i95Dev Dynamics BC Connect User Manual

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1. Introduction

i95Dev BC Connect is a secure, scalable and an efficient way of integrating your Magento e- commerce and Microsoft Dynamics BC system without impacting the client's existing workflows. i95Dev BC Connect is more than just information sync and helps you increase sales, reduce costs, improve operational efficiency, and provide superior customer experience thus enabling you to take your business to the next level.

The bidirectional information sync results in consistent data across the systems, which helps reduce the manual administrative work, improves efficiency, streamlines order fulfilment, inventory and more.

1.1. About this guide

The objective of the document is to help users understand i95Dev BC Connect features and its functionality. The document works on the premise that the reader is familiar with Magento and Dynamics BC ERP systems.

The manual is divided into the following parts:

1	Introduction	A note about the guide, and terminologies used.
2	Configuration and setup	Instructions to enable and configure i95Dev BC Connect
3	Information exchanged between Magento and Dynamics BC	List of data synchronized between Magento and Dynamics BC.
4	Magento admin dashboard	Changes made in Magento admin screens to view Dynamics BC Information (like BC IDs, order status, etc.) associated with a record in Magento.
5	i95Dev message queue reports in Magento	About report functionality in Magento to view sync status, and more.

1.2. Terminologies

- **Customer -** Customer details
- **Address -** Order details
- **Product** - Product detail
- **Order** - Order details
- **Invoice** - Invoice details
- **Shipment** - Shipment details
- **Connector** – i95Dev BC Connect
- **Magento admin** - Magento's admin panel or web store's backend

2. Configuration and Setup

Once i95Dev BC Connect is installed on your Magento system a main menu I95DEV and a tab, i95Dev Connector Settings is added to the store configurations screen. Here you can configure settings related to i95Dev BC Connect.

Note - This document is only for your reference. When BC Connect is installed, the i95Dev team takes care of installation and configuration of the connector.

i95Dev Connector Settings tab is where you can manage all settings related to the connector and has the following seven sections.

- i95Dev Extension
- i95Dev Connector Settings
- i95Dev Connect Notifications
- General Contact Info
- Credentials
- i95Dev Message Queue Settings
- i95Dev Connect Log Settings

2.1. Enabling the Connector

The connector, when installed, is by default in enabled mode. For connector to start synchronizing data between Magento and Dynamics BC, it must first be enabled from the store configurations screen.

Follow the following steps to enable the Connector from Magento admin.

1. **Sign in** to your Magento admin dashboard.
2. Click **Store** in the left admin bar, then click **Configurations** in the Settings group.
3. Scroll down and expand **i95Dev Connect tab** in the left navigation pane as shown in Figure 1.
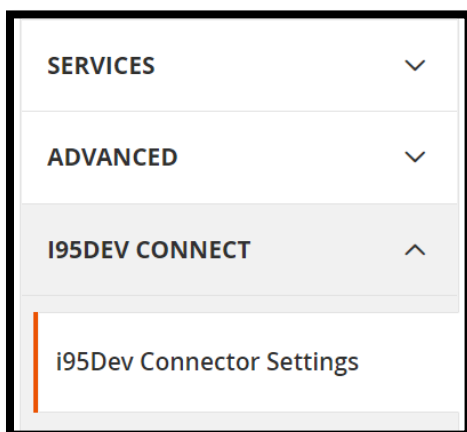4. Click **i95Dev Connector Settings** and expand **i95Dev Extension** tab.

