



***Functional Independence  
Measurement (FIM) Installation  
Guide***



***Version 1.0***

***May 2003***

***Department of Veterans Affairs***

***VistA System Design and Development***

## Revision History

<b>Date</b>	<b>Description</b>
2/26/2003	Updates from John Owczarzak
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## Introduction

The purpose of this guide is to provide instructions for installing the Functional Independence Measurement (FIM) Version 1.0.

## Recommended Users

The Information Resource Management (IRM) staff is required for installing and supporting VistA FIM.

## Related Manuals

*Functional Independence Measurement (FIM) Technical Manual and Security Guide, V.1.0*

*Functional Independence Measurement (FIM) User Manual, V.1.0*

## Online Help

Instructions, procedures, and other information are available from the FIM online help file. You may access the help file by clicking on Help|Contents from the menu bar or by pressing the F1 key while you have any FIM screen dialog open.

## Orientation

**Pre-installation Information** section provides information needed beforehand to install RMIM1\_0.KID.

**Installation Instructions** section contains instructions and examples of RMIM1\_0.KID installation process.

**Implementation Instructions** provides directions for implementing FIM software.

## Screen Displays and Text Notes

The user's response in this manual is in **bold** type, but does not appear on the screen as bold. The bold part of the entry is the letter or letters that you must type so that the computer can identify the response. In most cases, you need only enter the first few letters. This increases speed and accuracy.

Every response you type must be followed by pressing the return key (or enter key for some keyboards). Whenever the return or enter key should be pressed, you will see the symbol <RET>. This symbol is not shown but is implied if there is bold input.

Within the roll and scroll part of the system, help frames may be accessed from most prompts by entering one, two, or three question marks (?, ??, ???).

Within the examples representing actual terminal dialogues, the author may offer information about the dialogue. You can find this information enclosed in brackets, for example, [type ward name here], and will not appear on the screen.

Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:


Symbol	Description
	Used to inform the reader of general information including references to additional reading material. See example
!	Used to caution the reader to take special notice of critical information.

Table 1: Documentation Symbol Descriptions

## Software and Manual Retrieval

The VistA FIM software files and Installation and Implementation Guide (i.e., RMIM1\_0IG.PDF) are available on the following Office of Information Field Offices (OIFOs) ANONYMOUS SOFTWARE directories.

OIFO	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

VistA FIM software and documentation are distributed as the following set of files:

File Name	Contents	Retrieval Format	File Size
RMIM1_0.KID	KIDS build	ASCII	219,648 bytes
RMIM1_0.ZIP	FIM Executable	BINARY	1,121,792 bytes
RMIM1_0IG.pdf	Installation Guide	BINARY	1,350 bytes

File Name	Contents	Retrieval Format	File Size
RMIM1_0IG.doc			28,5700 bytes
RMIM1_0TM.pdf	Technical Manual and Security Guide	BINARY	2,460 bytes
RMIM1_0TM.doc			17,530 bytes
RMIM1_0UM.pdf	Users Manual	BINARY	19,350 bytes
RMIM1_0UM.doc			29,130 bytes

## VistA Intranet

Online Documentation for this product is available on the intranet at the following address: [www.va.gov/vdl](http://www.va.gov/vdl). This address takes you to the VistA Documentation Library (VDL), which has a listing of all the clinical software manuals. Click on the Clinical Case Registries link and it will take you to the FIM documentation.

## Pre-Installation Information

The following information contains recommendations and requirements for the pre-installation of the FIM software.

The Functional Independence Measurement is run on both the client and VistA. The installation is a *two-part* process involving the client workstation, and VistA.

The Functional Independence Measurement comprises the following:

- FIM.exe
- M routines
- VA FileMan files
- Print, Sort, Edit templates
- Options
- Keys
- RPC Broker Calls
- Mailman Groups
- TIU Document Definitions (Titles)
- HL7 logical link
- HL7 APPLICATION PARAMETERS
- PROTOCOLS

## Test Sites

The FIM software was tested at the following sites:

Test Sites	Alpha	Beta
Augusta, GA		X
Bay Pines, FL	X	X
Birmingham, AL		X
Erie, PA		X
Memphis, TN	X	X
Milwaukee, WI	X	X
Mountain Home, TN	X	X
Pittsburgh, PA		X
Seattle, WA	X	X
VISN 2, (Syracuse)	X	X
West LA, CA		X
West Palm Beach, FL	X	X

## Hardware and Operating Systems

Before the installation of the Functional Independence Measurement, certain environmental requirements for both the M server and the client workstation must be satisfied. These requirements are described below.

