Infor Distribution FACTS External Warehouse Management System Integration Guide

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Accellos HighJump Warehouse Management System

Release level: 65

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About this guide

This guide describes how the third-party FACTS External Warehouse Management System (EWMS), Accellos HighJump (formerly Accellos One Warehouse), is integrated to Infor Distribution FACTS.

Intended audience

This manual is designed with the FACTS Channel Partner and FACTS Implementation Consultant in mind. *This is a technical manual*, and it is not intended for the end user.

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 5.

Refer to the contents of the FACTS Version 9.3 & Incrementals folder located at www.inforxtreme.com. Click Search>Browse Documentation>FACTS> Version 9.3 & Incrementals to view a document tree similar to this.

- *FACTS Version 9.3 & Incrementals*
  - *Installation and Administration Guides*
    - *Installation Guide*
    - *Product Compatibility Matrix*
    - *Hardware Guide*
  - *Release Notes*
    - *9.3.0 Release Overview*
    - *Incremental Release Notes*
  - *Integrations*
    - *Infor Solutions*
      - *Infor Distribution Storefront*
      - *eCommerce*
    - *Credit Card*
      - *CenPOS*

- *WMS*
  - *Accellos*
- *Document Management*
  - *Unform*

- *Users Guides*
  - *Implementation Guides*
  - *Standard modules User Guides*

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Introduction

This guide describes the steps needed to implement the third-party FACTS External Warehouse Management System (EWMS), HighJump WMS by Accellos.

It covers the steps necessary to set up HighJump and the optional FACTS EW module.

All processes that affect item quantities (placing an order, inventory adjustments, etc.) are handled by EWMS and communicated to FACTS via ASCII files. Any FACTS operations that affect item quantities are automated to communicate to EWMS via ASCII files.

Process Overview

1. From a FACTS operation (printing a pick ticket, etc), an output ASCII file is created (in a specified directory) for download to EWMS.
2. EWMS picks up the ASCII file for download into the EWMS system.
3. Steps carried out in EWMS create ASCII files of various *types (XC, PC, RC, SC, MT, etc) for upload to FACTS. Some steps in the EWMS, such as a stock count, are not initiated by a FACTS ASCII file but by EWMS and will create an ASCII file to upload to FACTS.
4. In FACTS, running 'Upload Records' reads the ascii files that were uploaded by EWMS to FACTS.
    - Data from the ASCII files is put into holding files (EWPICK, EWRECV, EWMISC, EWCYCL, etc).
    - The ASCII files are then archived in the indicated FACTS archive folder.
5. Once all the EWMS upload ASCII files have been read/archived then the holding files are used to update the appropriate FACTS files (SORSOH/L, PORPOH/L, etc), removing records from the holding files as they are processed. (Records may not process out of the holding files if issues arise; normally the holding files will be empty.)

*One type of upload ASCII file "XC" is used to indicate the status of FACTS records as EWMS manages the related items – the involved FACTS files are EWLEDG and EWLEDT. Setting/status within these ledger files control whether a FACTS user can access certain records (depending upon the selected item(s) current state in EWMS).

Restrictions and Limitations

Known restrictions and limitations for the FACTS/HighJump integration are listed in this section.

Multiple Companies

Each FACTS company must have a separate instance of HighJump.

Item Number Size

Item numbers may not exceed 20 characters.

Fractional Quantities

Quantities can only be an integer values (whole number).

Unsupported FACTS Modules (the WMS interface cannot be used for a FACTS company that utilizes any of these modules)

- Electronic Data Interchange (EDI)
- Job Costing
- Service and Repair

Unsupported FACTS Document Types/Functionality for an EWMS managed warehouse (in warehouses which utilize WMS, these FACTS features cannot be used)

- Counter Sales
- Direct Invoices
- Recurring Invoices
- Item Repackaging
- Quick Transfer
- Adjustments, Credit Memo, and Non-Purchase Order Receipts with quantities that do not cancel out to zero for any specific warehouse and item
    - These transactions can be used to adjust cost by reducing and increasing inventory by the same amount with different costs, but the quantities must offset such that there is no net changes to inventory quantities.
- Adjustment IN of LOT items that are not already on file in FACTS
    - i.e. Adjustments cannot be used to create new lot numbers
- Adjustment IN of SERIAL items is never allowed
- Manufacturing Formulation
- Manufacturing Production with serial/lot items
    - serialized/lotted finished items nor serialized/lotted component items are allowed.
- Negative Production

  - i.e. MC production tickets with negative quantities for components or finished items are not allowed.
- Assignment of serial/lot numbers at Order Entry (an option in SO Static Control F/M) with on-the-fly (OTF) bills of materials (BOMs). (Refer to the 1st Known Scenario Restriction in the next section for details.)
- Processing serial/lot transactions must be in the proper sequence.
  - Receipts must be processed prior to shipments.
- In MC Production, listing the same item more than one time as a component or as a single finished item.
  - A component item can't be duplicated on the same finished item.

