



A E G I S



Developers Integration Lab (DIL)

DIL 3.0 Release Testing Guide

July 14, 2014

REVISION HISTORY

	Date	Description of Change
1.0	7/14/2014	Initial publication

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1.0 INTRODUCTION

Document Purpose

The purpose of this document is to provide information to participants who will be testing the Alpha and Beta releases of the new DIL 3.0 functionality. The document includes details on the following topics:

- Release milestones
- New features
- Accessing the testing environment
- Configuring a Test System
- Executing tests
- Providing feedback

This document should be used in conjunction with the updated DIL user guide, which can be found on the User Guide link in the DIL 3.0 Alpha environment.

System Requirements for DIL 3.0

- There are no new system requirements for DIL 3.0

User Requirements

- DIL users participating in Alpha and Beta testing should be familiar with the current DIL production application.

Background and Objectives

The purpose of the DIL 3.0 release is to support

- Corrected defects
- Increased reliability and clarity of test case results
 - In prior releases of the DIL, numerous scenarios resulted in a test case result not being associated with the test case itself and/or the participant. Changes in DIL 3.0, including identification of participants using the public certificate, allowing participants to register multiple machine names and assigning all messages a unique UUID, will result in a higher percentage of test results that can be attributed to a specific participant and therefore visible to the participant in the DIL.
 - In addition, participants will activate a specific Initiator test case in the DIL prior to test case execution. This function allows the DIL to more effectively associate the incoming test message with a specific test case for purposes of displaying test case results.
- Additional message types and specifications, like HL7 immunization messaging
- A participant who wishes to test multiple systems under a single DIL account
- Increased performance by more efficiently associating participants with test case results
- Improved Performance
 - By simplifying methods for mapping request and response messages to participants and test cases, test cases will execute more quickly in the DIL.
 - DIL 3.0 also includes backend changes to improve system performance
- Additional Administrative Functions to configure Test Systems
 - The new Test System configuration function allows participants to define additional specifications and profiles, link a Test System to a specification, configure multiple Test Systems under a single DIL account and identify all the servers and machines associated with a single Test System

Feedback on DIL 3.0

- Please submit any questions or suggestions to DIL_Support@aeGIS.net. Any feedback is appreciated.

2.0 Release Milestones

Release Phases and Dates

The DIL 3.0 release will be divided into three phases: Alpha, Beta and Production.

Phase	Target Release Date
Alpha	7/14/2014
Beta	8/11/2014
Production	8/25/2014

Alpha and Beta testing will take place in the following environment: <https://lab3.dil.aegis.net/LabGUI/>

Alpha Testing

The purpose of the Alpha testing phase is to give participants the opportunity to test the new features and provide feedback to AEGIS. During the Alpha phase, participants will be asked to register as a new participant in order to test the new registration and test system configuration functions.

Test Objectives for the Alpha phase:

- Validate Registration changes by using the modified Registration function
- Validate new Test System configuration function but adding, modifying and viewing Test Systems, Test System Profiles and Service References, as well as downloading certificates for one or more machines associated with the Test System
- Validate test case execution against configured Test Systems
- Validate submission of test case results to Healthway

Beta Testing

During the Beta phase, participants will be asked to verify the results of the data conversion.

Test Objectives for the Beta phase:

- Validate conversion of production account data: ensure that participant name, account contact information, user ID and password are accurate
- Validate conversion of production Test System data: ensure that the Test System record in DIL 3.0 was created correctly based on production data; ensure that Test System data can be modified without errors
- Validate conversion of production test case history: ensure that all test history from production is reflected accurately in DIL 3.0 including executed Service Sets, Gateway Messages and Service Sets that have been submitted to Healthway for validation

- Validate test case execution against converted data: ensure that test cases execute correctly against the Test System created from production data

3.0 Unchanged Features

The user interface for the following features has not been modified:

- Test Case Results
- Test Case Current Result Summary
- Test History
- Gateway Messages

4.0 Changes to Existing Features

Registration

The Registration function has been simplified to ask only for pertinent DIL user account information.

Participant Info

The Participant Info screen has been modified to reflect the Registration screen changes. The Document Metadata feature has been removed. The Patient ID Mapping feature has been moved to the new Test System(s) Configuration function.

Download and Install Certificates

The function to download certificates has been moved to the Test System Configuration feature. Additional details on accessing this function can be found in the next section of this document.

Gateway Profile

The data gathered on the Gateway Profile screen will now be entered during the Test Case Configuration step. Additional details on accessing this function can be found in the next section of this document.

FAQ

The FAQ section has been updated with new questions and answers.

Set Up Test

DIL 3.0 will allow a participant to configure multiple test systems under a single DIL account. When executing a test, the user must specify which Test System will be used for this specific test. The Set Up Test workflow has been modified so that if a Test System has not yet been activated, the user will be directed to activate a Test System prior to allowing the user to proceed to the Test Case Execution step.

Key steps for setting up a test are outlined below.