### M Server Requirements

The following minimum software tools are required on your M server in order to install and use the Functional Independence Measurement:

One of the following operating systems:

- Digital Standard M (DSM) V6.3-031 for OpenVMS AXP or greater
- InterSystems OpenM for NT version 7
- Micronetics Standard M (MSM) for Windows NT, V. 4.3 or greater

Network communications software:

- Your server needs to have TCP/IP running
- Your server needs to have Broker Listener running

## Client Workstation Requirements

The following minimum hardware and software tools are required on your client workstation in order to install and use the Functional Independence Measurement:

80x86-based client workstation

One of the following 32-bit operating systems:

- Microsoft Windows 95
- Microsoft Windows NT Workstation V. 3.51 or greater



The VA has made the decision to go to a 32-bit Microsoft Windows environment. Therefore, the Functional Independence Measurement will not operate on Windows 3.1 or Windows 3.1 with WIN32S.

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- Win 2K

## Network communications software

The Functional Independence Measurement requires networked client workstations running Microsoft's native TCP/IP stack. (*For more information on RPC Broker communications requirements see RPC Broker V. 1.1 Installation Guide page 7*).

RPC Broker V. 1.1 Listener running on the M server.

## Software Installation Time

Installation of this software will not affect users on the system; therefore, there is no need for log on to be disabled. Installation will take less than 10 minutes.

## Name Space

The FIM software name space is RMIM.

## New Globals

RMIM 783 (Functional Independence Measurement Record file) and RMIM 783.9 (Functional Independence Measurement Parameter file) are the new globals supplied with this package.

Note; Be sure to place globals in the appropriate translation table.

It is suggested that journaling be enabled. The global access privileges are as follows:

System = RWP    World = RW    Group = RW    UCI = RWP



## VistA Software Requirements

Before FIM can be installed, the following software applications and patches must be installed and *fully* patched in your accounts.

Application Name	Minimum Version
Kernel	V. 8
Kernel Toolkit	V. 7.3
VA FileMan	V. 22
RPC Broker	V. 1.1
TIU	V.1.0
OERR	V.3.0
HL7	V.1.6
MailMan	V.8

## Routine List

The following list contains the routines included in RMIM Version 1.0

Routine	Checksum Values
RMIMHL	5598302
RMIMRP	7242673
RMIMU	3354346
RMIMU1	2235473
RMIMV	8374421

## Skills Required to Perform the Installation

Instructions for performing the needed functions are provided in the vendor-supplied operating system manuals as well as VistA publications.

**!DSM for Open VMS** sites should refer to the most recent Computer Operations Management and Procedures for AXP Systems (COMPAS) Manual.

**!OpenM** sites should refer to the “Configuring OpenM” chapter in the VistA -NT Conversion Checklist.

**!MSM** sites should refer to the most recent 486 Cookbook and MSM System Managers Guide.

You need to know how to do the following:

- Create directories on the host file system  
*[client workstation only]*
- Create directories on a network server
- Copy files using commands of the host file system  
*[client workstation, network server and the M server]*
- Load routines from: diskettes, tapes, and/or host files  
*[both the client workstation and the M server]*

## Main Installation Procedures

The installation of the Functional Independence Measurement is a *two-part* process involving both your client workstation and Vista. Each part of the installation consists of a few basic steps that are described below.



We strongly recommend that you install the Functional Independence Measurement on a network drive and distribute shortcuts to client desktops.

