Parcelhub - Linnworks Custom Courier Integration Script

What is it?

When an order is processed using Linnworks, Linnworks has the ability to book a shipment and print shipping labels for that order. Linnworks has a series of couriers built in, but it also has a "Custom/Bespoke Courier" section that allows other couriers to integrate and print labels from Linnworks.

Parcelhub have written a script that integrates the Parcelhub systems with Linnworks. The script uses the Parcelhub API to create labels for orders in Linnworks. Using this script you can automatically create labels for your orders using all of the services available in the Parcelhub desktop client[1]. This has the advantage of having more carriers available than would be available through Linnworks directly, allowing you to ship using Parcelhub's advantageous pricing and having Parcelhub's support available to help you deal with the carriers. Tracking numbers are put into Linnworks automatically, and can be passed back to eBay, Amazon and other storefronts.

To set and use this script, you don't need to know anything about the API, but you do need to know how to use Linnworks. It would be helpful to have used the Parcelhub desktop application.

Some Linnworks documentation

Linnworks themselves describe how to set up shipping methods at the following two links.

- http://blog.linnsystems.com/shipping-management-in-linnworks/
- http://linnworks.com/Doc/order_shipping_management_delivery_multicarrier_integration

Installing and configuration

Installing the script

You should have got a copy of the Linnworks script with this document. Open the script in Notepad (or any other text editor of your choice). You should be able to open the script with Notepad by right clicking on the file in Windows Explorer, choosing "Open With" and choosing Notepad.

Open Linnworks if you have not done so already.

From the main screen on Linnworks, click on Settings, then Shipping Management, then the spanner next to "Custom/Bespoke Courier".

