Avery Dennison®

Freshmarx®

Connect

**User Manual** 





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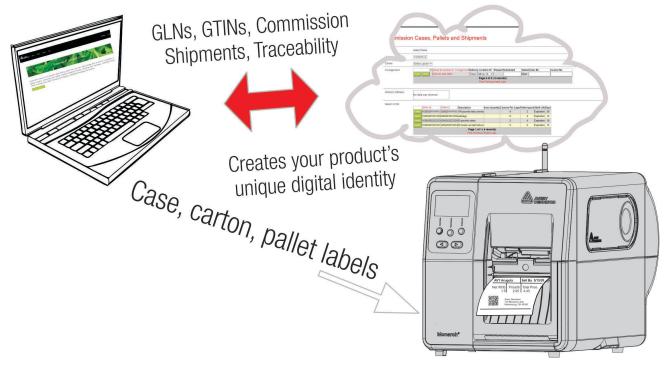
#### **Trademarks**

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## **Getting Started**

Freshmarx Connect is a Web-hosted food-traceability application that allows you to setup Global Location Numbers (GLNs), Global Trade Item Numbers (GTINs), and commission cases, pallets, and shipments. It creates the digital identity (record) of your product in the supply chain. Use an Avery Dennison® Monarch® Tabletop RFID Printer 2 (ADTP2) to print case/carton/pallet labels containing GS1 Standard data.



Freshmarx Connect requires preliminary setup. This may be done by your Avery Dennison Representative. It is not covered in this document:

- Registering users
- Obtaining a GS1 Company prefix.
   The GS1 company prefix is your company's unique identification number. If you have many products, your company may need more than one GS1 company prefix.
- Set up Global Location Numbers (GLNs).
- Set up Global Trade Item Numbers (GTINs).
   Create these numbers for all products. For example, you sell cabbage and cauliflower. Create an Item GTIN for a head of cabbage and an Item GTIN for a head of cauliflower.

### Use this document to

- 1. Connect your printer.
- 2. Log into Freshmarx Connect.
- 3. Print labels.

## System Requirements

The PC (running Freshmarx Connect) must use

- ♦ Microsoft® Windows® 10 (or greater)
- Google Chrome Version 83 (or greater)
- Microsoft® Edge Version 91.0.864.48 (or greater)
- Brave 1.24.86 (or greater)

## **Connecting the Printer**



Freshmarx Connect uses a GENERIC Microsoft Windows driver. Use the following instructions to install the ADTP2 printer driver.

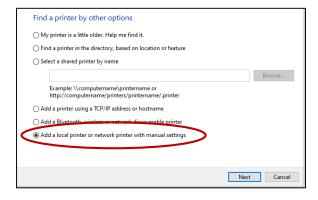
Microsoft Windows Administrator rights are needed to install printer drivers. If you need assistance, contact your IT department.

Connect your ADTP2 printer using WiFi, Ethernet, serial or a USB cable to the PC running Freshmarx Connect. Printing is done using a Windows Print Driver. Create a generic text printer that points to the connected port.

- 1. Turn on the printer.
- 2. On your PC, open Settings, Devices, then Printers & Scanners.
- Select + Add a printer or scanner. Your PC searches for available printers.
- **4.** Scroll through the list and select The printer that I want isn't listed.



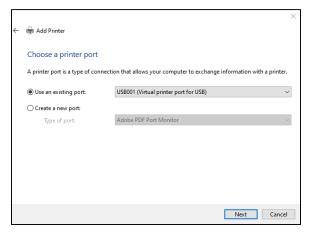
5. Select Add a local printer or network printer with manual settings. Click Next.





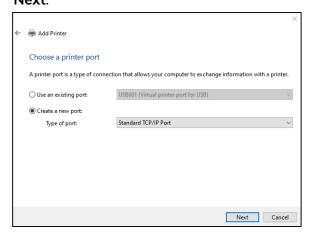
**6.** Select Use an existing port; select the port that appeared after connecting the ADTP2 printer.

For example, USB001. Click Next.



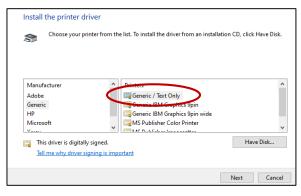
7. Select Use the driver that is currently installed. Click **Next**.

For network printers, select Create a new port, select Standard TCP/IP Port and click **Next**.



Enter the printer's IP Address. Click Next.

8. Select Generic as the Manufacturer and Generic/Text Only for the printer. Click Next.

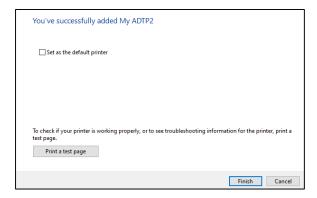


- If the Generic/Test Only driver does not appear in the list, then click **New Driver**. Select Manufacturer as Generic, and Printers as Generic/Text Only.
- 9. Enter a name for the printer. For example, "My ADTP2." Click **Next**.



- 10. Select Do not share this printer. Click Next.
- 4 Freshmarx Connect User Manual Classification: Avery Dennison Public

11. Decide if you want this printer to be your default and click Finish.



The printer is installed.

## Using the ADTP2 Printer

Labels are available in a variety of sizes and RFID inlay types - contact your Avery Dennison Representative for supply recommendations.

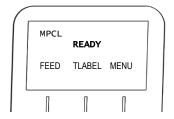


To configure RFID settings, you have two options – <u>Auto Calibration</u> or Easy Setup. Auto Calibration is the preferred method.

### Loading RFID Supply

Load supply according to your printer's Operator's Handbook.

After connecting the printer and loading supplies, make sure the printer is ready to receive data - the displays shows **Ready**.



