

# **CI-SPEC: CCRA / ICBA Dashboard Integration Specifications**

Developed by: Technical Personnel of ICBA and CCRA Stores  
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More information about this specification can be found at:

<http://www.ccra.net/ci-spec/>

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## **Executive Summary**

This document acts as a roadmap for participation in the CCRA / ICBA Dashboard web applications. Participation in these applications requires submitting portions of the bookstores inventory data. This data is used to compare prices with competitors, open new markets for salvage books, speed communication between stores and many other productivity enhancements.

This document is intended for a technical audience with background in databases and extensive experience with back-office bookstore ERP systems.

We welcome suggestions and feedback on this specification. For more information visit <http://www.ccra.net/ci-spec/>

## Revision History

Below is a brief listing of the changes made to this specification.

Date	Description of Changes
04/24/2005	The initial specifications are developed by the CCRA and ICBA Technology Teams in Denver Colorado.
04/29/2005	Specifications updated to make corrections as specified by CCRA and ICBA Technology Teams.
05/04/2005	Added "Required for" paragraphs for each Data File. This allows participants to only create data files for Dashboard resources that are of use to them.
05/29/2005	Added support for XML formatted data files.
05/29/2005	Added specification for log files being placed in FTP folders following import.

## **Data File Descriptions**

The CI-SPEC consists of four data files. These files may exist in one of three formats. The formats are:

1. CSV: Comma Separated Values files consist of an ASCII text file that contains fields separated by commas, and records separated by a "carriage return" and "line feed". Data files created in CSV format should be given filenames with a ".csv" extension.
2. TSV: Tab Separated Values files consist of an ASCII text file that contains fields separated by "Tab" characters, and records separated by a "carriage return" and "line feed". Data files created in TSV format should be given filenames with a ".tsv" extension.
3. XML: eXtensible Markup Language. Standard XML formatted text files. The XML delimits the field data. XML files should be given a ".xml" file extension.

There are four data files that must be created to be CI-SPEC compliant. Each data file will be described in detail, including examples, in later sections of this document. The data files are:

- Textbooks
- Tradebooks
- Usedbooks
- Nonreturnable

Formal definitions for each data file follow.

## Textbooks Data File

### Description Of Data File Contents

The Textbooks Data File stores the on-course current term textbook data. Books listed in this file are considered “on-course” if they are listed for a current or upcoming school term. Please do not include data from past terms or courses. Also, please do not include column/field names in the first row.

### Required For:

1. Booksleuth
2. Who Has It

### Filename

1. textbooks.csv – For Comma Separated Values formatted data, or,
2. textbooks.tsv – For Tab Separated Values formatted data.
3. textbooks.xml – For XML formatted data.

### Data Fields Specification

The Textbooks Data File consists of 4 fields; [ISBN], [SELL\_PRICE], [QTY\_ONHAND] and [QTY\_ONORDER]. Below are detailed field descriptions and sample data:

1. ISBN: The isbn of the book. This is the first field in the record. Please strip any dashes or spaces from this field. If dashes and spaces are not removed, our system will remove them during import. Some systems remove the ISBN “check digit”, be sure that your ISBN data includes the check digit. Since this field is text-based, you may optionally enclose the data with double quotes (“”).
  - b. Correct examples:
    - i. 067978330X
    - ii. 0072225564
    - iii. “0072225564”
  - c. Incorrect examples:
    - i. 0-764-5833-28 [Incorrect: do not include dashes]
    - ii. 1 933 0970 43 [Incorrect: do not include spaces]
    - iii. 158648203 [Incorrect: check digit missing]
2. SELL\_PRICE: The selling price of the book at your store and in your currency (US stores post USD\$, Canadian Stores post in CAD\$, etc). Please do not confuse this field with the retail price suggested by the publishers. This field should contain the selling price at your store for this title whether you sell the title at retail, above retail or below retail. Please do not include any currency symbols such as dollar signs (\$). The format should include a decimal point and two digits to the right of the decimal point.
  - b. Correct examples:
    - i. 29.95

ii. 10.00

iii. 139.50

c. Incorrect examples:

i. \$29.95 [Incorrect: do not include currency symbol]

ii. 55 [Incorrect: must include decimal and two digits]

iii. 120.5 [Incorrect: must include two right side digits]

iv. "110.50" [Incorrect: must not be enclosed with double quotes]