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## Instructions for Network Drive Installation

1. Start windows (required)  
Start Windows if it is not already running on the end-user client workstation. Before beginning the installation, however, we recommend you shut down all other Windows-based applications running on the workstation.
2. To install the Functional Independence Measurement:
  - a. Create a directory on a network drive. Example: H:\FIM, where H is a network drive.
  - b. Copy the WinZip files you received with this manual into the directory you just created.
  - c. There are three ways to make the FIM.EXE available to users:
    1. If site chooses to pass parameters within the Tools menu of CPRS, then Patient Selection will be controlled by CPRS and CPRS only. A set-up example for FIM.EXE will run in this method, please see below:

Select GUI Parameters Option: GUI Tool Menu Items

CPRS GUI Tools Menu may be set for the following:

- |     |          |     |                                 |
|-----|----------|-----|---------------------------------|
| 1   | User     | USR | [choose from NEW PERSON]        |
| 2   | Location | LOC | [choose from HOSPITAL LOCATION] |
| 2.5 | Service  | SRV | [choose from SERVICE/SECTION]   |
| 3   | Division | DIV | [choose from INSTITUTION]       |
| 4   | System   | SYS | [WEST-PALM.MED.VA.GOV]          |
| 9   | Package  | PKG | [ORDER ENTRY/RESULTS REPORTING] |

Enter selection: 4 System WEST-PALM.MED.VA.GOV

----- Setting CPRS GUI Tools Menu for System: WEST-PALM.MED.VA.GOV -----

Select Sequence: 17

Sequence: 17// 17

Name=Command: &FIM="H:\FIM.exe" s=%SRV p=%PORT d=%DFN

2. If site chooses to hang the software within the Tools menu of CPRS without passing parameters, then Patient Selection will be controlled by FIM. FIM will run as a stand alone. A set-up example for FIM.EXE will run in this method, please see below:

Select GUI Parameters Option: GUI Tool Menu Items

CPRS GUI Tools Menu may be set for the following:

- 1 User      USR [choose from NEW PERSON]
- 2 Location   LOC [choose from HOSPITAL LOCATION]
- 2.5 Service   SRV [choose from SERVICE/SECTION]
- 3 Division   DIV [choose from INSTITUTION]
- 4 System     SYS [WEST-PALM.MED.VA.GOV]
- 9 Package    PKG [ORDER ENTRY/RESULTS REPORTING]

Enter selection: 4 System WEST-PALM.MED.VA.GOV

----- Setting CPRS GUI Tools Menu for System: WEST-PALM.MED.VA.GOV -----

Select Sequence: 17

Sequence: 17// 17

Name=Command: &FIM="H:\FIM.exe"

3. If site chooses to initiate FIM through other means (i.e. desktop shortcut), then Patient Selection will be controlled by FIM. FIM will run as a stand alone.



If site chooses to launch FIM from CPRS Tools Menu using parameter passing (s=%SRV p=%PORT d=%DFN):

- 1.Patient Selection will be controlled by CPRS.
- 2.No Patient Selection will be allowed in FIM.
- 3.If FIM has an active patient record open, and CPRS changes patient, user will be informed that all current input data will be ignored.
- 4.FIM will shut down.

---

d. Run ServerList on each client to ensure a proper connection to an M server.

## Instructions for M Server Installation

This section of the WPB Functional Independence Measurement package was created using Kernel V.8.0 and VA FileMan V. 22.0 and requires the following external software:

<b>Package Name</b>	<b>Minimum Required Version</b>
FUNCTIONAL INDEPENDENCE	1.0

## Mail Group

The FIM Coordinators Mail Group RMIM FSOD is used for communication between users of the FIM template and the Coordinators. When a record that goes to FSOD gets created or edited, the FIM template will send a message to this group. Please contact the Rehab Medicine service to determine the appropriate individual as the coordinator of this mail group for your site.

The RMIM FSOD TRANSMISSION Mail Group is used for the transmission of FIM data to the FSOD database in Austin. No members need to be in this group. The mail group should have REMOTE MEMBER: XXX@Q-FIM.MED.VA.GOV, which was created by the FIM install.

The RMIM MAIL SERVER mail group may be used in the future for better communication between Facility System and the Austin Automation Center in regards to ACK or ERR status. No members need to be in this group.

