

## 6. Source Transformation / File Specification Editor (Tutorial)

<https://cms.pilotfishtechnology.com/5source-transformation/file-specification-editor-tutorial>

eiConsole v.20R1  
Tutorial 60 mins

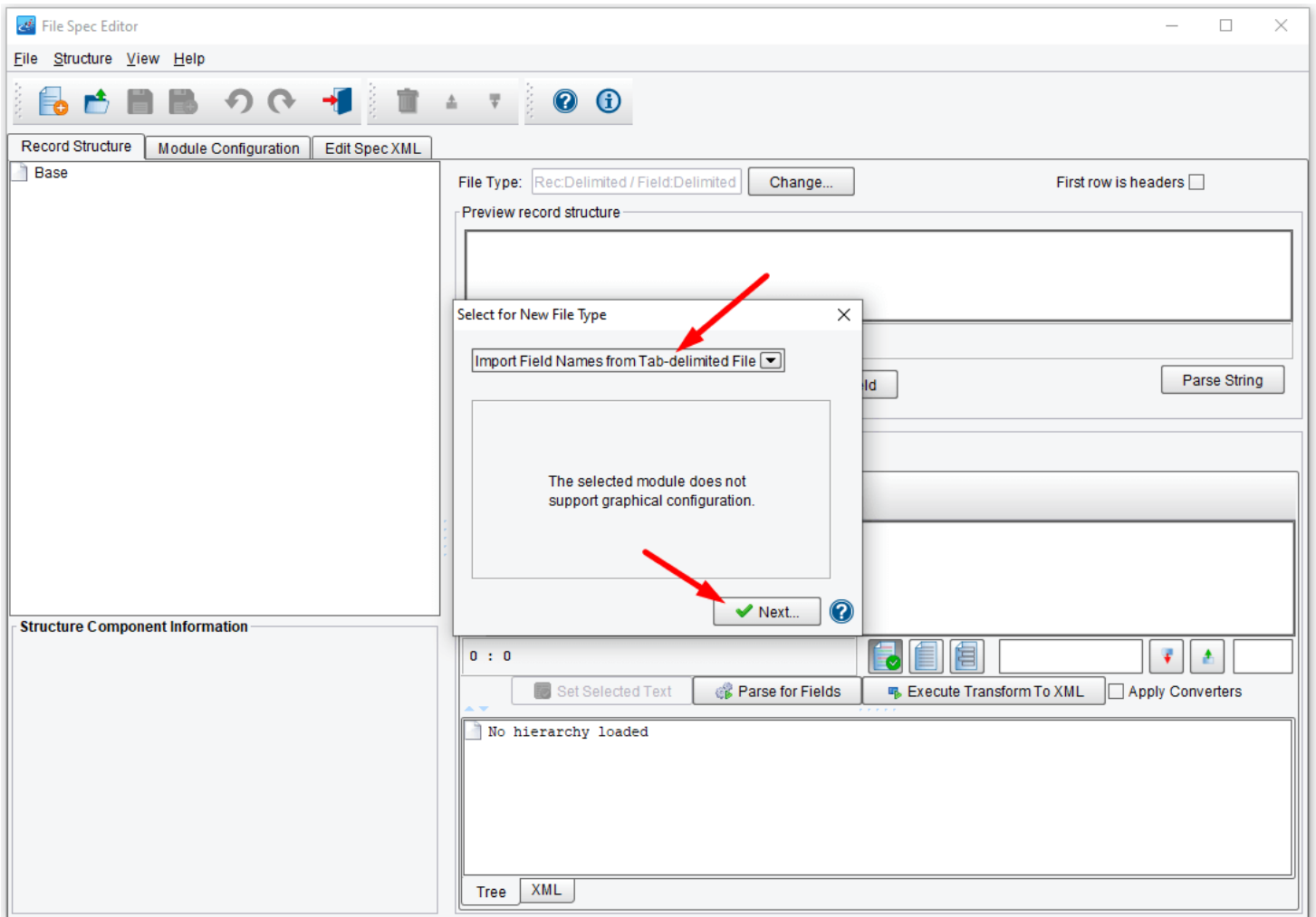
# eiConsole Foundation Source Transformation / File Specification Editor

You will need to download sample files to do this tutorial. If you have not done so yet, please click this [LINK](#). Unpack them to any folder on your disk. In our case is **c:\Program Files\PilotFish Technology\Samples\data\**