Known Scenario Restrictions

There are a few "known scenarios" that have limitations in their processing:

- For Kitting (On the Fly Bill of Materials) with serial/lot items, if the serial/lot number is assigned during Order Entry, FACTS does not send the serial/lot number to HighJump at this time.
- When processing a receipt of a serialized item and using the item on a Sales Order (or other document) in HighJump, performing the outbound confirmation prior to the inbound receipt will create a hard error in PO Receipt Entry (POE210).
- For Manufacturing Production, the use of an item in the components listing more than once is not supported at this time.

Supported Transaction Types

Within the stated restrictions and limitations above, the supported transactions for the EWMS interface are:

- Transfers
- Purchase Orders
  - Negative Purchase Orders (Vendor Returns)
- Sales Orders
  - Negative Sales Orders
  - On-the-Fly Bill of Materials (Kitting)
- CRS Documents
- Adjustments
- Physical Inventory / Cycle Counting
- Manufacturing Production (Bill of Materials)

Definitions

Upload – data coming to FACTS

Download – data going to EWMS

Preliminary steps

1. Install FACTS.
2. Install HighJump. Follow the Accellos HighJump setup and installation guidelines.
3. Choose one:
   a. Select a file transfer program to use to transfer download files (from the FACTS server's download directory) to the EWMS server download directory and to transfer upload files (from EWMS server's upload directory) to the FACTS server upload directory. In this case it makes sense to create the FACTS upload and download directories on the same server where FACTS is located.
   b. It is possible to enter, in FACTS WMS Control F/M (EWF990), the path to the EWMS server and directory as the download location where FACTS places its created ascii files, and, to enter in FACTS file maintenance the upload path from which upload ascii files created by EWMS can be retrieved; however, there is risk of a file transferred between servers in this fashion becoming corrupt or lost in transit.
   c. The FACTS files can be moved manually to the EWMS directory. Likewise, moving the EWMS files to the FACTS directory can also be done manually. This is not recommended as time sensitive information may need to be communicated between the two applications to prevent item/stock errors. However, as a means of testing the creation of appropriate files/data this might be preferable initially but should be changed to option a or b (above) when satisfactory file creation/movement has been achieved.

Setup Information

Setting up Accellos HighJump

For FACTS to communicate with Accellos about its items Accellos must be configured. These steps are specific to Version 6.5. Once Accellos is up and running, the method to receive FACTS ASCII files and the way in which the FACTS ASCII files will be named must be setup.

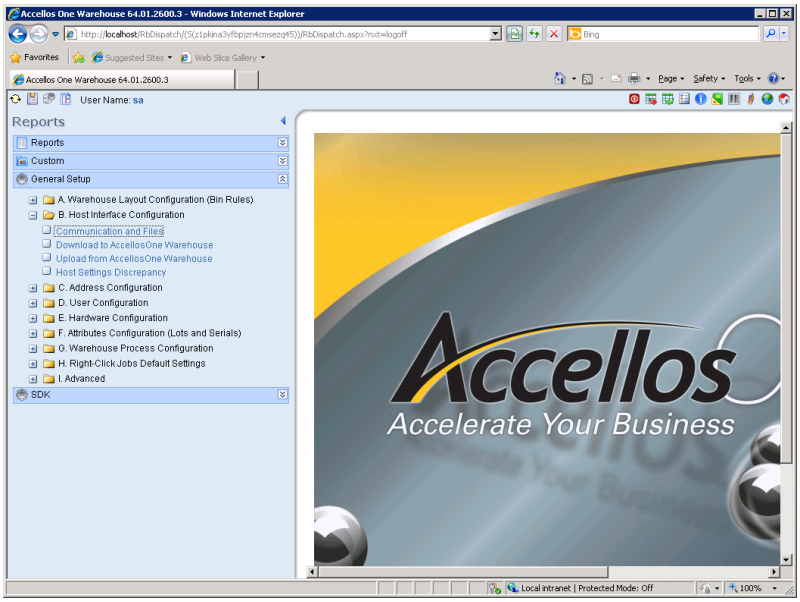
1 In Accellos, click the Reports ‘arrow’ to expand options.

