



## **Shipping System Interface Implementation Guide**

**Maves International Software**

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### **3. Interface overview**

#### **1.1 Introduction**

Warehouse operators that use small parcel shipping systems, often have a standalone PC based system such as UPS Worldship or Fedex Ship Manager. Data generated by this system, such as shipping charges and tracking numbers is often processed manually which can be time consuming.

This document defines how Maves e-Z Ware interfaces with UPS Worldship and Fedex Ship Manager.

The benefits of this interface include:

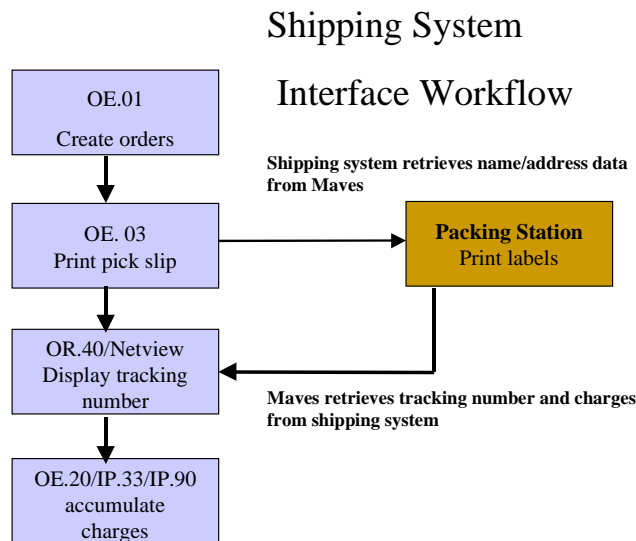
- ❑ Elimination of keying ship-to information in the shipping system eliminates manual processes, increases efficiency and reduces errors
- ❑ Publishing of parcel tracking data to Netview allows customers to track their packages and provides improved customer service.
- ❑ Automatic update of shipping charges to the Maves e-Z Ware allows the warehouse to easily bill for shipping charges, eliminates manual processes and reduces errors.

#### **3.1 General Design**

- After goods have been picked in the warehouse, they are taken to the packing station, where the UPS/Fedex workstation is installed. The user will be able to enter the Maves order number in Worldship, which will allow the system to retrieve order header data, including the ship to name and address as well as method of billing and service level from Maves and display it on the UPS/Fedex screen.
- The creation of the tracking number and label printing will occur entirely on the shipping system.
- After the goods have been packed and labeled, the tracking numbers, weight and UPS/Fedex charges will be updated back to the Maves system
- The tracking numbers, weight and shipping charges will also be displayed when doing an order inquiry within e-Z Ware as well as on the web in Netview.

- Charges for shipping, handling etc. can be automatically applied to the Maves order. These charges will print on the accessorial invoice.

### 3.1 Process Workflow



### 1.4 UPS Service type and Billing option

UPS Worldship retrieves the name and address from the Maves system for each shipment; however, the following functionality is also provided:

- ❑ UPS offers several levels of service including Ground, Next Day Air, 2<sup>nd</sup> Day Air etc. These service levels can also be setup in the Maves system (CP.06) and applied during order entry (OE.01), consequently UPS is updated with this information.
- ❑ UPS needs to know which shipper account should be used for charges and if the shipment is prepaid, collect or billed to a third party. The Maves interface allows for these combinations through the user of the Control Method (CP.03), which is applied during order entry (OE.01), consequently UPS is updated with this information.

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- ❑ In addition to the shipment charge, UPS Worldship allows the operator to designate and calculate several additional charges including handling (e.g. flat amount per package), Saturday delivery, Delivery Confirmation, Return service etc. The Maves interface retrieves these charges and via use of the Control Method (CP.03) can determine which of these should be billed back to the client.

## **1.4 Hardware and Network requirements**

The UPS Worldship (or Fedex Shipping Manager) software is installed on a standalone PC located in the warehouse. This workstation will need to have internet connectivity and be on the same network as the Maves server. UPS Worldship pulls data from Maves e-Z Ware via an ODBC connection. After the label is printed the UPS system appends data to a csv file on a drive that is mapped to the Maves server.

1. UPS Worldship version 8 or Fedex Ship Manager should be installed
2. Radmin should be installed on this PC so that we can access remotely.
3. As part of the software installation Maves will install a file in the format “A1TPS.INI” in the default data directory (if A1 is the Maves company) – see section below.
4. The Providex ODBC server driver will be installed on the Maves server – this is usually done by a Maves resource.
5. The Providex ODBC local client driver needs to be installed on the PC – instructions for how to do this (required for each PC that will access this functionality) are provided on the MyMaves website under /Resources/ Education / Crystal Reports. Note that the version of the client driver must match the version of the server e.g. version in use at time of writing is 3.33.
6. An odbc client driver must be defined on the local PC by using Start/Control panel/admin tools/ data sources(odbc) and defining an odbc connection named eg. “tps” using the Providex driver.
7. A drive on the PC must be mapped to a designated folder on the Maves server e.g. /mis/<clientcode>/data/live/ups or /mis/<clientcode>/data/live/fedex if installing fedex (note: this is referenced in CR.38 field 16) – this will require a utility that provides interoperability between the Linux/Unix server and the Windows client e.g. Samba.
8. A method of remote administration must be available for the PC workstation e.g. Radmin.

### 3.1 Creating the .INI file

Technical note on how to create the .INI file for ODBC

All steps should be done on the client's system unless otherwise noted.

1. Go to console mode and load program "aim\_tlbuild\_ini". If the program does not exist on the client's system it can be retrieved from mavsys at Maves. Ensure the program is at least version 1.3 by checking the \$ID line at the top.
  2. Set variable c\$ to the company code that the INI file is to be for e.g. A1. (Z0 is not a valid code.)
  3. Still from console mode, enter the following command: perform "aim\_tlbuild\_ini"
  4. The program will now run and build the INI file for the specified company. There is no output to the program. The INI file will be created in the standard data directory with the filename DATA.INI, prefixed by the company code (i.e A1DATA.INI).
3. Repeat as necessary for each company code.

## 2. Configuration – Maves e-Z Ware

### 2.1 Carrier Setup CR.38

UPS must be setup as a carrier in CR.38 (Carrier maintenance) with the external shipment interface fields 13-17 entered as seen below:

**mavcon: A1 CR.38 Carriers**

File Help

01*Carrier Code	UPS	08.Pieces Limit	0
02*Carrier Name	UPS	09.Weight Limit	0
03.Address 1		10.SCAC Code	UPS
04.Address 2		11.Label Format	
05.Telephone		12.RT Company	A1
06*Weight Measure	LBS		
07.Routing Code			

13.External Shipping Interface	Y	UPS
14.Reference Code	1	
15.Carrier URL	http://wwwapps.ups.com/webTracking/	
16.Shared Directory	/mis/ezwqa/data/live/ups	

17.Charges					
C1: Charge Code:	C1	UPS C1	C5: Charge Code:	C5	UPS C5
C2: Charge Code:	C2	UPS C2	C6: Charge Code:	C6	UPS C6
C3: Charge Code:	C3	UPS C3	C7: Charge Code:	C7	UPS C7
C4: Charge Code:	C4	UPS C4	C8: Charge Code:	C8	UPS C8

Enter the name of this Carrier

OK Cancel Delete Review Print Exit Help

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Field 13 has predefined options for UPS and Fedex.

Note: The entry in field 16 shared directory will be different for each installation; however, a specific directory should be setup for this purpose (not the default data directory)

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A maximum of 8 charges can be imported from the shipping system and each one can be linked to a charge code from CR.22 e.g. handling, shipping, extra handling etc. These charges should correspond with the data map defined within The Shipping System. Only the charges required need to be identified here.

For instance:

- C1: Handling
- C2: UPS shipping
- C3: Declared Value
- C4: Return Service
- C5: Saturday Delivery
- C6: Delivery Confirmation
- C7: Saturday Pickup
- C8: Saturday Pickup Published charge

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## 2.2 Control Method CP.03

Additional fields have been added to CP.03:

01*Client	GEN
02*Control Method	PPB
03*BOL Description	PREPAID
04.C.O.D. Function in OE.01	N
05.Internal Freight	N
06.Prepaid or Collect	
07.Print Client Freight Service	N
08.Use Paying Service as RT Bill-To	
09.Shipping Charges paid by Client	N
10.Bill Shipping Charges to Client	Y
11.Carrier Code	UPS
12.Charge codes to be billed	C2, C1

13*Description	Prepaid and Bill
----------------	------------------

ENTER = Accept	F3 = Jump	DEL = Delete
F2 = Clear	F4 = Exit/Print	REV = Review

OK Cancel Delete Review Print Exit Help

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Field 9 –Shipping Charges paid by client Y/N

If set = Y the UPS system will bill shipping charges to the client

If set = N the UPS system will bill shipping charges to the warehouse company

Note: Within Worldship a table will be setup that maps the client code to the corresponding shipper number.

## Field 10 – Bill Shipping charges to client

If set = Y then, in field 11 the carrier is entered and in field 12 a multi-select browse will appear with a list of the charges as defined in CR.38. The user should select which charges will be billed through to the client. For instance, it is possible that not all charges from UPS are to be billed, particularly in the case where the client is billed directly by UPS using a different shipper number.

