RF - Serial Relocation

This document describes how to use the RF Relocation programs to relocate serial numbers (for Serial Tracking products).
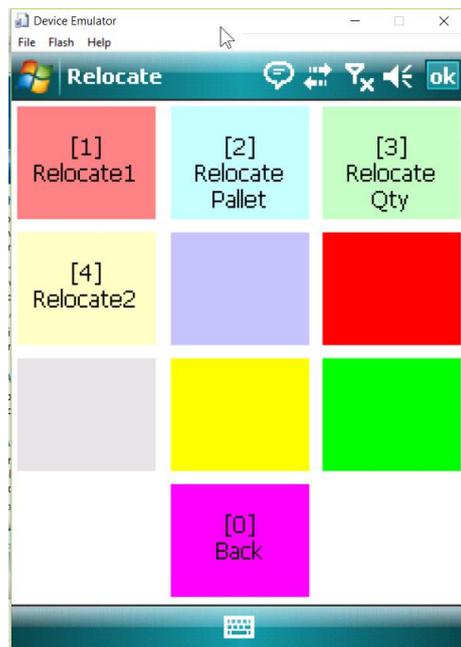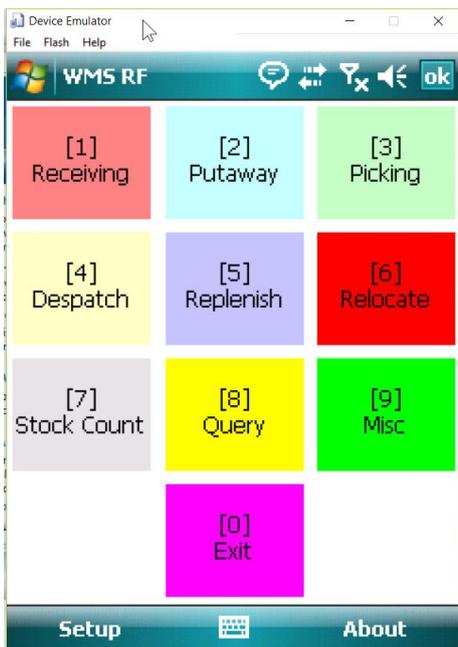
RF Relocate Options

Difference between RF Relocation Options

There are 4 **Relocate** sub-options in the WMS RF program.

The **Relocate Pallet** option relocates everything on a pallet from its Source location to the Destination location.

The **Relocate Qty** option cannot be used to partially relocate serialised tracking products from a Source location to a Destination location because of the serial tracking requirement.

Only the **Relocate1** and **Relocate2** options can be used to perform partial qty relocation of serialised tracking products.

 Although both **Relocate1** and **Relocate2** can be used to perform serial relocation, they operate differently. Both have their pros and cons, but I personally think **Relocate2** is a bit easier to use from an operational standpoint.

Relocate1 requires you to specify the Source location and the Destination location beforehand. Thus, you must know exactly where you want to move the serials to before you can use **Relocate1**. For serial relocation, **Relocate1** actually requires the user to pick the serials from a list instead of scanning the barcoded serial number.

The **Relocate2** option doesn't require you to know the exact Destination location beforehand. In this option, you will first transfer the serials from the Source location to a "mobile" location. (In

fact, you can transfer serials from multiple Source locations into the "mobile" location.) When the "mobile" location is filled with all the serials to be relocated, you can then specify the Destination location and pallet number, and transfer ALL the serials in the "mobile" location to the Destination location/pallet.

Relocate2 will not allow you to transfer some of the "mobile" location serials to one Destination pallet/location, and then transfer the rest of the "mobile" location serials to a different Destination pallet/location. You can only transfer ALL the serials in the "mobile" location to a single Destination pallet/location to end the relocation operation.

All transactions are Pallet Number Based

Although the user interface requires you to specify the Source location and the Destination location, in reality, you actually need to specify the Source pallet number and the Destination pallet number.

In blockstack locations (eg. "PP010101"), a single location address identifying an area on the warehouse floor may contain multiple pallets. Therefore, the WMS cannot operate with just the location address of the stocks, but must operate with the actual pallet number.

If there is currently just one pallet in the Source location, the WMS can infer the Source pallet number, and may not need to prompt the user to explicitly specify the pallet number. However, this "intelligence" is only programmed in the newer **Relocate2** option, and is not available in the older **Relocate1** option. (In **Relocate2**, if the specified location contains only one pallet, the pallet number will be auto-filled into the "Pallet Number" textbox.)

