



BRAINTREE: ZRA (Zambian Revenue Authority) SMART INVOICE CONNECTOR USER GUIDE

Project	
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Date	

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1 Introduction

The Braintree ZRA Smart Invoice Connector is a software solution designed to integrate with the Zambia Revenue Authority (ZRA) system, enabling businesses to automate their tax compliance and submission processes. This user guide provides an overview of the system's features and functionality, as well as step-by-step instructions on how to use the system.

2 Setup and Configuration


Before using the Braintree ZRA Smart Invoice Connector, you need to set up and configure the system. This involves:

- Installing the extension in your Business Central environment
- Configuring the system settings, such as the ZRA tax code and integration setup
- Setting up user accounts and permissions

The following system settings need to be configured.

2.1 Integration Setup

1. Open the ZRA Integration Setup menu.
2. Select the **Integration Service Provider**
3. Confirm that the **Target API URL** is correct for the Service Provider
4. Enter the following fields
 - a. **API Key**
 - b. **SDC ID**
5. Lastly, **Enable** the integration
6. If you want to host the list of commodity codes locally in the database, you can leave the **Use Web Service for commodity lookup** field disabled. Not all service providers do, but if the chosen Service Provider does support commodity code lookup, you can enable this feature.

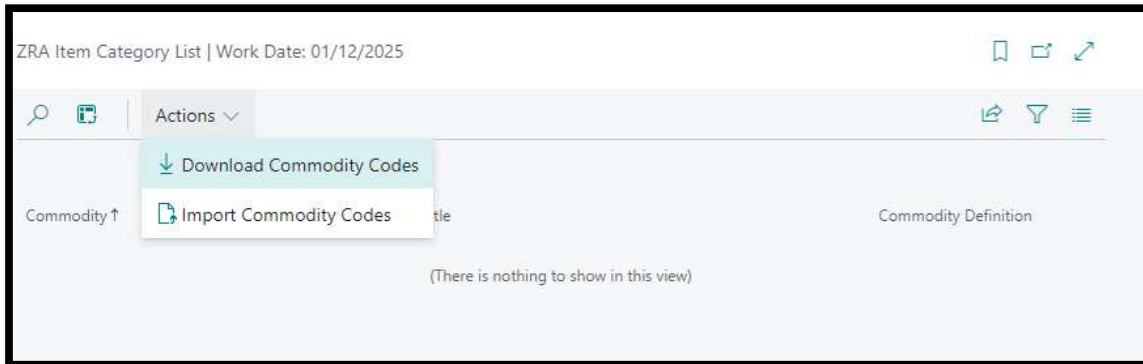


The screenshot shows the 'ZRA Integration Setup' form. At the top, there is a 'Download ZRA Codes (PDF)' button. Below this is the 'General' section. It contains four fields: 'Integration Service Provider' (a dropdown menu), 'Target API URL' (a text field with the value 'https://zra.abc.co.zm/smartinv'), 'SDC ID' (a text field), and 'API Key' (a text field). To the right of the 'SDC ID' and 'API Key' fields are two toggle switches. The first toggle switch is labeled 'Enabled' and is currently turned on. The second toggle switch is labeled 'Use Web Service for commodity lookup' and is currently turned off.

The user can download a copy of ZRA Codes used for mapping in the system as described in this document.

2.2 Commodity Codes

If service providers do not provide an API endpoint for the commodities, download and import the commodities list from the ZRA Item Category List.