Examples of control methods:

Control Method	Description	Settings	Usage
PPD	Prepaid	Field #9=Y Field #10=N	Shipping charges are billed directly by UPS using the Shipper number. No shipping charges are billed by the Maves system
PPB	Prepaid	Field #9=N Field #10=Y Field #11 = UPS Field #12 = C1, C2	Shipping charges are billed by UPS to the warehouse account and charges for C1 (Shipping) and C2 (Additional handling) are billed back to the client by the Maves system
PPN	Prepaid	Field #9=N Field #10=N	Shipping charges are billed by UPS to the warehouse account and no charges are billed back to the client by the Maves system
CB	Consignee Billed	Field #9=N Field #10=N	Shipping charges are billed to the consignee by UPS
COL	Freight Collect	Field #9=N Field #10=N	Shipping charges are collected from the client by UPS
TP	Bill to Third Party	Field #9=N Field #10=N	Shipping charges are billed to a 3 <sup>rd</sup> party by UPS

Note: the Description uses the same terminology as UPS – see also section 3.1.4

Note: Although several charges can be created within UPS and sent back to Maves for display purposes, the Control Method setting allows the user to define which specific charges are to be billed back to the client.

### 2.3 Service Level CP.06

This is an optional setup; however, in order to take advantage of the ability to specify the service level in OE.01, this table can be setup. The table that maps these codes to the UPS equivalents is in UPS Worldship. The following is an example:

Service Level	Description
GRD	Ground
1DAY	Next Day Air
1D-SAV	Next Day Air Saver
1D-AM	Next Day Air Early AM
2D-AM	2 <sup>nd</sup> Day Air AM
2D-SAV	2 <sup>nd</sup> Day Saver
2DAY	2 <sup>nd</sup> Day Air
3DAY	3 Day Select

See also section 3.1.3 where the Maves Service Level is mapped to the Worldship Service Type.

Note: Service levels can optionally be assigned in the following areas:

CR.18 Client Arrangements, field 67

CR.26 Customer ShipTo, field 15

CP.07 Carrier Service designation – this allows valid combinations to be setup

The service level, if setup above, will default in OE.01 Order Entry, field 8

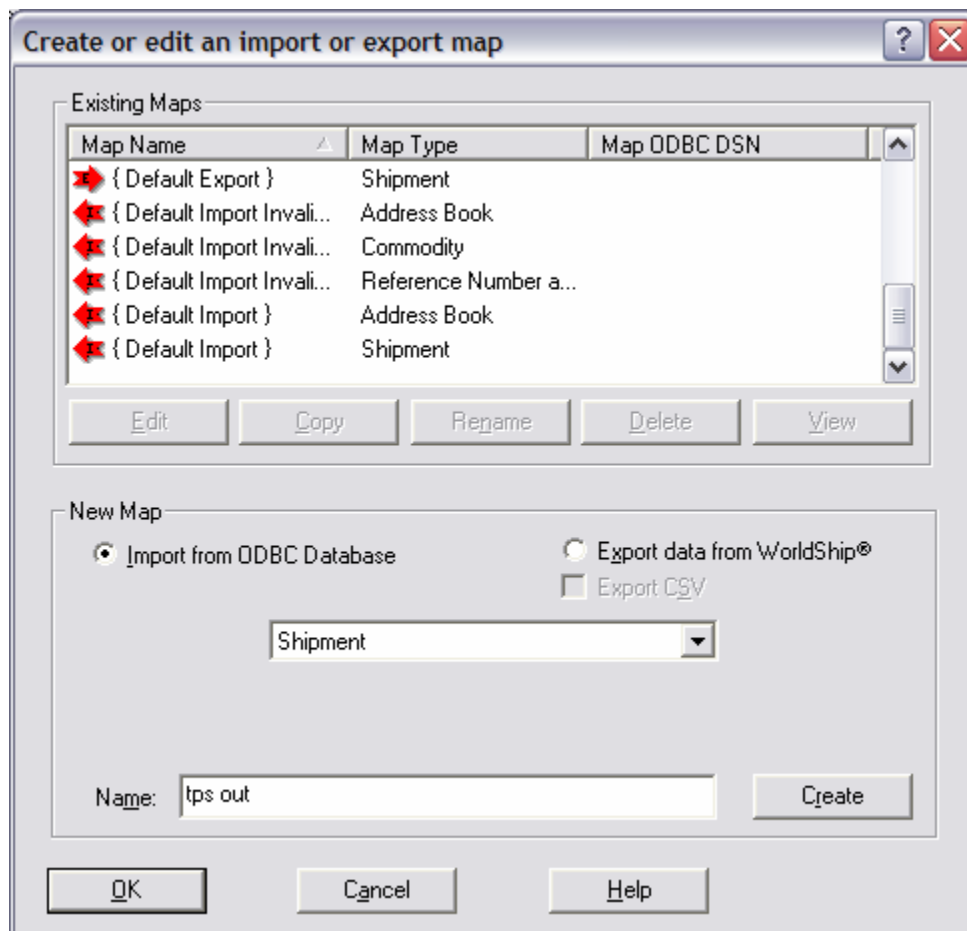
### 3. Configuration – UPS Worldship

#### 3.1 Import data from Maves to UPS

##### 3.1.3 Create import map

When OE.03 is run for the pick slip the system updates a file which is accessed by Worldship using ODBC. By clicking on the *UPS Online Connect* in the menu bar and *Create/Edit Map* you can create maps to the import and export tables. An import and an export map should be created. The import map is mapped to the Maves table “tps\_out”.

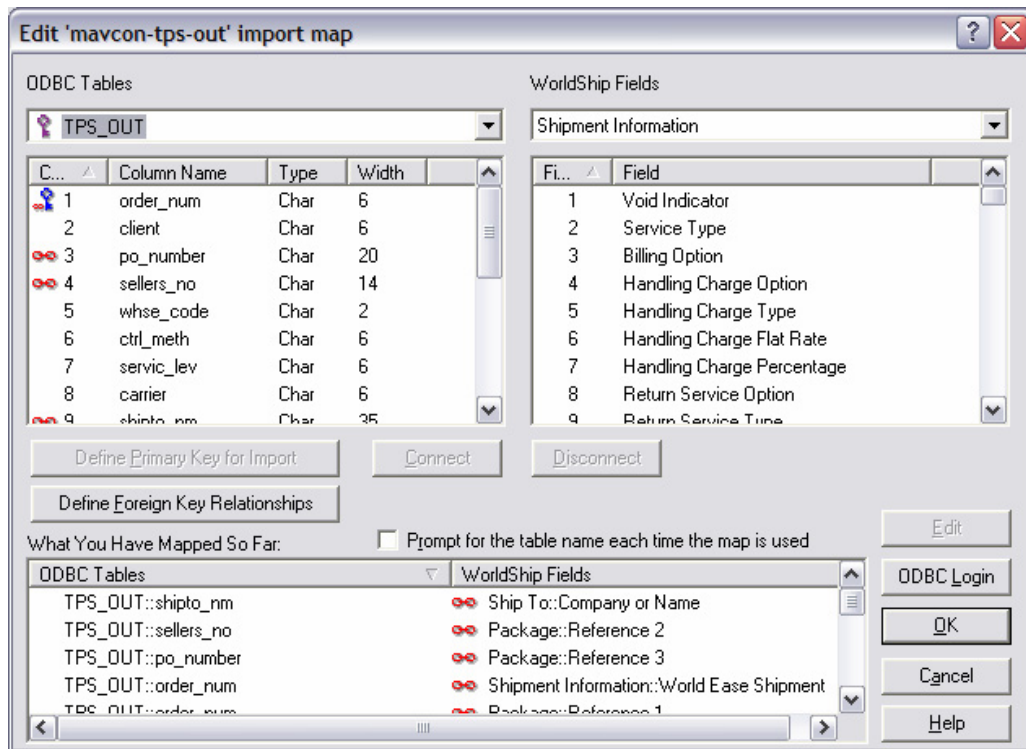
In the “*New Map*” section check the “Import from ODBC database” option, select *Shipment* from the drop down box, enter “tps out” in the *Name* box and click *Create* as below:



Note that fields come from different tables within Worldship: Shipment, Ship To, Package

Maves data	Maves data element	UPS Worldship Table	UPS Worldship field
Order number	Order_num	Shipment	Reference 1
Client code	Client	Shipment	Shipper number
Purchase Order #	Po_number	Shipment	Reference 2
Sellers #	Sellers_no	Shipment	Reference 3
Warehouse code	<not used>	<not used>	
Control method	Ctrl_meth	Shipment	Billing Option
Service Level	Servic_lev	Shipment	Service Type
Carrier code	<not used>	<not used>	
Shipto name	Shipto-nm	Ship To	Company
Shipto street	Addr_stnm	Ship To	Street address
Shipto city	Addr_city	Ship To	City
Shipto address 2	Addr_ln2	Ship To	Address 2
Shipto state	Addr_prov	Ship To	State / Prov
Shipto zip code	Addr_post	Ship To	Zip code
Shipto country	Addr_cntry	Ship To	Country
Shipto phone #	Addr_phone	Ship To	Phone
Contact name	Contact_nm	Ship To	Attention
Shipto Code	shiptocode	Ship To	Customer ID

Also select the “order\_num” column and click on the “*Define Primary Key for Import*” button. The Maves order number will be the means by which the order is recalled in UPS



### 3.1.2 Map Maves Client code to UPS Shipper number

Highlight the Shipper Number / client code entry in the lower window, click the “Edit” button and this will bring up another window that allows you to define the relationship between Maves client codes and the codes setup in UPS for Shippers. For instance”

Worldship Shipper number	Maves client code
132612	ABC001
153643	XYZ003
122411	DFLT

This will ensure that if your client is paying for UPS charges directly i.e. on their own UPS account, that shipping charges are billed to the correct account. The Maves client code = “DFLT” if field #9 of CP.03 = N for this control method.