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[1] Actually, technically you can only use the services that are available via the Parcelhub API, which are a subset of the services available through the Parcelhub desktop application. Eventually they will be the same.
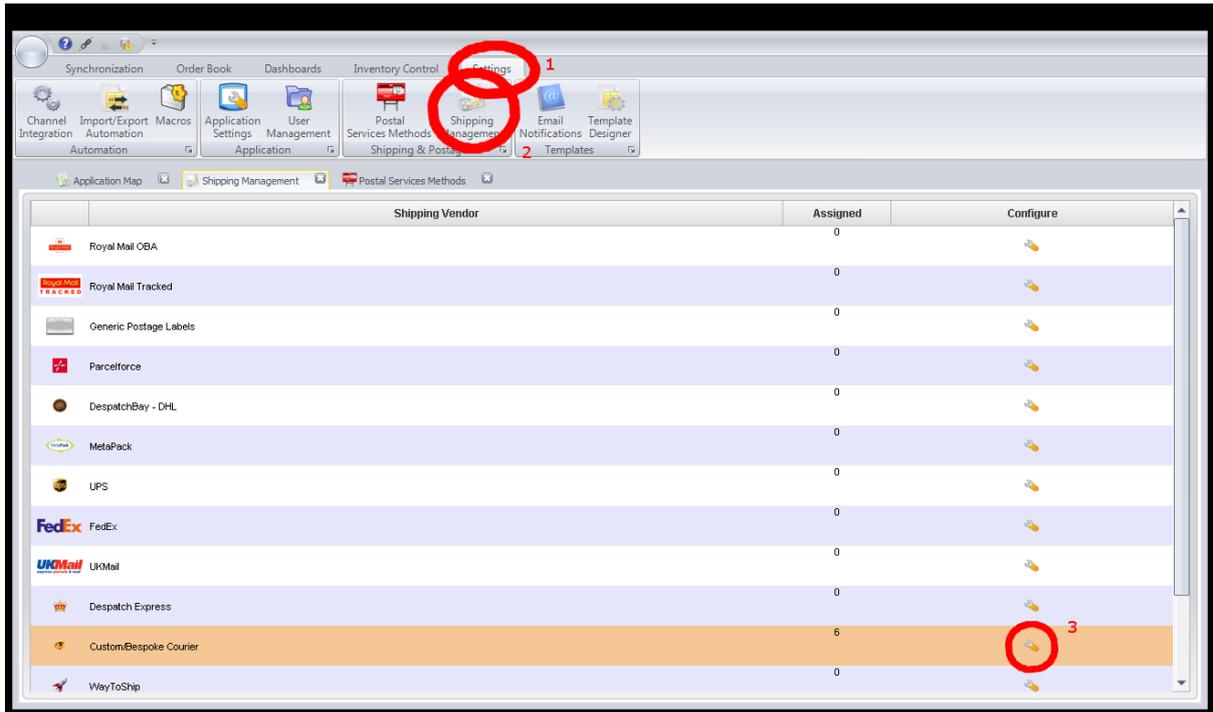
A new window will appear. Choose "Add new". This will allow you to add a new custom courier. Call it Parcelhub (or anything else you like- the name is not important for the operation of the script). Then click on the edit button next to the new configuration you have just created.
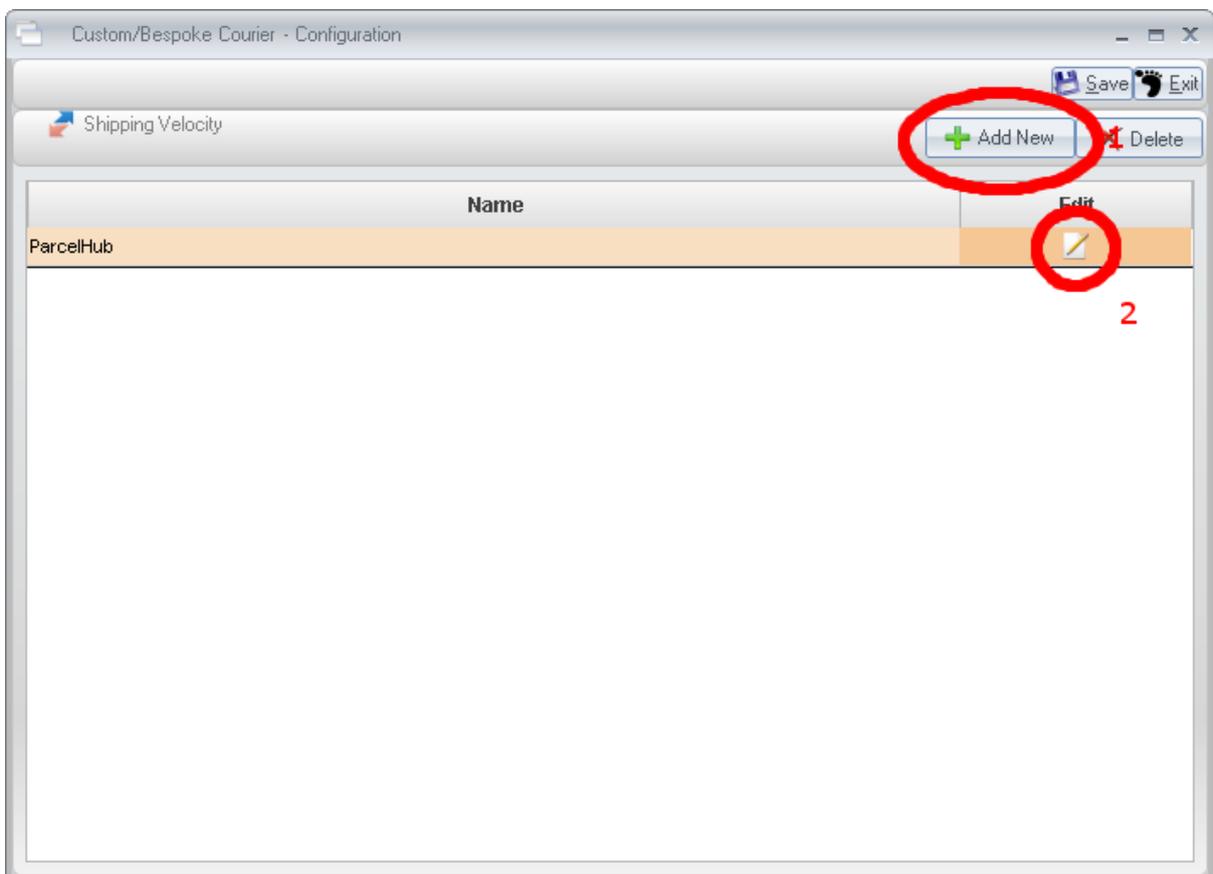
A new dialog will pop up. Firstly, although there is no maximize button, you can double click on the bar at the top of this window to maximize it. This makes the window easier to work with.