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

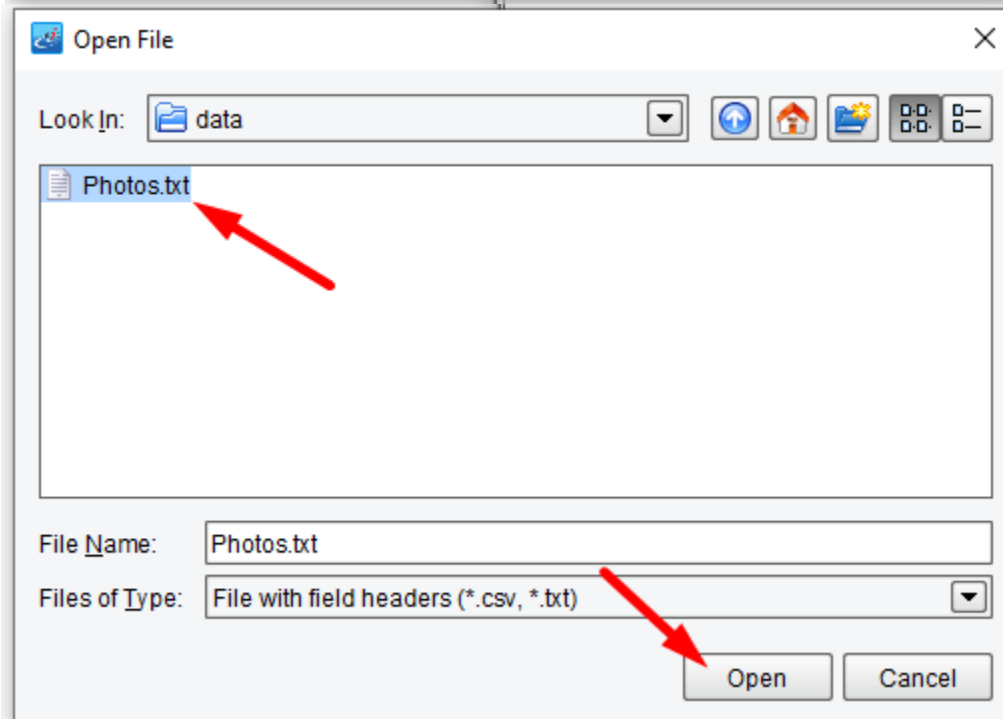
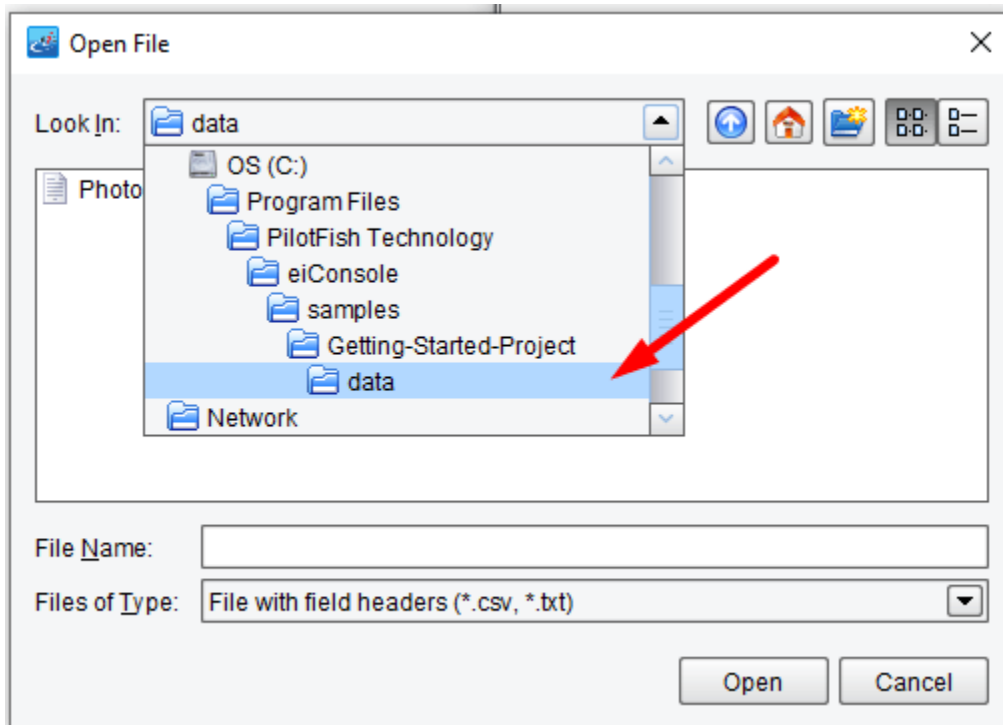
The screenshot displays the eiConsole interface. At the top, a menu bar includes File, Edit, Mode, Find, Tools, and Help. Below the menu is a toolbar with icons for Add Source, Delete Source, Move Down, Move Up, Add Target, and Delete Target. The main workspace is a grid of components: Source System (Flat File Source), Listener (Getting-Started-Interface Director / File Listener), Source Transform (FlatFileToXML), Route (Getting-Started-Interface), Target Transform (Relay (System Format)), Transport (Not Defined), and Target System (System Unnamed). A large watermark 'ei console' is overlaid on the workspace. Below the workspace, a configuration panel for the 'FlatFileToXML' format profile is visible. It includes tabs for Format Info, Transformation, and Forking. The Transformation tab is active, showing the 'Transformation Module Configuration' section with a dropdown for 'Delimited and Fixed-Width File' and a description: 'Performs transformation between fixed-width and delimited files and XML'. Below this are sub-tabs for Basic, Conditional Execution, and Advanced. The 'File Spec' field has 'Browse' and 'Edit' buttons, with a red arrow pointing to the 'Edit' button. To the right, the 'Advanced' sub-tab is active, showing 'XSL File' settings with a 'Use Direct Relay' checkbox, 'Cache XSLT' checkbox, and 'XSLT Engine' dropdown set to 'Saxon - XSLT 3.1'.

