TIBCO Foresight® Instream®

Validation Highlighter

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Two-Second Advantage®

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Introduction

This document is written for those who want to create HTML reports of validation results for viewing in a web browser.

To use Validation Highlighter, you will need a basic understanding of:

- TIBCO Foresight® Instream®
- EDI

System Requirements

Validation Highlighter has the same system requirements and runs on the same Windows, UNIX, and Linux operating systems as Instream®. See the readme that accompanies Instream.

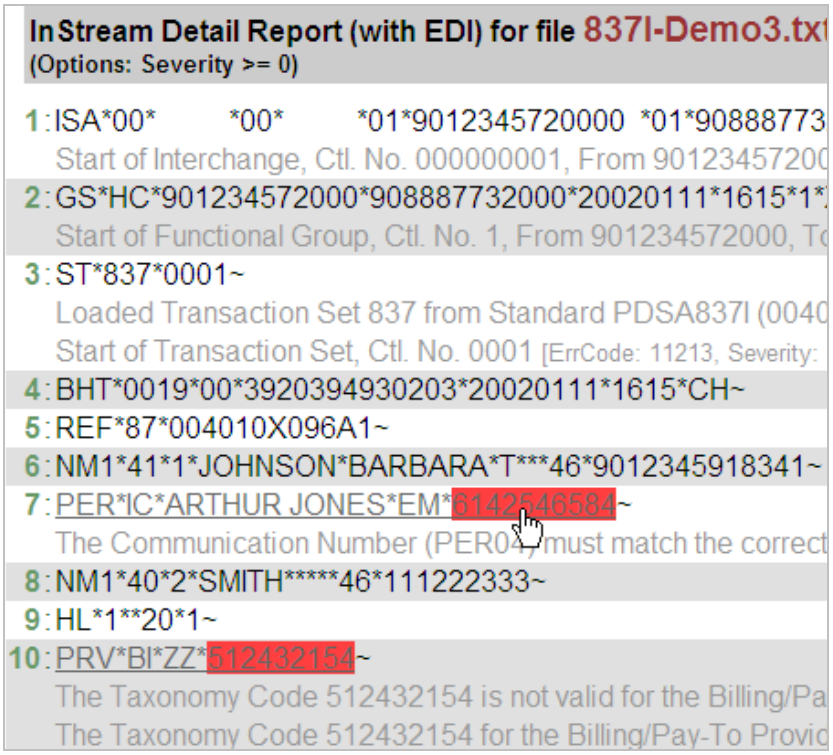
Overview

ValidationHighlighter.exe is a command-line program that comes with Instream. It is installed in Instream's Bin directory.

It lets you create an HTML report from a validation detail report generated by Instream. By clicking a segment ID in the report, you can see guideline information such as instructions, examples and notes.

Typical Report of EDI Data

A typical Validation Highlighter report shows validation results and looks like this.



By clicking on the error, you can see details about how the segment should be used:

Segment: **PER** **Submitter EDI Contact Information**
Position: 045
Loop: 1000A Optional (Must Use)
Level: Heading
Usage: Optional (Must Use)
Max Use: 2
Purpose: To identify a person or office to whom administrative communications should b
Syntax Notes: **1** If either PER03 or PER04 is present, then the other is required.
2 If either PER05 or PER06 is present, then the other is required.
3 If either PER07 or PER08 is present, then the other is required.
Semantic Notes:
Comments:
Notes: The contact information in this segment should point to the person in the subn transmission problems arise, this is the person to contact in the submitter orga

When the communication number represents a telephone number in the Unite (for voice, data, fax, etc.), the communication number should always include AAABBBCCCC. Where AAA is the area code, BBB is the telephone numb would be represented as 5342242525). The extension, when applicable, sho telephone number.
Example: PER*IC*JANE DOE*TE*9005555555~

Data Element Summary

	Ref. Des.	Data Element	Name
M	PER01	366	**Contact Function Code**
			Code identifying the major duty or responsibility of the person or group nam
			INDUSTRY: Contact Function Code
			IC Information Contact
>>	PER02	93	**Name**
			Free-form name
			INDUSTRY: Submitter Contact Name
>>	PER03	365	**Communication Number Qualifier**
			Code identifying the type of communication number

Typical Report of XML or Flat File Data

For any severity greater than 0, the entire record or XML element is marked up. There are no library links.

