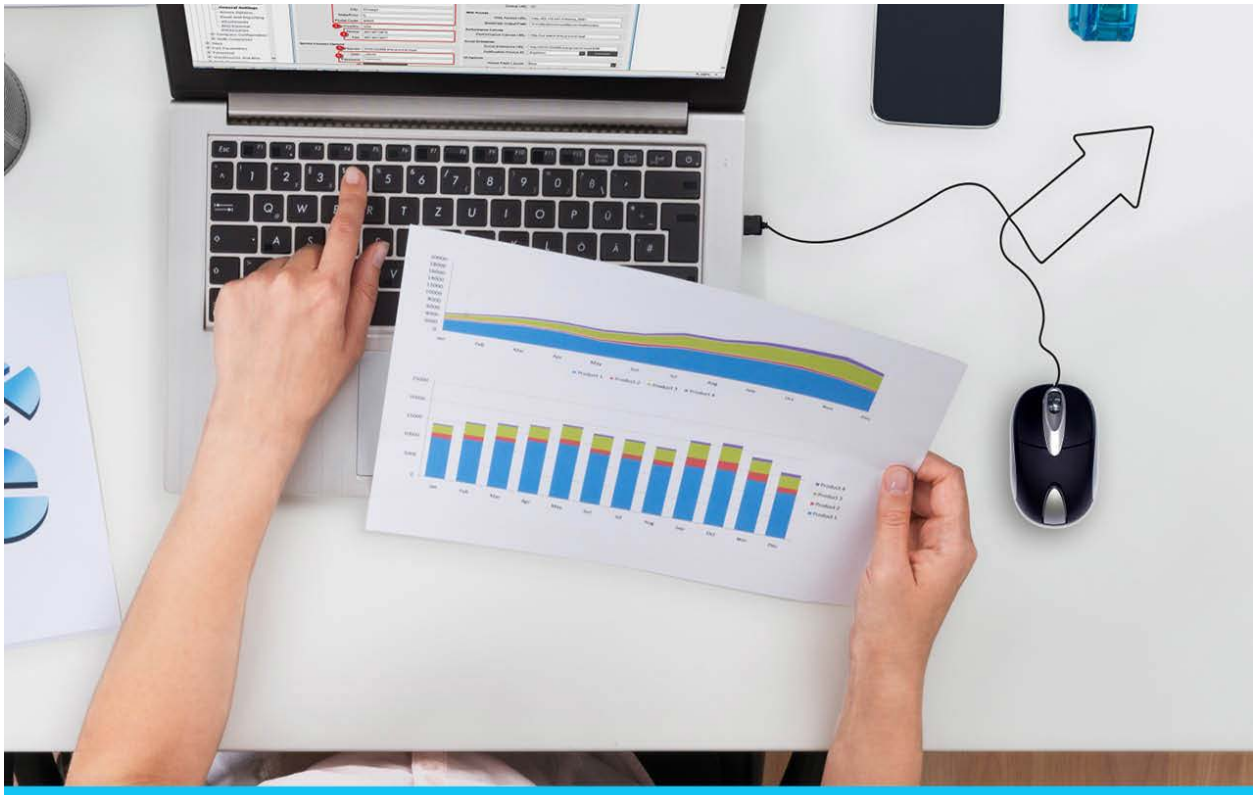

# Eclipse RF Replenishment

Release 9.0.5

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# RF Warehouse Management Overview

Use the Eclipse Radio Frequency (RF) Warehouse Management companion product to control and automate your entire warehouse's functions in real-time.

The RF Warehouse Management system uses radio frequency data communications that provide real-time access and integration to the system. RF data communications transmit between RF guns and workstation terminals, allowing up-to-the-minute information transmission of the following:

- Receiving and Put Away
- Picking
- Staging and Closing Orders
- Inventory Replenishment
- Product Movement
- Physical Inventory
- Cycle Counting

By using the RF Warehouse Management system, your warehouse gains real-time control over inventory. This real-time data transmission gives warehouse management the ability to:

- Make timely, well-informed decisions.
- Increase sales while lowering inventory levels.
- Reduce inventory variances to less than 0.01%.
- Reduce the number of lost sales and returns.
- Decrease your distribution cycle time.
- Improve service levels.
- Eliminate facility shutdown during physical inventory.
- Minimize personnel requirements and reduce your payroll.
- Improve warehouse space management.
- Cycle count discrepancies immediately.