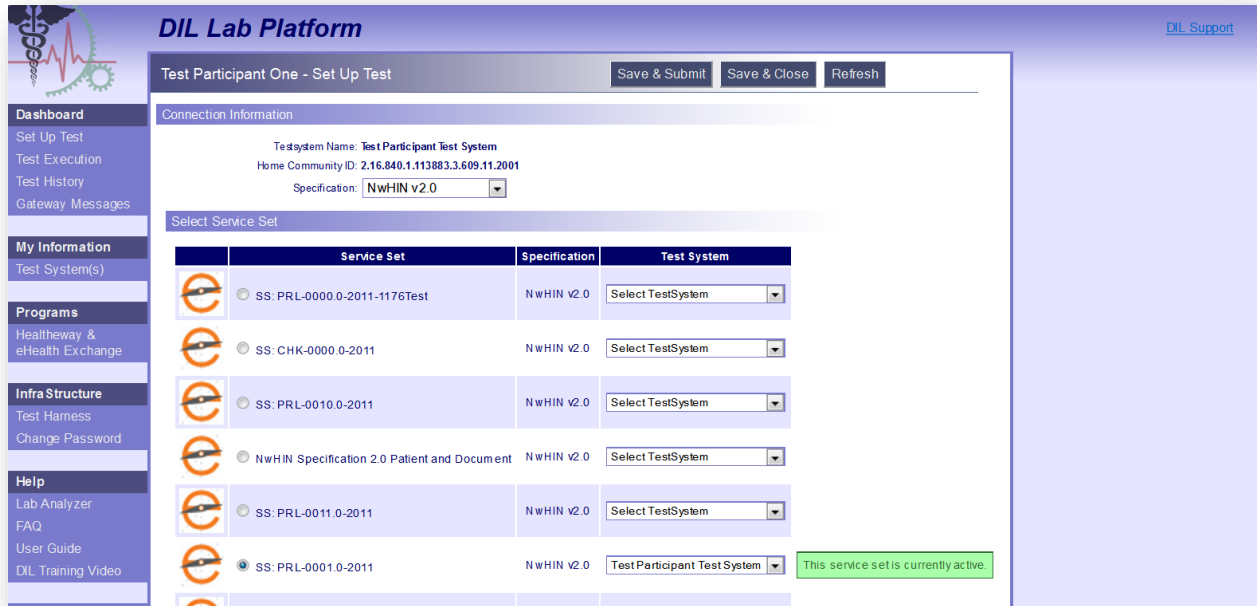
	Action	Details/Notes
1	Select a Service Set to execute	<ul style="list-style-type: none"> • Click "Set Up Test" from the left-hand side bar • Check the box next to the desired Service Set

	Action	Details/Notes
		<ul style="list-style-type: none">• Select a Test System from the Test System drop down. The Test System drop down is limited to the Test System(s) that support the specification associated with the Service Set. For example, if the Service Set is assigned the specification “NwHIN v1.0”, only Test Systems with Profile Actors specific to the NwHIN 1.0 specification will be available for selection.• Click “Save & Close” to activate this Service Set. This will be the Service Set available on the Test Execution screen.• When a tester is ready to submit the test results to a validating body (e.g., Healtheway), the tester should select the Service Set and click “Save & Submit”. This action allows a DIL Lab Representative user to see the results within the DIL.

Screenshots

Set Up Test

This screen allows the Participant to select a Service Set and a Test System.



Test Execution

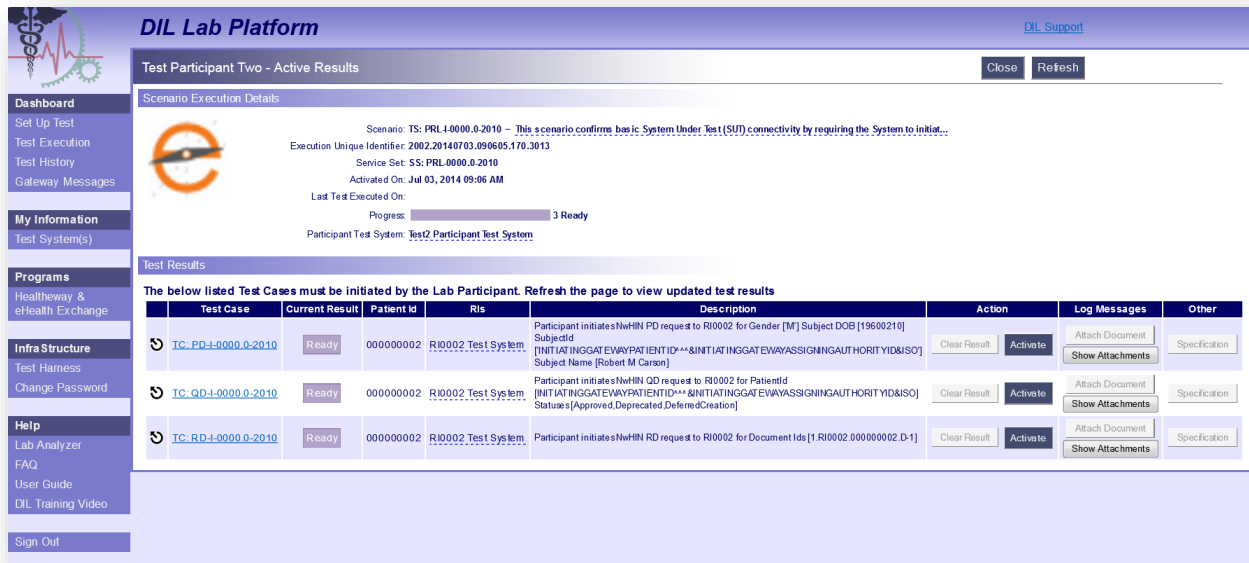
There are no changes for executing Responder test cases except that testers cannot initiate the execution of the entire scenario with one click; each test must be executed individually. Prior to executing Initiator test cases, users will Activate a specific test on the Active Results screen.

