



Clinical Case Registries
Immunology Case Registry
Installation Guide



ROR*1*5

February 2004

Department of Veterans Affairs

VistA Health System Design and Development

Revision History

Date	Description	Author
August 4, 2003	Format manual and input revisions	John Owczarzak
August 11, 2003	Input revisions	John Owczarzak
August 20, 2003	Input revisions	John Owczarzak
August 26, 2003	Final pass before submitting for Alpha testing	John Owczarzak
October 20, 2003	Add section on installing the GUI over previous version.	John Owczarzak
December 10, 2003	Update required builds, add warnings to set up HL7 task and links in test accounts, add required security keys for IRM and request LOINC mapping check for specified HIV tests.	Brent Hicks
December 15, 2003	Accept and review additions/revisions. Changed title and footer to match conventions.	John Owczarzak
January 7, 2004	Update security keys information in IRM Staff, Implementation Steps, and Step 1 sections. Added "Install during OFF-PEAK HOURS" message to the IRM Staff, Implementation Steps, and Step 1 sections. Updated the ROR TASK response in Step 2 section. Updated the LOINC codes in the IRM Staff, Implementation Steps, and Step 1 sections.	John Owczarzak
February 10, 2004	Changed title and footer to match updated conventions. Replaced ICR with CCR: ICR where applicable. Accepted and incorporated revisions from team review.	John Owczarzak
February 18, 2004	Update ICR test site information.	John Owczarzak

Table of Contents

Preface	1
Orientation	1
Recommended Users	1
Related Manuals	1
Software and Manual Retrieval	2
VistA Intranet	2
Online Help	2
Screen Displays and Text Notes	3
Introduction	4
Overview	4
Pre-Installation Information	5
Installation Summary	5
Test Sites	6
Hardware and Operating Systems Requirements	7
System Performance Capacity	7
Software Installation Time	7
Users on the System	7
Backup Routines	7
Name Space	7
New Files	7
VISTA Software Requirements	8
Required Patches	9
Health Level 7 (HL7)	9
Routine List	9
ICR Hardware and Software Requirements	11
ICR Workstation Requirements	11
<i>Software Requirements</i>	11
<i>Workstation Hardware Requirements and Guidelines</i>	11
Installation Instructions	12
Step 1: Assign IRM Security Keys and Check LOINC Mapping	12
Step 2: Load and Install Patch ROR*1*5	12
Step 3: Add ICR Local Coordinators	20
Step 4: Review the Results	21
Step 5: Set up the HL7 Link	21
Step 6: Add VA ICR to the ROR TASK Parameters	23
Step 7: Assign Security Keys to the Registry Coordinators	25
Step 8: Add the ICR Version Comparison Report and the Broker Context options to the ICR coordinators' secondary menus	26
Step 9: Set up the Graphic User Interface (GUI) for the ICR	26
<i>Prerequisite Steps for Setting Up the CCR-ICR GUI</i>	26
<i>Steps for Setting Up the ICR GUI</i>	28
<i>Installing the GUI Over a Previous Version</i>	37
<i>How to Uninstall the GUI</i>	38
Glossary	40
Acronyms and Terms	40

Preface

The Veterans Health Information System and Architecture (VistA) *Clinical Case Registries: Immunology Case Registry Installation Guide* provides assistance for installation, implementation, and maintenance of the CCR: ICR software.

Orientation

Pre-installation Information section provides information needed prior to installing ROR*1*5.

Installation Instructions section contains instructions and examples of ROR*1*5 installation process.

Implementation Instructions provides directions for implementing ROR*1*5.

Recommended Users

The Information Resource Management (IRM) staff is required for install and support of ROR*1*5.

Related Manuals

Clinical Case Registries: Immunology Case Registry Technical Manual/Security Guide

Clinical Case Registries: Immunology Case Registry User Manual

Software and Manual Retrieval

The CCR: ICR software files, Installation and Implementation Guide (i.e., ROR1_5IG.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

File Name	Contents	Retrieval Format	File Size
ROR1_0P5.KID	KIDS build	ASCII	2,621 KB
ROR1_0P5GUI.ZIP	Zipped GUI distributive	BINARY	4,347 KB
ROR1_0P5DOC.ZIP	Zipped DOC distributive Includes both PDF and DOC formats: <ul style="list-style-type: none">▶ Release Notes (ROR1_0P5RN)▶ Installation Guide (ROR1_0P5IG)▶ Technical Manual (ROR1_0P5TM)▶ User Manual (ROR1_0P5UM)	BINARY	9956 KB

VistA Intranet

Online documentation for this product is available on the Internet at the following address: <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 Immunology Case Registry documentation.

You can also access the Immunology Case Registry home page by using the following address:

<http://vista.med.va.gov/clinicalspecialties/> , then click on Immunology Case Registry link.

Online Help

Instructions, procedures, and other information are available from the Immunology Case Registry 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 CCR: ICR dialog open. Much of the information in the CCR: ICR User Manual is also in the CCR: ICR online Help.

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 only have to enter the first few letters. This increases speed and accuracy.

Every response you type must be followed by pressing **Return** (or **Enter** 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.

Computer dialogue appears in Courier font.

The following boxed format highlights special details about the topic being addressed:

 This boxed format highlights special details about the current topic.

Introduction

Overview

The primary goal of the Immunology Case Registry is to enhance the existing automated data collection system to transform it from an administrative database into a clinically relevant tool for patient management. The enhanced Immunology Case Registry will provide three main improvements:

1. Automated identification of new Human Immunodeficiency Virus (HIV) and Clinical Acquired Immunodeficiency Syndrome (AIDS) patients through a local VistA program
2. Efficient transmission of local VistA data to the HIV Registry through a change from Mailman to HL7 transmissions
3. Improved reporting formats for clinical use on both the national and local levels

The new system provides patient clinical data containing divisional information to be transferred to the national database.

Data from the Immunology Case Registry is used to monitor system-wide expenditures on HIV care, as well as to monitor national trends in adverse events, patient safety, quality of care and disease evolution across a large population of HIV patients. This enhanced ICR software also accomplish the following:

- Facilitate tracking of patient outcomes relating to antiretroviral Drug treatment (including those who defer or refuse treatment).
- Identify and track important trends in treatment response, adverse events, time on therapy.
- Match resources to clinical needs and utilization at local, VISN, and national levels.
- Monitor quality of care using both process and patient outcome measures.
- Verify workload for VERA reimbursement.

ROR*1*5 software will continue to automatically collect and update the local Immunology Case Registry list of patients with HIV. All these patients will have passed the pre-defined selection rules that identify a patient with HIV (i.e., ICD-9 code relating to HIV infection or positive resulted HIV-related lab test). Patients identified as possible HIV positive are placed in a pending state awaiting confirmation by local clinical staff. ICR data extraction and transmission will continue to be run automatically at night. The HIV Coordinator will have the ability to add patients to the local Immunology Case Registry list who have been missed through the automated capture process. In addition, functionality will be available to inactivate patients erroneously added to the Immunology Case Registry via the automated or manual process.

Each night a background process will transmit a set of predefined data via HL7 to the national HIV ICR for every active and recently inactivated patient in the local Immunology Case Registry. The CCR: ICR software creates a limited set of database elements to be stored locally in the VistA system, and focuses on assuring that a local listing is complete and accurate, that the desired data elements are extracted, and that data elements are appropriately transmitted to the HIV Immunology Case Registry.

Pre-Installation Information

The following information contains recommendations and requirements for the installation of VistA components for CCR: ICR software.

Installation Summary

There are several pieces of information that must be obtained before the implementation of the package. Below is a list of the required information.

- Ensure the IRM doing the install has the IMRA and ROR VA IRM security keys.
- Ensure via the lab ADPAC (or whomever maps Lab LOINC codes at the facility) that the local HIV antibody tests are mapped to one of the following LOINC codes:

HIV 1 AB	14092-1, 16974-8, 16975-5, 21007-0, 22356-0, 29327-4, 29893-5, 32571-2, 33866-5, 5220-9, 5221-7, 7917-8
HIV 1+2 AB	22357-8, 31201-7, 32602-5, 5223-3, 7918-6
HIV 2 AB	22358-6, 30361-0, 5224-1, 5225-8, 7919-4

 If you need assistance with the LOINC mapping process, a NOIS call may be entered to the Enterprise Vista Support - Health Data Systems team. This is a critical element which will ensure the correct patients are added into the ICR Registry.

- Load and install the patch ROR*1*5.

 In order to avoid termination/crashing of any running protocols that the ROR subscribes to, please **install during OFF-PEAK HOURS**. If you schedule the installation to automatically run during off-peak hours, please perform the actual scheduling process at the end of your business day.

 If you schedule the patch installation and then un-schedule it for any reason, please re-index the "AEP" cross-reference of the ENABLE PROTOCOLS field (#25) of the ROR REGISTRY PARAMETERS file (#798.1).

- Post-install routine of the patch schedules several tasks that search the data starting from 01/01/1985 until now and builds the registry. These tasks are processor intensive. Therefore, they will run during the off-peak hours only (from 8:00pm until 6:00am on weekdays and all weekends). The registry population tasks will be present in the system during the day but they will be in suspended state.
- The number of tasks and suspension parameters can be changed during the installation; however, they should be left as they are if a user is in doubt.
- When all registry population tasks finish, a VistA alert will be sent to the user who has initiated the installation and an e-mail notification will be sent to the AAC. The user should examine the logs, and if any serious errors were encountered during the registry population, they should be fixed, and the registry population process should be restarted using the [ROR SETUP] option.

