6. Source Transformation / File Specification Editor

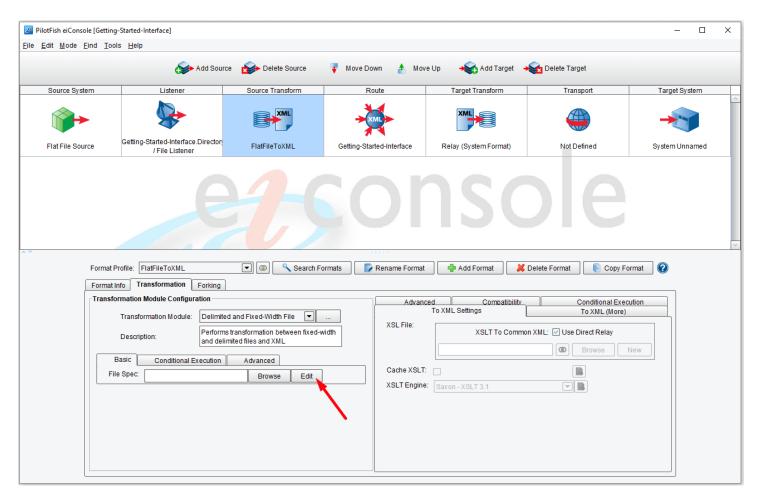
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eiConsole v.24R1 Tutorial 60 mins

eiConsole Foundation Tutorial Using the File Specification Editor for Source

You will need to navigate to the Working Directory c:\Users\{USER _NAME}\PilotFish eiConsole Working Directories\Foundation where {USER_NAME} is the user's name which was included in the sample files you downloaded in the first Foundation Tutorial – <u>Creating a Working Directory</u>.

Note: The Tutorials in the eiConsole Foundation, 1-13, are modular and are designed to be used in the sequence presented.



The Delimited and Fixed-Width File <u>Transformation Module</u> uses file specifications to describe the logical layout of a flat or delimited file. These file specifications are built using a tool in the eiConsole called the File Specification Editor. To launch the File Specification Editor, click the **Edit** button to the right of the **File Spec** configuration item.

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<u>File</u> <u>Structure</u> <u>V</u> iew <u>H</u> elp	
Record Structure Module Configuration Edit Spec XML	
Base	File Tures Deservational Character Definition
	File Type: Rec:Delimited / Field:Delimited Change First row is headers
	Preview record structure
	Select for New File Type × Import Field Names from Tab-delimited File I Parse String
Structure Component Information	The selected module does not support graphical configuration.
	Set Selected Text 🛛 📽 Parse for Fields 🖷 Execute Transform To XML 🗌 Apply Converters
	No hierarchy loaded
	Tree XML

This will launch the File Spec Editor (File Specification Editor). Here the developer will describe the logical structure of the inbound file so it can be parsed and translated into XML. When you create a new file specification, you can import the file description from several different <u>formats</u>. In this case, leave the pre-selected **Import Field Names from Tab-delimited File** option selected.

Take a moment to click the down arrow to see the other available options, for example, Import From Cobol Copybook Definitions. After you do this, set it back to **Import Field Names from Tab-delimited File** and click **Next**.

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File <u>N</u> ame Files of <u>Ty</u>	
	Open Cancel

You will be presented with an **Open File** dialogue that allows you to point the File Spec Editor at a sample tabdelimited file. Navigate to the **data** folder of your <u>Working Directory</u>. In this case, it is **c:\Users\{USER** _NAME}\PilotFish eiConsole Working Directories\Foundation\data.

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Look <u>I</u> n: 📔 d	data	•	💿 🏫 💕 🔡 🚍
Photos.txt			
File <u>N</u> ame:	Photos.txt		
Files of <u>T</u> ype:	File with field headers (*.csv, *.txt)		•
			Open Cancel

You will see **Photos.txt**, which is a sample input file. Select this and choose **Open**.

Load Test File	Х
Load selected file as Test file?	

Select Yes to load the selected file as a test file.