Secondly, choose Macro script from the radio buttons at the top (rather than Flat File). Your screen should now look like the screen shot.
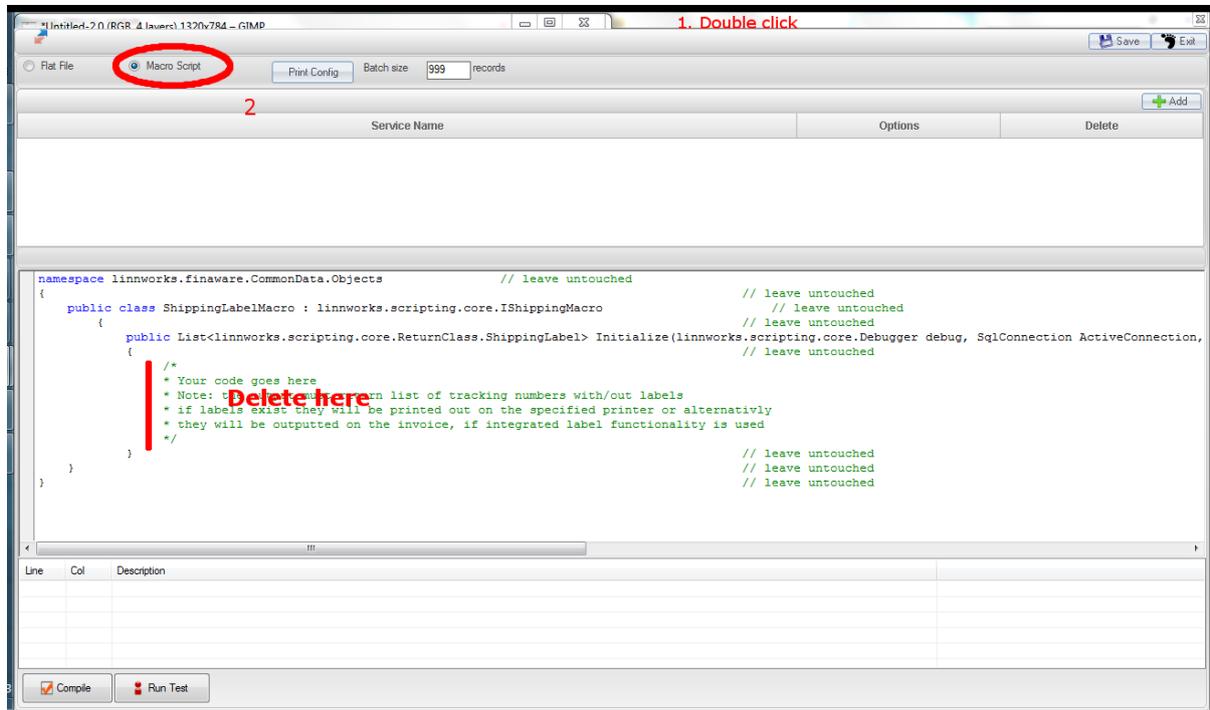
The next bit is unavoidably tricky. Sadly, Linnworks doesn't make this easy for us to do, and it's quite hard for us to write instructions describing how to do this. The difficulty arises because we can't touch any of the lines labelled "leave untouched", and if you even try Linnworks won't let you. If you get stuck, please contact Parcelhub who will be happy to help.

Start by deleting all of the green text where I have labelled. The section begins with "/*" and ends with "*/".

Next switch windows to Notepad where the script is open. We want to copy the program, but we need to make sure we copy and paste the program from the right bit. If you look at the program in Notepad, you'll see there is a line with "// COPY FROM HERE" written on it. Copy this line and all the lines after it all the way to another line with "// COPY TO HERE" written on it (this second line is near the end of the document).

Paste that code into Linnworks in the code windows where you deleted the text earlier. This is after the last open curly brace ({).

Configuring the script

Now you have pasted the script into the window, the next step is to configure the script. If you look at the program, there is a section at the top labelled "CONFIGURATION SECTION". By editing these parameters, you can set up the Linnworks script to produce labels correctly for your environment.

You don't have to be a computer programmer to configure this script, but you do need to make sure that you keep all of the quotation marks (") in the right place and leave all of the semi colons (";") in place. Again, if you get stuck contact Parcelhub.

Things you can configure

Username and Password

The first things you will need to change are the username and password. These should be changed to your Parcelhub username and password when using the live server.

From Address

By editing the From Address lines, you can change the 'From' address on shipments you create. This might or might not affect where that carrier attempts to pick up the parcel from, depending on the carrier. So to be safe, make sure this address is really where you want the parcels collecting from.

Live Server

The next variable that can be configured is "IWantToUseLiveServer". We have a live server and a test server. If this is set to true, then Linnworks will send shipments to the live server, which will return live labels. Please note:

- If you use the test server, you will (probably) have to use to use the test username "TEST001" and password "TEST001". This account may have different services available to the ones you have on your live account, as different customers have a different range of services available depending on your contract with Parcelhub.
- If you use the test server, then all labels returned are dummies. Please do not attempt to post real parcels using test labels! Attempting to do so will result in the carriers becoming confused. Your parcels may be returned, delivered or just plain lost, and the carriers will then send us a bill which we will pass on to you!
- Conversely, please be aware that every label you create using the live server, even when just trying it out, will need to be deleted (see later for how to do this), as these labels will be booked with the carriers. Any labels not cancelled will be billed. Naturally, any labels you do print out using the live server can be used to send real parcels.

Using Raw Printing

The next two settings are IWantToUseRawPrinting and printername.

To explain this setting it is necessary to understand a little bit about how the script works.

If IWantToUseRawPrinting is set to false, the script asks the API server for a picture (it's a PNG) of the label. The script then passes this label back to Linnworks, which then manages the printing of it (if you want to configure how Linnworks prints this kind of label, click on PrintConfig at the top of the screen where you pasted the script. For instance you can choose which printer Linnworks uses).

The problem we found with this approach is that it's very slow. Firstly our server takes a long time to draw PNGs, and then Linnworks is fairly slow at printing them.