RFID supplies can be damaged by static electricity. Ground

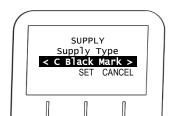


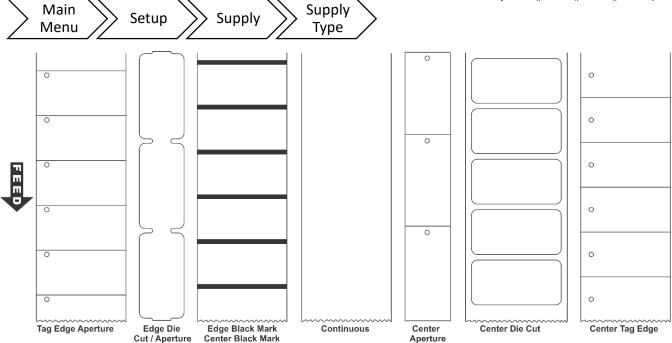
yourself by touching metal, such as the printer's metal base, before handling the RFID supplies.

Printing over the RFID inlay causes printing irregularity and may impact bar code print quality.

### Setting the Supply Type

The printer can print on aperture, black mark, die cut, or continuous supplies (see examples pictured). Set the printer's supply type to match the loaded supplies.





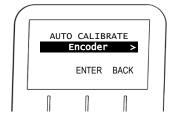


Select **C Black Mark** for black marks across the entire width of the supply. The black marks are used for supply sensing.

### **Using Auto Calibration**

Use the Auto Calibration Menu (with version 4.0 or higher) to automatically determine the RFID read/write settings and print speed. Auto Calibration is the preferred method to configure RFID settings.





#### Auto Calibration options include:

Option	Choices	Default
Encoder	Runs auto calibration using the encoder	N/A
Verifier	Runs auto calibration using the verifier	N/A
Power	Normal, High *use Normal unless otherwise directed by Avery Dennison	Normal

- ◆ Load RFID supply into the printer (refer to the Operator's Handbook for details). Expect to use 5-7 labels each time auto calibration runs (takes up to three minutes to complete). After Auto Calibration is done, the supplies may be re-rolled for use/printing. No inlays are encoded and nothing is printed during Auto Calibration. Run Auto Calibration after changes in supply/inlay type.
- Auto Calibration accounts for slight variations between printers and supply, we recommend running Auto Calibration on <u>each</u> of your printers.
- Auto Calibration fails if the supply contains non-functional inlays. Make sure your RFID supplies do not have marked inlays or other defects in the calibration process.
- Auto Calibration is only for use with non-stop encoding (typically used for batch printing). Use <a href="Easy Setup"><u>Easy Setup</u></a> for RFID configuration when printing and encoding in on-demand mode.
- Auto Calibration sets the print speed to the highest possible based on the ability to reliably encode
  the inlays. You may need to adjust the print speed DOWN to improve print quality and/or if you are
  writing more than 96-bits to the EPC.

#### Successful Auto Calibration

When auto calibration is successful, you see a green success message, click **OK**. RFID settings and print speed are automatically set. Run a test RFID job with at least 10 labels including EPC information. Read a few random labels to make sure the programmed tag matches the printed EPC information.

#### Unsuccessful Auto Calibration

If a motion error occurs (supply jam, out of supply, etc.) during calibration, the error is reported with an error number. Click **OK** to acknowledge the error. Correct the error and retry auto calibration.

### Failed Auto Calibration

If an auto calibration-specific error occurs, you see "Auto Calibrate Failed". Click **OK** to clear the error. Press **Feed** to feed a blank label and repeat Auto Calibration. If it fails a second time, re-inspect the supply and check for marked inlays or defects. Repeat Auto Calibration. If the process fails again, contact Service.

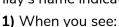
### **Using Easy Setup**

Use the printer's Easy Setup menu if you did not use Auto Calibration for RFID settings. Refer to the

System Administrator's Guide for more information. From the Main menu, select Setup, RFID, Easy Setup. Then, select the inlay's name and enter the inlay

position (found on your RFID supply roll).

For example, the RFID supply roll indicates your supply is AD-238U8 GWC 003 (the digits after the inlay's name indicate the Inlay Position):





2) Press ENTER.

3) Press → until you see



4) Press ENTER.

5) Press → until you see Inlay Pos. then press ENTER.

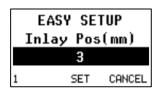
Lot No: RHT-32891800A-1D3

ate: 2021-01-25 21:49

Total Qty: 3500

od Qty: 3490

Label Ref: /



- 6) Press → to increase or← to decrease the position.
- 7) Press SET when the number you need appears.

8) Press BACK.

AD-238U8 GWC 003

Yield: 99.71%

PCS

PCS Good Qty



- 9) Press START to calibrate. At least one label feeds during the calibration process.
- 10) Press BACK until you see the Main Menu.

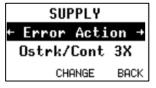
### Setting the Error Action

Decide how printer responds to a defective RFID inlay:

- stop printing and display an error -OR-
- print an overstrike pattern on the label containing a defective inlay and try to reprint the label. Selecting overstrike and continue 1x-5x sets the number of times the printer prints an overstrike pattern on defective inlay labels before generating an error. The overstrike pattern prevents someone from using a defective inlay label.

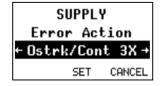
From the Main menu, select Setup, Supply, Error Action. For example:

1) When you see:

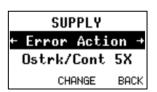


2) Press CHANGE.

3) Press → to increase or← to decrease thenumber of retries.



4) Press SET when the number you need appears.