**At minimum, the code “DFLT” must be mapped to the Worldship Shipper number of the warehouse company i.e. the warehouse pays the shipping charge.**

### 3.1.3 Map Maves Service Level to UPS Service Type

If this table is not setup (in conjunction with CP.06) UPS will default all shipments to “Ground”

Highlight the Service Type / Service Level entry in the lower window, click the “Edit” button and this will bring up another window that allows you to define the relationship between Maves service levels and the service types in UPS. For instance”

Maves Service Level	Worldship Service Type
GRD	Ground
1DAY	Next Day Air
1D-SAV	Next Day Air Saver
1D-AM	Next Day Air Early AM
2D-AM	2 <sup>nd</sup> Day Air AM
2D-SAV	2 <sup>nd</sup> Day Saver
2DAY	2 <sup>nd</sup> Day Air
3DAY	3 Day Select

Note: it is important that the Maves service level and UPS service type is entered exactly, otherwise the system will be unable to map between these codes.

### 3.1.4 Map Maves Control Method to UPS Billing Option

If this table is not setup (in conjunction with CP.03) UPS will default the billing option to “Prepaid”.

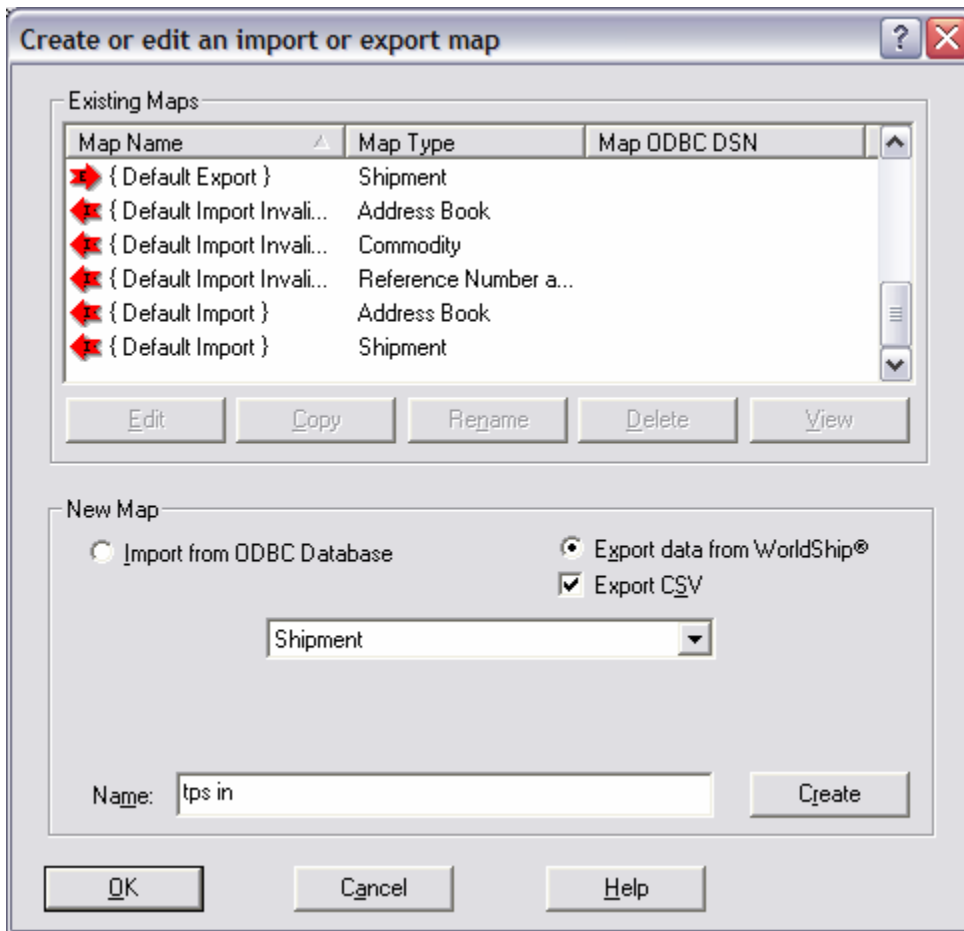
Highlight the Control Method / Billing Option entry in the lower window, click the “Edit” button and this will bring up another window that allows you to define the relationship between Maves control methods and the billing option in UPS. For instance:

Maves Control Method	Worldship Billing Option
PPD	Prepaid
PPB	Prepaid
PPN	Prepaid
CB	Consignee Billed
COL	Freight Collect
TP	Bill to Third Party

### 3.2 Export data from UPS to Maves

To create this file use the create/edit option again, now check both the *Export data from Worldship* and *Export CSV* buttons.

Enter “tps in” as the *Name* and click on the *Create* button as below

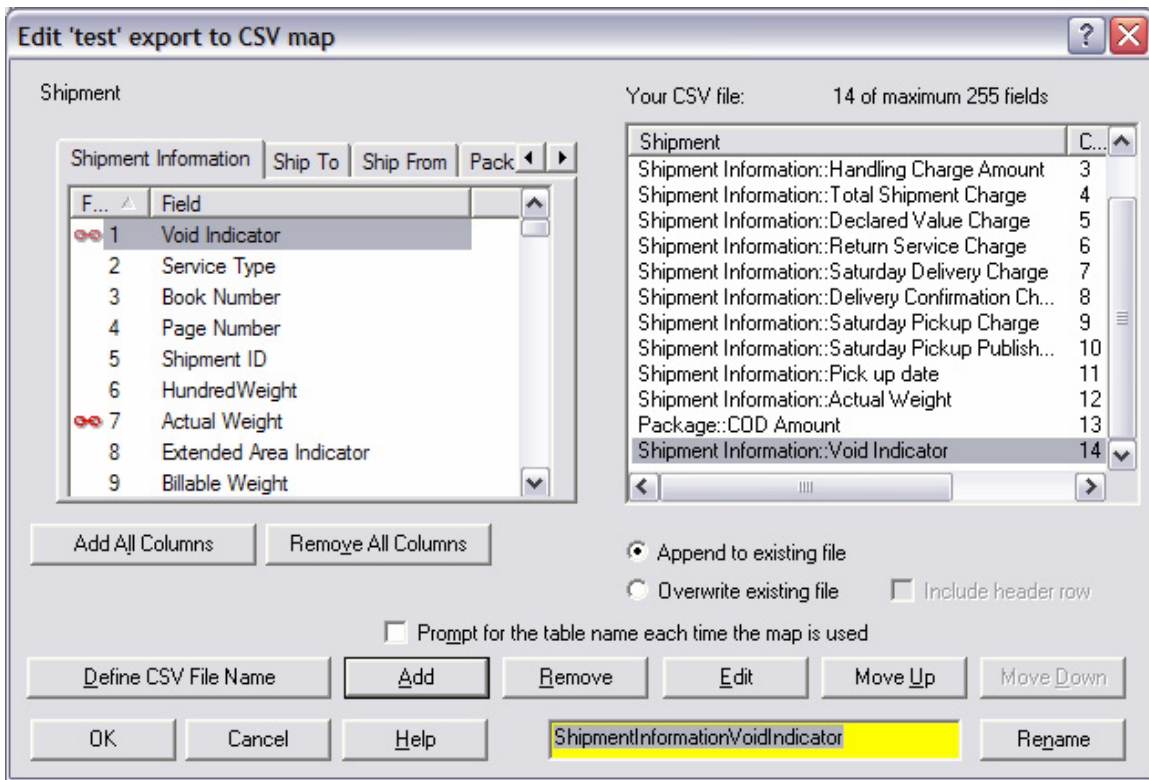


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The fields that should be mapped are:

CSV field sequence	Worldship Table	Worldship field	Maves equivalent
1	Package	Reference 1	Order number
2	Package	Tracking Number	Tracking number
3	Shipment	Handling charge amount	C1 charge
4	Shipment	Total Shipment Charge	C2 charge
5	Shipment	Declared value charge	C3 charge
6	Shipment	Return Service Charge	C4 charge
7	Shipment	Saturday Delivery Charge	C5 charge
8	Shipment	Delivery Confirmation charge	C6 charge
9	Shipment	Saturday Pickup charge	C7 charge
10	Shipment	Saturday Pickup Published charge	C8 charge
11	Shipment	Pickup date	Shipment date
12	Shipment	Actual weight	Weight
13	Package	COD amount	COD amount
14	Shipment	Void Indicator	Deleted Shipment
15	blank		
16			Package type
17			Payment type
18			Buy rate
19			Actual carrier
20			SSCC #