If the Destination location is empty, that means there is currently no pallet number associated with the Destination location. The older **Relocate1** option requires the user to explicitly create a NEW pallet number in the Destination location for the Destination pallet. The newer **Relocate2** option can intelligently auto-create a new pallet number in an empty Destination location.

Carriage Return in Barcode Scans

All barcode scans on the scanner will send up the text data with a Carriage Return. The RF program uses the automatic Carriage Return to trigger activities specific to each text box.

If you type in the text data via the keyboard instead of scanning the barcode (e.g. in the "Location" textbox, you type in the location address instead of scanning the location barcode), you must manually press the **[Enter]** key after inputting the text data to manually send in the Carriage Return character so as to trigger the special activity associated with the textbox. If you don't press the **[Enter]** key, the program may behave differently as compared to when scanning barcodes.
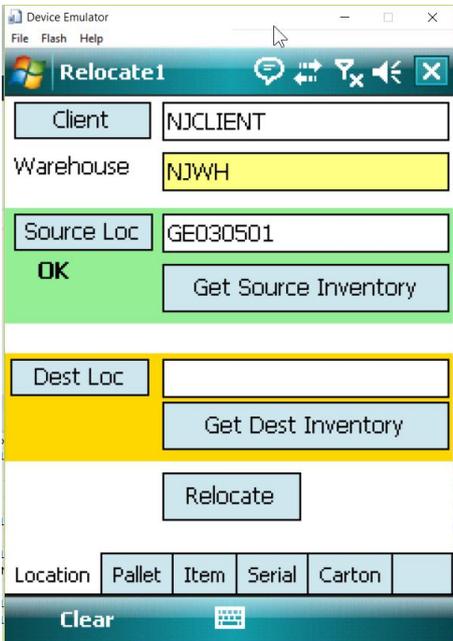
Relocate1

Enter the Source location in the "Source Loc" textbox and click the [Get Source Inventory] button.
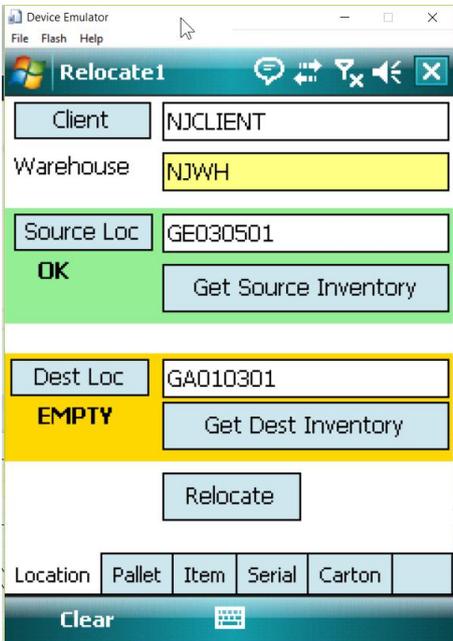
Enter the Destination location in the "Dest Loc" textbox and click the [Get Dest Inventory] button.

You must first switch to the "Pallet" tab page to specify the Source pallet.

After the Source pallet has been identified, you can then switch to the "Serial" tab page to specify the serials to be relocated.
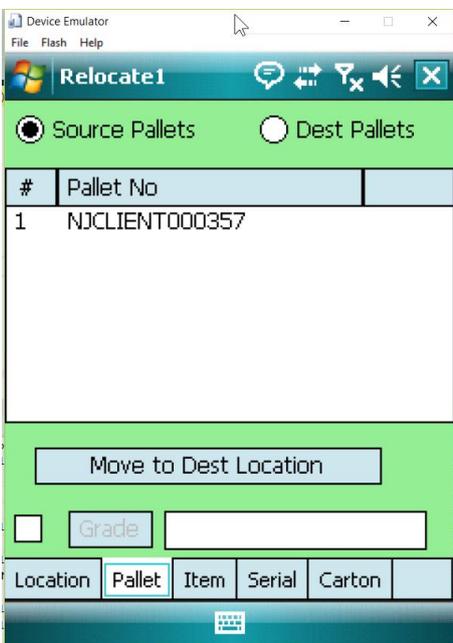

When the [Get Source Inventory] button is clicked, an **OK** will be displayed if the location contains stocks.

