

How-To Guide Configuring Broadcasting

Document Type: External

Document Version: 1.0

Date: 26/01/2022

Author: Hadhi Jawahir

Table of Contents

Introduction.....	3
Overview	3
Prerequisites for Broadcasting	3
Active Subscriptions Management.....	3
Configuration Steps	5
Predefined Broadcast	5
Predefined Broadcast – General Tab	6
Predefined Broadcast – Details Tab.....	8
Predefined Broadcast – Override Tab	9
Regional Predefined Broadcast	9
Predefined Broadcast – Details Tab.....	9
Regional Broadcasting – Local Updates Folder.....	11
Data Broadcaster	13
Scheduling a new Data Broadcast	15
Diary – General Tab	16
Diary – Job Tab	17
Diary – Data Tab	17
Broadcast Status.....	18
Broadcast History Maintenance	18
Broadcast History – General Tab	19
Broadcast History – Export Tab	20
Broadcast History – Export Tab – Exporting Sub-tab.....	20
Broadcast History – Export Tab – Collating Sub-tab	20
Broadcast History – Recipients Tab	21
Local Broadcast Status.....	21
Local Updates Folder	21
Database Updates Table.....	22
Troubleshooting Broadcast Issues.....	22
Scheduled Jobs	22
Locks	24
About This Document.....	26
Current Document Version information.....	26
Document Context	26
Document Inquiries	26
Document History	27

Introduction

The purpose of this guide is to demonstrate how to configure broadcasts that are used to distribute configuration throughout the estate to meet organizational needs.

All data is managed and maintained centrally in the Estate Manager. To apply configuration changes across the estate, the user will need to broadcast configurations using the Enactor broadcast function. The data broadcasting function in Enactor is fundamentally for selecting configuration elements (entities) that require distribution and identifying the target devices that they should be distributed to. This targeted distribution of the configured data to distributed systems of Enactor retail applications can be achieved in both manual and automated procedures with administration options to configure and manage them.

Overview

This guide will cover the following configuration entities:

- **Prerequisites for Broadcasting** – Providing an understanding of how active subscriptions work and how they can be managed for devices.
- **Predefined Broadcast Configuration** – Defining the key requirements and setting up broadcasts to be sent across the estate.
- **Data Broadcaster Configuration** – Enable manual distribution of specific data to devices across the estate as specified in the predefined broadcasts.
- **Broadcast Status** – Monitoring the status of the broadcasts locally as well as in the Estate Manager to make sure that they are successfully completed.
- **Troubleshooting Broadcast Issues** – Tackling and fixing broadcast issues that may arise during broadcasting.

Prerequisites for Broadcasting

To perform broadcasts successfully, the user must ensure that the intended target devices for broadcasts are subscribed before performing any broadcasts. Without the device being subscribed, the Estate Manager will not be able to communicate with the devices. If correctly installed, any device at start-up will connect to the Estate Manager Server and will be automatically subscribed. Once subscribed, the Estate Manager will be able to target that device or the range of devices and broadcast data directly to them. If the device has not been subscribed, it will not receive the broadcasted updates, and such failure to subscribe may happen due to network issues or firewall restrictions.

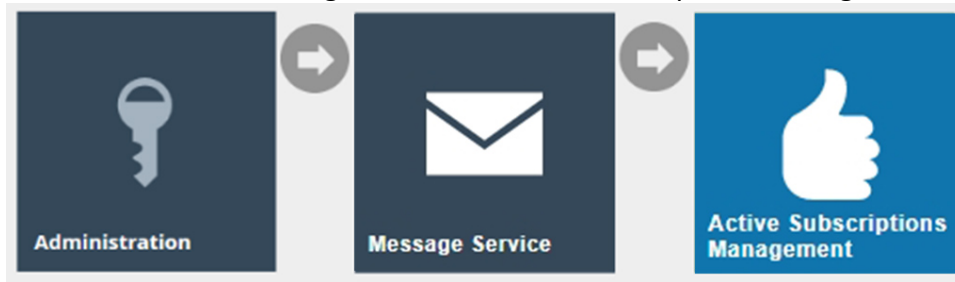
Active Subscriptions Management

Active Subscription Management option provides a means to monitor and manage the subscriptions to queues from Devices in the Estate. Before performing any broadcasts, it is better to check if the device has already been subscribed.

To check if the device is subscribed, follow the steps below:

The Active Subscriptions Management application can be accessed through:

Administration -> Message Service -> Active Subscriptions Management



The **Active Subscriptions** page lists all subscriptions to all queues for all Devices. The user is enabled to perform a filtered search of any of the Enactor messaging queues and/or the Client ID as shown below. The Client ID contains the device ID and is considered the best way to determine if a device has been subscribed to the queues.

Following are the Enactor messaging queues:

- AllStores – Every device in the enactor estate will subscribe to this queue.
- Device – This is a device-specific queue.
- Location – This is a location-specific queue. Once a device has been loaded in a valid location, it will subscribe to this queue.
- Region – This is a region-specific queue and once a device has been loaded in a valid region it will subscribe to this queue.

Enter the Client ID (Device ID) of the device that you wish to monitor the subscription status in the Client ID filter space and select the apply filter option.

The subscribe status of the selected device will be listed as shown below in the example.

The below example shows that the **pos1@0001.enactor** device is successfully subscribed to all the messaging queues and is ready to receive broadcasts from the Estate Manager.

