# DATA SERVICES | FTP Inventory Specification

# IPS Inventory Implementation Guide

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## Overview

The purpose of these inventory files is to supply Ingram Publisher Services (IPS) customers with the necessary data fields to update title availability electronically. Bibliographic and classification data is also available. Please contact your IPS Sales Rep for more information as it is a separate integration.

This document includes file descriptions and a layout specification for the Inventory, Supplemental files as well as the location of Refence files for field translation.

• The IPS Inventory file is available for download from the Ingram FTP Server, it provides stock availability for all IPS titles that are available to sell. *The file provides a snapshot of available inventory and therefore, does not guarantee that the title will be available during order processing.* 

The file layout specification can be found in the StockV2 File Specification section of this document.

• The Supplemental and Reference files contain additional inventory information like if country excludes the sale of a title (Country Exclusion) or Country, Product Status, etc. translations.

## **FTP Server Availability and Notification**

The Ingram FTP server is available 24 hours, seven days a week, with twice-weekly scheduled maintenance windows. If the server will be unavailable for any reason other than the scheduled maintenance windows listed below - notification will be sent via email to the technical contact listed on your account profile. It is your responsibility to ensure the contact information is updated by sending an email to the <u>IDS Integration Team</u>.

#### **FTP Maintenance Schedule**

Day	Duration
Saturday - Sunday	11:00 p.m. – 05:00 a.m. CDT
Friday	06:00 a.m 06:30 a.m. CDT

## **Document Version and Change Management**

There are two levels of version control used in our documentation, version X release X, where X represents the number of the sequential version or release of the document. We use "version" to describe a milestone that we have achieved in our effort to provide more services to our customers. A particular version either identifies a major change in the file specification or new functionality. We use "release" to communicate the levels of revision to the current file specification and or functionality.

- A major release will contain significant upgrades in functionality, which will require changes to our existing file specifications, e.g., expanded record length. This release will be identified by a change in the version numbering sequence, e.g., version 1 release 0 changing to version 2 release 0. In this case, the previous version is no longer supported. Therefore, you are required to make changes to your system even if you do not wish to take advantage of the new features.
- A revised release refers to a minimal change, e.g., additional fields that do not affect the overall record length, or the addition of new files. A revised release will be identified in the release numbering sequence, e.g., release version 2 release 0 changing to version 2 release 1. Please evaluate each release to determine if your business model requires implementation of the changes.

We will notify your technical contact, via email, when new functionality and versions are available. Please contact the <u>IDS Integration Team</u> to review or update your technical contact information.

## **Getting Started**

- 1. Determine how you will maintain the accuracy of the data.
- **2.** Download selected files and code translation files.
- 3. Create tables based on the file specifications. Sample SQL create table and import scripts are available upon request.
- **4.** Import data into a database or similar application.
- **5.** Create links to other data using the primary key.
- **6.** The remaining steps will vary based on your systems.

# StockV2 Implementation

In this section, you will find information about integration, maintaining data accuracy, and filtering of the data found in the inventory files. The average integration time varies per customer: speed of integration is contingent on your resources.

We recommend that you begin development as soon as you have fully reviewed the implementation guide, determined a plan to maintain the accuracy of the data, and have identified any data filtering that is required for your business needs.

## **Maintaining the Data**

It is critical to maintain the accuracy of the data for the best customer experience. Once you have a plan, we recommend that you develop an automated processing schedule, with error alerts, to complete updates in a timely manner to prevent inaccurate data.

Here are some suggestions for maintaining the accuracy of the data:

#	Desired Result	Suggestion
1	Maintain up-to-date inventory levels on all titles with faster processing.	Download the Full file up to six times daily. This will maintain up-to-date inventory.
2	Refresh active titles, which will remove IPS as the supplier for titles no longer carried.	If a title is not found in a Full file, the title is no longer available from IPS.

## **Data Filtering**

Data filtering can be accomplished in a variety of ways to limit the titles that will be made available to your customers. Based on the ever-growing number of titles provided, we recommend the following:

- All data can be filtered prior to or at the time it is loaded into your tables.
- Filtering can and should be applied to all files, except for reference files.