If you have an EPL printer like a Zebra label printer, there is another way. By setting this setting to true, the script bypasses Linnworks printing and prints directly to the printer. The API server can generate the printer language much quicker than a picture, and the printer can print it out much quicker too.

The downside is that this only works on EPL compatible printers, so if you haven't got one, you are out of luck.

If you use raw printing you need to set "printername" to the name of the printer as it appears in Control Panel.

Detecting Duplicates

If DetectDuplicates is set to true, then the script will refuse to print a label for any shipment that has already has a tracking number. If this is turned on, and you want to print another label for this shipment, you have to delete the tracking number in the Edit Order screen in Linnworks.

Assigning Postal Service Methods to the Linnworks Script

Creating Postal Services Methods

In Linnworks, each order has a postage method assigned to it. You can see what postal method has been assigned to each order via either the Edit Order or View Order screens.

You can see what Postal Services Linnworks knows about by going to the Postal Service Methods screen (Settings, then Postal Service Methods). You can add new service methods by clicking on the Add a new row button.
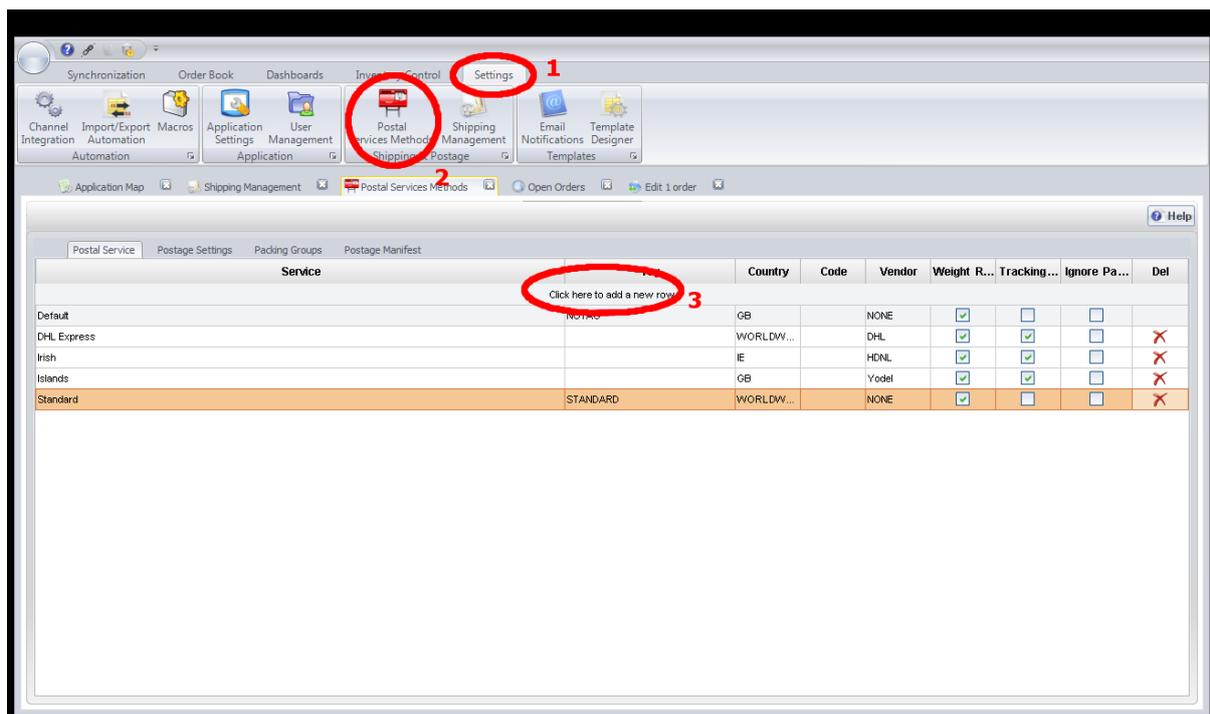
You should create a Service Method for every service you want to use.

Using the Linnworks script, the Country, Vendor, Weight Required, and Tracking fields don't do anything, so filling them in is just for your notes.

The best thing to do is to choose a list of the Parcelhub services you want to use, and create a service method for each one. So you might have a service method called Yodel @HOME72, Yodel STD, DHL Express and so on.

Assigning service methods to Linnworks script

Now we've created some postal service methods, we need to assign them to the Linnworks script.