When the [Get Dest Inventory] button is clicked, an **OK** will be displayed if the Destination location contains stocks. If the location is empty, an **EMPTY** will be displayed instead.
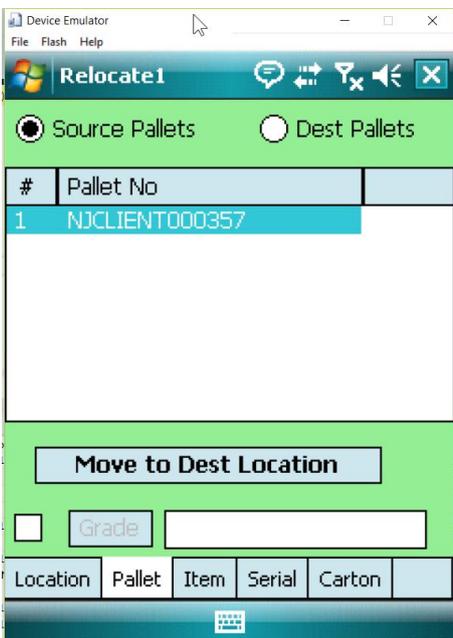
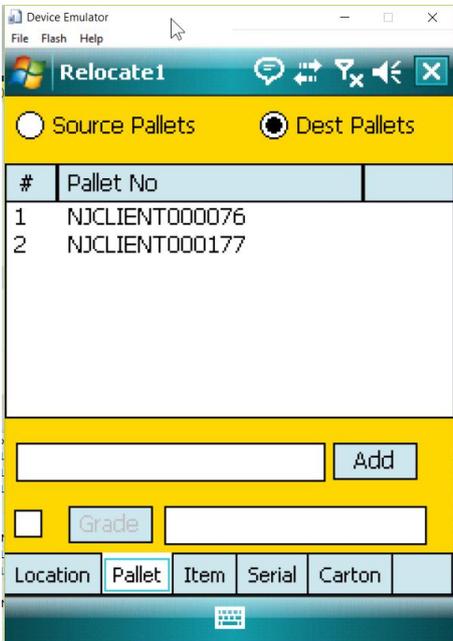It is necessary to retrieve the inventory status of both the Source and Destination locations first.

Select the "Pallet" tab page.

Select the "Source Pallets" radio button. A list of pallet numbers in the current Source location will be displayed.

You must first choose a Source pallet number from this list.
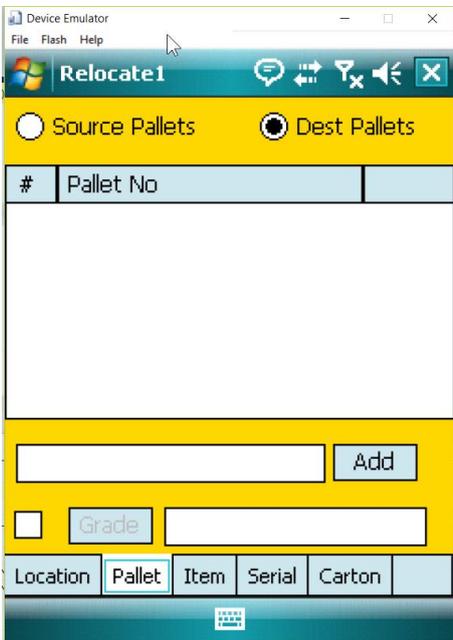
Click to select a Source pallet number. You must always select a Source pallet before you can perform serial relocation.

If the Destination location contains multiple pallets, you need to choose a Destination pallet.

In the same "Pallet" tab page, click the "Dest Pallets" radio button. If there are existing pallets in the Destination location, they will be shown in the grid. You must select one of the Destination pallets before continuing.

However, if the Destination location is empty, no pallets will be listed in the grid for "Dest Pallets".