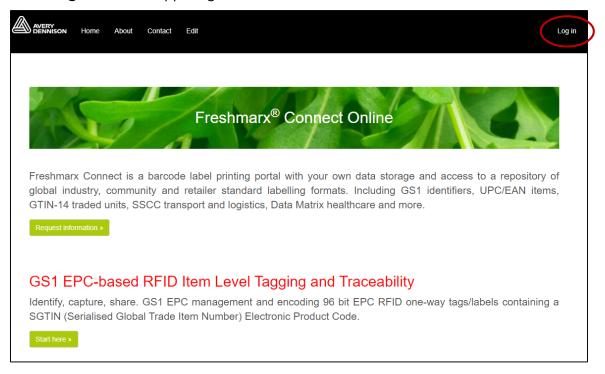


**5)** Press **BACK** until you see the Main Menu.

## Logging in

Check with your manager for your login credentials.

- Using a web browser, navigate to Freshmarx Connect: https://freshmarxconnect-app.atma.io/
- 2. Select **Log in** from the upper right corner.



- 3. Enter your email address.
- **4.** Enter your password.
- 5. Click Log in.
- 6. Click start here > to use Freshmarx Connect. You see the main menu:

Decode EPC Tag ▶ Global Location Numbers (GLNs) Global Trade Item Numbers Non-Retail (GTIN-14s) Commission Only Traceability Therapeutics▶



Therapeutics requires an additional fee and setup. Contact Avery Dennison for more information.

## Resetting Your Password

To reset your password:

- 1. From the Login page, click Forgot Password.
- 2. Enter your email address then click Submit.
- 3. Open the email and follow the link provided. The email link expires after five (5) minutes. The link goes to the Reset Password page.
- **4.** Enter the new password, confirm the password, then click **Set Password**. Your password is reset and you return to the Login page.
- 5. Login with your new password.

## Searching for Items

Within Commission Only or Traceability, easily locate GTIN items with the search feature. The following fields are searched: GTIN-14, GTIN-13, Item ID, Description, and Shelf Life.

- 1. Enter the search criteria (word, partial word, numbers, etc.). The search is not case sensitive and there is no 'wild card' character.
- 2. Click **Search** or press **Enter**. Any rows matching the search criteria are displayed. A message appears if no search results are found.



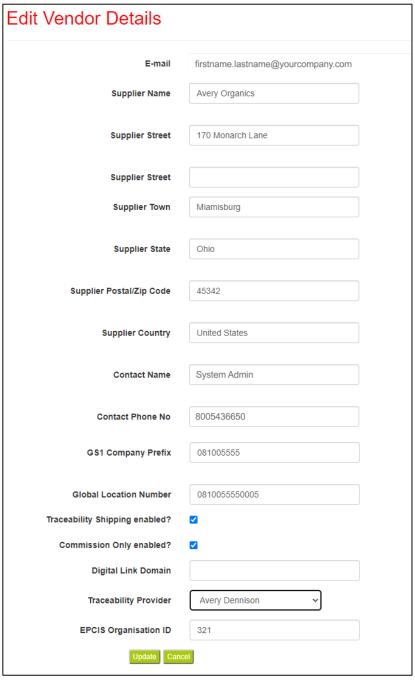
3. Select the item you need to continue, change the search criteria, or click **Show All** to remove the search criteria and see all your items.



Your System Administrator enters the Vendor Details and your Global Trade Item Numbers during initial Freshmarx Connect setup. This chapter gives limited information on how to edit Vendor details and how to enter a Global Trade Item Number.

## **Editing Vendor Details**

Your System Administrator enters the Vendor Details during initial Freshmarx Connect setup. Login to Freshmarx Connect, click **Edit** from the top menu bar and update the Supplier Name, Address, Contact information, GS1 Company Prefix, Global Location Number, EPCIS Organization ID, as necessary.



Enabling the mode you use simplifies the processes for your users and may prevent accidently tracked events.

If you only use Freshmarx Connect for Traceability, disable Commission Only, then click

Update

Global Location Number	0810055550005	
Traceability Shipping enabled?	✓	
Commission Only enabled?		
Digital Link Domain		

A user will not be able to select Commission Only from the main menu:

Decode EPC Tag ► Global Location Numbers (GLNs) Global Trade Item Numbers Non-Retail (GTIN-14s) Commission Only Traceabilit

Disbabled for this account

### Adding a GTIN14 (Global Trade Item Numbers) Non-Retail Item

Your System Administrator should have already entered GTIN item numbers into Freshmarx Connect. Set up the vendor location before adding items. You are responsible for creating unique item numbers that follow the GS1 standards, which are not covered in this document.

 Select Global Trade Item Numbers Non-Retail (GTIN-14s) from the main menu to add a GTIN item.



2. Enter the GTIN-13 for your item.



- 3. Enter the Item ID (alphanumeric).
- 4. Enter the Weight (numeric).
- 5. Enter the Volume (numeric).

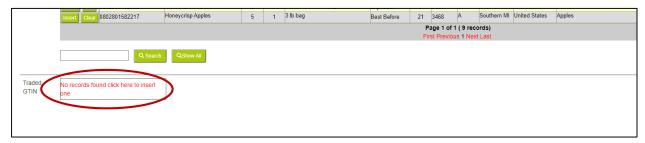
- **6.** Enter the Description (alphanumeric).
- 7. Select the Shelf Life (Expiration, Best Before, Packaging).
- 8. Enter the number of Days.
- 9. Select the PLU.
- 10. Enter the Grade.
- 11. Enter the Growing Region.
- 12. Select the Country of Origin.

