TIBCO Foresight® Instream®

Trading Partner Automation

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Two-second advantage®

Important Information

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Contents

Introduction

This document describes trading partner automation (TPA). It explains how to have TIBCO Foresight® Instream® use values in the EDI, XML, or flat file for certain data types to automatically select certain items based on various values in the data.

Select a …	When running …
Guideline	validation
Validation profile (APF) file	validation
Path for output	validation
INI file	Docsplitter
INI file	Response Generator (X12 data)

It is written for users who are familiar with Instream® validation.

The following TPA methods are explained in this document:

Method	Data type	Program	Selects …	Based on …	See page …
Envelope-Based	X12 EDIFACT TRADACOMS	Validation → Docsplitter → Resp. Gen →	Guideline Profile Output dir Docsplitter INI Resp. Gen INI	Values in enveloping	3
Content-based	X12 Flat file XML	Validation	Guideline Profile	Values anywhere in data	21
Flat File 1st record	Flat file Delimited or fixed length	Validation	Guideline Profile	Values in first record	41

Envelope-Based TPA

How it Works

Data X12, EDIFACT, TRADACOMS

Programs Validation, Response Generator, Docsplitter

TIBCO Foresight® Translator can use partner automation to select a map rather than a guideline. Please see **TIB_translator_ *<n.n>*_usersguide.pdf** for details

Selects Validation profile, validation guideline, validation output directory, Response Gen INI (X12 data), Docsplitter INI

The selection criteria consist of values in the interchange or group enveloping. You create a lookup file that Instream validation consults at each X12 GS, EDIFACT UNG or UNH, or TRADACOMS STX … based on one or more values in the interchange or group enveloping.

Example:

```
ISA
{ GS        check lookup file for guideline, profile, output path, Resp Gen options, and DocSplitter options
    ST-SE
  GE
IEA
ISA
{ GS        check lookup file for guideline, profile, output path (not Resp Gen or DocSplitter options)
    ST-SE
  GE
IEA
```

These changes can be made:

- X12: At each functional group.
- EDIFACT: At each UNG if available, or the UNH otherwise.
- TRADACOMS: At each STX.

The last output path selected will be used.

For flexibility, you can separately choose whether to use TPA when:

- Validating
- Using Docsplitter
- Using Response Generator

Overview of Envelope-based TPA with Instream programs			
	Validating	**Docsplitter**	**Response Gen**
Invoking TPA	**PARTNERAUTOMATION** in $dir.ini (Windows) or fsdir.ini (UNIX). See Turning on Envelope-Based TPA for Validation on page 5.	**-TPA** command line parameter. See Docsplitter Command Line on page 14.	**-TPA** command line parameter. See Response Generator Command Line on page 16.
Identifying lookup file	CSV file identified by PARTNERAUTOMATION in $dir.ini (Windows) or fsdir.ini (UNIX). See Lookup File Format on page 7.	CSV file identified by Docsplitter command line **-TPA** parameter. See Lookup File Format on page 7.	CSV file identified by Response Generator command line **-TPA** parameter. See Lookup File Format on page 7.
What it selects	Validation guideline Validation profile Validation outbound path	Docsplitter ini	Response Gen ini
Command line	Omit the **-g** parameter on the validation command line. See Validation Command Line on page 13.	Omit all command line parameters except **-i, -d**, and **-TPA.** See Docsplitter Command Line on page 14.	Omit all command line parameters except **-i** and **-TPA**. See Response Generator Command Line on page 16.
Changes at	Every GS (X12). Every UNG or UNH. (EDIFACT).	First GS in file. This selection is used for the entire file.	First GS in file. This selection is used for the entire file.
Standards	X12 and EDIFACT	X12	X12
Unmatched files	Best guess for guideline. Default APF. Output specified on command line.	Always uses guideline from validation detail results file.	Always uses guideline from validation detail results file.

Turning on Envelope-Based TPA for Validation

This step is not necessary for TPA for Response Generator or Docsplitter.

To enable TPA during validation:

1. Go to Instream's **bin** directory and edit **$dir.ini** (Windows) or **fsdir.ini** (UNIX).
2. Go to the **PARTNERAUTOMATION** line under [UserTables].
3. If the line starts with a colon (**:**), remove the colon.
4. Replace the filename and path with the one for the TPA lookup file that you are going to create. Retain the quotation marks around the path and filename.
5. If you are not using content-based TPA also, be sure that there is a colon at the front of the CBPARTNERAUTOMATION line.

If you are using the Instream API

C# and C++ API

You only have the ability to call the $dir.ini or fsdir.ini located in Instream/bin and that file can only have a single partner automation entry. There is no way to call an alternate $dir.ini or fsdir.ini location and no way to make a direct reference to a partner automation .csv file. The **InStream_partnerautomation** object is not available for C# and C++.

Java API

You are able to make a reference to the .csv file directly using the **InStream_partnerautomation** object.

Setting up a Lookup File for TPA

Tools for Editing a Lookup file

- A text editor like Notepad
- When editing your lookup file, avoid using a spreadsheet program, which may delete leading zeros, reformat numbers, and otherwise cause havoc with the content.

Big Picture

To set up your lookup table with a text editor:

1. Copy one of these:
   Instream's **Bin** directory: **SamplePartnerAutomation.csv**
   Instream's **DemoData** directory: **SampleTPA_DS_RG.csv**

2. Edit it to match your requirements:
   - Use the filename and path that you specified in $dir.ini or fsdir.ini if you are using TPA during validation.
   - This should be the same filename and path that you will use with the -TPA command line for Docsplitter and Response Generator if you are using TPA with them.

     You can use the same lookup table for validation, Docsplitter, and Response Generator, or you can use separate lookup tables for each.

2. Use a text editor to add a line for each scenario for which you want to specify a guideline, profile file, or output directory, as explained below.

3. Save as a text file.

Lookup File Format

The lookup table is a plain text file containing rows of comma-separated values.

Top line:

- The top line in the file contains headings.
- For validation, the top line must contain 13 or more headings
- For Docsplitter and Response Generator, the top line must contain 15 headings
- The actual text in the headings does not matter

Other lines contain the information shown below. Required fields are marked with an asterisk.

Selection Criteria	
Column	**Notes**

GS08/UNG7-12/ STX01	**Required**.
	X12 Example:
	`005010X279A1,HB,,,,,,,,,271-X279,,,,`
	If the data contains a GS08 value of `005010X279A1` AND the value specified in the GS01 (see GS01 criteria that follows), Instream uses the `271-X279` guideline for validation.
	EDIFACT Example:
	For EDIFACT, this value will be in the UNG07-01+02 or, if there is no UNG, in the UNH02-02+03.
	TRADACOMS Example:
	For TRADACOMS, this will be STX0102 + “0” + STX0101. Example:
	`STX=ANA:1+5000000000000:KAVERCORP …`
	Value is 10ANA: 1+0+ANA=10ANA

GS01/UNB1-1/ STX07	**Required**. X12 Example: `005010X279A1,HB,,,,,,,,,271-X279,,,,` If the data contains a GS08 value as specified (see GS08 criteria above) AND the GS01 value `HB`, Instream uses the `271-X279` guideline for validation. EDIFACT Example: For EDIFACT, this value will be in the UNB1-1. TRADACOMS Example: For TRADACOMS, this value will be in the STX07.
ISA05/UNB2-1/ STX02-01	Optional.
ISA06/UNB2-2/ STX02-02	Optional; do not include trailing blanks.
ISA07/UNB3-1/ STX03-01	Optional.

ISA08/UNB3-2/ STX03-02	Optional; do not include trailing blanks.
GS02/UNB4-1/ STX05	Optional. For the GS02 and UNB4-1, Response Generator and Docsplitter read these in the first group (GS-GE or UMB-UNE) in each interchange. These values are then applied to each group within the interchange. (Response Generator and Docsplitter do not operate on TRADACOMS data.)
GS03/ UNB4-1/ STX06	Optional. For the GS03 and UNB4-1, Response Generator and Docsplitter read these in the first group (GS-GE or UMB-UNE) in each interchange. These values are then applied to each group within the interchange. (Response Generator and Docsplitter do not operate on TRADACOMS data.)
Start Date	Date when this entry becomes active. The date must be in the format YYYYMMDD. Example: June 3, 2008 is 20080603. If validation takes place before June 3, 2008, then this entry is ignored.
End Date	Date after which this entry becomes inactive.

Your Settings	

Guideline Name	Required; do not include the file extension .STD.
	Additional Requirements for 278 Transaction Entries
	If the GS08 contains 278, such as `005010X278A1`
	Include the response guideline, a vertical bar, and then the request guideline:
	`278response|278request`
	Example:
	`PDA278RP|PDA278RQ`
	For 278s, Instream is programmed to look at the data's BHT-02 to determine if this is a request or response:
	▪ Response:
	If BHT-02 contains 11, the first guideline (response) is used.
	▪ Request:
	For **4010**, if the BHT-02 contains 13, the second guideline (request) is used.
	For **5010**, if the BHT-02 contains 01, 13, or 36, the second guideline (request) is used.
	If the GS08 contains 215, such as `005010X215`:
	Include the Inquiry guideline, a vertical bar, and then the ResponsetoInquiry guideline:
	`215Inquiry|215ResponsetoInquiry`
	Example:
	`PDSA5010-278X215I|PDSA5010-278X215R`
	(Continued on next page)

Your Settings	

	For 5010X215s, Instream is programmed to look at the data's BHT-02 to determine if this is an inquiry or response:
	▪ Inquiry:
	If BHT-02 contains 28 or 51, the first guideline (215Inquiry) is used.
	▪ ResponsetoInquiry:
	If the BHT-02 contains 49 or 52, the second guideline (215ResponsetoInquiry) is used.
	
