

RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **iCare Population Management GUI**

(BQI)

## **Installation Guide and Release Notes**

Version 2.9 Patch 3  
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Division of Information Technology

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## Preface

Version 2.9 Patch 3 is the twenty-second release of the iCare application. The site should have already installed up to the latest version, which is Version 2.9 Patch 2. Version 2.9 Patch 3 implements updates to section §170.315(f)(5) Transmission to Public Health Agencies – Case Reporting of the 21st Century Cures Act, enacted in December 2016 as well as additional new functionality.

The intended audiences for the *Installation Guide and Release Notes* are Indian Health Service (IHS) site managers and other technical staff. Technical documentation accompanies this installation document in this release. Please refer to the *Technical Manual* for additional information.

The iCare system is an integrated case management system intended to provide any IHS direct, tribal, or urban (I/T/U) healthcare providers with decision support and patient management for single or multiple disease states and care conditions for a single patient or for user-defined groups of patients. iCare provides a graphical interface to existing Resource and Patient Management System (RPMS) data, presenting different views to include individual patient provider-defined groups, and population and community-centric views of patient data.

The iCare application allows providers to proactively track conditions and health statuses of their patients, any individual patient, or populations of patients, based on specific or multiple user-defined clinical concerns. A more complex and integrated level of logic for certain chronic conditions is defined in underlying RPMS components and is accessible through iCare to assist non-specialist providers in improving clinical decision-making and compliance with clinical guidelines. This type of integrated system provides a mechanism to inform healthcare providers about and follow up on clinical interventions and information about single or multiple disease states and conditions.

The iCare package is intended for use by both general and specialist healthcare providers, as well as disease-specific case managers at any I/T/U using RPMS. The experience and skill level of all hands-on users of RPMS will range from non-expert to expert. The providers' knowledge of clinical guidelines and disease-specific treatment will range from general to specialists.

The iCare system consists of two components—the RPMS M programming language and the graphical user interface (GUI)—both of which must be installed and functioning in order for this application to work.

## 1.0 Release Notes

iCare Version 2.9 Patch 3 (v2.9 p 3) contains the following Change Requests.

This patch contains changes to support the Social Security Number Fraud Prevention Act of 2017 and the Social Security Number Reduction Act.

Feature / CR ID	Description
ADO 80531	Background Job Optimization Research
ADO 82981	BQI - Implement Disable Setting for Case Reporting/Comm Alerts for Tribal Sites
ADO 80530	Social Security Reduction Project Findings - Override AGZVIEWSSN Security Key
CR 12299/ADO 62430	BQI - Panel Def - Add New Filter by Orders
CR 10499/ADO 62422	BQI - Add Health Factors to Panel Definition
CR 10954/ADO 62424	BQI - Panel Def - Add Ad Hoc Filter by EHR Note Title
CR 12300/ADO 62431	BQI - Panel View - Add Orders Tab
CR 12378/ADO 62436	BQI - Add new security key for Comm Alerts detail
CR 9130/ADO 75470	BQI - Panel Def Problem Filter Clears Out When Switching Timeframe Type
CR 6345/ADO 60074	BQI - Review Community Alert Shigella Logic
CR 10266/ADO 60041	BQI - Update Lab LOINC Taxonomies Based on Clinical Logic Review
CR 10476/ADO 60045	BQI - Comm Alert - Update taxonomy BQI ZIKA TEST LOINC
CR 6866/ADO 60075	BQI - Update Measles Community Alert Logic for Positive Titer Result Based on Immunity [HEAT 206317]
CR 10084/ADO 60039	BQI - Community Alerts: Titers/Immunity for Varicella/Mumps/Rubella/HepA/HepB
CR 7037/ADO 60077	BQI - Update Community Alerts: Taxonomy: Measles
CR 4950/ADO 73026	Add Active/Inactive Column to Taxonomy View/Edit Form
ADO 61087	BQI: Update Community Alert Trigger Logic
ADO 61088	BQI: Update APIs
ADO 61089	BQI: Test Compatibility with USCDI
CR 10430/ADO 74913	BQI - Comm Alert - BQI LEPTOSPIROSIS LOINC
CR 10431/ADO 74914	BQI - Comm Alert - BQI TETANUS LOINC CODES
CR 10432/ADO 74915	BQI - Comm Alert - BQI TRICHINOSIS LOINC CODES
CR 10433/ADO 74916	BQI - Comm Alert - BQI TULAREMIA LOINC CODES