Open up the Linnworks script again by going via Shipping Management (see "Installing the script" for step by step instructions on how to get there). You should be back at this screen:
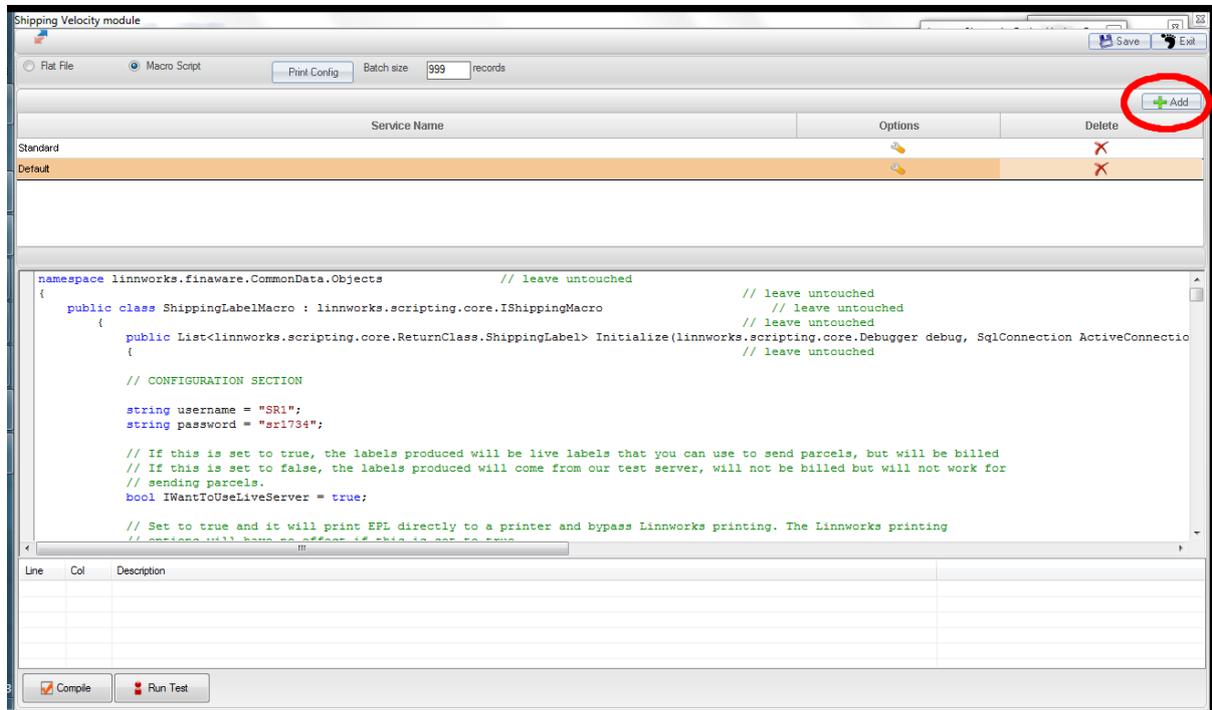
Click on the Add button. You should get a dialog pop up like this:
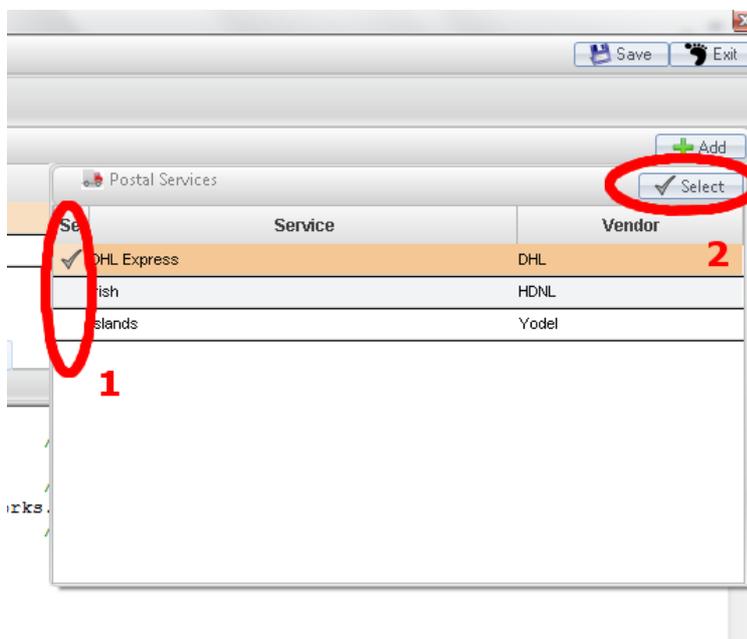
Select the services you want to use with the Linnworks script. In this example I've chosen DHL Express. Then press select. Your service should appear in the list of services at the top of the screen:
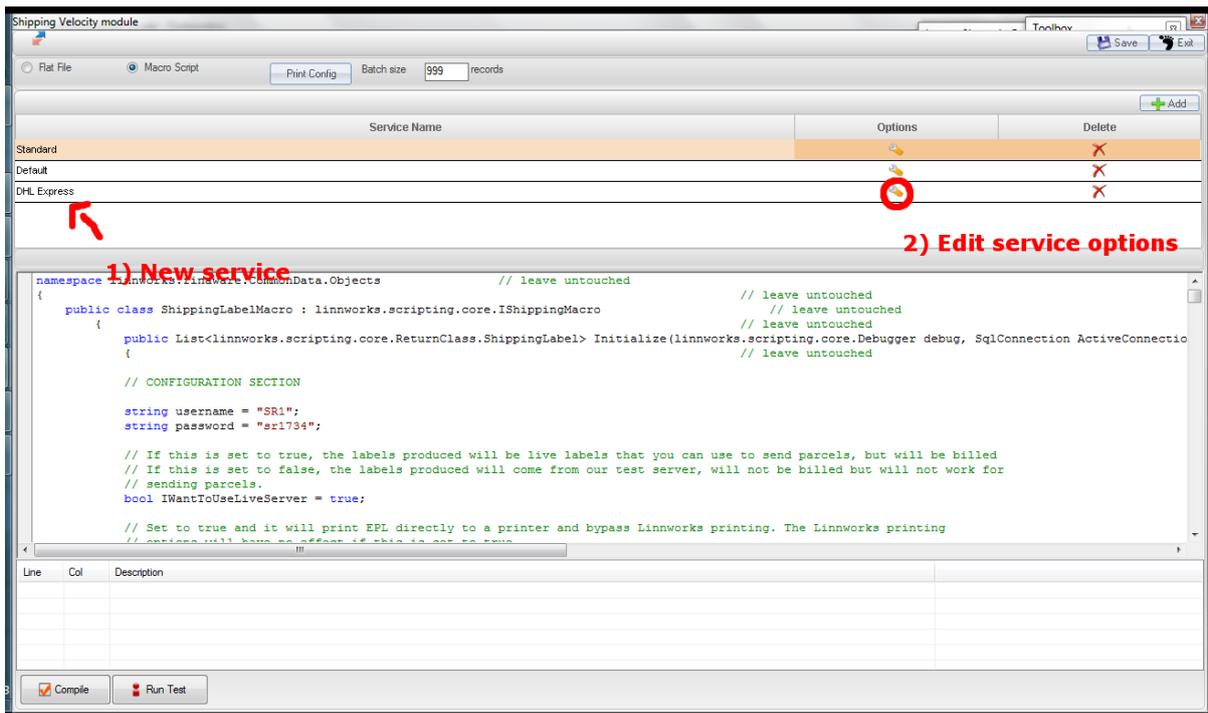
Edit the service options by clicking on the spanner next to the service. Now we need to tell the script which service this refers to. We do this by supplying the IDs for the service.