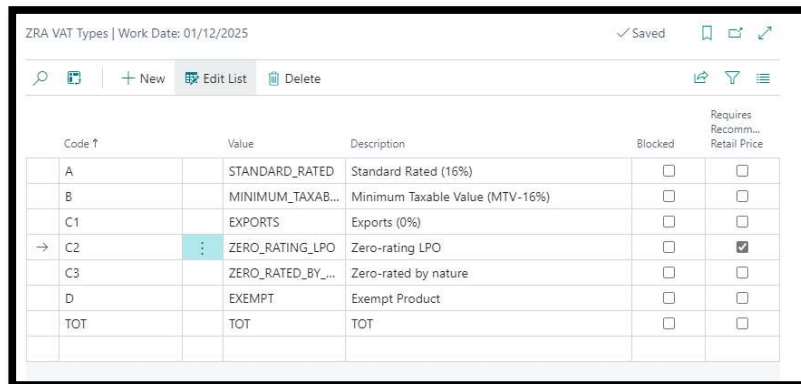


2.3 ZRA VAT Types

A predefined list is created when the extension is installed. This list can be modified as required.

Description of fields:

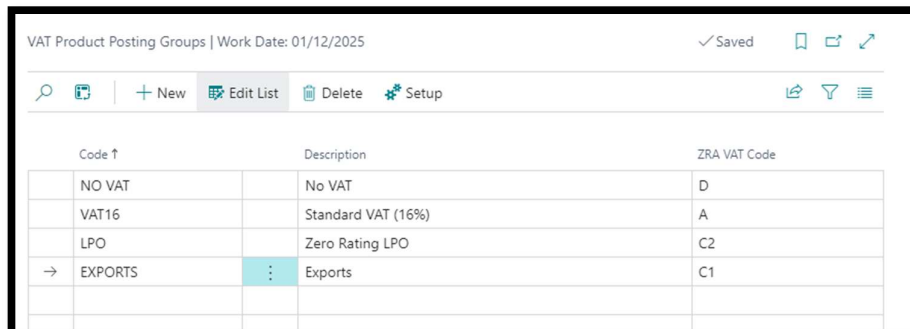
- **Code:** Unique identifier, used by most Service Providers
- **Value:** A secondary identifier, used by some Service Providers.
- **Blocked:** *Not used yet, reserved for future use.*
- **Requires recommended Retail Price:** When enabled, requires items to be registered with a recommended retail price when this code is used on a transaction.



Code	Value	Description	Blocked	Requires Recommended Retail Price
A	STANDARD_RATED	Standard Rated (16%)	<input type="checkbox"/>	<input type="checkbox"/>
B	MINIMUM_TAXAB...	Minimum Taxable Value (MTV-16%)	<input type="checkbox"/>	<input type="checkbox"/>
C1	EXPORTS	Exports (0%)	<input type="checkbox"/>	<input type="checkbox"/>
C2	ZERO_RATING_LPO	Zero-rating LPO	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C3	ZERO_RATED_BY_...	Zero-rated by nature	<input type="checkbox"/>	<input type="checkbox"/>
D	EXEMPT	Exempt Product	<input type="checkbox"/>	<input type="checkbox"/>
TOT	TOT	TOT	<input type="checkbox"/>	<input type="checkbox"/>

2.4 VAT Product Posting Groups

Link Zambian Tax Codes to VAT Product Posting Groups. This is the code used for Items when registering them with ZRA.



Code	Description	ZRA VAT Code
NO VAT	No VAT	D
VAT16	Standard VAT (16%)	A
LPO	Zero Rating LPO	C2
EXPORTS	Exports	C1

2.5 VAT Posting Setups

Link Zambian Tax Codes to VAT Posting Setup. These are the Tax codes used on document lines when the document is submitted to ZRA.

VAT Posting Setup | Work Date: 01/12/2025

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+ New Edit List Delete Edit View Suggest Accounts Copy...

