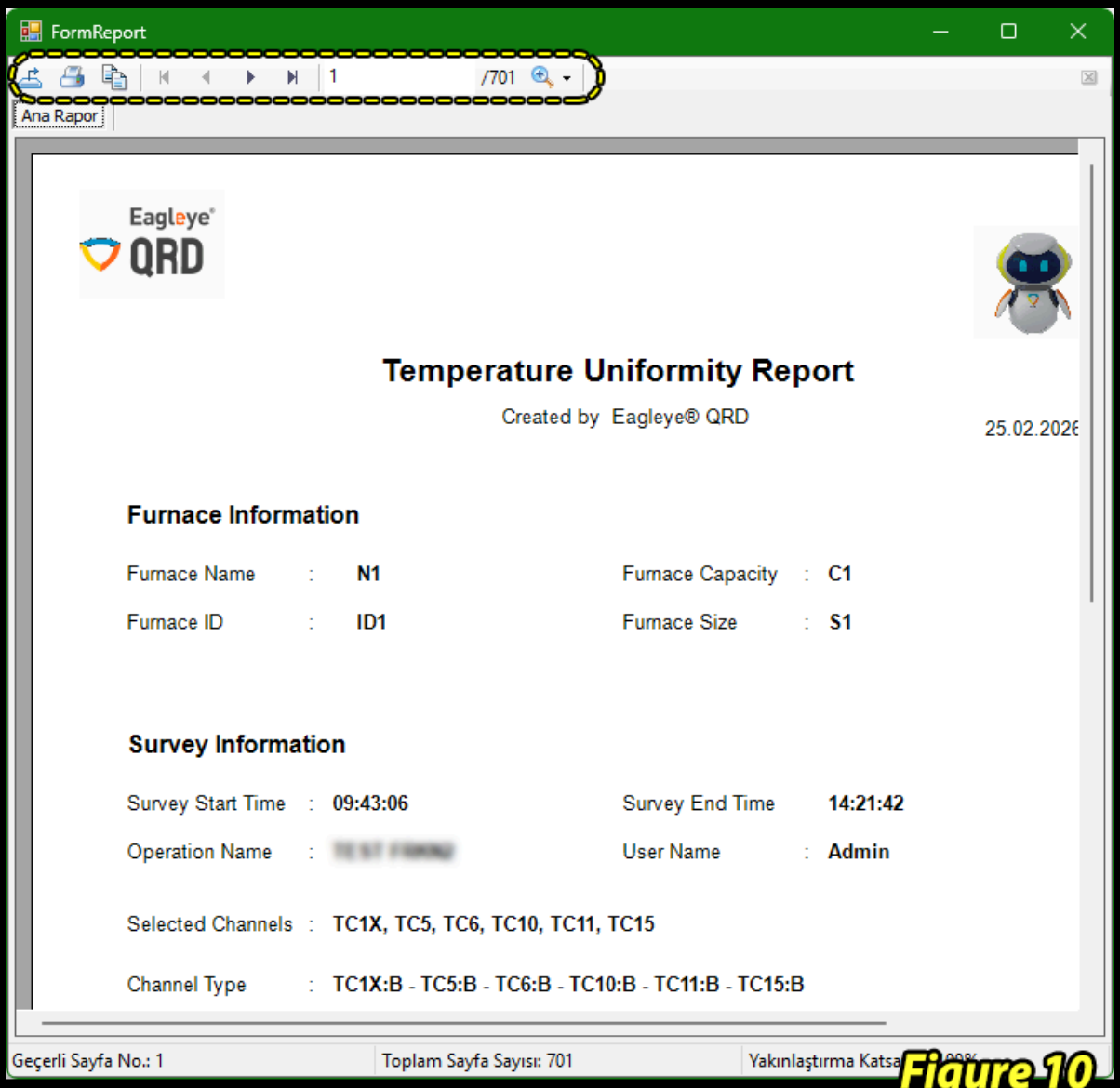


Figure 10

Click the **Show Report** button located in *Section 3* (as detailed in Figure 9) to generate the report in a new window.

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STEP 3:

Report Interface Functions

The icons in the report window perform the following functions *(from left to right):*

- Export: Exports the report.
- Print: Prints the report.
- Copy: Copies the report content.
- Navigation: Access the first, next, previous, or last page.
- Go to Page: Enter a specific page number in the box to jump to that page.
- Zoom: Adjusts the report magnification level.

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SECTION C: AUTOMATED REPORTING

Automated Reporting System with Eagleye QRD

1. File Path Configuration

This section defines the process of automated scanning of furnace data files (CSV/Excel) by the **Eagleye QRD** system without user intervention, including database mapping, phase verification, and PDF report generation.



Figure 11

Launch *Quality Report* application and select the *Furnaces* tab.

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In the Furnaces tab, file paths are defined in the section located at the bottom. The system manages data traffic through these paths. The definition of these three main paths is mandatory:

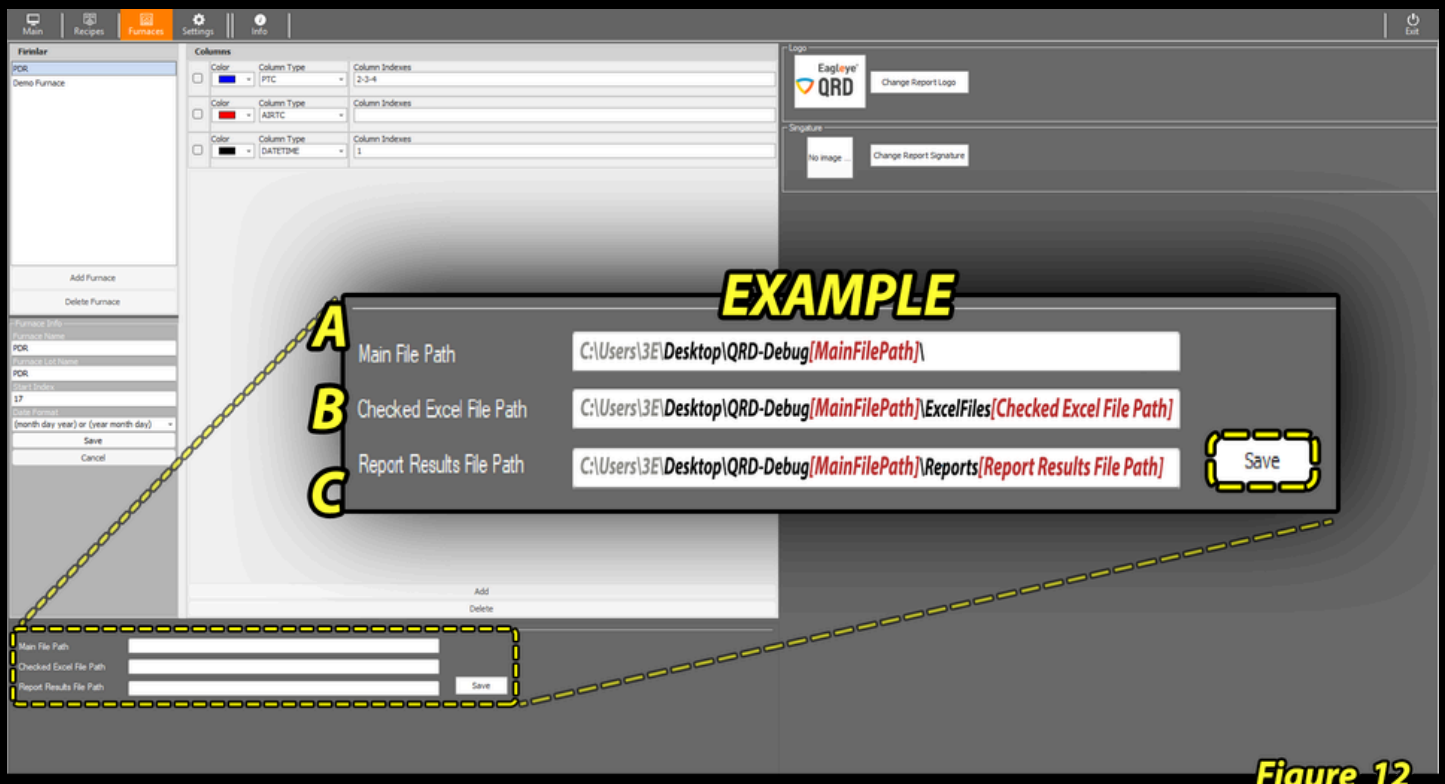


Figure 12

A) Main File Path

B) Checked File Path

C) Report Results File Path

After completing the configurations, click the *Save* button to store the settings.

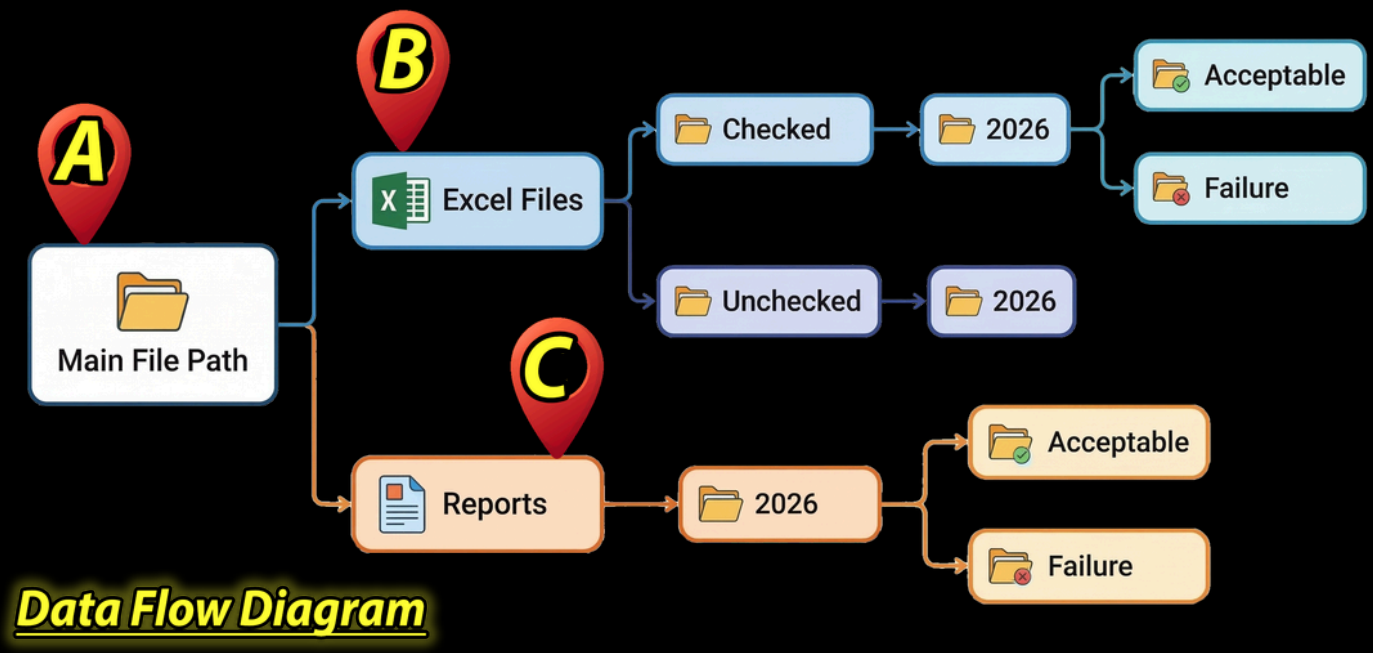
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2. Data Processing Diagram