Key steps for setting up and executing an **Initiator** test are outlined below.

	Action	Details/Notes
1	Activate Test	<p>Prior to executing a test from the Test System to the DIL, the participant must Activate the test in order for the DIL to associate the incoming request to this test case. If the test case is not activated, when the request is received from the participant’s Test System, the results will not be available for display in the DIL.</p> <ul style="list-style-type: none"> • Click the Activate button next to the desired test case. Please note that only one test case may be active at a time. To execute another test case within this scenario, click the Deactivate button next to the active test case. Deactivating the active test case will enable the Activate button on all test cases so that another selection may be made.
2	Initiate test	<i>This step occurs outside the DIL in the Participant’s system</i>
3	View Initiator Test Scenario results	<ul style="list-style-type: none"> • Click “Test Execution” from the left-hand side bar within the DIL to view the Active Test Results screen • Click “Refresh” to see the most recent test results
4	View Initiator Test Case results	<ul style="list-style-type: none"> • Select a Scenario by clicking the hyperlink name from the Active Test Results screen • Click “Refresh” on the Active Results screen to see the most recent test results • Select a Test Case by clicking the hyperlink name from the Active Results screen • Click “Refresh” on the Test Case Current Summary Result screen to see the most recent test results

Screenshots

Activate Test



5.0 New Features

Test System Configuration

The most significant change implemented in DIL 3.0 is the ability to configure multiple test systems under a single user account. A participant may want to create multiple Test Systems in the DIL under the following circumstances:

- The participant has an NWHIN testing environment and an NWHIN staging environment, each with its own unique home community ID
- The participant has an NWHIN test system and an HL7 test system
- A product vendor has multiple test systems, each specific to a client

Configuring a Test System

Before executing any test cases within the DIL, each participant must configure one or more Test Systems.

Key functions for configuring a Test System are as follows. Each step is outlined in more detail.

	Action	Details/Notes
1	Create a Test System	Click “Test System(s)” from the left-hand navigation menu. This step allows the participant to

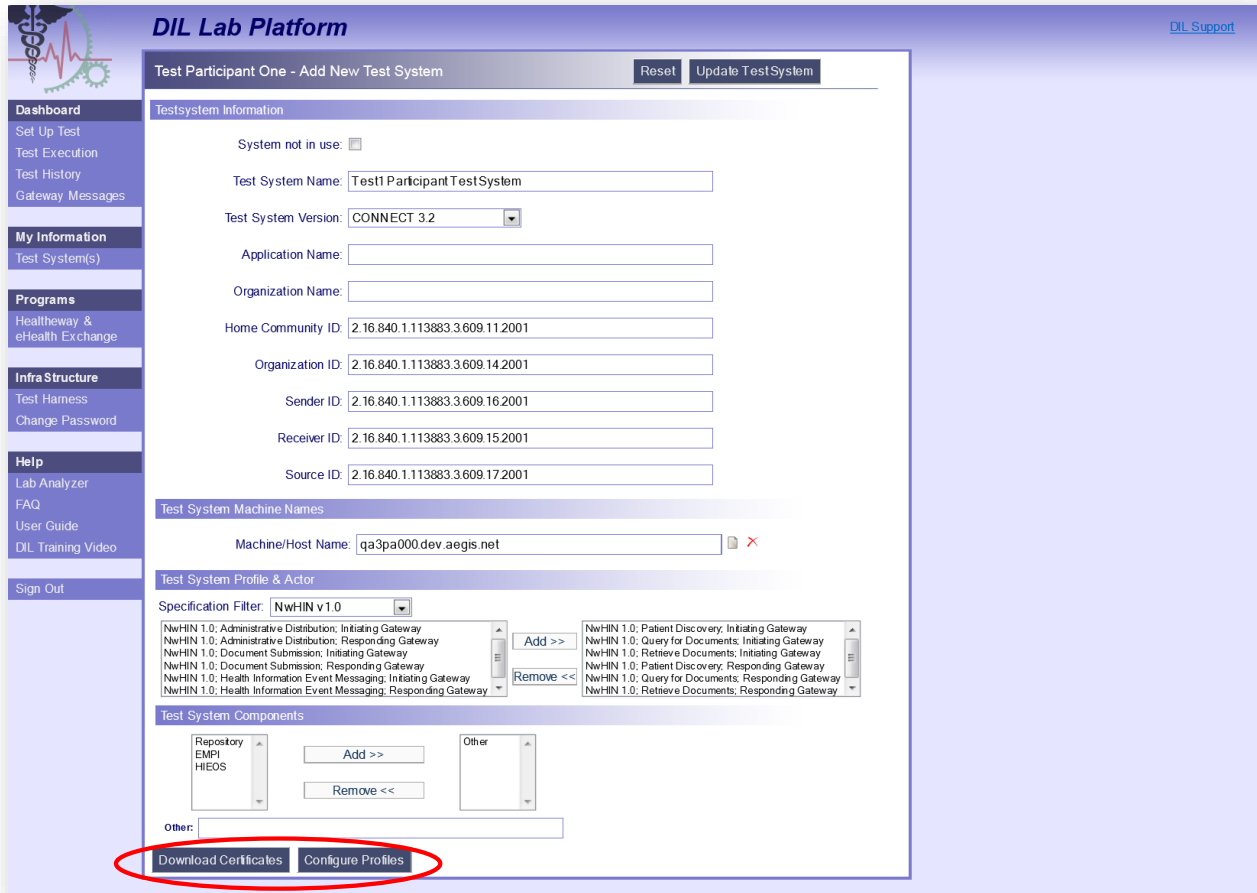
	Action	Details/Notes
		<ul style="list-style-type: none"> • Name the Test System • Identify the specification associated with this Test System • Identify the machine name(s) associated with this Test System • Specify the Test System Profile and Actors for this Test System • Enumerate the Test System Components of this Test System
2	Download Certificates	Once the Test System has been created, the participant must download a certificate for each specific machine name.
3	Configure Test System Profiles	<p>Once the Test System has been created, each specific Test System Profile needs to be configured. This step allows the participant to</p> <ul style="list-style-type: none"> • Specify the Service Type(s) associated with each Profile • Specify the Service Reference for each Service Type • Verify that the Service Reference is accessible by the DIL • Verify that the appropriate certificates have been installed