Active Subscriptions						
<div>Queue Name Starts With Client ID Starts With pos1@0001.enactor Last Read Start Last Read End Apply Filters Reset Filters</div>						
	Queue Name	Client ID	Unread Count	Last Read	Last ID	
<input type="checkbox"/>	AllStores	pos1@0001.enactor-AllStoresUpdatesDownQC	0	-	0	
<input type="checkbox"/>	AllStores	pos1@0001.enactor-UpdatesDownQC	0	-	0	
<input type="checkbox"/>	Device(pos1@0001.enactor)	pos1@0001.enactor-PosDeviceUpdatesDownQC	0	-	1	
<input type="checkbox"/>	Location(0001)	pos1@0001.enactor-PosLocationUpdatesDownQC	0	-	0	
<input type="checkbox"/>	Region(UK)	pos1@0001.enactor-PosRegionUpdatesDownQC	0	-	0	
<input type="checkbox"/>	ServerUpdates	pos1@0001.enactor-ServerUpdateToPos	0	-	0	
<div>Page 1 of 1 Page Size 20 Select All Deselect All Delete Selected Subscriptions</div>						

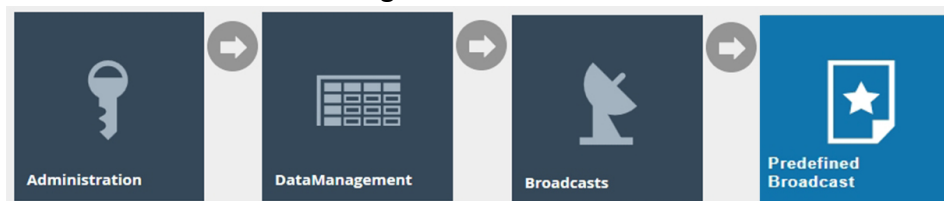
Configuration Steps

Predefined Broadcasts are persistent, reusable entities that define the key requirements of a broadcast. This allows the user to create a broadcast, add or remove the entities they wish to broadcast and then target the broadcast to exactly where they wish to send the configurations.

Predefined Broadcast

To create a new Predefined Broadcast, follow the steps below:

The Predefined Broadcast Maintenance application can be accessed through:
Administration -> Data Management -> Broadcasts -> Predefined Broadcast



To create a new Predefined Broadcast, select **Create a new Predefined Broadcast** on the Predefined Broadcast Maintenance page.

The screenshot shows the 'Predefined Broadcast Maintenance' application window. At the top, there are search filters for 'Predefined Broadcast ID' and 'Name', both with 'Starts With' dropdowns. Below the filters are 'Apply Filters' and 'Reset Filters' buttons. The main area contains a table with the following data:

	Predefined Broadcast ID	Broadcast Type	Name	Description
	LOCATIONS	XML	Locations	Locations
	2_NEW_BUILD_PRODUCT	XML	2. New Build All Product Data	New Build All Product Data
	1_NEW_BUILD_STATIC	XML	1. New Build All Static Data	New Build All Static Data
	64_REPLACE_CARD	XML	64. Replace Card Data	Replace Card Data
	58_REPLACE_CUST_LOY	XML	58. Replace Customer & Loyalty Data	Replace Customer & Loyalty Data
	65_REPLACE_DIARY	XML	65. Replace Diary Data	Replace Diary Data
	58_REPLACE_HOSP	XML	58. Replace Hospitality Data	Replace Hospitality Data

At the bottom of the page, there is a pagination bar showing 'Page 1 of 5' and 'Page Size 10'. Below the pagination bar, there is a button labeled '+ Create a new Predefined Broadcast' which is highlighted with a red box.

Enter a unique **Predefined Broadcast ID** for the new Predefined Broadcast. The ID can be alphanumeric and contain a maximum of 20 characters. The ID will be used to uniquely identify this new Predefined Broadcast. Use of a systematic and business-specific naming convention is recommended here.

Predefined Broadcast Maintenance

Please enter following details for the new Predefined Broadcast

Predefined Broadcast ID	USERS_BROADCAST
-------------------------	-----------------

[← Back](#) [+ Create](#)

Select **Create**.

The Predefined Broadcast Maintenance, for the newly created Predefined Broadcast, is presented as follows with the 3 key tabs namely; **General**, **Details** and **Override**.

Predefined Broadcast – General Tab

The **General** tab has all the basic information that captures the identity of the Predefined Broadcast.

Predefined Broadcast Maintenance

[Save](#) [Cancel](#)

You are editing Predefined Broadcast ID: 'USERS_BROADCAST'

General Details Override

Name* 1

Description* 2

Broadcast Type* 3

Force Selection of Change Set ☐ 4

Change Set ID Pattern 5

Select Target on Broadcast ☐ 6

Send To* 7

Send Update File Per Device Region ☐ 8

Expand All | Collapse All

Name	Selected
<input type="checkbox"/> All Regions (All)	<input type="checkbox"/>
<input type="checkbox"/> United Kingdom (UK)	<input type="checkbox"/>
<input type="checkbox"/> United States (US)	<input type="checkbox"/>
<input type="checkbox"/> Estate Manager (estatemanager)	<input type="checkbox"/>

Targets

Authorisation Code 9

Set the appropriate values on the **General** tab as follows:

Configuration	Description
Name	Enter a unique identifier by which users may recognise and select the predefined broadcast in other user interfaces, that can be alphanumeric with a maximum of 50 characters.

Description	Enter a user-friendly, informative description for the predefined broadcast that can be alphanumeric with a maximum of 100 characters.
Broadcast Type	Select the desired Broadcast Type from the dropdown list of predefined Export Types, which supports broadcast. Built-in types are XML and CSV.
Force Selection of Change Set	Checkbox, if checked indicates that change sets must be used to select a Change Set. A Change Set defines the period covered by instance selection for the broadcast. If selected, a dropdown list of Change Sets will be presented for selection.
Change Set ID Pattern	<p>This is a string value which is used to specify a Change Set for which the broadcast is to be made.</p> <p>Automatically generated change set IDs normally have the form {userId}-{openDateTime}, so a User ID is usually sufficient.</p> <p>Other automatically generated IDs have the same format. These are mainly generated by imports and the two main IDs are SELL_CODE_SET_IMP and PRICE_SET_IMP.</p> <p>Custom change sets can also be created with Arbitrary IDs.</p>
Select Target on Broadcast	Checkbox, if checked indicates that targets for the broadcast must be specified by the user at the time of submitting the Predefined Broadcast using the Data Broadcaster. If not checked, an additional panel is present in the General Tab to capture and include specified Targets in the Predefined Broadcast itself.
Send to / Target	<p>Select the desired target for the broadcast from a dropdown list of fixed options.</p> <ul style="list-style-type: none"> • All Stores – Indicates all Store Servers, Mobiles Servers and POS devices. • Regions – Indicates selected regions only and devices linked to the region. • Locations – Indicates selected locations and devices linked to that location. • Device – Indicates individual devices. <p>This is applicable only if the previous “Select Target on Broadcast” field is not checked.</p>
Send Update File Per Device Region	This field is applicable when defining Predefined Regional Entities for Broadcasts. Checkbox, if checked indicates that when the zip files are sent to the target devices, they are sent according to the regions as separate zip files for the same device. This is explained further in “Regional Broadcasting – Local Updates Folder” sub-section later in this guide.
Authorisation Code	Specifies an authorisation (permission/privilege) required to be in the User’s Role for the User to apply the broadcast. Select a desired authorisation Code from the dropdown