Country Of Origin	Ingredients	Origin of Ingredients	Begin EPC Serial	End EPC Serial	Next EPC Serial
United States			2200	16777215	2548
United States			1100	16777215	1277
United States			100	16777215	400
United States			200	16777215	337
United States			150	16777215	225
Denmark			60	16777215	106
United States	Apples	Michigan, USA	300	16777215	325

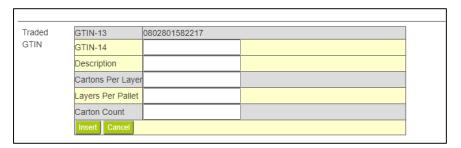
- 13. Enter the Ingredients (if necessary).
- 14. Enter the Origin of Ingredients (if necessary).
- 15. Enter the Begin EPC Serial Number.
- 16. Enter the End EPC Serial Number.
- 17. Enter the Next EPC Serial.
- 18. Click Insert.



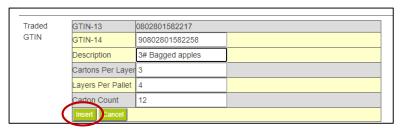
19. Click No records found click here to insert one. The Traded GTIN section appears.



20. Enter the GTIN-14.



- 21. Enter the Traded GTIN Description.
- 22. Enter the number of Cartons Per Layer.
- 23. Enter the number of Layers Per Pallet.
- 24. Enter the Carton Count. This is the number of labels that will print in Traceability.
- 25. Click Insert. The item is available in Commission Only or Traceability. If the Traded GTIN information is missing, the item will **not be available** in Commission or Traceability.



## **Printing SSCC and SGTIN Labels**

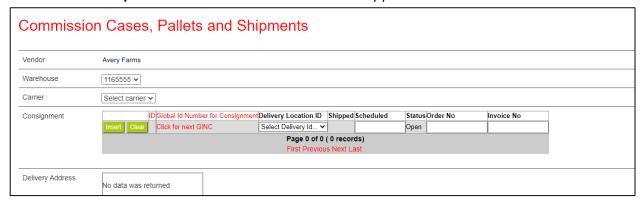
Select **Traceability** from the main menu to print and encode shipping labels.

Decode EPC Tag ▶ Global Location Numbers (GLNs) Global Trade Item Numbers Non-Retail (GTIN-14s) Commission Only

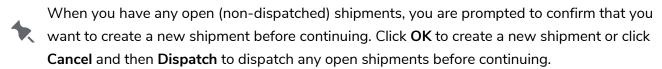


Use the Traceability menu to

- Create a consignment with the required Global ID Number, schedule date, and order/invoice number.
- Generate the required SSCC (Serial Shipping Container Code).
- Print (and encode) shipping labels.
- Dispatch (finalize) the digital identity for each shipment.
- 1. Select **Traceability**. Your vendor name and warehouse appear.



- 2. Select the Carrier.
- 3. In the Consignment section, select Click for next GINC. The next sequential number is automatically generated.



- 4. Select the Delivery Location ID (based on Global Location Numbers setup).
- 5. Enter the Scheduled Delivery Date as MM/DD/YYYY. The slash (/) is required.
- 6. Enter the Order Number and the Invoice Number, if known. These are not required fields.

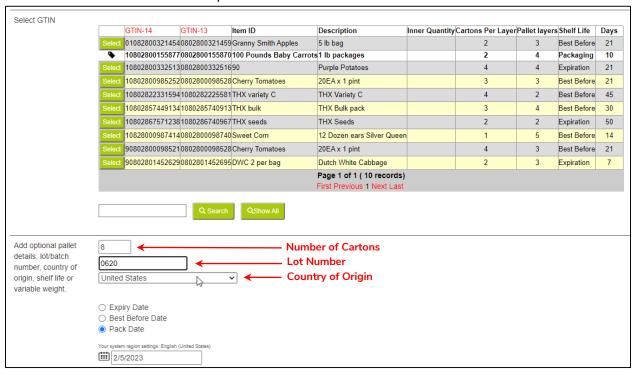
#### 7. Click Insert.



The delivery address appears.



- **8.** In the GTIN section, click **Select** to pick the product to ship or use **Search** to find the product you need. The optional pallet details appear.
- 9. The number of cartons is automatically added (based on Item GTIN setup). Verify the number of cartons for this shipment and change this information as necessary. The number of cartons equals the number of labels that will be printed.

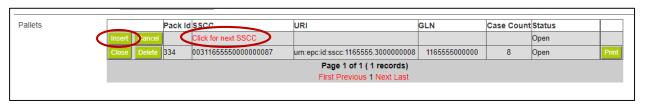


10. Enter the Lot number (maximum 20 alphanumeric digits). Lot number is very important for recall purposes and overall traceability. It helps reduce waste when lot numbers follow the product through the supply chain because it can prove your items are not part of a recall.

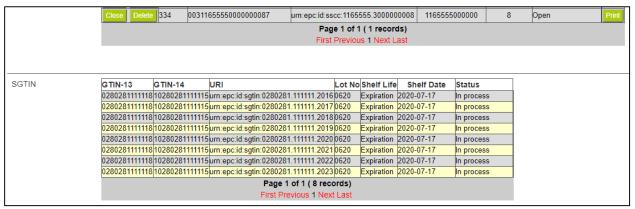
- 11. Adjust the Country of Origin, if necessary.
- 12. Enter the pallet Weight (up to two decimal points) in kilograms (kg) or pounds (lb). The unit of measure changes based on the shipment location. This field is only required for <u>variable-weight</u> products.



- 13. The Expiration, Best Before, or Pack Date is automatically calculated from your previously entered data (based on Item GTIN setup). Change this information if necessary.
- 14. In the Pallets section, select Click for next SSCC. The Serial Shipping Container Code is automatically generated.

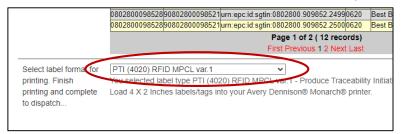


15. Click Insert. Within the SGTIN section, the GTIN-13, GTIN-14, URI, Lot number, Shelf Life, Shelf Date and Status appear.