File Spec Editor : New spec	– 🗆 X				
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Record Structure Module Configuration Edit Spec XML					
Base P Base Photographer-First Photographer-Last Photographer-Last Nork-Phone Address Ocity State File-Name Dive-Country Dive-Site Dive-Depth	File Type: Rec:Delimited / Field:Delimited Change First row is headers Preview record structure 0 : 0 Parse String Results preview Parse String To XML From XML Image: Photo Name & Photographer First & Photographer Last & Home Phone & Work Phone & Address Image: Photo Name & Photographer First & S55-765-8764 & S55-654-7652 & 1 Angel Drive & Los Angel Image: Photo Name & Photographer First & Photographer Last & Home Phone & Work Phone & Address Image: Photo Name & Photographer First & S55-765-8764 & S55-654-7652 & 1 Angel Drive & Los Angel Image: Photo Name & Photographer First & S55-325-6564 & S55-765-4353 & 2 Moon Court & Bangel				
Structure Component Information	4 Stoplight Parrotfish » Shaquille » Shutter » 555-324-6542 » 555-762-8763 » 3 Ladybug Lan 5 Golden Necklace Fel » Lenny » Lens » 555-264-2372 » 555-876-5463 » 4 Bow Street » Provi				
Structure Type: Field	1:1				
Field Name: Dive-Depth	Set Selected Text Selected Text Parse for Fields Fields Apply Converters				
Node quantity: 1 Unbound	No hierarchy loaded				
Change delimiter Prev New	Tree XML				

The record structure tree on the left is now populated with a green <u>node</u> and several blue <u>nodes</u>. Green nodes represent logical records within the file. Blue nodes represent fields underneath that record. The <u>File Specification</u> <u>Editor</u> processed the inbound tab-delimited file. Notice that the first line contains column headers that can be easily translated into field names.

Next, click **Execute Transform to XML** to parse this file into an XML structure.

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<u>File</u> <u>Structure</u> <u>V</u> iew <u>H</u> elp	
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Record Structure Module Configuration Edit Spec XML	
 Base Photo-Name Photographer-First Photographer-Last Home-Phone Work-Phone Address City State File-Name Dive-Country Dive-Site 	File Type: Rec.Delimited / Field:Delimited Change Preview record structure
Dive-Depth	Results preview
	To XML From XML To XML From XML Photo Name » Photographer First » Photographer Last » Home Phone » Work Phone » Address Red Frog Fish » Amy » Aperature » 555-765-8764 » 555-654-7652 » 1 Angel Drive » Los Ang 3 Sea Turtle Fly-By » Mark » Megapixel » 555-325-6564 » 555-765-4353 » 2 Moon Court » Ban 4 Stoplight Parrotfish » Shaquille » Shutter » 555-324-6542 » 555-762-8763 » 3 Ladybug Lan 5 Golden Necklace Eel » Lenny » Lens » 555-264-2372 » 555-876-5463 » 4 Bow Street » Provi 6 Stingray » Ziggy » Zoom » 555-765-7632 » 555-765-3655 » 5 Main Street » Middletown » C 1:1
Structure Component Information	Set Selected Text 🔐 Parse for Fields 🖷 Execute Transform To XML 🗌 Apply Converters
Structure Type: Field Name: Node quantity: Change delimiter Prev New	 Base
	Tree XML

You will see that the file has been parsed into a set of logical records.

File Spec Editor : New spec	– 🗆 X
<u>Eile S</u> tructure ⊻iew <u>H</u> elp	
Record Structure Module Configuration Edit Spec XML	
Base Record Photographer-First Photographer-Last Photographer-Last Work-Phone Work-Phone Otty State File-Name Dive-Country Dive-Site Dive-Depth	File Type: RecDelimited / Field:Delimited Change Preview record structure 0 : 0 Parse String Results preview To XML From XML From XML From XML For Comparison Photo Name > Photographer First > Photographer Last > Home Phone > Work Phone > Address Red Frog Fish > Amy > Aperature > 555-765-63764 > 555-654 - 7652 > 1 Angel Drive > Los Ang Sea Turtle Fly-By > Mark > Megapixel > 555-765-4634 > 555-765-4633 > 2 Moon Court > Ban Golden Necklace Eel > Lenny > Lens > 555-264-2372 > 555-876-5463 > 4 Bow Street > Provi Stingray > Ziggy > Zoom > 555-765-7632 > 555-765-3655 > 5 Main Street > Middletown > C Int Find Find Phone > C
Structure Component Information	Set Selected Text 🔐 Parse for Fields 🖷 Execute Transform To XML . Apply Converters
Structure Type: Field Field Name: Dive-Depth Node quantity: 1 - Unbound Change delimiter Prev New	<pre></pre>