	<u>If the GS08 contains 216</u>, such as `005010X216`:
	Include the Notification guideline, a vertical bar, and then the Acknowledgment guideline:
	`216Notification|216Acknowledgment`
	Example:
	`PDSA5010-278X216N|PDSA5010-278X216A`
	For 5010x216s, Instream is programmed to look at the data's BHT-02 to determine if this is a notification or acknowledgement:
	▪ Notification:
	If BHT-02 contains 14, 22 or CN, the first guideline (216Notification) is used.
	▪ Acknowledgement:
	If the BHT-02 contains 44 or 53, the second guideline (216Acknowledgement) is used.

Profile File	Optional; Instream validation APF file. Defaults to the Bin directory if you don't specify a full path. If you specify a path, enclose it in double quotes if it contains spaces. If it does not contain spaces, omit the quotes. Do not end with a backslash.
OutboundPath	Optional; enclose the path in double quotes if it contains spaces. Otherwise, do not use quotes. End with a backslash (\). Examples: `C:\files\casey\` or `"C:\my files\casey\"`
RespIni	Not for TRADACOMS. Optional; path and filename for Response Generator INI file. Defaults to In stream's Bin directory if you don't specify a full path. Do not use relative paths. If you specify a path, enclose it in double quotes if it contains spaces. If it does not contain spaces, omit the quotes. Do not end with a backslash. Examples: `RespGen837.ini` or `"C:\setupFiles\RespGen837.ini"` The same Response Generator INI file is used for an entire interchange. Response Generator cannot change in mid-interchange. This INI file cannot be invoked by the Response Generator -z parameter. It is exclusively for TPA.

Your Settings	
DocSplitIni	Not for TRADACOMS. Optional; path and filename for Docsplitter INI file. Defaults to Instream's Bin directory if you don't specify a full path. Do not use relative paths. If you specify a path, enclose it in double quotes if it contains spaces. If it does not contain spaces, omit the quotes. Do not end with a backslash. Examples: `DS837.ini` or `"C:\setupFiles\DS837.ini"` The same Docsplitter INI file is used for an entire interchange. Docsplitter cannot change in mid-interchange. This INI file can be invoked by the Docsplitter -s parameter if you don't want to use TPA. In that case, the [CommandLine Option] section is ignored.

Example Lookup File

```
GS08/UNG7-12/STX01,GS01/UNB1-1/STX07,ISA05/UNB2-1/STX02-01,ISA06/UNB2-
2/STX02-02,ISA07/UNB3-1/STX03-01,ISA08/UNB3-2/STX03-02,GS02/UNB4-
1/STX05,GS03GS02/UNB4-1/STX06,Start Date,End Date,Guideline Name,Profile
File,Outbound Path

004010X091A1,HP,,,,,,,,,835AW120,,,,

D.93A,UNOA,,,,,,,,,MYCUSCAR_D93A,,,,

004010X094A1,HI,ZZ,CASEY,,,,,,,PDA278RP|PDA278RQ,,C:\files\casey\,,

004010X096A1,HC,,,,,,,,,PDSA837I,,,RespGenDemo.ini,C:\setupfiles\DS837.ini

10ANA,ORDHDR,,,,,,,,,Trad93,,,,

005010X216,HP,,,,,,,,,PDSA5010-278X216N|PDSA5010-278X216A,,,,
```

Explanation

First line — (Wrapped in example above but not in the lookup file). Headings. Ignored by Instream.

Second line — When validating, Instream uses guideline 835AW120 if the data contains both of these:

GS-08	004010X091A1
GS-01	HP

Third line — When validating, Instream should use **MYCUSCAR_D93A** if the data contains both of these:

UNG7-12	D.93A
UNB01-01	UNOA

Fourth line	When validating, Instream should use either **PDA278RP** or **PDA278RQ** and write output to **c:\files\casey** if the data contains all of these: GS-08 004010X094A1 GS-01 HI ISA-05 ZZ ISA-06 CASEY If BHT-02 contains a value of 11, then Instream uses **PDA278RP**. This logic is programmed into Instream; you do not have to set it up. If BHT-03 contains a value of 13, then Instream uses **PDA278RQ**.
Fifth line	Instream should use all of these: ▪ When validating: guideline **PDSA837I** ▪ When using Response Generator: INI file **RespGenDemo.ini** (which is in Instream's Bin directory) ▪ When using Docsplitter: INI file **DS837.ini**, which is in C:\setupfiles. …if the data contains both of these: GS-08 004010X096A1 GS02 HC
Sixth line	Instream should use guideline Trad93 if the STX0102 contains 0 and the STX0101 contains ANA.
Seventh line	When validating, if the GS08 contains 005010X216 and the GS01 contains HP, Instream should reference the BH-02: ▪ If it contains 14, 22, or CN, Instream should use the first (notification) guideline specified: PDSA5010-278X216N. ▪ If it contains 44 or 53, Instream should use the second (acknowledgement) guideline specified: PDSA5010-278X216A.

How Instream Matches

- If only one row matches the criteria, that row is used.
- If more than one row matches:
  - The row that matches the most criteria will be used.
  - If all match the same number of criteria, the first matching row will be used.
- When using the Java API, if the ISA partner information is missing or not found in the lookup file, Instream issues a 191 return code and create a TA1.

  If the GS01 or GS08 are not found in the partner lookup file, Instream issues a 191 return code and creates a TA1 and a 997 or 999.

Example 1

The 1st row matches 5 criteria, the 2nd row matches 6 criteria, and the 3rd row matches 8 criteria, so Instream uses row 3.

Enveloping

```
ISA*00*          *00*          *14*ISA06Name1b    *20*ISA08Name1b
*030402*1426*U*00401*000000219*1*T*:

GS*HC*GS02Name1b*GS03Name1b*20030402*1426*219*X*004010X096A1
```

Lookup file

1. 004010X096A1,HC,14,,20,,GS02Name1b,,,,PDSA837ITest7,,,
2. 004010X096A1,HC,14,ISA06Name1b,20,,,GS03Name1b,,,PDSA837ITest8,,,
3. **004010X096A1,HC,14,ISA06Name1b,20,ISA08Name1b,GS02Name1b,GS03Name1b,,, PDSA837ITest9,,,**

Example 2

Row 2 and 3 match the same number of criteria, so Instream uses row 2.

Enveloping. Same as example 1

Lookup file

1. 004010X096A1,HC,14,,20,,GS02Name1b,,,,PDSA837ITest7,,,
2. **004010X096A1,HC,14,ISA06Name1b,20,,,GS03Name1b,,,PDSA837ITest8,,,**
3. 004010X096A1,HC,,ISA06Name1b,20,,GS02Name1b,GS03Name1b,,,PDSA837ITest9,,,

Example 3

Row 2 and 3 match more criteria than row 1 but assume that the validation date does not match the start and end dates in these rows. Therefore, they are ignored and row 1 is used.

Enveloping: same as example 1

Lookup file:

1. **004010X096A1,HC,14,ISA06Name1b,20,ISA08Name1b,,GS03Name1b,,,PDSA837ITest7,,,**
2. 004010X096A1,HC,14,ISA06Name1b,20,ISA08Name1b,GS02Name1b,GS03Name1b,20091101 ,,PDSA837ITest8,,,
3. 004010X096A1,HC,14,ISA06Name1b,20,ISA08Name1b,GS02Name1b,GS03Name1b, 20091101,20091102,PDSA837ITest9,,,

Command Lines

Validation Command Line

Omit parameters that Instream can look up in the lookup file. Instead of having to change the command line for different partner scenarios, the command line can be implemented like this for all scenarios:

HVInStream.exe -i*InFile* **-o***OutPath*

Where:

-i and **-o** Always required on the command line, even if you include an output directory in the lookup file. Instream uses the one in the lookup file if possible. If not, it uses the one on the command line.

-s Use **-s** on the command line when you want to override the profile name in the lookup file.

-g This parameter determines whether TPA will be used:

If **g** is present	TPA is not used for validation.
If **g** is absent	TPA is used and you must have a lookup file identified in your $Dir.ini (Windows) or fsdir.ini (UNIX).

If you validate a file with a partner scenario that is not in the lookup table, and no **–g** parameter is used on the command line, then Instream uses best-guess estimation based on information in the GS-08.