Understanding the Service IDs

Every Parcelhub service has two IDs that uniquely identify it. They are the ServiceProviderId and the ServiceId.

The ServiceProviderId is a number that refers to which service provider provides that service. For example Yodel is 10. Here is the current list:

ServiceProviderId	Carrier Name
6	DHL International
7	HDNL
10	Yodel
11	Citylink

Each service also has its own number. For instance Yodel's @HOME72 TR has a service id of 56. It's worth emphasising that not all customers (so not all logins) have all services. If you ask Parcelhub they can give you a list of all the services and their numbers for your account. You'll only have Yodel's @HOME72 TR if you send enough parcels per day to have Yodel pick them up in a trailer, for example.

So, hopefully by now you will know the ServiceId and the ServiceProviderId for the service you want to use.

You should still have the window with the script on it. When you click on the spanner next to the new service you've created a dialog like the following will pop up:
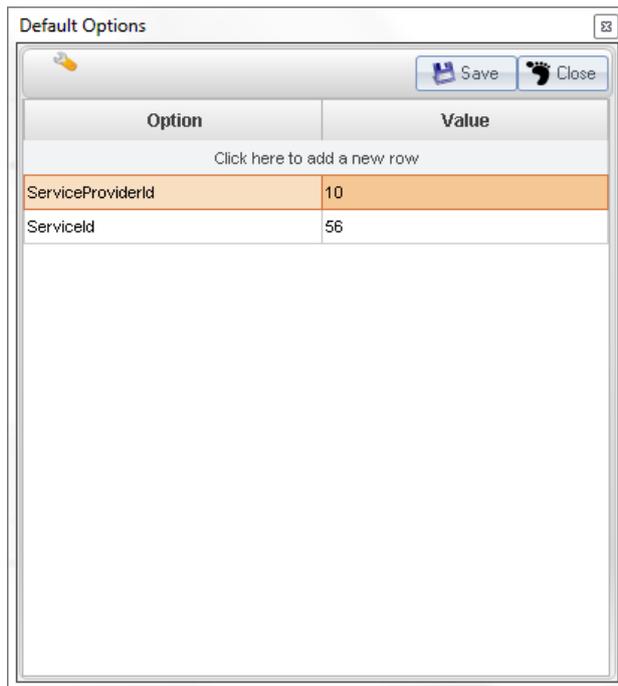
To provide the IDs to the script click on "Click here to add a new row". Put "ServiceId" (spelled exactly like that with no spaces and the capitalization as shown) in the Option column and add the ServiceId number you want to use in the Value column. Then do exactly the same for ServiceProviderId.