The Delimited and Fixed-Width File [Transformation Module](#) 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.

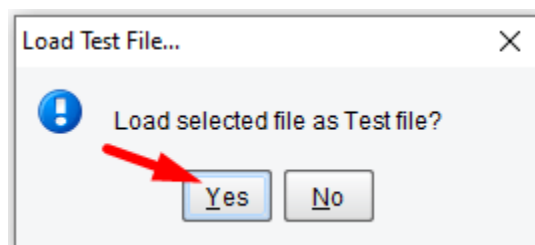


This will launch the File Spec Editor (File Specification Editor). Here the developer will describe the logical structure of the inbound file so that it can be parsed and translated into XML. When you create a new file specification you will have the ability to import the description of that file from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

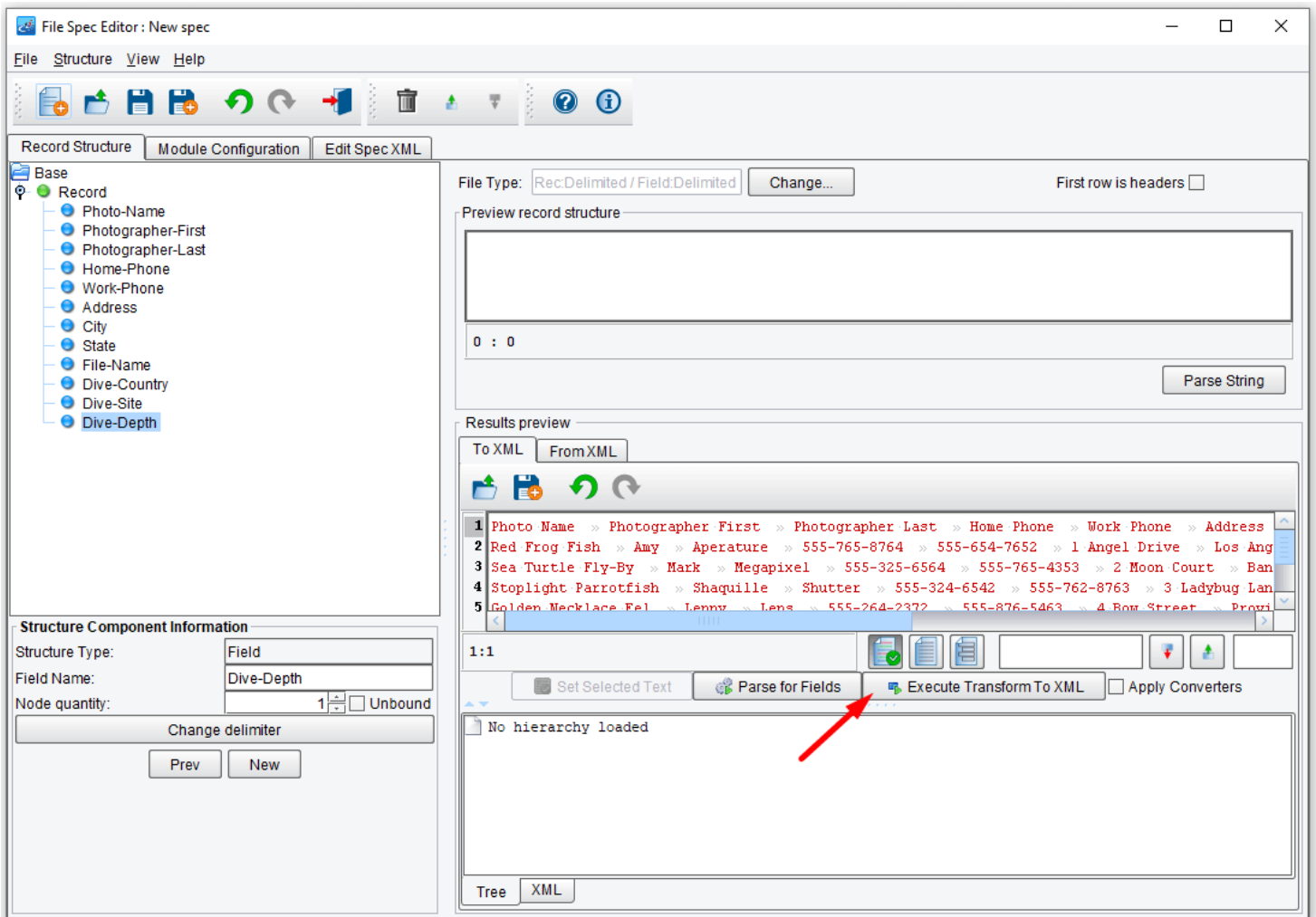
Take a moment to click the down arrow to see the other available options, for example, Import From Cobol Copybook Definitions. After you do this, set it back to **Import Field Names from Tab-delimited File** and click **Next**.