3. QTY\_ONHAND: The actual quantity of these titles that you have on-hand in your store's inventory. Must be a numeric value (no decimals), greater than or equal to zero.

b. Correct examples:

i. 15

ii. 208

iii. 0

c. Incorrect examples:

i. 4.5 [Incorrect: must not contain a decimal]

ii. -5 [Incorrect: must be greater than or equal to zero]

iii. 5 0 [Incorrect: must be a valid number (no spaces)]

iv. "20" [Incorrect: must not be enclosed with double quotes]

4. QTY\_ONORDER: The quantity of these titles that you have on-order from a supplier. Must be a numeric value (no decimals), greater than or equal to zero.

b. Correct examples:

i. 15

ii. 208

iii. 0

c. Incorrect examples:

i. 4.5 [Incorrect: must not contain a decimal]

ii. -5 [Incorrect: must be greater than or equal to zero]

iii. 5 0 [Incorrect: must be a valid number (no spaces)]

iv. "20" [Incorrect: must not be enclosed with double quotes]

### Data Format Examples

Below is a sample data in CSV format:

```
067978330X,29.95,55,10
0077255567,45.25,22,6
067978330X,22.99,90,0
0073225464,85.76,85,3
```

Also acceptable:

```
"067978330X",29.95,55,10
"0077255567",45.25,22,6
"067978330X",22.99,90,0
"0073225464",85.76,85,3
```

Below is sample data in TSV format:

```
067978330X 29.95 55 10
0077255567 45.25 22 6
067978330X 22.99 90 0
0073225464 85.76 85 3
```

Below is sample data in XML format:

```
<?xmlversion="1.0" encoding="ISO-8859-1" standalone="yes" ?>
<textbooks>
  <book>
    <isbn>067978330X</isbn>
    <sell_price>29.95</sell_price>
    <qty_onhand>55</qty_onhand>
    <qty_onorder>10</qty_onorder>
  </book>
  <book>
    <isbn>0077255567</isbn>
    <sell_price>45.25</sell_price>
    <qty_onhand>22</qty_onhand>
    <qty_onorder>6</qty_onorder>
  </book>
</textbooks>
```

### Sample Data Files

Sample data files in all formats are available for download from:

<http://www.ccra.net/ci-spec/>

## Used Books Data File

### Description Of Data File Contents

The Used Books Data File stores the on-course current term used textbook data. Books listed in this file are considered “on-course” if they are listed for a current or upcoming school term. Please do not include data from past terms or courses. Also, please do not include column/field names in the first row.

### Required For:

1. Booksleuth
2. Who Has It

### Filename

1. usedbooks.csv – For Comma Separated Values formatted data, or,
2. usedbooks.tsv – For Tab Separated Values formatted data.
3. usedbooks.xml – For XML formatted data.

### Data Fields Specification

The Used Books Data File consists of 4 fields; [ISBN], [USED\_PRICE], [QTY\_ONHAND] and [QTY\_ONORDER]. Below are detailed field descriptions and sample data:

1. ISBN: The isbn of the used book. This is the first field in the record. Please strip any dashes or spaces from this field. If dashes and spaces are not removed, our system will remove them during import. Some systems remove the ISBN “check digit”, be sure that your ISBN data includes the check digit. Since this field is text-based, you may optionally enclose the data with double quotes (“”).
  - a. Correct examples:
    - i. 067978330X
    - ii. 0072225564
    - iii. “0072225564”
  - b. Incorrect examples:
    - v. 0-764-5833-28 [Incorrect: do not include dashes]
    - vi. 1 933 0970 43 [Incorrect: do not include spaces]
    - vii. 158648203 [Incorrect: check digit missing]
2. USED\_PRICE: The used book selling price in your currency (US stores post USD\$, Canadian Stores post in CAD\$, etc). Please do not include any currency symbols such as dollar signs (\$). The format should include a decimal point and two digits to the right of the decimal point.
  - a. Correct examples:
    - i. 29.95
    - ii. 10.00