The URI contains the serial number and GTIN with a serialization, which makes each label unique for each case being labeled.

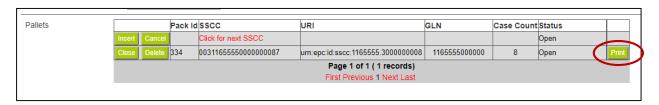
16. At the bottom of the screen, select the label format to print.



If you entered the pallet's weight, select a label format that includes "Variable Weight." Thumbnail images are shown for the label formats.



17. Make sure the printer is connected and ready to receive data, then click **Print**.



The print job is sent to the connected printer. The labels are printed and encoded.

- 18. Apply the labels to all the boxes in the shipment. After printing, you are prompted to dispatch any open shipments. Click **OK** to dispatch the shipment (wait a few seconds for the dispatch process to complete) or click **Cancel** to dispatch later.
- 19. Once the labels are applied, click **Dispatch**.



Dispatch finalizes the shipment and sends the EPCIS standard record to the third party software (selected earlier) to create the digital identity/record of that shipment. The shipment's information is viewable online (via your transparency provider).

**20.** Repeat steps 3 - 18 for each item you ship.

When you have any open (non-dispatched) shipments, you are prompted to confirm that you want to create a new shipment before continuing. Click **OK** to create a new shipment or click **Cancel** and then **Dispatch** to dispatch any open shipments before continuing.

### Viewing the Dispatched Data

Select any of the following documents to view the dispatched data:

- EPCIS commissioning document
- EPCIS aggregation document
- EPCIS shipping document

### Sample Traceability Commissioning Document

```
<?xml version="1.0" encoding="utf-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" schemaVersion="1.2"</pre>
creationDate="2021-06-29T14:03:21.575+00:00" xmlns:epcis="urn:epcglobal:epcis:xsd:1">
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2021-06-29T14:03:21.5760427+00:00</eventTime>
        <eventTimeZoneOffset>+0:00</eventTimeZoneOffset>
        <baseExtension>
          <eventID>urn:uuid:WK-CAAS-C052411.0810055550005.9109/eventID>
        </baseExtension>
        <epcList>
          <epc>urn:epc:id:sgtin:0802800.115587.248</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.249</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.250</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.251</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.252</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.253</epc>
          <epc>urn:epc:id:sqtin:0802800.115587.254</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.255</epc>
        </epcList>
        <action>ADD</action>
        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
        <disposition>urn:epcglobal:cbv:disp:active</disposition>
          <id>urn:epc:id:sqln:0810055.55000.0</id>
        </readPoint>
        <br/>
<br/>
dizLocation>
          <id>urn:epc:id:sgln:0810055.55000.0</id>
        </bizLocation>
        <extension>
          <quantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtin:0802800.115587.124</epcClass>
              <quantity>8</quantity>
              <uom>CS</uom>
            </quantityElement>
          </quantityList>
          <ilmd>
            <cbvmda:lotNumber>124</cbvmda:lotNumber>
            <cbvmda:packagingDate>2021-07-09</cbvmda:packagingDate>
          </ilmd>
        </extension>
      </ObjectEvent>
    </EventList>
  </EPCISBody>
</epcis:EPCISDocument>
```

### Sample Aggregation Document

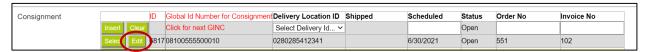
```
<?xml version="1.0" encoding="utf-8"?>
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-06-29T14:03:21.8530372+00:00"</pre>
xmlns:epcis="urn:epcglobal:epcis:xsd:1">
  <EPCISBody>
    <EventList>
      <AggregationEvent>
        <eventTime>2021-06-29T14:03:21.8530372+00:00/eventTime>
        <eventTimeZoneOffset>+0:00</eventTimeZoneOffset>
        <baseExtension>
          <eventID>urn:uuid:WK-CAAS-C052411.0810055550005.9131/eventID>
        </baseExtension>
        <parentID>urn:epc:id:sscc:0810055.3550000020</parentID>
        <childEPCs>
          <epc>urn:epc:id:sqtin:0802800.115587.248</epc>
          <epc>urn:epc:id:sqtin:0802800.115587.249</epc>
          <epc>urn:epc:id:sqtin:0802800.115587.250</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.251</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.252</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.253</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.254</epc>
          <epc>urn:epc:id:sgtin:0802800.115587.255</epc>
        </childEPCs>
        <action>ADD</action>
        <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
        <disposition>urn:epcglobal:cbv:disp:in progress</disposition>
        <readPoint>
          <id>urn:epc:id:sgln:0810055.55000.0</id>
        </readPoint>
        <br/>
<br/>
dizLocation>
          <id>urn:epc:id:sgln:0810055.55000.0</id>
        </bizLocation>
        <extension>
          <childQuantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtin:0802800.115587.124</epcClass>
              <quantity>8</quantity>
              <uom>CS</uom>
            </quantityElement>
          </childQuantityList>
        </extension>
      </AggregationEvent>
    </EventList>
  </EPCISBody>
</epcis:EPCISDocument>
```