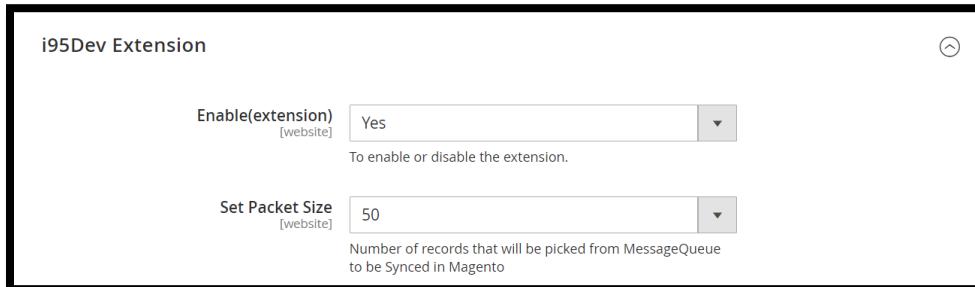

Figure 1: i95Dev Connector Settings

Figure 2: i95Dev Extension tab

5. Select **Yes** in the **Enable** drop-down list.

6. Set **Package Size** from drop-down list. By default the value is **50**.

2.2. Setting up the Connector

1. Select **BC** in the **Component** drop-down list.

2. In the **Capture Invoice** drop-down list, select **Yes** if you would like to capture amount online, else select **No**.
   a. **Note**: Only Authorize.net and PayPal payment methods are supported by default for capturing the amount online.

3. In the **Default Customer Group** drop-down list, select a Customer Group that is to be assigned to a Customer If no customer group provided from Dynamics BC in customer sync from Dynamics BC to Magento.

4. In the **Product Attribute Set** drop-down list, select a Product Attribute Set that is to be assigned to Product that is synced from Dynamics BC to Magento

5. In the **Attribute Group** drop-down list, select an Attribute Group that is to be assigned to Product Attribute that is created in Product Sync from Dynamics BC to Magento

2.3. Setting up Connector notifications

1. In the **E-Mail Confirmations** combo-box select the records (use ctrl key to select more than one options) for which you wish to enable notification.
   a. **Invoice**   When selected, a confirmation email is sent to the customer after an invoice is synced from Dynamics BC to Magento.
   b. **Shipment**   When selected, a confirmation email is sent to the customer after a shipment is created from Dynamics BC to Magento.

2. In the **Order Total Mismatch Notification** drop-down list**,** select **Yes** to enable admin notifications when there is a mismatch between Magento and Dynamics BC order

2.4. General Contact Info

1. Provide **Admin Email** to which want to receive data sync failed email notifications, **Admin Username** which will be displayed in data sync failed email notifications

2.5. Credentials

1. Provide **API Integration Token (**Token can be generated from Magento admin by following this link**)**, which will be used for communication between Magento and Dynamics BC.

2. Provide **Encryption Pass Key** as "**jZjneNba78tqCuB8l8eQrXoAigmbjIwwngYfjEdnnLg**=", which will be used to encrypt and decrypt the data that is transferred between Magento and Dynamics BC

2.6. i95Dev Message Queue Settings

1. Provide **Retry Limit** count, if this value is provided if any record failed to sync to Magento from Dynamics BC then that record will be try to sync again and again until this configuration value reached.

2. Provide **MQ Data Clean Days:** The data which is created before the configured days will be deleted from Message Queue.

2.7. i95Dev Connect Log Settings

1. Select **Yes** from drop-down list of **Enable Logs** configuration to generate connector related logs.

2. Provide **Log Clean Days**: The connector logs which are generated before configured days will be deleted.

3. Provide **Log Archive Days:** The connector logs which are generated before configured days will be archived.

4. Provide **Max Log Size** in **kb,** if generated log reaches the configured size a new log will be generated with same name by appending a suffix 1, 2, 3….

2.8. Implementing Locale

i95Dev BC Connect by default is implemented in English language which is configured using a CSV file. Follow the following steps to view custom fields and labels in your preferred language:

1. To display custom fields in your preferred language, download the English template, add preferred language, and upload the same to Magento FTP as shown below.