# RF Replenishment Overview

RF replenishment notifies you when a location needs to be restocked, based on minimum location quantities. If a location quantity falls below the location minimum, the system informs you of the following:

- The location needing to be restocked.
- Where to pick the product to replenish the under-stocked location.
- The quantity needed for replenishment.

Daily replenishment tasks are queued from the Warehouse Operation Queue. When levels dip below a minimum amount, the system queues a replenishment task for that location. You can schedule the Warehouse Operation Queue to run nightly so that you can replenish location shortages daily.

> **Note:** Daily replenishment does not work for lot-controlled items.

Before using daily replenishment, perform the following setup:

- Define minimum and maximum location quantities in RF Location Maintenance.
- Schedule the Warehouse Operation Queue to generate replenishment tasks.

For example, Allan needs to pick an order that contains 20 small widgets. The system directs Allan to location 01-02-A to pick the widgets, but there are only 15 small widgets in the location. Allan picks the 15 small widgets that are there and then informs the system that there is a shortage in the location by queuing an immediate replenish task. The system sends the immediate replenishment task to Stephanie, who is responsible for replenishing locations. Stephanie can replenish location 01-02-A from a storage location holding additional small widgets. Once Stephanie has replenished the location, Allan can return to 01-02-A and pick the remaining five small widgets, as needed.

Immediate replenishment is different from daily replenishment in that the Warehouse Operation Queue does not queue immediate replenish tasks. Instead, if a shortage is discovered during picking, users queue immediate replenish tasks from the **Alt-Q** function key.

# Automated RF Replenish Allocation Logic

You can define your own pick and replenish allocation logic in the control maintenance record. You can also use the system's replenish allocation logic, which follows.

You can define the system to direct picks and replenishments based upon unit of measure (UOM) in the control maintenance record. If you want to allocate picks or replenishments based on UOM, you must first define locations with UOMs in Product Location Maintenance. In addition, if a location is defined for a UOM, the system allocates picks and replenishments to only the defined UOM locations.

For example, if a location with cases needs replenishment, the system will only replenish this location with other cases. If a broken case exists in a case location, that case will automatically be replenished to the each location.

Use the control maintenance record to indicate whether to use a customer's shipping status as defined in the **Backorder Status** field in Customer Maintenance for orders backordered during the RF picking process.

## System Logic for Replenish Picks

Following is the replenish allocation logic for single and multiple picks.

**Round 1: Single Picks**

If the and control maintenance records are both set to **N**, the system directs users to pick from a single location based upon the following location status hierarchy:

1. **Primary** - Users are directed to a single primary location to fill the entire pick first.
2. **Secondary** - If a single primary location cannot fill the entire pick, users are next directed to a single secondary location to fill the pick.
3. **Floating** - If a single secondary location cannot fill the entire pick, users are directed to a single floating location to fill the pick.
4. **Remnant** - If a single floating location cannot fill the entire pick, users are directed to a single remnant location to fill the pick.
5. **Blank** - If a single remnant location cannot fill the entire pick, users are directed to a single blank location to fill the pick.

   If multiple locations with the same status exist to fill the pick individually, the system selects the location with the highest quantity. For example, the primary location A has 40 widgets and primary location B has 30 widgets. The system directs the picker to location A because it has the highest quantity.

   **Note:** If the and control maintenance records are both set to **Y**, the system directs users to pick from the location with the oldest product.

**Round 2: Multiple Picks**

If the and control maintenance records are both set to **N** and if there is not a single location containing enough quantity to fill the entire pick, the system directs the users to pick from multiple locations based upon the following location status hierarchy:

1. **Primary** - Users are directed to primary locations to fill the entire pick first.

2. **Secondary** - If multiple primary locations cannot fill the entire pick, users are next directed to secondary locations to fill the pick.
3. **Floating** - If multiple secondary locations cannot fill the entire pick, users are directed to floating locations to fill the pick.
4. **Remnant** - If multiple floating locations cannot fill the entire pick, users are directed to remnant locations to fill the pick.
5. **Blank** - If multiple remnant locations cannot fill the entire pick, users are directed to blank locations to fill the pick.