### Sample Shipping Document

```
<?xml version="1.0" encoding="utf-8"?>
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-06-29T14:03:21.8960326+00:00"</pre>
xmlns:epcis="urn:epcglobal:epcis:xsd:1">
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2021-06-29T14:03:21.8960326+00:00/eventTime>
        <eventTimeZoneOffset>+0:00</eventTimeZoneOffset>
        <baseExtension>
          <eventID>urn:uuid:WK-CAAS-C052411.0810055550005.6809.9131/eventID>
        </baseExtension>
        <epcList>
          <epc>urn:epc:id:sscc:0810055.3550000020</epc>
        </epcList>
        <action>OBSERVE</action>
        <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
        <disposition>urn:epcglobal:cbv:disp:in transit</disposition>
        <readPoint>
          <id>urn:epc:id:sgln:0810055.55000.0</id>
        </readPoint>
        <br/>
<br/>
dizLocation>
          <id>urn:epc:id:sgln:0810055.55000.0</id>
        </bizLocation>
        <bizTransactionList>
          <br/>bizTransaction
type="urn:epcglobal:cbv:btt:po">urn:epcglobal:cbv:bt:0280285412341:66</bizTransaction>
          <br/>bizTransaction
type="urn:epcglobal:cbv:btt:inv">urn:epcglobal:cbv:bt:0810055550005:52</bizTransaction>
        </br></bizTransactionList>
        <extension>
          <quantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtin:0802800.115587.124</epcClass>
              <quantity>8</quantity>
              <uom>CS</uom>
            </guantityElement>
          </quantityList>
          <sourceList>
type="urn:epcglobal:cbv:sdt:owning party">urn:epc:id:sgln:0810055.55000.0</source>
          </sourceList>
          <destinationList>
            <destination
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0280285.41234.0</destination>
          </destinationList>
        </extension>
      </ObjectEvent>
    </EventList>
  </EPCISBody>
</epcis:EPCISDocument>
```

### Editing Consignment Data within Traceability

 In the Consignment section, click Edit to correct an entry if you make a mistake entering the scheduled date, Order Number, or Invoice Number. It is not possible to edit the Delivery Location ID.



2. Click **Update** to save the changes (or click **Cancel** to cancel the changes).



3. Click Close to continue.

You cannot edit dispatched data.

## Deleting Data within Traceability

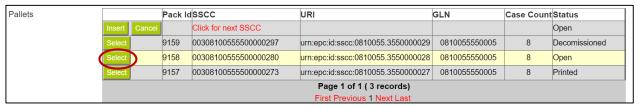
Use caution when deleting a pallet. You can delete a pallet before **or** after printing labels; however, the data is not deleted. The status changes to decommissioned. A decommissioned pallet cannot be dispatched.



If a pallet is decommissioned (not able to be dispatched), the EPC data is never posted.

Once a shipment is dispatched (commission event is posted), it cannot be deleted. A consignment cannot be deleted once case or EPC data has been associated to it.

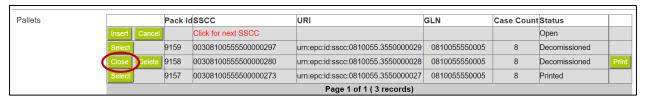
In the Pallet section, click Select for the item to delete (if the item is not already in use).



2. Click **Delete**. The status changes to Decommissioned.

Pallets	F		Pack Id	ISSCC	URI	GLN	Case Count	Status	$\Box$
	Insert	Cancel		Click for next SSCC				Open	
	Select		9159	00308100555500000297	urn:epc:id:sscc:0810055.3550000029	0810055550005	8	Decomissioned	
	Close	Delete	9158	00308100555500000280	urn:epc:id:sscc:0810055.3550000028	0810055550005	8	Open	Print
	Select		9157	00308100555500000273	urn:epc:id:sscc:0810055.3550000027	0810055550005	8	Printed	
		Page 1 of 1 ( 3 records)							

Click Close to continue.



EPCIS (Electronic Product Code Information Services) captures events relating to your products as they move through the supply chain. A GTIN must be commissioned before it can be used within EPCIS. Commissioning is the process of capturing an event that happens to your product. Other events include aggregation (combining products to make a new item), packing, shipping, etc. Every step in the process is usually represented by an event. As these events (steps) are recorded (tracked), it makes items easier to find if a recall happens.

If you need to create a consignment, select a delivery location, add a shipment date, order/invoice number, create an SSCC, or enter any palletization information, see "Printing SSCC and SGTIN Labels" for more information.

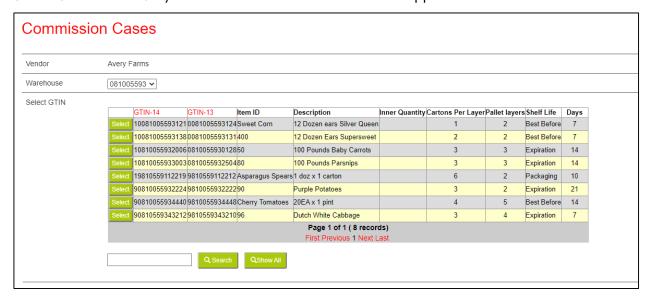
Select Commission Only from the main menu to print and encode serialized case labels and post commission events.

Decode EPC Tag ▶ Global Location Numbers (GLNs) Global Trade Item Numbers Non-Retail (GTIN-14s)

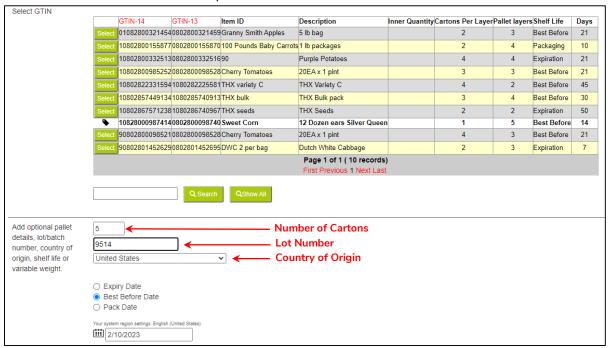


#### Use the Commission Only menu to

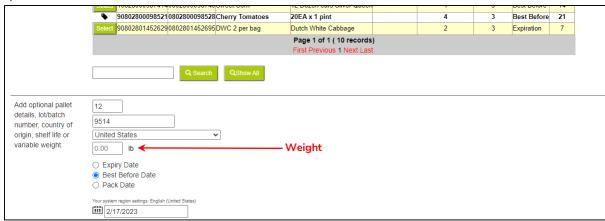
- Select a GTIN-14 and enter the batch/lot number
- Print and encode the desired quantity of case labels. The labeled cases would be set aside for later picking and dispatching. (Use the Commission Only page when you have an alternate method for creating shipping and pallet aggregation events.)
- Post the commission event (occurs when labels are printed).
- Select Commission Only. Your vendor name and warehouse appear.



