

How-To Guide Configuring Transaction Recovery History

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Introduction

As they occur in the respective devices, Retail transactions, CM (Cash Management) transactions and System Events will be queued to be sent to the EM and will be updated in real time to the EM.

Once sent to the EM, these records can be viewed in **Inbound Document Viewer**.

In an instance where the EM is not available for Devices to send Transaction details, for example due to a network connection issue, all the records pending will be sent from a connected device to the EM as soon as the EM is available.

Records not passed to the EM will remain queued for up to seven (7) days and will be removed from the queues afterwards. There could also be instances where, due to technical issues, the queues were cleared but the records were not fully passed to the EM.

For such periods that the EM was not updated, the EM has the option to recover the records that were processed at end-devices during that period. This recovery is done through a Transaction Recovery Request.

Note however, that any records purged at devices will be deleted permanently and will not be available to be sent to the EM in response to a Transaction Recovery Request.

This guide explains the process of configuring the EM in order to Broadcast a Transaction Recovery Request to all subscribed devices, requesting the devices to send to the EM, details of all retail transactions, Cash Management (CM) transactions and system events processed during a specified window of time. The Transaction Recovery Tool is configured in order to recover transactions from below device types:

- POS
- Master POS
- Back Office
- PDP Servers

Overview

This guide will cover the configuration for the following:

- **User Role** – Enabling privileges to access and configure Transaction Recovery Tool.
- **Transaction Recovery Tool** – A maintenance application which adds a new scheduled job to send a Transaction Recovery Notification.
- **Transaction Recovery History** – Viewing Transaction Recovery History and status.

Transaction Recovery History Configuration

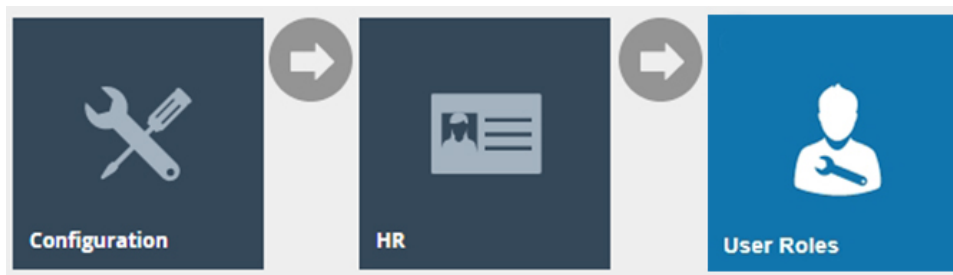
This section covers all the basics that are required to understand the Transaction Recovery History Configuration.

User Role Configuration

Adequate privileges are required for a user to access and carry out Transaction Recovery Tool functions.

To enable these privileges, follow the steps below:

Navigate to User Role Maintenance using the Search or the path Configuration -> HR -> User Roles

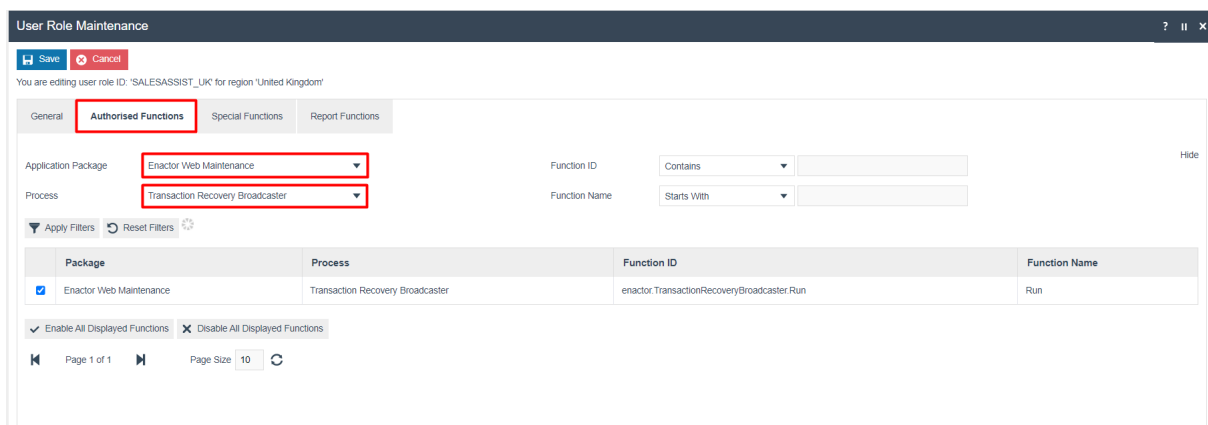


In the User Role Maintenance, select the **Edit** icon of the User Role that you wish to enable the privilege for.

