CALCROUTE Version 5.4.30

➢ Load ROUTEIHP (Header) and ROUTEIDP (Detail).

➢ Call ROUT50C with the following parameters: Direction-I/O (PINBD, 1A), Warehouse (PWHSE, 6A), and User ID (PUSER, 10A) and Type-1/2 (PTYPE, 1A).
Note 1: If a specific warehouse "PWHSE" is not passed as a parameter, CalcRoute will use the data for all warehouses as loaded in ROUTEIHP.
Note 2: "PTYPE" must be a "1" (maximize savings) or a "2" (minimize miles). Maximize savings routine is most often utilized when optimizing third party carrier freight. Minimize miles is most often applied to route management of an in-house fleet.

➢ The valid CalcRoute shipments are written to SHPHEDP (Header) and SHPDETP (Detail).
Note: Report ROUT68R generates displaying all orders grouped by customer and destination zip code that are grouped into shipments by CalcRoute; though these shipments may end up being rejected.

➢ Depending upon your System Control values, some orders may be written PRECONHP and PRECONDP (Displayed in Option 21).
Note: The user may NOT delete these orders from this option. Instead, the user manually selects individual orders and moves them into SHPHEDP and SHPDETP.

➢ Orders with errors will be written to one or more of the following files: ERRORIHP (Order Header), ERRORIDP (Order Detail), ERRORITP (Order Total) and/or ERRORIWP (Warehouse). The error description is part of each file.
Note 1: These error files ARE automatically cleared by CalcRoute each time ROUTE50C is called.
Note 2: Every order in the ERRORIDP and ERRORITP will display in ERRORIHP. Orders in ERRORIWP are NOT written to ERRORIHP.

➢ Two corresponding reports are also created: the "Optimization Edit Accepted" report (ROUT50T1), which shows the orders that successfully were written to SHPHEDP and SHIPDETP files and the "Optimization Edit Errors" report (ROUT50T2) which shows the orders that failed to be written along with a reason.

➢ The user may view/edit/delete/release shipments from Shipment Maintenance (Option 22).
Note: If a user deletes a shipment its contents are written to DELHEDP and DELDETP files. These files are not automatically cleared.

➢ The user may submit the shipments for optimization from Submit Optimization (Option 23) or shipments may be submitted automatically (*see below*).

➢ Optimization results are written to the MINOPNP file and viewable from Display Optimization (Option 24). At the same time, reports ROUT317R (combinations) and ROUT307R (leftovers) are generated; the report names are changed (ROUT77R and ROUT123R) when reprinting optimizations from the screen
Note: At this point, the records are also still in the SHPHEDP and SHPDETP files.

➢ The user may delete or release loads from the Display Optimization option (24) or loads may be released automatically (*see below*).
Note 1: A deleted load will *not* delete its corresponding shipment records from SHPHEDP and SHPDETP.

  Note 2: In order to successfully release a load, the corresponding shipment records must be in the SHPHEDP file.

➢ Successfully released loads are moved to ROUTEOHP (Header) and ROUTEODP (Detail) and may be viewed from Shipment History (Option 25). Load manifests (ROUT52R) are created for each release.   The corresponding load/shipment records are expunged in the SHPHEDP, SHPDETP and MINOPNP files

  Note 1: ROUTEOHP contains two carrier fields: Truckload carrier (FRTCR) and the Direct Carrier (FRDCR). If the Truckload carrier (FRTCR) is blank, the Direct Carrier (FRDCR) was employed. If the Truckload carrier (FRTCR) is not blank, then that is the selected carrier.

  See Direct and MultiStop No-Pool Example documents for these type of loads.

  Note 2: ROUTEOHP contains one record for each stop on a load. If the value in field FRTYP is a "C" then that represents a load with a pool distribution stop. If a stop on a load is at a pool, then that Pool code will be populated in field FRPOL.

  See MultiStop with Pool Example document if this type of load is expected.

  Note 3: ROUTEOHP contains one record for each stop on a load. If the value in field FRTYP is a "P" then that represents a load with multiple pickup points. If a stop on a load is at another warehouse, then that warehouse code will be populated in field FRCUS.

  See MultiWarehouse Pickup Example document if this type of load is expected.

➢ When shipments are released, CalcRoute checks for an object called ART460. If that program exists, CalcRoute will call it passing the assigned release # as a parameter. Some users treat this call as a notification and then write an internal program to retrieve the data from the ROUTEOHP and ROUTEODP files.

  Note: ART460 would be an optional program written by the user.

Note: Released shipments, found in ROUTEOHP and ROUTEODP are *not* automatically passed to CalcRate or CalcBOL.

Order Deletion – Will delete the order from CalcRoute.

➢ Call ROUT59R with the following parameters: Order number (PORDR, 20A) and Blank field (POKAY, 1A).

➢ If successful, the order will be deleted from CalcRoute (SHPHEDP and SHPDETP files) and POKAY will be returned with the value of "Y." If not, POKAY will be "N."

Note: If you wish to modify an order within your primary business system and automatically update the order detail in CalcRoute, it is recommended that you delete the order from CalcRoute first. Then, re-load ROUTEIHP and ROUTEIDP.

Submit Optimization – Will automatically optimize shipments.

➢ Call ROUT319R with the following parameters: Warehouse-Specific (code) or *ALL (PWHSE, 6A), Direction-I/O (PINBD, 1A), Type-1/2 (PTYPE, 1A) and a Return Error Code (PMSG, 30A).
➢ If successful, the optimization results will be written to MINOPNP. If not, an error code will be returned.

Note: As described above, the user may submit optimizations manually.

Load Release – Will automatically release loads.

➢ Call ROUT355R with the following parameters: Warehouse (PWHSE, 6A), Optimization Number (15,5N) and a return Error Code (PMSG, 30A).
➢ If successful, the records are written to ROUTEOHP and ROUTEODP and deleted from SHPHEDP, SHPDETP and MINOPNP. If not, an error code will be returned.

Note: As described above, the user may release loads manually.

Load Manifest Print – Will automatically create carrier documentation.

➢ Call ROUT356R with the following parameters: Warehouse (PWHSE, 6A), Optimization Number (15,5N) and a return Error Code (PMSG, 30A).
➢ If successful, individual carrier load manifest documentation will print for all specified optimization loads.

Note: The user may print individual load manifest manually from Display Optimization (Option 24).

Order Input Interface:

ROUTEIHP (Physical File)

ROUTEIDP (Physical File)

ROUT50C (Program)

ROUTEOHP (Physical File)

ROUTEODP (Physical File)

Order Deletion:

ROUT59R (Program)

Submit Optimization:

ROUT319R (Program)

Load Release:

ROUT355R (Program)

Load Manifest Print:

ROUT356R (Program)