	List if applicable. The permission value can be defined in Special Functions element of User Roles Maintenance.
--	---

Predefined Broadcast – Details Tab

The **Details** tab displays a list of entities available to broadcast and provides for selection of the configuration elements (entities) to be broadcasted. If “Force Selection of Change Set” described in the General Tab is not checked, all instances of the configuration elements selected here will be broadcasted.

Predefined Broadcast Maintenance

Save Cancel

You are editing Predefined Broadcast ID: 'USERS_BROADCAST'

General **Details** Override

Entity Type Available Selected

Transform
Transform Details
Transform Type
UI Persistent Process Data
UI Process Instance
User
User Biometric Data
User Biometric Data Type
User by Location
User Defined Privilege
User Preference
User Status
Voucher History
Voucher Serial Number
Voucher Type
Web Service Container
Workroom
Workroom Type
Role

User
User Template

Move
Move All
Remove
Remove All

Delete Existing Data ☐

Set the appropriate values on the **Details** tab as follows:

Configuration	Description
Entity Type	Select the entities you wish to include by highlighting and double clicking on an individual entity to move it to the selected table (table on the right) or by highlighting a range of entities and selecting the “Move” button. All entities within the selected table will form part of the broadcast.
Delete Existing Data	Checkbox, if checked indicates that all data for the selected configuration elements (entities) will be deleted from the selected target before the broadcast data is applied.
Broadcast Delay	Set a specific time period, if necessary to delay this predefined broadcast when it is being broadcasted. The period specified here will only be triggered after this predefined broadcast has been broadcasted using the data broadcaster.

Predefined Broadcast – Override Tab

The **Override** tab allows for advanced overrides of Entity Distribution Details by the Predefined Broadcast. This will not be described in this guide.

The screenshot shows the 'Predefined Broadcast Maintenance' application window. At the top, there are 'Save' and 'Cancel' buttons. Below them, a message states 'You are editing Predefined Broadcast ID: 'USERS_BROADCAST''. The main interface has three tabs: 'General', 'Details', and 'Override', with the 'Override' tab selected and highlighted by a red box. The 'Override' tab contains a table with two columns: 'Qname' and 'Entity Distribution Detail'. The table has one row with the value '(http://www.enactor.com/retail/user)' in the 'Qname' column and 'ReducedUserDetails' in the 'Entity Distribution Detail' column. Below the table, there is a '+ ' button and a dropdown menu showing 'user'.

After configuring all the above 3 tabs, select **Save** to complete creating the new Predefined Broadcast.

Regional Predefined Broadcast

Certain entities have region or location-based configurations such as product, menu, roles, tender and more. These entities would have been configured only for a particular region or location. However, when the usual broadcasts are done, even the entities that are not a part of that region or location are broadcasted, which in turn broadcasts a large amount of unnecessary data to that device.

Following is an example scenario:

A parent region is set to All Regions with UK and US as its Child Regions. Tenders are configured in the Tender Maintenance separately for UK and US regions. A new device is set up in the UK region and requires the Tenders that are configured only for the UK region to be broadcasted. However, this cannot be done by broadcasting the **Tender** entity to the new device in the UK region, as it will broadcast all the US tender configurations as well, which is unnecessary data for the device in the UK region.

For this purpose, the “Tender by Region” entity in the Details tab of Predefined Broadcast Maintenance is used, which ensures that the entities are distributed only to specified regions. There are many such entities for both Region and Location, which are listed and shown in the next sub-section. With this option, broadcasts can be sent to All Regions or Stores in the estate, but will only impact the respective regions or locations to which the entities have been configured. This enables the distribution of data throughout the estate in a more efficient manner.

Predefined Broadcast – Details Tab

In the Details tab of the Predefined Broadcast Maintenance application, there are special entities that can be selected for Regional Broadcasting.

Following are the entities that can be selected to broadcast the entities by Region:

- Location by Region
- Menu by Region
- Option Set by Region
- Product by Region
- Product Attribute by Region

- Product Price by Region
- Product Product Group by Region
- Product Sale Region by Region
- Promotion by Region
- Reason by Region
- Regional Product by Region
- Role by Region
- Selling Code by Region
- Tender by Region

Predefined Broadcast Maintenance

[Save](#) [Cancel](#)

You are editing Predefined Broadcast ID: 'REGIONAL_BROADCAST'

General **Details** Override

(activePaymentTransaction)

(cardIdentityToken)

(cardSupplementaryToken)

(deviceAssociation)

(digitalPaymentConfiguration)

(digitalPaymentProviderConfiguration)

(fiscalGrandTotal)

(paymentBasket)

(paymentCustomer)

(paymentCustomerCard)

(paymentMerchant)

(paymentTransaction)

(pdLogEntry)

(signatureChain)

(UISessionProcessInstance)

(updateDetail)

(updateTarget)

