

**NHIN RPC Package
Installation Guide
and
Technical Manual**



**NHIN Version 1.0
September 2010**

**Clinician Desktop Service
Veterans Health Information Technology**

Revision History

Date	Description of Change	Technical Writer, Project Manager
September 2010	Initial Release	C Hall, F Fontaine

Table of Contents

Revision History.....	2
Introduction.....	4
Installation.....	5
Verifying the Installation	6
Remote Procedure Calls.....	6
External Relationships	6
Security Keys	6
Routines	7
Checksums.....	7

Introduction

This document describes the installation procedures for the NHIN RPC Package (NHIN 1.0) to be used with the Department of Veterans Affairs (VA) Nationwide Health Information Network (NHIN) Gateway Adapter Version 2.0. The purpose of the VA NHIN Gateway Adapter is to implement the actions necessary to exchange electronic health records (EHRs) generated from the VA and received from authorized NHIN Health Information Exchanges (HIEs). The VA NHIN Gateway Adapter uses a service-oriented architecture (SOA) to share patient health data and to communicate between systems.

The VA NHIN Adapter interfaces with the VA NHIN CONNECT Gateway, which is an implemented instance of the Federal CONNECT Gateway software. The Federal NHIN CONNECT Gateway is the product deliverable of the Federal Health Architecture (FHA), under the Department of Health and Human Services (HSS). This product is the result of the collaboration and shared development cost of a group of more than twenty government agencies known as the Federal Consortium. The VA has been exchanging medical information with the Department of Defense (DoD) for several years. By using the VA CONNECT Gateway together with the VA NHIN Adapter, the VA will now be able to share patient health data with other federal partners, as well as private providers, such as Kaiser Permanente.

The VA NHIN Gateway Adapter is a HealtheVet-VistA application that acts as a gateway between the VA and other Health Information Exchanges (HIEs) to share patient clinical records. The VA NHIN Gateway Adapter is deployed as a single, national instance at AITC (Austin Information Technology Center). Payloads are standards-based CDA (Clinical Document Architecture) XML documents. VistA data is retrieved through the use of VistALink-mediated RPC calls; HIE data retrieved by the NHIN Adapter is displayed by VistAWeb. The NHIN Adapter provides a read-only service: it does not create a clinical repository with the data it mediates.

Installation

Download the following two files:

File Name	Contents	FTP Retrieval Format
NHIN1_0.KID	KIDS Build	ASCII
NHIN_TM.PDF	Installation Guide and Technical Manual	Binary

Sites may retrieve the files listed above in one of the following ways:

- The preferred method is to FTP the files from download.vista.med.va.gov, which will transmit the files from the first available FTP server.
- Sites may also elect to retrieve these files directly from a specific server as follows:

OI FIELD OFFICE	FTP ADDRESS	DIRECTORY
Albany	ftp.fo-albany.med.va.gov	[anonymous.software]
Hines	ftp.fo-hines.med.va.gov	[anonymous.software]
Salt Lake City	ftp.fo-slc.med.va.gov	[anonymous.software]

This package release may be installed with users on the system; however, it should be installed at a non-peak time to minimize disruption to the users. Installation of this patch should take less than 1 minute.

This package release of NHIN 1.0 will add the following file entries:

- NHIN APPLICATION PROXY to the OPTION file (#19)
- NHIN GET VISTA DATA to the REMOTE PROCEDURE FILE (#8994)

Using the Kernel KIDS menu:

1. Use the **Load a Distribution** option on the KIDS installation menu. When prompted to enter a host file type in NHIN1_0.KID.
2. On the KIDS menu under the INSTALLATION menu, use the following options, as desired:
 - Print Transport Global
 - Compare Transport Global to Current System
 - Verify Checksums in Transport Global
 - Backup a Transport Global
3. On the KIDS menu under the INSTALLATION menu, use the following option to install the package:
Install Package(s) (NHIN 1.0)
4. When prompted **Want KIDS to Rebuild Menu Trees Upon Completion of Install?**, respond **NO**.
5. When prompted **Want KIDS to INHIBIT LOGONs during the install?**, respond **NO**.
6. When prompted **Want to DISABLE Scheduled Options, Menu Options, and Protocols?**, respond **NO**.
7. When prompted **Delay Install (Minutes): (0-60):**, respond **0**.
8. The init routine NHINPI may be deleted once the installation has completed. Use the Kernel Delete Routines option [XTRDEL] to delete these routines.

Verifying the Installation

All the M/Vista side verification for the NHIN package can be done from the FileMan Inquiry option.

1. Verify that the NHIN package entry exists in the PACKAGE file (# 9.4).
2. Verify that the NHIN GET VISTA DATA remote procedure entry exists in the REMOTE PROCEDURE file (#8994).
3. Verify that the APP PROXY ALLOWED field in the REMOTE PROCEDURE file (#8994) is set to Yes.
4. Verify that the NHIN APPLICATION PROXY option exists in the OPTION file (#19).
5. Verify that the NHIN GET VISTA DATA remote procedure is attached to this option.
6. Verify that the NHIN,APPLICATION PROXY entry in the NEW PERSON file (#200) was created and the entry has the NHIN APPLICATION PROXY option assigned as a secondary menu.

Remote Procedure Calls

This package adds the NHIN GET VISTA DATA remote procedure entry in the remote procedure file (#8994).

Remote Procedure Call	M Entry Point
NHIN GET VISTA DATA	GET^NHINV

External Relationships

Following are the DBIAs (Data Base Integration Agreements) covering use of the following routines and global references:

^DGPM	1865
^LR	525
^LRO(69)	2407
^SCE	2065
DGPFAPI	3860
GMPLUTL2	2741
GMRVUT0	1446
GMVPXRM	3647
LR7OR1	2503
ORX8	2467
PSOORRL	2400
PXAPI	1894
PXAPI	1895
PXRHS03	1239
SDAMA201	3859
TIUSRVLO	2865
TIUSRVR1	2944

Security Keys

The NHIN RPC Package contains no security keys.

Routines

This package is releasing the following routines:

- NHINPI Post install routine
- NHINV Initial RPC routine
- NHINVART Allergies
- NHINVIMM Immunizations
- NHINVIT Vitals
- NHINVLR Lab Results
- NHINVPL Problems
- NHINVPS Medications
- NHINVPSI Inpatient Pharmacy
- NHINVPSO Outpatient Pharmacy
- NHINVPT Patient

Checksums

Following are the RPC checksums:

- NHINPI value = 313819
- NHINV value = 13990789
- NHINVART value = 28029452
- NHINVIMM value = 8275429
- NHINVIT value = 30108507
- NHINVLR value = 23999856
- NHINVPL value = 19630772
- NHINVPS value = 13986678
- NHINVPSI value = 32869468
- NHINVPSO value = 66033397
- NHINVPT value = 58401800