InStream Detail Report (with data) for file XML_PO_f.xml
(Options: Severity >= 0) (Guideline: XML_PO_F)

```
 3:<PO>
 3:<PURCHAGTNAME>ARTHUR JONES</PURCHAGTNAME>
 4:<PO_NUMBER>76766541</PO_NUMBER>
 5:<PO_DATE>19970905</PO_DATE>
 6:<BT_NAME>MAGGIE MCGILLICUTTY</BT_NAME>
 7:<ST_NAME>BEVERLY SIMPSON</ST_NAME>
 8:<BT_ADDR1>KAVER CORPORATE OFFICES</BT_ADDR1>
 9:<ST_ADDR1>103 NORTH MAIN STREET</ST_ADDR1>
10:<BT_ADDR2>8326 STATE STREET</BT_ADDR2>
11:<ST_ADDR2>DOCK NUMBER 5</ST_ADDR2>
12:<BT_CITY>DAMASCUS</BT_CITY>
13:<ST_CITY>COLUMBUS</ST_CITY>
14:<BT_STATE>MD</BT_STATE>
15:<ST_STATE>OH</ST_STATE>
16:<BT_COUNTRY>USA</BT_COUNTRY>
   Value 'USA' is not in enumeration . [EDTL:ErrCode: 18244, Severity: 3, Type: 0
17:<BT_ZIP>20750</BT_ZIP>
18:<ST_ZIP>43017</ST_ZIP>
```

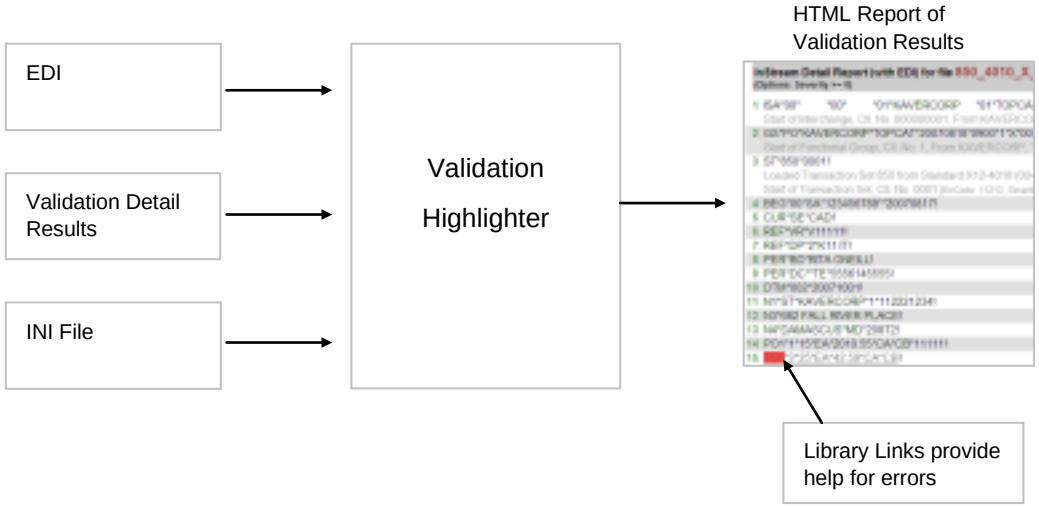
Demos

TIBCO Foresight supplies these Validation Highlighter demos. To run one, execute the file in the Scripts directory. View the results by opening the HTML file in the Output directory.