- Only when the registry population is successfully completed, the "VA ICR" registry name can be entered into the TASK PARAMETERS field of the Clinical Case Registries nightly task (the [ROR TASK] option). The "VA ICR" (without double-quotes) should be added after the "VA HEPC" and separated from it by a comma.

 This step should not be performed in the mirror account.

- The 'RORICR SND' HL7 logical link must be started at this point. Please do not forget to enable 'Autostart' for it.

 The logical link **MUST NOT** be started in the test/training account.

- IRM should assign the appropriate security keys to the registry coordinators (either the ROR VA ICR USER or ROR VA ICR ADMIN).

The assignment of new security keys only allows access to the GUI software after the next run of the nightly task [ROR TASK]. If users want immediate access, use the Re-index the ACL cross-reference option in the Clinical Case Registries Maintenance [RORMNT MAIN] menu. Running this option will activate the keys immediately.

 The ROR VA ICR ADMIN key is enough to get full access to the software.

- IRM should now install the GUI for the coordinators and add the ICR Version Comparison Report [RORICR VERSION COMPARISON] to the ICR coordinators secondary menu; this marks the end of the installation as far as IRMs are concerned.
- Immunology Case Registry end-users need to run the Immunology Case Registry version comparison report now. This report shows all patients who are in Version 2.1 and not in CCR: ICR of the registry, all patients in CCR: ICR but not in Version 2.1, and all patients that appear in both versions of the registry (V.2.1 and CCR: ICR).
- In addition, coordinators can delete any patients who have been added to CCR: ICR incorrectly using the GUI. Those patients that are in the CCR: ICR of the registry, but not in V. 2.1 are marked as "pending" patients. The data for these patients will not be sent to AAC until someone confirms that they should be in the registry.

Test Sites

Immunology Case Registry software was tested at the following sites:

Test Sites	Alpha	Beta
Coatesville		✘
Fargo		✘
Fresno		✘
NY Harbor		✘
Palo Alto	✘	✘

Hardware and Operating Systems Requirements

CCR: ICR software runs on the standard hardware platforms used by the Department of Veterans Affairs Healthcare facilities. These systems consist of Alpha Clusters running VMS (version 7.2-1 minimum) and DSM (version 7.2.1 VA1), or an Alpha 1000A running Windows NT (service pack 6) and Cache M operating system (version 3.2.31.1), or Alpha Server Clusters running VMS V7.3 and Cache for Open VMS Version 4.1.16.

System Performance Capacity

There are no significant changes in the performance capacity of the VistA operating system once the CCR: ICR software is installed and after the registry has been created. The software should not create any appreciable global growth or network transmission problems. There are no memory constraints.

Software Installation Time

The estimated installation time is less than 20 minutes during off peak hours. However, the scheduled registry setup task, which performs initial population of the registry, can take several days to run, depending on the size of the site.

Users on the System

Users may remain on the system. However, HepC users cannot use the HepC GUI during the installation as the patch updates some routines and files common to both registries.

Backup Routines

It is highly recommended that a backup of the transport global be performed before installing the software.

Name Space

The VistA CCR: ICR software name space is ROR.

New Files

ROR AIDS INDICATOR DISEASE #799.49

ROR DATA AREA #799.33

ROR GENERIC DRUG #799.51

ROR ICR STUDY #799.4

ROR LIST ITEM #799.1

ROR REPORT PARAMETERS #799.34

ROR TASK #798.8

ROR XML ITEM # #799.31



All new files are stored in the already existing globals (either ^ROR or ^RORDATA). Therefore, no global allocation is required.

VISTA Software Requirements

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

Application Name	Minimum Version
Automated Information Collection System (AICS)	V 3.0
Adverse Reaction Tracking (ART)	V 4.0
Clinical Case Registries	V.1.0
Authorization/Subscription Utility (ASU)	V 1.0
Consult/Request Tracking	V 3.0
Gen. Med. Rec.-Vitals	V. 4.0
Health Summary	V. 2.7
HL7	V. 1.6
Inpatient Medications (IM)	V. 5.0
Kernel	V. 8.0
Laboratory	V. 5.2
Lexicon Utility	V. 2.0
National Drug File (NDF)	V. 4.0
Order Entry/Results Reporting (OE/RR)	V. 3.0
Outpatient Pharmacy	V. 7.0
Patient Care Encounter (PCE)	V. 1.0
Pharmacy Data Management (PDM)	V. 1.0
Problem List	V 2.0
Radiology/Nuclear Medicine	V 5.0
RPC Broker	V 1.1
Registration	V 5.3
Scheduling	V 5.3
Text Integration Utilities (TIU)	V 1.0
ToolKit	V. 7.3
VA FileMan	V. 22.0
Visit Tracking	V 2.0

Required Patches

Before the installation of the CCR: ICR software, the following patches **must** be installed.

Application Name	Patches
Automated Lab Instruments	LA*5.2*69
Clinical Case Registries	ROR*1.0*4
Health Level (HL7) V. 1.6	HL*1.6*56
	HL*1.6*57
Medicine (EKG)	MC*2.3*34
Pharmacy	PSN*4*79
Scheduling	SD*5.3*131

Health Level 7 (HL7)

Immunology Case Registry uses VistA HL7 V2.3.1 software application to transmit Immunology Case Registry data to the Austin Automation Center (AAC).

The HL7 protocol defines only the seventh level of the Open System Interconnect (OSI) Model. This is the application level. Levels 1 through 6 involve primarily communication protocols.

The TCP/IP network standard is used to support the Transport layer and Network layer of the interface. The Minimal Lower Layer Protocol (MLLP) is used to support the Presentation layer protocol for the interface and will encapsulate the HL7 V2.3.1 messages with start and end markers.

VistA will send a batch HL7 message and receive a commit acknowledgment over the same link. The link will then be disconnected. AAC will then process the batch then reconnect with the sending site using the standard HL7 logical link (port 5000) and send an application acknowledgment.

Routine List

The following table contains the routines included in Clinical Registries patch ROR*1*5:

ROR	ROR01	ROR02	ROR10	RORACK	RORACK01	RORAPI01
RORDD	RORDD01	RORENV01	RORENV02	RORERR	RORERR10	RORERR11
RORERR12	RORERR20	ROREVT01	ROREXP	ROREXT	ROREXT01	ROREXT02
ROREXTUT	RORHDT	RORHDT01	RORHDT02	RORHDT03	RORHDT04	RORHDT05
RORHDTAC	RORHDTUT	RORHL01	RORHL02	RORHL03	RORHL031	RORHL04
RORHL05	RORHL06	RORHL07	RORHL071	RORHL08	RORHL081	RORHL09
RORHL10	RORHL11	RORHL12	RORHL121	RORHL13	RORHL14	RORHL15

RORHL16	RORHL17	RORHL21	RORHL7	RORHL7A	RORHLUT1	RORICR01
RORICR02	RORICR03	RORICREX	RORICRUT	RORKIDS	RORLOCK	RORLOG
RORLOG01	RORNTEG	RORP003	RORP004	RORP005	RORP005B	RORPOS01
RORPOS02	RORPOS03	RORPOSU1	RORPRE01	RORPUT01	RORREP01	RORREP02
RORRP007	RORRP010	RORRP011	RORRP012	RORRP013	RORRP014	RORRP015
RORRP016	RORRP017	RORRP018	RORRP019	RORRP020	RORRP021	RORRP022
RORRP023	RORRP024	RORRP025	RORRP026	RORRP027	RORRP029	RORRP030
RORRP031	RORRP032	RORRP033	RORRP034	RORRP035	RORRP1	RORRP10
RORRP2	RORRP3	RORRP4	RORRP5	RORRP6	RORRP7	RORRP8
RORRP9	RORSET01	RORSETU1	RORSETU2	RORTSITE	RORTSK	RORTSK01
RORTSK02	RORTSK03	RORTSK10	RORTSK11	RORTXT	RORUPD	RORUPD01
RORUPD04	RORUPD05	RORUPD06	RORUPD07	RORUPD08	RORUPD09	RORUPD50
RORUPD51	RORUPD52	RORUPDUT	RORUPEX	RORUPP01	RORUPP02	RORUPR
RORUPR1	RORUTL01	RORUTL02	RORUTL03	RORUTL04	RORUTL05	RORUTL06
RORUTL07	RORUTL08	RORUTL09	RORUTL10	RORUTL11	RORUTL14	RORUTL15
RORUTL16	RORUTL17	RORVM001	RORX000	RORX001	RORX002	RORX003
RORX003A	RORX004	RORX005	RORX005A	RORX005B	RORX005C	RORX005U
RORX006	RORX006A	RORX006C	RORX007	RORX007A	RORX008	RORX008A
RORX009	RORX009A	RORX009C	RORX010	RORX011	RORX012	RORX012A
RORX013	RORX013A	RORX013C	RORX014	RORX014A	RORXU001	RORXU002
RORXU003	RORXU004	RORXU005	RORXU006	RORXU007		

ICR Hardware and Software Requirements



The request for workstations, servers, and cabling plants are beyond the basic upgrading of the facility's main computer cluster to the newer DEC Alpha systems to provide the additional capacity needed to run the ICR software and related applications (e.g., CPRS, TIU, PCMM, PDM).

VHA facilities are encouraged to budget and purchase PC workstations as replacements for dumb terminals. The VHA LAN and Workstation task force report is recommended as a guide.

ICR Workstation Requirements

Software Requirements

- Vista 's Remote Procedure Call (RPC) Broker Version 1.1 or greater software **must** be properly installed and configured on the ICR workstation.
- Microsoft Word 2000 or Office 2000.
- Microsoft Windows 2000 Professional or XP Professional.
- Microsoft Internet Explorer (version 5 or higher).