VAT Bus. Posting Group T	VAT Prod. Posting Group T	Description	Block...	VAT Identifier	VAT %	Withholding Tax Rate	VAT Calculation Type	Sales VAT Account	Purch. VAT Account	Rev. VAT Account	VAT Clause Code	EU Ser...	Tax Category	ZRA Tax Code
	EXPORTS		<input type="checkbox"/>		0	0.00	Sales Tax	5610	5630			<input type="checkbox"/>		
	LPO	Setup for / LPO	<input type="checkbox"/>	LPO	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	
	NO VAT	Setup for / NO VAT	<input type="checkbox"/>	NO VAT	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	
	VAT10	Setup for / VAT10	<input type="checkbox"/>	VAT10	0 0	0.00	Normal VAT	5611	5631			<input type="checkbox"/>	E	
	VAT-A	Setup for / VAT16	<input type="checkbox"/>	VAT16	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	
	LPO	Setup for DOMESTIC / LPO	<input type="checkbox"/>	LPO	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>		C2
	NO VAT	Setup for DOMESTIC / NO VAT	<input type="checkbox"/>	NO VAT	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	D
	VAT10	Setup for DOMESTIC / VAT10	<input type="checkbox"/>	VAT10	10 0	0.00	Normal VAT	5611	5631			<input type="checkbox"/>	S	
	VAT-A	Setup for DOMESTIC / VAT16	<input type="checkbox"/>	VAT16	16 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	S	A
	NO VAT	Setup for EU / NO VAT	<input type="checkbox"/>	NO VAT	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	C1
	VAT10	Setup for EU / VAT10	<input type="checkbox"/>	VAT10	10 0	0.00	Reverse Cha...	5611	5631	5621		<input checked="" type="checkbox"/>	S	C1
	VAT-A	Setup for EU / VAT16	<input type="checkbox"/>	VAT16	16 0	0.00	Reverse Cha...	5610	5630	5620		<input type="checkbox"/>	S	C1
	EXPORTS	Setup for EXPORT / EXPORTS	<input type="checkbox"/>	EXPORT	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	C1
	NO VAT	Setup for EXPORT / NO VAT	<input type="checkbox"/>	NO VAT	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	C1
	VAT10	Setup for EXPORT / VAT10	<input type="checkbox"/>	VAT10	0 0	0.00	Normal VAT	5611	5631			<input type="checkbox"/>	E	C1
	VAT-A	Setup for EXPORT / VAT16	<input type="checkbox"/>	VAT16	0 Foreign	0.00	Normal VAT	5610	5630			<input type="checkbox"/>	E	C1
	LPO	Setup for LPO / VAT16	<input type="checkbox"/>	LPO	0 0	0.00	Normal VAT	5610	5630			<input type="checkbox"/>		C2

2.6 Reason Codes

Link the predefined service provider reason codes to the Reason Codes in Business Central.

Reason Codes | Work Date: 01/12/2025

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+ New Edit List Delete

Code ↑	Description	ZRA Reason Code
DAMAGED	Damaged Goods	03
WRONGCUST	Wrong customer invoiced	04
→ OTHER	Other	07

2.7 Payment Methods

Link supplier defined codes to the existing Payment Methods in Business Central.

Payment Methods | Work Date: 01/12/2025

[New](#)
[Edit List](#)
[Delete](#)
[Translation](#)

Code ↑	Bal. Account Type	Bal. Account No.	QR-Bill Bank Account No.	Direct Debit	Direct Debit Pmt. Terms Code	Pmt. Export Line Definition	ZRA Code
ACCOUNT	G/L Account			<input type="checkbox"/>		EFT	02
BANK	G/L Account			<input type="checkbox"/>		EFT	07
BNKCONV...	G/L Account			<input type="checkbox"/>		BANKDATAC...	
BNKCONVI...	G/L Account			<input type="checkbox"/>		BANKDATAC...	
CARD	G/L Account			<input type="checkbox"/>			05
CASH	G/L Account			<input type="checkbox"/>		CASH	01
CHECK	G/L Account			<input type="checkbox"/>		CHECK	04
GIRO	Bank Acco...	GIRO		<input type="checkbox"/>			
INTERCOM	G/L Account			<input type="checkbox"/>			
MULTIPLE	G/L Account			<input type="checkbox"/>			
→ PAYPAL	G/L Account			<input type="checkbox"/>			07

2.8 User Management

Two Permission Sets have been added:

1. ZRA ALL BTR – For administrators of the integration, that are allowed to change the configuration.
2. ZRA BASIC BTR – For all other users, so that the integration can happen in the background.