The charges C1 – C8 can be mapped to any charge field within Worldship – the above is an example only



When all fields have been added using the “Add” button click on the *Define CSV File Name* button and select the drive (see hardware section 1.6) and enter the filename in this format:

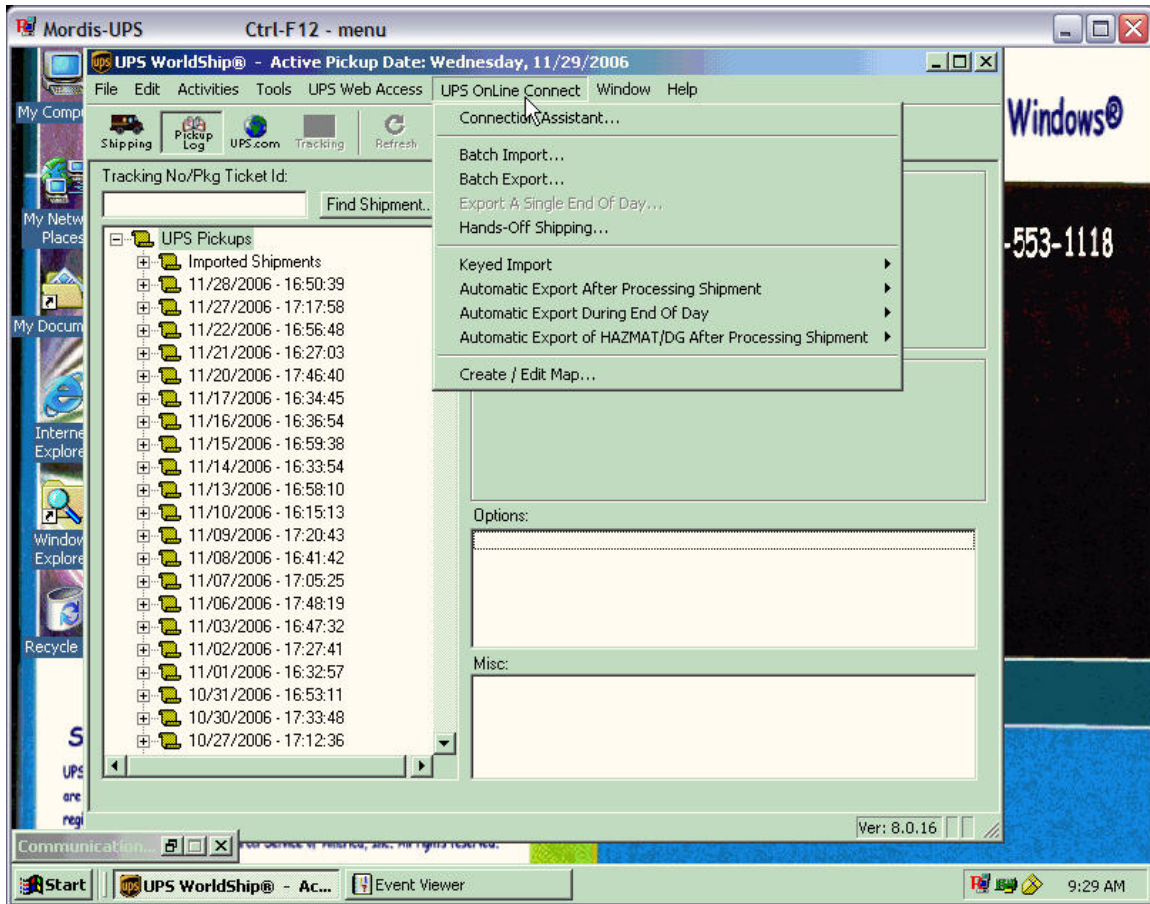
T1TPS\_IN.csv            if the company name is T1.

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## 4. How to use the interface in UPS Worldship

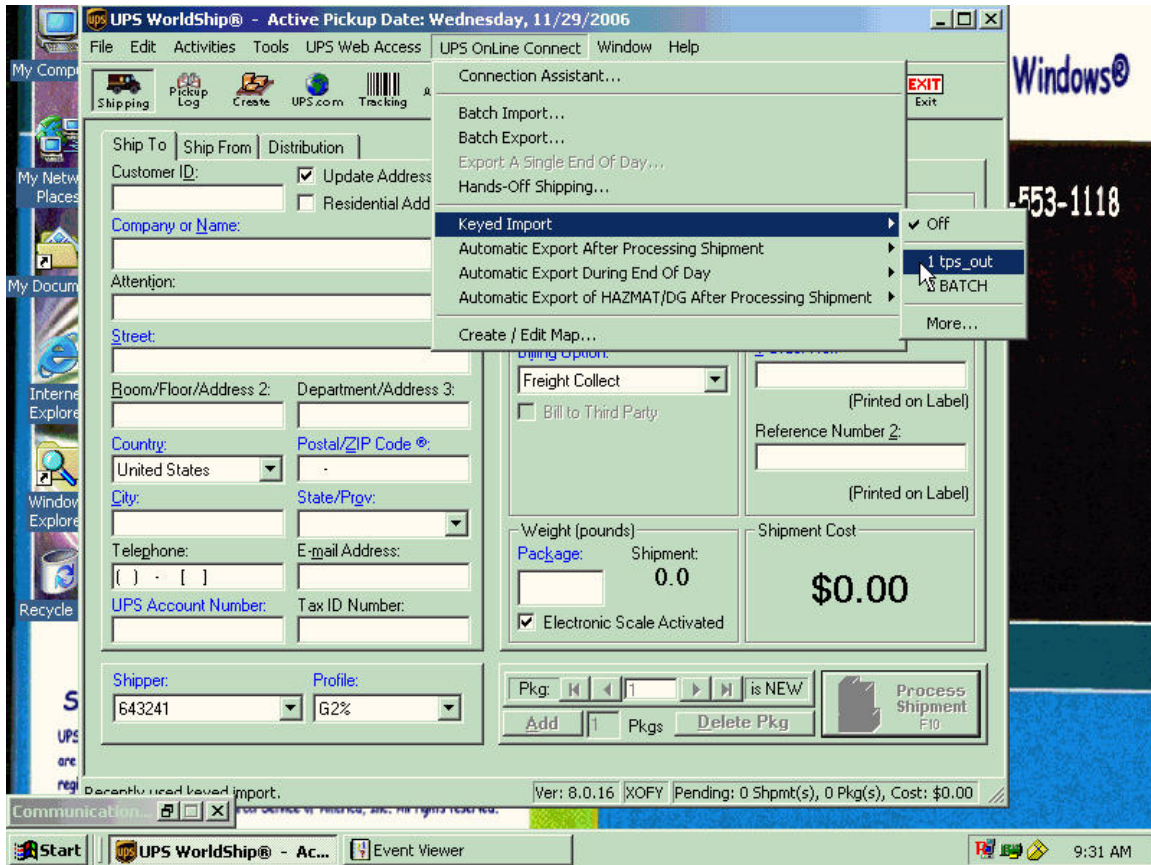
### 4.1 Retrieving Order header details from Maves

In Worldship click on UPS Online connect in the top menu bar



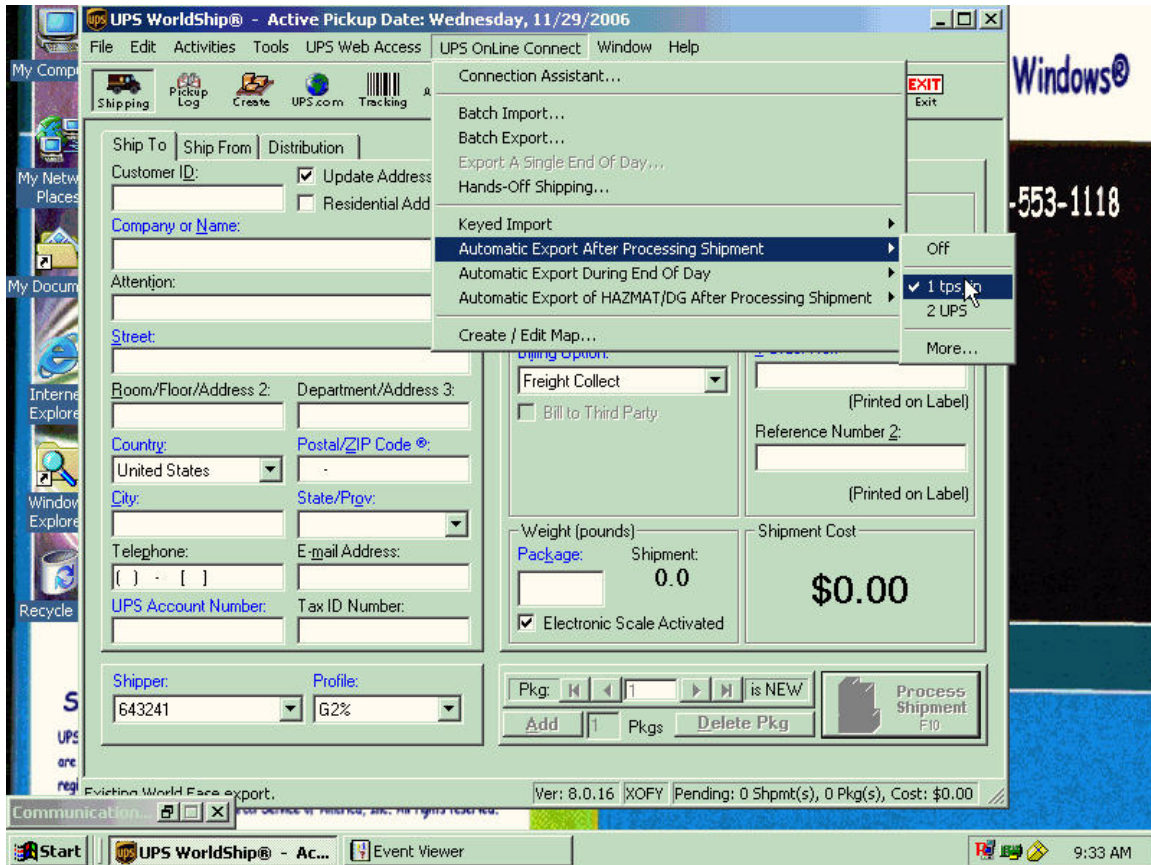
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Select the **Keyed Import** option and make sure it is set to the map “tps\_out” as shown below