Workstation Hardware Requirements and Guidelines

- Please refer to the VA Standard Desktop Configuration, located here:
<http://vaww.vairm.vaco.va.gov/VADesktop/>

Installation Instructions

VistA Immunology Case Registry uses the Kernel Installation and Distribution System (KIDS). For further instructions on using KIDS, please refer to the *Kernel V. 8.0 Systems Manual*.

You should install patch ROR*1*5 during **off peak** hours when there are fewer users are on the system. Installation of this software takes less than **20** minutes (disregarding the time required for initial registry population).

Please perform each of these steps in sequence. Do not proceed to a step until the previous step is complete.

Step 1: Assign IRM Security Keys and Check LOINC Mapping

- Ensure the IRM performing the install has the IMRA and ROR VA IRM security keys.
- Ensure via the lab ADPAC (or whomever maps Lab LOINC codes at the facility) that the local HIV antibody tests are mapped to one of the following LOINC codes:

HIV 1 AB	14092-1, 16974-8, 16975-5, 21007-0, 22356-0, 29327-4, 29893-5, 32571-2, 33866-5, 5220-9, 5221-7, 7917-8
HIV 1+2 AB	22357-8, 31201-7, 32602-5, 5223-3, 7918-6
HIV 2 AB	22358-6, 30361-0, 5224-1, 5225-8, 7919-4

- If you need assistance with the LOINC mapping process, a NOIS call may be entered to the Enterprise Vista Support - Health Data Systems team. This is a critical element which will ensure the correct patients are added into the ICR Registry.

Step 2: Load and Install Patch ROR*1*5

 In order to avoid termination/crashing of any running protocols that the ROR subscribes to, please **Install during OFF-PEAK HOURS**. If you schedule the installation to automatically run during off-peak hours, please perform the actual scheduling process at the end of your business day.

From the Kernel Installation and Distribution Systems (KIDS) menu, select the Installation menu:

```
>D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT100

Select OPTION NAME: XPD MAIN      Kernel Installation & Distribution System

    Edits and Distribution ...
    Utilities ...
    Installation ...

Select Kernel Installation & Distribution System Option: Installation
```

Load the distribution to the transport global:

```
1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation Option: 1 Load a Distribution
Enter a Host File: ROR1_OP5.KID

KIDS Distribution saved on Aug 15, 2003@08:54:37
Comment: Clinical Case Registries (Immunology Case Registry v3.0)

This Distribution contains Transport Globals for the following Package(s):
  ROR*1.0*5
Distribution OK!

Want to Continue with Load? YES// <RET>
Loading Distribution...

Build ROR*1.0*5 has an Enviromental Check Routine
Want to RUN the Environment Check Routine? YES// <RET>
  ROR*1.0*5
Will first run the Environment Check Routine, RORP005

Use INSTALL NAME: ROR*1.0*5 to install this Distribution.
```

Verify checksums in the transport global:

```
1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation Option: 2 Verify Checksums in Transport Global
Select INSTALL NAME: ROR*1.0*5 Loaded from Distribution 8/15/03@08:55:59
=> Clinical Case Registries (Immunology Case Registry v3.0) ;Created on

This Distribution was loaded on Aug 15, 2003@08:55:59 with header of
  Clinical Case Registries (Immunology Case Registry v3.0) ;Created on
Aug 15, 2003@08:54:37
  It consisted of the following Install(s):
  ROR*1.0*5
DEVICE: HOME// <RET> TELNET

PACKAGE: ROR*1.0*5      Aug 15, 2003 8:58 am      PAGE 1
-----
```

171 Routine checked, 0 failed.

Backup the transport global:

- 1 Load a Distribution
- 2 Verify Checksums in Transport Global
- 3 Print Transport Global
- 4 Compare Transport Global to Current System
- 5 Backup a Transport Global
- 6 Install Package(s)
Restart Install of Package(s)
Unload a Distribution

Select Installation Option: **5** Backup a Transport Global
Select INSTALL NAME: **ROR*1.0*5** Loaded from Distribution
8/15/03@10:45:43
=> Clinical Case Registries (Immunology Case Registry v3.0) ;Created on

This Distribution was loaded on Aug 15, 2003@10:45:43 with header of
Clinical Case Registries (Immunology Case Registry v3.0) ;Created on
Aug 15, 2003@08:54:37

It consisted of the following Install(s):
ROR*1.0*5

Subject: Backup of ROR*1.0*5 install on Aug 15, 2003
Replace **<RET>**

Loading Routines for
ROR*1.0*5.....
.....

Send mail to: SMITH,JOHN// **<RET>**
Select basket to send to: IN// **<RET>**
And Send to: **<RET>**

Start the installation of the package.



During the following installation, the user will be prompted to enter parameters that govern the processing times of the task that populates the Immunology Case Registry.

Some sites may not want to have several update jobs running during peak hours. Entering suspension start and stop times during the update can alleviate this problem. During the hours in between the start and stop times, the update tasks will suspend their processing, thus freeing up the processor. The following is a screen shot of this part of the install.

```
Schedule the registry setup task? YES// <RET>
Maximum number of registry update subtasks: (0-10): 5// 3
Suspend the post-install during the peak hours? YES// <RET>
Suspension start time: 6:00AM// <RET>
Suspension end time: 8:00PM// <RET>
```

After the time tasked job(s) are due to begin, (no sooner than three minutes after), verify that the registry update task and several subtasks (if the site has more than 100,000 records in the PATIENT file (#2)) have started.

```
1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation Option: 6  Install Package(s)
Select INSTALL NAME: ROR*1.0*5  Loaded from Distribution 8/7/03@14:22:03
=> Clinical Case Registries (Immunology Case Registry v3.0) ;Created on

This Distribution was loaded on Aug 07, 2003@14:22:03 with header of
Clinical Case Registries (Immunology Case Registry v3.0)
It consisted of the following Install(s):
ROR*1.0*5
Checking Install for Package ROR*1.0*5
Will first run the Environment Check Routine, RORP005

The [ROR TASK] option is scheduled to run on Aug 08, 2003 at 2:00.
If you are going to schedule the installation, please, choose an
appropriate time so that the post-install will either finish well
before the [ROR TASK] scheduled time or start after the option
completion.

Install Questions for ROR*1.0*5

Incoming Files:

798      ROR LOCAL REGISTRY
Note: You already have the 'ROR LOCAL REGISTRY' File.

798.1    ROR REGISTRY PARAMETERS (including data)
Note: You already have the 'ROR REGISTRY PARAMETERS' File.
I will OVERWRITE your data with mine.
```

```
798.2      ROR SELECTION RULE  (including data)
Note:  You already have the 'ROR SELECTION RULE' File.
I will OVERWRITE your data with mine.

798.3      ROR PENDING PATIENT  (Partial Definition)
Note:  You already have the 'ROR PENDING PATIENT' File.

798.4      ROR PATIENT
Note:  You already have the 'ROR PATIENT' File.

798.5      ROR HDT TASK
Note:  You already have the 'ROR HDT TASK' File.

798.7      ROR LOG
Note:  You already have the 'ROR LOG' File.

798.8      ROR TASK

798.9      ROR LAB SEARCH  (including data)
Note:  You already have the 'ROR LAB SEARCH' File.
I will MERGE your data with mine.

799.1      ROR LIST ITEM  (including data)
Note:  You already have the 'ROR LIST ITEM' File.
I will OVERWRITE your data with mine.

799.31     ROR XML ITEM  (including data)

799.33     ROR DATA AREA  (including data)

799.34     ROR REPORT PARAMETERS  (including data)

799.4      ROR ICR STUDY

799.49     ROR AIDS INDICATOR DISEASE  (including data)

799.51     ROR GENERIC DRUG  (including data)

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

Schedule the registry setup task? YES// <RET>
Maximum number of registry update subtasks:  (0-10): 5// <RET>
Suspend the post-install during the peak hours? YES// <RET>
Suspension start time: 6:00AM// ?

- - - - -
Registry update subtasks will be suspended after this time
every day except the weekends and holidays. However, they
will be checking for a stop request every hour during the
suspension.
- - - - -

Enter time of the day (e.g. 8AM).

Suspension start time: 6:00AM// 6:30AM
Suspension end time: 8:00PM// 7PM

=====
Number of registry update (sub)tasks... 5
```

```

Suspend the tasks during peak hours.... Yes
Suspend the tasks at..... 06:30
Resume the tasks at..... 19:00
=====

Are you sure? YES

Want KIDS to INHIBIT LOGONS during the install? NO

Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES

Enter options you wish to mark as 'Out Of Order': ROR TASK

Enter protocols you wish to mark as 'Out Of Order': <RET>

Enter protocols you wish to mark as 'Out Of Order': ROR*

Enter protocols you wish to mark as 'Out Of Order': <RET>

Delay Install (Minutes): (0-60): 0// 1

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// <RET> TELNET

Install Started for ROR*1.0*5 :
      Aug 07, 2003@14:27:10

Build Distribution Date: Aug 07, 2003

Installing Routines:
      Aug 07, 2003@14:27:12

Running Pre-Install Routine: PRE^RORP005

Deleting the subfile #798.19...
The subfile has been deleted.

Deleting the subfile #798.32...
The subfile has been deleted.

Installing Data Dictionaries: .
      Aug 07, 2003@14:27:15

Installing Data:

** ERROR IN POINTER RESOLUTION OF DATA **
Unable to find exact match and resolve pointer (^ORD(101, Entry:RORICR-
SITE-DRIVER)).
      Jan 27, 2004@10:51:18

Installing PACKAGE COMPONENTS:

Installing SECURITY KEY

Installing FUNCTION