The system also maintains a list of users and assigns a unique integer to each user as required by the ZRA interface. This should not require any maintenance by an administrator.

ZRA Users | Work Date: 01/12/2025

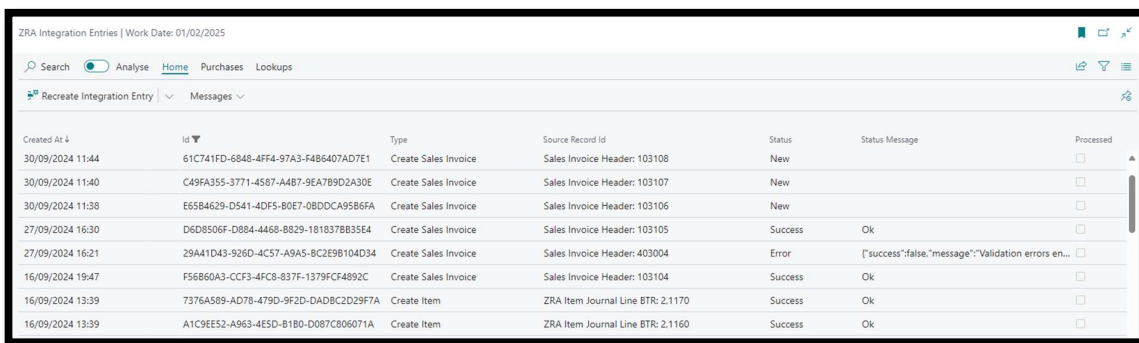
[New](#)

User Security ID	User Name	User Number
→ (84759790-002e4f94a743)	BRAINTREE\	1
(316145a3-12577a9ec5bb)	BRAINTREE\K	2
(85d33c2d-130a55cdd4f8)	BRAINTREE\A	3
(0b6f033e-162e93d55f3)	BRAINTREE\J	4
(3f640ef3-17fd3e0a4945)	BRAINTREE\N	5
(9a085ecb-1e1e5f2a2a5a)	BRAINTREE\N	6
(60abbff0-2b4e88151991)	BRAINTREE\D	7
(e663b704-3-2e40597aaa7b)	BRAINTREE\J	8
(6ae7270e-310696e4541a)	BRAINTREE\C	9
(ea9c0c4f-3270685d2d8b)	BRAINTREE\E	10
(cc9ce53c-33b5c273d677)	BRAINTREE\C	11
(f2776abb-3615f5d7cb88)	BRAINTREE\K	12
(b096cfce-1289104393f6)	BRAINTREE\C	13
(7856c2d1-4312d89cec09)	BRAINTREE\D	14
(fc2223b1-459eb4e38984)	BRAINTREE\T	15
(e64844fb-463e1a12ea7d)	BRAINTREE\C	16
(480dbd84-495ad934f44b)	BRAINTREE\D	17
(3e69784f-4d6b370129c2)	BRAINTREE\W	18
(10e34968-5395af402ae3)	BRAINTREE\B	19
(24585c18-1-5d98f6ae4c2c)	BRAINTREE\K	20
(bfee6e25-6072e9cd4ef)	BRAINTREE\C	21
(bf60e675-717c9a983666)	BRAINTREE\V	22
(05666718-7-719e74318048)	BRAINTREE\G	23
(06573ae9-72e40fab4770)	BRAINTREE\A	24
(6b4b6faf-7922598d6555)	BRAINTREE\K	25
(6ec319c3-822ecc5c0ebe)	BRAINTREE\C	26

3 Integration with ZRA

The Braintree ZRA Smart Invoice Connector enables you to automate your tax compliance and submission processes with the ZRA system.