Here are some common data filters (sorted - in no particular order):

#	Desired Result	Example Filter					
1	Only show titles that are currently available to sell <sup>1</sup> (or in stock).	Jackson, TN On-Hand Quantity > "00000000" and (On Sale Date = < "current date" or = "00010101") and the title is not restricted.					
2	Only show titles currently carried in one DC.	Stocked in the Jackson DC - <u>Jackson, TN Stock Flag</u> = "Y"					
3	Show titles that can be pre-ordered or that have not yet published / released (NYP / NYR).	Jackson, TN On-Hand Quantity >= "00000000" and (Publication Date > "current month" or the On Sale Date > "current date")  For title with an On Sale Date - Ingram can receive On-Hand quantities up to 14 days prior to the On Sale date. It is important that you do not show these titles as "available" until the On-Sale date has passed, regardless if the On-Hand quantity is greater than "0000000".					
4	Show titles that are available in the Jackson DC that have a Price less than \$20.00.	Jackson, TN Stock Flag = "Y", Jackson, TN On-Hand Quantity > "00000000" and Price < "0002000"					
5	Show only titles that are returnable.	Returnable Indicator = "Y" and Return Date > "current date".					
6	Determine if a title is not returnable.	Return Date = "00010101" or > "current date" and Returnable Indicator = "N"					

<sup>&</sup>lt;sup>1</sup> Filtering for On-Hand Qty titles only to build your title offering may lead to an unsatisfactory customer experience – as your offering will change frequently. It is recommend that you show all titles carried regardless of the inventory level and add a message to your customer regarding availability (e.g., "Available to ship", "Title is temporarily out of stock", "Pre-Orders are now being taken" or "Reserve your copy today"). You can use the Product Availability Code (position 272-273) in addition to the On Hand Qty and On Sale Date (position 197-204) fields to assist with assigning the proper status.

## StockV2 File Overview

In this section of the document, you will find detailed information regarding the StockV2 file; file delivery method, file descriptions and update frequency, sample schedule for maintaining data integrity and the file layout specification.

#### **Data File Description**

The IPS StockV2 file is the "master" file, which contains all active IPS titles that are available to sell and is generated six times per day. The file is overwritten.

You are responsible for the additional filtering of titles that are not available to sell based on the publisher's request or in a particular country. Please see the <u>Restricted Code</u> and <u>County Exclusion file</u> for assistance with identifying restrictions.

#### **File Delivery**

The inventory files can be downloaded from the Ingram FTP server.

#### **FTP Location**

• \IPS\Inventory

#### **File Name**

stkv2ips@ingram.zip

#### **Availability**

- Download from FTP server
- Daily, 6 times every four hours except for Sundays due to maintenance window. See below for time of day.

			Mo	nda	y			- 1	Tue	sda	y			W	edn	esd	ay			1	huı	sda	y				Fri	day				8	Satu	rda	ıy				Sur	ı da	y	
	- ;	a.m			p.m			a.m			p.m			a.m			p.m			a.m			p.m			a.m			p.m			a.m			p.m			a.m	١.		p.m	١.
T	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9	1	5	9
Ī	Х	х	X	х	X	X	х	X	X	х	X	Х	х	X	X	Х	X	х	х	X	X	х	X	X	X	х	X	X	Х	Х	х	X	X	X	X	X		X	X	х	X	X

Please note: All times are central time (CT) and are subject to change without notice. If a file is not available at the time specified, please check back at 15-minute intervals – as it may have been delayed due to unforeseen circumstances.

#### **Reference Files Location and File Names**

- \Inventory\_Reference\_Files\
  - o country.txt
  - o ipspubnum.txt
  - o prodstat.txt
  - o prodtp.txt
  - o pubstatus.txt
  - o restrictcodes.txt

# StockV2 File Specification

This file specification adheres to the following:

File Format: fixed-width text fileRecord Length: 301 characters

• Text Qualifier: none

Line Terminator: carriage return line feedNumeric Fields: right justified and zero filled

• Decimal: two decimals implied for all Price and Weight fields

• Date/Time Format: YYYYMMDD

• Field Format Key:

o A, N – Alpha Numeric (Text / String)

o DT – Date / Time

 $\circ$  N – Numeric

Position	Length	Format	Field Name	Description
1	1	A, N	GTIN Prefix	This is the Global Trade Item Number Prefix (GTIN). A "0" represents a single unit and is currently the only prefix defined for the book industry. Add the GTIN Prefix to the EAN to convert EAN to GTIN-14, no recalculation of the check digit required.
2 – 14	13	A, N	EAN	EAN or ISBN – 13. The Bookland International Article Number is the Ingram Primary Item Identifier, it will be present on ALL titles, and can be used to link to other Ingram data files.  Please note: For titles that are not assigned an EAN, Ingram will use the UPC with a leading zero.
15 – 28	14	A, N	UPC	Universal Product Code, item identifier, which has been converted to the GTIN-14 form – prefixed with two zeros. No recalculation of check digit is required.
29 – 38	10	A, N	ISBN-10	International Standard Book Number (ISBN-10), a 10-digit item identifier, used for books published before 2007.
39 – 45	7	N	La Vergne, TN On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
46 – 52	7	N	Roseburg, OR On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
53 – 59	7	N	Ft. Wayne, IN On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
60 – 66	7	N	Chambersburg, PA On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
67 – 73	7	N	Allentown, PA On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
74 – 80	7	N	Fresno, CA On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
81 – 87	7	N	DC On-Hand Quantity	Reserved for future use.