You will be presented with an Open File dialogue that allows you to point the File Spec Editor at a sample Tab-delimited file. In the **data** folder of the Sample [Interface](#), provided with your distribution. In this case is **C:\Program Files\PilotFish Technology\Samples\data**. You will see **Photos.txt** which is a sample input file. Select this and choose **Open**.

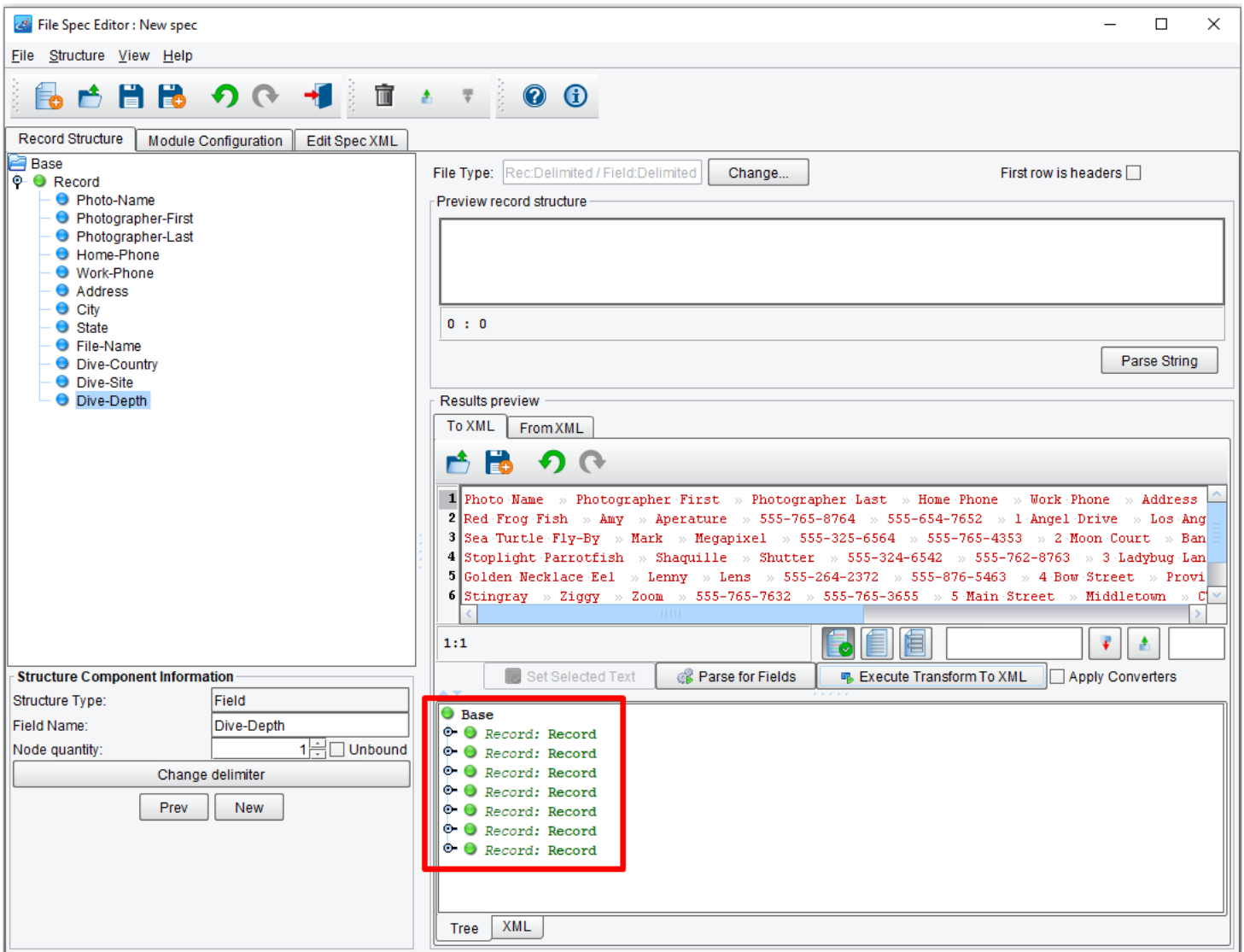


Select **Yes** to Load selected file as a Test file.