## Installation Instructions

Sign into the area where you intend to install the package. Make certain your DUZ variable is set to a valid user number and DUZ(0) equals "@". Load the KIDS build RMIM1\_0.KID using the Load a Distribution option.

```
Select INSTALL NAME:  FUNCTIONAL INDEPENDENCE 1.0   Loaded from Distribution
4/23/03@11:23:03
```

```
=> FUNCTIONAL INDEPENDENCE 1.0 ;Created on Apr 15, 2003@13:02:54
```

This Distribution was loaded on Apr 23, 2003@11:23:03 with header of

```
FUNCTIONAL INDEPENDENCE 1.0 ;Created on Apr 15, 2003@13:02:54
```

It consisted of the following Install(s):

```
FUNCTIONAL INDEPENDENCE 1.0
```

```
Checking Install for Package FUNCTIONAL INDEPENDENCE 1.0
```

```
Install Questions for FUNCTIONAL INDEPENDENCE 1.0
```

Incoming Files:

```
783   FUNCTIONAL INDEPENDENCE MEASUREMENT RECORD
```

```
783.9 FUNCTIONAL INDEPENDENCE MEASUREMENT PARAMETER
```

Incoming Mail Groups:

```
Enter the Coordinator for Mail Group 'RMIM FSOD': <Enter REHAB FSOD/FIM Coordinator>
```

Enter the Coordinator for Mail Group 'RMIM FSOD TRANSMISSION': <Enter IRM Support>

Enter the Coordinator for Mail Group 'RMIM MAIL SERVER': <Enter IRM Support>

Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES// n NO

Want KIDS to INHIBIT LOGONs during the install? YES// n NO

Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES// n NO

Enter the Device you want to print the Install messages.

You can queue the install by enter a 'Q' at the device prompt.

Enter a '^' to abort the install.

DEVICE: HOME// TELNET DEVICE

## FUNCTIONAL INDEPENDENCE 1.0

-----  
Install Started for FUNCTIONAL INDEPENDENCE 1.0 :

Apr 23, 2003@11:30:10

Build Distribution Date: Apr 15, 2003

Installing Routines:

Apr 23, 2003@11:30:10

Installing Data Dictionaries:

Apr 23, 2003@11:30:14

Installing PACKAGE COMPONENTS:

Installing SECURITY KEY

Installing PRINT TEMPLATE

Installing SORT TEMPLATE

Installing INPUT TEMPLATE

Installing MAIL GROUP

Installing HL LOGICAL LINK

Installing HL7 APPLICATION PARAMETER

FUNCTIONAL INDEPENDENCE 1.0

-----

Installing PROTOCOL

Located in the RMIM (FUNCTIONAL INDEPENDENCE) namespace.

Located in the RMIM (FUNCTIONAL INDEPENDENCE) namespace.

Installing REMOTE PROCEDURE

Installing OPTION

Apr 23, 2003@11:30:16

Updating Routine file...

Updating KIDS files...

FUNCTIONAL INDEPENDENCE 1.0 Installed.

Apr 23, 2003@11:30:18

Install Message sent #37277096

-----

[-----]

100% |        25        50        75        |

Complete [-----]

Install Completed



## Post Installation

For post installation, schedule the following option to run nightly:

### 1. Schedule Nightly Task

RMIM NIGHTLY TRANSMISSION TASK option.

This should be done before midnight

### 2. Start HL7 Logical Link

Select HL7 Main Menu Option: Filer and Link Management options

Select Filer and Link Management Options Option: Start/Stop Links

This option is used to launch the lower level protocol for the appropriate device. Please select the node with which you want to communicate.

Select HL LOGICAL LINK NODE: RMIM LINK

Select one of the following:

- F FOREGROUND
- B BACKGROUND
- Q QUIT

Method for running the receiver: B//

### 3. Create TIU Document Definitions

The following FIM progress note and consult note titles need to be added to the TIU Document Definition hierarchy using the TIU option Create Document Definitions.

The titles can be entered under the site-appropriate Document Class.

The three mandatory TIU titles can be site specific; however, only three titles are allowed.

For example:

- PM&R FIM NOTE
- PM&R FIM FSOD NOTE
- PM&R FIM CONSULT

### 4. Configuration File Management

The settings in this file are critical to the proper operation of the Functional Independence Measurement. Incorrect or missing settings will cause unpredictable results.