Screenshots

Test System(s) hyperlink



Download Certificates and Configure Profiles buttons



Creating a Test System

Key steps for creating a Test System are outlined below.

	Action	Details/Notes
1	Access Test System(s) function	Click Test System(s) hyperlink from left-hand navigation menu
2	Access New Test System screen	Click Add New System button
3	Complete Test System Information section	<ul style="list-style-type: none"> • System not in use Indicator: When checked, this system will not be available for test case execution. This feature may be used when a Test System is no longer online. • Test System Name: Create a name for the Test System • Test System Version: Indicate the type of Gateway used by this Test System • Other: If Other is selected for the Test System Version, enter a short description of the Test System Gateway • Test System Description: Enter a description of the Test System • Application Name: Enter the name of the Application used by this Test System. Note that for HL7 transactions, this value is the Application Name sent in the MSH segment. • Organization Name: Enter the name of the Organization associated with this Test System. Note that for HL7 transactions, this value is the Facility Name sent in the MSH segment. • Home Community ID: Enter a valid OID representing the Home Community ID for this Test System • Organization ID: Enter a valid OID representing the Organization ID for this Test System • Sender ID: Enter a valid OID representing the Sender ID for this Test System • Receiver ID: Enter a valid OID representing the Receiver ID for this Test System • Source ID: Enter a valid OID representing the Source ID for this Test System
4	Select Test System Profile(s) and Actor(s)	<p>Specify the Profiles and Actors for the Test System. These Profiles will be configured with specific Service Profiles (endpoints) on a separate screen.</p> <p>Use the Specification Filter to narrow down the selections in the left-hand selection box. To select more than one Test System Profile & Actor record, select one record, use the SHIFT key and select another record to select all the records in that range; or select one record and then use the CTRL button to select another record.</p> <ul style="list-style-type: none"> • Add: Once the Profile & Actor records have been selected click

	Action	Details/Notes
		<p>“Add” to move them to the right-hand selection box.</p> <ul style="list-style-type: none"> Remove: Select one or more records from the right-hand selection box and click Remove to remove the records from the Test System
5	Enumerate Test System Components	<p>To select more than one Test System Component, select one record, use the SHIFT key and select another record to select all the records in that range; or select one record and then use the CTRL button to select another record.</p> <ul style="list-style-type: none"> Add: Once the Component records have been selected click “Add” to move them to the right-hand selection box. Remove: Select one or more records from the right-hand selection box and click Remove to remove the records from the Test System
6	Save Test System	Click “Add Test System” to create the Test System in the DIL
7	Add Machine Name(s)	Once the Test System has been created, add the machine or machines that are part of the Test System.