2 Choose General setup.

3 Choose B. Host Interface Configuration

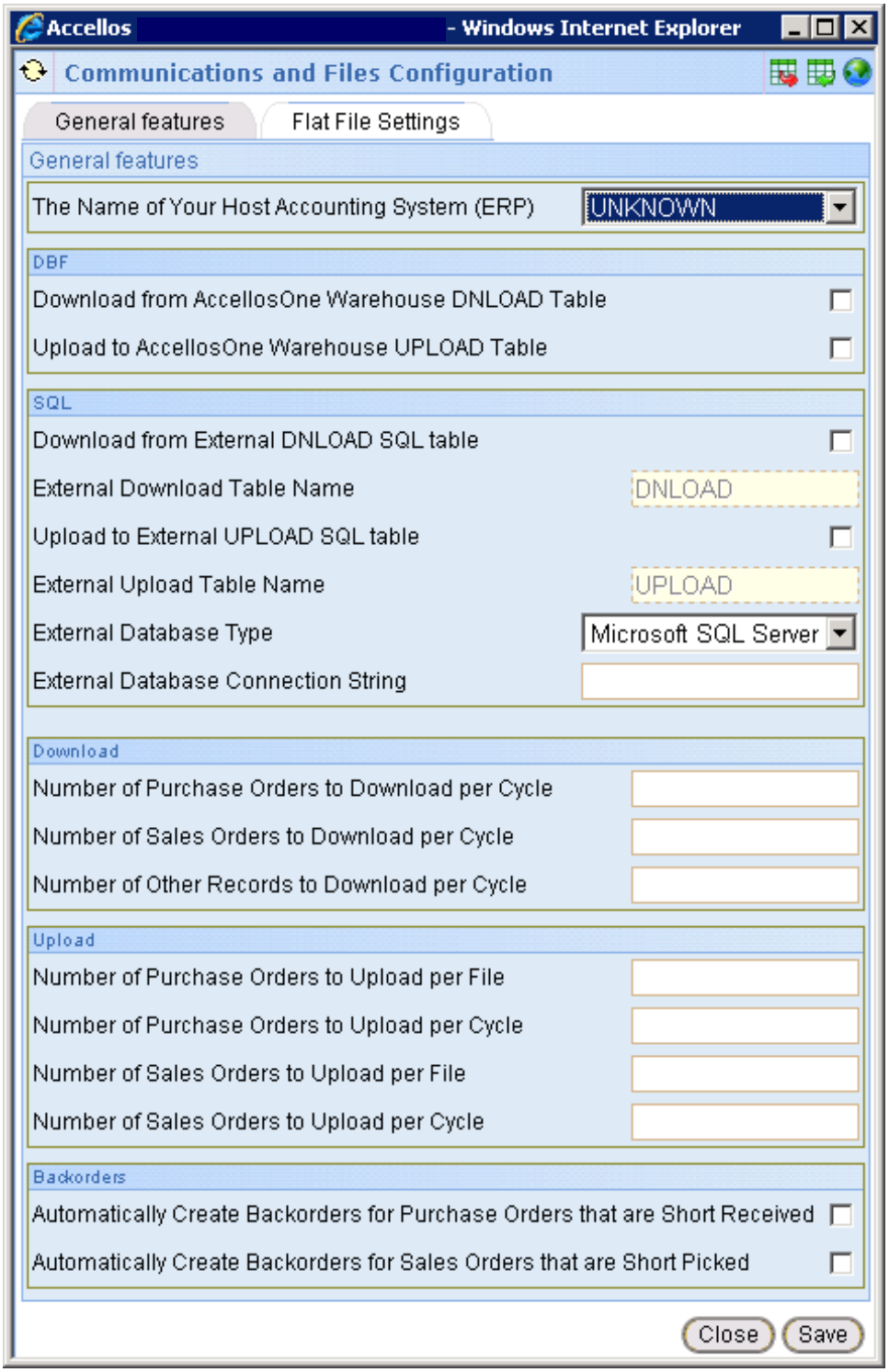
4 Click Communication and Files.