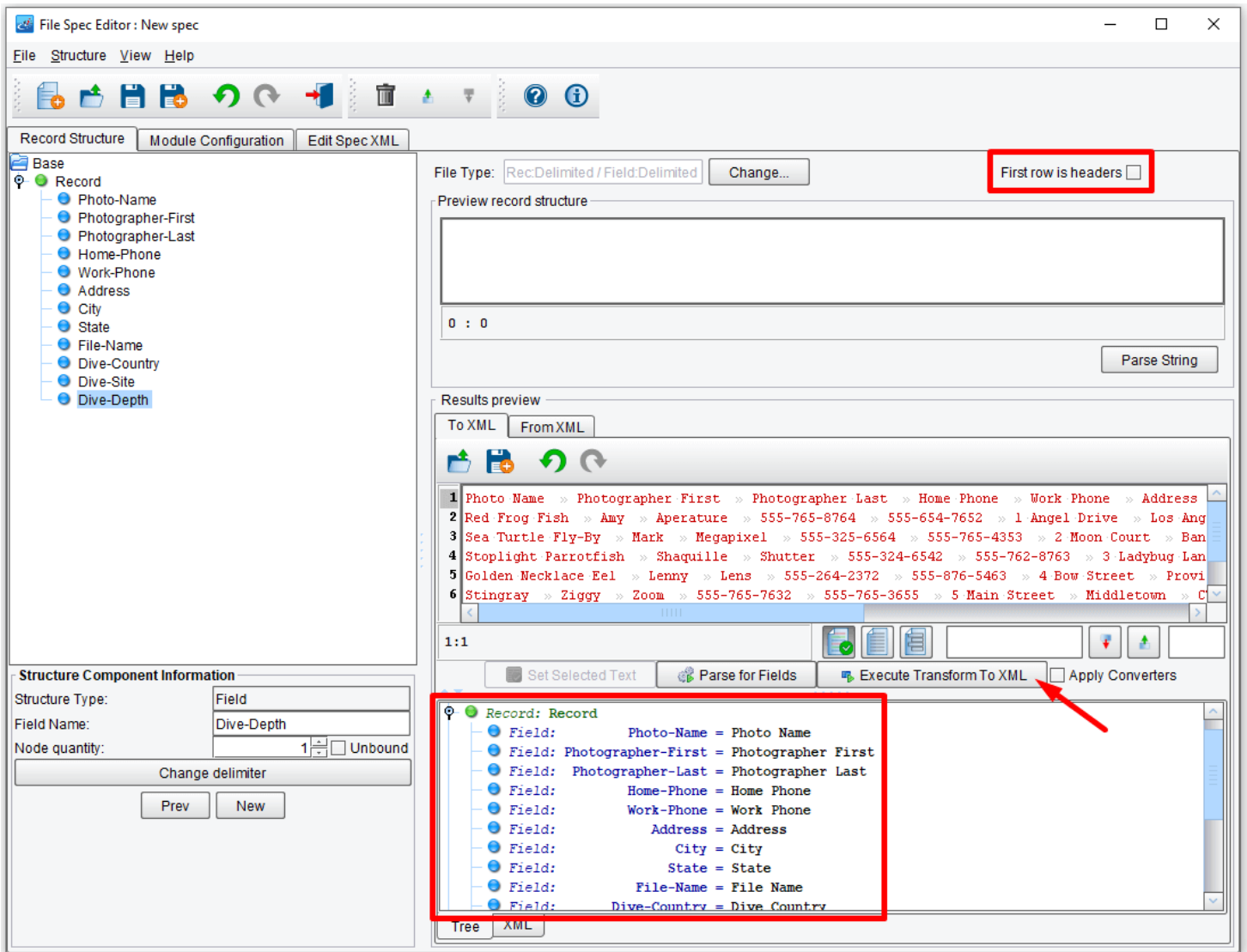


The record structure tree on the left is now populated with a green [node](#) and several blue [nodes](#). Green nodes represent logical records within the file. Blue nodes represent fields underneath that record. The File Specification Editor processed the inbound tab-delimited file. Notice that the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