Account Balance

Account Balance Snapshot

Move

Move All

Remove

Remove All

Location by Region

Menu by Region

Option Set by Region

Product Attribute by Region

Product by Region

Product by Region

Product Price by Region

Product Product Group by Region

Product Sale Region by Region

Product Sale Region by Region

Promotion by Region

Reason by Region

Regional Product by Region

Role by Region

Selling Code by Region

Tender by Region

Following are the entities that can be selected to broadcast the entities by Location:

- Product Price by Location
- User by Location

Predefined Broadcast Maintenance

Save Cancel

You are editing Predefined Broadcast ID: 'LOCATIONAL_BROADCAST'

General **Details** Override

Entity Type Available Selected

Transaction Type
Transform
Transform Details
Transform Type
UI Persistent Process Data
UI Process Instance
User
User
User Biometric Data
User Biometric Data Type
User Defined Privilege
User Preference
User Status
User Template
Voucher History
Voucher Serial Number
Voucher Type
Web Service Container
Workroom
Workroom Type

Product Price by Location
User by Location

Move
Move All
Remove
Remove All

Regional Broadcasting – Local Updates Folder

Once broadcasts are completed, the affected entities are sent to the target devices in the form of a zip file. They are then downloaded by the devices and these zip files exist in the Updates Folder. This is further explained in the "Local Updates Folder" sub-section under "Broadcast Status".

Note: Please make sure to select the "Send Update File Per Device Region" checkbox in the "Predefined Broadcast – General Tab", which will enable the zip files to be broken down into more than 1 zip file, allowing to form a better structure of the data that is being broadcasted. The example below shows the Updates Folder after the above configuration has been enabled.

Following is how the contents of the zip file in the local updates folder is shown when the normal **Tender** entity is broadcasted:

📁 > This PC > Local Disk (D:) > Enactor > pos > Updates > Processed

Name	Date modified	Type	Size
7cd68047-08fd-453d-b0e1-13a839fe33fb_0001.zip	1/31/2022 12:53 PM	WinRAR ZIP archive	3 KB

You will notice here that this zip file ends with "_0001", which contains all the Tender configurations of All Regions, UK Region and US Region.

But when the **Tender by Region** entity is broadcasted, you will notice that there are 2 separate zip files as shown below:

📁 > This PC > Local Disk (D:) > Enactor > pos > Updates > Processed

Name	Date modified	Type	Size
5208ca44-ea8b-4a1d-8625-78a98c2597df_Region_UK.zip	1/31/2022 6:29 PM	WinRAR ZIP archive	2 KB
5208ca44-ea8b-4a1d-8625-78a98c2597df_Region_All.zip	1/31/2022 6:29 PM	WinRAR ZIP archive	2 KB
7cd68047-08fd-453d-b0e1-13a839fe33fb_0001.zip	1/31/2022 12:53 PM	WinRAR ZIP archive	3 KB

From the 2 zip files available, one contains just the Tender configurations for the UK Region while the other zip file has All Regions Tender configurations that are common to all the Regions in the Estate.

Note: There will not be any configuration from the US region in either of these zip files.

This demonstrates how Regional Broadcasting can be done by using the special entities that are available to select for broadcasting. This reduces the inefficiency caused by the transferring of large unnecessary configurations and ensures much efficient broadcasting, as only region-specific data is broadcasted.

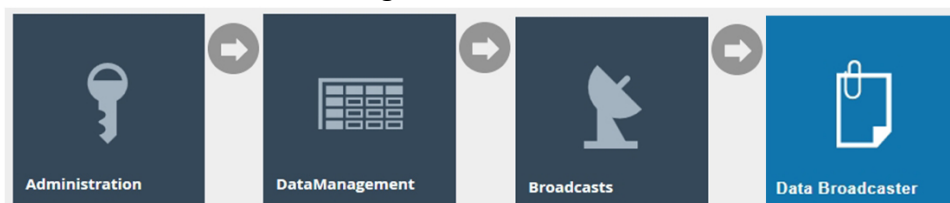
Note: The Enactor Regional Broadcasting Functional Document contains more in-depth information on Regional Broadcasting.

Data Broadcaster







This is used to manually distribute specific data to selected devices in the Estate utilizing Predefined Broadcasts while also managing the timing selection of data distribution. The Data Broadcaster application broadcasts data based on the information specified in the selected Predefined Broadcast.

To create a new Data Broadcast, follow the steps below:

The Data Broadcast Maintenance application can be accessed through:
Administration -> Data Management -> Broadcasts -> Data Broadcaster



Alternatively, Data Broadcaster Maintenance can also be accessed through the Predefined Broadcast, by selecting the Broadcast icon of the corresponding predefined broadcast as shown below:

Predefined Broadcast Maintenance				
Predefined Broadcast ID	Starts With			Hide
Name	Starts With			
Apply Filters Reset Filters				
	Predefined Broadcast ID	Broadcast Type	Name	Description
	REGIONAL_BROADCAST	XML	Regional Broadcast	Broadcast of all Regional Entities
	USERS_BROADCAST	XML	Users Broadcast	Broadcast of all Users
	LOCATIONS	XML	Locations	Locations
	2_NEW_BUILD_PRODUCT	XML	2. New Build All Product Data	New Build All Product Data
	1_NEW_BUILD_STATIC	XML	1. New Build All Static Data	New Build All Static Data
	64_REPLACE_CARD	XML	64. Replace Card Data	Replace Card Data

Select and set the appropriate values for the fields for this Data Broadcast and click on the Submit button to initiate the broadcast according to the configuration specified on this page.

Please select a predefined broadcast definition and press submit

Broadcast Request

Predefined Broadcast
Broadcast of all Users

Run At Date/Time
28
January
2022
05
39
05

Changes Since Date/Time
28
January
2022
05
39
05

Submit

Back

Set the appropriate values in the fields as follows:

Configuration	Description
Predefined Broadcast	Select the desired predefined broadcast from a dropdown list of configured options.
Run At Date/Time	Set a date and time at which broadcast is to be run. It defaults to the current date and time. A future date and time can be set here based on the requirement.
Changes Since Date/Time	Set a date and time from when the changes of the entities in the predefined broadcast are to be included for broadcast.
Change Set	Dropdown selection from a list of dates and times when database updates have occurred. The Submit button will initiate the broadcast according to the configuration specified on this page.