```

```

Installing INPUT TEMPLATE

Installing DIALOG

Installing HL LOGICAL LINK

Installing PROTOCOL
  Located in the ROR (CLINICAL CASE REGISTRIES) namespace.
  Located in the ROR (CLINICAL CASE REGISTRIES) namespace.

Installing REMOTE PROCEDURE

Installing OPTION

Installing PARAMETER DEFINITION
      Aug 07, 2003@14:27:19

Running Post-Install Routine: POS^RORP005

  Re-indexing new cross-references...
  The cross-references have been rebuilt.

  Updating HepC registry parameters...
  The parameters have been updated successfully.

  Updating the ICR registry parameters...
  The parameters have been updated successfully.

  Restoring the CDC definition...
  The definition has been restored successfully.

  Removing obsolete items from the drug list...
  000004198809, 000004199309, 000004200509, 000004200709
  000004201009, 000004201109, 000004201209, 000004201607
  000004201609, 000004201707, 000004201709, 000004690033
  000085012002, 000085012003, 000085012004, 000085028502
  000085053901, 000085057102, 000085057106, 000085068901
  000085076901, 000085092301, 000085095301, 000085111001
  000085113301, 000085116801, 000085117901, 000085117902
  000085119101, 000085119102
  The drug list has been updated successfully.

  Converting the mapping of the local lab tests...
  The conversion has been completed successfully.

  The registry setup task #471268 has been scheduled.

Updating Routine file...

Updating KIDS files...

ROR*1.0*5 Installed.
      Aug 07, 2003@14:27:21

Install Message sent

Install Completed

```

Check that the registry population task has been scheduled.

Using Taskman, check that TASK^RORSET01 is scheduled in Taskman to run at the time specified during the install.

```
>D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT100

Select OPTION NAME: Systems Manager Menu

      Core Applications ...
      Device Management ...
FM    VA FileMan ...
      Manage Mailman ...
      Menu Management ...
      Programmer Options ...
      Operations Management ...
      Spool Management ...
      Information Security Officer Menu ...
      Taskman Management ...
      User Management ...
      Application Utilities ...
      Capacity Management ...
      HL7 Main Menu ...

Select Systems Manager Menu Option: Taskman Management

      Schedule/Unschedule Options
      One-time Option Queue
      Taskman Management Utilities ...
      List Tasks
      Dequeue Tasks
      Requeue Tasks
      Delete Tasks
      Print Options that are Scheduled to run
      Cleanup Task List
      Print Options Recommended for Queueing

Select Taskman Management Option: List Tasks

      List Tasks Option

      All your tasks.
      Your future tasks.
      Every task.
      List of tasks.
      Unsuccessful tasks.
      Future tasks.
      Tasks waiting for devices.
      Waiting list for a device.
      Running tasks.

      Select Type Of Listing: All of your tasks.....finished!

DEVICE: HOME// <RET> TELNET
```

```
Task list Aug 07, 2003 3:50 pm Page 1
-----
471263: TASK^RORSET01, Registry setup (VA ICR). No device. TST,DEV.
        From Today at 13:54, By you. Scheduled for Today at 18:00
-----
471296: EN^GMRCIBKG, IF Consults background error processor. No device.
        EVL,DEV. From Today at 15:45, By POSTMASTER.
        Scheduled for Today at 16:45
```

 If you schedule the patch installation and then un-schedule it by any reason, please re-index the "AEP" cross-reference of the ENABLE PROTOCOLS field (#25) of the ROR REGISTRY PARAMETERS file (#798.1).

It is possible to stop the registry update subtasks within the Toolbox option. All tasks will be terminated when any one task is stopped. Tasks complete the patient they are currently processing before stopping; therefore, it can take a few minutes to see that these tasks have been removed from TaskMan. Allow five minutes before checking TaskMan. When the update is re-started, the patients already processed during the previously stopped tasks (whether they were added to the registry or not) are skipped, but only if working in multitask mode.

You will receive VA alerts after successful completion of the ICR update process. An e-mail notification will be sent to the AAC at the same time.

Step 3: Add ICR Local Coordinators

Immunology Case Registry local coordinators must be added to the COORDINATOR field (#14) in the ICR REGISTRY PARAMETERS file (#798.1). All users (from the NEW PERSON file (#200)) added to this multiple receive alerts in the event of problems with the regular registry updates and data transmissions.

Review the registry parameters and define a list of registry coordinators in the ICR REGISTRY PARAMETERS file (#798.1) using the Edit Registry Parameters [RORMNT EDIT REG PARAMS] menu option:

 At the time of installation, patient data is checked back to January 1, 1985.

```
>D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT100

Select OPTION NAME:  RORMNT MAIN      Clinical Case Registries Maintenance

ACL   Re-index the ACL cross-reference
EAA   Edit 'Awaiting ACK' flag
ELS   Edit Lab Search Criteria
ERP   Edit Registry Parameters
PLF   Print Log Files
PP    Pending Patients ...
```

```
Select Clinical Case Registries Maintenance Option: ERP Edit Registry
Parameters

Select ROR REGISTRY PARAMETERS REGISTRY NAME: VA ICR Immunology Case
Registry
REGISTRY UPDATED UNTIL: (see note below)/ <RET>
DATA EXTRACTED UNTIL: JAN 1,1985// <RET>
EXTRACT PERIOD FOR NEW PATIENT: 5475// <RET>
ENABLE LOG: YES// <RET>
Select LOG EVENT TYPE: <RET>
REGISTRY STATUS: <RET>
Select COORDINATOR: HICKS,BRENT BH IRM FIELD OFFICE
INFORMATION RESOURCE MANAGEMENT
Are you adding 'HICKS,BRENT' as a new COORDINATOR (the 1ST for this ROR
REGISTRY PARAMETERS)? No// Y
(Yes)
Select COORDINATOR: GAVRILOV,SERGEY SG IRM FIELD OFFICE
Are you adding 'GAVRILOV,SERGEY' as a new COORDINATOR (the 2ND for this
ROR REGISTRY PARAMETERS)? No// Y
(Yes)
Select COORDINATOR: <RET>
LAG DAYS: 7// <RET>
DAYS TO WAIT FOR ACK: 1// <RET>
NUMBER OF RETRIES FOR ALERT: 2// <RET>
ENABLE PROTOCOLS: YES// <RET>
MAXIMUM MESSAGE SIZE: 5// <RET>
```

 The value of the REGISTRY UPDATED UNTIL field depends on the date of package installation. It must be anything but JAN 1, 1985 after successful completion of the initial registry population! If the field value is JAN 1, 1985, review the results (see Step 4), fix the error(s), and restart the registry setup using the Registry Setup [ROR SETUP] menu option.

Step 4: Review the Results

- You will receive an alert after successful completion of the registry update.
- Review the content of the package entry in the INSTALL file (#9.7) and error logs in the ROR LOG file (#798.7). You can use Print Log Files option [RORMNT PRINT LOGS] of the Clinical Case Registries Maintenance [RORMNT MAIN] menu to print the error logs.
- Review the patients who had errors during processing their data. If some of those patients must be added to the registry, you have to either fix the errors and restart the registry setup or add the patients manually using the GUI (if the initial population of the registry takes a lot of time). The registry setup can be restarted using the Registry Setup [ROR SETUP] menu option.

 If you cannot resolve the problem(s) yourself or have any doubts, please log a NOIS and wait for resolution.

Step 5: Set up the HL7 Link

 Do not perform this step in the mirror/training account.

Review the parameters of the package HL7 logical link and start it up. The RORICR SND link is exported with the KIDS build. The VistA HL7 package manages and sends the batch HL7 messages to AAC using this link.

Go to the Filer and Link Management Options menu and start the link:

```
>D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT320

Select OPTION NAME: Systems Manager Menu

      Core Applications ...
      Device Management ...
FM    VA FileMan ...
      Manage Mailman ...
      Menu Management ...
      Programmer Options ...
      Operations Management ...
      Spool Management ...
      System Security ...
      Taskman Management ...
      User Management ...
PG    Programmer mode
      Application Utilities ...
      Capacity Management ...
      HL7 Main Menu ...

Select Systems Manager Menu Option: HL7 Main Menu

      Systems Link Monitor
      Filer and Link Management Options ...
      Message Management Options ...
      Interface Developer Options ...
      Site Parameter Edit

Select HL7 Main Menu Option: Filer and Link Management Options

SM    Systems Link Monitor
FM    Monitor, Start, Stop Filers
LM    TCP Link Manager Start/Stop
SA    Stop All Messaging Background Processes
RA    Restart/Start All Links and Filers
DF    Default Filers Startup
SL    Start/Stop Links
PI    Ping (TCP Only)
ED    Link Edit
ER    Link Errors ...

Select Filer and Link Management Options Option: SL 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: RORICR SND
```

```
The LLP was last shutdown on JAN 17, 2002 11:18:11.
This LLP has been enabled!
```

It is advised to start the link monitor and make sure that the link started:

```
SM      Systems Link Monitor
FM      Monitor, Start, Stop Filers
LM      TCP Link Manager Start/Stop
SA      Stop All Messaging Background Processes
RA      Restart/Start All Links and Filers
DF      Default Filers Startup
SL      Start/Stop Links
PI      Ping (TCP Only)
ED      Link Edit
ER      Link Errors ...

Select Filer and Link Management Options Option: SM Systems Link Monitor

                SYSTEM LINK MONITOR for PALO ALTO HCS (T System)

      NODE          MESSAGES RECEIVED  MESSAGES PROCESSED  MESSAGES TO SEND  MESSAGES SENT  DEVICE TYPE  STATE
      PCMM          70110             70110             221396           221396         MM          Halting
      PRCPFROM      52840             52840             52840            52840         SS          Halting
      PRCPSSOM      5898              5898              5898             5898         PC          Halting
      ROR SEND      8                 8                 13               8             NC          Inactive
  -> RORICR S
      SPN           3683             3683             3683             3683         MM          Halting
      VAALB         15661            15661            16619            16633         NC          Shutdown
      VAALT         526              526              575              575          NC          Shutdown
      VAALX         1540             1540             1658             1658         NC          Shutdown
      VAAMA         3034             3034             3229             3230         NC          Shutdown

      Incoming filers running => 1          TaskMan running
      Outgoing filers running => 1         Link Manager running

      Select a Command:
      (N)EXT (B)ACKUP (A)LL LINKS (S)CREENED (V)IEWS (Q)UIT (?) HELP:
```

Close the link monitor using the 'Q' command.