Navigate to the **Authorised Functions** tab of the selected User Role and apply the following filters:

Application Package > Enactor Web Maintenance

Process > Transaction Recovery Broadcaster



Enable the following privileges:

Application Package	Function ID	Description
Enactor Web Maintenance	enactor.TransactionRecoveryBroadcaster.Run	Allows the User to configure and run a Transaction Recovery Request.

Application Package > Enactor Web Maintenance Process > Transaction Recovery History

The screenshot shows the 'User Role Maintenance' interface. The 'Authorised Functions' tab is active. The 'Application Package' dropdown is set to 'Enactor Web Maintenance' and the 'Process' dropdown is set to 'Transaction Recovery History'. Below these, there are filters for 'Function ID' (Contains) and 'Function Name' (Starts With). A table displays the following functions:

Package	Process	Function ID	Function Name
<input checked="" type="checkbox"/> Enactor Web Maintenance	Transaction Recovery History	enactor.transactionRecoveryHistory.Cancel	Cancel
<input checked="" type="checkbox"/> Enactor Web Maintenance	Transaction Recovery History	enactor.transactionRecoveryHistory.List	List
<input checked="" type="checkbox"/> Enactor Web Maintenance	Transaction Recovery History	enactor.transactionRecoveryHistory.Remove	Remove
<input checked="" type="checkbox"/> Enactor Web Maintenance	Transaction Recovery History	enactor.transactionRecoveryHistory.Run	Run

Enable the following privileges:

Application Package	Function ID	Description
Enactor Web Maintenance	enactor.transactionRecoveryHistory.Cancel	Allows the User to cancel a record in Transaction Recovery History.
Enactor Web Maintenance	enactor.transactionRecoveryHistory.List	Set this, along with enactor.transactionRecoveryHistory.Run to allow the User to view the list of Transaction Recovery History.
Enactor Web Maintenance	enactor.transactionRecoveryHistory.Remove	Allows the User to remove / delete a record in Transaction Recovery History.
Enactor Web Maintenance	enactor.transactionRecoveryHistory.Run	Set this, along with enactor.transactionRecoveryHistory.List to allow the User to view the list of Transaction Recovery History.