<b>Feature / CR ID</b>	<b>Description</b>
CR 10434/ADO 74917	BQI - Comm Alert - BQI VARICELLA LOINC CODES
CR 10435/ADO 74918	BQI - Comm Alert - BQI VIBRIOSIS LOINC CODES
CR 10436/ADO 74919	BQI - Comm Alert - BQI VISA VRSA LOINC CODES
CR 10437/ADO 74920	BQI - Comm Alert - BQI WEST NILE LOINC CODES
CR 10438/ADO 74921	BQI - Comm Alert - BQI WEST EQUINE ENCEPH LOINC
CR 10439/ADO 74922	BQI - Comm Alert - BQI YELLOW FEVER LOINC
CR 10440/ADO 74923	BQI - Comm Alert - BQI TYPHOID LOINC CODES
CR 10441/ADO 74924	BQI - Comm Alert - BQI ROCKY MTN LOINC CODES
CR 10442/ADO 74925	BQI - Comm Alert - BKM TOXOPLASMOSIS LOINC CODES
CR 10444/ADO 74926	BQI - Comm Alert - BQI HANTAVIRUS LOINC CODES
CR 10445/ADO 74927	BQI - Comm Alert - BQI BOTULISM LOINC CODES
CR 10446/ADO 74928	BQI - Comm Alert - BQI PLAGUE LOINC CODES
CR 10447/ADO 74929	BQI - Comm Alert - BQI POLIO ACUTE LOINC
CR 10449/ADO 74930	BQI - Comm Alert - BQI BABESIOSIS LOINC CODES
CR 10450/ADO 74931	BQI - Comm Alert - BQI CAMPYLOBACTERIOSIS LOINC
CR 10451/ADO 74932	BQI - Comm Alert - BQI EBOLA LOINC CODES
CR 10452/ADO 74933	BQI - Comm Alert - BQI HEP D LOINC CODES
CR 10453/ADO 74934	BQI - Comm Alert - BQI HEP E LOINC CODES
CR 10454/ADO 74935	BQI - Comm Alert - BQI HERPES SIMPLEX LOINC
CR 10455/ADO 74936	BQI - Comm Alert - BQI LEAD LOINC CODES
CR 10456/ADO 74937	BQI - Comm Alert - BQI POWASSEN LOINC CODES
CR 10457/ADO 74938	BQI - Comm Alert - BQI PSITTACOSIS LOINC CODES
CR 10458/ADO 74939	BQI - Comm Alert - BQI Q FEVER LOINC CODES
CR 10459/ADO 74940	BQI - Comm Alert - BQI RABIES LOINC CODES
CR 10460/ADO 74941	BQI - Comm Alert - BQI RUBELLA LOINC CODES
CR 10461/ADO 74942	BQI - Comm Alert - BQI SALMONELLA LOINC CODES
CR 10462/ADO 74943	BQI - Comm Alert - BQI SARS LOINC CODES
CR 10463/ADO 74944	BQI - Comm Alert - BQI SHIGELLA LOINC CODES
CR 10464/ADO 74945	BQI - Comm Alert - BQI SMALLPOX LOINC CODE
CR 10465/ADO 74946	BQI - Comm Alert - BQI ST LOUIS ENCEPH LOINC
CR 10466/ADO 74947	BQI - Comm Alert - BQI EAST EQUINE ENCEPH LOINC
CR 10467/ADO 74948	BQI - Comm Alert - BQI EHRLICHIOSIS LOINC CODES