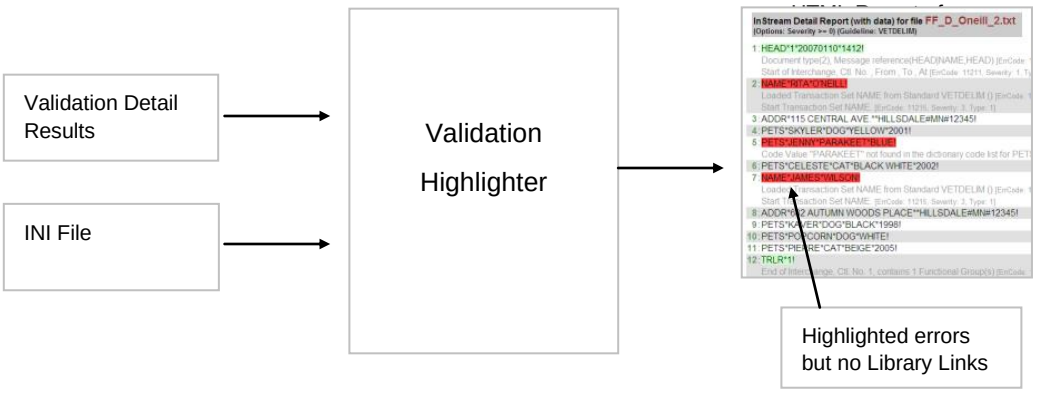
Version	Demo Batch File (In Instream's Scripts directory)	Validates this EDI (in Instream's DemoData directory)	Report (In Instream's Output directory)
5010	ValidationHighlighter_5010_837I	837I_5010_H_errorTable1.txt	837I_5010_H_errorTable1.html
4010	ValidationHighlighter_837I	837I_4010_H_1clm_multiErrors.txt	837I_4010_H_1clm_multiErrors.html
4010	ValidationHighlighter_850	850_4010_X_1.txt	850_4010_X_1.html
4010	ValidationHighlighter_856	856_4010_X_1.txt	856_4010_X_1.html
4010	ValidationHighlighter_FF_Delim	FF_Delim_2Vetcustomer.txt	FF_Delim_2Vetcustomer.html
4010	ValidationHighlighter_XML	XML_PO_f.xml	XML_PO_f.html
5010	ValidationHighlighter_5050_850	850_5050_X.txt	850_5050_X.html
D93A	ValidationHighlighter_CUSCAR	CUSCAR_D93A.txt	CUSCAR_D93A.html
D93A	ValidationHighlighter_D93A_ CreateLinks	n/a Creates liblinks for the MYCUSCAR_D93A guideline	n/a

Running Validation Highlighter

Input and output - original file contains EDI data



Input and output - original file contains XML or flat file data



Command Line

The format is:

ValidationHighlighter -r *InstreamDetailRpt* **-e** *OriginalData* [**-o** *ReportFile*] [**-s** *Severity*] [**-liblinkpath** *Path*] [**-csspath** *Path*] [**-emailable**] [**-showenv**] [**-f**] [**-v**] [**-h**] [**-i** *INIfile*]

Where command line options overwrite those in the INI file, and include:

-r *InstreamDetailRpt*	**Required** Path and filename of the validation detail results file created by Instream validation. If the data is XML or flat file, this detail file must contain CSEG records (created by validating with a profile that has CSEG=1). Example: `-r "C:\Foresight\InStream\Output\856_4010_X_1_Results.txt"`
-e *OriginalData*	**Required for EDI** **Ignored for XML and Flat File** Path and filename of the EDI file that was validated. Example: `-e "C:\Foresight\InStream\DemoData\856_4010_X_1.txt"`
-o *ReportFile*	Path and filename of the HTML report created by Validation Highlighter. The directory must already exist. If omitted, output goes to the console. Example: `-o "C:\Foresight\InStream\Output\856_4010_X_1.html"`
-s *Severity*	Only segments with errors of at least this severity are included in the HTML report. If –s is omitted, the **severity** setting in the INI file is used. If no severity setting is included there, 0 is used, which shows all information, including segments with no errors. Example: Shows segments with errors of a severity of two (warning) or greater. `-s 2`

-liblinkpath *Path*	**EDI only.**
	liblinks are not available for XML and flat files.
	Path to HTML help files that explain EDI errors. This path must be included on the command line or in the INI file (see page 11).
	Always use forward slashes (/), and use an ending slash.
	This may be an absolute path or it may be relative to the HTML report file.
	There is no default liblinkpath. It must be set in the INI file or with this parameter.
	Examples:
	`-liblinkpath "../LibraryLinks/"`
	This example shows the LibraryLinks directory, which is up one directory from the HTML report, and then in a directory called LibraryLinks (relative to the report file location).
	`-liblinkpath "/Help/LibraryLinks/"`
	This example uses the LibraryLinks directory under the Help directory... This is an absolute path. If this report was hosted on a web server at www.example.com, the complete URL to the library links files would be www.example.com/Help/LibraryLinks/.