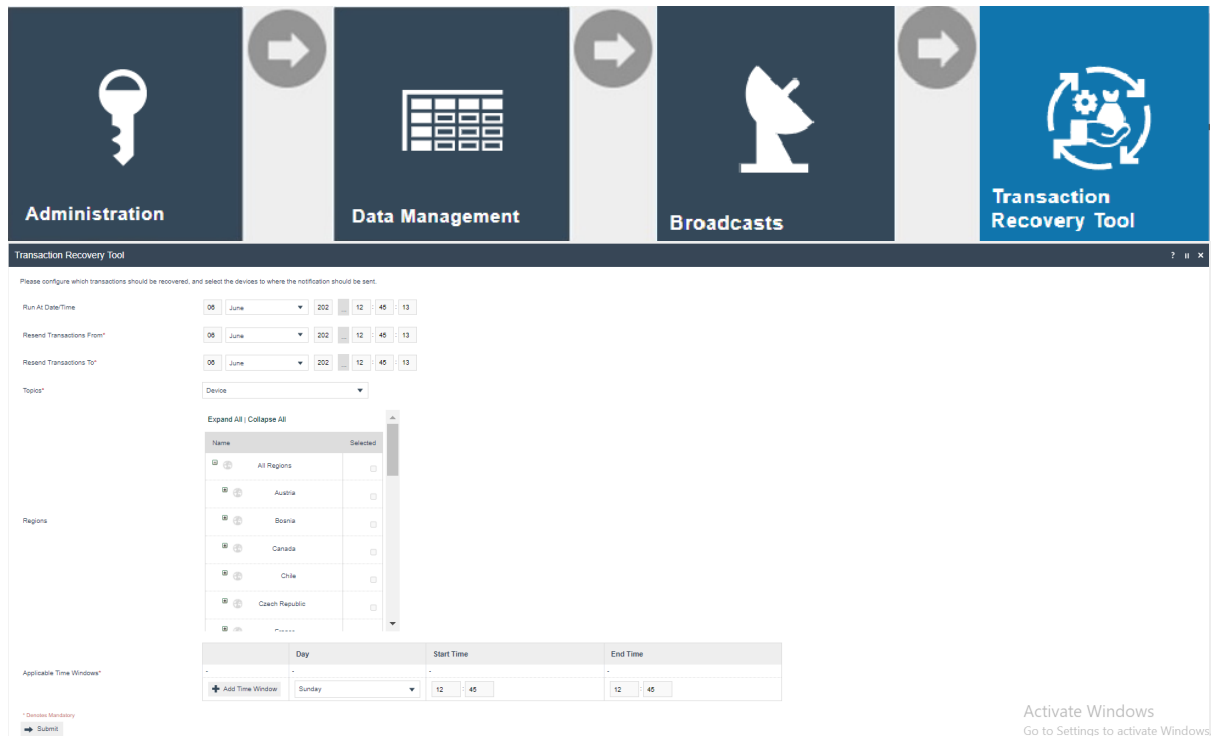
Ensure that the selected User has the necessary privileges enabled by ticking on the relevant function/s that are listed.

Select **Save** and make sure to log out and back in for these changes to be reflected to the User, assigned with the User Role configured.

Transaction Recovery Broadcaster Configuration

This maintenance application is used to create a new scheduled job to send a Transaction Recovery Notification to desired end-devices.

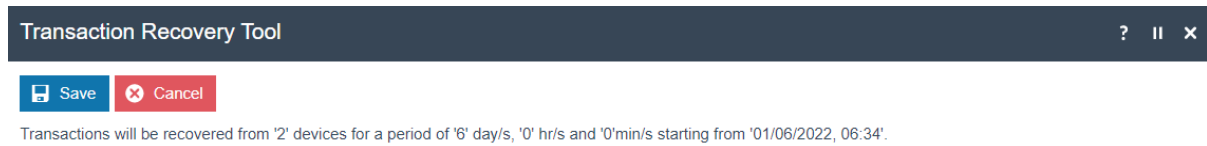
Navigate to Transaction Recovery Tool Maintenance using the Search or the path Administration -> Data Management -> Broadcasts -> Transaction Recovery Tool



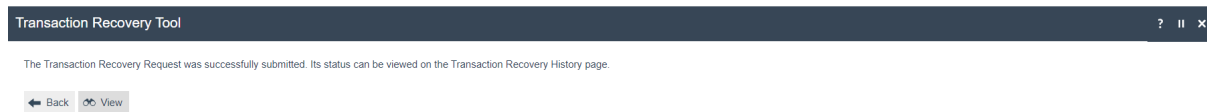
Following must be defined in the Transaction Recovery Tool Maintenance screen that opens:

Configuration	Description
Run At Date/Time	Date and time when Transaction Recovery Tool will send out the transaction recovery request to the subscribed devices.
Resend Transactions From	Starting date and time of transaction recovery period.
Resend Transactions To	Ending date and time of transaction recovery period.
Topics	Specify the target devices of the Estate to which the transaction recovery request is to be broadcast. Target devices selection is two dimensional; first to select the level of topology in the Topics property and then select individual elements at the selected level by marking checkboxes in the Regions property. Selection is restricted to display POS, Master POS, Back Office and PDP Server only.
Applicable Time Windows	Time window during when the Transaction Recovery will be broadcast to the EM from an end-device. The user can define multiple time windows. In the event multiple time windows are set, the end-device will broadcast the data to the EM during earliest time window.

