PilotFish Automated Interface Assembly Line
The Key to Transformational Change in Your Integration Strategy

SOURCE · Listener · Transform · Router · Transform · Transport · TARGET

The assembly line has long been considered one of the greatest transformational innovations of the American economy. Now PilotFish's Automated Interface Assembly Line can transform how integration gets done in your organization. Interfaces are rapidly built, managed and maintained with automated functions at each of the Assembly Line's 7 stages. Implementation times are slashed with reuse made possible by component-driven architecture. Resource costs decrease significantly as non-developers and business analysts can do up to 80-90% of your interface work. Here's a look at how the Automated Interface Assembly Line creates interfaces at lightning speed:
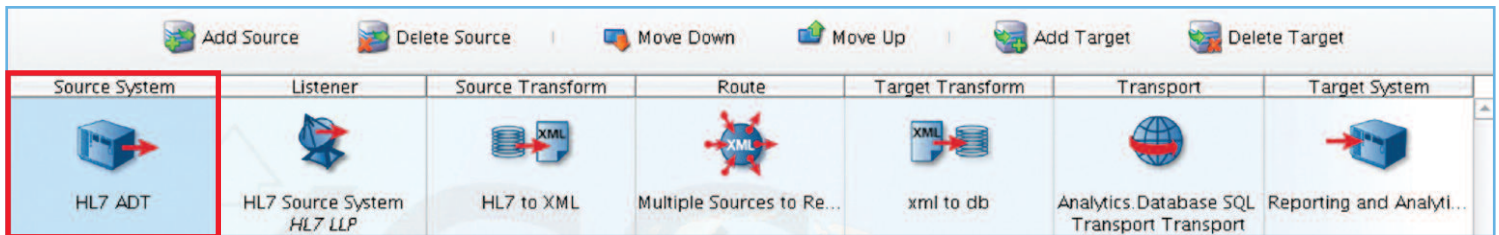
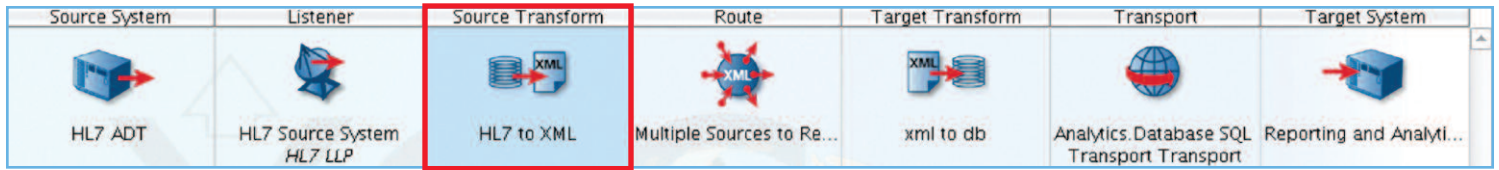### 1 Automation Begins at the Source System Stage

Start your interface by selecting the Source System icon. A panel opens that lets you name your Source and add descriptive information like the owner, format type, etc. Click the Add Source button to add as many sources as you like.