Position	Length	Format	Field Name	Description
88 – 94	7	N	Jackson, TN On-Hand Quantity	Quantity available to sell in the Distribution Center (DC) specified in the "field name" column.
95 – 101	7	N	La Vergne, TN On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
102 – 108	7	N	Roseburg, OR On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
109 – 115	7	N	Ft. Wayne, IN On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
116 – 122	7	N	Chambersburg, PA On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
123 – 129	7	N	Allentown, PA On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
130 – 136	7	N	Fresno, CA On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
137 – 143	7	N	DC On-Order Quantity	Reserved for future use.
144 – 150	7	N	Jackson, TN On-Order Quantity	Quantity On-Order with the supplier in the DC specified in the "field name" column.
151 – 157	7	N	Price	This is the U.S. Suggested Retail Price (SRP) and is the highest list price in any active Distribution Center (DC). This is the Price that Ingram uses for account billing purposes and is most widely used as the MSRP. Two decimals are implied. Format: "0001495" = \$14.95
158 – 164	7	N	Publisher Price	The U.S. Publisher Supplied Price.
				Please note: Ingram is NOT responsible for the accuracy of the data in this field.
165	1	A, N, Blank	Filler 1	
166 – 168	3	A, N	Discount Level	Discount percent (e.g., "NET", " 5%", "35%") or standard discount represented by the codes "REG" or "LOW" (please contact <u>Customer Care</u> to obtain your account level discounts for these values). The data in this field is left justified and space filled, e.g., five percent = " 5%"
169 – 178	10	A, N, Blank	Filler 2	
179 – 180	2	A, N	Publisher Status Code	This data is supplied by the publisher and represents the current state of the title in the publishing life cycle. Please see <a href="Product Availability Code">Product Availability Code</a> (position 272 – 273) for the supplier status information. See reference file, inventory\ pubstatus.txt for complete list of values.
181	1	A, N	La Vergne, TN Stock Flag	"Y" – title is Active and carried/stocked in the specific DC, the title can be ordered or backordered based on the on-hand quantity. "N" – title is no longer carried/stocked, backorders are no longer accepted. <i>Please note:</i> For sell down titles - please see the <u>on-hand quantity fields</u> (positions 039 – 094) for available inventory.
182	1	A, N	Roseburg, OR Stock Flag	See description above.
183	1	A, N	Ft. Wayne, IN Stock Flag	See description above.
184	1	A, N	Chambersburg, PA Stock Flag	See description above.

Position	Length	Format	Field Name	Description
185	1	A,N	Allentown, PA Stock Flag	See description above.
186	1	A,N	Fresno, CA Stock Flag	See description above.
187	1	A,N	DC Stock Flag	Reserved for future use.
188	1	Blank	Jackson, TN Stock Flag	See description above.
189 – 196	8	DT	Publication Date	Date in which the title was or is due to be published.  Please note: If the publisher only supplies a month and year as the Publication Date - we will populate DD (=Day) with the first day of the month or the date specified in the On Sale Date (position 197-204).
197 – 204	8	DT	On Sale Date	The On-Sale Date, also known as "Street Date", is the date that the publisher will allow the item to be sold to the public. <i>Please note:</i> Date = "000000" – indicates that an On Sale Date has not been set and the item can be sold upon receipt.
205	1	A, N	Returnable Indicator	"Y" – Title is returnable. "N" – Title is NOT returnable.  Please note: Please see Return Date (position 206-
				213) for allotted time frame for return.
206 – 213	8	DT	Return Date	This represents the last date the title can be returned to Ingram. Please allow plenty of time for shipment and receipt at an Ingram DC.  Please note:  Date = "00010101" – the title is NOT Returnable.  Date = "99991231" – a Return Date has not been set.
214 – 218	5	A, N, Blank	Filler 3	
219	1	A, N	Backorder Only Indicator	This indicator is used to flag titles which will be ordered only when a backorder is placed for the title. Backorders may be placed in any "Y" flagged DC (see DC Stock Flag, positions 181 – 188).  Valid Codes:  "Y" – a backorder is required for ordering.  "N" – Backorder is not required.  "1" – approximate one day backorder, (e.g., title transfer between DC's).  "2" – approximate two day backorder.
220	1	A, N	Media Mail Indicator	"Y" – Title is eligible to ship via the USPS Media Mail. "N" – Title is NOT eligible.  Please note: The USPS defines the rules for the use of Media Mail – please visit their web site for more information, www.usps.gov.
221	1	A, N	Product Type	Title classification assigned by Ingram. See reference file, <b>inventory\prodtp.txt</b> for complete list of values.
222	1	A, N	Imprintable Indicator	Service no longer available as of October 2020
223	1	A, N	Indexable Indicator	Service no longer available as of October 2020
				-