<b>Feature / CR ID</b>	<b>Description</b>
CR 10468/ADO 74949	BQI - Comm Alert - BQI GIARDIASIS LOINC CODES
CR 10469/ADO 74950	BQI - Comm Alert - BQI H1N1 LOINC CODES
CR 10470/ADO 74951	BQI - Comm Alert - BQI LEGIONNAIRES LOINC CODES
CR 10471/ADO 74952	BQI - Comm Alert - BQI LISTERIOSIS LOINC CODES
CR 10472/ADO 74953	BQI - Comm Alert - BQI LYME DISEASE LOINC
CR 10473/ADO 74954	BQI - Comm Alert - BQI MALARIA LOINC CODES
CR 10474/ADO 74955	BQI - Comm Alert - BQI MUMPS LOINC CODES
CR 10475/ADO 74956	BQI - Comm Alert - BQI PERTUSSIS LOINC CODES
CR 10477/ADO 74957	BQI - Comm Alert - BQI ANTHRAX LOINC CODES
CR 10478/ADO 74958	BQI - Comm Alert - BQI BRUCELLOSIS LOINC CODE
CR 10479/ADO 74959	BQI - Comm Alert - BQI CALIF SEROGROUP LOINC
CR 10480/ADO 74960	BQI - Comm Alert - BQI CHANCROID LOINC
CR 10481/ADO 74961	BQI - Comm Alert - BQI CHOLERA LOINC
CR 10483/ADO 74963	BQI - Comm Alert - BQI CYCLOSPORIASIS LOINC
CR 10484/ADO 74964	BQI - Comm Alert - BQI DIPHTHERIA LOINC CODES
CR 10485/ADO 74965	BQI - Comm Alert - BQI SHIGA-TOXIN E COLI LOINC
CR 9148/DO 75483	BQI - Modify Hep C Lab Criteria for Community Alert
CR 10482/ADO 74962	BQI - Comm Alert - BQI CRYPTOSPORIDIOSIS LOINC
CR 5323/ADO 73272	Community Alerts Tab: Dashboard
CR 8811/ADO 75315	BQI - Community Alert - Flu - Correct Result Logic
CR 10951/ADO 75776	BQI/BKM - Create New BQI VALLEY FEVER LOINC Taxonomy and Change BKM COCCI ANTIBODY LOINC CODES
CR 10952/ADO 75777	BQI - Change Syphilis Community Alert to Use BKM Taxonomies
ADO 85147	BQI - Future forecasted Immunizations for <3 yrs not correct [INC0214586]
ADO 85298	BQI - Add new COVID columns to COVID Care Mgmt Grp
ADO 85301	BQI - COVID Drug Columns
ADO 88024	BQI – Update COVID Care Mgmt for New Bivalent Boosters

## 2.0 Installation Notes

**Prefix:** BQI

**Current Version:** 2.9 Patch 3

### 2.1 Contents of Distribution

File	Description
bqi_0290.03k	Version 2.9 Patch 3 KIDS installation file
bqi_0290.03i.pdf	Installation Guide and Release Notes
bqi_0290.03t.pdf	Technical Manual
bqi_0290.03gui.zip	Version 2.9 Patch 3 GUI installation files in Compressed Folder (zipped) format
bqi_0290.03u_panel_def.pdf	iCare User Manual for Panel Definition
bqi_0290.03u_panel_view.pdf	iCare User Manual for Panel View
bqi_0290.03u_comm_alerts.pdf	iCare User Manual for Community Alerts
bqi_0290.03u_taxonomy.pdf	iCare User Manual for Taxonomy Maintenance

### 2.2 Required Resources

### 2.3 RPMS

The RPMS server portion of the iCare application does not require a specific version, cache, or operating system (OS). However, the RPMS server must be able to fully support BMXNet (BMX) 4.0 or higher and is therefore subject to any requirements need to run that application. Please refer to the *BMX Version 4.0 Technical Manual* for details.

**Note:** The following are required builds to install the KIDS:  
 ATX\*5.1\*40, ATX\*5.1\*41, ATX\*5.1\*42, and  
 ATX\*5.1\*43  
 IHS COMMUNICATIONS SUPPORT 1.0  
 BQI\*2.9\*2  
 BCCD\*2.0\*1

Table 2-1 shows **required RPMS server software**.

Table 2-1: Required RPMS software

Module	Minimum Version
IHS ICD/CPT Lookup & Grouper (AICD)	v4.0 Patch 1
Taxonomy (ATX)	v5.1 Patch 40 and v5.1 Patch 41