Step 6: Add VA ICR to the ROR TASK Parameters



These steps must be taken in order. Do not proceed with Step 6 unless the registry creation is complete (i.e. a VA Alert has been issued indication that the ICR registry has been created).

Also, note that this step must not be performed in the mirror/training account.

The [ROR TASK] menu option is currently scheduled (via Taskman) for nightly execution of the update and data extract for the Hepatitis C registry. The option performs the following:

- Extracts registry names from the task parameters
- Rebuilds the "ACL" cross-reference of the ROR REGISTRY PARAMETERS file to activate the security keys allocated since the previous run.

- Clears expired Awaiting Acknowledgement flags for the registries from the list
- Excludes inactive registries and registries that have data sent to the AAC but have no acknowledgements from the list
- Runs the registry update process for the remaining registries
- Starts an individual data extraction task (TASK^ROREXT) for each updated registry
- Purges the logs older than 14 days from the ROR LOG file
- Purges the old event references from the ROR PENDING PATIENT file (#798.3).

When the registry population is successfully completed, the "VA ICR" registry name can be entered into the TASK PARAMETERS field of the Clinical Case Registries nightly task (the [ROR TASK] option).

The "VA ICR" (without double-quotes) should be added after the "VA HEPC" and separated from it by a comma:

```

Core Applications ...
Device Management ...
FM  VA FileMan ...
    Manage Mailman ...
    Menu Management ...
    Programmer Options ...
Operations Management ...
Spool Management ...
System Security ...
Taskman Management ...
User Management ...
PG  Programmer mode
    Application Utilities ...
    Capacity Management ...
    HL7 Main Menu ...

Select Systems Manager Menu Option: Taskman Management

    Schedule/Unschedule Options
    One-time Option Queue
    Taskman Management Utilities ...
    List Tasks
Dequeue Tasks
Requeue Tasks
Delete Tasks
Print Options that are Scheduled to run
Cleanup Task List
Print Options Recommended for Queueing

Select Taskman Management Option: Schedule/Unschedule Options

Select OPTION to schedule or reschedule: ROR TASK   Registry Update &
Data Extraction
...OK? Yes// <RET>   (Yes)
(R)

    Edit Option Schedule
Option Name: ROR TASK
Menu Text: Registry Update & Data Extractio           TASK ID: 474186

```

```

QUEUED TO RUN AT WHAT TIME: AUG 7,2003@18:00
DEVICE FOR QUEUED JOB OUTPUT:
QUEUED TO RUN ON VOLUME SET:
RESCHEDULING FREQUENCY: 1D
TASK PARAMETERS: VA HEPC,VA ICR
SPECIAL QUEUEING:

Exit      Save      Next Page      Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND:                                     Press <PF1>H for help   Insert

```

*Exit the screen form using the 'E' command and save the data.

*Before exiting, it is recommended to proceed to the Next Page and add the RORSUSP and RORMNTSK task parameters. Specifying these parameters may help to decrease the time it takes for subsequent registry population:

```

                                Edit Option Schedule
Option Name: ROR TASK
-----
VARIABLE NAME: RORSUSP                VALUE: "07:00-19:00"
VARIABLE NAME: RORMNTSK              VALUE: "5-3-AUTO"
VARIABLE NAME:                       VALUE:
VARIABLE NAME:                       VALUE:
VARIABLE NAME:                       VALUE:

Exit      Save      Refresh

Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND:                                     Press <PF1>H for help   Insert

```

If the task is terminated by a user request or because of errors during the executions, an alert is sent to the users defined as the registry coordinators (the COORDINATOR multiple of the REGISTRY PARAMETERS file) of all registries being updated.

Step 7: Assign Security Keys to the Registry Coordinators

IRM should assign the appropriate security keys to the registry coordinators (either the ROR VA ICR USER or ROR VA ICR ADMIN).

The assignment of new security keys only allows access to the GUI software after the next run of the nightly task [ROR TASK]. If users want immediate access use the Re-index the ACL cross-reference option in the Clinical Case Registries Maintenance [RORMNT MAIN] menu. Running this option will activate the keys immediately.

 The ROR VA ICR ADMIN key is enough to get full access to the software.

Step 8: Add the ICR Version Comparison Report and the Broker Context options to the ICR coordinators' secondary menus

IRMs will need to add the ICR Version Comparison Report [RORICR VERSION COMPARISON] and the Broker Context [ROR GUI] to the ICR coordinators' secondary menus.

Step 9: Set up the Graphic User Interface (GUI) for the ICR

After the Immunology Case Registry KIDS build has been installed, and the initial registry population is complete, the following instructions **must** be applied for the Immunology Case Registry GUI software to function as designed.

The local coordinator installing Immunology Case Registry GUI on a Windows XP or Windows 2000 environment **must** have Administrator privileges on their PC Workstation.



The Immunology Case Registry GUI software application **must** be installed on a mouse-driven PC Workstation.

Prerequisite Steps for Setting Up the CCR-ICR GUI

1. Assign the Broker Context [ROR GUI] option as a secondary menu item to everyone who will be using the GUI.
2. Ensure that Immunology Case Registry users are allocated the correct user security keys.
 - ROR VA ICR ADMIN – This key will allow access to the complete GUI system
 - ROR VA ICR USER – This key will allow access to just the reports and the activity log.
3. Make sure the Vista servers are listed in the HOSTS file. If necessary, modify the HOSTS file of each client (PC) to set the appropriate mappings between names and IP addresses. The HOSTS file is located as follows:

Version of Windows OS	File (Location and Name)
Windows XP	C:\WINDOWS\SYSTEM32\DRIVERS\ETC\HOSTS
Windows 2000	C:\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS

Example of a Windows HOSTS file

```
# Copyright (c) 1994 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Chicago
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com           # source server
#       38.25.63.10      x.acme.com             # x client host
#
#
```

- a. Move the cursor to the end of the last line displayed in the file.
- b. Press the <Enter> key to create a new line.
- c. On the new line, enter the desired IP address beginning in the first column, as described in the example above. As recommended, add an appropriate IP address for the DHCPSEVER host name as the next entry below 127.0.0.1.

After typing the IP address, type at least one space and enter the host name that corresponds to that IP address. As recommended, type in DHCPSEVER as the next entry below "loopback."

For example, the entry for a server at your site with an IP address of 192.1.1.1 would look like the following:

```
127.0.0.1    localhost    # loopback <---existing entry
192.1.1.1    DHCPSEVER   # HepC & ICR <---added entry
```

4. Repeat steps a - c until you have entered all of the IP addresses and corresponding host names you wish to enter.
5. When your entries are complete, use Notepad's **File | Save** command to save the HOSTS file.



Do not save the HOSTS file with an extension.

6. Close the HOSTS file.



The HOSTS file location on NT 4.0 Client is different from on WIN95. The ICR executable attempts — using RPC Broker — to log in to the default Vista server when ICR executes. RPC Broker cannot find the HOSTS file, so it uses the default.

For more information, see the *RPC Broker V.1.1 Systems Manual*.

Steps for Setting Up the ICR GUI

1. Copy installation package (file CCRSetup.exe) to the temporary directory on the workstation or put the file in a shared directory on the network.
2. Run CCRSetup.exe by clicking **Start | Run | CCRSetup.exe**.
3. Follow the instructions of the installation program
4. Configure the application shortcut parameters.

You are now ready to start the Immunology Case Registry software application by double-clicking on the Immunology Case Registry Desktop shortcut icon you just updated.