Position	Length	Format	Field Name	Description
239 – 244	6	N	Weight	Title weight in pounds. Two decimals implied. E.g., "000025" = .25 pounds.
245 – 255	11	A, N, Blank	Filler 5	
256 – 259	4	A, N	Ingram Publisher Number	An Ingram assigned code representing the publisher imprint. See reference file, inventory\ipspubnum.txt for a complete list of values for our IPS partners.
260 – 264	5	A, N, Blank	Filler 6	
265	1	A, N, Blank	Restricted Code	The code indicates if an title has imposed restrictions limiting the sale to certain geographical areas or market types. If more than one restriction applies to any one title, the higher priority code is supplied. If blank a restriction does not exists for the title. Please see reference file, inventory\restrictcodes.txt for complete list of values.  Please note: The Country Exclusion file can be used to determine which titles are Restricted for Sale to a specific country.
266 – 270	5	A, N	Discount Category Code	This is the Ingram Publisher Services (IPS) discount code that is assigned by the publisher and can be used in conjunction with the Ingram Publisher Number (position 256 – 259) to translate the discount on IPS titles.
271	1	A, N, Blank	Filler 7	
272 – 273	2	A, N	Product Availability Code	This code indicates the stock availability status of the title within Ingram systems. This status relates to the Ingram system only and may not match the Publisher Status Code (position 179 – 180). See reference file, inventory\prodstat.txt for complete list of values.
274 – 282	9	A, N	Ingram Title Code	This is an alternative Ingram assigned item identifier and can be used when ordering from Ingram.
283 – 284	2	A, N	Product Classification Type	This field will provide the ability to include or exclude public domain reproduction and compilation titles on your site or designate them with the additional classification.  Possible values include:  "PR" – reproductions, previously published titles that are now in the public domain.
				"PC" – compilations, collections of public information often gathered from internet Web sites.
285 – 301	17	A, N, Blank	Filler 8	

# **Inventory Supplemental Files**

## **Inventory Country Exclusion file**

Certain export destinations are subject to trade sanctions, embargoes and other restrictions under United States law and these restrictions may apply to both U.S. and International shipments. The Restricted by Country file contains an EAN and a three-digit Alpha Country Code which signifies that the title in restricted for sale to the country that will receive the titles.

#### **File Location**

\inventory

#### **File Name**

ctry\_excl\_titles.txt

#### **Availability**

- Download from FTP server
- Monday by 1:00am CST
- Updated weekly

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#### Reference File

country.txt

#### File Usage Suggestions

You can use this file with the Restricted Code field in the StockV2 file to exclude titles from showing as supplied by Ingram for any shipments to a specific country. Use the Country Exclusion file to determine the specific countries.

Example – for EAN: 9788883709715

Stock V2 Restricted Code = "C" – Available in the United States and some other countries.

Country Exclusion file:

"9788883709715","MHL" - Marshall Islands

"9788883709715", "ZAR" - Zaire

#### **File Format**

This file specification adheres to the following:

- File Format: comma-delimited
- Record Length: 21 characters
- Text Qualifier: double quote
- Line Terminator: carriage return line feed
- Field Format Key
  - o A, N Alpha Numeric (Text / String)
  - o DT Date / Time
  - o N Numeric

Column	Length	Format	Field Name	Description
1	13	A, N	EAN	EAN or ISBN-13. The Bookland International Article Number is the Ingram Primary Item Identifier, will be present on ALL titles, and can be used to link to other Ingram data files.  Please note: For titles that are not assigned an EAN, Ingram will use the Universal Product Code (UPC) with a leading zero.
2	3	A, N	Country Code	Contains a three-digit alpha Country code. See reference file, inventory\country.txt for complete list of values.

