



Nationwide Health Information Network (NHIN)

Services Registry Test Guide

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Version 1.0

Reference Documents

- NHIN Onboarding Guide
- NHIN Onboarding Processes, v1.0
- NHIN Validation Plan, v2.0
- NHIN Validation Testing Checklist
- Web Services Registry Test Cases v2.0

Related Final Production Specifications

- Web Services Registry Production Specification, v2.0;
http://healthit.hhs.gov/portal/server.pt/gateway/PTARGS_0_11673_910663_0_0_18/NHIN_WebServicesRegistryProductionSpecification_v2.0.pdf

Document Change History

Version	Date	Items Changed Since Previous Version	Changed By
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1 Introduction

The Nationwide Health Information Network (NHIN) validation testing focuses on supporting an organization's ability to securely exchange health information using the defined technical specifications. By successfully completing the services registry tests, an organization demonstrates the ability to obtain the information to interact with other organizations listed in the services registry, a fundamental capability for interoperability.

Use of the services registry is not mandatory for participation in the NHIN. Organizations may use the services registry to identify partners in the exchange or they may use other means. Those that plan to use the services registry to look up partners will benefit from completing the service registry tests.

1.1.1 A Note About Obtaining the Interop Lab's Endpoints

Many organizations obtain the endpoints and other connection information about the Interoperability Lab by querying the NHIN Validation Services Registry. As indicated above, use of the services registry is not required. If organizations choose not to use the services registry, they may be given the endpoints by their NHIN Representative to incorporate using other means.

The lab nodes as referred to in the Interoperability Scenarios (e.g., Node 1) map to the names in the UDDI as follows:

- Node 1: NHIN Interoperability Test Platform Host RI1C23
- Node 2: NHIN Interoperability Test Platform Host RI2C23

2 NHIN Services Registry Test Guide

The *NHIN Services Registry Test Guide* provides guidance for successful testing of systems within organizations using the NHIN specifications listed in the previous Final Production Specifications section.

2.1 Roles in the Validation Process

During the validation process, different members of the NHIN team provide assistance to the organization. This guide identifies the major NHIN team members as:

- NHIN Certificate Authority (CA) – provides certificates for testing and production
- NHIN Representative – guides organization through the onboarding process
- NHIN Implementation Team – assists organization with onboarding activities
- NHIN Validation Team – performs initial review of test results

2.2 Conventions

In the context of NHIN validation testing, the term **organization** can refer to a number of things:

- NHIN organization – entity that has developed a technical solution (gateway) they wish to use to participate in the NHIN.
- NHIN organization user – person conducting testing on behalf of an organization

- NHIN organization system – system undergoing validation testing

This guide uses the term **organization** for either of the first two previous definitions. As needed, the guide distinguishes the definitions.

3 Testing Process

Services registry testing occurs during the NHIN onboarding process, Stage 2: Validation. Your NHIN Representative guides you and your organization through the testing process, and provides you with required documents and artifacts. It is recommended that organizations complete services registry testing as early as possible in the validation stage.

3.1 Preparing for Testing

To prepare for services registry testing, NHIN provides organizations with the following materials:

- This guide and other documents describing the NHIN onboarding process, including testing and validation details
- Information on obtaining and loading NHIN digital certificates
- A form for entry in the NHIN services registry
- Test cases

To prepare for testing, organizations perform the tasks described in the following paragraphs.

3.1.1 *Configure Certificate*

Before beginning testing, organizations install the NHIN digital certificate on the system(s) undergoing testing.

3.1.2 *Configure Your System to Use Validation Services Registry*

Prior to testing, your gateway needs to be configured to use the validation services registry. The URL for the NHIN Validation Services Registry is <https://registry-vs.nhinonline.net/uddi/inquiry>. (If applicable, your gateway vendor should be able to instruct you on how to make the configuration changes required to use the services registry.)

3.1.3 *Review Test Cases*

Test cases describe the interactions organizations perform for services registry testing. The relevant test cases for services registry testing are found in `web-services-registry-master-test-cases-2.0.xls`. To ensure your organization's system can perform the tests, please review the test cases prior to testing. If your organization has issues or questions, contact your onboarding representative.

3.2 Conducting Testing

Services registry testing involves completing the following activities for each test case:

- Querying the NHIN Validation Services Registry,
- Capturing the results of the query,

- Capturing the portions of the system logs related to the query and the response, and
- Providing the results of the query and the portions of the system log to the NHIN Validation Team.

If your organization will subscribe to the services registry, complete the test cases for querying the registry and subscribing to the registry; otherwise, just complete the test case(s) for querying the registry.

3.3 Validation

Validation of the test results occurs manually. The NHIN Validation Team reviews the query response and the portions of the system logs related to the query and the response to validate the results of testing and identify any issues. Without delay, the NHIN Representative notifies the organization of results. If the organization does not pass testing, the NHIN team works with the organization to ensure the organization understands the reasons for failure, can address the issues, and testing can be successful on a subsequent test.

4 Glossary

NHIN Organization	An entity that has developed a technical solution (gateway) they wish to use to participate in the NHIN.
NHIN Organization System	The organization's technical solution itself, which the organization is operating and using to undergo interoperability testing.
NHIN Organization User	The person who is conducting the testing for an organization's system.
NHIN Representative	A member of the NHIN team who provides guidance and assistance to organizations through the interoperability testing process.
NHIN Validation Services Registry	The UDDI in the NHIN validation environment that maintains system and service information about the nodes offering validation services.