Example that uses TPA:

```
HVInStream.exe -i "C:\Foresight\Instream\DemoData\6claims.txt"
-o "C:\ Foresight\Instream\Output\6claims_Results.txt"
```

Example that does not use TPA:

```
HVInStream.exe -i "C:\Foresight\Instream\DemoData\6claims.txt"
-o "C:\ Foresight\Instream\Output\6claims_Results.txt" -gPDSA837I
```

Docsplitter Command Line

When using TPA with Docsplitter, the command line should look like this:

DocSplitter.exe -i*DTLfile* **-d***DataFile* **-TPA***LookupFile*

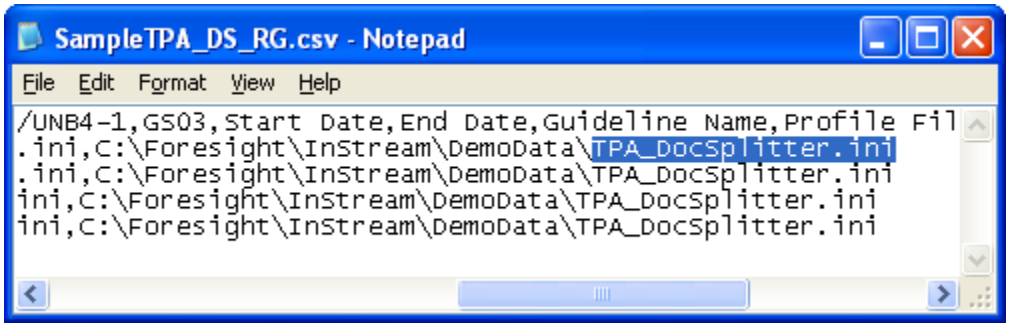
About command line parameters:

- The **-i**, **-d**, and **-TPA** parameters must be used for Docsplitter TPA.
- The **-TPA** parameter points to the lookup file for TPA.
- Do not use any other parameters. Instead, include the settings in the setup file.

Example:

```
DocSplitter.exe -i"c:\DTLfiles\6claims_Results.txt"
-d"C:\EDIfiles\6claims.txt" -TPA"c:\lookupFiles\lookup1.csv"
```

The TPA lookup file will point to a Docsplitter setup file:



This Docsplitter setup file must contain a [CommandLine Option] section with these parameters:

Required	Optional
ValidEdiOutputPathName	LogLevel
InValidEdiOutputPathName	ReportFormat
ReportFilePathName	
Guideline	

For an example file, see TPA_DocSplitter1.ini in Instream's DemoData directory.

The contents of the Docsplitter setup file are documented in **TIB_fsp-instream_<n.n>_docsplitter.pdf**. See the **Docsplitter setup file** section.

Docsplitter Command Line when Splitting from a 997

When using a 997 as the source of error information, rather than the validation detail results file, the command line should be in one of these formats:

DocSplitter.exe -d*DataFile* **-i***DTLfFile* **-e997***File* **-TPA***LookupFile*

DocSplitter.exe -d*DataFile* **-g***Guideline* **-e997***File* **-TPA***LookupFile*

About command line parameters:

- The **-d**, **-e997**, and **-TPA** parameters must be used.
- Either **-i** or **-g** must be used.
- The **-TPA** parameter points to the lookup file for TPA.
- Do not use any other parameters. Instead, include the settings in the Docsplitter setup file.

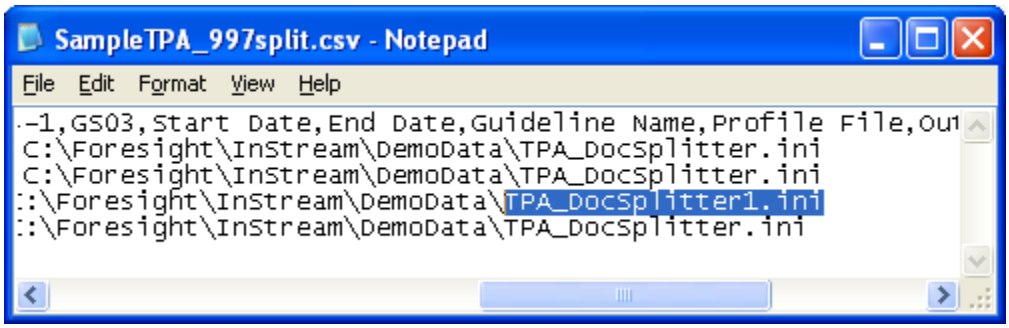
Example using detail file

```
Docsplitter.exe" -d"C:\EDIfiles\835-Demo1.txt"
-i"C:\DetailFiles\835-Demo1_Results.txt" -e997"C:\997s\835-Demo1.997"
-TPA"TPAlookupFiles\SampleTPA_997split.csv"
```

Example using guideline

```
Docsplitter.exe" -d"C:\EDIfiles\835-Demo1.txt" -gPDSA835
-e997"C:\997s\835-Demo1.997" -TPA"TPAlookupFiles\SampleTPA_997split.csv"
```

The TPA lookup file will point to a Docsplitter setup file:



The Docsplitter setup file must contain a [CommandLine Option] section with these parameters:

Settings in [CommandLine Option] section	
Required	**Optional**
ValidEdiOutputPathName	LogLevel
InValidEdiOutputPathName	ReportFormat
ReportFilePathName	Guideline
Settings in other sections are optional	

For an example, see TPA_DocSplitter1.ini in Instream's DemoData directory.

The contents of the Docsplitter setup file are documented in **TIB_fsp-instream_<n.n>_docsplitter.pdf**. See the **Docsplitter setup file** section.

Response Generator Command Line

When using TPA with Response Generator, the command line should look like this:

RespGen.exe -i*DTLfile* **-TPA***LookupFile*

About command line parameters:

- The **-i** parameter is required on all Response Generator command lines, including those for TPA.
- The **-TPA** parameter points to the lookup file for TPA.
- Do not use any other command line parameters. Instead, include the settings in the lookup file.

For an example Response Generator TPA INI file, see **TPA_ResponseGen.ini** in Instream's DemoData directory.

Sample Validation Output

The top of the detail results file will show TPA just before it processes the ST segment:

```
VER  2.0

STRT          010002 103/15/05 11:32:13Analysis requested on file
C:\Foresight\Instream\DemoData\CBTPAdemo\cbt1.txt, 3754 bytes long

GEN           015074 1 0Message file loaded :
C:\Foresight\Instream\bin\FSANERRS.TXT

GEN           015075 1 0Message file loaded :
C:\Foresight\Instream\bin\FSBRERRS.TXT

GEN           015010 1 0Message file loaded :
C:\Foresight\Instream\bin\CustomerFSBRERRS.TXT

GEN           015004 1 0Partner Automation Table Loaded
C:\Foresight\Instream\Bin\SamplePartnerAutomation.csv

GEN           015006 1 0Guideline Selected using Criteria:
(004010X091A1,HP,,9012345720000,,,,,,)

STRUS         1|ISA|0|1|0

GEN           111211 1 0Start of Interchange, Ctl. No. 000000001, From
9012345720000, To 9088877320000, At 020103 0944

STRUS         2|GS|0|1|108

GEN           211212 1 0Start of Functional Group, Ctl. No. 1, From
901234572000, To 908887732000, At 20020103 1615

STRUS         3|ST|0|0|173

GEN           311001 1 0Loaded Transaction Set 835 from Standard AAA
(004010X091A1)

GEN           311213 1 0Start of Transaction Set, Ctl. No. 0001
```

Demos

Envelope-based Validation Demo

1. Go to Instream's **Bin** directory and check **$dir.ini** or **fsdir.ini**. Be sure PARTNERAUTOMATION is uncommented (has no preceding colon) and points to **SamplePartnerAutomation.csv** in the Bin directory.
2. Check **SamplePartnerAutomation.csv**. It will contain a header line and one or more lines used for matching. These will vary according to your specific installation but will have values from the enveloping and a guideline to be used for data that has that value, like this:

   `004010X091A1,HP,,,,,,,,,835AW120,,`

3. Run **V_835_4010_TPA** in Instream's Scripts directory.

Demo Output (HIPAA Instream)

```
VER  2.0

STRT          010002 103/16/05 11:07:08Analysis requested on file
C:\Foresight\Instream\DemoData\835-DEMO1.TXT, 2032 bytes long

.

.

.

GEN           015004 1 0Partner Automation Table Loaded
C:\Foresight\Instream\Bin\SamplePartnerAutomation.csv

GEN           015006 1 0Guideline Selected using Criteria: (004010X091A1,HP,,,,,,,,)

STRUS         1|ISA|0|1|0

GEN           111211 1 0Start of Interchange, Ctl. No. 000000001, From 9012345720000, To
9088877320000, At 020108 1042

STRUS         2|GS|0|1|108

GEN           211212 1 0Start of Functional Group, Ctl. No. 1, From 901234572000, To
908887732000, At 20020108 1615

STRUS         3|ST|0|0|173

GEN           311001 1 0Loaded Transaction Set 835 from Standard 835AW120 (004010X091A1)

GEN           311213 1 0Start of Transaction Set, Ctl. No. 0001
```

Envelope-based TPA Validation, Response Generator, and Docsplitter Demos

See these demos in Instream's Scripts directory:

V_RG_837I_4010_TPA
V_RG_837P_4010_TPA
V_DS_837I_4010_TPA
V_DS_835_4010_TPA997split
V_Order_TRADACOMS_TPA

Content-based TPA

How it Works

Data X12, flat file, and XML

Programs Validation

Selects Profile, guideline

Content-based TPA requires that someone set up business rules in TIBCO Foresight® EDISIM® Standards Editor. It is best done by an experienced guideline developer who understands the basics of EDISIM® business rules. See **BusinessRules.pdf**.