Clicking on the **Submit** button will open the following popup message indicating the user to verify the number of devices and the period to recover the transactions from:



Click on **Save** and upon successful verification, the Transaction Recovery Monitor will be run as a scheduled diary entry job and the user will be navigated to the following screen:

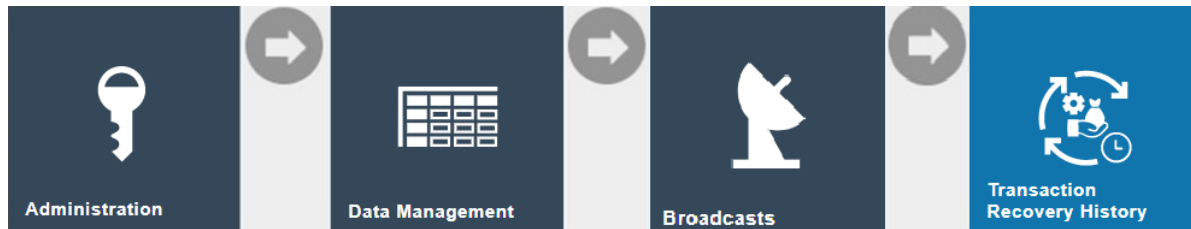


Clicking on **View** button will navigate the user to the Transaction Recovery History Maintenance.

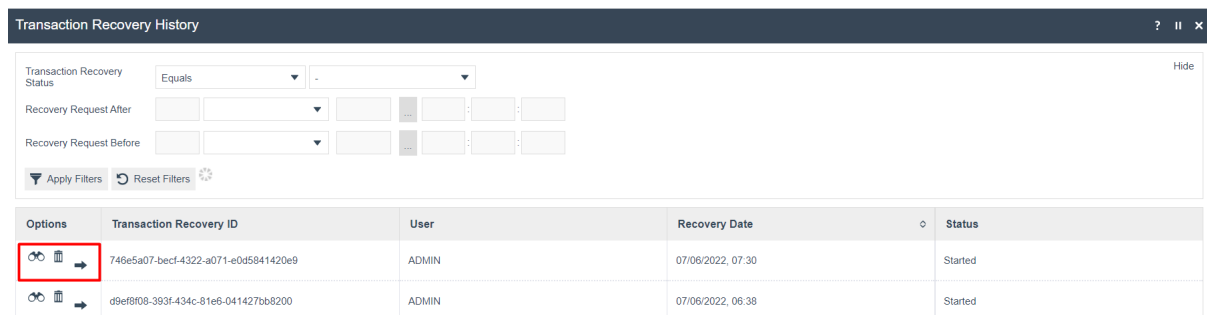
Transaction Recovery History

Transaction Recovery History will enable to view the status of the Transaction Recovery Broadcast, sent to the EM from the end-devices, as a response to the Transaction Recovery Request.

Navigate to Transaction Recovery Tool Maintenance using the Search or the path Administration -> Data Management -> Broadcasts -> Transaction Recovery History



Transaction Recovery History page lists all Transaction Recovery Requests:



User can view, delete and recover records using the appropriate icons.

The status of the Transaction Recovery job is displayed, and a job could have one of below statuses.

Status	Description
Started	Transaction Recovery Request has been sent to target devices.
Successful	All transactions from all target devices received by the EM.
Partially received	EM has successfully received details of least one transaction.
Partially received with failures	EM has successfully received details of the transactions while some have failed.
Failed	All transactions have failed.

Clicking on View icon will open a window containing details of the individual Transaction Recovery job:

Transaction Recovery History - General tab

The screenshot shows a web application window titled "Transaction Recovery History". At the top, there is a navigation bar with a "Back" button and a refresh icon. Below this, a message states "You are viewing Transaction Recovery ID: '746e5a07-becf-4322-a071-e0d5841420e9'". The main content area has two tabs: "General" (highlighted with a red box) and "Recipients". The "General" tab displays several fields for filtering and viewing transaction recovery details:

- Recovery Date: 07 June 2022
- Send Transactions From: 01 January 2022 07:29:00
- Send Transactions To: 31 May 2022 07:29:00
- User: ADMIN
- Topics: AllStores
- Status: Started

The General tab indicates the general details of the selected entry, as was updated when creating the Transaction Recovery Request via Transaction Recovery Tool. Additionally, the status is also mentioned.