Figure 3: Locale Implementation

3. Data synced between Magento and Dynamics BC

Connector by default synchronizes the following information between Magento and Dynamics BC

Element	Magento to BC	BC to Magento
Customer	Y	Y
Address	Y	Y
Product	Y	Y
Inventory	N	Y
Order	Y	Y
Shipment	N	Y
Invoice	N	Y
Order Status	N	Y
Tier Price/ Price Group	N	Y

4. Magento admin dashboard

4.1. Customer

4.1.1. Email Address

Customer email address is mandatory field in Magento, hence customer records created in Dynamics BC must have an email address. In cases where an email address in not available, the Connector automatically generates and assigns a dummy email address. This email address generated follows the following format:

BCcustomerid@companyname.com

In the above email address the **BCcustomerid** is the Customer ID given at the time of Customer creation in Dynamics BC and **companyname** is the name of the BC Company. This email id can be updated later.

4.1.2. Primary Address

As with email, primary address is mandatory in Magento. Hence a customer record created in Dynamics BC must have a primary address associated with the customer record for successful synchronization to Magento.

4.1.3. Customer grid and information screen

Once a Customer record is synced between Magento and Dynamics BC, you can view the BC Customer ID in Magento admin's Customer information screen.

We added two additional columns to Magento admin's Customer grid, Origin - to identify the originator (the source system where the record was created), and BC Customer ID – to display the primary identifier of the record in Dynamics BC to help correlate the records in Magento and BC.

	Origin	BC Customer ID	ID ↑	Name	Email	Group	Phone	ZIP	Country	State/Province	Customer Since	Web Site	Confirmed email	Account Created in	Action
☐	BC	C00110	10	Chris R. Bants	chrisbant@mail.com	General					Dec 9, 2021 3:12:05 PM	Main Website	Confirmation Not Required	Default Store View	Edit
☐	website	C00100	9	Joseph Q. Ann	josephann@test.com	General	8984038012	47408	United States	Indiana	Dec 9, 2021 3:00:21 PM	Main Website	Confirmation Not Required	Default Store View	Edit
☐	website	C00090	8	venu gopal	venu.sap119@gmail.com	General					Dec 8, 2021 2:46:07 PM	Main Website	Confirmation Not Required	Default Store View	Edit
☐	BC	C00080	7	Alia isha	aliaisha1@gmail.com	General					Dec 8, 2021 8:44:05 AM	Main Website	Confirmation Not Required	Default Store View	Edit

Figure 4: Customer grid in Magento admin

Similarly, the Connector adds an additional BC Information section in the account Information tab. This section displays customer's BC Customer ID and Price Group assigned (if any) to the Customer.
1. Go to the **Customer View** tab in the **Customer Information** screen.
2. Scroll down to the BC Information section to view Customer's **BC Customer ID** and **Price Group**.

Figure 5: Customer's BC Information in Magento admin

4.2. Order

4.2.1. Order grid and information screen

As with Customer grid, the same two columns are also added to the Order grid – Origin and BC Order ID.

	ID	Purchase Point	Purchase Date ↑	Bill-to Name	Ship-to Name	Grand Total (Base)	Grand Total (Purchased)	Status	BC Order ID	Origin	Action	Allocated sources	Signifyd Guarantee Decision
☐	000000013	Main Website Main Website Store Default Store View	Dec 9, 2021 3:32:20 PM	Chris R. Bants	Chris R. Bants	$45.00	$45.00	Complete	S-ORD101017	BC	View	Default Source	
☐	000000012	Main Website Main Website Store Default Store View	Dec 9, 2021 3:28:11 PM	Joseph Q. Ann	Joseph Q. Ann	$48.00	$48.00	Complete	S-ORD101018	website	View	Default Source	
☐	000000011	Main Website Main Website Store Default Store View	Dec 8, 2021 11:07:27 AM	michael jackson	michael jackson	$51.98	$51.98	Pending	S-ORD101016	website	View		

Figure 5: Order grid in Magento admin

Similar to Customer information page, an additional section, BC Information, is also added to the Order information page. This section displays BC Order ID, Order Status and BC Invoice ID.

