

# **Self-Service Onboarding**

The eiTestBed is a cloud-based app that provides all of the resources required to establish standardized initial and ongoing data exchange with an entity. That entity might be a Health Information Exchange, hospital, lab, insurance company, medical equipment manufacturer or application service provider. The eiTestBed provides a Web repository that contains your entity's implementation guides, sample data, interface templates and combines it with a fully automated testing facility. The testing facility enables message submission, validation and emulation of information exchanges between your entity and your information exchange partners, before going live. Help screens, illustrated tutorials and a video walk your exchange partners through how to use it.

## How Your Entity Can Use the eiTestBed

Your entity defines the data formats, communication methods and validation rules required for electronic data exchange with your information exchange partners. Using an eiTestBed wizard, your entity publishes your implementation guides, sample files, documents and contact info. Working with PilotFish, you will configure an eiTestBed specific to your entity where these definitions are then encoded in the eiTestBed's testing facility based on your sample requirements.

## How Information Exchange Partners Use the eiTestBed

Information exchange partners log into your eiTestBed. The Documentation tab links them to your resources. There they download your interface templates, implementation guides and sample files. Using your documentation, the partner configures their interface with their existing integration tools. (You can also offer them an eiConsole preconfigured with interface templates that they can easily modify for testing and validation.)

After configuring their interface, the partner returns to the eiTestBed and submits transactions to test and validate for compliance. A report is returned in real-time identifying what passed and what failed. If something in the transaction failed, then specifics are provided detailing what went wrong and how to fix it. The partner continues to test iteratively until all validation rules are passed. The eiTestBed can also be configured to send asynchronous follow-up responses to the partner so that the partner can test their ability to consume the response.

When satisfied with their self-testing, the partner contacts your technical representative for final integration testing and production deployment. (If they are an eiConsole user, they can quickly deploy the interface into production on the eiPlatform using drag & drop or with just a few mouse clicks.)

# The eiTestBed for Rapid Customer Onboarding

Exclusive Cloud-Based App Automates the Process of Onboarding Information Exchange Partners

## Why should you implement an eiTestBed?

The eiTestBed automates the entire process of onboarding information exchange partners by providing an online self-service implementation, testing and validation facility. This frees up your staff from the time-consuming process of exchange partner onboarding. By implementing an eiTestBed, your staff:

- No longer needs to individually send each exchange partner your implementation specifications and files – an online repository provides everything required to configure interfaces to your entity. Implementation resources get published to the eiTestBed once where your exchange partners can access them and you're done.
- No longer needs to field exchange partner questions by email and phone – actionable error messages are provided that tell your exchange partner not just that a problem occurred, but also how to fix it.
- No longer needs to individually desk-check sample data payloads – automated validation replaces time intensive and tedious desk checking by your staff. Simulated responses (synchronous and asynchronous) are provided to inbound messages, without requiring human intervention or full test environments.
- No longer needs to spend hours tracking down why an exchange partner's message failed a test – the eiTestBed displays a self-service log of messages that replaces manual troubleshooting by your staff.
- No longer needs to work around scheduling conflicts or time zone differences when working with exchange partners the eiTestBed provides exchange partners with 24/7 access so they can work at their own pace and on their own schedule.

## Can the eiTestBed be customized?

Yes. The eiTestBed is built on a flexible, pluggable architecture that can be configured to meet the unique needs of your entity. Every eiTestBed is branded to your specifications and customized to include an implementation-specific tutorial, interface documentation and message validation rules. Further customization to support unique security and transmission protocols, reporting requirements and endpoint system simulations are also available.

### Who is the eiTestBed for?

Any entity that offers a standard set of interfaces, file formats, APIs or Web services for establishing digital information exchange that wants to dramatically reduce the time, effort, cost and quality of onboarding multiple information exchange partners.

- **HIEs** can onboard hundreds or even thousands of exchange members simultaneously while ensuring that exchange standards are met and messages have valid formats and content.
- **Labs** can publish their documentation and formats so that their customers can self-implement electronic orders for medical tests, statuses and results.
- Government Departments and Agencies can automate the certification process for conformance with national standards as well their own internal processing requirements.
- Medical Device and Equipment Manufacturers who want to provide documentation, interface templates and a test bed so their products can be quickly implemented and interfaced with hospital and laboratory systems.
- **Cloud-based Software Providers** can publish all of the standard APIs or interfaces to and from their cloud application and provide a test bed for third party integrators.
- **Payers** can enforce compliance with federally mandated standards for critical processes such as claims, billing and other financial transactions while making it simpler for their exchange partners to achieve compliance and conduct business.