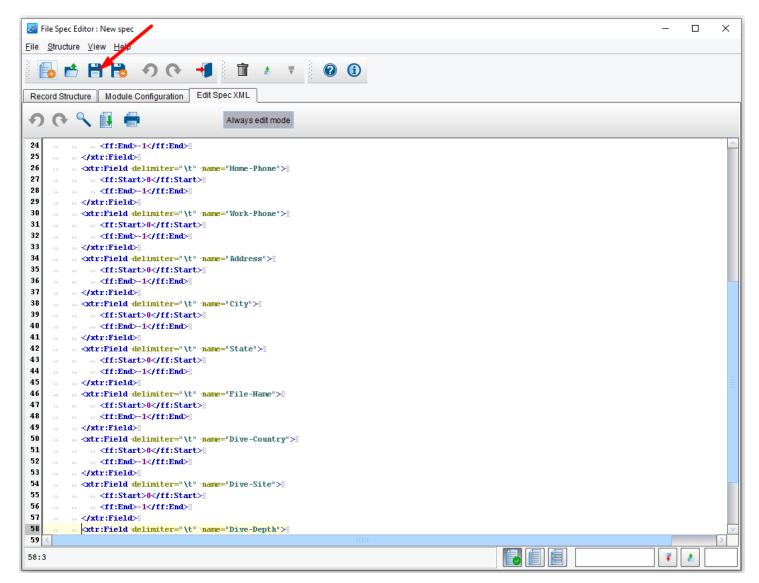
Double-click the nodes to expand the record. Scrolling and expanding each record, you can see the information it pulled from each field. You can see that the tool has recognized the first line in the file, which in fact, contains headers as data.

Zile Spec Editor : New spec	- 🗆 X
<u>File</u> Structure <u>View</u> <u>H</u> elp	
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Record Structure Module Configuration Edit Spec XML Base Photoorante Photoorante Photographer-First Photographer-Last Photographer-Last Home-Phone Address Otiv State File-Name Dive-Country Dive-Site Dive-Depth	File Type: Rec:Delimited / Field Delimited Change First row is headers Preview record structure
	Set Selected Text of Parse for Fields Execute Transform To XML Apply Converters
Structure Component Information	● Base • ● Record: Record
Structure Type: Field	↓ ↓ Record ↓ ↓ Here ↓ ↓ ↓ ↓ Here ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
Field Name: Dive-Depth Node quantity: 1 - Unbound	- • Field: Photographer-First = Amy
Node quantity: 1 Unbound Change delimiter	- • Field: Photographer-Last = Aperature - • Field: Home-Phone = 555-765-8764
	- • Field: Work-Phone = 555-654-7652
Prev New	- Image: State of the stat
	- 👽 Field: State = CA
	- • Field: File-Name = FrogFish.jpg - • Field: Dive-Country = Bonaire
	- Field: Dive-Site = Oil Slick Leap
	Tree XML