<b>Module</b>	<b>Minimum Version</b>
VA FileMan (DI)	v22.0 Patch 1020
VA Kernel (XU)	v8.0 Patch 1020
Toolkit (XT)	V7.3 Patch 1019
BMXNet (BMX)	v4.0 Patch 5
IHS/VA Utilities (XB)	v3.0 through Patch 11
Patient Information Management System (PIMS)	v5.3 through Patch 1020
IHS Clinical Reporting (BGP)	V22.0
PCC Data Entry (APCD)	v2.0 through Patch 10
PCC Health Summary (APCH)	v2.0 through Patch 17
Q-Man (AMQQ)	v2.0 through Patch 21
HIV Management System (BKM)	v2.2 Patch 2
IHS Asthma Register (BAT)	v1.0
IHS PCC Suite (BJPC)	v2.0 Patch 25
IHS MU Performance Reports (APCM)	v2.0
Referred Care Info System (BMC)	v4.0 Patch 13
Patient Registration (AG)	v7.2 Patch 8
Immunization (BI)	v8.5 Patch 22 and v8.5 Patch 1003
iCare (BQI)	v2.9 Patch 2
IHS User Security Audit (BUSA)	v1.0 Patch 3
Diabetes Management System (BDM)	v2.0 Patch 14
Designated Provider Mgt System (BDP)	v1.0 Patch 1
Electronic Health Record (EHR)	v1.1 Patch 31
Clinical Reminders (PXRМ)	v2.0 Patch 1012
Text Integration Utilities (TIU)	v1.0 Patch 1023
CPT FILES (ACPT)	v2.21 Patch 8
ICD UPDATE (AUM)	v22.0
Lab Service (LR)	v5.2 Patch 1049
IHS DICTIONARIES (PATIENT) (AUPN)	v99.1 Patch 28
IHS DICTIONARIES (POINTERS) (AUT)	v8.1 Patch 31
IHS VA SUPPORT FILES (AVA)	v93.2 Patch 26
CCDA (BCCD)	v2.0 Patch 1
IHS COMMUNICATION SUPPORT (BCOM)	v1.0

### 2.3.1 GUI Client

Table 2-2 shows client workstation specification details.



Table 2-2: GUI client

<b>Client PC</b>	<b>Minimum Versions</b>
Microsoft Windows (any Windows OS that supports .NET 4.0 Framework)	Windows 7 or newer, Windows 2012 Server or newer
Microsoft .NET Framework (The iCare installation package will check for the .NET framework prerequisite and will assist the user with download and installation if needed)	V4.0 (minimum client version)
Suggested client PC hardware	Processor: Minimum: Pentium III 800MHz Suggested: Pentium 4 2GHz+ Memory (RAM): Minimum: 2048MB Suggested: 4096MB+
Approximate disk space requirements	iCare application footprint ≈ 55MB

## 2.4 Before You Begin: Installation Issues

1. Make a copy of this distribution for offline storage.
2. Print all notes and readme files.
3. Capture the terminal output during the installation using an auxport printer attached to the terminal where the software installation is performed to ensure a printed audit trail if any problems should arise.
4. iCare users should be off-line.

## 3.0 Installation Instructions

The iCare package contains components that run on both the RPMS server and the client personal computer (PC). Installation of the RPMS server components is conventional and consists of a Kernel Installation and Distribution System (KIDS) build.

The client PC component is currently deployed via a standard Windows installation package application as an “msi” file. New versions of the client software can be installed on the client PC as updates are available so that the client software version matches the version of iCare installed on the server. Previous versions of the client software will be automatically removed from the client workstation when the new version is installed.

If desired, the iCare client may be uninstalled via the Windows control panel in the **Add/Remove Programs** option (for Windows XP and prior versions), or the **Programs and Features** option for Windows. Select the entry in the list for the iCare version to uninstall and click the **Uninstall** option.

### 3.1 Special Considerations for Multi-Divisional Sites

Different facilities that use the same RPMS database are considered to be multi-divisional sites. Once installed the KIDS on the RPMS server, all facilities will be affected.

### 3.2 Before Installation

Determine the method of installing the new iCare GUI client for all iCare users. Refer to Appendix A: for GUI Deployment Options for descriptions of some of the available deployment options, including options for automated installation.

Coordinate with all iCare users when the KIDS will be installed with the GUI, so the GUI is ready to go when the KIDS is installed.

The following sections provide instructions on how to install iCare.

### 3.3 Pre-installation Instructions

1. If possible, initially load the software into a test account, then into the production account. There are no routines or globals to remove after the installation is complete.
2. Refer to the RPMS Server Installation Instructions (Section 3.4) and the Sample RPMS Client Installation (Section 3.5) for the applicable prompts and user responses. User responses appear in **bold** type.