2 Automated Connectivity with Your Source System

Click the Listener stage for automated connectivity. The Listener Configuration panel lets you choose from a drop down with over 25 pre-built communications protocols, including every popular one you'll ever need. Each has its own custom panel with just a few fields to fill out.
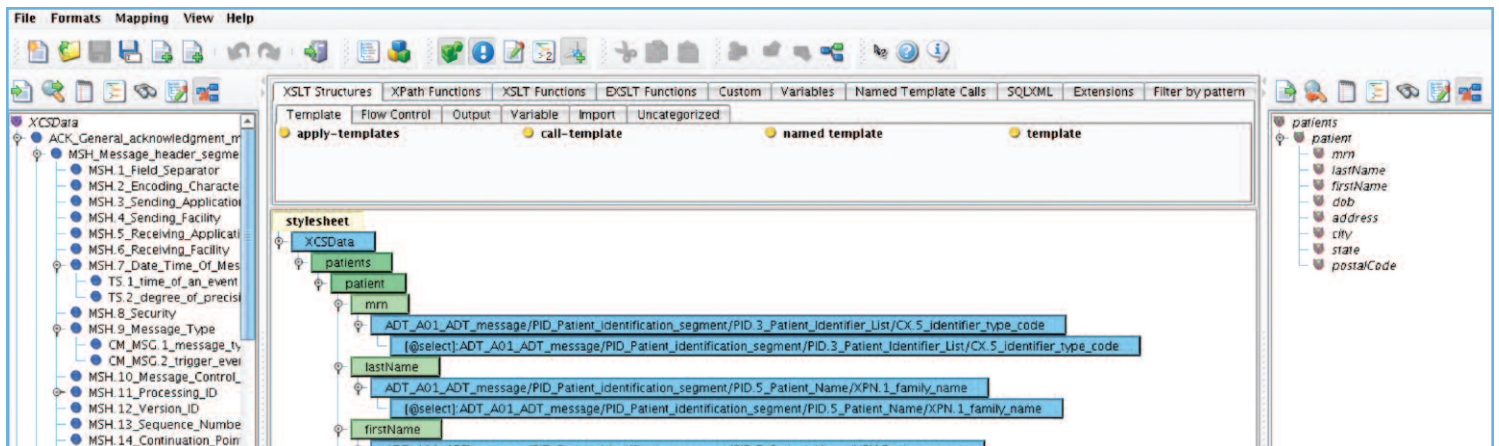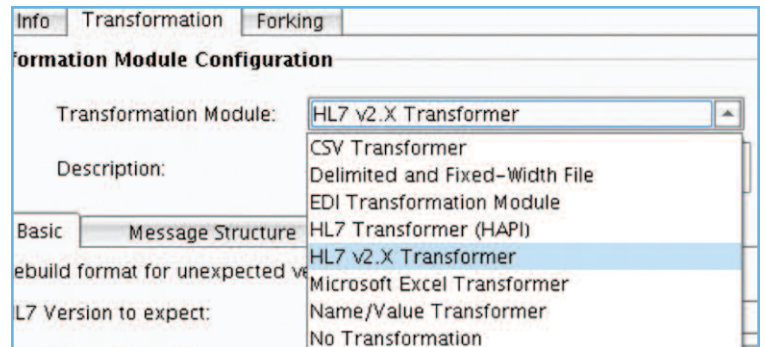
Click the Processor Configuration tab for access to over 75 processors in the drop down, including Compression, Encryption, Authentication and Audit. These perform operations that affect all of the incoming data. Processors may be layered in any order to meet virtually any data manipulation requirement. These Processors can be easily reordered to match the order of execution for your interface for maximum flexibility. You may also "roll your own" custom processor using a simple, well-documented API. Here too, each has its own custom panel that requires a minimal amount of effort to configure.

Source System	Listener	Source Transform	Route	Target Transform	Transport	Target System
HL7 ADT	HL7 Source System *HL7 LLP*	HL7 to XML	Multiple Sources to Re...	xml to db	Analytics.Database SQL Transport Transport	Reporting and Analyti...

❸ Automated Transformation from Your Source System

Reading in data from a proprietary format or a format exported by a Source system is quickly accomplished with built-in transformation modules and format builders available via a drop down. Configuration is an easy process. A partial list includes:

- Delimited & Fixed-Width Field
- EDI Transformation Module
- HL7 2.X Transformer
- XLS/XLSX
- XSD Format Builder

- Database Format Builder
- EDI Format Builder
- HL7 2.X Format Builder
- HL7 3.X Format Builder
- HL7 FHIR Format Builder

Info | Transformation | Forking
...formation Module Configuration
Transformation Module: HL7 v2.X Transformer
Description:
Basic | Message Structure
...ebuild format for unexpected ve...
...L7 Version to expect:

- CSV Transformer
- Delimited and Fixed–Width File
- EDI Transformation Module
- HL7 Transformer (HAPI)
- HL7 v2.X Transformer
- Microsoft Excel Transformer
- Name/Value Transformer
- No Transformation

Automated Graphical Data Mapping

Achieve even the most complex data mapping with an automated, graphical, 3 pane, drag & drop data mapper. No coding or scripting is required. Macros make it easy to do common mapping tasks. The built-in palette of XSLT structures and functions allows you to accomplish anything you can do programmatically via drag & drop, including XPath and XSLT Functions, Iteration, Conditional Logic, String Manipulation, etc.

Users also have the option of working in the Data Mapper both in the XSLT and graphical view, in real-time. The XSLT Transformations created using the Data Mapper are W3C-compliant. They can be deployed to an existing Enterprise Service Bus (ESB), an "XSLT crunching" appliance, or by an automated means, with one mouse-click, to the eiPlatform Java framework to support run-time transformations.
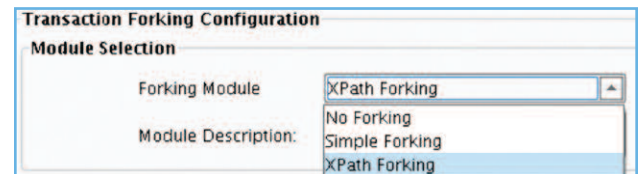
Automated HL7 Data Mapping Features

- Transform cryptic HL7 field names to "friendly names" by checking off a box.
- Automate mapping between slightly incompatible HL7 messages and matching fields so the user only needs to work with the remaining deltas.
- Automatically read in non-standards compliant HL7 with a click of a button and parse unknown segments, capturing the data for subsequent transformation and manipulation.