With content-based TPA, you can have Instream validation switch to another guideline and profile many times within the same transaction set or functional group. You can switch at the ST segment or at any repeating loop within the guideline. Switching is triggered by one or more specific values between the ST and SE. The structure of each guideline must be similar, especially at the switch location.

Overview of Content-based TPA validation with Instream programs	
Invoking TPA	**CBPARTNERAUTOMATION** in $dir.ini (Windows) or fsdir.ini (UNIX). See Turning on Content-Based TPA on page 23.
Identifying lookup file directory	CSV file directory identified by CBPARTNERAUTOMATION in $dir.ini (Windows) or fsdir.ini (UNIX). See Lookup File Format on page 7.
Identifying lookup file name	IdentifierLookup business rule in original guideline. See Setting up your Lookup Table for Content-Based TPA on page 28.
What it selects	Validation guideline Validation profile

Command line	Use the **-i -o**, and **-g** validation command line parameters. See Validation Command Line on page 13.
Changes at	Locations marked by DSR in originating guideline.
Standards	X12, flat file, XML Mark guideline switch point with a DSR mark in Standards Editor.
Unmatched files	Originating guideline (-g on command line) Default APF

Content-based TPA requires guideline changes.

Example: Check for guideline and profile at top of each transaction set	**Example:** Check for guideline and profile at each 2000A loop
ISA GS } *use settings from command-line or from envelope-based partner automation* ST *check lookup table here* . . . SE ST . . . SE ST *check lookup table here* . . . SE GE IEA	ISA GS ST } *use settings from command-line or from envelope-based partner automation* 2000A *check lookup table here* 2000A *check lookup table here* 2000A *check lookup table here* SE ST 2000A *check lookup table here* 2000A *check lookup table here* 2000A *check lookup table here* SE GE } *use settings from command-line or from envelope-based partner automation* IEA

To set up content-based TPA:

Step	See page …
Turn on CBPARTNERAUTOMATION in the $dir.ini (Windows) or fsdir.ini (UNIX) file	23
Set up a lookup file containing transaction set values and corresponding guideline name and profile name	26
Set up TPA business rules in your base guideline	28
Start validating with the guideline that contains the TPA business rules	28

Turning on Content-Based TPA

To enable content-based TPA:

1. Go to Instream's **bin** directory and edit **$dir.ini** (Windows) or **fsdir.ini** (UNIX).
2. Go to the **CBPARTNERAUTOMATION** line.
3. If the line starts with a colon (`:`), remove the colon.
4. Adjust the path to point to the directory containing your content-based TPA file (described below). Retain the trailing slash and the quotation marks around the path:

   ```
   CBPARTNERAUTOMATION= "C:\Foresight\Instream\Bin\"
   ```

   Do not include a filename. It will be determined by the IdentifierLookup business rule in the guideline. This lets you have lookup files that are specific to particular guidelines. Put all lookup files in the directory specified in the CBPARTNERAUTOMATION line.
5. If you are not using envelope-based TPA also, be sure that there is a colon at the front of the PARTNERAUTOMATION line.

Planning

It helps to write out the scenario you are trying to capture. In our EDI example, this is:

```
                    ①
At the beginning of each transaction set, switch guideline and profile …

        ②                ③
if the Payee N1-03 and Payee N1-04 contain the values listed in …

                            ④
lookup table MyCBpartnerAutomation.csv.
```

These are the pieces of information that we need to convey to Instream:

① Where the guideline/profile switch should take place
See Marking the Potential Switch Location on page 28

② The first element with a value that determines if a switch should take place (Payee N1-03)
See Marking the First Value that Determines the Switch on page 30

③ The second element with a value that determines if a switch should take place (Payee N1-04)
See Setting up a Rule that Checks the Lookup Table on page 31

④ The name of a table containing values and the corresponding guideline and profile names
See Setting up your Lookup Table for Content-Based TPA.

Setting up your Lookup Table for Content-Based TPA

We are working on the circled part of our example:

At the beginning of each transaction set, switch to a different guideline and profile …

if the Payee N1-03 and Payee N1-04 contain the values …

listed in lookup table MyCBpartnerAutomation.csv.

1. Go to Instream's DemoData\CBTPAdemo directory and copy MyCBpartnerAutomation.csv to the path that you specified in the **$dir.ini** or **fsdir.ini** file (see Turning on Content-Based TPA on page 23).
2. Edit this new file with a text editor like Notepad.
3. Add a line for each scenario that triggers a guideline or profile switch, as explained below.
4. Save as a text file.

Important

Use a text editor when editing the lookup file.

Avoid editing it with a spreadsheet, which may delete leading zeros, reformat numbers, and otherwise cause havoc with the content.

Lookup File Format for Content-Based TPA

This text file contains rows of comma-separated values. The top line in the file contains labels for the four columns. You can change the labels since they are ignored by Instream.

The first two values in each line determine if Instream should start using the profile in column three and the guideline in column four. Every line has exactly three commas:

If these selection criteria are in the data …

Switch to these

```
Value1,Value2,Profile,Guideline
FI,222222222,C:\Profiles\MYapf_1.apf,B41A835
XX,,C:\Profiles\Myapf_2.apf,
```

Where:

Value1 First value from data.

Value2 Second value from data. At least one value must be present.

Profile Optional; defaults to the **Bin** directory if you don't specify a full path. If you specify a path, do NOT use quotes even if it contains spaces. Do not end with a backslash.

Guideline Optional; use at least one of column three and four. Do not include the file extension "**.STD"**.

For HIPAA 278s, include the response guideline, a vertical bar, and then the request guideline:

`PDA278RP|PDA278RQ`

If the data's BHT-02 contains 11, the first guideline is used. If the BHT-02 contains 13, the second guideline is used.

If Instream does not match the data to columns 1 or 2:

1. It uses the guideline selected with envelope-based TPA.
2. If that is not in effect, it uses the guideline selected with the command line **–g** parameter.

Example Lookup File

This is the lookup file for the example used throughout this section. You can find a copy of this file in **DemoData\CBTPAdemo\MyCBpartnerAutomation.csv**.

```
PayeeN103,PayeeN104,Profile,Guideline
FI,222222222,C:\Foresight\Instream\DemoData\CBTPAdemo\MYapf_1.apf,B41A835
FI,333333333,C:\Foresight\Instream\DemoData\CBTPAdemo\MYapf_1.apf,B41A835
XX,,C:\Foresight\Instream\DemoData\CBTPAdemo\Myapf_2.apf,
```

Explanation:

First line	Headings. Ignored by validation; you can change them.
Second line	When validating, Instream uses profile **MYapf_1.apf** and guideline **B41A835** if the data contains both of these values at the elements specified with a business rule: FI and 222222222
Third line	When validating, Instream uses profile **MYapf_1.apf** and guideline **B41A835** if the data contains both of these at elements specified with a business rule: FI and 333333333
Fourth line	When validating, Instream uses profile **Myapf_2.apf** if the data contains XX at the first element specified with the business rule. Since no guideline is given, it will use the one selected by envelope-based TPA, or, if that was not used, with the one selected by the command line **–g** parameter.

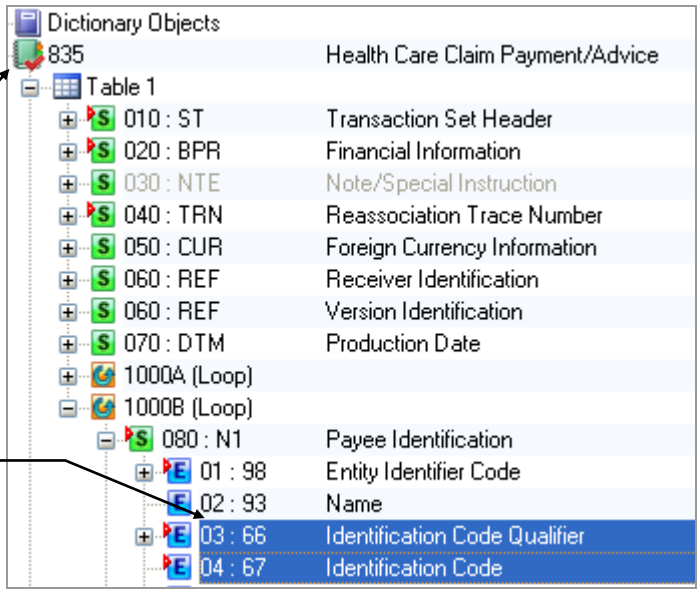
Setting up your Base Guideline

The example used throughout this section sets up rules for the base guideline - the one that starts the validation. This guideline has the SetIdentifier and IdentifierLookup business rules. The guidelines that are invoked by this one won't have these rules.