   For multiple picks, the system directs users to the location with the highest quantity first, while still following the location status hierarchy. For example, a replenishment pick requires 300 widgets. The primary location A has 200 widgets and primary location B has 150 widgets. The system directs the users to pick all 200 widgets from location A first and then to pick 100 widgets from location B.

   **Note:** If the and control maintenance records are both set to **Y**, the system directs users to pick from the locations with the oldest product.

## Additional Replenish Pick Allocation Logic

For locations with minimum and maximum amounts defined, the system selects only those locations with quantity above the maximum amount.

For example, if the following locations exist, and location 04-04-40 has a maximum quantity set at 150 and no other locations have maximum quantities set:

| Location | Quantity | Status | Max/Min Qty |
|---|---|---|---|
| 04-04-40 | 100 | S | 150/75 |
| 04-04-41 | 75 | F | N/A |
| 04-04-42 | 50 | F | N/A |
| 04-04-43 | 40 | F | N/A |
| 04-04-44 | 10 | F | N/A |

For an order of 50, the system selects location 04-04-41 from which to pick first. Even though location 04-04-40 has more quantity, it is not at or above its maximum quantity. The system does not select it as the replenish pick because the quantity is below the maximum quantity.

## System Logic for Replenish Put Away

The system replenishes locations based on their creation date.

- The system replenishes the most recently-created locations first, but it always replenishes primary locations before secondary locations.
- The system replenishes locations with minimum and maximum amounts defined when the on-hand quantity minus the in process pick is lower than the minimum amount defined.

  For example, if location 04-04-40 above has a minimum quantity set at 75, and there is an in process pick of 30 items from this location, the system replenishes this location first because its quantity falls below the minimum amount defined after the pick.

# Auto-Selecting Replenishment and Cycle Count Tasks

Use Warehouse Operation Queuing to set the system to automatically select replenish and cycle count tasks.

We recommend that you schedule Warehouse Operation Queuing to run once a day at an off-peak time. If you need to run the function immediately, open the Warehouse Operation Queuing screen to generate the process. When the processing is complete, the phantom sends you a message and the system generates the Blank Locations Report. Use this report to view product and locations that have been selected for replenish or cycle count tasks.

For a description of the report, see What the Report Shows at the end of the topic.

> **Note:** Avoid using Warehouse Operation Queuing too often in a single day as cycle count tasks are selected each time the function is run.

**To auto-select replenish and cycle-count tasks:**

1. From the **Warehouse Management > Warehouse Maintenance** menu, select **Warehouse Operation Queuing** to display the Warehouse Operation Queuing window.
2. In the **Branch/Territory/All** field, enter the branch or territory to indicate the area where you want to check inventory. Enter **ALL** to check inventory for all areas.
3. In the **Load All Items Ranked** field, do one of the following:
   - For replenish tasks, leave blank. If you enter a rank in this field, replenish tasks are not selected.
   - For cycle counting, select a product rank from the list if you want to select cycle count tasks based on rank.
4. Set options, if needed, and run the program.

## What the Report Shows

The Blank Locations Report shows the following information:

| Field/Column | Description |
|---|---|
| **ID** | ID of the product queued for the replenish or cycle count task. |
| **Item Description** | Description of the product queued for the replenish or cycle count task. |
| **Type** | Type, such as stock, assigned to the location. |
| **Location** | Location queued for the replenish or cycle count task. |
| **Lot/Serial#** | Lot or serial number for the product. |
| **Tag ID** | Order ID to which the product is tagged, if any. |
| **Qty** | Quantity of the product currently in the location as recorded by the system. |
| **LocStat** | Status, such as primary, assigned to the location. |
| **Last-Cntd** | Date the product and location was last cycle counted. |

# Selecting RF Daily Replenishment Tasks to Pick

Use the Replenish Select screen to choose which replenish tasks to pick. The Replenish Select screen displays replenish picks as follows:

- The order in which the system entered the replenish task.
- Number of pick tasks in the replenish task.
- The pick group in which the replenish tasks resides.
- The product's rank.

**Note:** Define the replenish task size, which is the number of products in the task, in the control maintenance record. The replenish task size is different from pick task size, so the number of pick tasks may exceed the number defined in this control maintenance record.

**To select replenish tasks to pick:**

1. From the **Warehouse Management > RF Applications > RF Main Menu**, select **Replenish** to display the Replenish Pick screen.