1. Integration happens in the background and without user interaction. On posting of Sales and Purchase documents, the system creates:
 - a. Integration Entries. Serves as a log for what has or has not been submitted.
 - i. Also carries status codes and messages for troubleshooting.
 - ii. User can resubmit entries for processing from here.
 - b. Job Queue Entries. Background process that is responsible for processing the requests.



Created At	Id	Type	Source Record Id	Status	Status Message	Processed
30/09/2024 11:44	61C741FD-6848-4FF4-97A3-F4B6407AD7E1	Create Sales Invoice	Sales Invoice Header: 103108	New		<input type="checkbox"/>
30/09/2024 11:40	C49FA355-3771-4587-A4B7-9EA789D2A30E	Create Sales Invoice	Sales Invoice Header: 103107	New		<input type="checkbox"/>
30/09/2024 11:38	E6584629-D541-4DF5-80E7-0BDDCA95B6FA	Create Sales Invoice	Sales Invoice Header: 103106	New		<input type="checkbox"/>
27/09/2024 16:30	D6D8506F-D884-4468-B829-1818378B35E4	Create Sales Invoice	Sales Invoice Header: 103105	Success	Ok	<input type="checkbox"/>
27/09/2024 16:21	29A41D43-926D-4C57-A9A5-8C2E9B104D34	Create Sales Invoice	Sales Invoice Header: 403004	Error	["success":false,"message":"Validation errors en...	<input type="checkbox"/>
16/09/2024 19:47	F56860A3-CCF3-4FC8-837F-1379CF4892C	Create Sales Invoice	Sales Invoice Header: 103104	Success	Ok	<input type="checkbox"/>
16/09/2024 13:39	7376A589-AD78-479D-9F2D-DAD8C2D29F7A	Create Item	ZRA Item Journal Line BTR: 2.1170	Success	Ok	<input type="checkbox"/>
16/09/2024 13:39	A1C9EE52-A963-4E5D-81B0-D087C806071A	Create Item	ZRA Item Journal Line BTR: 2.1160	Success	Ok	<input type="checkbox"/>

3.1 Invoices & Credit Memos (Sales & Purchases)

ZRA requires certain information on the documents. Checks have been put in place to ensure that they are captured before a document can be released and posted.

Note: Posted Sales Documents (Invoices and Credit Memos) need to be submitted to the ZRA before they can be printed. The ZRA mandates that certain information is printed on all invoices, but this information is only returned from ZRA after submission. A custom automated job could be configured to print or send invoices by email after reply is received from the ZRA Smart Invoice system.

Requirements:

1. Payment Method Code – Required field on header
2. If Credit Memo or Return Order
 - a. Reason Code - Required field on header
 - b. Applies-to Doc. Type
 - c. Applies-to Doc. No.
3. VAT Posting Setup combination must have a linked ZRA VAT Type
4. ZRA Smart Invoice No. (Purchase only)

Checks during integration:

1. Item must be registered from the ZRA Item Worksheet.

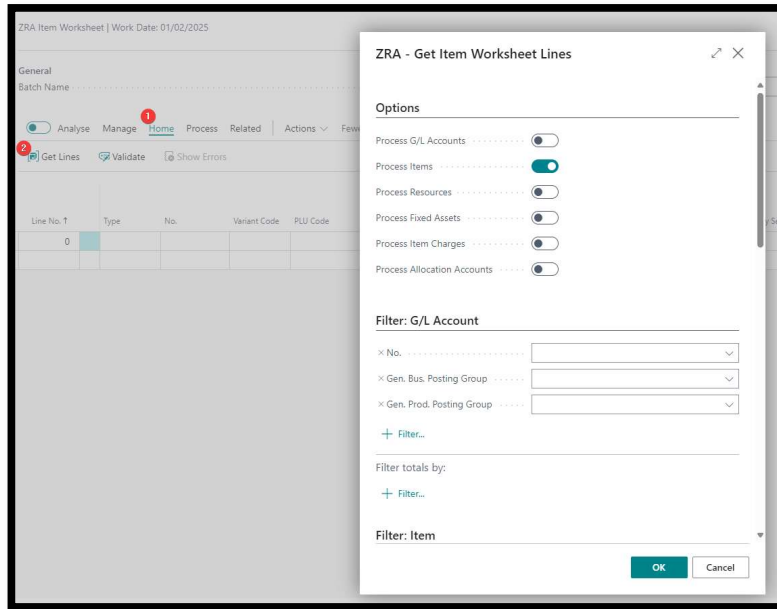
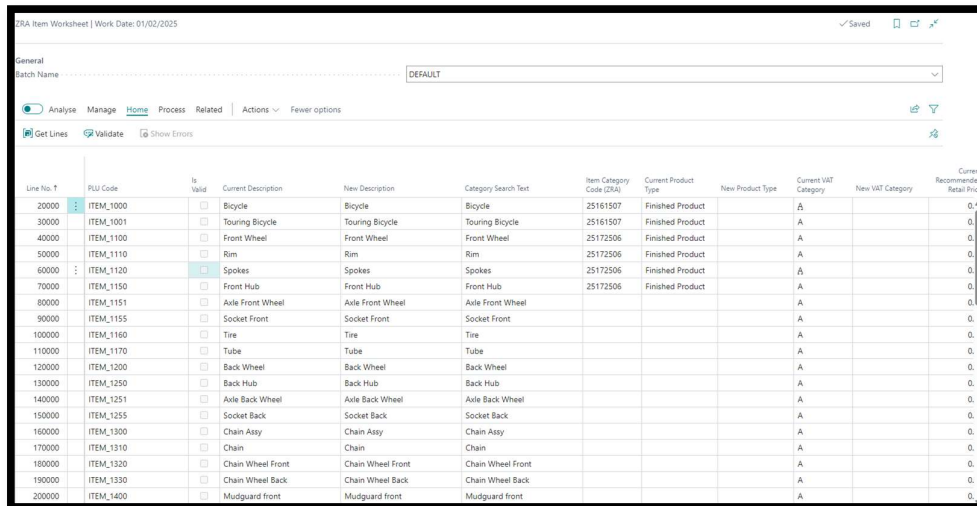
Recommended Retail Price, if required by the setup on the ZRA VAT Type

3.2 Item Worksheet

The ZRA Item Worksheet is used to register items with ZRA. It is a required step for document to be submitted.

1. Search for and open the ZRA Item Worksheet.
2. Select a Batch Name to work in.
3. On the ribbon menu, click Home | Get Lines
4. Select the entities you want to pull into the worksheet
5. The filters for each entity will only apply if the entity is selected to be processed.

6. Click OK. The worksheet is now populated with the default information for the entity. If the entity has been registered previously, the user will be able to update the record.