If the predefined broadcast has been configured to “Delete Existing Data”, the user will only have the option to define the run at start date and time. A delete broadcast will always send the full entity file/s with a delete command to clear the entity table on the targeted device.

If the predefined broadcast has been configured to “Force Selection of Change Set”, the user will only have the option to define the Change Set from the dropdown and will not be able to specify a run at start date and time.

When submit is selected, if the predefined broadcast has been configured to “Select Target on Broadcast”, then the broadcast target selection is shown.

Select the appropriate targets and select Submit to proceed.

Data Broadcaster

?

||

×

Please select broadcast targets for 'Broadcast of all Users'

Targets

Send To*

Device

Expand All | Collapse All

Name	Selected
All Regions	<input type="checkbox"/>
United Kingdom	<input type="checkbox"/>
United States	<input type="checkbox"/>
Estate Manager	<input type="checkbox"/>

SubmitCancel

* Denotes Mandatory

If the Broadcast is successfully submitted, a success message is displayed with an option to View.

Data Broadcaster

?

||

×

The Broadcast Request was successfully submitted. Its status can be viewed on the Broadcast History page.

Back

View

The View option navigates to the Broadcast History entry for the current Broadcast, which can also be accessed in the Broadcast History Maintenance. This is further described in the “Broadcast Status” section of this guide.

Scheduling a new Data Broadcast

Predefined broadcasts can be scheduled to run automatically at specific intervals according to a schedule by creating a diary entry. This can be done in the predefined broadcast maintenance by selecting the Schedule icon of the corresponding predefined broadcast as follows:

Predefined Broadcast Maintenance

?

||

×

Predefined Broadcast ID

Starts With

Hide

Name

Starts With

Apply Filters

Reset Filters

	Predefined Broadcast ID	Broadcast Type	Name	Description
	REGIONAL_BROADCAST	XML	Regional Broadcast	Broadcast of all Regional Entities
	USERS_BROADCAST	XML	Users Broadcast	Broadcast of all Users
	LOCATIONS	XML	Locations	Locations
	2_NEW_BUILD_PRODUCT	XML	2. New Build All Product Data	New Build All Product Data
	1_NEW_BUILD_STATIC	XML	1. New Build All Static Data	New Build All Static Data
	64_REPLACE_CARD	XML	64. Replace Card Data	Replace Card Data

Page 1 of 5

Page Size 10

+

Create a new Predefined Broadcast

The Diary Maintenance for the newly created Scheduled Broadcast, is presented below. Diary Maintenance application can also be accessed by clicking on the Diary icon next to the Home icon in the top right corner of Estate Manager.

Diary – General Tab

The General tab specifies all the details required to define and schedule the diary entry for the scheduled broadcast.

Following is an example of the broadcast scheduled to run at the end of each day:

Diary

Save Cancel Copy Remove

Please enter details for this System Job

General Job Data

Location

Estate Manager

Device Type

Estate Manager

Subject*

Daily Day End Broadcast

Start Date*

28

January

2022

...

Start Time*

19

:

00

End Time*

19

:

30

Occurs

☐ Once
 ☐ At Minute Intervals
 ☐ Every Hour
 ☒ Every Day
 ☐ Every Week
 ☐ Every Month

Interval (minutes only)

1

Hidden

☐

Category

-

* Denotes Mandatory

Set the appropriate values on the **General** tab as follows:

Configuration	Description
Location	Select the desired Location from a dropdown list of all configured Locations.
Device Type	Select the desired Device Type from a dropdown list of all configured devices.
Subject	Enter a description that describes the scheduled job. E.g., User Broadcast Every 15 minutes
Start Date	Set the starting day to run the job for the first time.
Start Time	Set the starting time in the day for each scheduled instance of running the job.
End Time	Set the ending time in the day for each scheduled instance of running the job.
Occurs	Select the frequency of the job from a dropdown list of fixed occurrences:

	<ul style="list-style-type: none"> • Once – Broadcasts the data only once at the start date and start time configured. • Every Minute Intervals – The broadcast will run every minute from the start time until the end time for that day. • Every Hour – The broadcast will run every hour from the start time until the end time for that day. • Every Day – Scheduled Job will run once a day commencing each day at the start time and stop at the end time. • Every Week – Will run every 7 days following the start time/date. • Every Month – Will run every month on the same date.
Interval (minutes only)	Enter the minute value if “Every Minute Intervals” is selected in the Occurs field.
Hidden	Checkbox, if checked it will hide this job in the listings of scheduled jobs unless explicitly requested.
Category	Dropdown list selection of configured diary entry categories.

Diary – Job Tab

The **Job** tab specifies the Process ID of the Job to be run. When scheduling predefined jobs such as broadcasts, this information is supplied from the context. This is already assigned in this tab since the predefined broadcast had been used to create this diary job.

Diary

Save Cancel Copy Remove

Please enter details for this System Job

General Job Data

Process ID

EstateDirector/DataBroadcast/PredefinedDataBroadca

Submitted Job ID

0

Diary – Data Tab

The **Data** tab specifies the input data supplied as parameters that are needed to execute this job. The parameters are as follows:





- Name of the parameter that is known to the Process and used by it to identify the input.
- Java Type specifies the nature of the parameter (in terms of Java Data Types).
- Value property receives the value intended for execution-specific input

These are already assigned in this tab since the predefined broadcast was used to create this diary job.

Please enter details for this System Job

General
Job
Data

Process Data

	Name	Java Type	Value
	enactor.coreUI.UserLocale	String	com.enactor.core.localisation.Locale@6aa0ac64
	enactor.coreProcessing.DataBroadcastDet	String	com.enactor.coreProcessing.broadcast.DataBroadcast
	enactor.coreProcessing.PredefinedBroadc	String	predefinedBroadcastId=USERS_BROADCAST;
		String	

Select **Save** to commit the changes. The job will run automatically in the background as scheduled and the job can be monitored in the scheduled jobs application.