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



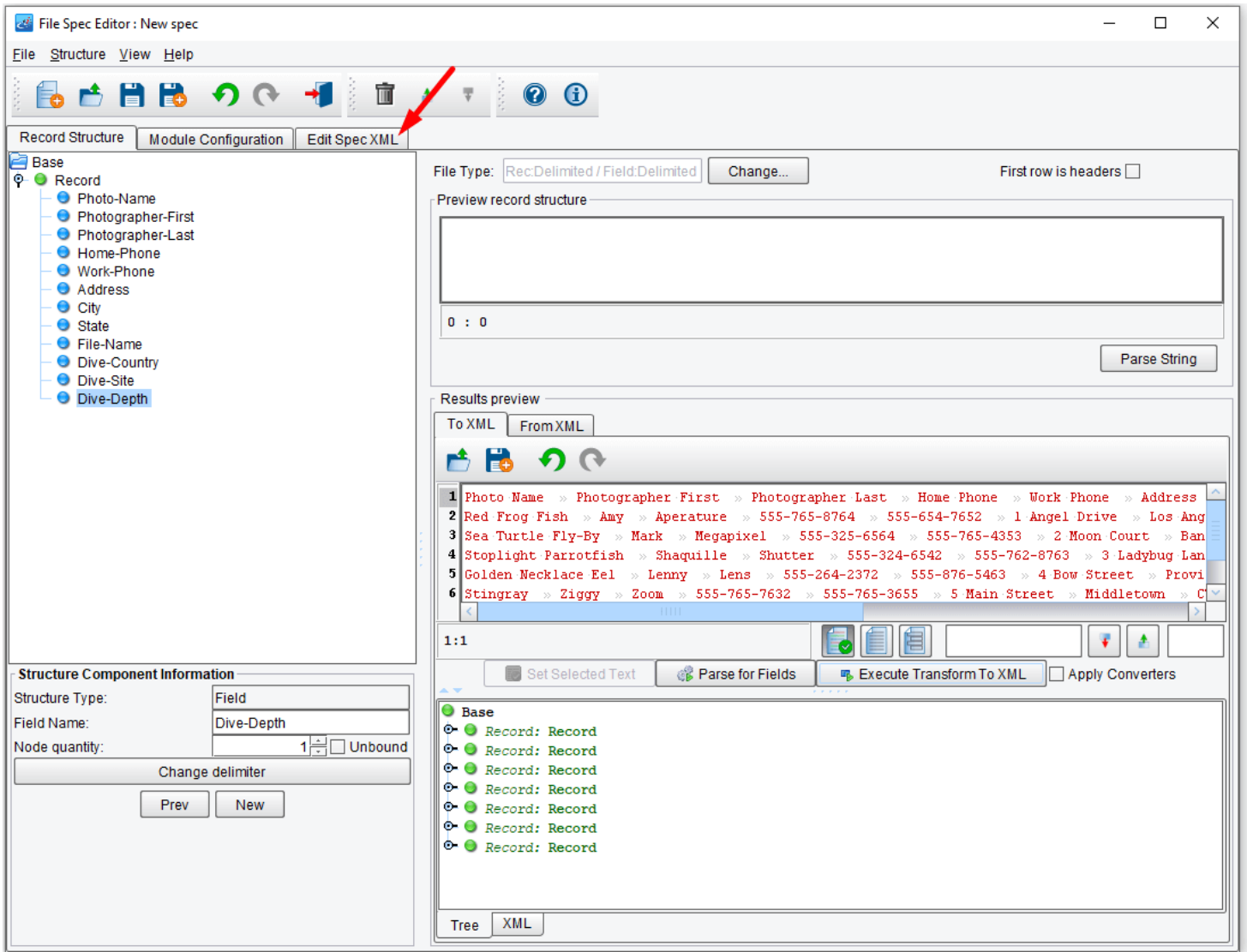
You will see that the file has been parsed into a set of logical records.



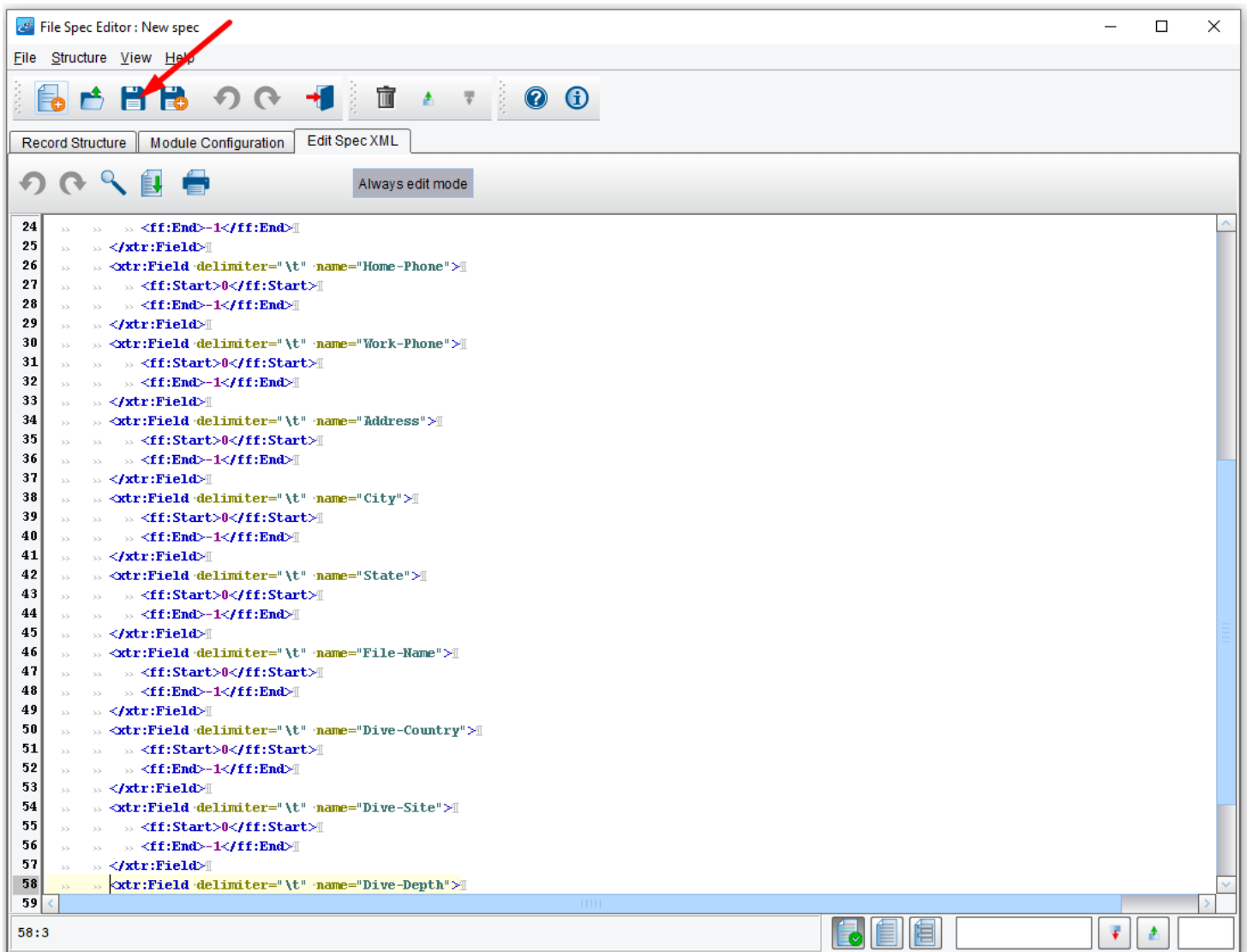
Double click the nodes to expand the record. As you scroll and expand each record, you can see the information that it pulled from each field.