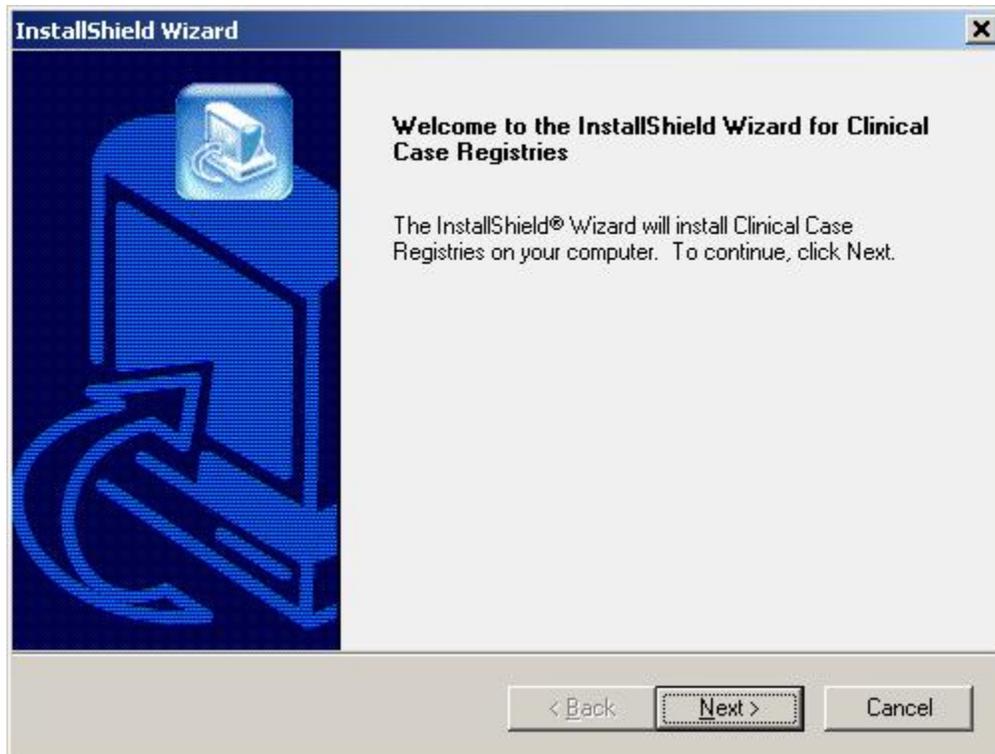
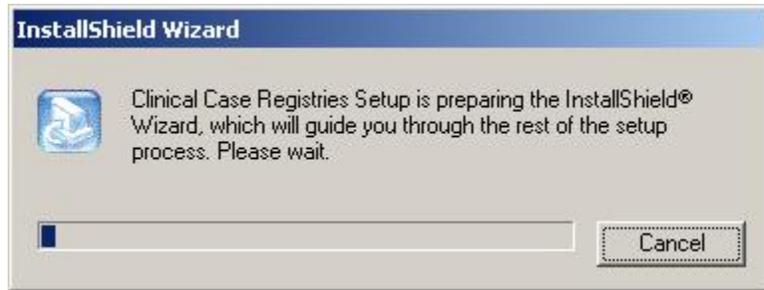
The remainder of this section describes steps 3 and 4 in detail.

Application installation example

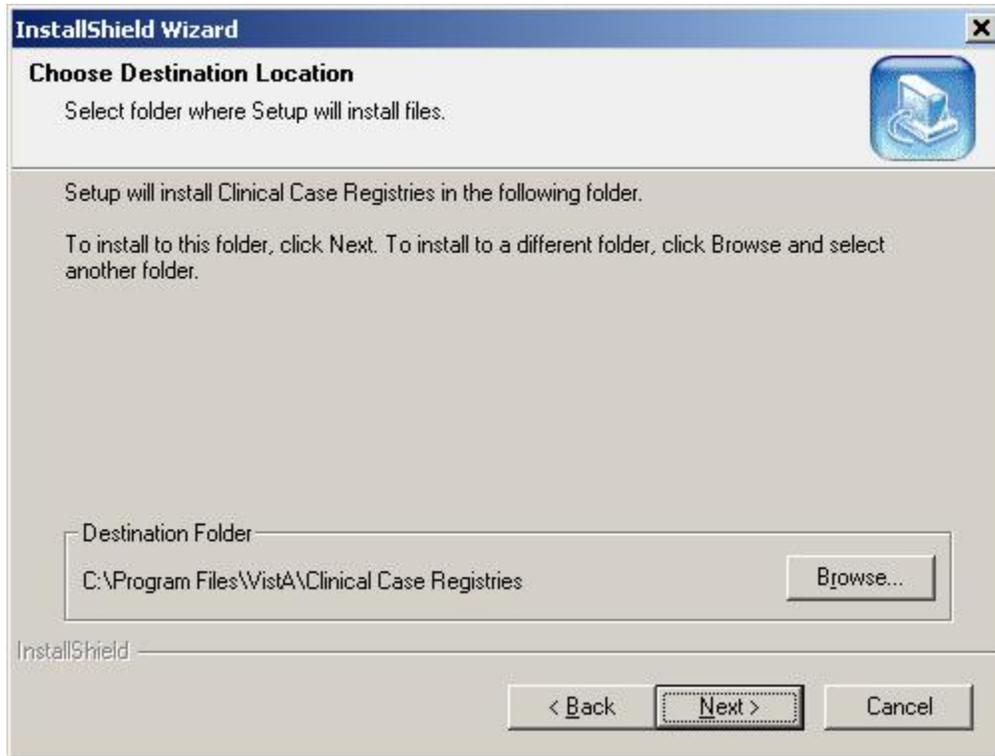
1. Run CCRSetup.exe clicking **Start | Run | CCRSetup.exe**.

Wait until the InstallShield Wizard prepares the setup procedure.





2. Click **Next** to continue the installation

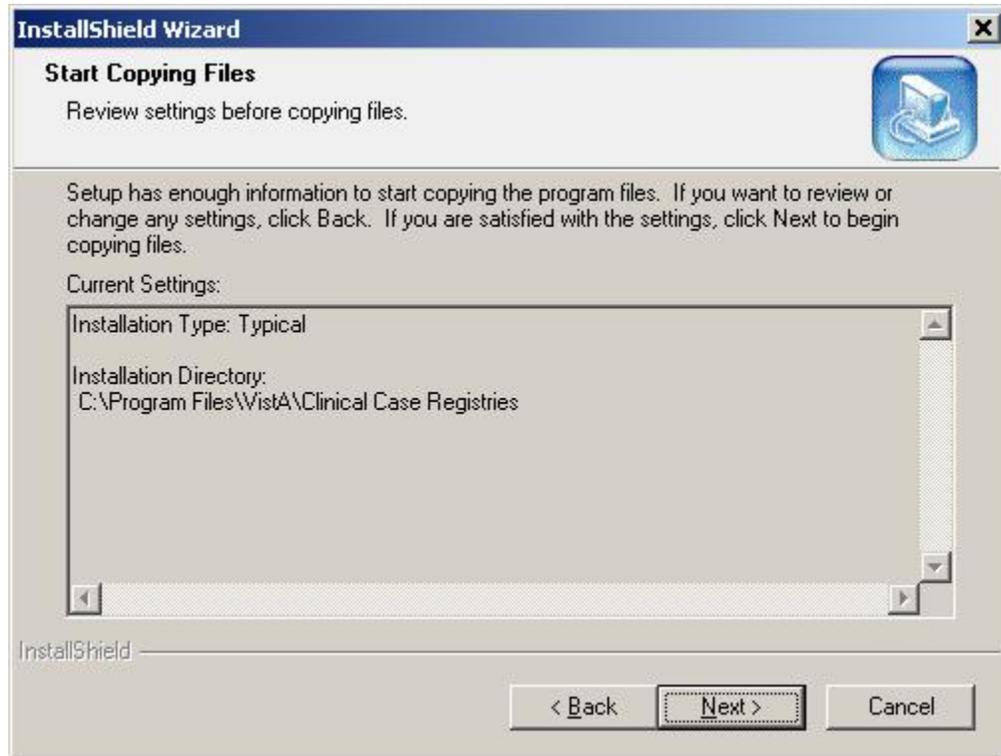


3. Select the directory in which to install the CCR GUI. We recommend that you accept the default directory you are offered: “C:\Program Files\Vista\Clinical Case Registries”. To select a different location, click **Browse** and select the directory. Click **Next** to proceed with installation.

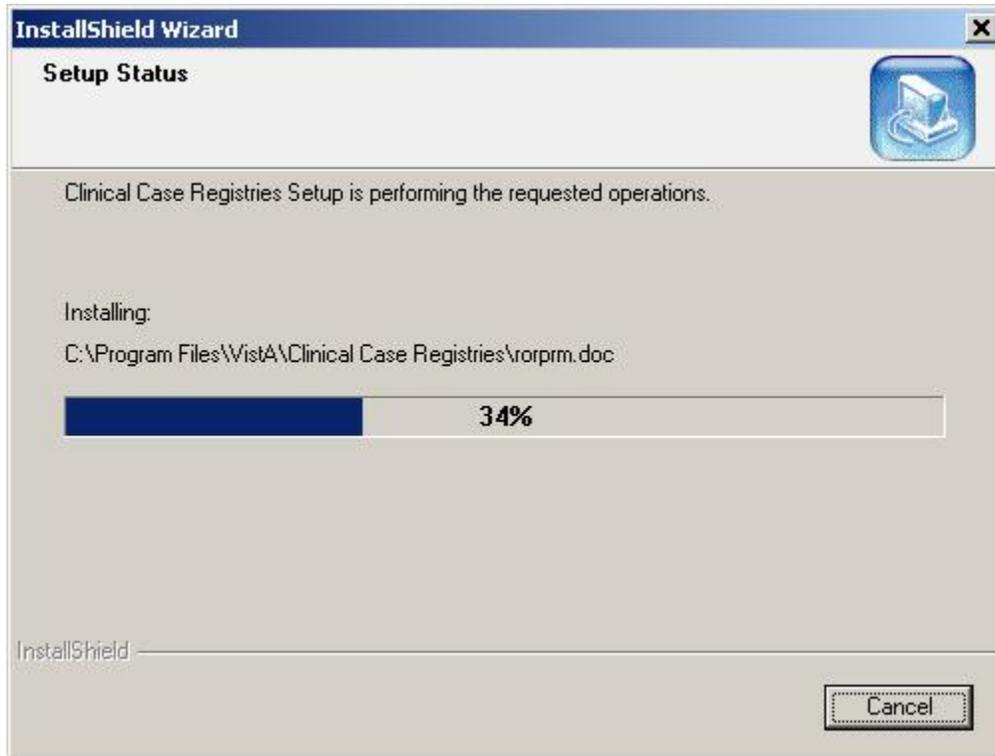


4. During the “Typical” installation, all the files will be copied to your PC. During the “Compact” installation, only application executable will be copied. The “Custom” installation lets you select what files to install. We recommend the “Typical” type for the initial installation.