In this example, the rules will switch to another guideline and profile at the ST segment when certain values are found in the 835 Payee N1-03 and N1-04.

Switch to a different guideline and profile here …

… when these contain certain values



Marking the Potential Switch Location

We are working on the circled part of our example:

At the beginning of each transaction set, switch to a different guideline and profile …

if the Payee N1-03 and Payee N1-04 contain the values …

listed in lookup table MyCBpartnerAutomation.csv.

Set up the location where you may want to switch profile or guideline:

1. Open the guideline in EDISIM 5.15 or later.
2. Right-click on the place where you may want to change profile or guideline. This can be the transaction set itself or any loop header (the header itself, not the first segment in the loop).

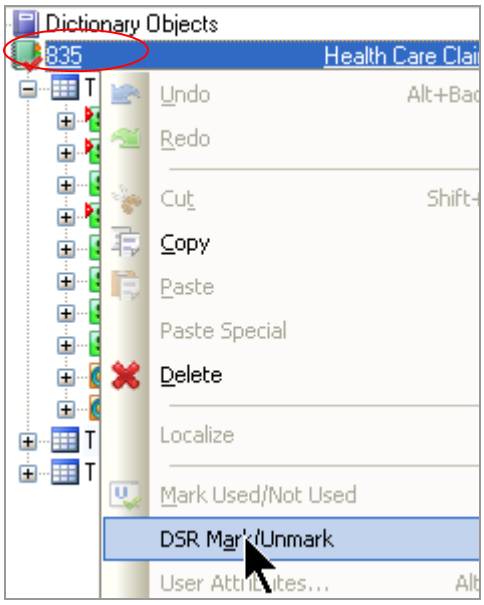
3. Select **DSR Mark/Unmark**.

   Look for a small checkmark on the item's icon.

Notice whether the item you marked is mandatory or must be used. If this item is an optional loop, it might not appear in the data and so the guideline and profile will not change.

EDI Example

In our EDI example, we right-click and select **DSR Mark/Unmark** on the **835** transaction set line because we are going to look up a profile and guideline at the beginning of each transaction set in the data.



Marking the First Value that Determines the Switch

We are working on the circled part of our example

At the beginning of each transaction set, switch to a different guideline and profile …

if the Payee N1-03 and Payee N1-04 contain the values …

listed in lookup table MyCBpartnerAutomation.csv.

If you have two values that will determine what guideline and profile should be used, identify the first one.

(If you have only one value that determines the guideline/profile, skip this set of steps.)

1. Right-click on the element or field.
2. Choose **Business Rules | New**.
3. Under **What Rule to Run**, choose **SetIdentifier**.
4. For the **SetIDvariable** parameter, type a variable name of your choice that identifies this location. Do not use spaces or special characters.

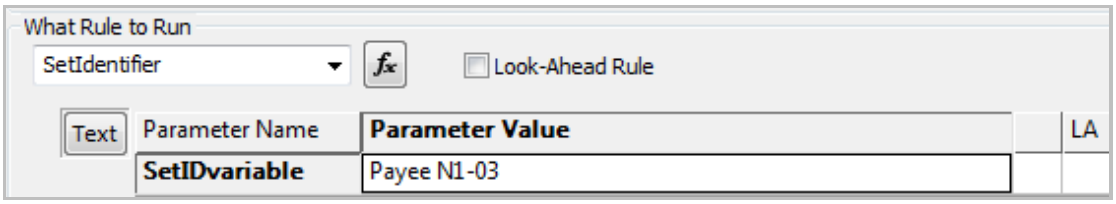
   Make a note of this name; you will need to use its exact spelling and capitalization in another business rule.
5. Close the business rules boxes.

Notice whether the element or field that you marked is mandatory or must be used. If it is optional, you may need more extensive business rules to cover the variations that can occur. See the example on page 34.

Our Example

In our example, we want to select guideline and profile for each transaction set based on the contents of the Payee N1-03 and N1-04.

To capture the contents of the N1-03 in a variable, right-click on the **1000B N1-03**, choose **Business Rules | New a**nd set up this business rule:



This value corresponds to the first column in the lookup table.

Setting up a Rule that Checks the Lookup Table

We are working on the circled parts of our example:

At the beginning of each transaction set, switch to a different guideline and profile …

if the Payee N1-03 and Payee N1-04 contain the values …

listed in lookup table MyCBpartnerAutomation.csv.

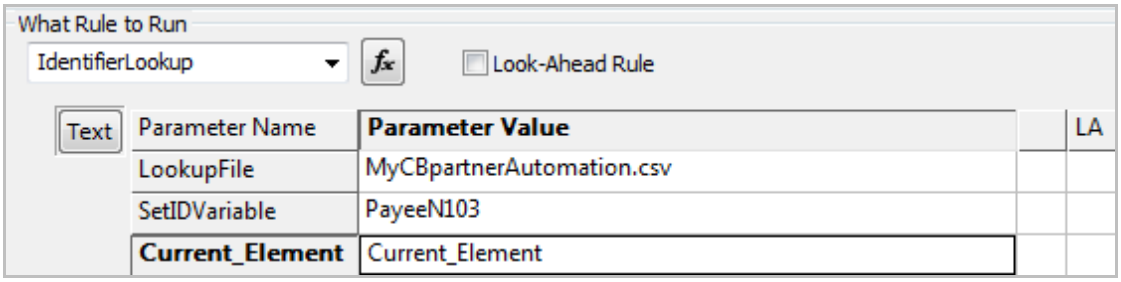
On the last location involved in the lookup, add the rule that actually compares the data to the lookup table:

1. Right-click on the element or field.
2. Choose **Business Rules | New**.
3. **For What Rule to Run,** choose **IdentifierLookup**.
4. For Parameter, type these three items, separated by one space each:
   - **LookupFile** is the name of the lookup file.
   - **SetIDVariable** is the variable assigned to the first element involved (if one exists).
   - **Current_Element** is Current_Element (usually) or another variable set by a SetIdentifier rule. See the example below.

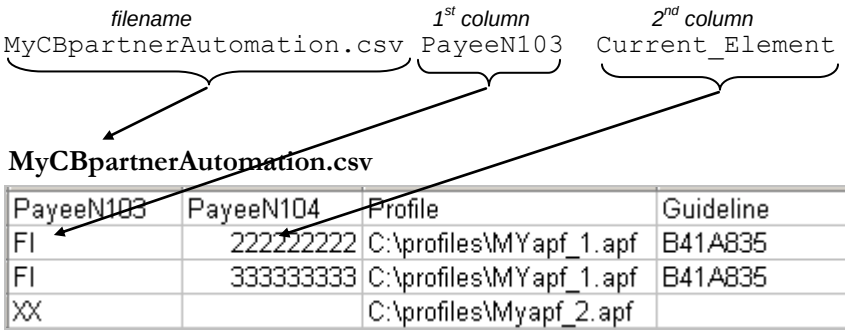
When Instream validation reaches this location in the data, it checks the content-based lookup table to see if the first two columns match the values in the first variable and the current element or field. If so, it goes up to the switch point and validates with the guideline and/or profile from the lookup table.

How Rules Interact with Lookup Tables

Example Rule:



Example Lookup Table:



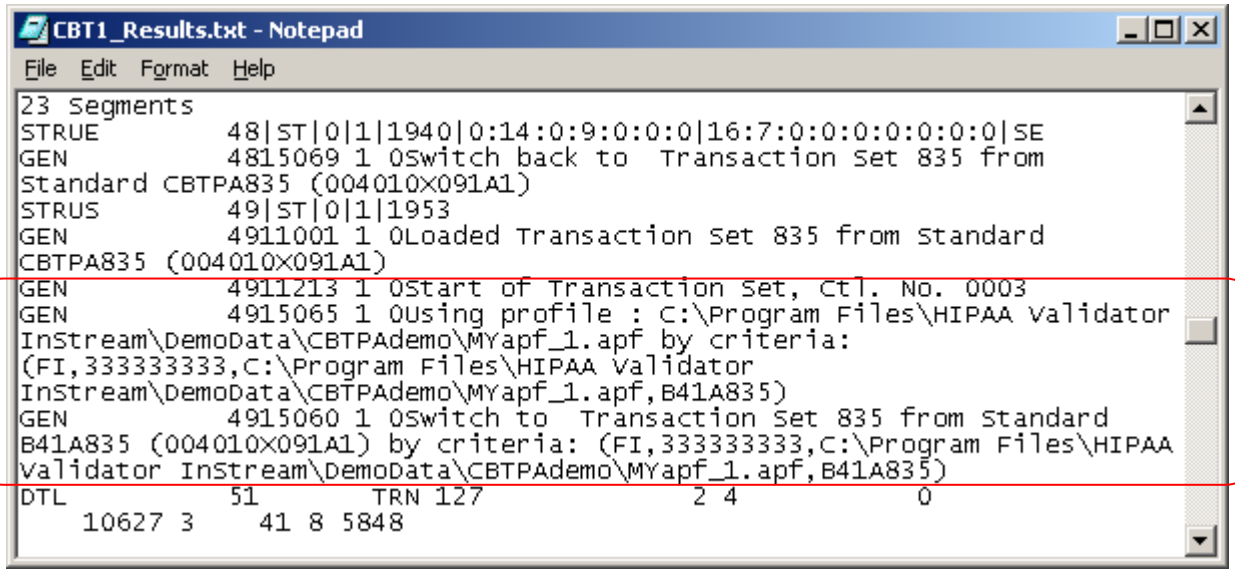
Our Example

In our example, we have assigned the variable PayeeN103 to our first element. We now go to the N1-04 and do the actual lookup by adding the IdentifierLookup rule shown above.