You can see that the tool has recognized the first line in the file, which in fact contains headers as data. To change this, select the **First row is headers** checkbox at the top of the panel.

Then click **Execute Transform to XML** again.



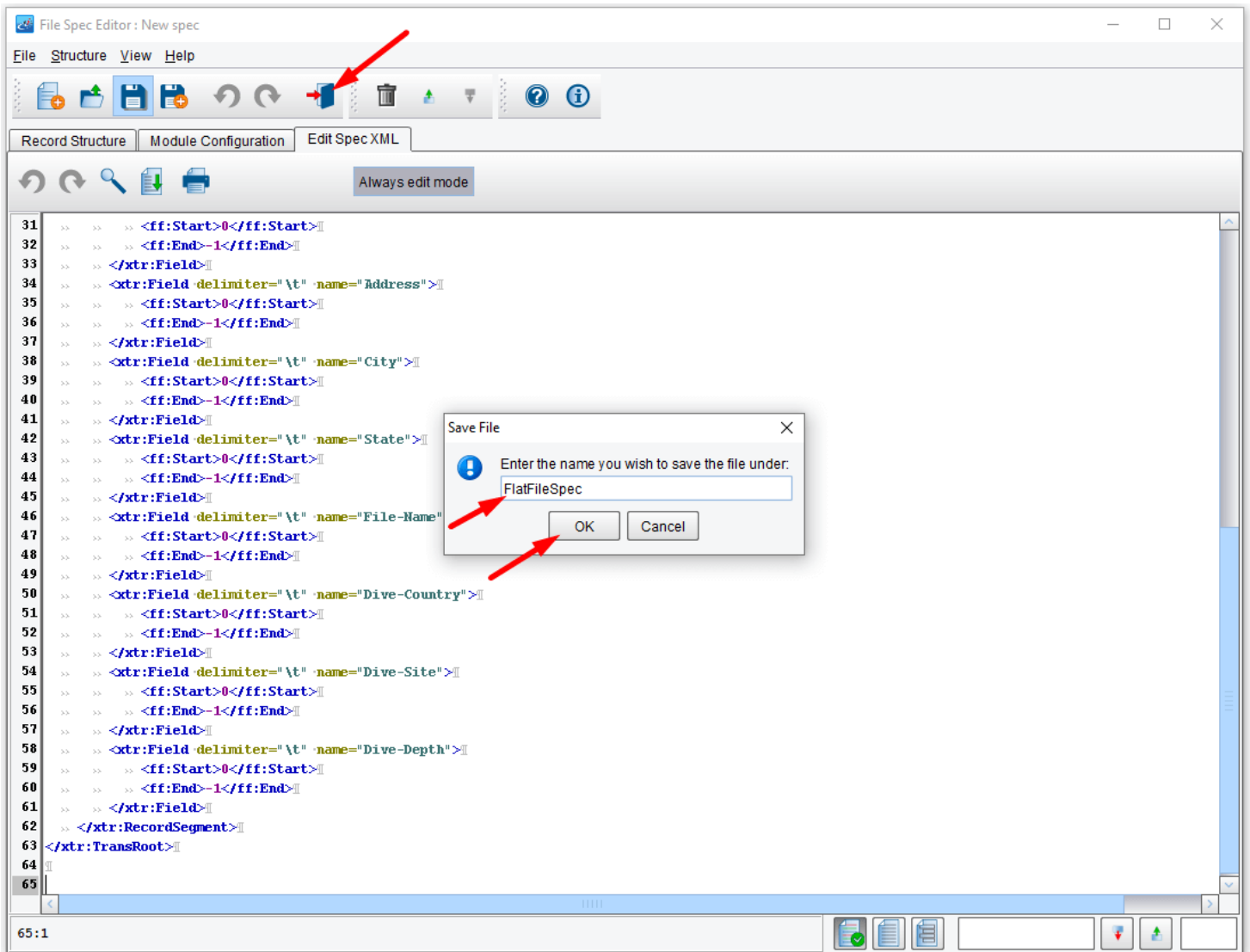
Now you will see that the tool correctly recognizes the records within the file. Under the covers, the File Specification Editor saves this information in an XML file. Click the **Edit Spec XML** tab.