1. Go to **Information tab** in the **Order View** screen.
2. Scroll down to the BC Information section to view Order's **BC Order ID**, **BC Order Status**

   and **BC Invoice ID**.

Order & Account Information

Order # 000000013 (The order confirmation email was sent)

Order Date	Dec 9, 2021, 3:32:20 PM
Order Status	Complete

Account Information

Customer Name	Chris R. Bants
Email	chrisbant@mail.com
Customer Group	General

BC Information

BC Order ID	S-ORD101017
BC Order Status	Complete
BC Invoice ID	PS-INV103221
BC Shipment ID	S-SHPT102221

Figure 6: BC Information of Order in Magento admin

Note: For invoice and shipment, the Connector by default assumes the Dynamics BC system as the master. Hence, both the invoice and shipment information is synchronized only from Dynamics BC to Magento.
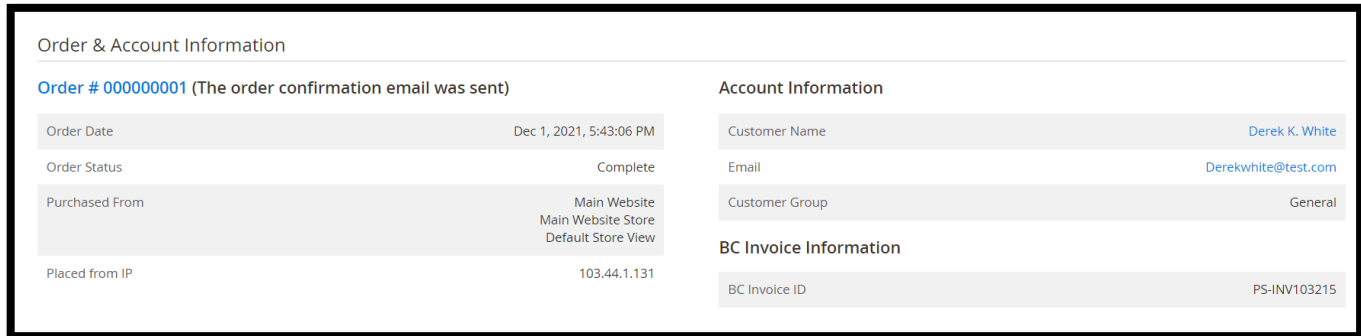
4.3. Invoice

4.3.1. Invoice grid and information screen

Once an Invoice record is synced to Magento from Dynamics BC, you can view the BC Invoice ID in Magento admin's Invoice information screen.

Invoice ↓	Invoice Date	Order #	Order Date	Bill-to Name	Status	Grand Total (Base)	Grand Total (Purchased)	BC Invoice ID	Action
000000001	Dec 1, 2021 5:49:06 PM	000000001	Dec 1, 2021 5:43:06 PM	Derek K. White	Paid	$505.00	$505.00	PS-INV103215	View
000000002	Dec 1, 2021 5:50:08 PM	000000002	Dec 1, 2021 5:47:06 PM	Peter W. Saint	Paid	$550.00	$550.00	PS-INV103216	View
000000003	Dec 7, 2021 7:30:07 AM	000000004	Dec 7, 2021 7:23:48 AM	Derek E. Young	Paid	$46.00	$46.00	PS-INV103217	View
000000004	Dec 7, 2021 7:31:05 AM	000000005	Dec 7, 2021 7:28:05 AM	Cedric J. France	Paid	$42.00	$42.00	PS-INV103218	View