Testing your Content-Based TPA

1. Save your guideline.
2. Go to EDISIM's **User Files\Public Guidelines** directory and copy the guideline to Instream's **Database** directory.
3. Validate some data that contains the data in the lookup file and some that does not. The command line is described on page 33.

The results file should have messages like these that confirm switching or not switching (search for the word "criteria"):



If you are using a HIPAA guideline: Once you have your automation working properly, merge your guideline with an Instream guideline or guidelinePlus as described in **BusinessRules.pdf**.

Our Example

1. Copy your EDISIM guideline into Instream's Database directory.

   There is a backup copy of the guideline (CBTPA_EX.std) in Instream's **DemoData\CBTPAdemo** directory.

2. Edit **V_835_4010_CBTPA.bat** (Windows) or **V_835_4010_CBTPA.sh** (UNIX) in Instream's Demodata\CBTPAdemo directory and replace the guideline with your guideline's name. Save and close the file.

3. Run the file and look for the results in Instream's **Output** directory.

Command Line for Validating

Omit parameters that Instream can find in the LOOKUP file. Instead of having to change the command line for different partner scenarios, the command line can be implemented like this for all scenarios:

HVInStream.exe -i*InFile* **-o***OutPath* **-g***Guideline*

Where:

-i Always required on the command line.

-o Always required on the command line.

-g Guideline that contains the IdentifierLookup business rule for content-based TPA. Omit if you are also using envelope-based TPA.

Content-Based TPA Demos

HIPAA EDI

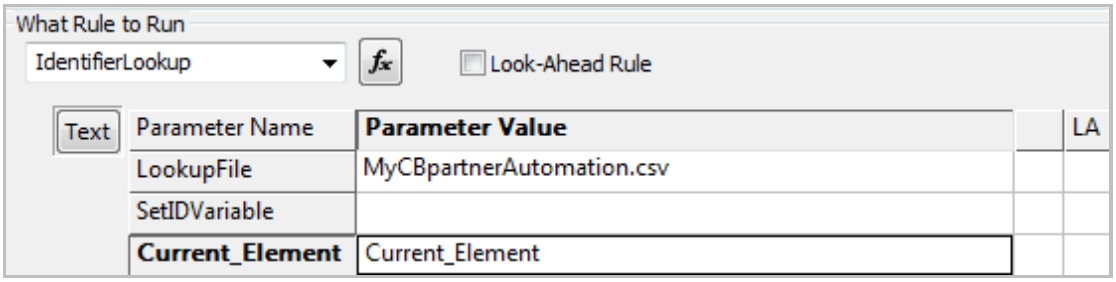
See **_readme_CBTPA.txt** in Instream's **DemoData\CBTPAdemo** directory for information on how to run the demo. By default, results will be in Instream's Output directory.

Flat File

Run **V_FFdelim_CBTPA** in Instream's **Scripts** directory.

Example using one Element

When using only one element to determine if the profile or guideline should change, use only two parameters for the IdentifierLookup in Standards Editor:



The lookup file will have column 2 empty:

```
PayeeN103,,Profile,Guideline
222222222,,C:\Profiles\MYapf_1.apf,B41A835
333333333,,C:\Profiles\MYapf_1.apf,B41A835
```

HIPAA Example using Optional Elements

Overview

In a different 835 example, we change profile at the ST for certain Payer ID - Payee ID combinations.

Payer ID is either the BPR-10 (if included) or else the TRN-03

Payee ID is the 1000B N1-04

```
                                                  BPR-10
                                                  Payer ID
                                                  (if present)
ST*835*0002
BPR*I*6.09*C*CHK*****1111111111*******20040908
TRN*1*002467228*1111111111
                                                  TRN-03
DTM*405*20040903                                  Payer ID
(1000A)                                           (if BRP10 is missing)
        N1*PR*ARGUS*XV
        N3*1300WASHINGTONST
        N4*KANSASCITY*MO*641051433                N1-01
                                                  Payee ID
(1000B)
        N1*PE*PHARMERICAINCWESTREGION*FI*999999999
        REF*PQ*9000759
```

Assume that we want this to happen:

If Payer ID (BPR-10 or TRN-03) is …	And Payee ID (1000B N1)-01 is …	Then use this profile
1111111111	999999999	MYapf_1.apf
not 1111111111	999999999	MYapf_2.apf.

Strategy

1. Set up the lookup file.
2. Check the **$dir.ini** (Windows) or the **fsdir.ini** (UNIX).
3. Set up the business rules in the guideline:
   a. If the BPR-10 is present, use its value as the Payer ID.
   b. On the TRN-03, check to see if the BPR-10 is present. If not, use this value as the Payer ID.
   c. On the Payee N1-04, look up the Payer ID and the current value (the Payee ID) in the lookup file

Set up lookup file MY_CBTPA.CSV

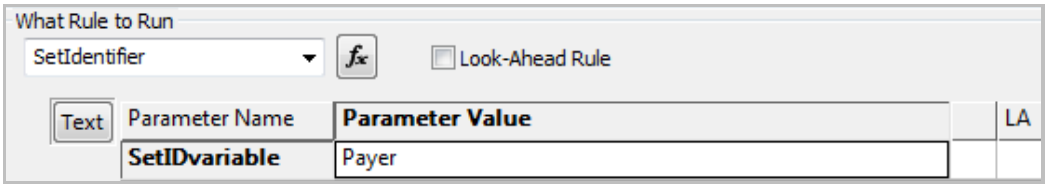
```
Payer,Payee,Profile,Guideline
1111111111,999999999,MYapf_1.apf,
,999999999,MYapf_2.apf,
```

Check the $dir.ini or fsdir.ini

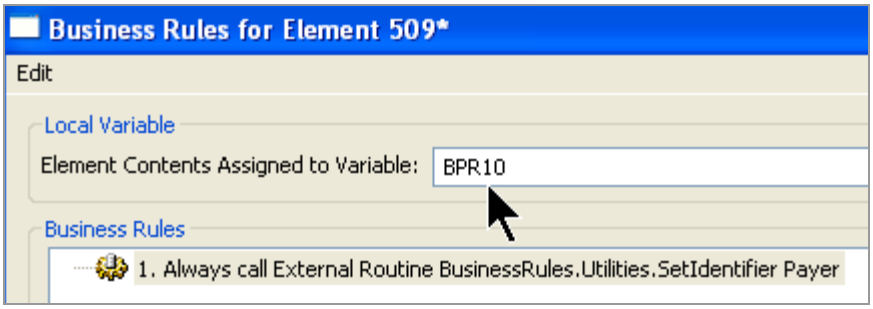
For CBPARTNERAUTOMATION, remove the leading colon and put in the path to the directory containing the lookup file.

Customize the Guideline

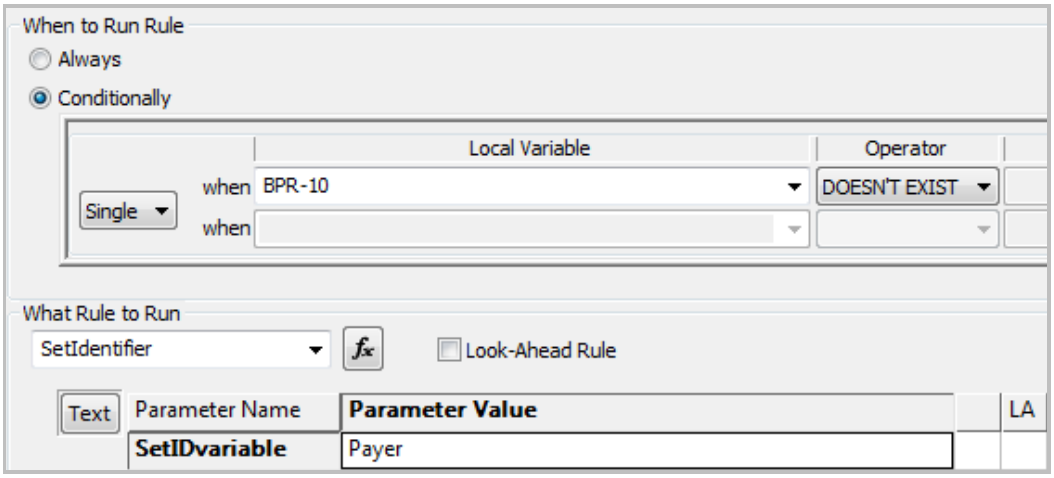
1. In EDISIM Standards Editor, start a new 835 addenda guideline based on 835AW120.
2. To mark the place where the profile is to change, right-click on the 835 line at the top and choose **DSR Mark/Unmark**.
3. Put a **SetIdentifier** business rule on the BPR-10 (an optional element):



4. Also on the BPR-10, add a local variable, like this:

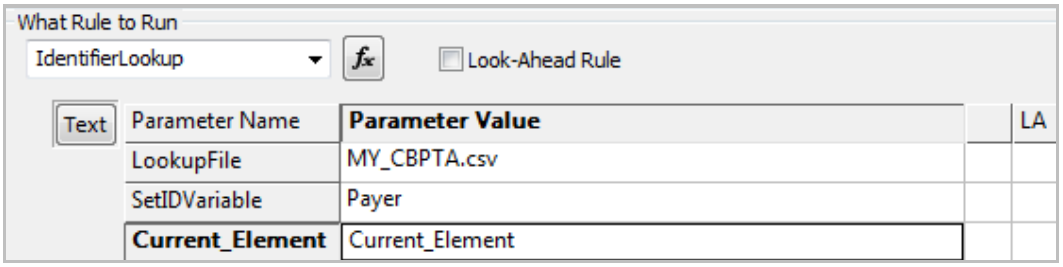


5. On the TRN-03, add a rule like this (notice the parameter is the same as on the BPR-10):



We now have a value in Payer - either the BPR-10 or the TRN-03.