Screenshots

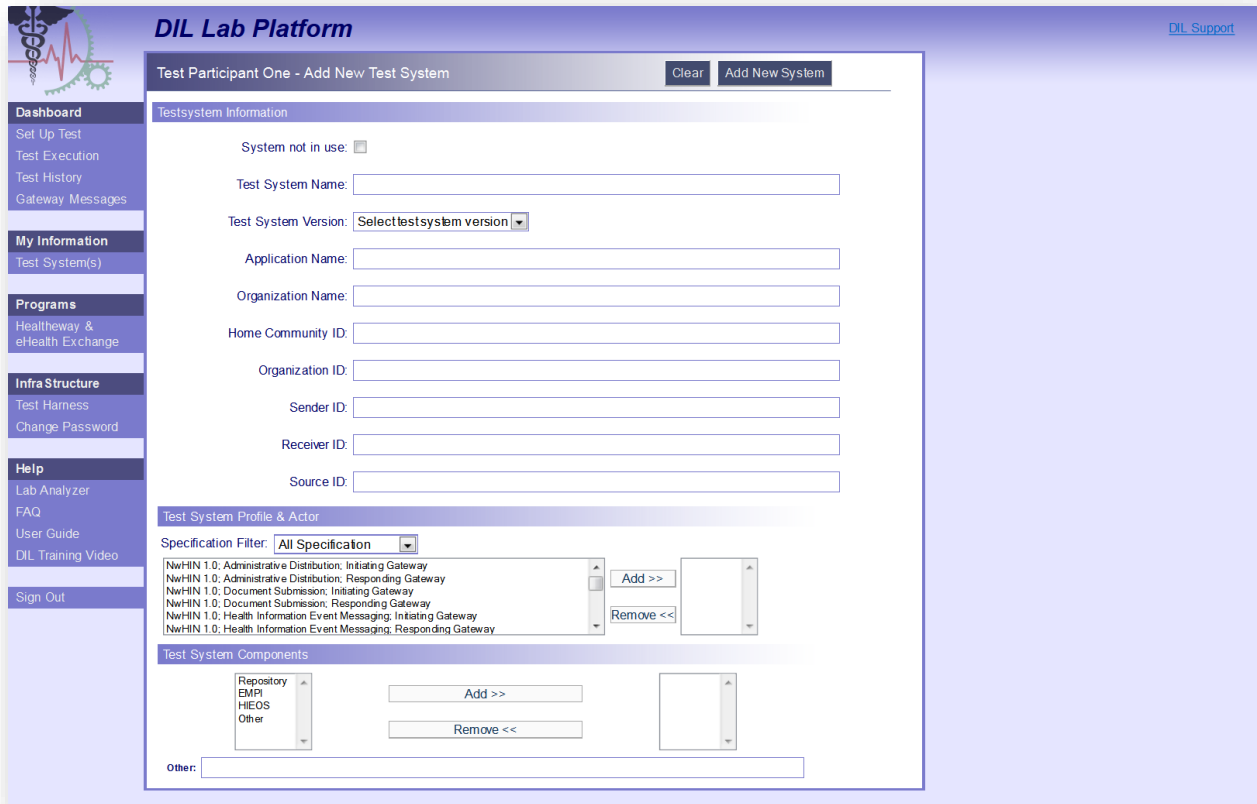
Test System(s) hyperlink



Add New System



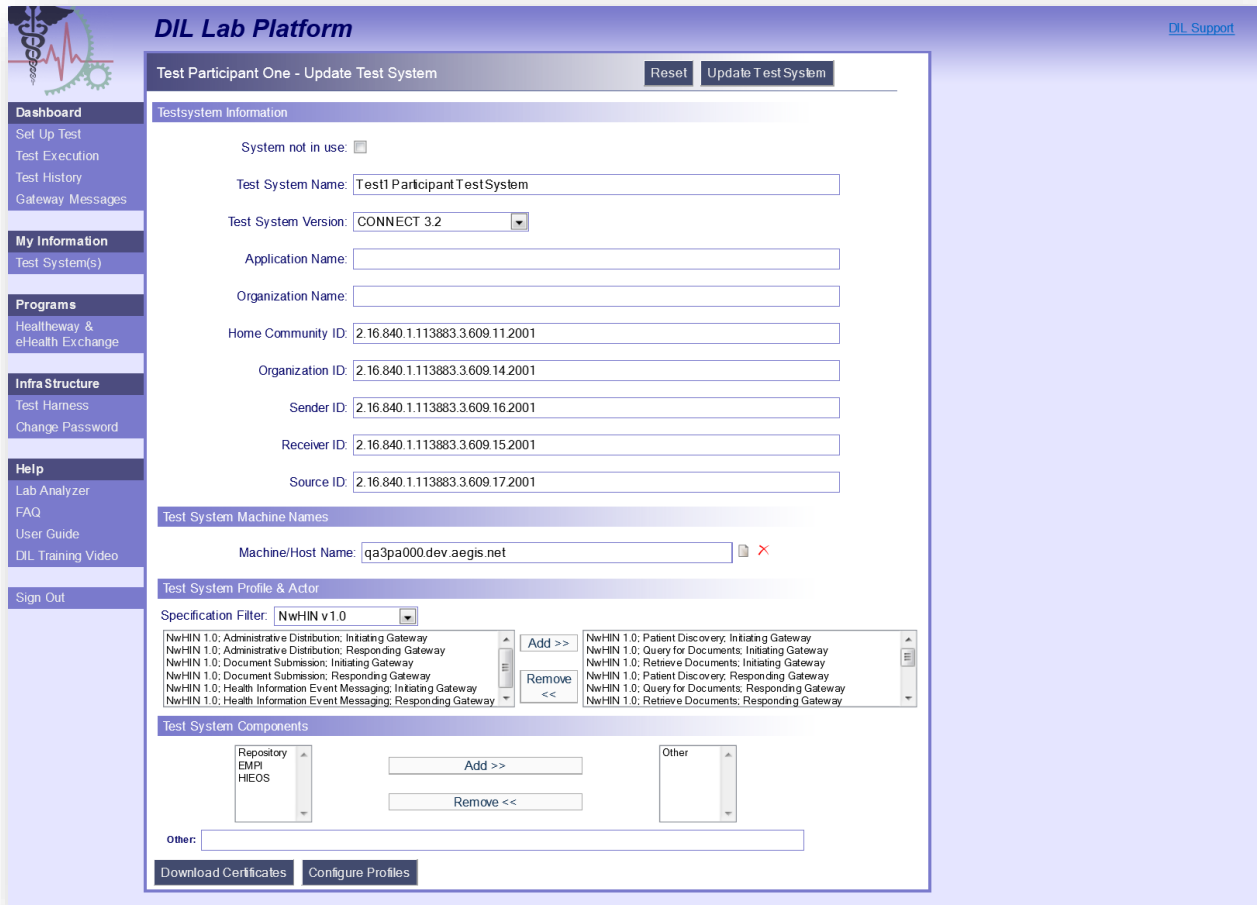
Test System Configuration – Add New System