Please have your designated staff member add the FIM progress note and consult note titles to the TIU DOCUMENT DEFINITION file #8925.1 via the option: Create Document Definitions.

The RMIM FIM SITE PARAMETERS file stores the system parameter data.

Use the option: FIM Site Parameter Edit (RMIM EDIT SITE PARAMETER). This option will edit the RMIM FIM SITE PARAMETERS #783.9. Only one entry per primary facility for integrated sites.

Example:

Select RMIM FIM SITE PARAMETERS FACILITY NAME: WEST PALM BEACH VAMC ←Station Name

FACILITY NAME: WEST PALM BEACH VAMC// <RET>

MAIL GROUP: RMIM FSOD// [Type this Mail Group Name.]

FSOD NOTE TITLE: PM&R FIM TO FSOD NOTE// [Type the name of the Progress Note title to identify it is an FSOD record.]

NON FSOD NOTE TITLE: PM&R FIM NOTE// [Type the name of the Progress Note title to identify a record did not go to FSOD.]

CONSULT TITLE: PM&R FIM CONSULT// [Type the name of the Progress Note title to identify Consult Completion.]

Select FACILITY CODE: 7074// [Multiple field to hold all of your Facility Codes.]

FACILITY CODE: 7074//

TYPE OF CARE: CONTINUUM OF CARE// [Type for the facility Code.]

## 5. Broker Context Menu Option Assignment

Assign Broker Context Menu [RMIMFIM] as a secondary menu item to anyone who will be using the FIM application.

## Options

The following options will be created during installation:

Option	Description
RMIM EDIT SITE PARAMETER	FIM Site Parameter Edit
RMIM NIGHTLY TRANSMISSION TASK	FIM to FSOD Transmission Task
RMIMFIM	RMIM FIM Context version 1.0.1.1
RMIMIT	FIM Retransmit all records to Austin
RMIM MAIL SERVER	RMIM Mail Server
RMIM MAIL SERVER REPORT	Austin Status Report for FSOD Transmissions
RMIM REPORTS	FIM Reports
RMIMCOORD MENU	FIM Coordinators Menu
RMIMXMIT	FIM to FSOD by Patient
RMIMXMIT DATE	FIM to FSOD by Transmission Date

## Key Assignment

Rehab Medicine Management will determine which roles will require which key.

The following keys will be created during installation:

- RMIM COORD-FIM/FSOD Coordinators
- RMIM FSOD- User who will be sending data to Austin

## Mail Groups

The following mail group will be created during installation:

- RMIM FSOD
- RMIM FSOD TRANSMISSION <adding members are not necessary>
- RMIM MAIL SERVER <adding members are not necessary>

## Protocols

RMIM DRIVER

RMIM SUBSCRIBER

## Exported RPCs

RMIM distributes the following remote procedure calls (RPCs):

RPC Name	Line Tag	Routine
RMIM AUTHOR LOOKUP	AL	RMIMR
RMIM CHECK DUPLICATE	DUP	RMIMV
RMIM CONSULT LIST	CON	RMIMV
RMIM CONVERT DATE	DTFMT	RMIMRP
RMIM FIM PARAMETER	PRM	RMIMRP
RMIM GET CASES	LC	RMIMRP
RMIM GET DFN	DFN	RMIMRP
RMIM GET FORM	FRM	RMIMRP
RMIM GET PATIENT DME	DME	RMIMRP
RMIM GET SELECTED CASE	GC	RMIMRP
RMIM GET USER INFO	DUZ	RMIMRP
RMIM LOCATION LOOKUP	LL	RMIMRP
RMIM LOCK PATIENT	PT L	RMIMRP
RMIM PATIENT INFO	PI	RMIMRP
RMIM PATIENT LOOKUP	PL	RMIMRP
RMIM RESTRICTED RECORD	RRN	RMIMRP
RMIM SAVE FSOD	SAV	RMIMRP
RMIM SEND EMAIL	XM	RMIMRP
RMIM VERSION	RPC	RMIMVP

## HL7 Application Parameters

RMIM AAC

RMIM SITE

## HL7 Logical Links

RMIM LINK

## **Bulletins**

No additional bulletins are created during the installation the Functional Independence Measurement.