The picture above is what it should look like if you have done it correctly.

Click Save, and it should all be working.

Testing the new service

The best way of testing your new service is to make a test order. I'm not going to cover how to do that in this document in detail, but here are some hints.

You can create orders by clicking on New Order from the Orders tab. The key thing you need to do is to assign the new service under the Shipping tab. By clicking on the Service drop down you can choose the postal service method you've just created.

Annoyingly Linnworks will only let you test the script with orders that are set to the postal service method you want to test. In other words if you want to test your new Yodel @HOME24 postal service method, you'll have to create a test order and set the postal service method to "Yodel @HOME24". If you try and use an order set to a different postal service method it just won't work.

Make a note of the order number for your test order, as you'll need that to test the order.

Go back to the script screen (see earlier for how to get there) and choose "Run Test".
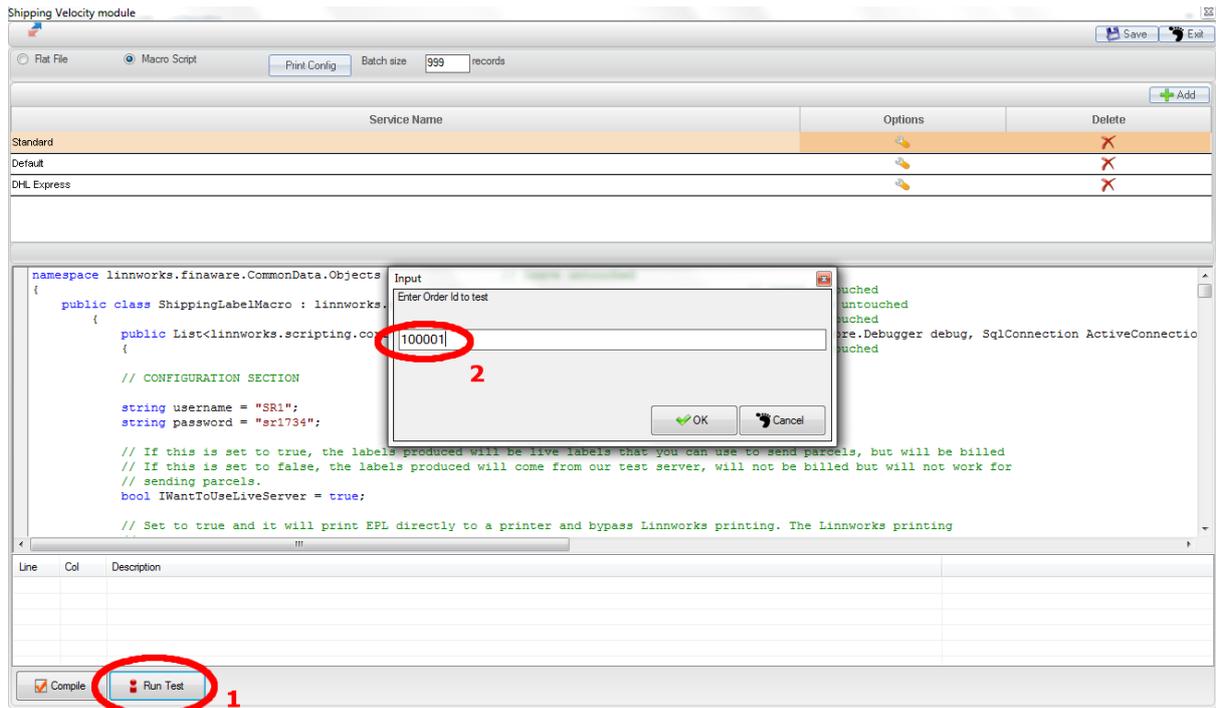
Type in the order number for the test order you have just created.

If it fails, you'll get an error message pop up in a dialog box. The error message should give you a clue as to what has not worked.

If it succeeds what happens depends on whether you have raw printing turned on or not. If you have raw printing turned on, the labels will come out of the printer as the script has no way of knowing whether it is being tested or not. A dialog box will be shown with the tracking numbers.

