The assembly line is one of the greatest transformational innovations of the American economy. Now PilotFish’s Automated Graphical Interface Assembly Line can transform how integration gets done in your organization. Within the eiConsole, 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 and automated features and functions. 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 Graphical Interface Assembly Line can help you create interfaces at lightning speed:

1. **Automation Begins at the Source System Stage**
   
   Start your interface by selecting the Source System stage. The System Info panel opens where you can name your Source System. Here, you can also click on the Choose Source Icon to select a representative icon from a library of hundreds of icons.

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 several dozen 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 nearly 100 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.
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

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. 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. Macros make it easy to do common mapping tasks, too.

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 to capture 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

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
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

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/RabbitMQ/MSMQ)
- RESTful Web Service
- SOAP Web Service

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

NOTE: Anywhere you see a drop down, you have the ability to extend the options using a simple, well-documented API.
Add Additional Targets with a Click of a Button

Select the Target System stage and the System Info panel opens where you can name your Target System. Here, as on the Source System stage, you can click the Choose Source Icon to select a representative icon from a library of hundreds of icons.

Graphical Automated Inline Testing

Once you've configured your interface, you can test it end-to-end in the eConsoIe for Healthcare's automated 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 may also view the data output at each stage as the data undergoes 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 Graphical Interface Assembly Line can do for you.