Broadcast Status

Once the Broadcast is sent using the Data Broadcaster, the status of Broadcasts can be monitored in 2 ways:

1. Using the Broadcast History Maintenance in Estate Manager.
2. Using the Updates Folder in the Local Machine and the Updates Table in the Local Database.

Monitoring the status starts from the Broadcast History Maintenance in the Estate Manager. Once the status changes to “Sending to Recipients”, the local updates folder and the updates table in the local database can be monitored to check if the broadcast has been received successfully to the intended device. Then a message is sent back to the Estate Manager resulting in a change in status to “Successful”. This way the complete broadcast status can be monitored.

Broadcast History Maintenance

The status of all the broadcasts that have been done are displayed in the Broadcast History Maintenance and filters can be used to select and view individual entries as desired.

Broadcast History										
Predefined Broadcast ID: <input type="text"/> Broadcast After: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Broadcast Before: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="button" value="Apply Filters"/> <input type="button" value="Reset Filters"/>				Broadcast Job Status: <input type="text"/> Minimum Items Affected: <input type="text"/> Maximum Items Affected: <input type="text"/> <input type="button" value="Hide"/>						
Options	Broadcast ID	Predefined Broadcast ID	User	Broadcast Date	Broadcast Type	Items Affected	Progress		Status	Name
	458009b-907d-44b-8f65-4201899de295	UPDATE_TENDER	admin	06/01/2022, 08:39	XML	92502	1 / 3 (6)	<div></div>	Partially Received	Adhoc- Upadhyia
	4563a088-ed1f-4ba4-8b3f-5b60e176d653	UPDATE_MENU	admin	06/01/2022, 08:08	XML	1055	3 / 3 (6)	<div></div>	Successful	Adhoc- Upadhyia
	493a7fb-7167-4369-baaf-c034bc0494f	REPLACE_USERS	admin	06/01/2022, 07:48	XML	36953	1 / 5 (9)	<div></div>	Partially Received with Failures	Adhoc- Upadhyia
	e56861d3-1900-4c40-b06c-bd53b6886fdd	1_NEW_BUILD_PRODUCT	admin	06/01/2022, 06:37	XML	336	2 / 3 (7)	<div></div>	Partially Received	Adhoc- Upadhyia
	2181e6c1-0141-463d-a445-1e69c1691ade	1_NEW_BUILD_STATIC	admin	06/01/2022, 04:40	XML	253685	0 / 1 (2)	<div></div>	Sending to Recipients	POS Base Data

Page 4 of 160 Page Size 10

Select the **view** button against each broadcast to navigate to a Broadcast History View page of that broadcast to further examine the details of the broadcast.

Broadcast History – General Tab

The General tab provides all the basic identification and status details of the Broadcast. All fields are Read-Only at this point.

Broadcast History	
Back Refresh	
You are viewing Broadcast ID: '5a4bb4fc-f44e-4863-b77a-9d8fe60b8e9d'	
<div> <div>General</div> <div>Export</div> <div>Recipients</div> </div>	
Name	1.New Build All Static Data
Broadcast Date	28 January 2022
Changes Since Date/Time	28 January 2000 05 : 56 : 00
Broadcast Type	XML
User	ADMIN
Topics	Device
Devices Received	0 / 1
Status	Sending to Recipients
Items Affected	8327

Following are the details of each field:

Configuration	Description
Name	Alphanumeric; maximum 50 characters. A unique identifier given to the Predefined Broadcast and by which Users may recognise and select it in other User Interfaces.
Broadcast Date	The date on which the Broadcast was submitted for processing.
Changes Since Date/Time	The date/time that the changes from are selected for broadcast in the data broadcaster.

Broadcast Type	The defined export type for broadcast as selected in the Predefined Broadcast. Built-in types are XML and CSV.
User	The User ID of the User Account from which the Broadcast was submitted.
Topics	Indicates the Target level to which the Broadcast was defined to distribute to.
Devices Receipted	The number of Target Devices that have acknowledged the receipt of the broadcast as a ratio of all devices targeted.
Status	If completed the Status will indicate as either Successful or Failed. Intermediate stages of processing such as Exporting may be indicated.
Items Affected	This figure normally indicates the total number of instances of all entities distributed in the Broadcast. However, in some circumstances the broadcast may involve replay of the Activity Log (resending updates) and may be inflated.

Broadcast History – Export Tab

The **Export** tab indicates the status of preparation of the download data package to be made available for distribution to selected Target devices. There are two phases of processing in this process of preparation; Exporting and Collating, each with a progress status bar shown the Overall Status region at the top of the page.

Broadcast History – Export Tab – Exporting Sub-tab

The Export phase, which is shown in the Exporting Sub Tab, initiates a process to extract data for each Entity selected for export. These processes export the data from the Estate Manager database in the format requested; each has a progress bar, which indicates in Yellow if data export is in progress or Green if data Export has completed, otherwise remains Grey, if there is no data.



Broadcast History

Back

You are viewing Broadcast ID: '6e0c7592-fa36-4605-83d0-fb3a31295c87'









General **Export** Recipients

Overall Status

Exporting  Collating 

Exporting Collating

Expand All | Collapse All

Region	Options	Sub Job Id	Progress
All Regions			
product		1984	
productAttribute		1985	
optionSet		1986	
productList		1987	

Broadcast History – Export Tab – Collating Sub-tab

The Collating phase processes the exported data files into a download package, usually one file for all distribution Targets, and the progress bar indicates in yellow as files are being added and green when completed. Multiple files, and progress bars may be present subject

to the distribution configuration. The progress bar shown for Overall Status of collating is a summation of the status of individual Broadcast Files.