Line No.	PLU Code	Is Valid	Current Description	New Description	Category Search Text	Item Category Code (ZRA)	Current Product Type	New Product Type	Current VAT Category	New VAT Category	Current Recommended Retail Price
20000	ITEM_1000	<input type="checkbox"/>	Bicycle	Bicycle	Bicycle	25161507	Finished Product		A		0.
30000	ITEM_1001	<input type="checkbox"/>	Touring Bicycle	Touring Bicycle	Touring Bicycle	25161507	Finished Product		A		0.
40000	ITEM_1100	<input type="checkbox"/>	Front Wheel	Front Wheel	Front Wheel	25172506	Finished Product		A		0.
50000	ITEM_1110	<input type="checkbox"/>	Rim	Rim	Rim	25172506	Finished Product		A		0.
60000	ITEM_1120	<input type="checkbox"/>	Spokes	Spokes	Spokes	25172506	Finished Product		A		0.
70000	ITEM_1150	<input type="checkbox"/>	Front Hub	Front Hub	Front Hub	25172506	Finished Product		A		0.
80000	ITEM_1151	<input type="checkbox"/>	Axle Front Wheel	Axle Front Wheel	Axle Front Wheel				A		0.
90000	ITEM_1155	<input type="checkbox"/>	Socket Front	Socket Front	Socket Front				A		0.
100000	ITEM_1160	<input type="checkbox"/>	Tire	Tire	Tire				A		0.
110000	ITEM_1170	<input type="checkbox"/>	Tube	Tube	Tube				A		0.
120000	ITEM_1200	<input type="checkbox"/>	Back Wheel	Back Wheel	Back Wheel				A		0.
130000	ITEM_1250	<input type="checkbox"/>	Back Hub	Back Hub	Back Hub				A		0.
140000	ITEM_1251	<input type="checkbox"/>	Axle Back Wheel	Axle Back Wheel	Axle Back Wheel				A		0.
150000	ITEM_1255	<input type="checkbox"/>	Socket Back	Socket Back	Socket Back				A		0.
160000	ITEM_1300	<input type="checkbox"/>	Chain Assy	Chain Assy	Chain Assy				A		0.
170000	ITEM_1310	<input type="checkbox"/>	Chain	Chain	Chain				A		0.
180000	ITEM_1320	<input type="checkbox"/>	Chain Wheel Front	Chain Wheel Front	Chain Wheel Front				A		0.
190000	ITEM_1330	<input type="checkbox"/>	Chain Wheel Back	Chain Wheel Back	Chain Wheel Back				A		0.
200000	ITEM_1400	<input type="checkbox"/>	Mudguard front	Mudguard front	Mudguard front				A		0.

7. Required fields:
 - a. **New Description**
 - b. **Item Category Code (ZRA)**
 - c. **New Product Type**
 - d. **New VAT Category**
 - e. **New Recommended Retail Price** (mandatory if required by VAT Type)
 - f. **Quantity Unit of Measure Code (ZRA)** – see Integration Setup. This must be a code as defined by the ZRA.
 - g. **Packaging Unit of Measure Code (ZRA)** – see Integration Setup. This must be a code as defined by the ZRA.
 - h. **Country Code of Origin**

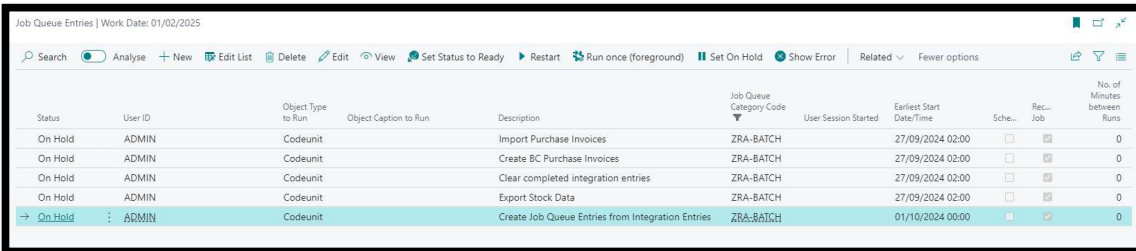
Click Home | Register Items. This will process the entries in a background process and the progress can be monitored on the Integration Entries page.

3.3 Job Queue

There are 5 Job Queue Entries that are created automatically when the extension is installed. Each of them performs different tasks for the integration to run smoothly.

By default,

1. **Create Job Queue Entries from Integration Entries:** Finds Integration Log Entries with **Status = New** and creates a Scheduled Task for them to be processed.
2. **Export Stock Data:** Submits registered ZRA Items (only linked to the Item table) to the Service Provider to satisfy the stock adjustment requirement. (Only applies when using Fiscal Edge as Service Provider)
3. **Clear completed integration entries:** Uses a parameter in the parameter string of the Job Queue Entry to specify the frequency at which it must check for and remove completed records out of the Integration Entries table.
4. **Import Purchase Orders:** If the service provider supports importing of purchase orders from other Smart Invoice customers, this will import the documents into a staging table.
5. **Create BC Purchase Invoices:** If the service provider supports importing of purchase orders from other Smart Invoice customers, this will create purchase documents from the staging tables.