If the Destination location is empty, you will need to go to the "Serial" tab page and create a new pallet number in the Destination location.
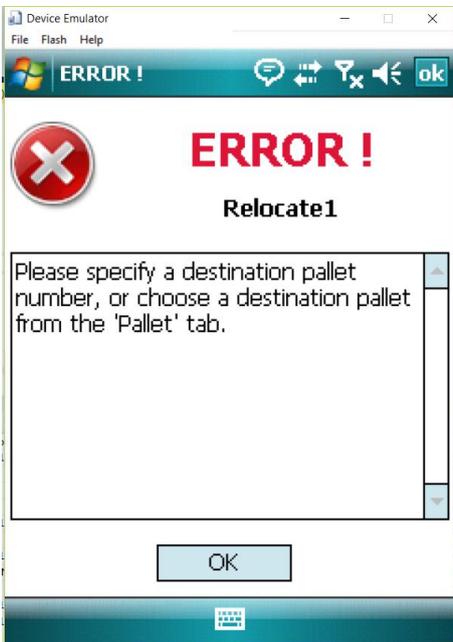
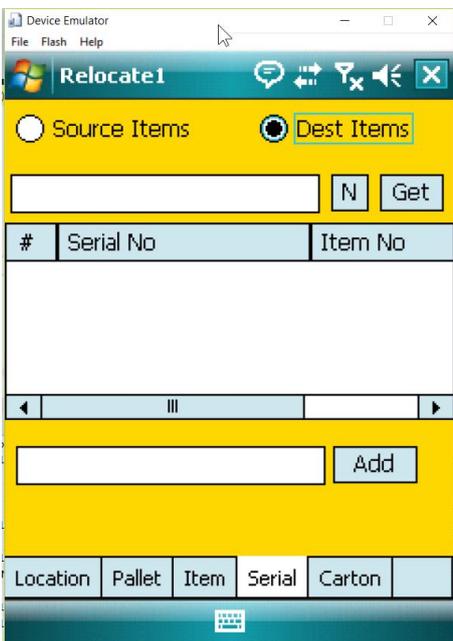Switch to the "Serial" tab page.

Select the "Source Items" radio button.

The Source pallet number that has been selected from the "Pallet" tab page will appear in the "Source Items" textbox. Click the [Get] button to retrieve all the serial numbers in the source pallet.

Once the serial numbers from the source pallet is displayed, you can click on any serial in the list, and then click the [Move to Dest Pallet] button to relocate that serial to the destination pallet.
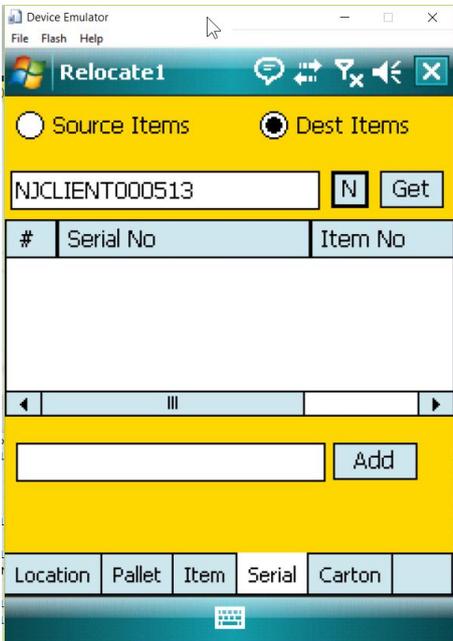

However, if the Destination location was empty, you will see this error message. This is because for empty Destination locations, we must first generate a new pallet number to contain the relocated serials.
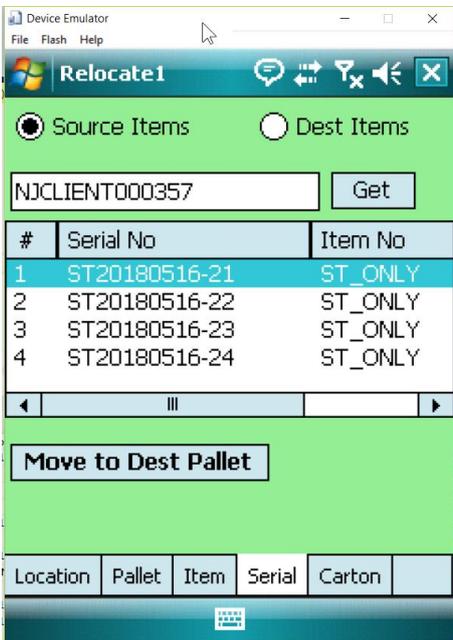

To generate a new pallet number in the Destination location, on the "Serial" tab page, select the "Dest Items" radio button.