- iii. 139.50
  - b. Incorrect examples:
    - i. \$29.95 [Incorrect: do not include currency symbol]
    - ii. 55 [Incorrect: must include decimal and two digits]
    - iii. 120.5 [Incorrect: must include two right side digits]
    - iv. "110.50" [Incorrect: must not be enclosed with double quotes]
- 3. QTY\_ONHAND: The actual quantity of these used titles that you have on-hand in your store's inventory. Must be a numeric value (no decimals), greater than or equal to zero.
  - a. Correct examples:
    - i. 15
    - ii. 208
    - iii. 0
  - b. Incorrect examples:
    - i. 4.5 [Incorrect: must not contain a decimal]
    - ii. -5 [Incorrect: must be greater than or equal to zero]
    - iii. 5 0 [Incorrect: must be a valid number (no spaces)]
    - iv. "20" [Incorrect: must not be enclosed with double quotes]
- 4. QTY\_ONORDER: The quantity of these titles that you have on-order from a supplier. Must be a numeric value (no decimals), greater than or equal to zero.
  - a. Correct examples:
    - i. 15
    - ii. 208
    - iii. 0
  - b. Incorrect examples:
    - i. 4.5 [Incorrect: must not contain a decimal]
    - ii. -5 [Incorrect: must be greater than or equal to zero]
    - iii. 5 0 [Incorrect: must be a valid number (no spaces)]
    - iv. "20" [Incorrect: must not be enclosed with double quotes]

**Data Format Examples**

Below is a sample data in CSV format:

```
067978330X,15.00,15,3
0077255567,22.50,2,0
067978330X,11.50,40,9
0073225464,43.25,45,25
```

Also acceptable:

```
"067978330X",15.00,15,3
"0077255567",22.50,2,0
"067978330X",11.50,40,9
"0073225464",43.25,45,25
```

Below is sample data in TSV format:

```
067978330X 15.00 15 3
0077255567 22.50 2 0
067978330X 11.50 40 9
0073225464 43.25 45 25
```

Below is sample data in XML format:

```
<?xmlversion="1.0" encoding="ISO-8859-1" standalone="yes" ?>
<usedbooks>
  <book>
    <isbn>067978330X</isbn>
    <used_price>15.00</used_price>
    <qty_onhand>15</qty_onhand>
    <qty_onorder>3</qty_onorder>
  </book>
  <book>
    <isbn>0077255567</isbn>
    <used_price>22.50</used_price>
    <qty_onhand>2</qty_onhand>
    <qty_onorder>0</qty_onorder>
  </book>
</usedbooks>
```

### Sample Data Files

Sample data files in all formats are available for download from:

<http://www.ccra.net/ci-spec/>

## Trade Books Data File

### Description Of Data File Contents

The Trade Books Data File contains your trade book inventory, both in-stock and on-order titles. Please do not include data that isn't either in-stock or on-order. Also, please do not include column/field names in the first row.

### Required For:

1. Tradesleuth
2. Who Has It

### Filename

1. tradebooks.csv – For Comma Separated Values formatted data, or,
2. tradebooks.tsv – For Tab Separated Values formatted data.
3. tradebooks.xml – For XML formatted data.

### Data Fields Specification

The Trade Books Data File consists of 4 fields; [ISBN], [SELL\_PRICE], [QTY\_ONHAND] and [QTY\_ONORDER]. Below are detailed field descriptions and sample data:

1. ISBN: The isbn of the book. This is the first field in the record. Please strip any dashes or spaces from this field. If dashes and spaces are not removed, our system will remove them during import. Some systems remove the ISBN “check digit”, be sure that your ISBN data includes the check digit. Since this field is text-based, you may optionally enclose the data with double quotes (“”).
  - a. Correct examples:
    - i. 067978330X
    - ii. 0072225564
    - iii. “0072225564”
  - b. Incorrect examples:
    - i. 0-764-5833-28 [Incorrect: do not include dashes]
    - ii. 1 933 0970 43 [Incorrect: do not include spaces]
    - iii. 158648203 [Incorrect: check digit missing]
2. SELL\_PRICE: The selling price of the book in your currency (US stores post USD\$, Canadian Stores post in CAD\$, etc). Please do not confuse this field with the retail price suggested by the publishers. This field should contain the selling price at your store for this title whether you sell the title at retail, above retail or below retail. Please do not include any currency symbols such as dollar signs (\$). The format should include a decimal point and two digits to the right of the decimal point.
  - a. Correct examples:
    - i. 29.95

ii. 10.00

iii. 139.50

b. Incorrect examples:

i. \$29.95 [Incorrect: do not include currency symbol]

ii. 55 [Incorrect: must include decimal and two digits]

iii. 120.5 [Incorrect: must include two right side digits]

iv. "110.50" [Incorrect: must not be enclosed with double quotes]