Data Flow Diagram

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A. Main File Path



Excel files from the furnaces (supports .csv, .xls, .xlsx extensions) are transferred into this folder. The inside of the folder is scanned and checked by the system every 3 seconds. Reports of the transferred files are automatically generated according to the *{CardName@FurnaceName}* naming format compliances. *(See: 3.1 Naming Convection)*

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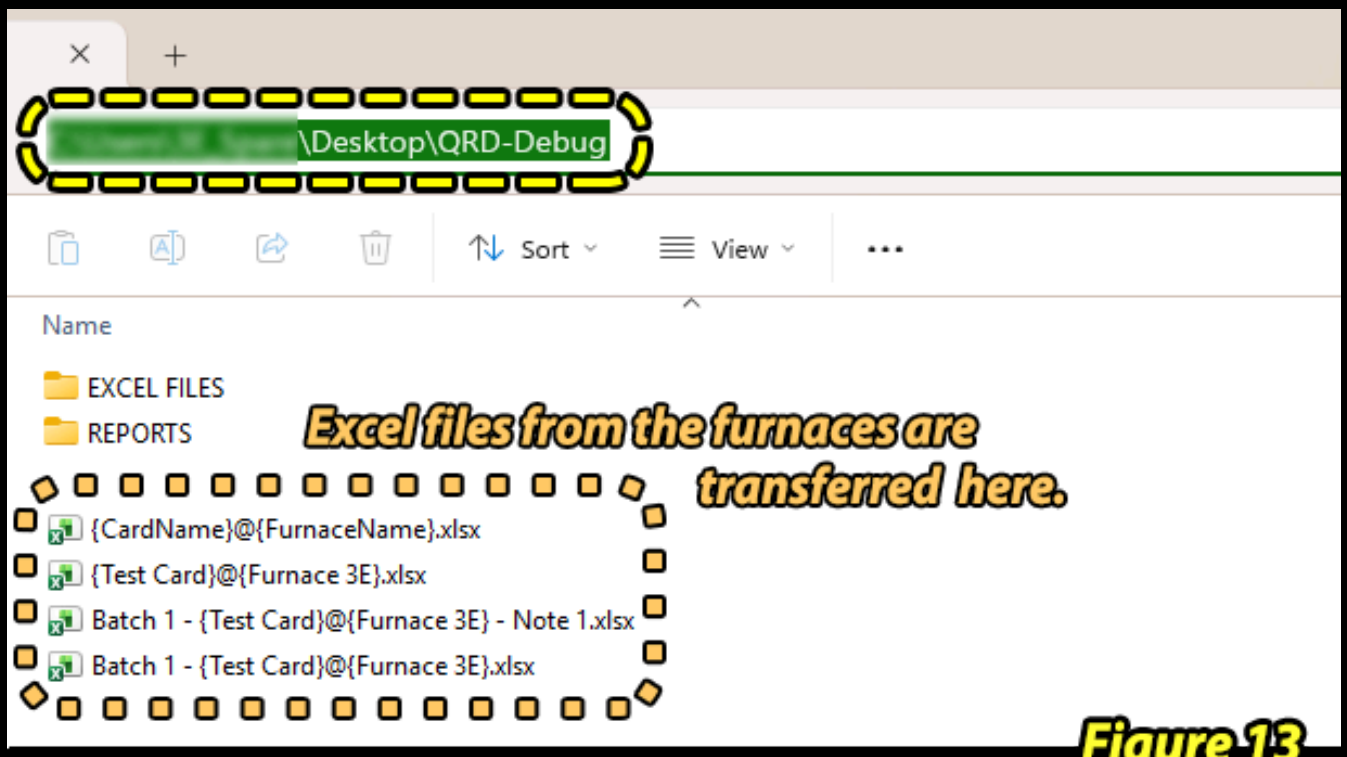


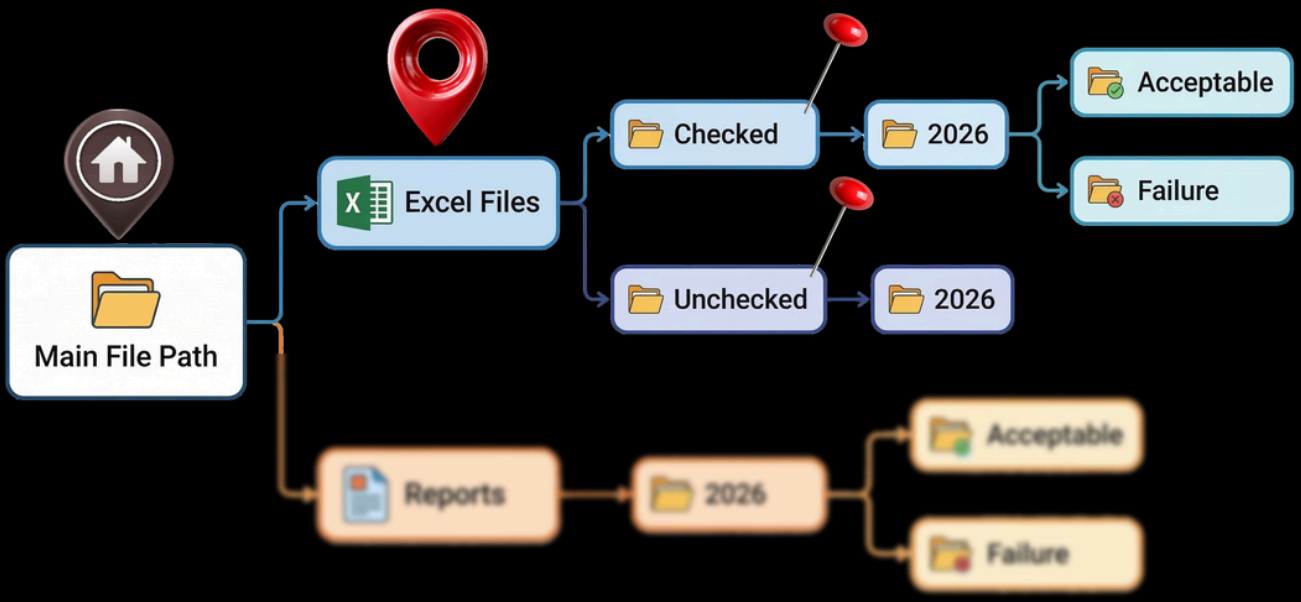
Figure 13

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B. Checked Excel File Path (Excel Files)



Excel files transferred to the *Main File Path* directory are marked as **CHECKED** and **UNCHECKED** after being checked by the system, and are classified to be archived by year.