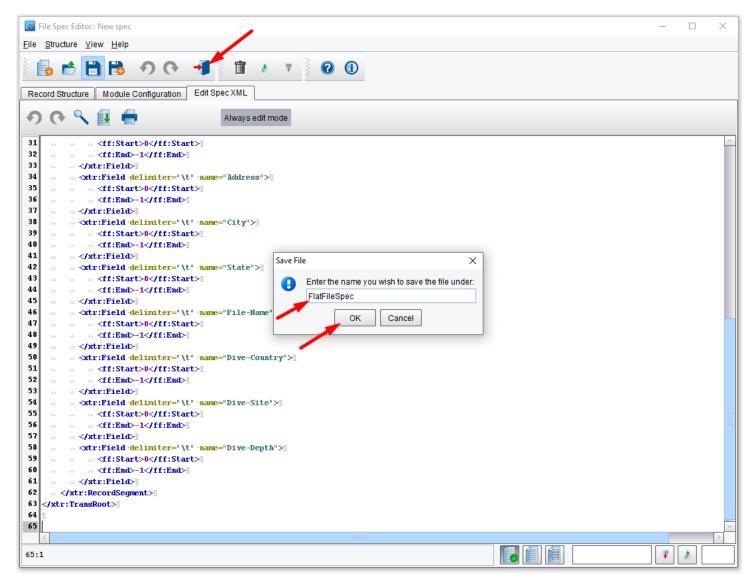
To change this, select the **First Row is Headers** checkbox at the top of the panel and then click **Execute Transform to XML** again. Now you will see that the tool correctly recognizes the records within the file.

Z File Spec Editor : New spec	– 🗆 X
<u>File</u> <u>S</u> tructure <u>V</u> iew <u>H</u> elp	
Record Structure Module Configuration Edit Spec XML	
Base Record Photo-Name Photographer-First Photographer-Last Home-Phone Work-Phone Address City State File-Name Dive-Country Dive-Site Dive-Depth	File Type: RecDelimited / Field Delimited Change First row is headers Preview record structure 0 0 : 0 Parse String Results preview Parse String To XML From XML Image: Photo grapher First > Photographer Last > Home Phone > Work Phone > Address 2 Red Frog Fish > Amy > Aperature > 555-765-8764 > 555-654-7652 > 1 Angel Drive > Los Ang 3 Sea Turtle Fly-By > Mark > Megapixel > S55-324-654 > 555-765-4353 > 2 Mon Court > Ban 4 Stoplight Parrotfish > Shaquille > Shutter > 555-326-654 > 555-762-8763 > 3 Ladybug Lan 5 Golden Necklace Eel > Lenny > Lens > 555-765-7632 > 555-765-3655 > 5 Main Street > Provi I 1:1 Image:
Structure Component Information	Set Selected Text Parse for Fields Execute Transform To XML Apply Converters
Structure Type: Field Field Name: Dive-Depth Node quantity: 1 Unbound Change delimiter Prev New	 Base

Under the covers, the File Specification Editor saves this information in an XML file. Click the Edit Spec XML tab.



After you have clicked the Edit Spec XML tab, you will be presented with this window. Since the tool correctly processes the file, no additional work is needed. Click the **Save** icon at the top.



Give the file specification a name: "FlatFileSpec", then click OK. Next, click the Return to Console icon at the top.

🚪 PilotFish eiConsole [Getting-St	tarted-Interface]					- 0	×
<u>File Edit Mode Find T</u> ools	<u>H</u> elp						
	🍻 Add Sourd	ce 😥 Delete Source	🐺 Move Down 🔥 Mov	ve Up 🛛 😽 Add Target 🚽	Delete Target		
Source System	Listener	Source Transform	Route	Target Transform	Transport	Target System	
*	>	XML	-XML	XML			~
Flat File Source	Getting-Started-Interface.Director / File Listener	FlatFileToXML	Getting-Started-Interface	Relay (System Format)	Not Defined	System Unnamed	
Format Profile: FlatFileToXML						×	
	nation Module Configuration		Advon	cod Compatibility	Conditional Exo	cution	
T D Bas	ransformation Module: Delimite Description: Perform and deli	d and Fixed-Width File tansformation between fixed-width files and XML Advanced Browse Edit	Cache XSLT	To XML Settings	Conditional Exe To XML (More)		

You will now see that the Delimited and Fixed-Width File Transformation Module is now configured to point at the **FlatFileSpec.xml**.

The next step is to develop the logical data transformation between the XML output of the File Specification Engine and your chosen XML schema. To do this, first, unselect the **Use Direct Relay** checkbox and then select **New** (in the <u>XSLT</u> Configuration right panel) to move on to the next step - Source Transformation - Data Mapping.