

**Installation Guide  
for  
National Utilization Management  
Integration (NUMI)  
Release 1.0**



Office of Information & Technology (OI&T)  
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# **1. Introduction**

This document explains installation considerations for National Utilization Management Integration (NUMI), Release 1.0.

## **1.1 Purpose**

The purpose of this document is to describe the roles of the national NUMI administrators, who install NUMI on national servers, and the role of the local VA Medical Center IT staff in assisting end users and making NUMI accessible to them.

## **1.2 Scope**

The scope of this document includes a description of activities surrounding the installation of the NUMI software, and the steps that need to be completed before and after the installation process starts.

## **1.3 Target Audience**

This document is intended primarily for local VA Medical Center IT staff. These individuals will not install any NUMI software on the national servers, on the local servers, or on local workstations. National administrators will install the software on centralized NUMI servers, and although their general role is explained in this document, detailed installation steps are not included.

## **2. Deployment Overview**

NUMI is a centralized web-based application and does not require any hardware or software installation at the VA Medical Centers. As each site starts using NUMI, the national NUMI administrators shall populate the NUMI database for the site automatically, via a web service that retrieves inpatient movement data from local VistA systems using existing VistA Remote Procedure Calls (RPC). IT staff may need to verify that end users have appropriate VistA options, and assist utilization review staff in accessing the web site. A member of the utilization review staff at each station shall be assigned by the Office of Quality and Performance (OQP) as the local NUMI administrator, and they shall be responsible for maintaining user profiles and permissions for other local NUMI users.

### **2.1 Installing NUMI on the Servers**

The national administrators shall install NUMI on 2 national server clusters. The local IT staff does not have a role in this.

## 3. Pre-Installation Instructions and Preparation

This section explains preparation needed before medical facility staff starts using NUMI.

### 3.1 Installation Process Requirements

It is assumed that the person responsible for doing installations at your site has performed appropriate pre-implementation planning. Here are some things to consider before implementation, from the user workstation perspective. Please see the 'User Instructions' chapter of the *NUMI User Guide* (located under HealthVet in the VA Software Document Library [VDL] - <http://www.va.gov/vdl/>) for details about how to set up the requirements mentioned in [Section 3.1.1](#) thru [Section 3.1.6](#).

#### 3.1.1 Pop-Ups

- Users' Pop-Up blocker must be set to 'allowed' for the site

#### 3.1.2 Make NUMI a Trusted Site

- NUMI must be designated as a "Trusted Site"

#### 3.1.3 Active-X Controls

- Users' Active-X Controls must be set to 'allowed' for the site

#### 3.1.4 Screen resolution

- Users' screen resolution must be set to 1024x768 or higher in order to properly view NUMI

#### 3.1.5 Browser version

- Internet Explorer 6.0 or higher must be installed on the users' workstations - this browser is the only browser that will let users access the NUMI application

#### 3.1.6 Existing VistA account

- Users must have a VistA account in order to login to NUMI. Once they have a VistA account, their access to sites within NUMI will be set up by a NUMI Administrator. Note: NUMI access is completely independent from access to sites outside of NUMI including CPRS, VistA and VistA Web. See [Section 6.1](#) for more details.

### **3.1.7 Minimum Software Version**

- Operating System: Windows Server 2000 or 2003 or Linux
- Database: SQL Server 2000 or 2005

### **3.1.8 CPU Capacity**

- Users' workstations must have 2GB RAM, 2ghz Pentium 4

### **3.1.9 Estimated Global Growth**

Not Applicable. NUMI does not edit or add any data to VistA.

## 4. Database Information

Not Applicable. NUMI does not add or change any files or data in VistA.

General information can be found in the 'Database Information' chapter of the *NUMI Systems Management Guide* (located under HealtheVet in the VDL - <http://www.va.gov/vdl/>).

## **5. Instructions for Installing M Server (or Database) Components**

### **5.1 Pre-Installation Instructions for the M-Server/Database Component**

#### **5.1.1 Install Software in Test Accounts**

The software will be installed by national NUMI administrators on test servers and accounts before installing in the Production environment.

#### **5.1.2 Generate Pre-Installation Reports**

Not Applicable.

#### **5.1.3 Coordinate Installation with other Teams**

Not Applicable.

#### **5.1.4 Install sequence information for multiple patches**

Not Applicable.

#### **5.1.5 Mandated Installation Dates**

Not Applicable.