Click the [N] button to generate a NEW pallet number in the "Dest Items" textbox.
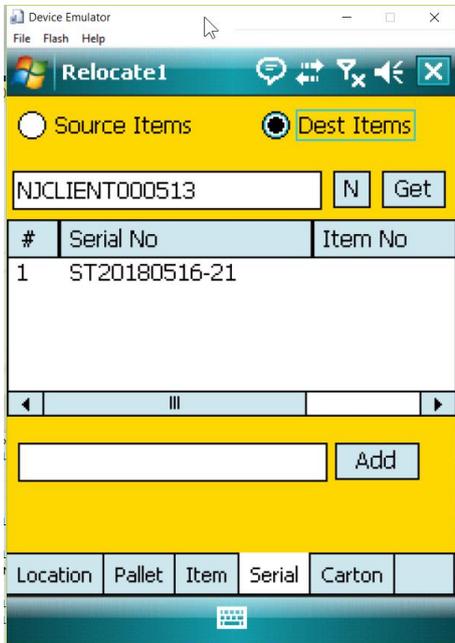
Once the new pallet number has been generated in the "Dest Items" textbox, select the "Source Items" radio button again.

As before, click on the serial number that you want to relocate, and then click the [Move to Dest Pallet] button.

If the serial can be successfully relocated (you will hear the words "OK" sounded from the speaker), the serial will be removed from the "Source Items" grid.

If you switch to the "Dest Items" display, you will see that the serial is now listed under the Destination pallet.

Relocate2

The **Relocate2** option is designed to work like a shopping cart in a supermarket. You put the items from the Source location (the supermarket shelves) into your shopping cart, move the shopping cart to the Destination location (checkout/cashier) and then unload (relocate) the items to the Destination location.

First, you must "Begin" the relocation exercise. A mobile location and mobile pallet number (your shopping cart) will be assigned to your scanner.

You can then go to multiple Source locations, and at each location, scan the serials to be relocated. At this point, the serials are first relocated from their Source location to your mobile location. This is similar to going to different shelves in the supermarket and putting the goods you want to buy into your shopping cart.

To complete and "End" the relocation exercise, all the items that have been initially relocated to the mobile pallet will be relocated finally to the Destination location. In the supermarket analogy, this is equivalent to bringing your shopping cart to the cashier at the checkout area.
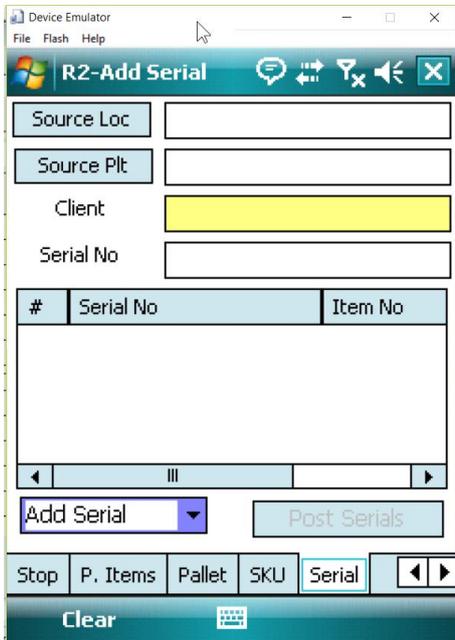

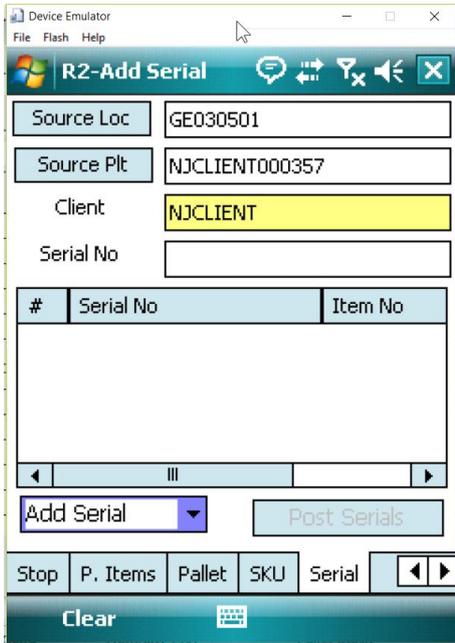Click on [Begin Relocate] to start the **Relocate2** relocation exercise.

A Mobile Location will be assigned to the scanner.