6. On the 1000B N1-04, do the lookup:



Combining Envelope and Content Based TPA

You can use both methods together:

- Use PARTNERAUTOMATION to identify a guideline, profile, and output directory based on the values in the ISA and GS. This might identify a content-based guideline.
- If the guideline selected by the envelope-based TPA has an IdentifierLookup business rule that switches guideline or profile based on one or more values in the transaction set, Instream will look up the profile and guidelines in the content-based lookup table. Output directory remains as selected by the envelope-based TPA.

To use both types of TPA:

- Identify both lookup tables by updating PARTNERAUTOMATION and CBPARTNERAUTOMATION in $Dir.ini or fsdir.ini.
- Run Instream validation without **-g**.

Flat File TPA

How it Works

If the first record in a flat file contains data that identifies the partner, then you can use it to select a guideline and profile.

Data Delimited data; fixed length data with or without record terminators, NCPDP data. First record contains identifying data.

Programs Instream validation

Selects Validation guideline, validation profile

Overview of Flat File TPA with Instream programs	
	Validating
Invoking TPA, identifying lookup file	**PARTNERAUTOMATIONFLAT** in $dir.ini (Windows) or fsdir.ini (UNIX). See Activating Flat File TPA on page 44.
Lookup file format	CSV file containing selection criteria, guideline, and APF. See Lookup File for Flat File TPA on page 44.
What it selects	Validation guideline Validation profile
Command line	Omit the **-g** parameter on the validation command line. See Validation Command Line on page 13.
Changes at	First record in the file.
Data formats	Flat file in any of these formats: ▪ Delimited fields and records ▪ Fixed fields without delimiter at end of each record ▪ Fixed fields with delimiter at end of each record
Unmatched files	Validation stops with return code 140

The Flat File Guideline

To get a flat file guideline, you can:

- Import an existing copybook or CSV layout
- Create a guideline from within Standards Editor

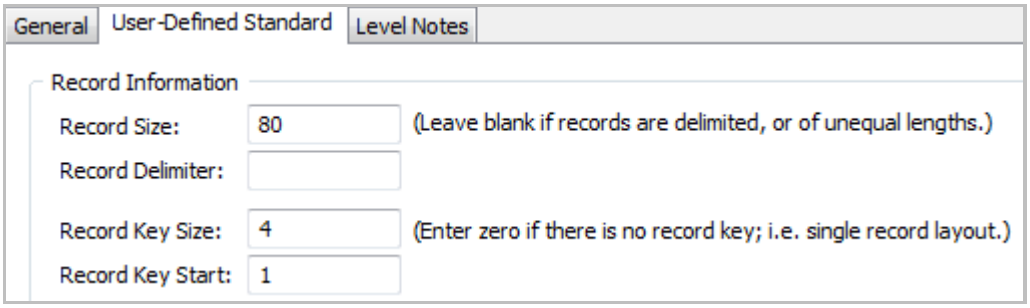
Please see **FlatFilesAtForesight.pdf** for details.

In the table below, identify the line that describes the file format and then include the corresponding information in Standard Editor's **File | Properties**.

Data File Format	Record Size	Record Key Size Record Key Start	Record Delimiter	Field Delimiter	Sub-Field Delimiter
Fixed Length All records are the same length No delimiters between fields	✓	✓			
Fixed Length Fields with Record Delimiter Each field is the same length Records are different lengths because some have additional fields		✓	✓		
Delimited Each field has a delimiter Each record has a delimiter			✓	✓ Keyboard character or hexadecimal (if comma is delimiter, use hex X2C)	Not currently supported

Example: Fixed Length

Each record is 80 bytes.
Each record starts with a 4-byte key.



Example: Fixed Length Fields with Record Delimiter

Record lengths may vary and end with an exclamation mark.
Each record starts with a 4-byte key.
Field lengths may vary and are delimited with an asterisk.

General | User-Defined Standard | Level Notes

Record Information

Record Size: (Leave blank if records are delimited, or of unequal lengths.)

Record Delimiter: !

Record Key Size: 4 (Enter zero if there is no record key; i.e. single record layout.)

Record Key Start: 1

Field Information

Field Delimiter: *

Sub-Field Delimiter:

Enter a delimiter character, or 'X' followed by a hexadecimal representation of the character (ex. X1F). If guideline has no field delimiters, then leave empty.

Example: Delimited

Record and field length may vary.
Records and fields have delimiters.
The first field is assumed to be the record key.

General | User-Defined Standard | Level Notes

Record Information

Record Size: (Leave blank if records are delimited, or of unequal lengths.)

Record Delimiter: !

Record Key Size: (Enter zero if there is no record key; i.e. single record layout.)

Record Key Start:

Field Information

Field Delimiter: *

Sub-Field Delimiter:

Enter a delimiter character, or 'X' followed by a hexadecimal representation of the character (ex. X1F). If guideline has no field delimiters, then leave empty.

Copy this guideline from EDISIM's User Files\Public Guidelines directory to Instream's Database directory.

Activating Flat File TPA

To activate flat file TPA:

1. Go to Instream's **bin** directory and edit **$dir.ini** (Windows) or **fsdir.ini** (UNIX).
2. Go to the **UserTables** section and add or update a PARTNERAUTOMATIONFLAT line:

```
[UserTables]
:UserTable = "C:\Foresight\InStream\Bin\CMS_UserTable.txt"
:PARTNERAUTOMATION = "C:\Foresight\InStream\Bin\TI_demo.csv"
PARTNERAUTOMATIONFLAT = "C:\Foresight\InStream\Bin\MyFlatFilePartAuto.csv"
```

3. If the line starts with a colon (`:`), remove the colon.
4. Adjust the path to point to the directory containing your lookup file (described below).
5. If you are not using other types of Trading Partner Automation also, be sure that is a colon at the front of any other partner automation lines in this section.

Lookup File for Flat File TPA

Editing Tools for a Lookup file

- Use a text editor like Notepad
- Do not use a spreadsheet program to edit your lookup file. It may delete leading zeros, reformat numbers, and otherwise cause havoc with the content

Lookup File Big Steps

To set up your lookup table with a text editor:

1. Go to Instream's **DemoData\FFTPAdemo** directory and copy **MyFlatPartnerAutomation.csv** to the PARTNERAUTOMATIONFLAT filename and path that you specified in $dir.ini or fsdir.ini.
2. Use a text editor to add a line for each scenario for which you want to specify a guideline, profile file, or output directory, as explained below.
3. Save as a text file.

Lookup File Format

The lookup table is a plain text file containing rows of comma-separated values.

The top line in the file contains labels of your choice. These are for your convenience and are ignored by TPA.

TPA starts with row 2 and uses the position of each item to determine its meaning.

Columns in Lookup File	
Column	**Notes**
FileType	**Required**. Describes the type of flat file. <u>Format for fixed length files</u> **F<***reclength recorddelim***>** Where: **F< >** Literal text *reclength* Number of bytes in each record. If they vary, use the number of bytes in the first record. *recorddelim* Separator between records in hexadecimal, if it is not a newline. Examples: `F<80>` means the file has fixed length fields and a record length of 80 bytes. Records end with a newline. `F<80 oX27>` means the file has fixed length fields and a record length of 80 bytes. Records end with a single quote. <u>Format for delimited files</u> **D<***fielddelim recorddelim***>** Where: **D< >** Literal text *fielddelim* Separator between fields in hexadecimal. *recorddelim* Separator between records in hexadecimal. Precede hex values with **0x**. Example: `D <0x2A 0x21>` means the file has delimited fields separated by asterisks (hex equivalent is 2A) and records terminated by exclamation marks (hex equivalent is 21).