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Next, select the **Automatic export after processing shipment** options and make sure it is set to the map “tps\_in” as shown below



This should cause a pop up box “*Enter Keyed import*” to appear where the Maves order number can be entered as shown below

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UPS WorldShip® - Active Pickup Date: Wednesday, 11/29/2006

File Edit Activities Tools UPS Web Access

Enter import key: [ ] Close EXIT Exit

Shipping Pickup Log Create UPS.com Tracking

Ship To Ship From Distribution

Customer ID: [ ] ☒ Update Address Book  
☐ Residential Address

Company or Name: [ ]

Attention: [ ]

Street: [ ]

Room/Floor/Address 2: [ ] Department/Address 3: [ ]

Country: [ United States ] Postal/ZIP Code: [ ]

City: [ ] State/Prov: [ ]

Telephone: [ ( ) - [ ] ] E-mail Address: [ ]

UPS Account Number: [ ] Tax ID Number: [ ]

Shipper: [ 643241 ] Profile: [ G2% ]

Service Options Detail Reference

Shipment: UPS Service: [ Ground ]  
☐ Saturday Delivery

Billing Option: [ Freight Collect ]  
☐ Bill to Third Party

Package: Package Type: [ Package ]  
Declared Value: \$ [ ]  
1 Order No.: [ ] (Printed on Label)  
Reference Number 2: [ ] (Printed on Label)

Weight (pounds) Package: [ ] Shipment: 0.0  
☒ Electronic Scale Activated

Shipment Cost: \$0.00

Pkg: [ 1 ] is NEW  
Add [ 1 ] Pkgs Delete Pkg

Process Shipment F10

For Help, press Shift + F1 Ver: 8.0.16 XOFY Pending: 0 Shpmt(s), 0 Pkg(s), Cost: \$0.00

Start UPS WorldShip® - Ac... Event Viewer 9:32 AM

Any orders which have “UPS” as the carrier code in OE.01 will, after OE.03 has been run, be available to UPS for retrieval. All the operator needs to do is enter the Maves order number in the box above the system will retrieve the name, address and reference numbers from the Maves system.

Note: Do not change the Order number as seen in Reference 1 above eg. this must remain the Maves order number.

## 4.2 Exporting data from UPS to Maves

Once a shipment is processed by pressing the F10 key the system will perform the standard functions within Worldship e.g. printing label and will also update shipment information to the Maves system.

## 4.3 Deleting shipments or making changes

If you make changes to a shipment and wish to reprint the label the original shipment must first be Voided using the UPS “Void” button. Doing this will inform the Maves interface that this shipment has been deleted. The shipment can then be recalled and

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reprocessed. If the “Void” procedure is not done the original shipment details including tracking number will still be seen e.g. in OR40 and Netview.

## 5. Configuring the interface in Fedex Shipping Manager

### 5.1 Import Data from Maves to Fedex

In the toolbar select *Integration / Fedex Integration Assistant*

FedEx Ship Manager | v.2308-a | 190850

Databases Customize Utilities Integration Inbound Passport fedex.com Help

Ship<sub>2</sub> Track<sub>2</sub> Shipping list Address Book Report Close<sub>7</sub> fedex.com

Shipment details Options ShipAlert Document Commodity/Merchandise Customs

**Recipient information**

☐ Ship to group ☐ Hold

Recipient ID: Select recipient...

Country:

Contact name:

Company name:

Address 1:

Address 2:

Postal code:  State/Province:

City:

Telephone:  Ext:

Location #:

☐ This is a residential address

☐ Save in/Update my address book

**Package and shipment details**

Number of packages:  ☐ Identical packages

Weight:

Service type: Select service type...

Package type: Select package type...

Package dimensions:

Ship date: 01/12/2007

**Sender information**

Current sender: Maves  
165 Commerce Valley Dr.  
Thornhill, ON L3T 7V8

Change sender: SENDER190850 - Richard Forkun

Change return address: Current sender

**Billing details**

Bill transportation to:  Acct #:

Department notes:

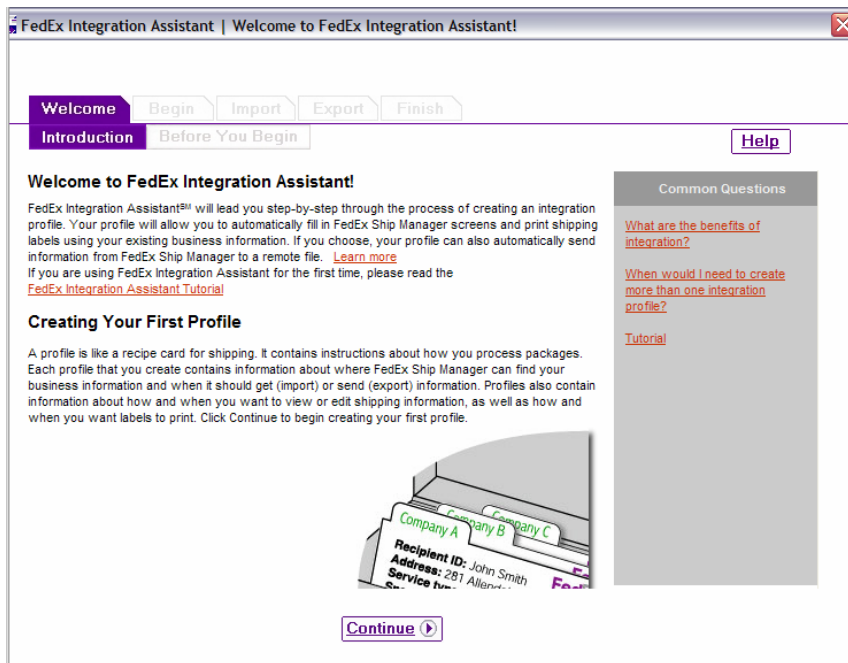
Customer reference:  Add'l handling

Clear fields Delete/Modify shipment Repeat shipment Override preferences Rate quote \$000000.00 Multiple-piece shipment Shipping

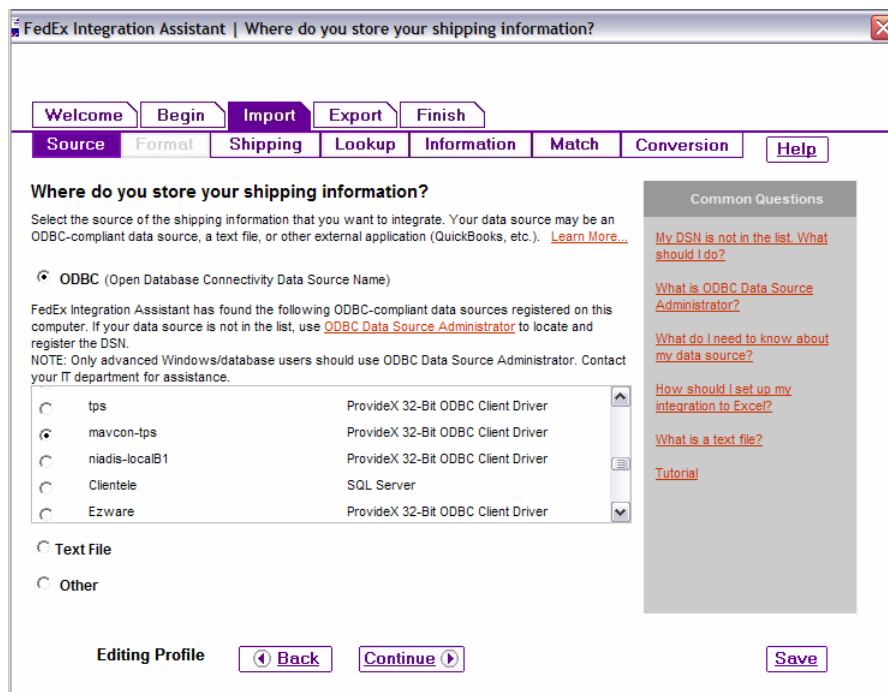
Comm Idle Friday, January 12, 2007 01:21:36 PM

Click the *Continue* button so you can create a profile. This profile should include both import and export:

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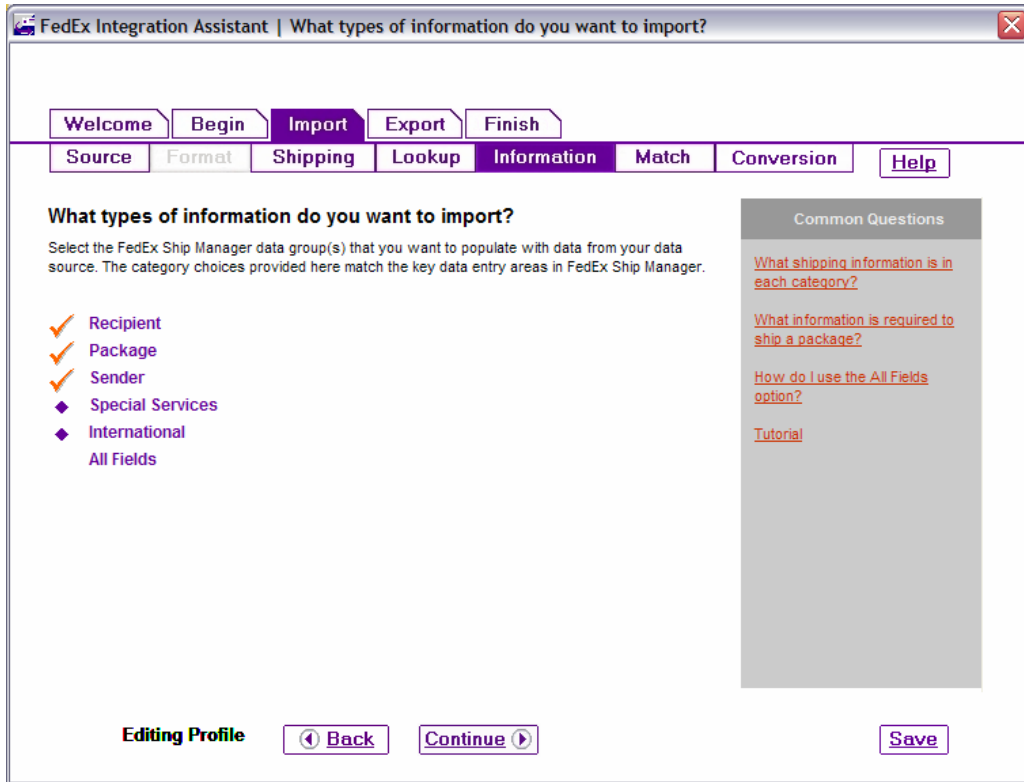


Select the ODBC data source based on the settings you entered previously



Select both Import and Export then continue with selecting the types of information to be mapped as follows:

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The screenshot shows the 'FedEx Integration Assistant' window with the title 'What types of information do you want to import?'. The window has a tabbed interface with 'Import' selected. Below the tabs, there's a list of information types to import: Recipient, Package, Sender, Special Services, International, and All Fields. The 'All Fields' option is selected. To the right, there's a 'Common Questions' section with links to 'What shipping information is in each category?', 'What information is required to ship a package?', 'How do I use the All Fields option?', and 'Tutorial'. At the bottom, there are buttons for 'Editing Profile', 'Back', 'Continue', and 'Save'.

**FedEx Integration Assistant | What types of information do you want to import?**

Welcome Begin **Import** Export Finish

Source Format Shipping Lookup **Information** Match Conversion Help

**What types of information do you want to import?**

Select the FedEx Ship Manager data group(s) that you want to populate with data from your data source. The category choices provided here match the key data entry areas in FedEx Ship Manager.

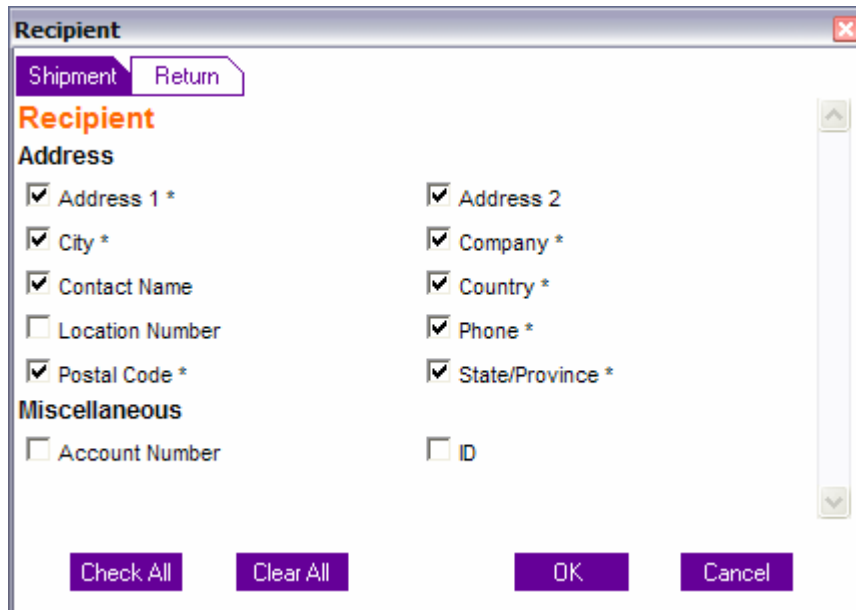
- ✓ Recipient
- ✓ Package
- ✓ Sender
- ◆ Special Services
- ◆ International
- ◆ All Fields

**Common Questions**

- [What shipping information is in each category?](#)
- [What information is required to ship a package?](#)
- [How do I use the All Fields option?](#)
- [Tutorial](#)

Editing Profile Back Continue Save

Now click on “All Fields” (Fedex has a 2 stage process – you select the fields to be mapped, then do the actual mapping in a second step)



The screenshot shows the 'Recipient' window with the 'Shipment' tab selected. The window is titled 'Recipient' and has a sub-tab 'Return'. The 'Recipient' section is highlighted in orange. Below it, there's a list of fields to be mapped, organized into 'Address' and 'Miscellaneous' sections. The 'Address' section includes fields like Address 1, City, Contact Name, Location Number, Postal Code, Address 2, Company, Country, Phone, and State/Province. The 'Miscellaneous' section includes Account Number and ID. All fields are currently checked. At the bottom, there are buttons for 'Check All', 'Clear All', 'OK', and 'Cancel'.

**Recipient**

Shipment **Return**

**Recipient**

**Address**

- ✓ Address 1 \*
- ✓ City \*
- ✓ Contact Name
- Location Number
- ✓ Postal Code \*
- ✓ Address 2
- ✓ Company \*
- ✓ Country \*
- ✓ Phone \*
- ✓ State/Province \*

**Miscellaneous**

- Account Number
- ID

Check All Clear All OK Cancel

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Map the appropriate fields from the Maves “tps\_out” table to the corresponding fields in Fedex.

Maves data element	Fedex Table	Fedex field
Order number	Package	Customer Reference
Client code	Sender	Account #
PO #	Misc	PO number
Sellers #	<not used>	
Warehouse code	<not currently used>	
Control method	Misc	Bill Transportation To
Service Level	Misc	Service Level
Carrier code	<not used>	
Shipto name	Recipient	Company
Shipto street	Recipient	Address 1
Shipto city	Recipient	City
Shipto address 2	Recipient	Address 2
Shipto state	Recipient	State
Shipto zip code	Recipient	Zip code
Shipto country	Recipient	Country
Shipto phone #	Recipient	Phone
Contact name	Recipient	Contact name
Shipto code	Recipient	Customer ID

Now map the corresponding Fedex fields with those from Maves according to the above table to the Maves “TPS\_OUT” table.

When finished click the *Select Index* button and then select “Order number” from the list that appears – this will be the number you will enter for each shipment  
Next select the “Conversion” tab:

**FedEx Integration Assistant | Convert your fields to FedEx Ship Manager fields.**

Welcome Begin **Import** Export Finish

Source Format Shipping Lookup Information Match **Conversion** Help

**Convert your fields to FedEx Ship Manager fields.**

Click the FedEx Ship Manager field on the left that you want to convert. Then, in the box on the right, select your value from each drop-down menu to match the FedEx Ship Manager value. Select a radio button to duplicate or remove a field for matching multiple fields.

**Shipment Data**

**Package fields**

- Service Type

**Recipient fields**

- State/Province
- Country**

<input type="radio"/> TUVALU	<None>
<input type="radio"/> UGANDA	<None>
<input type="radio"/> UKRAINE	<None>
<input type="radio"/> UNION ISLAND	<None>
<input type="radio"/> UNITED ARAB EMIRA	<None>
<input type="radio"/> UNITED KINGDOM	<None>
<input checked="" type="radio"/> UNITED STATES	United States
<input type="radio"/> URUGUAY	<None>
<input type="radio"/> US MINOR OUTLYING	<None>
<input type="radio"/> US VIRGIN ISLANDS	<None>

Duplicate Remove

Editing Profile Back Continue Save

**Common Questions**

[What is conversion?](#)

[When do I have to convert the format of my data to match the format required by FedEx?](#)

[When would I duplicate a field?](#)

[Tutorial!](#)

Click on the “Country” field on the left hand side and this will load all the countries maintained in Fedex – then from the drop down box select the Maves equivalent values for United States, Canada as well as any other countries that you intend to ship to.