Transaction Recovery History - Recipients tab

Options	Device	Status	Items Affected	Transactions Received	Progress	Date/Time Processed	Last Updated
	aut.MPOS1@0001.enactor	Not Subscribed	0	0			07/06/2022 07:30:26
	aut.PDCB@0001.enactor	Not Subscribed	0	0			07/06/2022 07:30:26
	aut.POS1@0001.enactor	Acknowledged	480	478	<div style="width: 99.6%;"></div>	07/06/2022 07:32:50	07/06/2022 07:32:50
	aut.POS6@0001.enactor	Not Subscribed	0	0			07/06/2022 07:30:26
	aut.WebPOS1@0001.enactor	Not Subscribed	0	0			07/06/2022 07:30:26
	autopos11@0001.enactor	Acknowledged	60	60	<div style="width: 100%;"></div>	07/06/2022 07:33:21	07/06/2022 07:33:21
	autopos15@0001.enactor	Acknowledged	0	0		07/06/2022 07:32:44	07/06/2022 07:32:44
	autopos1@0001.enactor	Acknowledged	18	18	<div style="width: 100%;"></div>	07/06/2022 07:32:44	07/06/2022 07:32:44
	autopos2@0001.enactor	Acknowledged	0	11	<div style="width: 100%;"></div>	07/06/2022 07:32:49	07/06/2022 07:32:49
	autopos3@0001.enactor	Acknowledged	71	71	<div style="width: 100%;"></div>	07/06/2022 07:33:16	07/06/2022 07:33:16
	autopos4@0001.enactor	Acknowledged	5	5	<div style="width: 100%;"></div>	07/06/2022 07:32:50	07/06/2022 07:32:50

The Recipients tab displays the status of each target device in the selected entry. A device could have one of the below statuses.

Device status	Description
Sent	Transaction Recovery Request has been sent to target devices.
Not Subscribed	Device is not subscribed.
Acknowledged	EM has successfully received an acknowledgement from the device, that the device received the Transaction Recovery Request.
Partially receipted	EM has successfully received details of at least one transaction.
Successful	EM has successfully received details of all transactions.
Failed	<p>All transactions got failed.</p> <p>Note: There is another instance where EM would mark a Device status as failed: Devices may continue to send Transactions to the EM after the Applicable Time Window has expired. Hence, the Device status will automatically be set to 'Failed' once twenty-four (24) hours have lapsed from the time set for 'End Time' under Applicable Time Windows in Transaction Recovery Tool.</p>

Clicking on the **View** icon will list all the individual transactions that are broadcast from that device. The screen displayed is similar to below:

Transaction ID	Type	Status	Last Updated
0001000000012201191139145	CMTransaction	Received	07/06/2022 07:31:50
0001000000022201191139192	CMTransaction	Received	07/06/2022 07:31:48
0001000000032201191140545	CMTransaction	Received	07/06/2022 07:31:48
00010000000282205301123041	CMTransaction	Received	07/06/2022 07:31:55
00010000000292205301125358	CMTransaction	Received	07/06/2022 07:31:55
00010000000302205301126404	CMTransaction	Received	07/06/2022 07:31:57
00010000000312205301127400	CMTransaction	Received	07/06/2022 07:32:05
0001000000032205301128448	CMTransaction	Received	07/06/2022 07:31:59
00010000000332205301133578	CMTransaction	Received	07/06/2022 07:32:08
00010000000342205301135142	CMTransaction	Received	07/06/2022 07:32:29
00010000000352205301153415	CMTransaction	Received	07/06/2022 07:32:25
00010000000362205301202434	CMTransaction	Received	07/06/2022 07:32:25
00010000000372205301203380	CMTransaction	Received	07/06/2022 07:32:30
00010000000382205301208049	CMTransaction	Received	07/06/2022 07:32:32
00010000000392205301209110	CMTransaction	Received	07/06/2022 07:32:33
00010201000012202281542526	RetailTransaction	Received	07/06/2022 07:31:50

Clicking on the **View** icon against a transaction record will display the Retail Transaction Archive entry for that transaction (applicable only for Retail Transactions).