-csspath *Path*	Path to the CSS file that sets up the styles for the HTML report.
	If -csspath is omitted on the command line, a default embedded style sheet is used.
	Always use forward slashes (/), and use an ending slash.
	This may be an absolute path or it may be relative to the HTML report file.
	Examples:
	`-csspath "../Style/"`
	This example shows that the css directory is called Style and is up one directory from the HTML report (relative to the report file location).
	`-csspath "/Stylesheets/"`
	This example shows the CSS directory is called Stylesheets at the root of your hard drive or web server. If this report is hosted on a web server at www.example.com, the complete URL to the CSS file would be www.example.com/Stylesheets/.
	Please see Adjusting Styles on page 14.

-emailable	For EDI, this includes all necessary library links and the CSS inside the same HTML file as the report. For XML and flat files, it does not include the library links (since there are none) but it includes the CSS in the HTML file so it is all one document.

-showenv	**EDI only** **Not available for XML and flat files** Always show ISA/IEA, GS/GE and ST/SE envelope information. By default, enveloping is only shown when the -s parameter causes it to be shown. For example, if you use "-s 3" only those segments with errors will be output into the report. Using "-showenv" as well will ensure that the ISA/IEA, GS/GE and ST/SE segments are also printed, thus providing additional context to your report.
-f	Fragment mode. The <html></html>, <head></head> and <body></body> tags are not output so that the report content may be included within an existing page. The **- liblinkpath** command line option is ignored and the output includes <liblinks> tags to point to the help pages. This allows dynamic customization of the report (with ASP, for example).
-i *INIfile*	Path and filename of an initialization file containing settings. These settings can be overridden by the command-line parameters. If omitted, an attempt is made to load a default INI file named **ValidationHighlighter.ini**. On Windows, this will be the same directory as ValidationHighlighter.exe (Instream's Bin directory by default). On UNIX, this will be the path specified in the FSINSTREAMINI environment variable. If ValidationHighlighter.ini is not found, internal defaults are used. Example: `-i "C:\foresight\setup\VH.ini"`
-v	Display Validation Highlighter's version. Do not use with other options. Example: `ValidationHighlighter.exe -v`
-h	Displays help. Do not use with other options. Example: `ValidationHighlighter.exe -h`

Example Command Line - EDI

```
"C:\Foresight\InStream\Bin\ValidationHighlighter.exe"
-r "C:\Foresight\InStream\Output\837I-Demo3_Results.txt"
-e "C:\Foresight\InStream\DemoData\837I-Demo3.txt"
-o "C:\Foresight\InStream\Output\837I-Demo3.html"
```