Key functions available on Test System screen are outlined below.

Action	Details/Notes
Clear	When adding a new system, the Clear function will clear out all data entry fields
Add Test System	When adding a new system, Add Test System will save the new Test System information and create the Test System record

Test System Configuration – Existing System



Key functions available on Test System screen are outlined below.

Action	Details/Notes
Reset	Undoes any data entry done after the last time the record was saved
Update Test System	Saves changes to the Test System record
Download Certificates	Takes user to the Download Certificates screen
Configure Profiles	Takes user to the Test System Profiles screen

Downloading Certificates

To establish a secure connection with the DIL, a participant user must download and install the Certificates created internally within the DIL for testing. The DIL, acting as a Certificate Authority, provides a method to download and install trusted certificates. These certificates can only be used with the DIL for secure transfer of messages from a participant’s machine to the DIL.

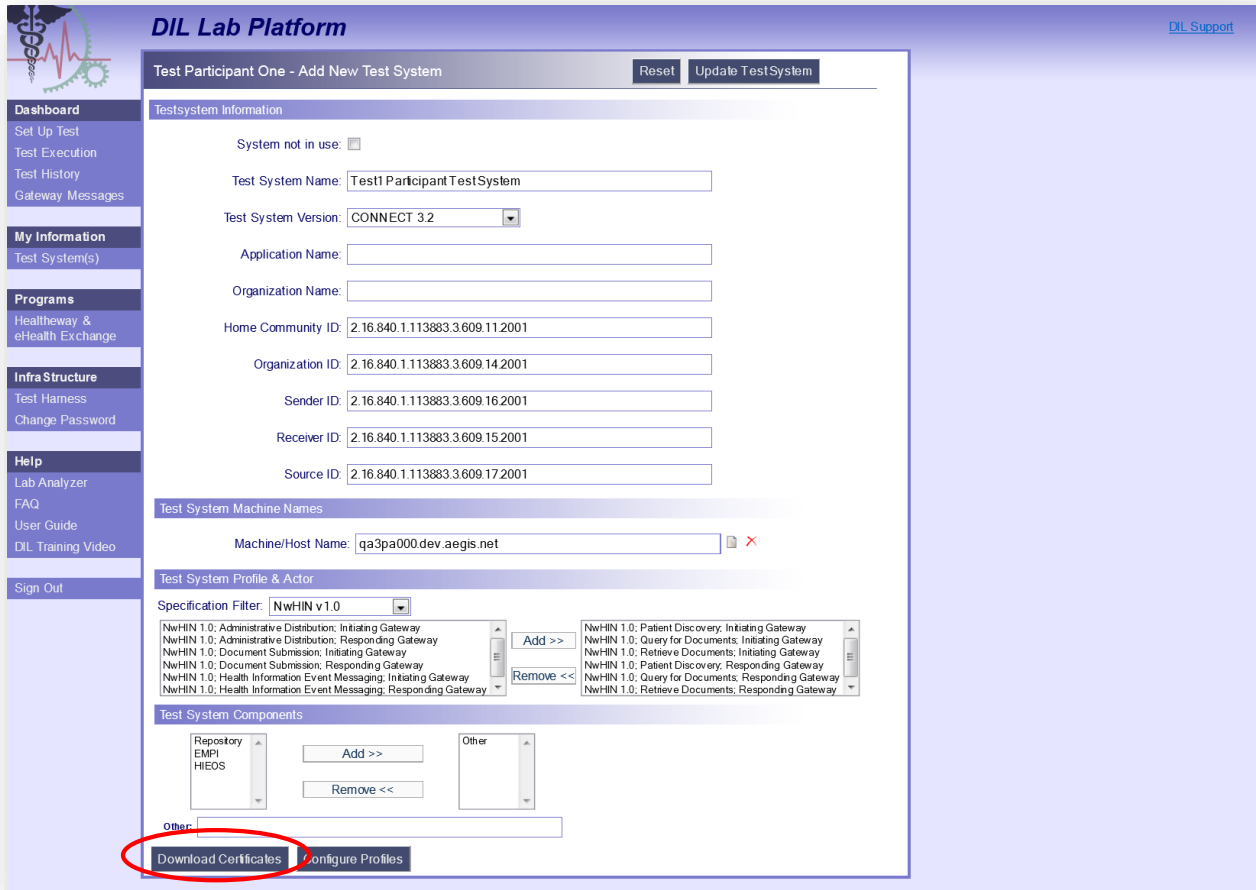
IMPORTANT: The information provided here merely highlights the links and functions available on this screen. The information required for successful downloading and installation of certificates is found in the Certificate Install Instructions document on the Download Certificates page.