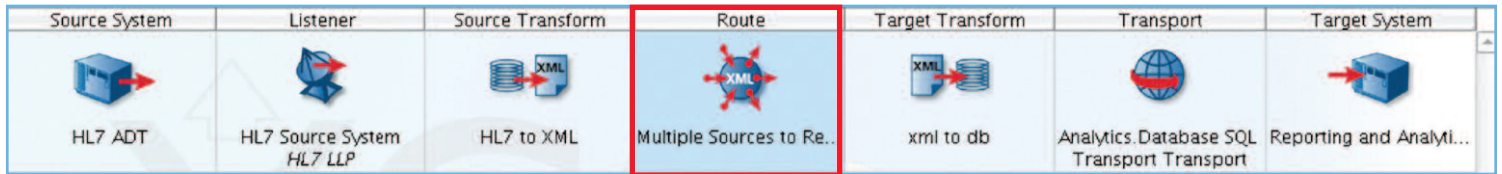## Automated Implementation of a Wide Variety of Workflow Patterns

Oftentimes, automation of a business process requires more than simple point-to-point integration of Source and Target Systems. To accomplish this PilotFish supports the implementation of a wide variety of the workflow patterns common to more complex business process modeling (BPM) scenarios. The supported patterns include (but are not limited to):

- Sequencing
- Splitting
- Merging

- Branching
- Conditional Logic
- Iteration

Transaction Forking Configuration
Module Selection
Forking Module: XPath Forking
Module Description:
- No Forking
- Simple Forking
- XPath Forking

PilotFish automates Workflow Patterns with a number of pre-built Modules, each with simple configuration panels including:

- XPath and Attribute based Module
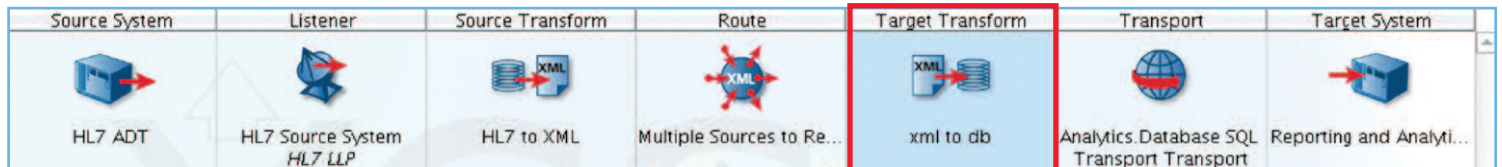- Parallel Split or Forking Operation
- Process Orchestration Module

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④ Automated Routing & Error Handling

In the Route stage you can maintain general metadata describing the Route, specify routing rules and configure Transaction Monitoring. You can also turn on and off transaction logging and debug tracing. A number of different mechanisms for Transaction Monitoring are included and are automated with pre-built configuration panels. These include:

- Email Alert Monitor
- Error Route Trigger
- SNMP Trap
- Batch Failure Monitor
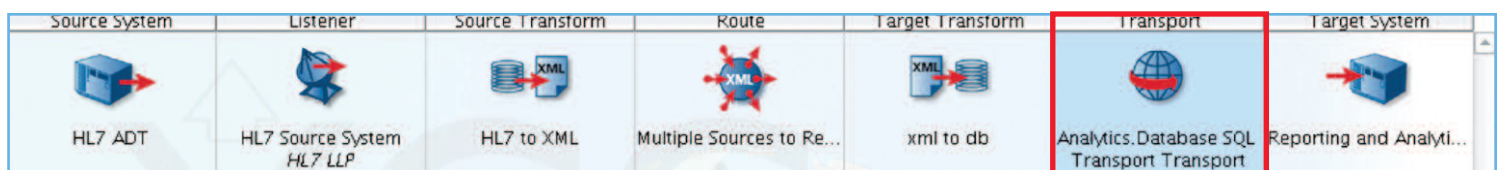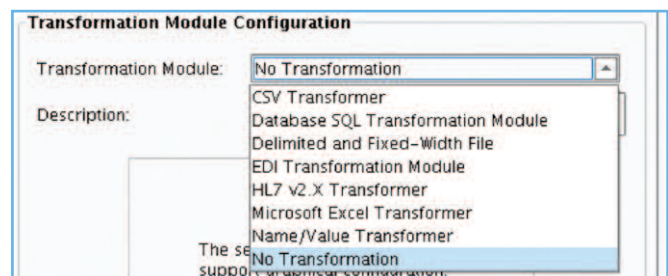- Transaction Processing Monitor
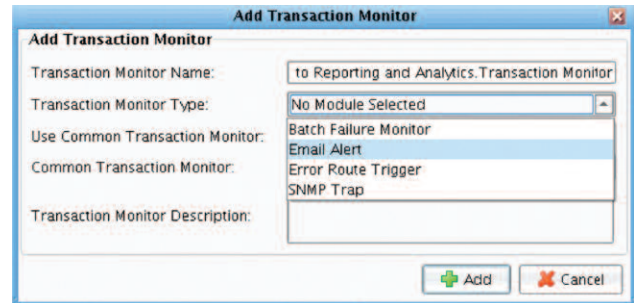
NOTE: Anywhere you see a drop down you have the ability to extend the options using a simple, well-documented API.