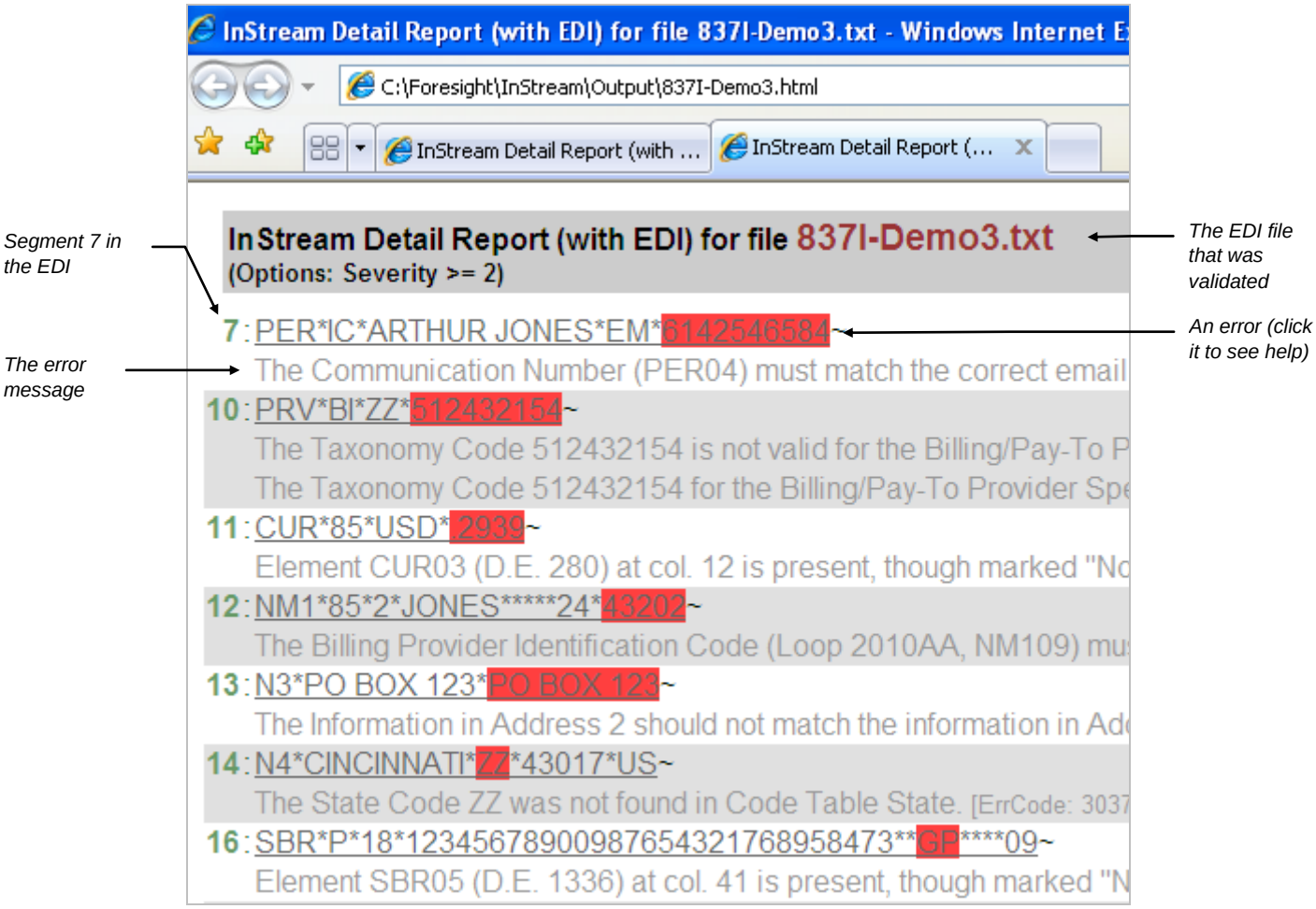
This example uses EDI file 837I-Demo3.txt and validation detail results file 837I-Demo3_Results.txt to create the HTML report 837I-Demo3.html. Since it has no -i parameter, the settings in ValidationHighlighter.ini in Instream's Bin directory will be used.

Example Command Line - flat file

```
"C:\Foresight\InStream\Bin\ValidationHighlighter.exe"
-r "C:\Foresight\InStream\Output\FF_FL_Oneill_results.txt"
-o "C:\Foresight\InStream\Output\FF_FL_Oneill.html"
```

This example uses the validation detail results file FF_FL_Oneill_results.txt to create the HTML report FF_FL_Oneill.html.

Understanding the Results



INI File

By using the -i command line parameter, you can specify the path and filename of an INI file for Validation Highlighter.