Key steps for downloading certificates are outlined below.

	Action	Details/Notes
1	Access Test System	<ul style="list-style-type: none"> Click the Test System(s) link from the left-hand navigation menu Select the desired Test System from the list of Test Systems Click “Download Certificates” at the bottom of the screen
2	Set Password	<p>For each machine associated with the selected Test System, please specify a secure password. This will be the password for the private (.p12) certificate generated by the DIL.</p> <p>After entering all desired passwords, click “Save Password”</p>
3	Download Certificates	<ul style="list-style-type: none"> Download the DIL Root Certificate Download the DIL CA Certificate Click each Machine Name to download the private (.p12) cert for that machine. <p>Follow the instructions available on this screen to install the certificates.</p>

Screenshots

Download Certificates button



Download Certificates screen



Key functions available on Download Certificates screen are outlined below.

Action	Details/Notes
Close	Takes user back to the Test System screen
Save Password	Saves all passwords entered on the screen

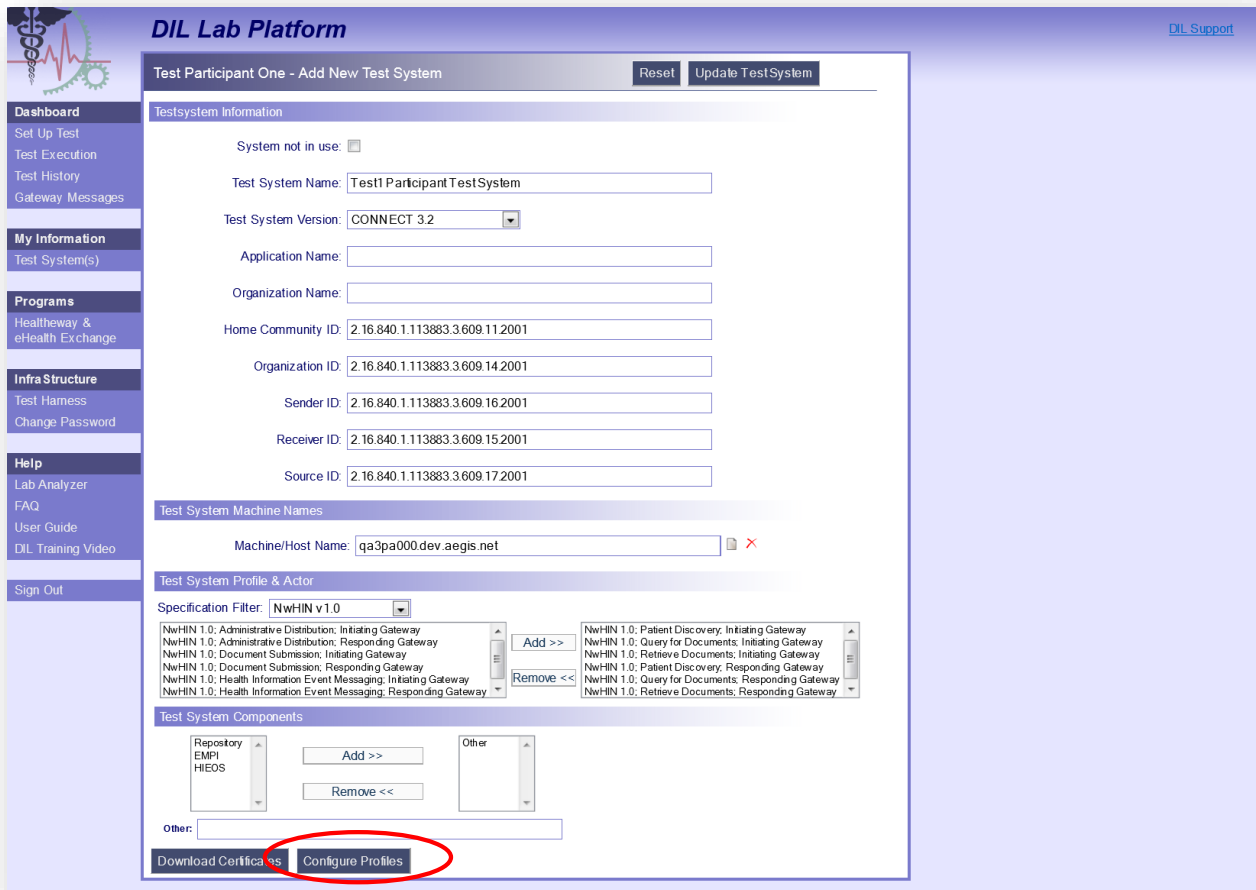
Creating a Test System Profile

Key steps for creating a test system profile are outlined below.