Figure 7: Invoice grid in Magento admin

We added an additional column to Magento admin's Invoice grid, BC Invoice ID – to display the primary identifier of the record in Dynamics BC to help correlate the records in Magento and BC.
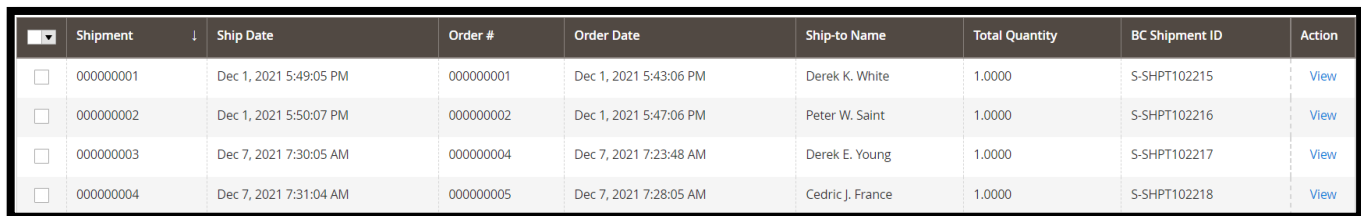

Figure 8: BC Information of Invoice in Magento admin

4.4. Shipment

4.4.1. Shipment grid and information screen

Once a Shipment record is synced to Magento from Dynamics BC, you can view the BC Shipment ID in Magento admin's Shipment information screen.

Figure 9: Shipment grid in Magento admin

We added an additional column to Magento admin's Shipment grid, BC Shipment ID – to display the primary identifier of the record in Dynamics BC to help correlate the records in Magento and BC.

Figure 10: BC Information of Shipment in Magento admin

4.5. Product

4.5.1. Inventory & Tier Prices

For inventory and tier prices, the Connector by default assumes the Dynamics BC system as the master. Hence, both the inventory and tier pricing information is synchronized only from Dynamics BC to Magento.

4.5.2. Product grid and information screen

In Product grid we add one column – BC Product Status. Products successfully synced between Magento and Dynamics BC have status as "synced".

	ID ↑	Thumbnail	Name	Type	Attribute Set	SKU	Price	Quantity	Salable Quantity	Visibility	Status	Websites	BC Product Status	Variant Id	Action
☐	14		Dump Truck	Simple Product	Default	Dump Truck	$1,700.00	150.0000	Default Stock: 150	Catalog, Search	Enabled	Main Website	synced		Edit
☐	13		SCOOTER	Simple Product	Default	SCOOTER	$48.00	378.0000	Default Stock: 378	Catalog, Search	Enabled	Main Website	synced		Edit
☐	12		Breads	Simple Product	Default	Breads	$45.00	358.0000	Default Stock: 358	Catalog, Search	Enabled	Main Website	synced		Edit
☐	11		Cream	Simple Product	Default	1005-CREAM	$42.59	1000.0000	Default Stock: 1000	Not Visible Individually	Enabled	Main Website	synced		Edit

Figure 11: Product sync status, from Magento to Dynamics BC

5. Inbound Message Queue in Magento

The Inbound Message Queue Report gives an overview of the status of data sync transactions happening from Dynamics BC to Magento. The sync status can be viewed for the following entities:

Customer	Product	Order
Address	Tier Price	Invoice
Inventory	Price Group	Shipment

This is a dynamic report; once the record has synced successfully there would be no records in the report section.

5.1. Sync status

The Connector assigns the following status to each record during various stages of the sync process

Pending	Status used for incoming data – once the Connector starts receiving a message (data of an entity) from Dynamics BC. At this stage, the data is received by Magento but yet to be synced.
Processing	Status used for records, which have picked up from Inbound Message Queue to Magento
Success	Status used for records, which have successfully synced to Magento.
Error	Status used when the Connector encounters an error during the sync process.
Complete	Status used when a record is successfully synced to Magento and the success acknowledgement is sent back to the Dynamics BC system.

5.2. Manual data sync

For every records that fail to sync to Magento (records with sync status "Error"), the connector attempts to re-sync the record couple of times which is pre-configured. In the process, if the record successfully syncs then the status is changed to "Success**"** and then to "Complete" as discussed above. However, if the record fails to sync even after a pre-configured number of attempts, the automated retry process is stopped and will be removed from the message queue periodically (pre-configured).