# Inventory Supplemental Files (continued)

## **Proposition 65 Warnings File**

This file provides a list of product warnings provided by the publisher to meet the State of California's Proposition 65 warnings that are required by law to be displayed on websites/in store to California Customers.

Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm. These chemicals can be in the products that Californians purchase, in their homes or workplaces, or that are released into the environment.

#### **File Locations**

\inventory \Inventory\_Reference\_Files

#### **File Name**

Prop65\_Warnings.txt

#### **Availability**

- Download from FTP server
- Available by 8:00am CDT
- Weekly on Sunday

#### **File Format**

This file specification adheres to the following:

- File Format: pipe-delimited
- Record length: variable
- Field terminator:
- Record terminator: carriage return line feed
- Field format key
  - o A, N alpha numeric (text / string)

Column	Format	Field Name	Description							
1	A, N	EAN	EAN or ISBN-13. The Bookland International Article Number is the Ingram Primary Item Identifier, will be present on ALL titles, and can be used to link to other Ingram data files.  Please note: For titles that are not assigned an EAN, Ingram will use the Univers Product Code (UPC) with a leading zero.							
2	A, N	Warning Narrative	Displays the appropriate warning supplied by the Publisher to meet the Proposition 65 requirements as set by the state of California.							

#### Sample:

#### EAN|Warning Narrative

0073577122024|This product can expose you to chemicals including Di(2-ethylhexyl)phthalate (DEHP), which is known to the State of California to cause cancer and birth defects or other reproductive harm.

0603154505041|WARNING: Choking Hazard. Small parts. Not for children under 3 years.

0646422102344|WARNINGS: proposition 65 reasons: California Residents WARNING: Cancer and Reproductive harm --- www.p65warnings.ca.gov. https://www.cyberacoustics.com/prop-65 California Residents Cancer and

Reproductive harm --- https://www.cyberacoustics.com/prop-65 www.p65warnings.ca.

0766868223011|WARNING: Cancer and Reproductive Harm--www.P65Warnings.ca.gov/product

0788200110018|WARNING: For California Residents Only Cancer and Reproductive Harm www.P65Warnings.ca.gov

# Frequently Asked Questions

This is a list of the common questions regarding the data and data files.

Question	Answer
How do I calculate my cost?	Your cost is the <u>Price</u> minus (Price multiplied by the <u>Discount Level</u> ). Price-(Price*Discount Level) = Cost  Example: Price: \$9.95 Discount Level: 40% 9.95-(9.95*0.4) = \$5.97
Is there anything in the full or delta files that identifies or flags "what" field has been changed?	There is not a flag in the inventory file that denotes that a record is new or has been changed. However, there is a <u>Delta</u> file.
What code will Backorder Only titles have in the inventory file?	A Backorder Only title will have a "Y", "1", or "2" in the <u>Backorder Only Indicator</u> field or a "22" in the <u>Product Availability Code</u> field.
Does the reference file, ipspubnum.txt, contain all of are available publishers from Ingram Publisher Services (IPS)?	This file contains all possible publisher numbers for publishers that are currently distributed by IPS. The file, ipspubnum.txt, is a reference file for the code found in the <a href="Ingram Publisher Number">Ingram Publisher Number</a> field and the file is updated as needed.

# Glossary

Term	Definition	
Available To Sell	This refers to titles that are available to sell; however, some restrictions may apply. You are responsible for filtering titles that are not available to sell; please see the Restricted Code and County Exclusion file for assistance with identifying the title restrictions.	
CDT	Central Daylight Time (GMT - 5) is observed during the summer months.	
CT	Central Time (Greenwich mean time, GMT - 6) and central daylight time (GMT - 5) is observed during the summer months.	
<b>Current Date</b>	Current Date specifies a date that is based on a reading the time-of-day.	
Delete	When a title has been discontinued and is no longer available to purchase from Ingram, the inventory record will no longer appear in the Full inventory files.	
Primary Item Identifier	The EAN is the Primary Item Identifier or Primary Key which is used to uniquely identify a record in a file or table. No two distinct rows in a table can have the same value (or combination of values). This key can be used to link data from other files or tables.	
Primary Key	See Primary Item Identifier.	

# **Contacts**

Company	Email	Business Hours
Login Instructions, Development, Testing and Production Access	integrate@ingramcontent.com	Normal
Data Sales, Administration and Setup	ids@ingramcontent.com	Normal

### Business hours (all times CT and excluding Ingram recognized holidays)

• Normal: Monday – Friday, 8:00 a.m. to 5:00 p.m.

#### **Policy**

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