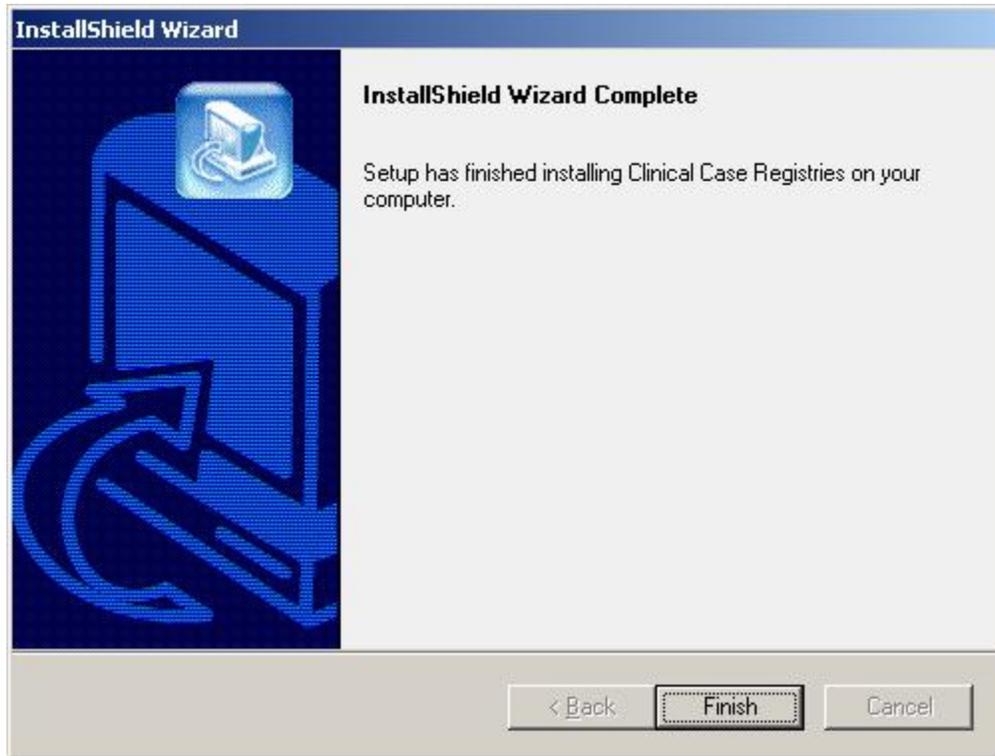
Select installation type and click **Next** to proceed with installation



5. Review the installation settings and click **Next** to proceed.



6. Wait until the InstallShield Wizard finishes the installation.



7. Click **Finish**.

Configuration of the application shortcut

The installation program will place a shortcut to the CCR GUI on the desktop of your PC. You need to update the parameters of the shortcut in order to address the correct Vista server.

The following is an example of the procedure to change the shortcut parameters in the Windows XP environment.

To update the shortcut parameters:

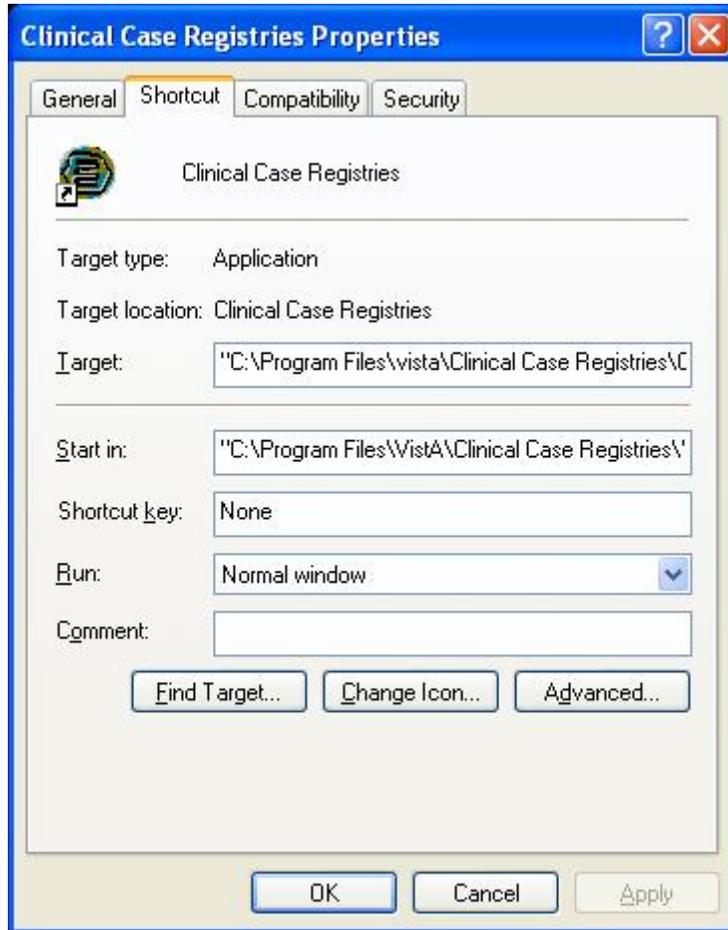
1. Place the mouse cursor on the shortcut and click the right mouse button.

The context menu for the shortcut will appear.

2. Click **Properties**.

The Properties window for the shortcut will appear.

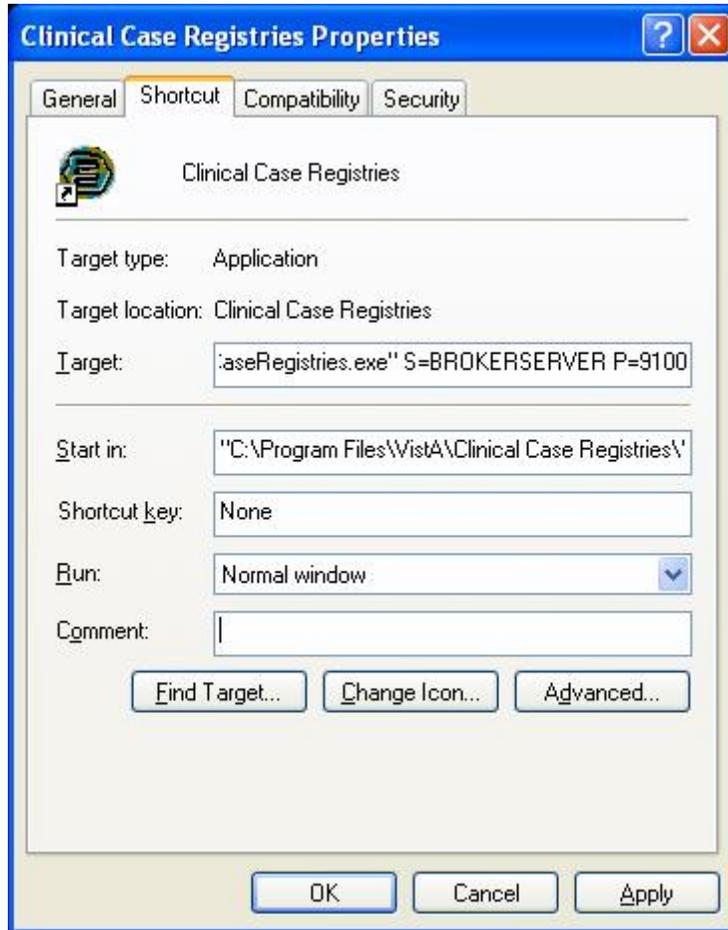
Note that the “Target” field specifies the path to the application.



3. Add parameters after the closing quote at the end of the “Target” field. Do **not** change the application path.

In the following example, we added parameters to define the broker server as “BROKERSERVER” and the port as “9100”.

S=BROKERSERVER P=9100



You need to specify the server name assigned to your server in the host file.

For example, if the server name is “DHCPSEVER” , the corresponding parameter would be:

S=DHCPSEVER

4. Click **Apply** to save your changes.

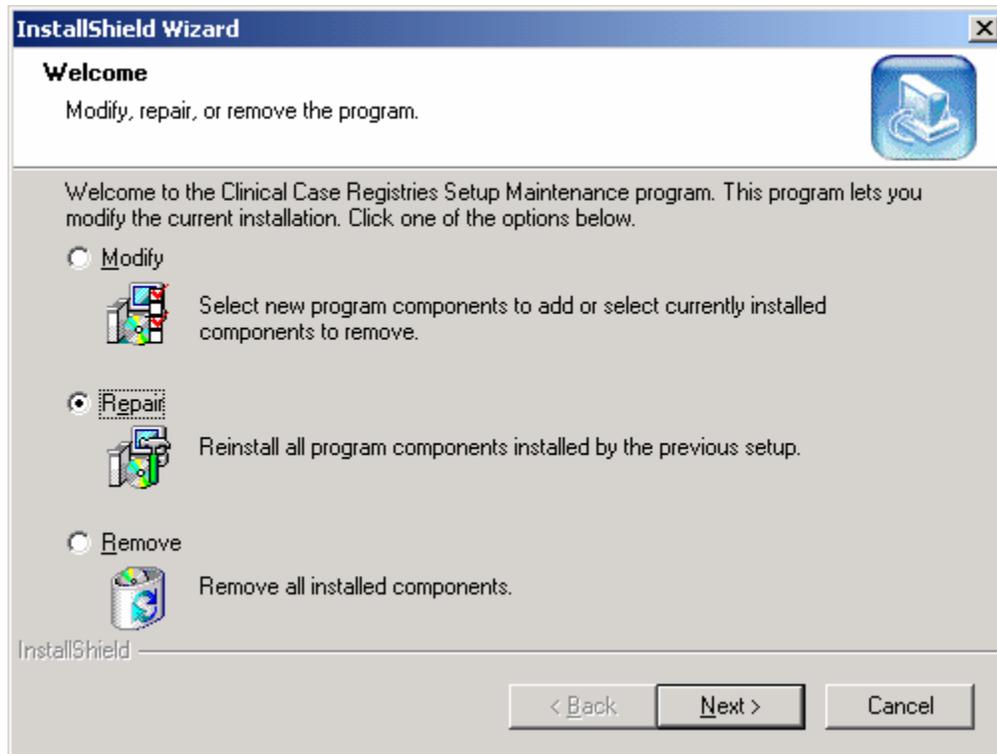
Installing the GUI Over a Previous Version



Although uninstalling the GUI before installing a new version is recommended (see [How to uninstall the GUI](#)), you can update the GUI without uninstalling previous versions.