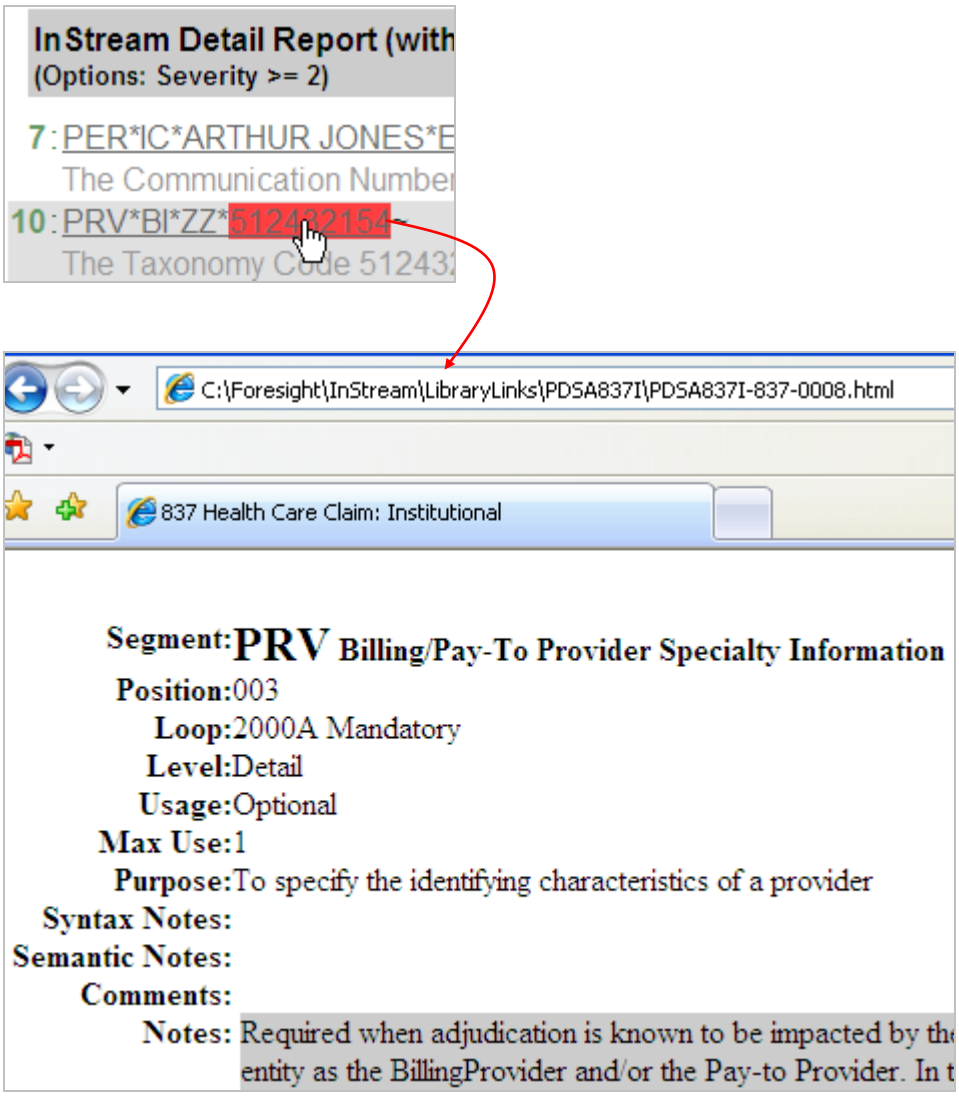
If you omit -i from the command line, an attempt is made to load a default INI file named **ValidationHighlighter.ini.** On Windows this will be loaded from the same directory where ValidationHighlighter.exe was executed (Instream's Bin directory by default). On UNIX, this file will be loaded from the path specified in the FSINSTREAMINI environment variable. If ValidationHighlighter.ini is not found, internal defaults are used.

This file contains configuration information that can be overridden by command line parameters. The comments in the file explain each option. The [Options] section at the bottom contains settings.

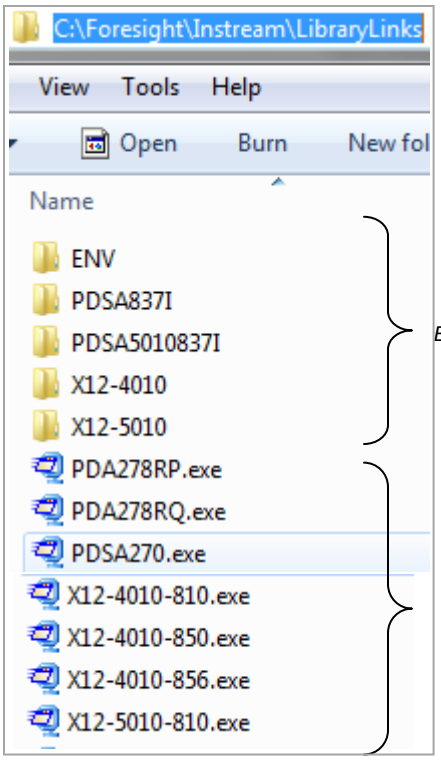
Option	Explanation
csspath=../	The css file is up one directory from the HTML file.
liblinkpath=../LibraryLinks/	The library links are up one directory from the HTML report and in a directory called LibraryLinks. If the HTML is in C:\Foresight\Output, then the LibraryLinks directory will be C:\Foresight\LibraryLinks:
severity=0	If set to 0, all EDI segments show along with any related messages. Otherwise, the severity specified means that any errors of that severity or greater will show, along with their accompanying EDI segments. Segments with no messages will not appear in the HTML report. Severities include: 1 Informational 2 Warning 3 Error 4 Fatal 5 User 1 6 User 2
showenv=0	If set to 0, envelope segments only appear if the severity setting causes them to appear. If set to 1, enveloping segments always appear. The command line parameter **showenv** overrides this setting in the INI file.
fragmentmode=0	If set to 0, output is in fragment mode. If set to 1, output is a complete HTML file. The command line parameter **-f** overrides this setting in the INI file.