- 2. In the GTIN section, click **Select** to pick the product to commission or use **Search** to find the product you need. The optional pallet details appear.
- 3. The number of cartons is automatically added (based on Item GTIN setup). Verify the number of cartons for this shipment and change this information as necessary. The number of cartons equals the number of labels that will be printed.



- 4. Enter the Lot number (maximum 20 alphanumeric digits). Lot number is very important for recall purposes and overall traceability. It helps reduce waste when lot numbers follow the product through the supply chain because it can prove your items are not part of a recall.
- 5. Adjust the Country of Origin, if necessary.
- 6. Enter the pallet Weight (up to two decimal points) in kilograms (kg) or pounds (lb). The unit of measure changes based on the shipment location. This field is only required for <u>variable-weight</u> products.

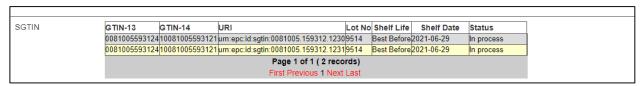


7. The Expiration, Best Before, or Sell By date is automatically calculated from your previously entered data (based on Item GTIN setup). Change this information if necessary.

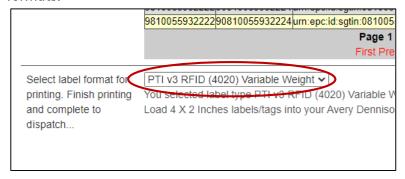
8. In the Production run section, select Click for next Run ID (SSCC). The Serial Shipping Container Code is automatically generated.

Production run,		Pack Id	SSCC	URI	Run Date	Case Count	Status
batch/lot, or pallet	Insert		Click for next Run Id (SSCC)				Open
	Select	9672	00308100555500000686	urn:epc:id:sscc:0810055.3550000068	10/19/2021 2:52 PM	5	Commissioned
	Select	9670	00308100555500000679	urn:epc:id:sscc:0810055.3550000067	10/14/2021 11:12 AM	9	Commissioned
	Select	9656	00308100555500000662	urn:epc:id:sscc:0810055.3550000066	9/28/2021 8:29 AM	8	Commissioned
	Select	9647	00308100555500000655	urn:epc:id:sscc:0810055.3550000065	9/27/2021 2:12 PM	8	Commissioned
	Select	9479	00308100555500000556	urn:epc:id:sscc:0810055.3550000055	7/23/2021 2:53 PM	8	Open
	Select	9478	00308100555500000532	urn:epc:id:sscc:0810055.3550000053	7/23/2021 10:01 AM	8	Commissioned
	Select	9477	00308100555500000518	urn:epc:id:sscc:0810055.3550000051	7/23/2021 9:59 AM	8	Decommissioned
	Select	9476	00308100555500000464	urn:epc:id:sscc:0810055.3550000046	7/22/2021 8:59 AM	8	Open
	Select	9475	00308100555500000457	urn:epc:id:sscc:0810055.3550000045	7/21/2021 4:45 PM	8	Commissioned
	Select	9473	00308100555500000426	urn:epc:id:sscc:0810055.3550000042	7/21/2021 4:30 PM	8	Open
	Page 1 of 3 ( 23 records)						

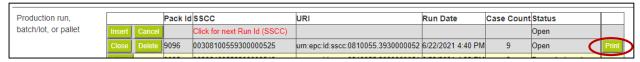
9. Click **Insert**. Within the SGTIN section, the GTIN-14, URI, Lot number, Shelf Life, Shelf Date and Status appear. The URI contains the serial number and GTIN with a serialization, which makes each label unique for each case being labeled.



10. At the bottom of the screen, select the label format to print. If you entered the pallet's weight, select a format that includes "Variable Weight." Thumbnail images are shown for the label formats.



11. Make sure the printer is connected and ready to receive data, then click **Print**.



- Printing posts the commission event and the status changes to Commissioned.

  The print job is sent to the connected printer. The labels are printed and encoded.
- 12. Apply the labels to all the boxes. The current GTIN stays selected so you can change the number of cartons, a lot number, or the shelf life and print another batch of labels.
- 13. Select a new item and repeat steps 2 12.

### Viewing the Commissioned Data

Select the EPCIS commissioning document to view the commissioned data.

### Sample Commissioning Only Document

```
<?xml version="1.0" encoding="utf-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcqlobal:cbv:mda" schemaVersion="1.2"</pre>
creationDate="2021-06-22T19:22:41.9090746+00:00" xmlns:epcis="urn:epcglobal:epcis:xsd:1">
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2021-06-22T19:22:41.910078+00:00/eventTime>
        <eventTimeZoneOffset>+0:00</eventTimeZoneOffset>
        <baseExtension>
          <eventID>urn:uuid:WK-CAAS-C052411.081005593.9068/
        </baseExtension>
        <epcList>
          <epc>urn:epc:id:sqtin:0081005.159312.1228</epc>
          <epc>urn:epc:id:sgtin:0081005.159312.1229</epc>
        </epcList>
        <action>ADD</action>
        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
        <disposition>urn:epcglobal:cbv:disp:active</disposition>
        <readPoint>
          <id>urn:epc:id:sqln:0028028.00000.0</id>
        </readPoint>
        <br/>
<br/>
dizLocation>
          <id>urn:epc:id:sgln:0028028.00000.0</id>
        </bizLocation>
        <extension>
          <quantityList>
            <quantityElement>
              <epcClass>urn:epc:class:lgtin:0081005.159312.9514</epcClass>
              <quantity>2</quantity>
              <uom>CS</uom>
            </quantityElement>
          </quantityList>
          <ilmd>
            <cbvmda:lotNumber>9514</cbvmda:lotNumber>
            <cbvmda:bestBeforeDate>2021-06-29</cbvmda:bestBeforeDate>
          </ilmd>
        </extension>
      </ObjectEvent>
    </EventList>
  </EPCISBody>
</epcis:EPCISDocument>
```