3. QTY\_ONHAND: The actual quantity of these titles that you have on-hand in your store's inventory. Must be a numeric value (no decimals), greater than or equal to zero.

a. Correct examples:

i. 15

ii. 208

iii. 0

b. Incorrect examples:

i. 4.5 [Incorrect: must not contain a decimal]

ii. -5 [Incorrect: must be greater than or equal to zero]

iii. 5 0 [Incorrect: must be a valid number (no spaces)]

iv. "20" [Incorrect: must not be enclosed with double quotes]

4. QTY\_ONORDER: The quantity of these titles that you have on-order from a supplier. Must be a numeric value (no decimals), greater than or equal to zero.

a. Correct examples:

i. 15

ii. 208

iii. 0

b. Incorrect examples:

i. 4.5 [Incorrect: must not contain a decimal]

ii. -5 [Incorrect: must be greater than or equal to zero]

iii. 5 0 [Incorrect: must be a valid number (no spaces)]

iv. "20" [Incorrect: must not be enclosed with double quotes]

### Data Format Examples

Below is a sample data in CSV format:

```
067978330X,29.95,55,10
0077255567,45.25,22,6
067978330X,22.99,90,0
0073225464,85.76,85,3
```

Also acceptable:

```
"067978330X",29.95,55,10
"0077255567",45.25,22,6
"067978330X",22.99,90,0
"0073225464",85.76,85,3
```

Below is sample data in TSV format:

```
067978330X 29.95 55 10
0077255567 45.25 22 6
067978330X 22.99 90 0
0073225464 85.76 85 3
```

Below is sample data in XML format:

```
<?xmlversion="1.0" encoding="ISO-8859-1" standalone="yes" ?>
<tradebooks>
  <book>
    <isbn>067978330X</isbn>
    <sell_price>29.95</sell_price>
    <qty_onhand>55</qty_onhand>
    <qty_onorder>10</qty_onorder>
  </book>
  <book>
    <isbn>0077255567</isbn>
    <sell_price>45.25</sell_price>
    <qty_onhand>22</qty_onhand>
    <qty_onorder>6</qty_onorder>
  </book>
</tradebooks>
```

### Sample Data Files

Sample data files in both CSV and TSV formats are available for download from:

<http://www.ccra.net/ci-spec/>

## **Non-Returnable Books Data File**

### **Description Of Data File Contents**

The Non-Returnable Books Data File contains a listing of titles that you have in-stock but are “non-returnable” and you are seeking to recover some of their cost (salvage value). Please do not include column/field names in the first row.

### **Required For:**

1. Buried Treasures
2. Bookwash
3. Buried Treasures
4. StockCop
5. Who Has It

### **Filename**

1. nonreturnable.csv – For Comma Separated Values formatted data, or,
2. nonreturnable.tsv – For Tab Separated Values formatted data.
3. nonreturnable.xml – For XML formatted data.

### **Data Fields Specification**

The Non-Returnable Books Data File consists of 3 fields; [ISBN], [RETAIL\_PRICE] and [QTY\_ONHAND]. Below are detailed field descriptions and sample data:

1. ISBN: The isbn of the book. This is the first field in the record. Please strip any dashes or spaces from this field. If dashes and spaces are not removed, our system will remove them during import. Some systems remove the ISBN “check digit”, be sure that your ISBN data includes the check digit. Since this field is text-based, you may optionally enclose the data with double quotes (“”).
  - a. Correct examples:
    - i. 067978330X
    - ii. 0072225564
    - iii. “0072225564”
  - b. Incorrect examples:
    - i. 0-764-5833-28 [Incorrect: do not include dashes]
    - ii. 1 933 0970 43 [Incorrect: do not include spaces]
    - iii. 158648203 [Incorrect: check digit missing]
2. RETAIL\_PRICE: The retail price set by the publisher in your currency (US stores post USD\$, Canadian Stores post in CAD\$, etc). Please do not include any currency symbols such as dollar signs (\$). The format should include a decimal point and two digits to the right of the decimal point.