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⑤ Automated Transformation to Your Target System

As in the Source stage, the Target Transform stage offers automated data transformation. Transforming data from the canonical format to a proprietary format or a format accepted by a Target system is easily accomplished with built-in transformation modules and format builders. These also have pre-built, easy-to-fill out configuration panels. A partial list includes:

- Database SQL Transformation Module
- Delimited and Fixed-Width File
- EDI Transformation Module
- HL7 v2.X Transformer
- Microsoft Excel Transformer

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⑥ Automated Connectivity with Your Target System

PilotFish automates connectivity to your Target system with 18 popular Transport Adapters (or add your own with our Open API). Each has a pre-built configuration panel making it easy to connect to any system. Some include:

- Database Table
- Directory
- Email (SMTP)
- FTP
- HTTP Post
- HL7 LLP
- Message Queues (JMS/MQ/Rabbit MQ/MSMQ)
- RESTful Web Service
- SOAP Web Service
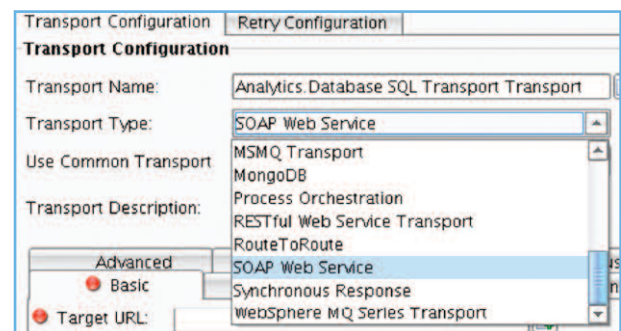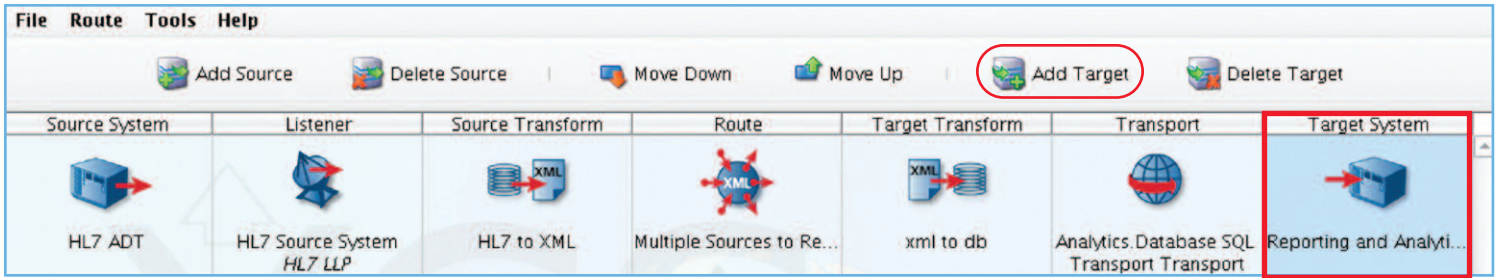
7 **Add Additional Targets with a Click of a Button**

Select the Target System for a panel to fill in descriptive information about the system receiving the interface data. This information is user defined and can be used later to search for interfaces maintained in the eiConsole for Healthcare. Add additional Target Systems simply by clicking Add Target.
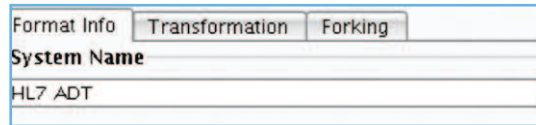
Graphical Automated Inline Testing