The checked files are sent to the **CHECKED** subfolder, and the unchecked files are sent to the **UNCHECKED** subfolder.

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B. Checked Excel File Path (Excel Files)

Files sent to the **CHECKED** folder are classified as **ACCEPTABLE** or **FAILURE**, filtered by year, and transferred to the subfolder.

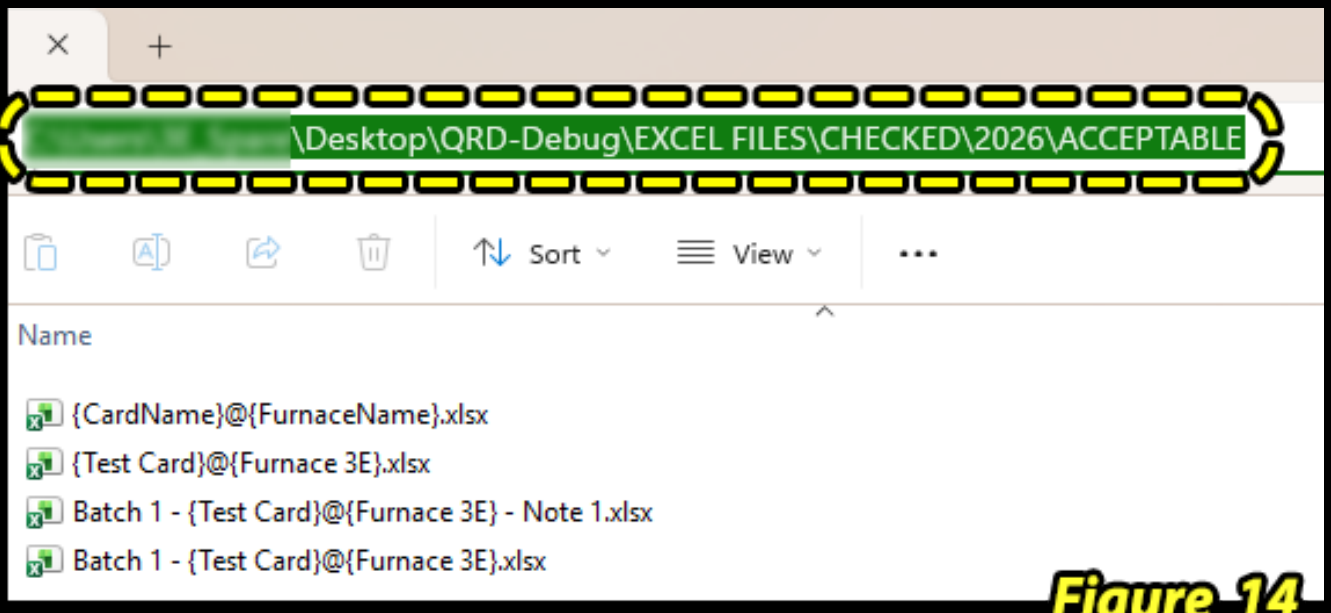


Figure 14

Files classified under the **UNCHECKED** folder are also filtered and listed by year.

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Note: All these processes are executed automatically by the Eagleye QRD application and presented to the user listed in folders.

Note 2: The primary reason for a file being classified as *UNCHECKED* by the system is its non-compliance with the naming convention.
(This topic is explained under the 3.1 Naming Convention [page 24] section.)

Note 3: The transfer of files to the *UNCHECKED* folder is detailed under the 3.2 *UNCHECKED* Folder Operational Logic [page 27] section.

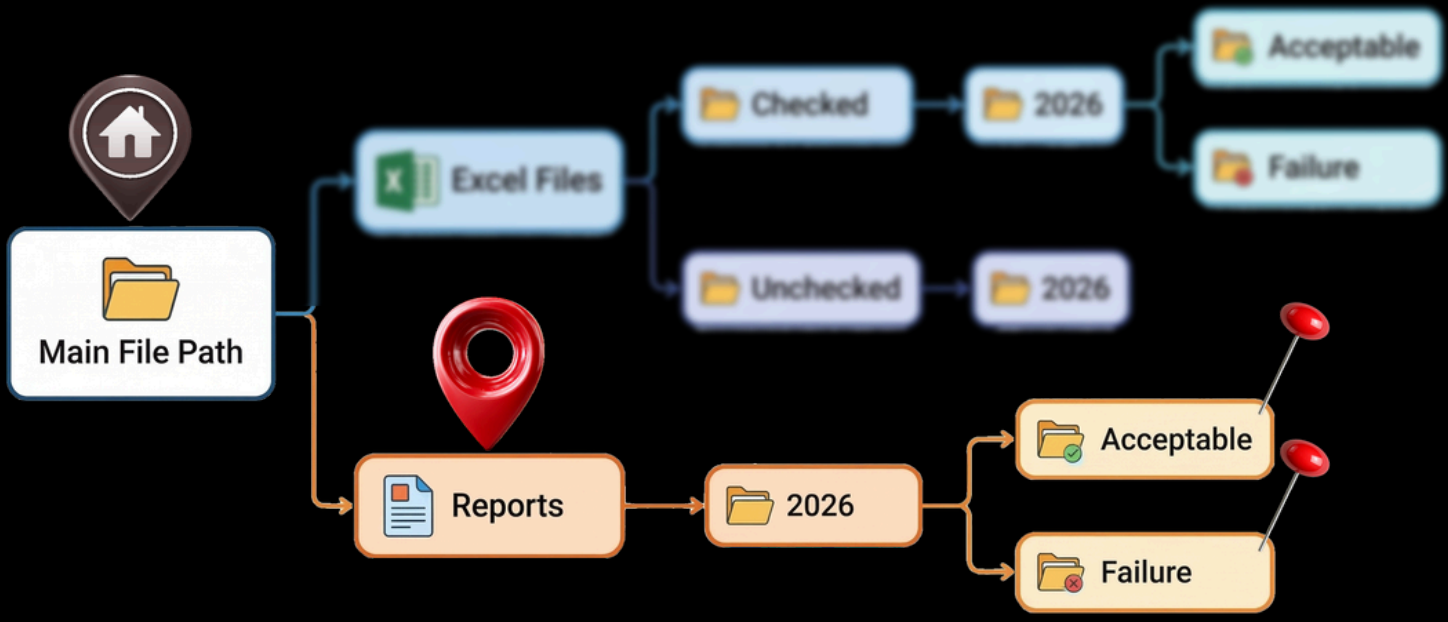
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C. Report Results File Path (Reports)