Note: when you click on the drop down list the system is actually looking at values from the live Maves database so it can only select from values that are actually in the file. For instance if you intend to ship to Australia you will need to have an order in Maves going to Australia so that the country code will appear in here.

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Specify mapping rules also for the Service Type.

FedEx Integration Assistant | Convert your fields to FedEx Ship Manager fields.

Welcome Begin **Import** Export Finish

Source Format Shipping **Lookup** Information Match **Conversion** Help

**Convert your fields to FedEx Ship Manager fields.**

Click the FedEx Ship Manager field on the left that you want to convert. Then, in the box on the right, select your value from each drop-down menu to match the FedEx Ship Manager value. Select a radio button to duplicate or remove a field for matching multiple fields.

**Shipment Data**

**Package fields**

- ✓ Service Type
- ✓ Bill Transportation

To

**Recipient fields**

- ◆ State/Province
- ✓ Country

Standard Overnight <None>

2 Day <None>

First Overnight <None>

Express Saver <None>

Ground GRD

Ground Home Deliver <None>

1 Day Freight <None>

2 Day Freight <None>

3 Day Freight <None>

International Priority 1DAY

Duplicate Remove

**Common Questions**

- [What is conversion?](#)
- [When do I have to convert the format of my data to match the format required by FedEx?](#)
- [When would I duplicate a field?](#)
- [Tutorial](#)

Editing Profile

Back Continue Save

## 5.2 Export from Fedex

In the Export tab select the “Text File” option and enter the location and filename of the file as below:

**FedEx Integration Assistant | Where do you want to send shipping information?**

Welcome Begin Import **Export** Finish

Destination Format Method Information Match Conversion Help

**Where do you want to send shipping information?**

Select the source of the shipping information that you want to integrate. Your data source may be an ODBC-compliant data source, a text file, or other external application (QuickBooks, etc.). [Learn More...](#)

☐ ODBC (Open Database Connectivity Data Source Name)

☒ **Text File**

Select the text file that contains your shipping information.

V:\A1TPS\_IN.csv [Browse](#)

☐ Other

**Common Questions**

- [My DSN is not in the list. What should I do?](#)
- [What is ODBC Data Source Administrator?](#)
- [What do I need to know about my data source?](#)
- [How should I set up my integration to Excel?](#)
- [What is a text file?](#)
- [Tutorial](#)

Editing Profile [Back](#) [Continue](#) [Save](#)

Note: the file to be used will be on a mapped network drive e.g. X, Y etc. and the filename format is A1TPS\_IN.csv if A1 is the company.

After pressing “Continue” define the file structure as below:

**FedEx Integration Assistant | What is the format and structure of your text file?**

Welcome Begin Import **Export** Finish

Destination Format **Format** Method Information Match Conversion Help

**What is the format and structure of your text file?**

Answer each question that appears below.

**What kind of text file are you using to store your data?**

☒ **Delimited** – Fields are separated by a character such as a comma

☐ Fixed Width – Fields are aligned in columns

**What character separates your fields?**

(comma)

**Does the first row contain field names (headings)?**

☐ Yes ☒ **No**

Below is sample data from your text file:

```
"400252", "1Z6432410243185436", "1.00", "13.10", "20070504", "400265", "905900603030", "46.97", "0.00", "0.00", "4.27", "42.00", "400264", "905900603040", "43.45", "0.00", "0.00", "39.50", "0.00", "400264", "651383560000061", "13.35", "0.00", "0.00", "12.90", "0.00"
```

**Common Questions**

- [What is a text file?](#)
- [Tutorial](#)

Editing Profile [Back](#) [Continue](#) [Save](#)

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Select the “Delimited” option and “comma” as the character separator and “No” *to first row contains field names (headings)* and press “Continue”.

The screenshot shows the 'FedEx Integration Assistant' window with the title 'How will your data source receive exported information?'. The 'Export' tab is selected in the top navigation bar. Below the tabs, the 'Method' sub-tab is active. The main content area asks 'How will your data source receive exported information?' and provides instructions. It includes a 'NOTE' about data source compatibility. There are two sections with radio button options: 'When do you want to export to your data source?' (with options 'Each time a shipment is completed' and 'At the end of day') and 'How do you want to update your data source?' (with options 'Insert a new record' and 'Update an existing record'). A 'Common Questions' sidebar on the right lists links like 'What is a record?' and 'What does inserting a record do?'. At the bottom, there are buttons for 'Editing Profile', 'Back', 'Continue', and 'Save'.

Select “Each time a shipment is completed” and “Insert a new record” then press “Continue”

Define the types of information to be exported:

The screenshot shows the 'FedEx Integration Assistant' window with the title 'What types of information do you want to export?'. The 'Export' tab is selected in the top navigation bar. Below the tabs, the 'Information' sub-tab is active. The main content area asks 'What types of information do you want to export?' and provides instructions. It includes a list of data groups with checkboxes: 'Tracking Number' (checked), 'Charges' (checked), 'Package', 'Recipient', 'Sender', 'Special Services', 'International', and 'All Fields'. A 'Common Questions' sidebar on the right lists links like 'What is a tracking number?' and 'What shipping charges can I export?'. At the bottom, there are buttons for 'Editing Profile', 'Back', 'Continue', and 'Save'.

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Click on ALL Fields and select the data elements that will be required

The 'All' dialog box has two tabs: 'Shipment' (selected) and 'Return'. Under the 'Tracking Number' section, the checkbox for 'Tracking Number' is checked. Under the 'Charges' section, under 'Customer Rates', the checkbox for 'Declared Value Surcharge' is checked. At the bottom are buttons for 'Check All', 'Clear All', 'OK', and 'Cancel'.

The 'Charges' dialog box has two tabs: 'Shipment' (selected) and 'Return'. Under the 'Charges' section, under 'Customer Rates', the checkbox for 'Net Charge' is checked. Other visible checkboxes include 'Alaska Surcharge', 'Cash On Delivery Surcharge', 'Date Certain Delivery Surcharge', 'Delivery Area Surcharge', 'Fuel Surcharge', 'Hawaii Surcharge', 'Inside Pickup Surcharge', 'Non Standard Container Surchar', 'Appointment Delivery Surcharge', 'Dangerous Good/Hazmat Surcharg', 'Declared Value Surcharge', 'Evening Delivery Surcharge', 'Gross Charge', 'Inside Delivery Surcharge', and 'Offshore Surcharge'. At the bottom are buttons for 'Check All', 'Clear All', 'OK', and 'Cancel'. A tooltip 'Net Char' is visible over the 'Net Charge' checkbox.

From the Tracking Number section select:

- ☐ Tracking Number

From the Charges section select:

- ☐ Net Charge
- ☐ Gross Charge
- ☐ Select 6 other charges (a total of 8 charges must be selected even if they will not be used)

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From the Miscellaneous/Package section select:

- ☐ Customer Reference
- ☐ Weight
- ☐ Ship Date

Next map the appropriate fields from the Maves “TPS\_IN” table to the corresponding fields in Fedex.

Maves data elements	Fedex Table	Fedex field
Field 1	Package	Customer Reference
Field 2	Tracking Number	Tracking number
Field 3	Charges	Net charge
Field 4	Charges	Gross charge
Field 5	Charges	User definable
Field 6	Charges	User definable
Field 7	Charges	User definable
Field 8	Charges	User definable
Field 9	Charges	User definable
Field 10	Charges	User definable
Field 11	Package	Ship Date
Field 12	Package	Weight

Continue and save the changes to a profile.

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## 6. How to use the interface in Fedex Shipment Manager

From the toolbar at the top of the shipping window select *Integration* then select the name you gave to your integration profile:

The screenshot shows the FedEx Ship Manager v.2308-a interface. The top menu bar includes Databases, Customize, Utilities, Integration, Inbound, Passport, fedex.com, and Help. The top toolbar has buttons for Shipper2, Trackers, Shipping list, Address Book, Report, Close, and fedex.com. The main window is titled "FedEx Ship Manager" and contains several tabs: Shipment details, Options, ShipAlert, Document, Commodity/Merchandise, and Customs. The "Shipment details" tab is active, displaying a form with the following sections:

- Recipient information:** Includes fields for Recipient ID (with a dropdown menu), Country (dropdown), Contact name, Company name, Address 1, Address 2, Postal code, State/Province (dropdown), City (dropdown), Telephone, and Ext. There are also checkboxes for "Ship to group", "Hold", "This is a residential address", and "Save in/Update my address book".
- Package and shipment details:** Includes fields for Number of packages (with a dropdown), Weight (dropdown), Service type (dropdown), Package type (dropdown), Package dimensions (dropdown), and Ship date (01/12/2007).
- Sender information:** Includes fields for Current sender (Maves, 165 Commerce Valley Dr., Thornhill, ON L3T 7V8), Change sender (dropdown), and Change return address (dropdown).
- Billing details:** Includes fields for Bill transportation to (dropdown), Acct # (dropdown), Department notes (dropdown), and Customer reference (dropdown). There is also an "Add handling" button.

At the bottom of the form, there are buttons for Clear fields, Delete/Modify shipment, Repeat shipment, Override preferences, Rate quote, \$000000.00, Multiple-piece shipment, and Ship now. The status bar at the bottom shows "Comm Idle 33:32" and "Friday, January 12, 2007 02:56:08 PM".