Actually, a system generated Mobile Pallet Number is also created at the Mobile Location. The Mobile Pallet Number can be viewed from the "P. Items" (Picked Items) tab page.
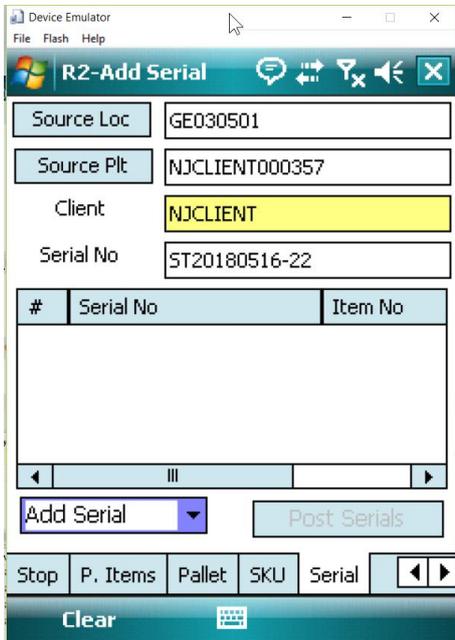

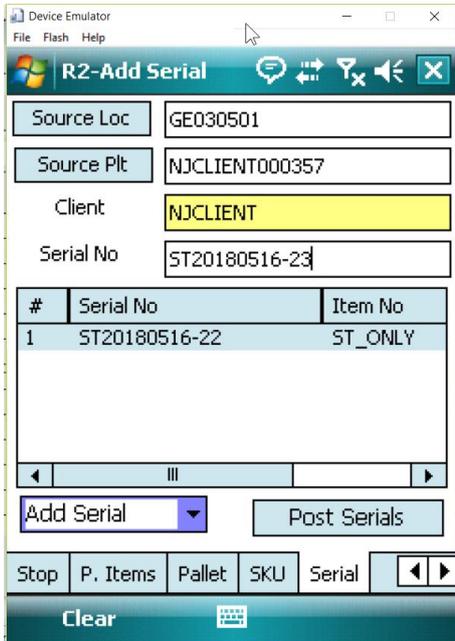Click on the "Serial" tab page to relocate serials.

In the "Source Loc" textbox, specify the Source Location you are relocating from.

If the Source location has only 1 pallet, the pallet number will automatically be populated in the "Source Plt" textbox.

If the Source location contains more than 1 pallet, you must specify a pallet number for the "Source Plt" textbox.
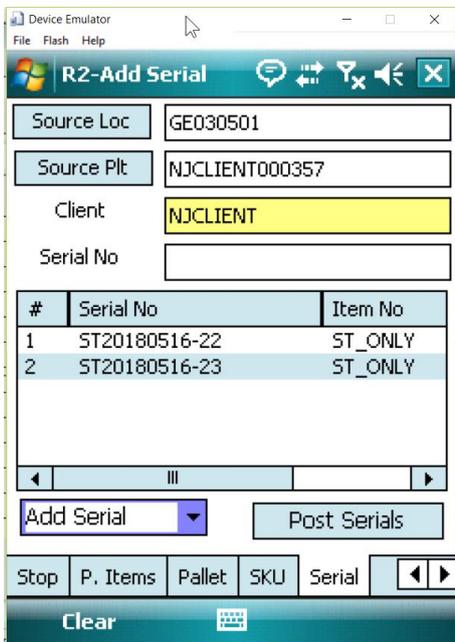

In the "Serial No" textbox, enter or scan a serial to be relocated from the Source pallet.
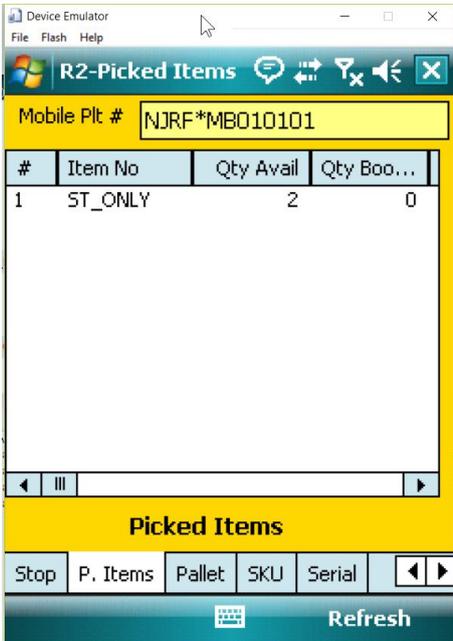
If the serial number is validated, it will be added to the grid.