Magento administrator can manually sync (after resolving the issue that is causing the automated sync to fail.

5.3. Clean up synced data

To avoid the message queue from getting overwhelming (to understand and in size), the Connector periodically (pre-defined) removes the data, with sync status "Complete" and "Error", from the message queue.

5.4. Viewing sync report and manually syncing data

Please follow the following steps to view sync report and to manually sync records with sync status Error.

1. **Login** as administrator in **Magento admin** panel.

2. Click **I95DEV** in the **Admin sidebar** → click **Inbound Message Queue** in **Reports** group.
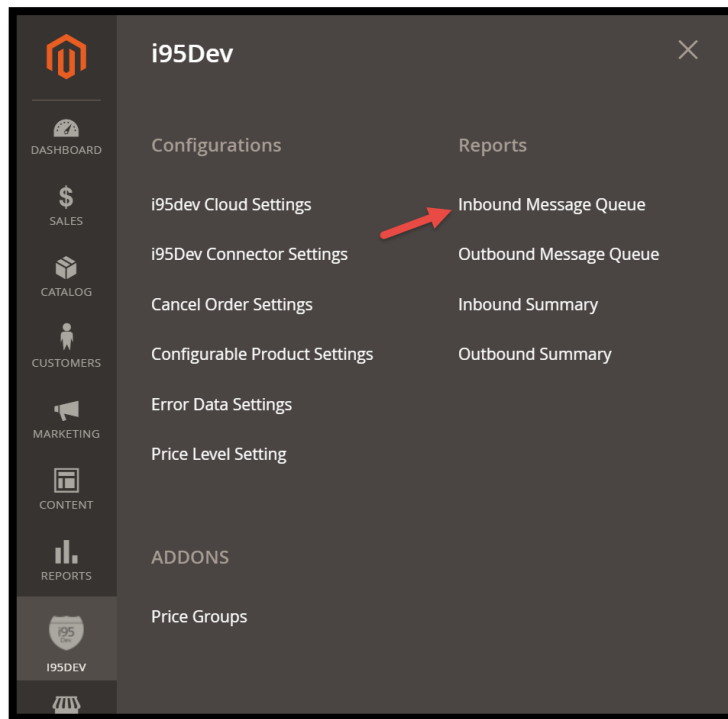   The system displays the Inbound Message Queue Report screen.

Figure 12: Navigation to Inbound Message Queue

3. Select the entity type in **Entity** drop-down list for which you wish to see the sync report.

Figure 13: Entity in Inbound Message Queue

4. To view records with sync status Error, select **Error** from the **Status** drop down list and click **Search**

Figure 14: Entity Status in Inbound Message Queue

5. Select all records (check box) you wish to sync manually and select **Sync** from the **Actions** Drop-down list.

6. Click **Submit**.

6. Outbound Message Queue in Magento

The Outbound Message Queue Report gives an overview of the status of data sync transactions happening from Magento to Dynamics BC. The sync status can be viewed for the following entities, this is a dynamic report

Customer	Order
Product	-

6.1. Sync status

The Connector assigns the following status to each record during various stages of the sync process

Pending	Status used for outgoing data – once the Connector starts receiving a message (data of an entity) from Magento. At this stage, the data is received by Connector Outbound Message Queue but yet to be synced.
Request Transferred	Status used for records, which sent from Outbound Message Queue to Dynamics BC
Processing	Status used for records, which have picked up from Outbound Message Queue to Dynamics BC
Error	Status used when the Connector encounters an error during the sync process.
Complete	Status used when a record is successfully synced to Dynamics BC and the success Acknowledgement is sent back to the Magento.

6.2. Clean up synced data

To avoid the message queue from getting overwhelming (to understand and in size), the Connector periodically (pre-defined) removes the data, with sync status "Complete" and "Error", from the message queue.