   **Note:** If prompted, log on to the character-based system.

   The **PID** field displays your User ID.
2. In the **Br** field, edit the branch to check for replenishing, if necessary.
3. Use the **Slct** hot key to display the Replenish Select screen.

   The system displays the following information:

| Field | Description |
|---|---|
| **Br** | The branch in which you are performing the replenish task. |
| **PID** | Your user ID. |
| **A** | Whether you have selected a replenish task. An asterisk (*****) displays next to each selected task. |
| **Job** | The order in which the system entered the replenish task. |
| **Ct** | The number of pick tasks for the replenish task. |
| **Group** | The pick groups in which the replenish tasks reside.<br><br>**Note:** Only the replenish tasks for the pick groups assigned to the user ID in the **PID** field display. |
| **Ranks** | The product ranks for the products in the task. |

4. Place the cursor next to the task you want to pick and press **Enter**.

   The system displays an asterisk (*****) next to each selected task.

   **Note:** Press **Enter** a second time next to each task you want de-select.

5. Press **Esc** to return to the Replenish Pick screen and to begin picking.

# Performing RF Daily Replenishment Tasks

Use daily replenishment to restock locations with below-minimum quantity levels. You can schedule Warehouse Operation Queuing to run nightly so that location shortages queue daily for replenishment.

RF replenishment displays the following information:

- The location needing to be restocked.
- The location from where to pick the product to replenish the understocked location.
- The quantity needed for replenishment.

The Replenishing Pick screen provides two methods for picking and replenishing:

- Use a tote to transport product from location to location.
- Directly move product without a tote.

  **Note:** If the RF Enable Tote Validation control maintenance record is activated, you must scan a tote and use it to transport the product in its final location.

**To perform daily replenish tasks using a tote:**

1. From the **Warehouse Management > RF Applications > RF Main Menu**, select **Replenish** to display the Replenish Pick screen.

   **Note:** If prompted, log on to the character-based system.

   The **PID** field displays your User ID.
2. In the **Br** field, edit the branch to check for replenishing, if necessary.
3. Use the **Slct** hot key to select replenish tasks.

   **Note:** Define replenishment task size in the RF Replenishment Task Size control maintenance record.

   Once you have selected the replenish task, the system displays the following information on the Replenish Pick screen.

| Field | Description |
|---|---|
| **Desc** | The description of the product needing to be replenished. The product bar code displays next to **Desc**. |
| **T** | The product's status, such as **S** for stock. |
| **Location** | The location from where you pick product. |
| **Qty** | The number of items that need to be pulled. This is displayed in the item's lowest UOM.<br>For example:<br>If a product's UOM is defined both by **cs** and **ea**, the system uses **ea** as the pick and put away quantity since **ea** is a lower UOM than **cs**. If you pick **20 ea** of the product, then you put away **20 ea** and not **2 cs**. |
| **Tote** | The tote number displays after you scan it. |
| **PutLoc** | The location that needs to be replenished. |

4. Go to the location defined in the **Location** field.
5. Scan the product bar code.
6. Scan the replenish from location.
   - Use the **Qty** hot key to change the quantity that you are picking from the location.
   - Use the **All** hot key to pick all available quantity from the location. If you select this option, replenish the needed quantity in the primary location and then relocate the rest of the product.
7. Scan the tote that you are using to transport the product, and place the product in the tote.

   Once you scan the tote, the system assigns the tote a replenish status until the product is relocated.
8. Repeat this process until you have picked all products that need replenished from their indicated locations.

   After you have picked all items for the replenish task, the system displays "No Replen Qued."
9. Press **Esc** to save updates and exit the screen.

**To put away replenishing product using a tote:**

1. From the **Warehouse Management > RF Applications > RF Main Menu**, select **Replenish** to display the Replenish Pick screen.

   **Note:** If prompted, log on to the character-based system.
2. From the Replenish Pick screen, use the **PutAway** hot key to open the Directed Put Away screen.
3. Scan the tote holding the replenishing items.
4. Go to the displayed location.
5. Scan the item you are putting away.
6. Scan the location.
7. At the prompt, verify the number of items you are putting away for replenishment.
8. Physically put away the product.
9. Repeat this process until all items have been put away for replenishment.

   The Directed Put Away screen displays "Scan Tote" once you complete put away for replenishment.
10. Press **Esc** to save updates and exit the screen.