If raw printing is not enabled, the same dialog box will pop up, but there is a button you can press to see a picture of the labels generated.
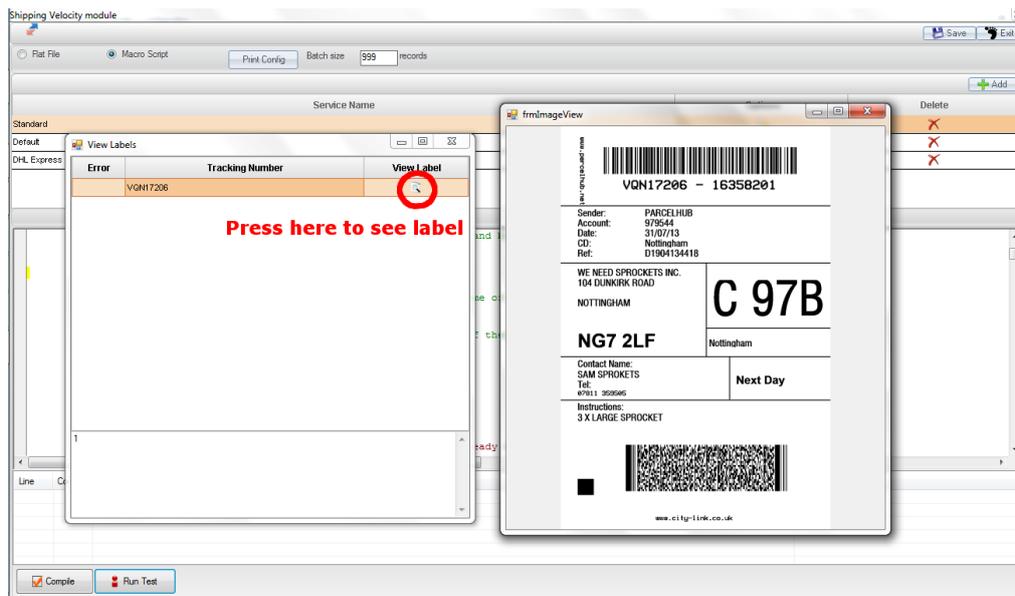
Remember- all these labels you generate while testing are live labels! You must delete them otherwise you will get a bill!

Deleting Shipments

The deleting applet

OK, so how do you delete shipments? You need to use the deleting application. This is supplied separately. This is what it looks like when you start it:
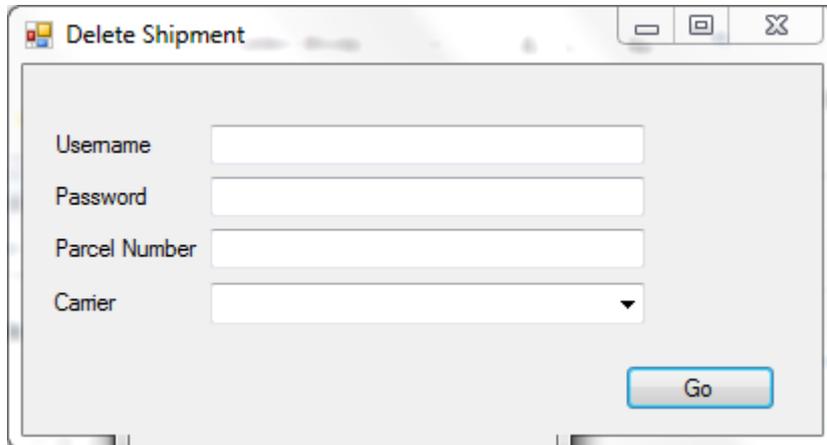
It's pretty self-explanatory. You type your Parcelhub username and password in the box, select the carrier you sent the parcel with, type in the Parcelhub parcel ID number and press "Go". It then returns a green light if it is successful or an error if it doesn't.

What isn't obvious is where you get the Parcelhub parcel ID from.

Getting the Parcelhub Parcel ID from Linnworks.

Every time labels are generated for an order, the script adds a note to that order. The following is a test order. This is the View Order page. You get to this screen by double clicking on an order in the Open Orders page.


You can see the notes by clicking on the "Order Notes" button. This order is one of my test orders. You should be able to see the format of the note that the script adds. This order is a bit unusual that

I have printed a *lot* of labels for this order- obviously a typical order will only have one shipment created for it.

The number on each line is the number you need to put into the parcel deleter application, above.

Dealing with Errors

When you use the service in production you can see errors on the orders page. Below is a sample order in the open orders list. I've tried to print a label, but it's failed. I can tell this by the red x on the left hand side of the status icons:
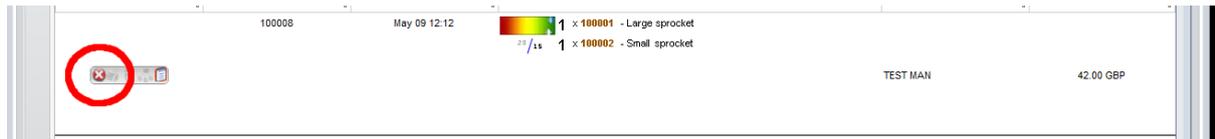
If I hover my mouse over the X, it tells me the error "Can't send this parcel via this service (probably address or size related- does this delivery method deliver this size parcel to this address?)". This is the most common error message. 99% of the time it means that a part of the address is incomplete. Parcelhub is fussy when it comes to addresses- UK postcodes must be complete, capitalized and have a space in the right place. There must be an order reference. The country must be filled in, even if it's just GB.

There are some sample scripts on the Linnworks website to help with automatically formatting postcodes for users who input their postcode incorrectly into (say) eBay. E.g. http://www.linnworks.com/Doc/Sample_Script_Reformat_UK_Post_Code