The system automatically transfers the .pdf reports generated under the **Excel File / CHECKED** directory to the **ACCEPTABLE** or **FAILURE** folders, filtered by year. The user can directly access the reports of the relevant year from the report list.



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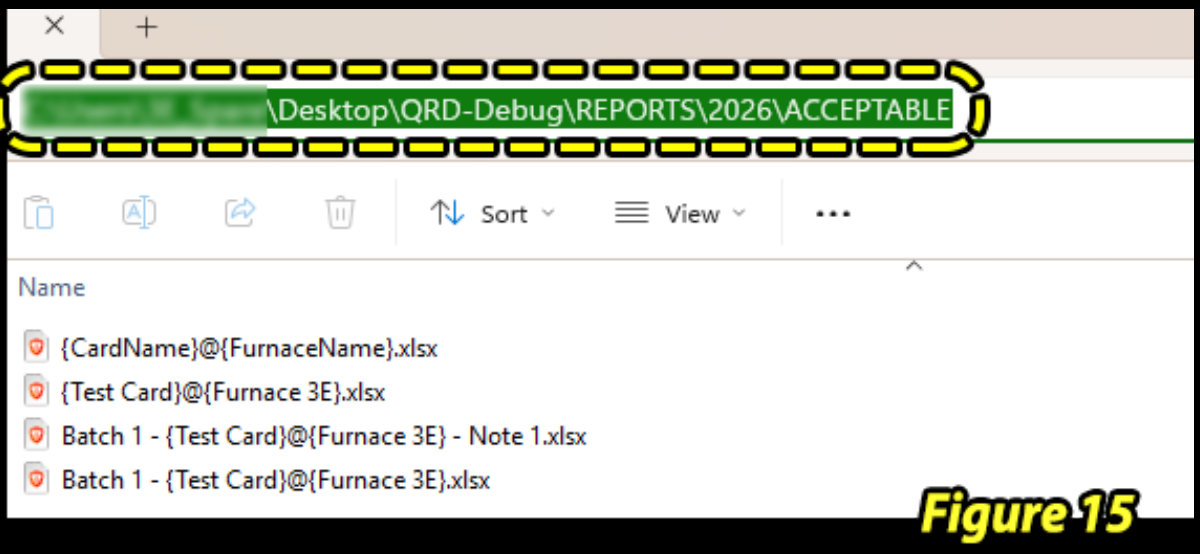


Figure 15

Note: The _FAILURE suffix is dynamically appended to the file names of invalid reports.

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3. Validation Standards and Error Management

3.1 Naming Convention

The fundamental rule for the system to recognize a file is that the *{CardName@FurnaceName}* string must be present in the file name.

Note: There may be other characters before or after this pattern.

Example Scenario::

When cards named *xxxx* and *xxxx_1,*
and a furnace named *Demo Furnace* are defined
in the **Eagleye QRD** application:

- Batch No 1 - {xxxx@Demo Furnace} - Note 1.xls — Valid Format
- Batch No 2 - {yyyy@Demo Furnace} - Note 2.xls — Invalid Format
- Batch No 3 - {xxxx@qwert} - Note 3.xls — Invalid Format
- Batch No 4 - Note 4.xls — Invalid Format
- Batch No 6 - {xxxx_1@Demo Furnace} - Note 6.xls — Valid Format

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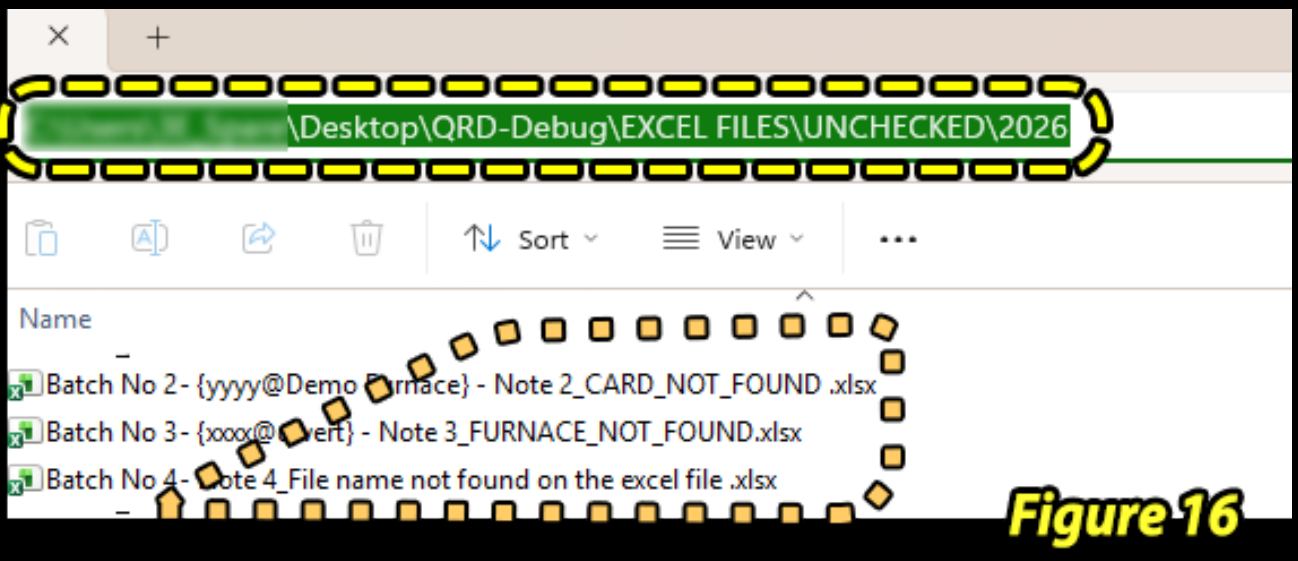