(Screen Capture Note: All screens may vary by branding name, version or user setup.)



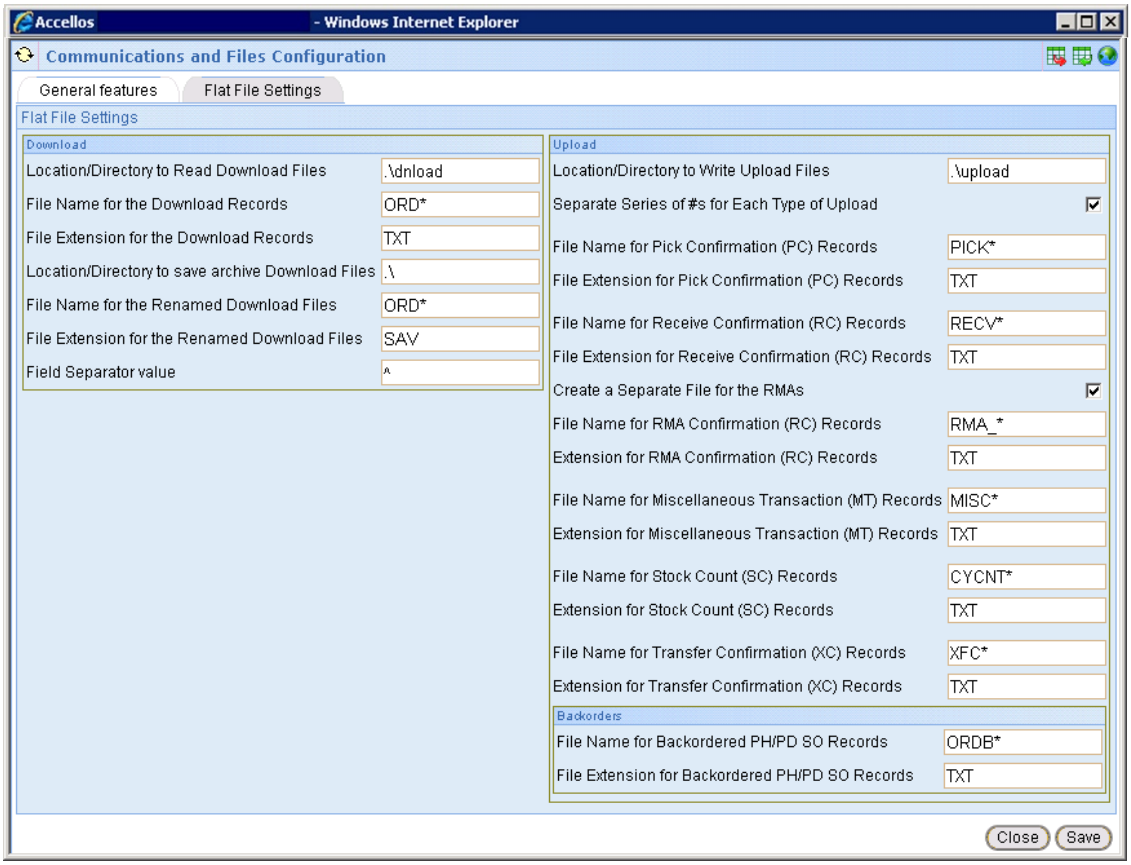
5 The Communications and File Configuration screen contains two tabs: the General Features tab to specify the type of upload Accellos can expect, and the Flat File Settings to specify