The customer lookup box should appear and look like this:

The screenshot shows a "Customer Reference Lookup" dialog box. It has a title bar with a close button. The main text says "Enter the Customer Reference number for the order you wish to import." Below this is a text input field labeled "Customer Reference:". At the bottom are "OK" and "Cancel" buttons.

Now enter the Maves order number and Fedex will retrieve the order data

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Once a shipment is processed by pressing the F10 key the system will perform the standard functions within Fedex e.g. printing label and will also update shipment information to the Maves system.

## 7. Query and billing functions

### 7.1 How to view Tracking details

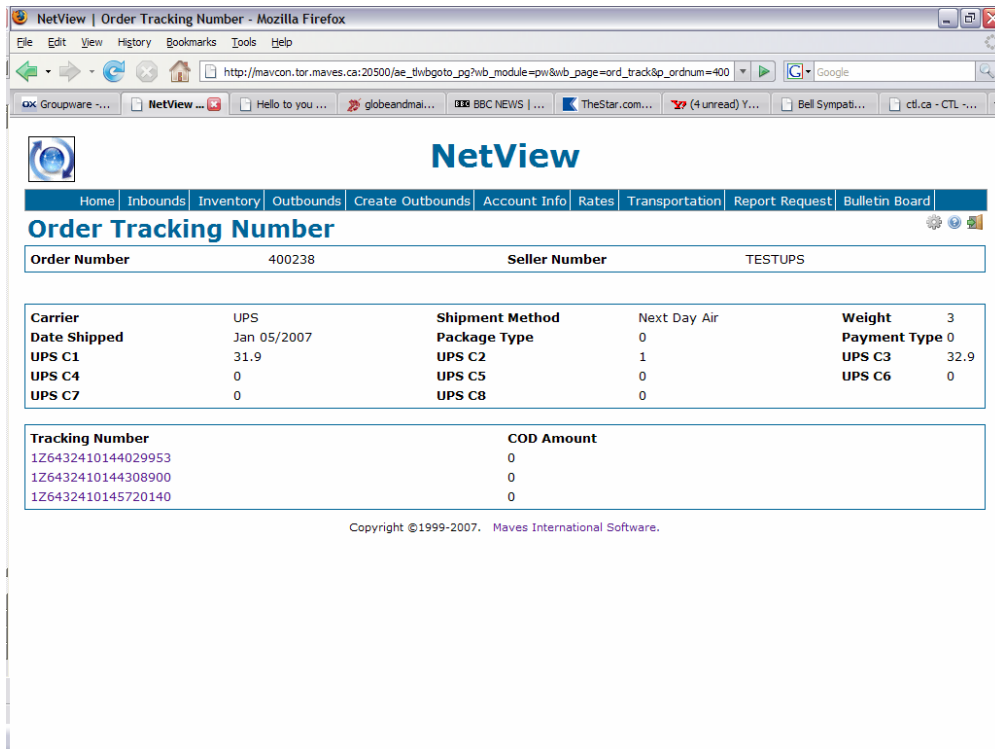
By recalling an order in OR.40 the user can then press F6 for further options and scroll down to find tracking numbers. There can be multiple tracking numbers for each order if there are multiple parcels.

OR.92 can also be used to both view and make changes to tracking data.

In Netview, a new *Tracking* column can be setup (this must be done by the webmaster account) and this will contain the word “View” which, when clicked, will provide the user with the ability to view data retrieved from the shipping system. This data will include the tracking number as well as freight charges. By clicking on the tracking number the user will then be taken to the UPS website to review the status of this parcel.

Client Reference	Consignee Reference	Carrier	Ship to Arrive Date	Shipped Date	Warehouse Reference	Tracking Number
TUE1	POTUE1	UPS	Jul 03/2006		400217	
TIMANDHUGH		UPS	Jul 03/2006		400216	
TESTUPS1234560	TESTUPS1234567891230	UPS	Aug 01/2006		400226	
TESTUPS1		UPS	Aug 01/2006	Aug 01/2006	400239	<a href="#">View</a>
TESTUPS001	TESTPO001	UPS	Jul 03/2006		400213	
TESTUPS0000089	TESTUPS0000000000009	UPS	Aug 01/2006	Aug 01/2006	400228	<a href="#">View</a>
TESTUPS		UPS	Aug 01/2006	Aug 01/2006	400238	<a href="#">View</a>
TESTSELLERS190	TESTPO12312312310	FEDEX	Aug 01/2006		400233	
TESTSELLERS1	TESTPO1	FEDEX	Aug 01/2006		400232	
TESTSELLERS	TESTPO	FEDEX	Aug 01/2006	Aug 01/2006	400231	<a href="#">View</a>
TESTODBC1	TESTPOOCB	UPS	Jul 03/2006		400215	
TESTMANUAL001	TESTPMANUAL	UPS	Jul 03/2006		400214	
TESTFED		FEDEX	Aug 01/2006	Aug 01/2006	400240	
TEST1	TEST1	UPS	Aug 01/2006	Aug 01/2006	400227	<a href="#">View</a>
T2			Jul 03/2006		400206	
T1			Jul 03/2006		400205	
SEL92		UPS	Aug 01/2006	Aug 01/2006	400237	<a href="#">View</a>
SEL91		UPS	Aug 01/2006	Aug 01/2006	400236	<a href="#">View</a>
S3		Customer Pick-Up	Jul 03/2006		400198	
S1123	PO123	UPS	Aug 01/2006	Aug 01/2006	400235	<a href="#">View</a>
S1		Triple A Cartage	Jul 03/2006		400197	
S1		Triple A Cartage	Jun 08/2006		400180	
RFTEST2		J.B. Hunt	Apr 07/2006		400014	
NO CHARGE		UPS	Aug 01/2006	Aug 01/2006	400229	<a href="#">View</a>
CHARGE		UPS	Aug 01/2006	Aug 01/2006	400230	<a href="#">View</a>
ABC		BISHOP TRANSPORT	Dec 26/2006		400234	

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By clicking on the tracking number the user is taken to the carrier website and will see the status of their shipment

## 7.2 Billing shipping charges

After an order is ship confirmed in OE.20 and the day end has been run (IP.33/IP.90), shipping charges will update into the accessorial accumulator file (as seen in IP.93) based on the setup of the carrier in CR.38 and the type of control method used in OE.01, based on the settings in CP.03.

Invoices can then be generated in IP32 and printed in IP.53 or run in trial mode in IP.23 and printed in IP.24. On the invoice a line will print for each order and unique charge code. For instance, if both shipping charges and UPS additional handling charges are being billed back then 2 lines will print per order.

## **8. Technical Notes**

### **8.1 Exporting data to UPS/Fedex**

The file that is generated by Maves and available via ODBC for UPS and Fedex is pw\_tps\_out, as seen when using the F9 Powerkey. This file contains the order number and 18 other pieces of data from the order header. This is generated by OE.03 .

### **8.2 Importing data from UPS/Fedex**

The file that is received back from UPS and Fedex does not come in via ODBC, but is a flat file that is updated by UPS/Fedex each time an order is shipped in those systems. This file is A1TPS\_IN.CSV (for company A1) and contains a row for each order / tracking number combination. This file contains the order number and tracking number and up to 14 other pieces of data. For instance, if a Maves order results in 3 packages in UPS, then 3 tracking numbers are generated and 3 rows of data will be updated to this file. By using the samba share, a letter drive e.g. X on the shipping system has access to a defined directory on the Maves server. The location of this directory is defined in CR.38 field 16 and is specific to the carrier.

### **8.3 Background Task**

Since data is being written by UPS/Fedex throughout the day, a background task called “UPS” (see CC.40) continually polls the directory, reads file A1TPS\_IN.CSV and updates file pw\_tps\_in which can be seen in OR.92. This data is also made available to OR.40 as well as Netview, using the “view” link in the “Tracking” column in the outbound orders list.

Note: there is no maintenance on these files so records will grow over time, unless manually deleted.

### **8.4 Troubleshooting**

If the UPS or Fedex system locks up or the input box ceases to appear this may be because the ODBC process is not working correctly on the server. A call should be made to the Maves SIG group in order to reset the ODBC process.

If ODBC is running correctly on the UPS/Fedex side but tracking numbers are not being seen in Netview or OR40 then it is possible that the background task is not working correctly. This can be checked in CC.41 and restarted, if necessary, in CC.40.

How to check if the Maves ODBC connection is working on a specific PC?  
From Windows, go to Start / Control Panel / Administrative Tools/ Data Sources (ODBC), select the System DSN tab, then select the data source being used for this purpose (probably has Maves or Maves-UPS in the name), click the “Configure” button,

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select the “Debug” tab then click the “Test Connection” button. Within a couple of seconds a message should be appear with “Connection succeeded Datasource includes 2 tables”. (Be sure to Cancel out of the application and be careful not to click on “OK” and inadvertently change any settings)

If nothing appears for several seconds then ODBC likely is not working. An error message of some kind will eventually appear – just close the application and a call to Maves Support and the SIG group is warranted.

In the

If you upgrade your version of UPS or Fedex software please make sure the mapping settings are carried over or recreated, or give us a call at Maves in order to do this for you.