3. Ensure that the BMX system is installed and that a BMX monitor process is running. The BMX Integrated Security feature allows connection to RPMS without having to re-specify access and verify codes every time. For this feature to work, the integrated security field of the BMX monitor port must be set to **Yes**. See the BMX user and installation manuals for details on BMX.
4. For Patch 3, because the Community Alerts Export is being moved from using 'sendto' to using the HS Communication Support package (BCOM), be sure that an archive folder exists on your server. To check for this folder, go to the RPMS SITE file and check what the FILE EXPORT PATH is.

```

Select OPTION: INQUIRE TO FILE ENTRIES

OUTPUT FROM WHAT FILE: ICARE SITE PARAMETERS// RPMS SITE
                        (1 entry)
Select RPMS SITE LOCATION NAME: 2016 DEMO HOSPITAL
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes// (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// - No record number (IEN), no Computed
Fields
NUMBER: 1                LOCATION NAME: 2016 DEMO HOSPITAL
PATIENT CARE COMPONENT PRESENT: YES    UNIVERSAL LOOKUP FOR VISITS: ALLOWED
THIRD-PARTY BILLING PRESENT: YES       MFI RUNNING: NOT USED
QMAN RUNNING: Y                       OPERATING SYSTEM: DOS
PCC FILE 200 CONVERSION: YES
DATE PCC VISIT RELINKER RUN: APR 17, 2020
FILE IMPORT PATH: H:\Temp\F1Q1D        FILE EXPORT PATH: H:\Temp\F1Q1D
LEAD DIGITS FOR RECORD IDS: 505430

Select RPMS SITE LOCATION NAME: █

```

Figure 3-1: RPMS SITE data

The archive folder should be in the folder before the FILE EXPORT PATH. For example, the archive folder (from above) should be in H:\Temp (aka H:\Temp\archive). If the FILE EXPORT PATH is G:\Pub\Export, the archive folder should be in G:\Pub (aka G:\Pub\archive).

### 3.4 RPMS Server Install Instructions

1. On the RPMS server, load and install bqi\_0290.03k file using the KIDS menu options. From the **KIDS** menu, select the **Installation** menu.
2. From the **Installation** menu, select **Option 1: Load a Distribution**.
3. Type **bqi\_0290.03k** at the "Enter a Host File" prompt (the file name might need to be preceded with the appropriate host path to retrieve from the appropriate software directory).
4. The KIDS file bqi\_0290.03k contains the following: ICARE MANAGEMENT SYSTEM 2.9 Patch 3

5. Type **Yes** (or press Enter to accept the default) at the “Want to Continue with Load? YES//” prompt.
6. From the **Installation** menu, select **Option 2: Verify Checksums in Transport Global**, which provides a mechanism for ensuring the integrity of routines by verifying checksums for the components of the Transport global, and reports any errors uncovered.
7. Type **BQI\*2.9\*3** as the install name.

Optional: At this time, an optional election to exercise one of the following installation options is available. Use BQI\*2.9\*3 as the install name.

- a. **Back Up a Transport Global:** Creates a MailMan message that will back up all current routines on the system that would be replaced by this release (because this is a new release no files will be replaced).
  - b. **Compare Transport Global:** Previews all changes that will result from the installation of this patch and compares them with the values currently loaded on the system (routines, data dictionaries, templates, etc.).
8. From the **Installation** menu, select the **Install Packages(s)** option.
  9. At the “Select Install Name” prompt, type **BQI\*2.9\*3**.
  10. Respond to the following prompts as indicated:
    - a. At the “Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES//” prompt, type **NO**.
    - b. At the “Want KIDS to INHIBIT LOGONs during the install?//YES” prompt, type **NO**.
    - c. At the “Want to DISABLE Scheduled Options, Menu Options and Protocols?// YES” prompt, type **NO**.
  11. Type the device that will print the install messages. Exit the **Installation** menu.

Proceed to Section 5.0 for further information and setup instructions.

<p><b>Note:</b> Please read the Post-Installation notes for more information.</p>
---

## 3.5 Client Installation

Determine the method of installing the GUI for all iCare users. Note that the bqi-iCareInstall-v2\_9\_3.msi file is a Microsoft installation file intended to be suitable for use with automated workstation install “push” technologies, such as Microsoft Active Directory Group Policy deployment. Refer to Appendix A for descriptions of some of the available deployment options, including options for automated installation.

The installation of the iCare client must be coordinated with the installation of the KIDS on the RPMS server so that the GUI is ready to be installed after the KIDS is installed.