The screenshot shows the 'Broadcast History' window with the 'Export' tab selected. Below the tabs, the 'Overall Status' section shows 'Exporting' and 'Collating' progress bars, both at 100%. The 'Collating' tab is also highlighted. Below this, a table shows the progress for a specific broadcast file.

	Sub Job Id	Name	Progress
	1989	6e0c7592-fa36-4605-83d0-fb3a31295c87_0001	<div style="width: 100%;"></div>

Broadcast History – Recipients Tab

The recipients tab, list the recipients the broadcast is being sent to. Following are the status indicators for each device:

- : A device with a dash against is not subscribed to the estate manager, however the device is setup in the estate manager.
- : An empty box against a device means that this device is included within the broadcast but has not acknowledged the broadcast. Check that the device is running and on the network.
- : The device has successfully received and loaded the broadcast.
- : The device has received the broadcast but has failed to successfully load it.

The screenshot shows the 'Broadcast History' window with the 'Recipients' tab selected. Below the tabs, there is a checkbox for 'Include Not Subscribed'. A table lists the recipients and their status.

Options	Device	Status	Items Affected	Date/Time Processed	Last Updated
	BO@0001.enactor	Success	4469 / 4470	05/01/2022 11:15:48	05/01/2022 11:16:30
	pos1@0001.enactor	Sent			05/01/2022 11:15:26

Local Broadcast Status

When the Status of the broadcast in the Broadcast History Maintenance changes to “Sending to Recipients”, the status should be checked locally to see if the broadcast files for the device have been received. The status can be checked in both the Local Updates folder as well as the Updates folder of the local database.

Local Updates Folder

Broadcasts will be received as updates in the form of XML files compressed within a zip file. These are downloaded by the devices and exist in the enactor home directory of the targeted device. The user can check if the broadcast has been received by viewing the

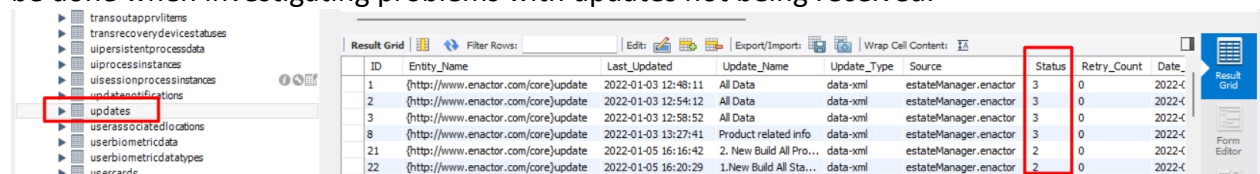
C:\[ENACTOR_HOME]\pos\Updates directory.



The file would first sit in this directory while being processed and then if the broadcast/application update has been received and processed, the file will move into the processed folder and a failure will move the file to the failed directory. If failures should occur check the common.log for more information in C:\[ENACTOR_HOME]\pos\logs

Database Updates Table

The user can also check the updates table for the current status of the broadcast. This will need to be checked in the database of the device receiving the broadcast. This should only be done when investigating problems with updates not being received.



ID	Entity_Name	Last_Updated	Update_Name	Update_Type	Source	Status	Retry_Count	Date_Updated
1	{http://www.enactor.com/core}update	2022-01-03 12:48:11	All Data	data-xml	estateManager.enactor	3	0	2022-01-03 12:48:11
2	{http://www.enactor.com/core}update	2022-01-03 12:54:12	All Data	data-xml	estateManager.enactor	3	0	2022-01-03 12:54:12
3	{http://www.enactor.com/core}update	2022-01-03 12:58:52	All Data	data-xml	estateManager.enactor	3	0	2022-01-03 12:58:52
8	{http://www.enactor.com/core}update	2022-01-03 13:27:41	Product related info	data-xml	estateManager.enactor	3	0	2022-01-03 13:27:41
21	{http://www.enactor.com/core}update	2022-01-05 16:16:42	2. New Build All Pro...	data-xml	estateManager.enactor	2	0	2022-01-05 16:16:42
22	{http://www.enactor.com/core}update	2022-01-05 16:20:29	1.New Build All Sta...	data-xml	estateManager.enactor	2	0	2022-01-05 16:20:29

Database Updates table current statuses are shown in integer values from 1 to 7 and following are what they depict:

- 1 – STATUS_PENDING: Broadcast is pending, and download has not begun.
- 2 – STATUS_PROCESSED: Processed successfully.
- 3 – STATUS_FAILED: Failed requires further investigation.
- 4 – STATUS_RETRY: Attempting to process the update again.
- 5 – STATUS_SCHEDULED: Scheduled download not to be processed until late date/time.
- 6 – STATUS_DOWNLOADED: downloaded but not processed.
- 7 – STATUS_RETRY_DOWNLOADED: Attempting to download the update again.

Troubleshooting Broadcast Issues

Broadcast Issues can occur due to many reasons, and this is first shown to the User in the Broadcast History Maintenance, where the status column shows a Failed message. This section covers how to troubleshoot such broadcast issues and fix them to successfully send broadcasts with a status of Success.

Scheduled Jobs

Most broadcasts, when failed, can be monitored in the Scheduled Jobs Maintenance.

When the broadcast fails in the Broadcast History, make a note of the date and time that the Broadcast has failed.