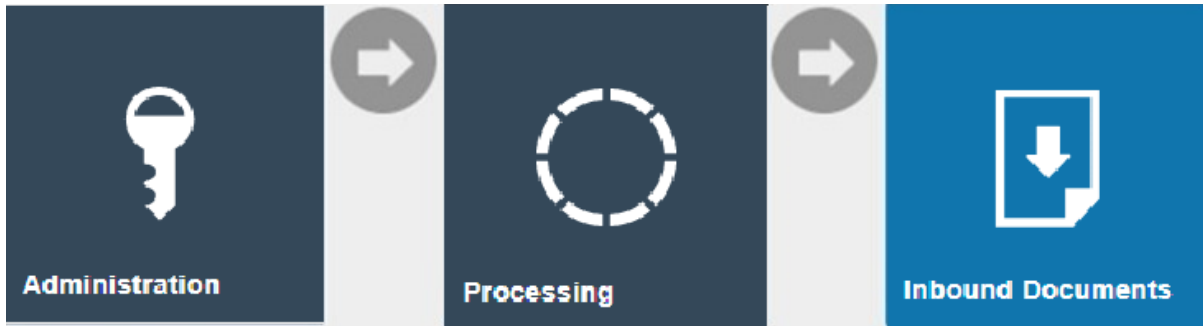
Location	Terminal	Transaction	Originated By	Originating Device ID	Completed By	Completing Device ID	Created On	Completed On	Last Updated	Total
Enactor Store	101	1	Michael Browne	mpos1@0001.enactor	Michael Browne	mpos1@0001.enactor	19/04/2022, 05:15	19/04/2022, 05:16	04/10/2022, 08:31	£16.80

Records will be created in Inbound Document Viewer of Document Type 'transactionRecoveryAcknowledgement'.

Inbound Document Viewer

For Retail and Cash Management transactions and System Events that are recovered from Devices, records will be made in Inbound Documents, which can be viewed in Inbound Document Viewer.

Navigate to Inbound Document Viewer using the Search or the path Administration -> Processing -> Inbound Documents



Document Type > Contains > 'transactionRecoveryAcknowledgement'
 Queue Name > Estate Manager Transaction Processing

Records received from the EM in response to a Transaction Recovery Request will be listed with status 'Processed'.

Document ID	Source	Source ID	Content Type	Document Type	Date Received	Status
14716	pdpServer@0001.enactor		XML	transactionRecoveryAcknowledgement	05/10/2022, 12:31	Processed
14714	pdpServer@0001.enactor		XML	transactionRecoveryAcknowledgement	05/10/2022, 12:31	Processed
14717	pdpServer@0001.enactor		XML	transactionRecoveryAcknowledgement	05/10/2022, 12:31	Processed
14715	pdpServer@0001.enactor		XML	transactionRecoveryAcknowledgement	05/10/2022, 12:31	Processed
13145	pos6@0001.enactor		XML	transactionRecoveryAcknowledgement	05/10/2022, 12:30	Processed

If an already processed transaction was recovered again, the record for that transaction will have the status 'Duplicated'.

About This Document

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The amendment history of this document can be found in the table below.

Current Document Version information

Document Context

This document is part of the Enactor Product Documentation Series. All Enactor products include a comprehensive documentation set designed to improve understanding of the product and facilitate ease of use.

Document Inquiries

At Enactor we aspire to producing the highest quality documentation to reflect and enhance the quality of our product. If you find that the document is inaccurate or deficient in any way, please assist us in improving our standard by letting us know.

For matters of document quality or any other inquiries regarding this document please contact:

By Email: documentation@enactor.co.uk

Document History

The following versions of the document have been produced:

VERSION	STATUS	ISSUE DATE	AUTHOR	REASON FOR ISSUE
1.0	Initial Draft	07/06/22	Rasangi De Silva	Initial version.