## Deleting Data within Commission Only

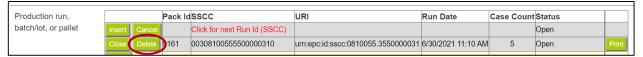
Use caution when deleting a pallet or production run of cases. You can delete a pallet or production run of cases before **or** after printing labels; however, the data is not deleted. The status changes to decommissioned.

Once labels are printed, the EPC event data is posted.



If that data is later decommissioned, the EPC data does not change (the original data remains posted and unchanged).

In the Production run/pallet section, click Delete.



2. The status changes to Decommissioned. Click Close to continue.



## **Configuring the ADTP2 Printer**



You may need to send an MPCLII configuration packet to the ADTP2 printer. Refer to the printer's Packet Reference Manual for more information.

Select Online Configuration from the Freshmarx Connect bottom menu.



Enter an MPCLII string into the box provided, then click Send to printer.

## **Glossary**

Freshmarx Connect uses the following abbreviations.

Aggregation

The process of combining objects to make a new object. Examples include

- when items are packed into a case
- when cases are packed onto a pallet
- when cabbage from multiple suppliers is added to a shredder to make coleslaw.

Commission

The process of capturing an event each time a new identifier is created. A GTIN must be commissioned **before** it can be used within EPCIS.

Dispatch

The final step in the Freshmarx Connect process. Once a shipment has been dispatched, it is locked/finalized and the permanent digital identity is sent to the specified transparency provider. The shipment's information is viewable online (via your transparency provider).

**EPC** 

The Electronic Product Code™ is a numbering standard for items, similar to the UPC code for bar coding. For more information, refer to the GS1 EPC Tag Data Standard Specification.

**EPCIS** 

The Electronic Product Code Information Services (GS1 standard) is a unique string of data (automatically generated by Freshmarx Connect) that is sent to third party software (transparency providers) to create the digital identity/record of each shipment. Searching the EPCIS allows the shared view of events (transparency) for this record. It can prove your items are not part of a recall. The EPCIS is one component of the URI (Uniform Resource Identifier).

**GINC** 

The Global Identification Number for Consignment is automatically generated by Freshmarx Connect. It includes your GS1 Company prefix and a serialized number (from the freight carrier). This unique number identifies a logical group of goods for transportation.

**GLN** 

The Global Location Numbers are **your customer's** shipping address and contact information.

These numbers are set up in Freshmarx Connect's GLN section and not covered in this document.

GS1

The Global Standards One group is an international organization of members from many different sectors: food, retail, distribution, etc. GS1 develops and sets information standards for supply chain logistics, ecommerce, etc.

GS1 Company

Prefix

The company prefix is your company's unique identification number, which is included in all global trade item numbers (GTIN) that you create for your

products.

Setting up a GS1 Company prefix is not covered in this document.

GTIN The Global Trade Item Numbers are unique numbers that you create for your

products. For example, an individual head of cabbage would have a GTIN

number.

These numbers are set up in Freshmarx Connect's GTIN section.

LGTIN The Lot GTIN includes the GTIN plus the batch or lot number (which is useful in

product recalls).

PTI The Produce Traceability Initiative was developed to provide case-level

traceability (transparency) through the produce supply chain. Walmart mandates their suppliers comply with this initiative. For more information, refer to the web

site: <a href="https://www.producetraceability.org/">https://www.producetraceability.org/</a>

Traded GTIN The Traded GTIN is the product you ship to customers that includes the number

of cartons per layer and/or layers per pallet. The traded GTIN allows you to setup different units of the same product. For example, cases of cabbage and/or pallets

of lettuce.

These numbers are set up in Freshmarx Connect's GTIN section.

SGTIN The Serialized Global Trade Item Number includes the GTIN plus a serialized

number. This number is automatically generated by Freshmarx Connect. The SGTIN shows the different units of the same product. Currently, the SGTIN is 96-

bits of EPC data.

SSCC The Serial Shipping Container Code is automatically generated by Freshmarx

Connect. It contains the GS1 company prefix and a serialized number which identifies objects within a shipping container. Currently, the SSCC is 96-bits of

EPC data.

URI The Uniform Resource Identifier is a unique string of data (automatically

generated by Freshmarx Connect) for use in information systems. It contains the

EPC and SSCC data. Searching the URI allows the shared view of events (transparency) for this record. It can prove your items are not part of a recall.



### **AMERICAS**

170 Monarch Lane Miamisburg, OH 45342 937 865 2123 (direct) Tel +800 543 6650 (8:00 a.m. – 6:30 p.m., EDT) Fax +937 865 6663

### **ASIA**

No. 7 Chun Ying Street Tseung Kwan O Industrial Estate New Territories, Hong Kong Tel +852 2372 3169 Fax +852 2995 0014

#### **WESTERN EUROPE**

1 Thomas Road Wooburn Green Bucks HP10 0PE Tel +(44) 1628 859500 Fax +(44) 1628 859567

# ASIA PACIFIC NEW SOUTH WALES

61 Vore Street
Silverwater NSW 2128
Tel +(02) 9647 1833
Fax +(02) 9647 1914
Toll free (Outside Sydney only)

https://identificationsolutions.averydennison.com/