Field1	**Required**. First selection criteria. Specify data that causes this row's guideline and/or APF to be used. <u>Format for fixed length files (F in first column)</u> *<start length label value>* Where: **< >** Literal text *start* Starting position of data. If set to -1 the field will not be used as search criteria for matching, but the value defined in the field will be returned to the caller application. *length* Number of characters in data (do not include trailing spaces) *label* Text of your choice to identify the data. Not used by TPA. Recommendation: call this one **`key`** as shown in the example below, since one and only one label must be **`key`** on each line. *value* Value to find at that location. If this contains spaces, include them, but enclose in single quotes. Example: `<15 5 key LB926>` TPA looks at positions 15-19. If they contain `LB926`, use the guideline and/or APF in this row during validation. Example 2: `<-1 5 key LB926>` Because *start* is set to `-1`, the *value* field will not be used for matching, but the text `LB926` will be returned in the column. Example 3: `<15 5 key 'CL 01'>` TPA looks at positions 15-19. If they contain `CL 01,` use the guideline and/or APF in this row during validation. Because there is a space in `CL 01` the value is enclosed in spaces. <u>Format for delimited files (D in first column)</u> *<fieldposition label value>* Where: **< >** Literal text *fieldposition* Field position in the record. If set to -1 the field will not be used as search criteria for matching, but the value defined in the field will be returned to the caller application. *label* Text of your choice to identify the data. Not used by TPA. Recommendation: call this one **`key`** as shown in the example below, since one label must be **`key`** on each line. *value* Value to find in that field. If this contains spaces, include them, but enclose in single quotes. Example 1: `<3 key LB926>` TPA looks in the third field for `LB926` and, if found, uses the guideline and/or APF in this row during validation. Example 2: `<-1 key LB926>` Because *fieldposition* is set to `-1`, the *value* field will not be used for matching, but the text `LB926` will be returned in the column. Example 3: `<3 key 'LB 926'>` TPA looks in the third field for `LB 926` and, if found, uses the guideline and/or APF in this row during validation. Because there is a space in `LB 926` the value is enclosed in spaces.

Field2 … Field10	Optional additional selection criteria. Use same format as Field1. If multiple selection criteria are used, then all must match for this guideline and/or APF to be used.
Guideline Name	**Required**. Do not include the file extension .STD.
Profile File	Optional; Instream validation APF file. Defaults to the Bin directory if you don't specify a full path. If you specify a path, enclose it in double quotes if it contains spaces. If it does not contain spaces, omit the quotes. Do not end with a backslash.

How Instream Matches:

- If only one row matches the selection criteria, that row is used.
- If more than one row matches:
  - The row that matches the most criteria will be used.
  - If they match the same number of criteria, the first matching row will be used.
- If no match is found, the validation fails with return code 140. Unlike for EDI, it is not possible to have "best fit" guessing for flat file guideline selection, since flat files are not based on published standards. Consider whether you could use a fairly generic row at the end to pick a basic guideline that would work.

Example Lookup File

```
FileType,field1,field2,field3,field4,field5,field6,field7,field8,field9,field10,Guideline,Apf
F<46>,<15 5 field1 LB926>,<25 7 field2 WILSON>,,,,,,,,,VetFFtags1,
F<46>,<15 5 field1 LB926>,<-1 7 field2 'HLTH CO'>,,,,,,,,,VetFFtags1,
D<0x2A 0x21>,<3 field1 LB926>,,,,,,,,,,VETDELIM1,
D<0x2A 0x21>,<3 field1 BJ612>,,,,,,,,,,VETDELIM2,Lenient.apf
F<46>,<15 5 field1 BJ612>,<25 10 field2 MACDERMAND>,,,,,,,,,VetFFtags1,Lenient.apf
F<75>,<2 2 key 00>,,,,,,,,,,NCPDP5,
```

Explanation

First line	Headings. Ignored by Instream.
Second line	When validating, Instream should use guideline VetFFtags1 if the data contains both of these: Positions 15-19 `LB926` Positions 25-30 `WILSON`
Third line	When validating, Instream should use guideline VetFFtags1 if the data contains both of these. (Note use of single quote in sample line around value with space [‘HLTH CO’]): Positions 15-19 `LB926` Positions 25-30 `HLTH CO`
Fourth line	When validating, Instream should use guideline VETDELIM1 if the third field contains `LB926`. (Note the use of `<0x2A 0x21>` means the file has delimited fields separated by asterisks (hex equivalent is 2A) and records terminated by exclamation marks (hex equivalent is 21).
Fifth line	When validating, Instream should use guideline VETDELIM2 and profile Lenient.apf if the third field contains `BJ612`. (Note the use of `<0x2A 0x21>` means the file has delimited fields separated by asterisks (hex equivalent is 2A) and records terminated by exclamation marks (hex equivalent is 21).
Sixth line	When validating, Instream should use guideline VetFFtabs1 and profile Lenient.apf if: Positions 15-19 `BJ612` Positions 25-34 `MACDERMAND`
Seventh line	NCPDP example that selects the standard NCPDP5.

Sample Flat File Validation Output

The top of the detail results file will show TPA in GEN messages before it processes the first segment:

```
VER  2.0
STRT          010002 103/04/11 11:16:56Analysis requested on file
C:\Foresight\InStream\DemoData\\FFTPAdemo\SpacetestFixed1_nospaces.txt, 526 bytes long
GEN           015075 1 0Message file loaded : C:\Foresight\InStream\bin\FSBRERRS.TXT
GEN           015004 1 0Partner Automation Table Loaded C:\Foresight\
               InStream\DemoData\FFTPAdemo\MyFixedFileLookup.csv
GEN           015006 1 0Guideline Selected using Criteria: (15 5 LB926,,,,,,,,,,)
GEN           015040 1 0Loaded Profile from C:\Foresight\InStream\Bin\$fsdeflt.apf
GEN           117021 1 0Document type(2), Message reference(HEAD)
STRUS         1|HEAD|0|1|0
CSEG          1HEAD0000000001LB926     WILSON    201001101412
GEN           111001 1 0Loaded Transaction Set HEAD from Standard VetFixed1 ()
GEN           111215 1 1Start Transaction Set HEAD.
STRUS         2|NAME|0|1|48
EDTL          5||1|PETS|SPEC|2||0|2|10600|3|
EMSG          5Value "PARAKEET  " is an invalid '"Species" (SPEC)' for PETS02 (D.E. SPEC)
at col. 15
EDAT          5PARAKEET
ESEG          5PETSJENNY     PARAKEET  BLUE
STRUE         7|NAME|0|1|260|0:0:0:1:0:0:0|0:1:0:0:0:0:0:0:0|PETS
STRUS         7|NAME|0|2|261
STRUE        13|NAME|0|2|509|0:0:0:0:0:0:0|0:0:0:0:0:0:0:0:0|PETS
CSEG         13TRLR0000000001
STRUE        13|HEAD|0|0|526|0:2:0:1:0:0:0|1:2:0:0:0:0:0:0:0|TRLR
SVRTY         0         8         0         1         0         0         0
ETYPE        13         7         2         0         0         0         0         0
0         0
END          1310006 103/04/11 11:16:57Analysis of file
C:\Foresight\InStream\DemoData\\FFTPAdemo\VetCustomerFile.txt complete
```

Flat File TPA Demos

Please go to Instream's DemoData\FFTPAdemo directory. Directions are in _readme_FFTPA.txt.

Validation Guideline Selection Overview

Instream validation selects a guideline this way:

1. **g parameter:** If a guideline is given on the command line with **-g**, it is always used. If this guideline cannot be found, validation stops.
2. **no g parameter and:**

   A. **TPA is not used:**

   If it is flat file data, processing stops.

   If it is EDI, Instream checks the GuidelineBestFit setting in the [Options] section of the $dir.ini or the fsdir.ini file.

   - If **GuidelineBestFit=1** or is omitted, Instream selects a guideline based on each X12 GS08 or EDIFACT UNG07-01+02 or UNH02-02+03 in the file. A message appears in the detail results file on each GS or UNG/UNH where best fit is used.

     The following documents use both the GS08 and then the ST01 to select a guideline: 270, 271, 276, and 277.

     For 278s, Instream uses the GS08 and then the BHT02.

   - If **GuidelineBestFit=0**, Instream stops processing with a return code of 140 and places this error message in the detail results file:

     ```
     Unable to Select Guideline based on best fit criteria [Best
     Fit option is turned off]
     ```

B. **TPA is used:** If a match is found for this data, the TPA guideline is used.

If no TPA match is found:

- If it is flat file data, processing stops.
- If it is EDI, Instream checks the GuidelineBestFit setting in the [Options] section of the $dir.ini or the fsdir.ini file.
  - If **GuidelineBestFit=1** or is omitted, Instream selects a guideline based on the X12 GS08 or EDIFACT UNG07-01+02 or UNH02.02+ 03. A message appears in the detail results file on each GS or UNG/UNH where best fit is used.

    The following documents use both the GS08 and then the ST01 to select a guideline: 270, 271, 276, and 277.

    For 278s, Instream uses the GS08 and then the BHT02.
  - If **GuidelineBestFit=0**, Instream stops processing.

For EDI data, whenever the validation command line does not include a guideline, and Instream cannot find a guideline another way (through best fit or trading partner automation), it creates a TA1 file.