**To perform daily replenish tasks without using a tote:**

1. From the **Warehouse Management > RF Applications > RF Main Menu**, select **Replenish** to display the Replenish Pick screen.

   **Note:** If prompted, log on to the character-based system.

   The **PID** field displays your User ID.
2. In the **Br** field, edit the branch to check for replenishing, if necessary.
3. Use the **Slct** hot key to select replenish tasks.

**Note:** Define replenishment task size in the control maintenance record.

Once you have selected the replenish task, the system displays the following information on the Replenish Pick screen.

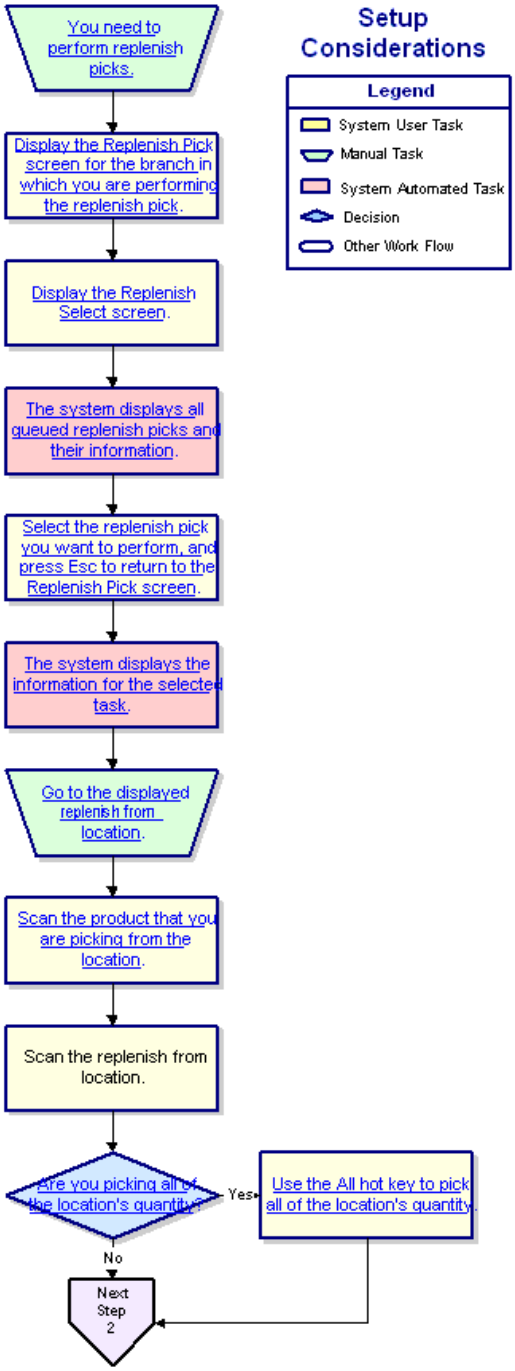
| Field | Description |
|---|---|
| **Desc** | The product's description that is needing to be replenished. The product bar code appears next to **Desc**. |
| **T** | The product's status, such as **S** for stock. |
| **Location** | The location from where you pick product. |
| **Qty** | The number of items that need to be pulled. This quantity is displayed in the item's lowest UOM.<br>For example:<br>If a product's UOM is defined both by **cs** and **ea**, the system uses **ea** as the pick and put away quantity since **ea** is a lower UOM than **cs**. If you pick **20 ea** of the product, then you put away **20 ea** and not **2 cs**. |
| **Tote** | The tote number displays after you scan it. |
| **PutLoc** | The location that needs to be replenished. |

4. Go to the location defined in the **Location** field.
5. Scan the product bar code.
6. Scan the picking location.
   - Use the **Qty** hot key to change the quantity that you are picking from the location.
   - Use the **All** hot key to pick all available quantity from the location. If you select this option, replenish the needed quantity in the primary location and then relocate the rest of the product.
7. Physically remove the product from the location and take it to the put away location defined in the **PutLoc** field.
8. Place the cursor in the **PutLoc** field and scan the put away location.

   **Note:** If the control maintenance record is activated, you must scan a tote and use it to transport the product in its final location.

9. Place the product in the put away location.
10. Repeat this process until you have replenished all products.
11. Press **Esc** to save updates and exit the screen.

# Replenishing Stock Using RF Workflow



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