Figure 16

After verification, files with an invalid format are transferred to the **UNCHECKED** folder, and their respective error codes are indicated.
(See: 3.2 UNCHECKED Folder Operational Logic [Page 27])

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If the result of a report with a **CHECKED** status is a **FAILURE,** this is automatically indicated in the file name.

Example:
Batch No 6 - {xxxx_1@Demo Furnace} - Note 6_FAILURE.xls

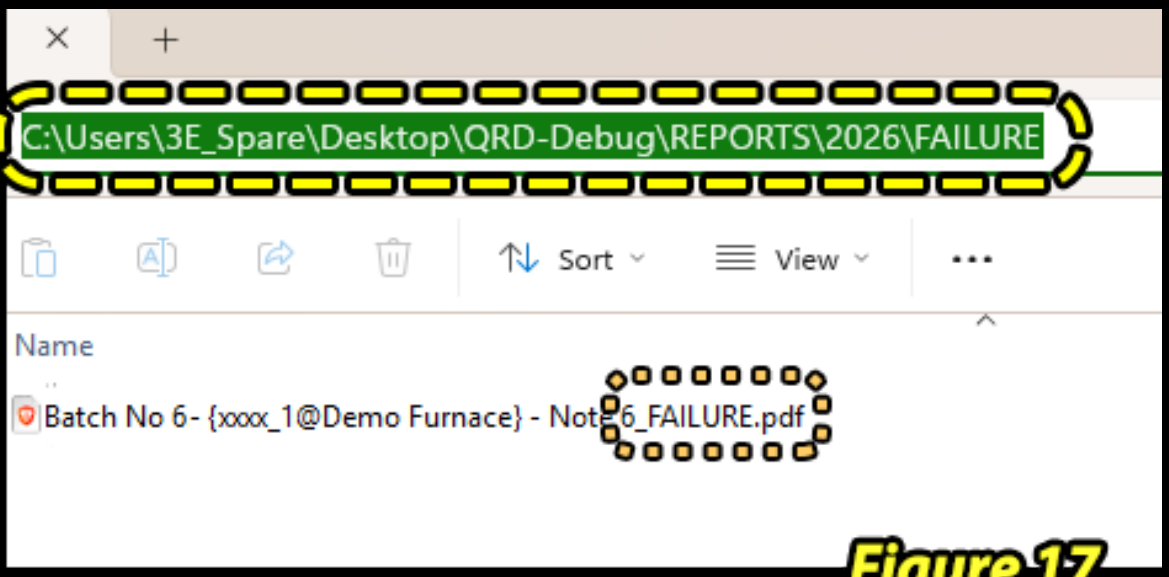


Figure 17

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3.2 UNCHECKED Folder Operational Logic

The transfer of files to the **UNCHECKED** folder does not imply that the report content is corrupted. **It indicates that the naming convention is invalid** *(meaning the system cannot perform identification).*

> ***Note:*** *To enable the user to diagnose the error rapidly, the corresponding error code is dynamically appended to the file name.*

Error Suffix	Cause	Solution
_CARD_NOT_FOUND	The *Card Name* in the file name is missing or incorrect.	Add the card to the **Eagleye QRD** application or correct the file name.
_FURNACE_NOT_FOUND	The *Furnace Name* in the file name is missing or incorrect.	Add the furnace to the **Eagleye QRD** application or correct the file name.
_File name not found on the excel file	*{CardName@FurnaceName}* string in the file name is missing or incorrect.	Apply the file naming convention. *(See: 3.1 Naming Convention [Page 24])*

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4. *Automatically Discovering the Eagleye PDR Device on the Network*

This section provides step-by-step instructions on how the **Eagleye QRD** application automatically connects to the **Eagleye PDR**'a over the same network.



Figure 18

Getting Started:

*Launch **Quality Report*** application and select th ***Settings*** *tab.*

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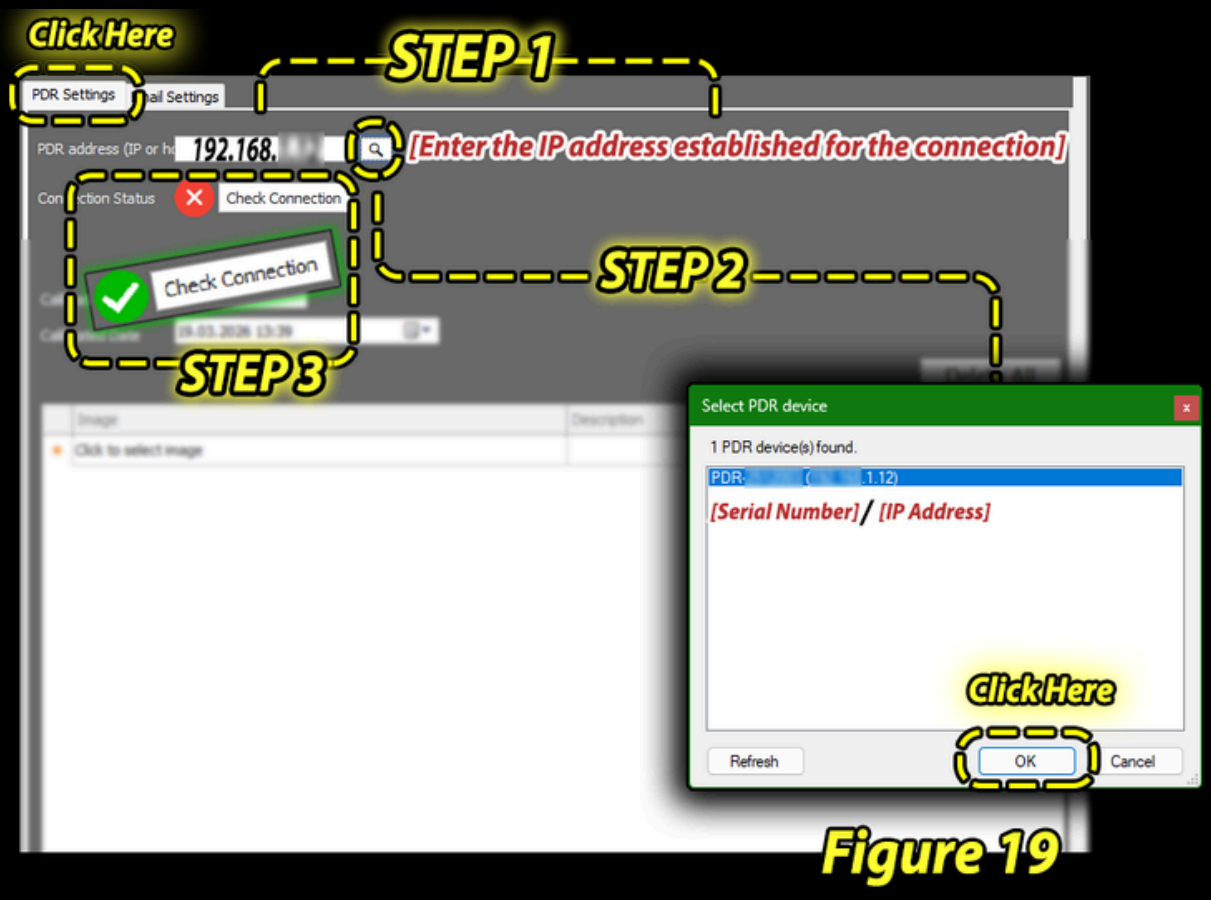


Figure 19

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Step 1:

Enter the IP address of the network to which the **Eagleye PDR** device is connected and click the magnifier icon.

(*bkz: See: Detailed in Figures 4A & 4B, [Page 6]*)

Step 2:

Select the target **Eagleye PDR** device *(listed by Device Model and Serial Number)* from the resulting dialog and click OK.

Step 3:

Verify the connection status via Check connection.

(*bkz: Detailed in Figure 7, [Page 8]*)

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5. Sending Reports via Email

5. 1 Email Settings

This section configures the SMTP settings required for the system to send notification emails.

SMTP *(Simple Mail Transfer Protocol)* is a standard communication protocol that enables sending emails through servers. Enter the following information for automated email delivery.



Figure 20

Getting Started:

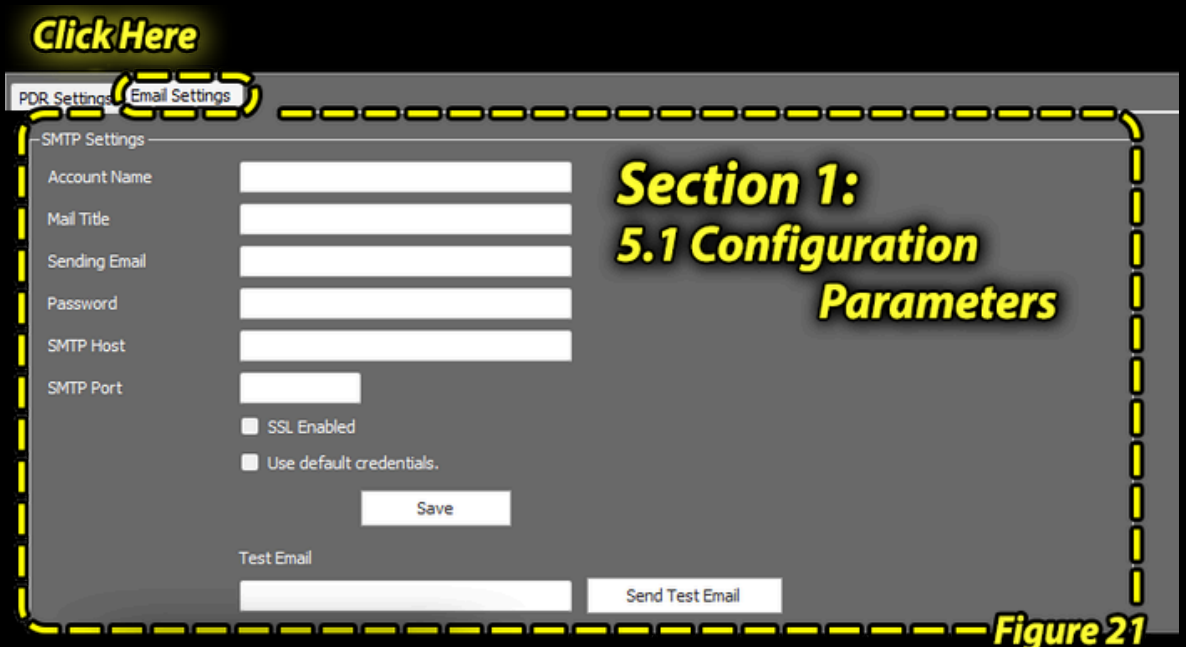
Launch ***Quality Report*** application and select the *Settings* tab.