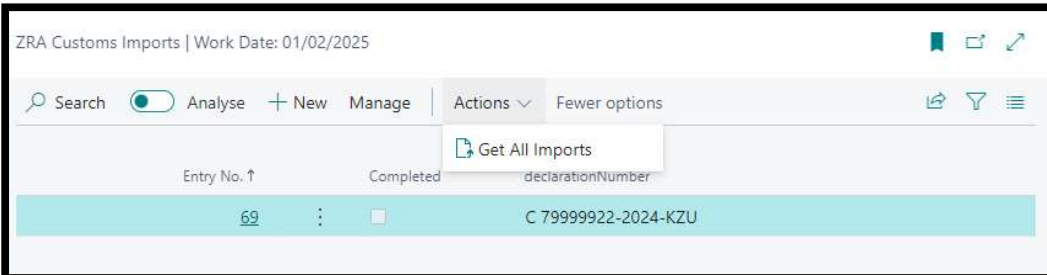


Status	User ID	Object Type to Run	Object Caption to Run	Description	Job Queue Category Code	User Session Started	Earliest Start Date/Time	Sche...	Rec... Job	No. of Minutes between Runs
On Hold	ADMIN	Codeunit		Import Purchase Invoices	ZRA-BATCH		27/09/2024 02:00	<input type="checkbox"/>	<input type="checkbox"/>	0
On Hold	ADMIN	Codeunit		Create BC Purchase Invoices	ZRA-BATCH		27/09/2024 02:00	<input type="checkbox"/>	<input type="checkbox"/>	0
On Hold	ADMIN	Codeunit		Clear completed integration entries	ZRA-BATCH		27/09/2024 02:00	<input type="checkbox"/>	<input type="checkbox"/>	0
On Hold	ADMIN	Codeunit		Export Stock Data	ZRA-BATCH		27/09/2024 02:00	<input type="checkbox"/>	<input type="checkbox"/>	0
On Hold	ADMIN	Codeunit		Create Job Queue Entries from Integration Entries	ZRA-BATCH		01/10/2024 00:00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0

3.4 Customs Imports

The ZRA Smart Invoice system allows users to accept or reject goods sitting at customs. This can be done on the Service Provider's portal, or in Business Central.

1. Search for and open the ZRA Customs Imports page
2. Click Actions | Get All Imports
3. This will fetch any pending imports
4. Open the Customs Import card for an import entry
5. For each line, update the **PLU Code** (a.k.a. ZRA Item No.)
6. Set the **Import Action** to either Approved or Rejected.
7. When all lines are updated, click Approve Lines action on the header.
8. This will submit your selection to the ZRA.



Entry No. ↑	Completed	declarationNumber
69	<input type="checkbox"/>	C 79999922-2024-KZU



ZRA Customs Import | Work Date: 01/02/2025

+

✓ Saved

69

✓ Approve Lines

General

Entry No.

69

declarationNumber

C 79999922-2024-KZU

Completed

Lines

New Line

Delete Line

	id	itemName	PLU Code	hscode	quantity	Import Action	Status
→	232	SANDBOX IMPORTS ITEM THULANI 2	ITEM_1000	48191000	100.00		Approved
	233	SANDBOX IMPORTS ITEM THULANI 3	ITEM_1001	48191000	100.00		Rejected
	234	SANDBOX IMPORTS ITEM THULANI 4	ITEM_1100	48191000	100.00		Approved

4 Troubleshooting

If you encounter any issues or errors while using the Braintree ZRA Smart Invoice Connector, refer to the troubleshooting guide below:

- Check the Integration Entry or Job Queue Entries for error messages
- Verify that the system settings are correct
- Contact the Braintree support team for assistance.

Email: bcsupport@braintree.co.za