#### **5.1.6 Logoff During Installation?**

Not Applicable.

#### **5.1.7 Install Software During Off-Peak Hours?**

Not Applicable.

#### **5.1.8 Average amount of time required to complete the installation**

Not Applicable.

### **5.2 Installing M Server/Database Components**

Not Applicable.

## **6. M Environment**

Not Applicable. Nothing needs to be installed in the M environment.

### **6.1 VistA rights needed for NUMI users**

UM Reviewers will need to use CPRS to look up patient information while they work in NUMI, and will minimally need CPRS access. NUMI users must have the option *CPRChart version n.n.n.n [OR CPRS GUI CHART]* on their menus, where *n.n.n.n* is the current released version of CPRS.

## **7. Instructions for Installing Middle Tier Applications (e.g. Application Servers)**

The middle tier of NUMI is Medical Domain Web Services (MDWS). The NUMI application servers are located in Hines, Illinois and Falling Waters, West Virginia. These run on an Internet Information Services (IIS) Application Server. The NUMI application requires Microsoft ASP .NET 2.0 Ajax Extensions 1.0 and Web Services Enhancements 3.0 to enable the interactions with the Web Services. Primary and secondary sites shall be designated for NUMI.

### **7.1 Instructions for Creating a Directory on the Middle Tier Server**

Not Applicable.

### **7.2 Middle Tier Component Configuration Instructions**

Not Applicable.

### **7.3 Manual and/or Automated Middle Tier Installation Instructions**

Not Applicable.

## **8. Instructions for Starting Applications on the Middle Tier Application Server**

Not Applicable.

## **9. Instructions for Installing Client Components**

Not Applicable. There are no client components for VA Medical facilities to install.

## **10. Post-Installation Review**

Not Applicable.

## **11. Post-Installation (Setup and Configuration)**

Not Applicable.

## **12. Starting the Client-Side Desktop Software**

Not Applicable.

## **13. M Installation Example**

Not Applicable.

## **14. Zipped File Contents, Where Applicable**

Not Applicable.

## 15. Troubleshooting

Not Applicable. Information about post-installation troubleshooting can be found in the 'Troubleshooting' chapter of the *NUMI Systems Management Guide* (located under Health\_Vet in the VDL - <http://www.va.gov/vdl/>).

# APPENDIX A - Acronyms and Descriptions

Descriptions for acronyms used in this document are listed in [Table 1](#).

**Table 1: Acronyms and Descriptions**

Acronym	Description
CERMe	CareEnhance Review Management Enterprise
CPU	Central Processing Unit
DBMS	Database Management System
FTP	File Transfer Protocol
HIPAA	Health Insurance Portability and Accountability Act
HTML	HyperText Markup Language
HTTP	HyperText Transfer Protocol
HTTPS	HyperText Transfer Protocol Secure
LAN	Local Area Network
MDWS	Medical Domain Web Services
NUMI	National Utilization Management Integration
PM	Project Manager
QA	Quality Assurance
QCI	Quality Control Inspector
QCP	Quality Control Plan
SDD	System Design Document
SDLC	Software Development Life Cycle
SME	Subject Matter Expert
SOW	Statement of Work
SQL	Standard Query Language
SRS	Software Requirements Specification
TBD	To Be Determined
UMDB	Utilization Management DataBase
URL	Uniform Resource Locator
VA	Veterans Affairs
VDL	VA Software Document Library
VHA	Veterans Health Administration

<b>Acronym</b>	<b>Description</b>
VistA	Veterans Information Systems Technology Architecture
WAN	Wide Area Network
XML	Extended Markup Language

## **APPENDIX B – SSL Certificates**

Secure Socket Layer (SSL) Certificates are required by the VA for websites that transmit patient data. All instances of NUMI will, therefore, require SSL Certificates. All instances of NUMI and CERMe will need a separate SSL Certificate.

NUMI will need SSL Certificates for IIS, and CERMe will need them for Jetty. All requests need to be submitted to the PKI help desk. The help desk may also be contacted for detailed instructions on how to generate a request in IIS or Jetty, how to submit the request to the helpdesk, and how to install the certificates once they are issued.

### Sources on the web

For Jetty SSL info:

<http://docs.codehaus.org/display/JETTY/How+to+configure+SSL>

For IIS SSL info:

<http://support.microsoft.com/kb/228991>