Note that serial numbers added to the grid are not yet transacted at the database.

After all the serials from the Source pallet have been added into the grid, click the [Post Serials] button to commit the actual transaction in the database.

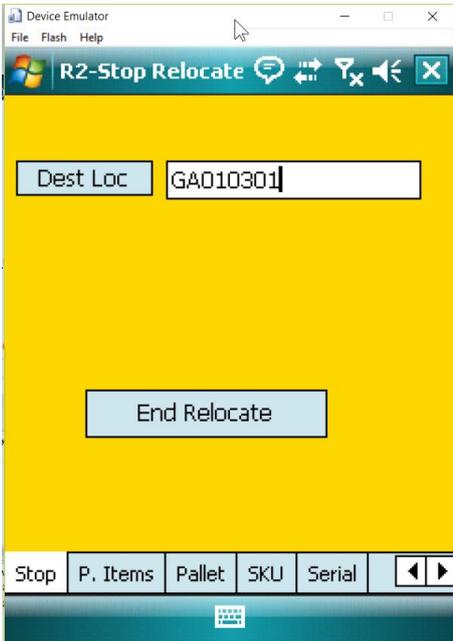Once posted, the serials will be relocated from the Source pallet to the Mobile pallet.

If you switch to the "P. Items" (Picked Items) tab page, you will be able to see the Item Numbers (unfortunately, not the serial numbers) that has been added to the Mobile pallet.
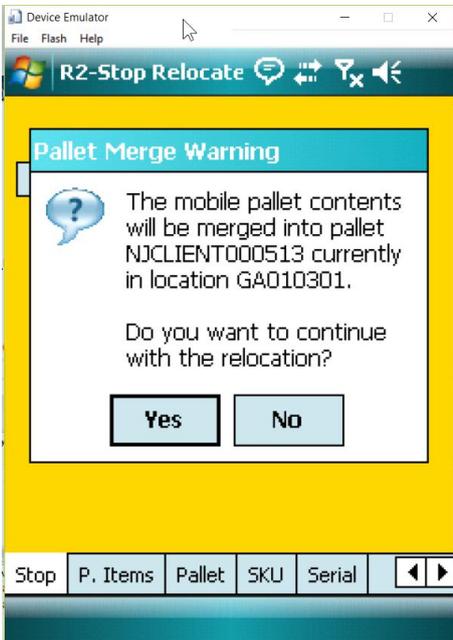
You can switch back to the "Serial" tab page, and then relocate serials from another Source location/pallet into the Mobile pallet.

Once all required serials have been transferred to the Mobile pallet, switch to the "Stop" tab page to complete the **Relocate2** relocation exercise.
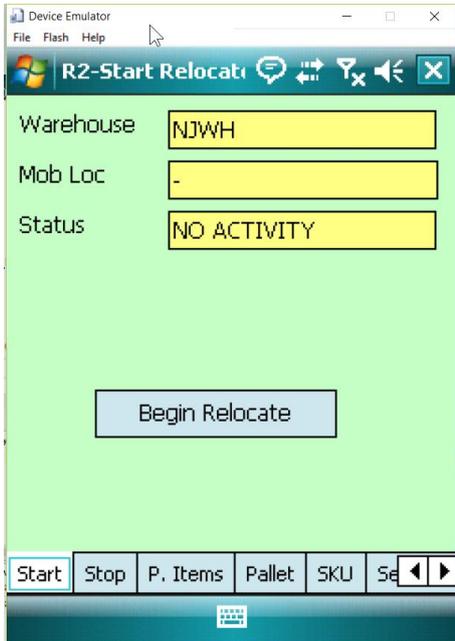
Enter the Destination Location in the "Dest Loc" textbox, and click the [End Relocate] button.

If the specified Destination location already contains a pallet, a warning message may be displayed to ask whether the contents on the Mobile pallet should be merge into the existing Destination pallet.

Answer [Yes] to merge the Mobile pallet contents into the Destination pallet.

Otherwise, answer [No], and then specify another (empty) Destination location.

After the [End Relocate] activity completes, all the items on the Mobile pallet will be relocated into the Destination Location.

The Mobile pallet will then be flushed from the system, and the Mobile Location will be unassigned from the scanner.

The whole sequence can now be repeated to relocate serials to another Destination Location.

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