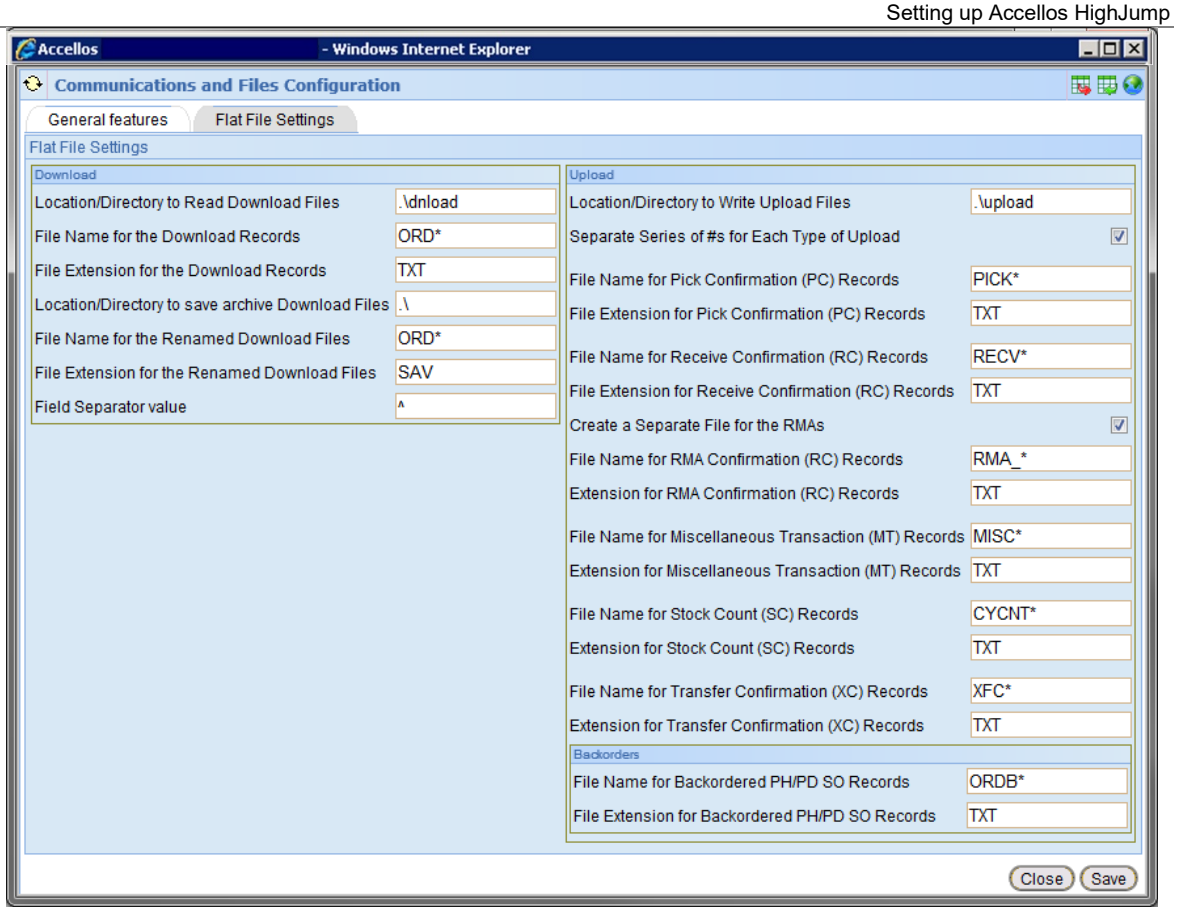
ASCII file names.
On the General Tab, select Unknown for The Name of Your Host Accounting System (ERP).



No other entries/selections are needed on the General Features tab.

6 On the Flat File Settings tab, specify the ASCII file names and the upload and download (and if entered, archive) directories.
Any adjustments that Accellos will send back to FACTS must also be indicated.





The ASCII file names entered on this screen are also entered into the FACTS WMS Control F/M (EWF990) program. Using an asterisk in the flat file settings allows Accellos to create files that are sequentially numbered. Note: the asterisk, if entered on this screen, may not be entered in WMS Control F/M. Use the Input Information to assist you with your entries in the three screen sections: Download, Upload, and Backorders.

Download Input Information

- The location/directory is created on the same server where Accellos is installed.
- The download records (sent to Accellos from FACTS) must begin with the characters entered, e.g. ORD* indicates that the download file must begin with ORD.
- The File Extension is the extension of the download file.
- The last field is the delimiter Accellos expects; it is also in FACTS.

Upload Input Information

- The location/directory is created on the same server where Accellos is installed.
- All other fields (except the checkboxes) are also in FACTS.