a. Correct examples:

- i. 29.95
- ii. 10.00
- iii. 139.50

b. Incorrect examples:

- i. \$29.95 [Incorrect: do not include currency symbol]
- ii. 55 [Incorrect: must include decimal and two digits]
- iii. 120.5 [Incorrect: must include two right side digits]
- iv. "110.50" [Incorrect: must not be enclosed with double quotes]

3. QTY\_ONHAND: The actual quantity of these titles that you have on-hand in your store's inventory. Must be a numeric value (no decimals), greater than or equal to zero.

a. Correct examples:

- i. 15
- ii. 208
- iii. 0

b. Incorrect examples:

- i. 4.5 [Incorrect: must not contain a decimal]
- ii. -5 [Incorrect: must be greater than or equal to zero]
- iii. 5 0 [Incorrect: must be a valid number (no spaces)]
- iv. "20" [Incorrect: must not be enclosed with double quotes]

**Data Format Examples**

Below is a sample data in CSV format:

```
067978330X,15.00,15
0077255567,22.50,2
067978330X,11.50,40
0073225464,43.25,45
```

Also acceptable:

```
"067978330X",15.00,15
"0077255567",22.50,2
"067978330X",11.50,40
"0073225464",43.25,45
```

Below is sample data in TSV format:

067978330X	15.00	15
0077255567	22.50	2
067978330X	11.50	40
0073225464	43.25	45

Below is sample data in XML format:

```
<?xmlversion="1.0" encoding="ISO-8859-1" standalone="yes" ?>
<nonreturnable>
  <book>
    <isbn>067978330X</isbn>
    <retail_price>15.00</retail_price>
    <qty_onhand>15</qty_onhand>
  </book>
  <book>
    <isbn>0077255567</isbn>
    <retail_price>22.50</retail_price>
    <qty_onhand>2</qty_onhand>
  </book>
</nonreturnable>
```

#### **Sample Data Files**

Sample data files in all formats are available for download from:

<http://www.ccra.net/ci-spec/>

## **Data Transmission Methods**

There are two acceptable methods to transmit your data files to CCRA / ICBA servers. They are either via posting the files to your webserver and supplying a url to access them, or FTP (SFTP) the files to the CCRA / ICBA servers.

Our automated software will read the files nightly and update the data within our data warehouse.

Please post or transmit your file before 9:00PM Eastern Standard Time daily in order to be included in the nightly data import.

If you do not submit a new file, the previous night's file will be imported again.

### **Posting Data Files To Your Website**

Posting your data files to a webserver is simple and flexible. The steps are as follows:

1. Create appropriate data files using the specification described previously in this document.
2. Save the files to an appropriate folder on your webserver.
3. Sign into the CCRA / ICBA Dashboard and submit the URLs to your data files.

### **Sending Data Files Via FTP/SFTP**

The CCRA / ICBA maintains an FTP/SFTP server that you may access to transmit your data files. To obtain the connection data, passwords, and folder locations visit the CCRA / ICBA Dashboard (<http://www.ccra.net>) and click "Resources" -> "FTP/SFTP" for complete instructions on where and how to access our FTP/SFTP server. Below are sample settings that can be used to test your export:

#### **Sample FTP / SFTP Connection Data:**

FTP Server Host: <ftp.ccra.net>  
FTP Port: 21  
File Path: /test  
FTP Username: test  
FTP Password: test

Please Note: Maximum upload file size is limited to 1 megabyte for the test account. Actual store accounts have a maximum of 20 megabytes. If you require additional space to store your data files please contact your CCRA / ICBA Dashboard Administrator.

### **Log Files**

Regardless of whether you FTP or post the data files, once your file has been imported, a copy of the log file (named "import.log") will be placed in your folder under your FTP/SFTP account. The log file will provide you with a detailed list of the import process including any errors that may have occurred while importing your data. You may also sign up through the Dashboard to have your log file emailed to you each morning. To do so, sign into your Dashboard account and click "Management" -> "Data Files Integration".

## **Copyright Statement**

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For more information visit:

<http://www.ccra.net>

or

<http://www.icbainc.com>