# **Reap the Rewards of the eiTestBed**

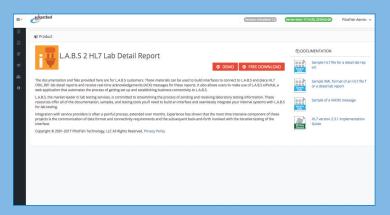
- Greatly reduce the number of IT resources required by your organization to onboard new customers.
- Provide one central source for everything a new information exchange partner needs to interface with your system.
- Offer 24/7 access to empower partners to self-implement at their own pace and on their own schedule.
- Limit highly coordinated work between your organization and partners to truly implementation-unique discussions, for the benefit of each.

# Partner Onboarding via the eiTestBed in 6 Easy Steps



Step 1. Partner Registers on Your Custom eiTestBed

Your exchange partner clicks a link to your eiTestBed. There they fill out a form, register and login. Help screens get them on their way fast and a video shows how to use the eiTestBed, step-by-step.



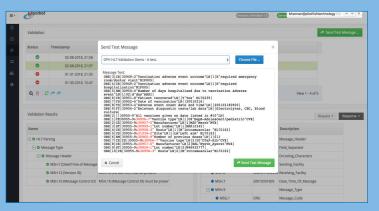
#### **Step 2. Partner Downloads Implementation Materials**

Your exchange partner clicks on the Documentation tab in the eiTestBed. This web repository includes everything you have published that they may need to interface with your system – sample files, implementation guides, interface templates etc., - all ready for download.



#### **Step 3. Partner Configures the Interface**

Using the downloaded materials, the exchange partner develops the interfaces to your system using their existing integration tools, or optionally, PilotFish's eiConsole for Healthcare. (*The eiConsole can be pre-bundled with your interface templates so exchange partners can rapidly configure and tweak interfaces from their system to yours.*)



**Step 4. Partner Tests Their Messages Automatically** 

Once your exchange partner has created their interface, they return to the eiTestBed. There they can choose from multiple transport options to test and validate their interface ranging from simple "cut and paste" to real time APIs.

Validation Results				
Name	Result			
- 🗢 HL7 Parsing	HL7 Parsing			
🖃 👁 Message Type	Message type must be ORU_R01			
🖃 오 Message Header	MSH Record Validity			
<ul> <li>MSH.7 (Date/Time of Message)</li> </ul>	MSH.7 (Date/Time of Message) must be present			
MSH.12 (Version ID)	MSH.12 (Version ID) must be present			
MSH.10 (Message Control ID)	MSH.10 (Message Control ID) must be present			

#### **Step 5. Partner Reviews Validation Results**

The eiTestBed provides a filterable/ sortable diagnostic report of every message sent. Messages with a green checkmark have passed validation rules and defined tests. Those with a red "X" have failed. Actionable error responses show exactly where to fix a problem. The exchange partner continues tweaking and testing until all validation rules are passed.

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۲	02-08-2018, 21:57	DPH HL7 Validation Demo	Synchr	Synchronous		
•	01-31-2018, 21:35	DPH HL7 Validation Demo	Synchr	Synchronous		
•	01-30-2018, 15:47	DPH HL7 Validation Demo		ronous		
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Validati	ion Results		Message Content		Reques	t • Respons
Name		Result	Name	Value	Description	
- • H	L7 Parsing	HL7 Parsing	🖃 🗢 MSH		Message_Header	
-0	Message Type	Message type must be ORU_R01	MSH.1	E.	Field_Separator	
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#### **Step 6. Exchange Partner Deploys Their Interface**

When satisfied with their self-testing (all validation results show green check marks), your exchange partner contacts your technical representative for final integration testing and secure production deployment.

### PilotFish Middleware and Cloud Solutions for Achieving Healthcare Interoperability

#### eiConsole for Healthcare – Interface Engine IDE

An interface engine IDE for the creation, deployment and management of interfaces. Configure interfaces end-to-end using a graphical "Assembly Line". Perform codeless, drag & drop data mapping. Debug and test at any stage in a graphical test mode and promote interfaces to production on the eiPlatform runtime.

#### eiPlatform – Interface Engine

A high performance, secure, runtime complement to the eiConsole for Healthcare. Interfaces developed in the eiConsole can be deployed to production on the eiPlatform with a few mouse-clicks where they will run in unattended mode.

#### eiDashboard - Interface Monitoring & Management

An optional Web application component that offers a RESTful-based, real time operational reporting and management dashboard for your interfaces.

#### eiTestBed - Self-Service Onboarding Solution

A cloud-based application for your information exchange partners that provides all of the resources required to establish standardized initial and ongoing healthcare information exchange. The eiTestBed contains a web repository with everything required to configure an interface to an entity's system, service or exchange and a fully automated testing facility that allows validation of information exchanges, before going live.

#### PilotFish Interface Exchange ("PIE") – Interface Repository

A cloud-based repository for eiConsole interface templates and components to facilitate rapid integration.

#### About Applied PilotFish Healthcare Integration (APHI)

APHII, a subsidiary of PilotFish Technology, LLC, develops, distributes and supports comprehensive middleware solutions that enable interoperability throughout the healthcare industry. PilotFish products are distributed directly to end-users, through select channel partners and value added resellers.