6.3. Viewing sync report

Please follow the following steps to view sync report of Outbound Message Queue
1. **Login** as administrator in **Magento admin** panel.

2. Click **I95DEV** in the **Admin sidebar** → click **Outbound Message Queue** in **Reports** group. The system displays the Outbound Message Queue Report screen.
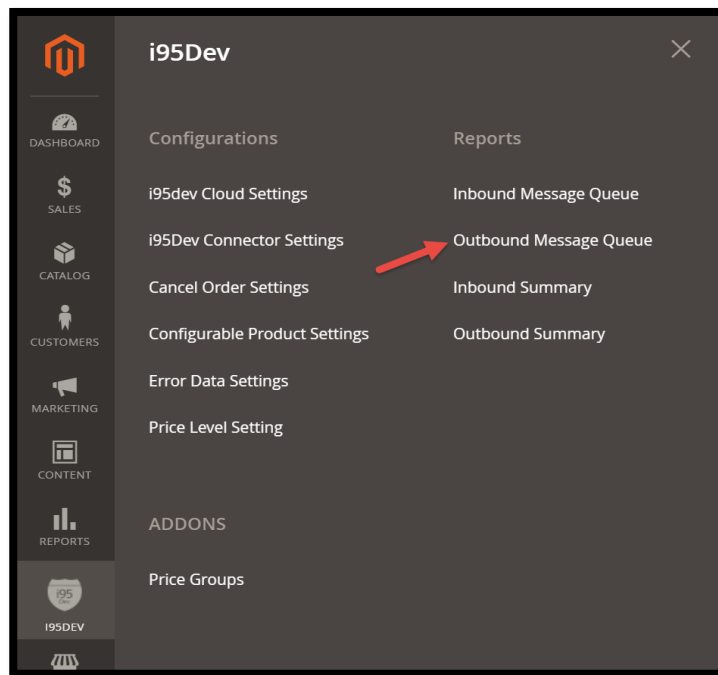
Figure 15: Navigation to Outbound Message Queue

Figure 16: Outbound Message Queue in Magento

7. Summary Reports in Magento

7.1. Inbound Summary

The Inbound Summary Report gives status wise count of the records for different entities like Customer, Order and Product etc., that are syncing from Dynamics BC to Magento.

Please follow the following steps to view sync summary report of Inbound Message Queue

1. **Login** as administrator in **Magento admin** panel.

2. Click **I95DEV** in the **Admin sidebar** → click **Inbound Summary** in **Reports** group. The system displays the Inbound Message Queue Summary Report screen.

Inbound Summary reportt						
Entity	Pending	Processing	Error	Success	Complete	Total by Entity
Address	16	0	2	0	45	63
Customer	3	0	2	0	17	22
Inventory	0	0	5	0	26	31
Invoice	1	0	2	0	3	6
Order	5	0	6	0	4	15
Price Level	0	0	0	0	1	1
Product	0	0	0	0	19	19
Shipment	1	0	2	0	3	6
Total by Status	28	5	19	0	120	172

Figure 17: Inbound Message Queue Summary Report in Magento

7.2. Outbound Summary

The Outbound Summary Report gives status wise count of the records for different entities like Customer, Order and Product etc., that are syncing from Magento to Dynamics BC.

Please follow the following steps to view sync summary report of Outbound Message Queue

1. **Login** as administrator in **Magento admin** panel.

2. Click **I95DEV** in the **Admin sidebar** → click **Outbound Summary** in **Reports** group. The system displays the Outbound Message Queue Summary Report screen.

Outbound Summary Report					
Entity	Pending	Request Transferred	Error	Complete	Total by Entity
Customer	0	0	2	35	37
Order	0	0	6	11	17
Product	0	0	3	7	10
Total by Status	0	0	11	53	64

Figure 18: Outbound Message Queue Summary Report in Magento