To install the GUI over a previous version, perform the following:

1. Start the CCRSetup.exe

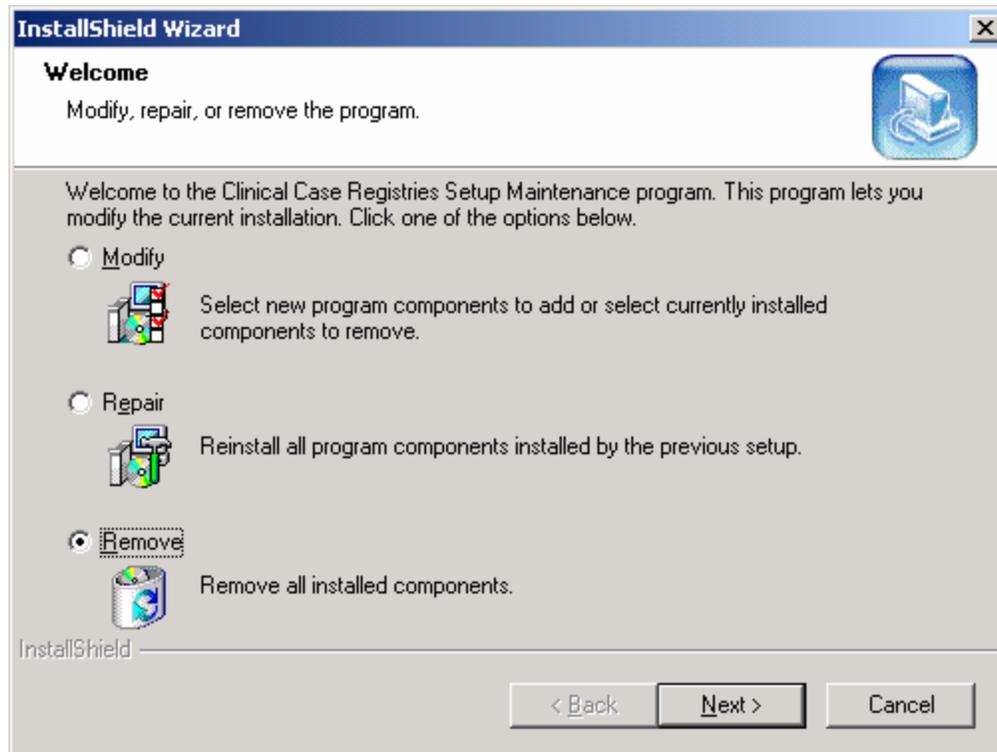


2. Select the **Repair** option and click **Next**.

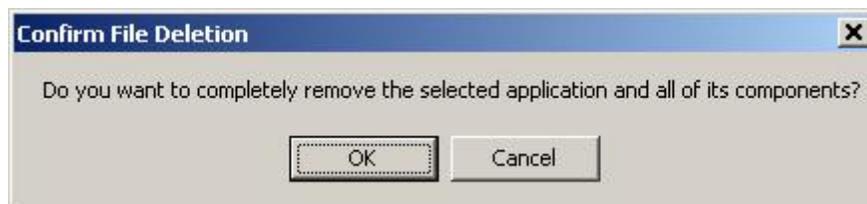
Choosing **Repair** will over-write previously installed components in the path and refresh the settings for your desktop icon. You will, however, need to modify the shortcut to point to the ICR database (see *Configuration of the application shortcut* in [Steps for setting up the ICR GUI](#)).

How to Uninstall the GUI

1. Start the CCRSetup.exe



2. Select the **Remove** option and click **Next**.

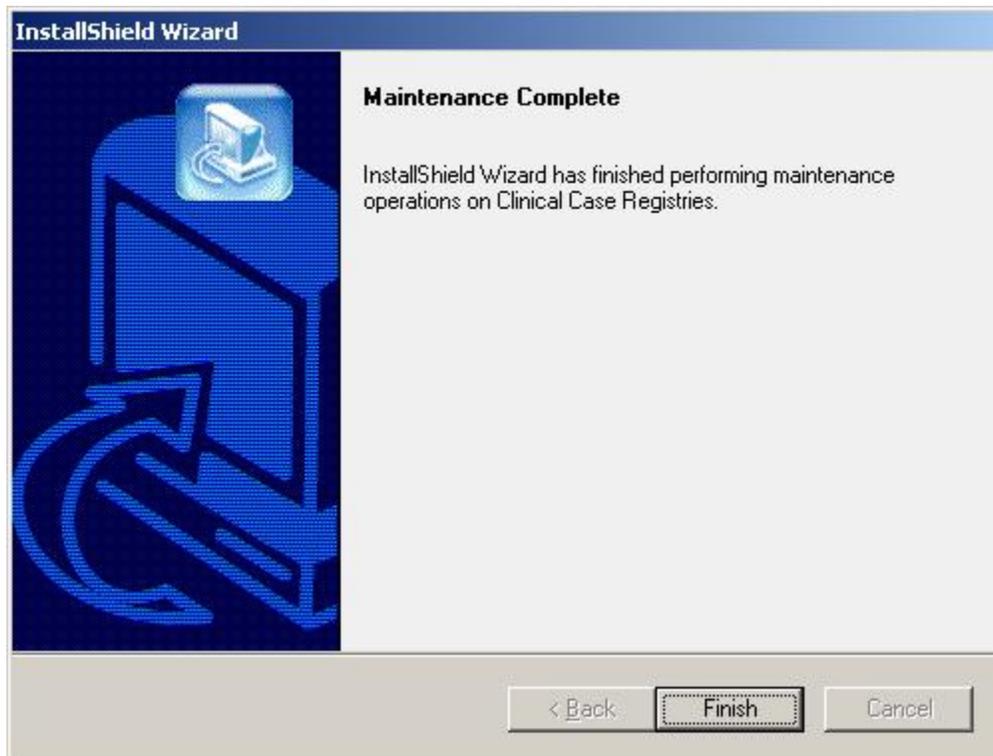


3. Confirm application removal by clicking **OK**.



The application will request permission to delete files added to your PC during the installation.

Confirm file removal by clicking **Yes**. Repeat confirmation for the remaining files.



4. Click **Finish** to complete file removal.

Glossary

Acronyms and Terms

Term or Acronym	Description
API	Application Programmer Interface
ADPAC	Automated Data Processing Application Coordinator
CPRS	Computerized Patient Record System
DFN	File Number—the local/facility patient record number (patient file internal entry number)
Extract Data Definition	This is a set of file and field numbers that identify the data that should be extracted during the extraction process.
Extract Process	This process is run after the update process. This function goes through patients on the local registry and, depending on their status, extracts all available data for the patient, since the last extract was run. The extract transmits any collected data for the patient to the national database via HL7.
FDA	Food and Drug Administration
HL7	Health Level 7
Hepatitis C Rx	A defined list of Hepatitis C medications, see Appendix A of the Clinical Case Registries V. 1.0, Hepatitis C User Manual.
Icons	
ICD-9	International Classification of Diseases, version 9 A numeric code used for identifying patient diagnoses associated with inpatient and outpatient care.
ICN	Integration Control Number, or national VA patient record number
IRM	Information Resource Management
Iteration	A single pass through a group of instructions . Most programs contain loops of instructions that are executed repeatedly. The computer <i>iterates</i> through the loop, which means that it repeatedly executes the loop.
KIDS	Kernel Installation and Distribution System
LIM	Laboratory Information Manager

Term or Acronym	Description
Local Registry	This is the local file of patients that have either passed the selection rules and therefore been added automatically or been added manually by a designated Hepatitis C supervisor.
Local Registry Update	This process adds new patients (that have had data entered since the last update was run and pass the selection rules) to the local registry.
LOINC	Logical Observation Identifiers Names and Codes
Loop	In programming , a loop is a series of instructions that is repeated until a certain condition is met. Each pass through the loop is called an iteration . Loops constitute one of the most basic and powerful programming concepts.
National Case Registry	All sites running the Hepatitis C Case registry transmit their data to this central data registry.
Selection Rules	A pre-defined set of rules that define a Hepatitis C patient. See Appendix A of the Clinical Case Registries V. 1.0, Hepatitis C User Manual for selection rules.
PTF	Patient Treatment File—refers to the VistA Inpatient File in the Local Registry Report, under “Reason Added”
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Networks
VistA	Veterans Health Information System and Technology Architecture