After you have clicked the Edit Spec XML tab you will be presented with this window:

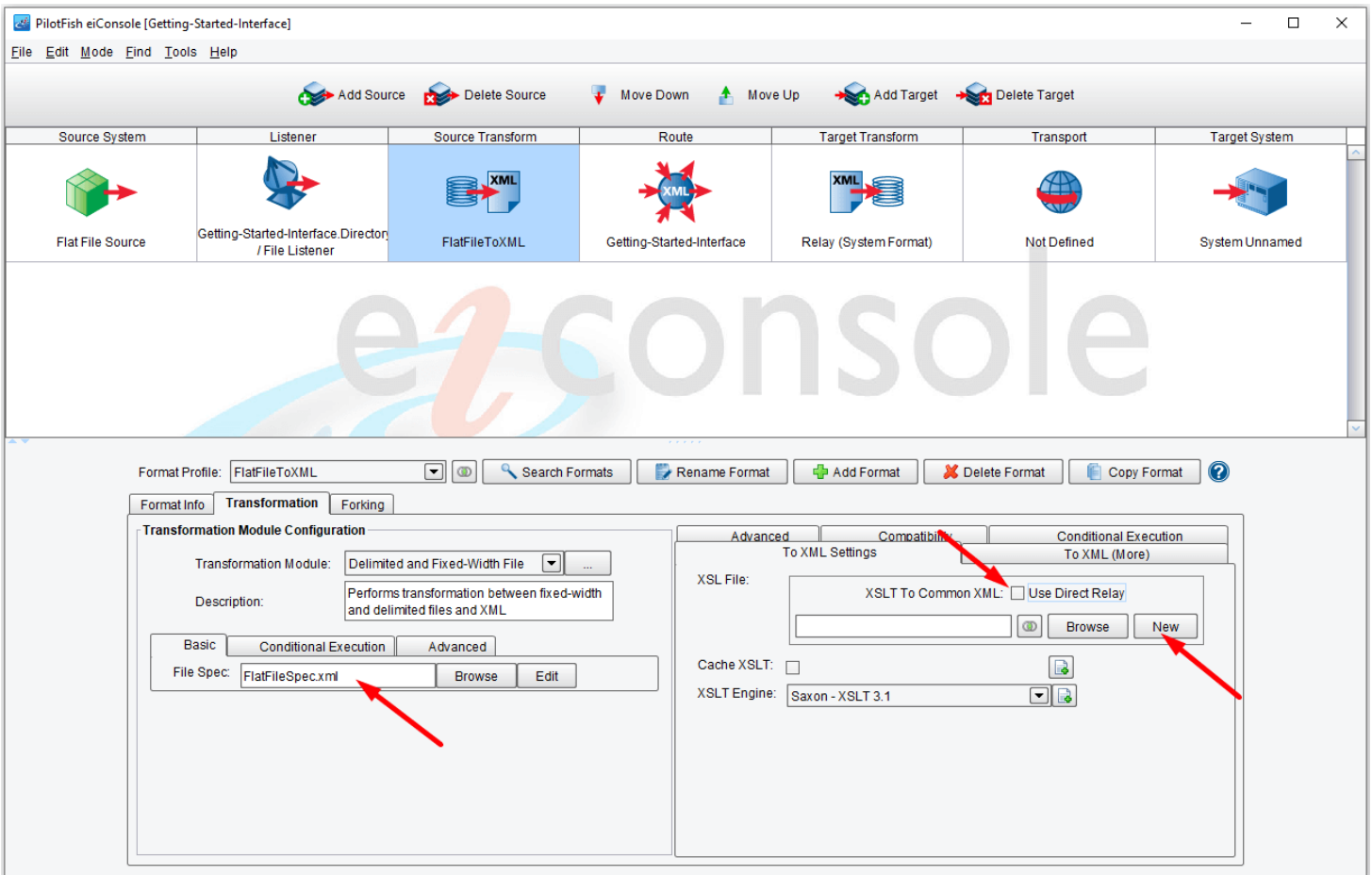
Since the tool is correctly processing the file, no additional work is needed. Click the **Save** icon at the top.





Give the file specification a name: **"FlatFileSpec"**, then click **OK**.

Next, click the **Return to Console** icon at the top.



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.

Lastly, select **New** (in the [XSLT](#) Configuration right panel) to move on to the next step.