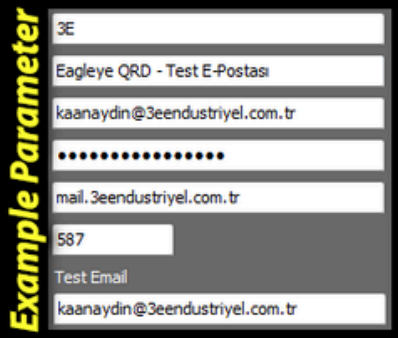
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Section 1 - Configuration Paramaters





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Account Name:
Enter the name of the account that will send the notification emails.

Email Title:
Enter the subject line for the notification emails.

Sender Email:
Enter the sender email address.

Password:
Enter the password for the sender email account.

SMTP Host:
Enter the SMTP *(Simple Mail Transfer Protocol)* server address.

SMTP Port:
Enter the port number to connect to the SMTP server. Port 587 is typically used for client-to-server communication.

(Port 465 is generally used if SSL is enabled.)

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SSL Enabled:

Check this option to ensure a secure connection to the email server.

(SSL/TLS is a standard security protocol that ensures emails are transmitted over the internet in an encrypted and secure manner.)

Use Default Credentials:

Check this box to use the system's predefined username and password for email transmission.

[Optional] - Test Email:

Enter the destination address in this field to verify your configured SMTP settings.

Send Test Email:

Click this button to send the test email.

Save:

Click this button to save your configured settings.

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Note:

You can send a test email to verify that the configured settings are functioning correctly.

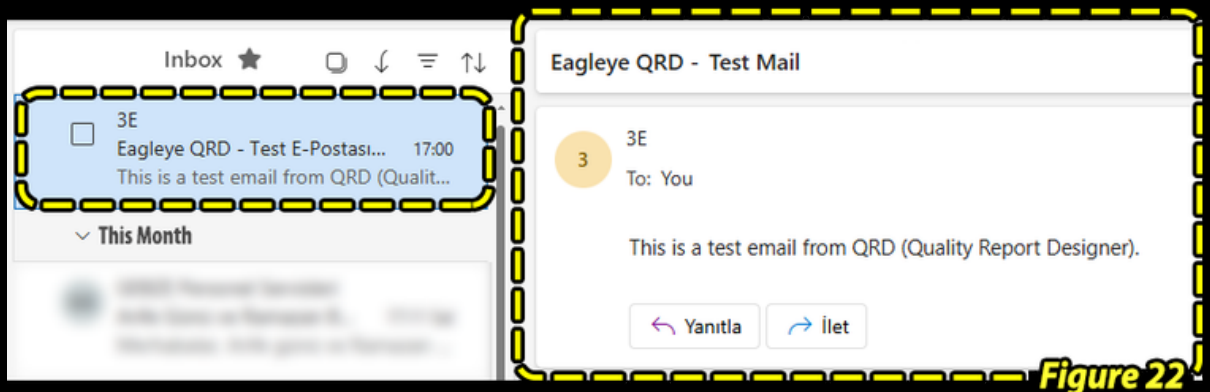


Figure 22

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5.2:
Section 2 - Notification Types

This section enables the configuration of automated email notifications for various statuses occurring within the system *(Failed Reports, Unchecked Files, Acceptable Reports)*.

Each notification type has its own independent configuration panel.

PDF and Excel files can be attached to the sent emails depending on the notification type.

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5.2.1 - Failed Reports

This notification is triggered when an error occurs during report generation or data processing within the system.



Figure 23

Send email for failed reports:
Check this box to activate email notifications for failed reports.

Recipients:
Enter the email addresses where the error notifications will be sent.

Mail Template:
Define the content of the message to be sent in this field.

Note: For this notification type, the PDF report and Excel file are automatically attached by the system (No additional configuration by the user is required).

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5.2.2 - Unchecked Files

This notification is sent when files that could not be processed or failed the inspection (naming convention) are detected within the system.

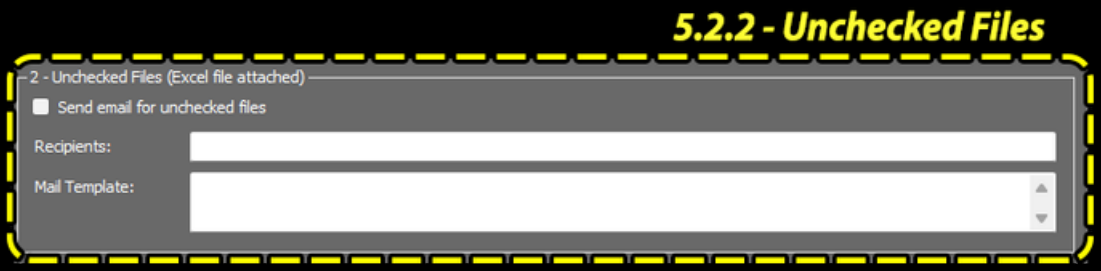


Figure 24

Send email for unchecked files:
Check this box to activate email notifications for files pending inspection.

Recipients:
Enter the email addresses where the status notification emails will be sent.

Mail Template:
Define the content of the message to be sent in this field.

Note: The relevant Excel file is automatically attached and transmitted with this notification type.

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5.2.3 - Acceptable Reports

This is the confirmation notification sent for reports that have been successfully completed and comply with the specified criteria.



Figure 25

Send email for acceptable reports:
Check this box to activate email notifications for successful reports.

Recipients:
Enter the email addresses where the reports will be transmitted.

Mail Template:
Define the email content in this field.

---Attach PDF report: Check this box to attach the PDF format of the report to the email.
---Attach Excel file: Check this box to attach the Excel format of the report to the email.

Note: Unlike other sections, this part leaves the choice of whether to send attachment files to the user's preference.

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EAGLEYE QRD

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