Once you've configured your interface you can test it end-to-end in the eiConsole for Healthcare's auto-mated testing component. You have the option to start and stop testing at any stage. Testing automatically generates detailed error messages of any failed stages for easy analysis. You many also View the data output at each stage as the data un-dergoes the transformation process.
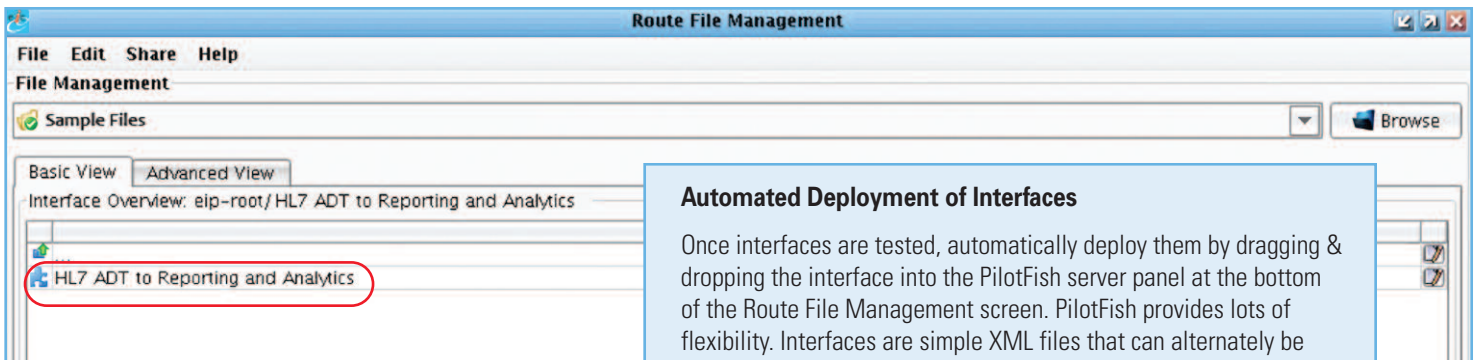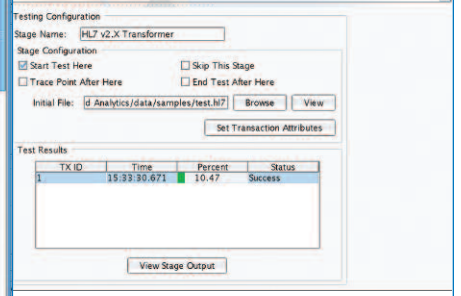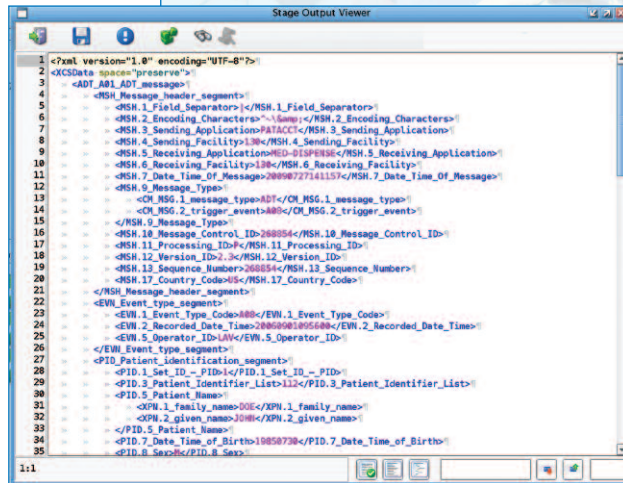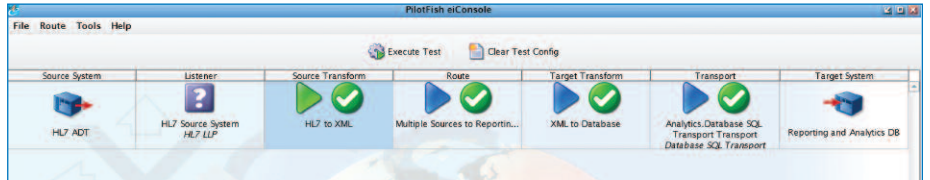
Automated Deployment of Interfaces

Once interfaces are tested, automatically deploy them by dragging & dropping the interface into the PilotFish server panel at the bottom of the Route File Management screen. PilotFish provides lots of flexibility. Interfaces are simple XML files that can alternately be managed and deployed through any major change control and/or build automation framework.

Speed up your integration process. Automate now! Call us for a free evaluation on what our Automated Interface Assembly Line can do for you.

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