Broadcast History

Predefined Broadcast ID

-

Broadcast Job Status

Starts With

Broadcast After

Minimum Items Affected

Broadcast Before

Maximum Items Affected

▼ Apply Filters

↺ Reset Filters

Options

Broadcast ID

Predefined Broadcast ID

User

Broadcast Date

Broadcast Type

Items Affected

Progress

Status

Name

🔍

🗑️

➡️

920d56be-0278-42df-a4ab-5ea510890d6c

UPDATE_LOCATION

ADMIN

31/01/2022 06:11

XML

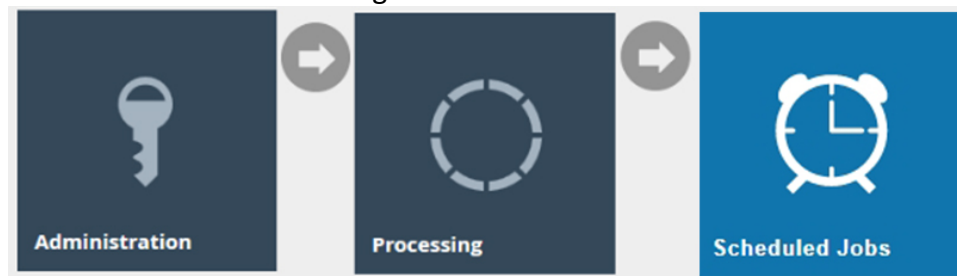
0

0 / 0 (0)

Export Failed

Update Location Broadcast

The Scheduled Job Maintenance application can be accessed through:
Administration -> Processing -> Scheduled Jobs



Change the filter of Status to **Failed** and then click on the (!) icon of the row with the time and date that matches close to the failed broadcast as follows:

Scheduled Job Maintenance

Process ID

Starts With

Start Date Time

Status

Equals

Failed

1

Description

Contains

Parent Jobs

☐

Apply Filters

Reset Filters

Device ID

-

End Date Time

Job ID

Runtime Context

Starts With

2

This will open the Application Process Log, where the failed transaction processing job will be shown. The message indicates the reason for the selected job to fail and as shown on the below example the message “No matching regions found for export criteria.” is shown as the reason.

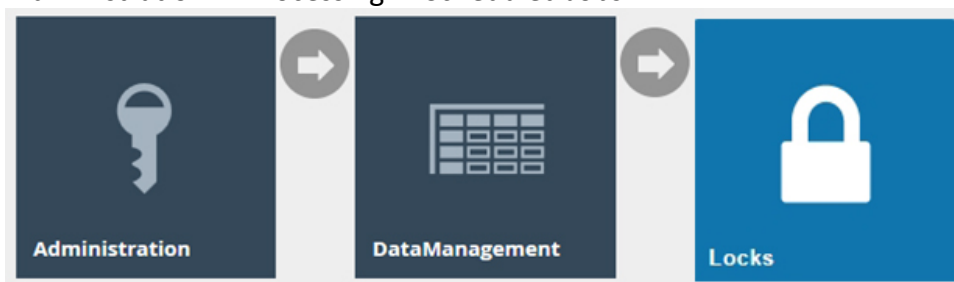
Application Process Log								
Log Entry Type	-				Start Date			Hide
End Date					Region	-		
Location	-				User ID	Starts With		
Device	-				Device ID	Starts With		
Entry Type	scheduledJob				Reference ID	2331		
Process ID	Contains							
<input type="button" value="Apply Filters"/> <input type="button" value="Reset Filters"/>								
Type	Date	Message	Device ID	Entry Type	Reference ID	Process ID	User ID	
	31/01/2022, 06:12	Starting file export jobs	estateManager.enactor	scheduledJob	2331	DataBroadcastProcessor	HJAWAHIR	
	31/01/2022, 06:12	No matching regions found for export criteria	estateManager.enactor	scheduledJob	2331	RunDataBroadcastAsynchronousExport	HJAWAHIR	
	31/01/2022, 06:12	Job Started	estateManager.enactor	scheduledJob	2331	DataBroadcastProcessor	HJAWAHIR	
	31/01/2022, 06:12	Failed to export data for broadcast	estateManager.enactor	scheduledJob	2331	RunDataBroadcastAsynchronousExport	HJAWAHIR	
	31/01/2022, 06:12	Failed to export data for broadcast	estateManager.enactor	scheduledJob	2331	DataBroadcastProcessor	HJAWAHIR	
	31/01/2022, 06:12	Job Failed	estateManager.enactor	scheduledJob	2331	DataBroadcastProcessor	HJAWAHIR	
<input type="button" value="Page 1 of 1"/> <input type="button" value="Page Size 10"/> <input type="button" value="Export Results"/>								
<input type="button" value="Back"/>								

Make sure to navigate to the Location Maintenance and monitor that the location exists and "Is Live". Hence, once this issue is fixed in the location, the broadcast can be sent to this location successfully.

Locks

There can be instances when the broadcast does not successfully get sent because the entity that the user is trying to broadcast to is locked by the Estate Manager and cannot be accessed for broadcasting. Typically locks older than a threshold of 24 hours are ignored. However, a manual facility is also available to monitor and maintain these locks. The User may wish to examine the status of Persistent locks and may do so by using the Persistent Lock Maintenance page.

The Scheduled Job Maintenance application can be accessed through:
Administration -> Processing -> Scheduled Jobs



The list of locked entities is currently displayed here. If the entity that the user is trying to broadcast is also available in this list, click on the Delete icon of that entity row and release the lock as shown below:

Persistent Lock Maintenance

Entity Name

Starts With

Entity Key

Starts With





User ID

Starts With

Apply Filters

Reset Filters

Hide

	Entity Name	Entity Key	User ID	Request Date
	{http://www.enactor.com/core} pageDefinition	PageDefinitionUri=Pos/Print/StandardReceiptTemplate44_EN_StandardReceipt44;	ADMIN	31/01/2022, 09:49
	{http://www.enactor.com/retail} pageDefinitionDetail	definitionId=EN_StandardReceipt44;	ADMIN	31/01/2022, 09:49
	{http://www.enactor.com/core} pageDefinition	PageDefinitionUri=Pos/Print/StandardReceiptTemplate44_CY_SR_Temp44;	ADMIN	01/02/2022, 04:31
	{http://www.enactor.com/retail} pageDefinitionDetail	definitionId=CY_SR_Temp44;	ADMIN	01/02/2022, 04:31

Page 1 of 1

Page Size 10

After releasing the lock, the broadcast of that entity can be completed successfully.

About This Document

©2022 Enactor Ltd

All documents produced by Enactor Ltd are supplied to customers subject to Copyright, commercial confidentiality and contractual agreements and must not be copied or transferred without permission.

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			