Backorder Input Information

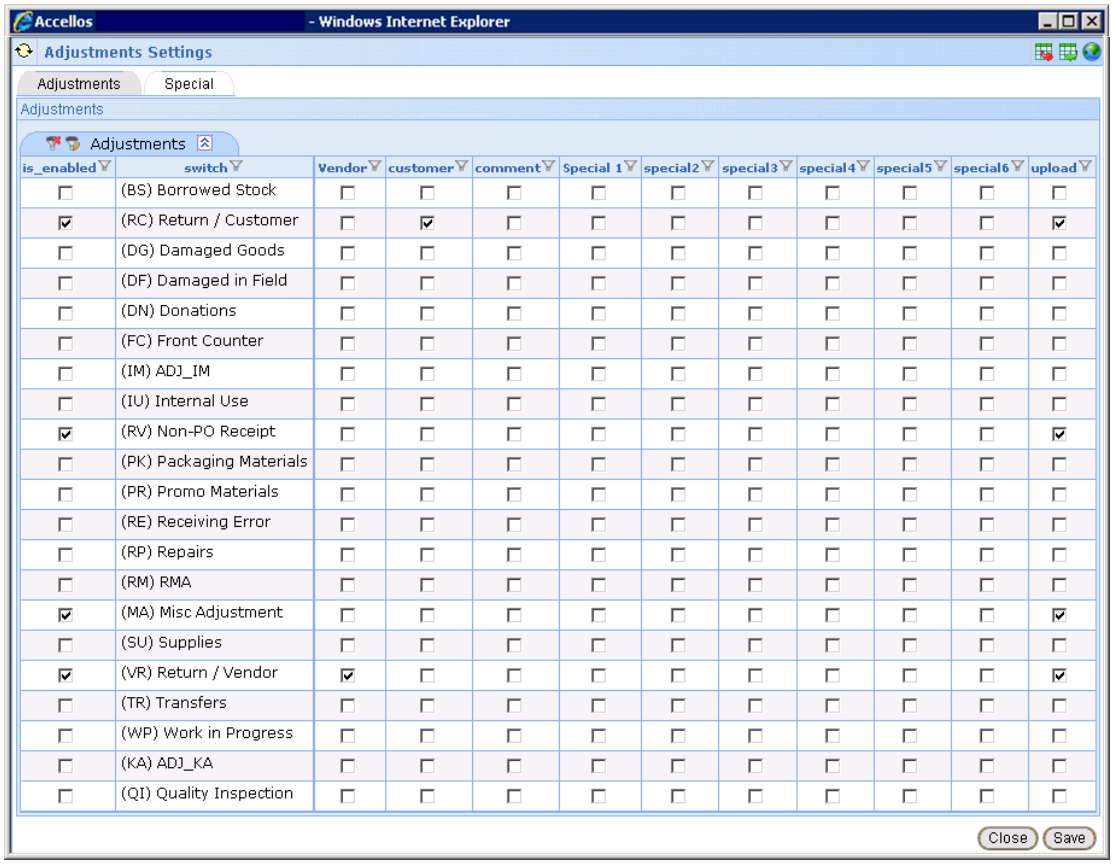
- These fields are also in FACTS.

7 Return to the Accellos main screen and click the Reports ‘arrow’ to expand options.

8 Choose General setup.

9 Choose G. Warehouse Process Configuration.

10 Click Adjustments and complete the necessary settings.
Only those switches that are enabled and also checked in the upload column is/are sent to FACTS. The switch column corresponds to the FACTS WMS Adjustment Interchange F/M (EWF960) program. It is possible to create new adjustment codes/switches in Accellos that, if sending back to FACTS, will also need to have a unique 2-character code created and entered in FACTS via PSO.)
Other necessary settings are Accellos-specific, such as creating/setting bins, creating users, turning on logs/logging of upload/download files (if needed), setting up the scheduler for download/upload (to manual or start or auto), and so on.



is_enabled	switch	Vendor	customer	comment	Special 1	special2	special3	special4	special5	special6	upload
☐	(BS) Borrowed Stock	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☑	(RC) Return / Customer	☐	☑	☐	☐	☐	☐	☐	☐	☐	☑
☐	(DG) Damaged Goods	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(DF) Damaged in Field	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(DN) Donations	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(FC) Front Counter	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(IM) ADJ_IM	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(IU) Internal Use	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☑	(RV) Non-PO Receipt	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑
☐	(PK) Packaging Materials	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(PR) Promo Materials	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(RE) Receiving Error	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(RP) Repairs	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(RM) RMA	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☑	(MA) Misc Adjustment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑
☐	(SU) Supplies	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☑	(VR) Return / Vendor	☑	☐	☐	☐	☐	☐	☐	☐	☐	☑
☐	(TR) Transfers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(WP) Work in Progress	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(KA) ADJ_KA	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	(QI) Quality Inspection	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Setting up FACTS

For FACTS to use EWMS the optional EW module must be used. If the EW module is not available on your system, you may not have the options discussed in this section.