	Action	Details/Notes
1	Access the Configure Profiles function	<ul style="list-style-type: none"> Click the Test System(s) link from the left-hand navigation menu Select the desired Test System from the list of Test Systems Click "Configure Profiles" at the bottom of the screen
2	Select the profile to configure	The Test System Profiles screen will have a listing of the Profile & Actor records selected for the Test System. Click "Configure Profile" next to the desired profile.
3	Enter Data to Configure the Service Reference(s) for this Profile	<ul style="list-style-type: none"> Service Type: The Service Type drop down lists the available Service Types for the selected Profile. Select the desired Service Type for this Profile. Service Reference: Enter the endpoint for this specific Service Type for this Profile Service Host Name: Enter the Host Name for this specific Service Type for this Profile Service Port: Enter the Port for this specific Service Type for this Profile Status: Indicate if this Service Reference is Active or Inactive Comments: Enter any desired comments (this field is not required) Click "Add New Reference" <p>The New Reference will display at the bottom of the screen. Click "Configure Reference" to make updates as necessary.</p>
4	Verify that the Service Type endpoint is accessible and that the appropriate certificates are installed	<p>Click the 'Verify Certificate and Endpoint' button to verify that the certificate has been successfully installed and that the endpoint is accessible by the DIL.</p> <p>Messages will display to let the User know the status of the Certificates and Service endpoint.</p> <p>Once the endpoint has been successfully verified, the endpoint may be published using the Publish Service Reference function.</p>

Screenshots

Configure Profiles button



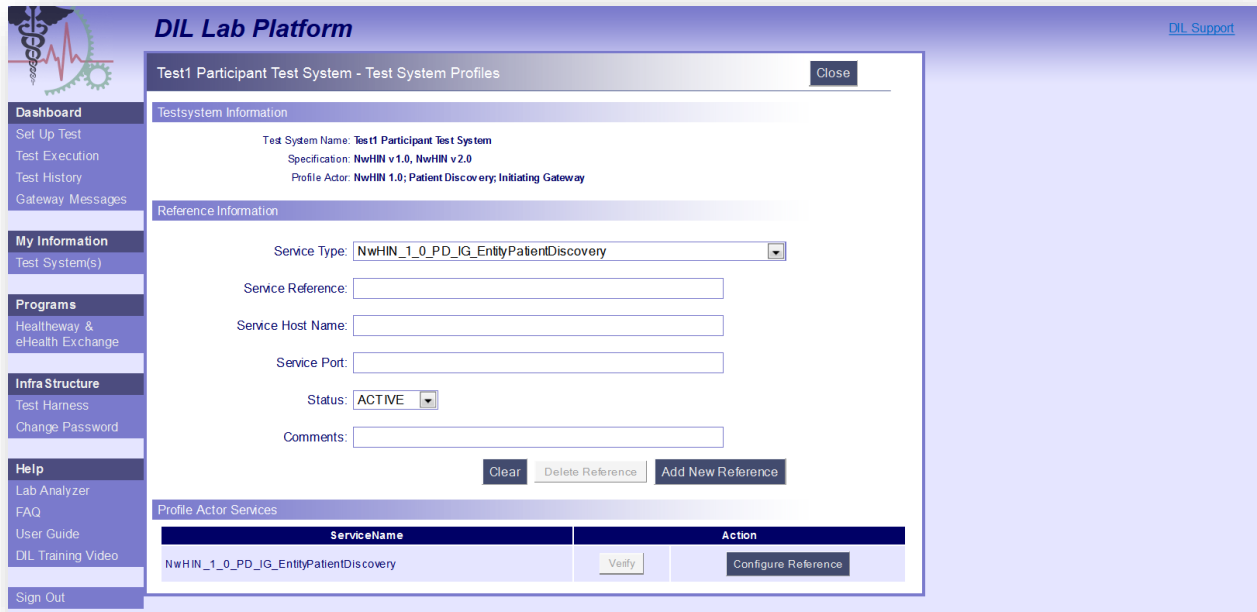
Test System Profiles list



Key functions available on the Test System Profiles screen are outlined below.

Action	Details/Notes
Configure Profile	Takes user to the Configure Profiles (Add Service Reference) screen.
Delete Profile	Deletes the Profile
Close	Takes user back to the Test System Profiles list

Configure Profiles



Key functions available on the Test System Profiles screen are outlined below.

Action	Details/Notes
Clear	Clears any data entered
Delete Reference	Deletes the current Service Reference
Add New Reference	Adds the new Service Reference
Verify Certificate and Endpoint	Verifies Certificate and Endpoint status
Configure Reference	Loads the selected Service Reference and allows a user to make changes
Update Reference	When a user clicks Configure Reference, the Update Reference button allows the user to save changes to the selected Service Reference
Close	Takes user back to the Test Systems Profile screen