Liblinks

Liblinks are sets of HTML help files that describe transactions. They are specific to the validation guideline. When you click an error in the HTML report, the liblinks page for that segment displays. Note the path displayed in the browser's address line below:



You can see the liblinks that ship with Instream in Instream's LibraryLinks directory:



Expanded liblinks – ready for use

Self-extracting zip files.Unzip to use these liblinks.

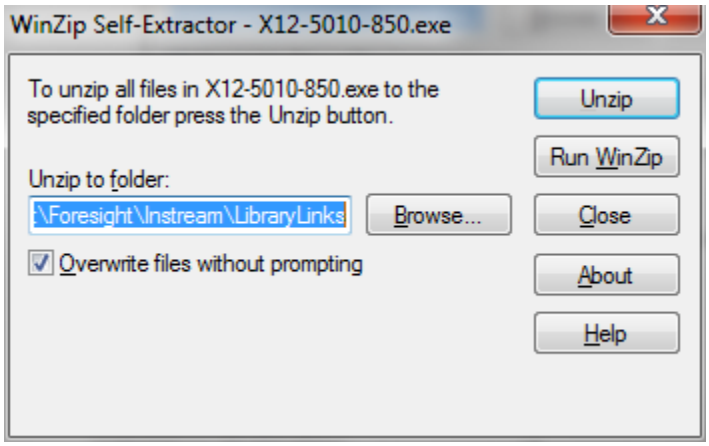
Liblinks can be stored elsewhere if you identify that location with liblinkpath in ValidationHighlighter.ini.

Unzipping Liblinks

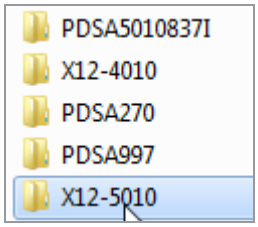
To minimize disk space used, the Instream installation only expanded the liblinks used in the demos.

To use liblinks for another HIPAA guideline or for one of the other guidelines, unzip them into the LibraryLinks directory:

1. Double-click on the exe file and unzip to the LibraryLinks folder.

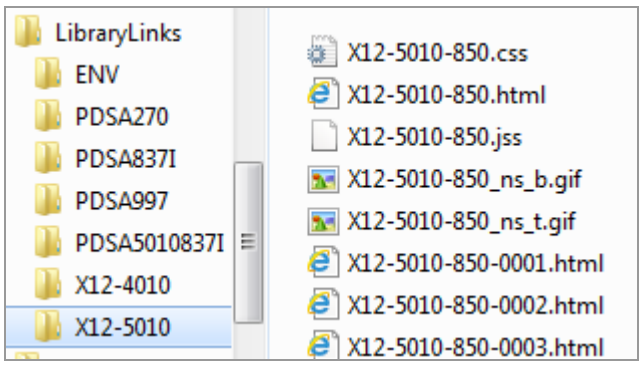


3. Complete the unzipping, refresh the LibraryLinks directory, and look for a new directory:



4. Open the directory and be sure that the files are directly under it, without another subdirectory.

   Correct:



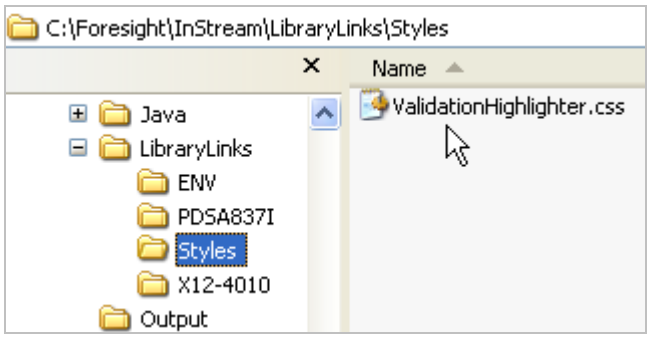
Adjusting Styles

Your output is based on styles set up in ValidationHighlighter.css. If you understand CSS styles, you can adjust the styles so that the appearance of the output is different.