Configuring EWMS in FACTS

Complete the following steps in the FACTS programs listed to setup the EW module.

1 Click System Management>File Maintenances>System Control F/M (SMF950), and specify the company being used to process EWMS.

2 (Optional) If you have not already created the WMS Control “EWN” record do so now in Warehouse Management System>WMS Control F/M (EWF990).

3 Click Warehouse Management System>Warehouse F/M (ICF970).

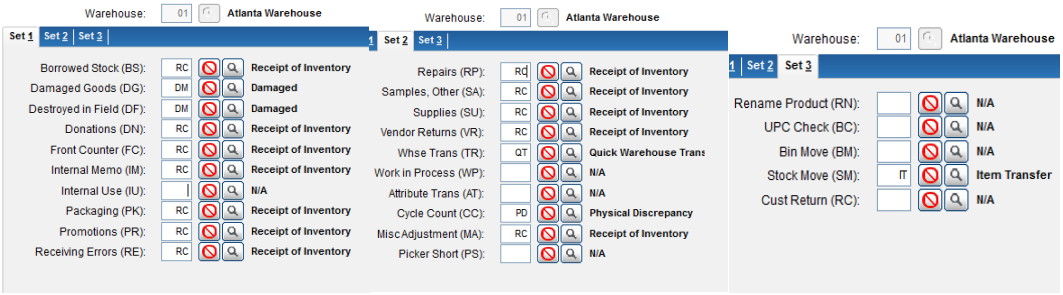
4 Specify the warehouse.

5 On the EWMS tab, check the appropriate check boxes and specify the Download, Upload, Archive (as needed) directories. (Be sure to create, in advance, the directories you specify, using the desired locations and naming conventions.)

6 (Optional) If using a file transfer program, configure it now to interact with the created directories, sending files in the download directory of FACTS to the download directory of Accellos and retrieving upload files from the Accellos upload directory and placing them in the upload directory of FACTS.

7 Click Warehouse Management System>WMS Adjustment Interchange F/M (EWF960).

8 Specify the codes on the Set 1, Set 2, and Set 3 tabs. The codes entered in this program are created in IC in the Adjustment Code F/M (ICF960) program.
The codes entered in WMS Adjustment Interchange F/M correspond to the codes entered into Accellos Warehouse Process Configuration > Adjustment Settings that are enabled (“is_enabled” is checked) and checked for Upload. (See Setting up Accellos, page 13).



9 Click Warehouse Management System> WMS Control F/M (EWF990). View the FACTS help documentation to determine entry options (if unfamiliar with these fields).

10 Check your settings. It is extremely important that you enter the same delimiter information in FACTS as in Accellos for the integration to work successfully. The ASCII file names (without

asterisk) and file extensions (entered with the leading ‘period’) must also be the same in FACTS as entered in Accellos.

Make sure Accellos is configured and running, and, if using a file transfer program that it is already configured and running. Make sure all FACTS setup steps are complete.

11 Click Warehouse Management System>Upload Records from WMS (EWU110). This program begins the monitoring process of FACTS’ upload directory for ASCII files to process. If files exist, they are read. If status files exist they will update the EWMS ledger file and the ASCII file will be archived. Non-status files (those that actually change inventory in some way) will have their contents written to the holding files. The ASCII file is archived and then the holding files will update the FACTS files as necessary, records being removed from the holding files as they successfully interact with FACTS.

12 Click Warehouse Management System>Upload System Startup to display the programs to run *in order* to populate Accellos with FACTS data. Processing these programs on the Accellos server may require additional information to be entered as Accellos receives/reads-in the data. Having an Accellos certified representative available to assist you is advisable.

13 This completes the FACTS/Accellos integration. Your inventory is now maintained through Accellos.

System Startup

Create Item Download

When creating the Item Download, if the Quantities option is selected, the Accellos system is going to attempt to match the FACTS locations with the proper BIN. If the BIN is not setup, the items will be in an external location.

PO, SO, Transfers or CRS Download

If the document hasn’t been printed, the document will not be sent to Accellos.

Standard Part Numbers

Only UPCs are sent to Accellos.

Import Locations

Accellos supports up to 8 characters for a BIN location where as FACTS only supports up to 6 characters. Any BIN location that is being uploaded that is more than 6 characters will be ignored.