To adjust the styles:

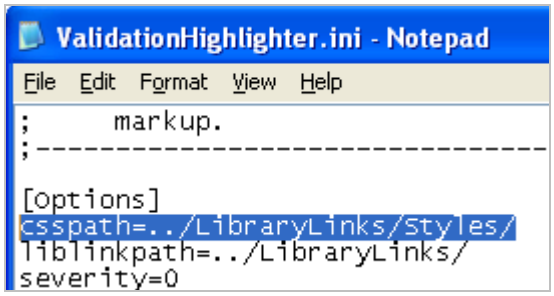
1. Copy **ValidationHighlighter.css** from Instream's LibraryLinks to another location, using the same filename.

   In this example, we are using a new directory called Styles, which we create under LibraryLinks:



2. Edit the new ValidationHighlighter.css and change the styles as you wish.

3. Edit ValidationHighlighter.ini in Instream's Bin directory. Change csspath to point to this new directory. The directory is relative to the location of the ValidationHighlighter output.



This changes the default path to the CSS file.

4. If you are using the –csspath command line parameter, point to this new CSS file.

Creating your own Liblinks

You can create your own liblinks for a type 1, 2, and 8 (TIBCO Foresight® EDISIM®) guideline by running EDISIM®'s Document Builder from a command line.

Current limitation You cannot currently create liblinks from a merged guideline. Please contact support for details.

Command line format:

*Path***FSDocBld -fsstd "**G*uideline*" **-fsset** "*setID*" **-fsprofile** "*profileName*" **-fsohtml** "*HTMLdir*" **-fstitle** "*pageTitle*"

Where:

*Path***FSDocBld**	Required. Path and filename of Document Builder executable. In a default installation, this is C:\Foresight\EDISIM\Bin\FSDocbld.exe
-fsstd "G*uideline*"	Required. Guideline containing the information for the liblinks. This is an unencrypted guideline in the EDISIM database. Example: "C:\Foresight\EDISIM\User Files\Public Guidelines\Kaver810"
-fsset "*setID*"	Required. The transaction set. Example: "810"
-fsprofile "*profileName*"	A Document Builder profile. Example: "C:\Foresight\Profiles\external.dpf"

-fsohtml "*HTMLdir*"	Required. The output directory for the HTML. This should be an existing empty directory under Instream's LibraryLinks directory. The directory name should be the same as the guideline name Example: "`C:\Foresight\InStream\LibraryLinks\Kaver810\`"
-fstitle "*pageTitle*"	Text to use as a page title. Example: "`Kaver Corp. X12-4010 810 Invoice`"

Example command line to create Library Links based on an EDISIM guideline called Kaver810:

```
C:\Foresight\EDISIM\Bin\FSDocbld.exe -fsstd "C:\Foresight\EDISIM\User Files\Public
Guidelines\Kaver810" -fsset "810" -fsprofile "C:\Foresight\Profiles\external.dpf"
-fstitle "Kaver Corp. X12-4010 810 Invoice"
-fsohtml "C:\Foresight\InStream\LibraryLinks\Kaver810\"
```

Please see **ValidationHighlighter_D93A_CreateLinks** in Instream's Scripts directory for a demo.

Return Codes

Return Code	Meaning
0	No error.
1	Bad parameter supplied.
2	File not found.
10	INI file parsing error.
30	Problem parsing Instream results file.
35	Error in standard C++ library.
40	Error creating HTML output.
50	Unknown error.

Seeing Return Codes in the Log File

A log file called ValidationHighlighter.log is created if there are any errors in the operation of Validation Highlighter. In all cases except 50 (unknown), the log should provide details on the problem.

For Windows, the log goes in the same directory as ValidationHighlighter.exe. For UNIX, the log goes into the directory specified by the FSINSTREAMINI environment variable.

Seeing Return Codes when running a script (UNIX)

To display return codes when you run a script, put this line similar to this in the script right after running ValidationHighlighter:

```
echo " ValidationHighlighter return code = " $?
```

This returns something like:

```
ValidationHighlighter return code = 0
```

Seeing Return Codes when running a script (Windows)

To display return codes when you run a batch file, put a line similar to this in the batch file right after running ValidationHighlighter:

```
@ECHO [ERROR %ERRORLEVEL%] There was a problem running
ValidationHighlighter.exe
```

In this example, ValidationHighlighter could not find its input file so you get a return code of 2:

```
Instream detail report file "C:\Foresight\InStream\Output\out.dtl" not found
[ERROR 2] There was a problem running ValidationHighlighter.exe.
```