To install the iCare Windows GUI client portion of the iCare application for a basic single-workstation, perform the following tasks:

1. Copy the bqi\_0290.03gui.zip file into a local directory or centrally accessible network share directory, and extract its contents:
  - a. **bqi-iCareInstall-v2\_9\_3.msi**
2. Log into the client PC with administrator privileges.
3. Copy bqi-iCareInstall-v2\_9\_3.msi to the client PC from the network share directory.
4. Install the iCare software by executing bqi-iCareInstall-v2\_9\_3.msi on the client PC.
5. When prompted with the **Destination Folder** dialog, click **Next** to confirm and complete the installation.
6. To run the iCare package, click **Start**.
  - a. Choose **All Programs**.
  - b. Select **IHS iCare**.
  - c. Click **iCare Version 2.9.3**.

## 4.0 Sample Installations

### 4.1 Sample Cache Install

As shown in Figure 4-1, an installation option must be selected to begin the installation process.

```
Select OPTION NAME: XPD MAIN   Kernel Installation & Distribution System

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

Select Kernel Installation & Distribution System Option: Installation

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
```

Figure 4-1: Selecting Installation Option

**Note:** The following are required builds to install the KIDS:  
 ATX\*5.1\*40, ATX\*5.1\*41, ATX\*5.1\*42, and  
 ATX\*5.1\*43  
 IHS COMMUNICATIONS SUPPORT 1.0  
 BQI\*2.9\*2  
 BCCD\*2.0\*1

```
Enter a Host File: d:\pub\bqi_0290.03k <Enter> (Note: Type the appropriate
path for your system.)

KIDS Distribution saved on Jul 22, 2022@09:58:15
Comment: iCare Version 2.9 Patch 3 - CURES

This Distribution contains Transport Globals for the following Package(s):
  BQI*2.9*3
Distribution OK!
Want to Continue with Load? YES//
Loading Distribution...

  BQI*2.9*3

**INSTALL ABORTED** Patch ATX*5.1*41 is Required to install this package!!

Use INSTALL NAME: BQI*2.9*3 to install this Distribution.
```

Figure 4-2: Failed Load

```

Select Installation <TEST ACCOUNT> Option: 1  Load a Distribution
Enter a Host File: H:\PATCHES\bqi_0290.03k

KIDS Distribution saved on Jul 22, 2022@09:58:15
Comment: iCare Version 2.9 Patch 3 - CURES

This Distribution contains Transport Globals for the following Package(s):
  BQI*2.9*3
Distribution OK!

Want to Continue with Load? YES//
Loading Distribution...

  BQI*2.9*3
Use INSTALL NAME: BQI*2.9*3 to install this Distribution.

  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: Verify Checksums in Transport Global <Enter>

```

Figure 4-3: Successful Load

```

Select Installation <TEST ACCOUNT> Option: 2  Verify Checksums in Transport
Global
Select INSTALL NAME:  BQI*2.9*3      Loaded from Distribution
7/22/22@12:32:30
  => iCare Version 2.9 Patch 3 - CURES  ;Created on Jul 22,
2022@09:58:15

This Distribution was loaded on Jul 22, 2022@12:32:30 with header of
iCare Version 2.9 Patch 3 - CURES  ;Created on Jul 22, 2022@09:58:15
It consisted of the following Install(s):
  BQI*2.9*3

Want each Routine Listed with Checksums: Yes// NO
DEVICE: HOME//  VIRTUAL

PACKAGE: BQI*2.9*3      Jul 22, 2022 12:33 pm      PAGE 1
-----
-----

366 Routines checked, 0 failed.

```

Figure 4-4: Checking Transport Global

As shown in Figure 4-5, other prompts are shown on subsequent installation pages.

```

Select Installation Option:
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: Install Package(s)

```

Figure 4-5: Installation Options

## 4.1.1 Installation

```

Select Installation <TEST ACCOUNT> Option: 6 Install Package(s)
Select INSTALL NAME:   BQI*2.9*3      Loaded from Distribution
7/22/22@12:32:30
=> iCare Version 2.9 Patch 3 - CURES ;Created on Jul 22,
2022@09:58:15

This Distribution was loaded on Jul 22, 2022@12:32:30 with header of
iCare Version 2.9 Patch 3 - CURES ;Created on Jul 22, 2022@09:58:15
It consisted of the following Install(s):
BQI*2.9*3
Checking Install for Package BQI*2.9*3

Install Questions for BQI*2.9*3

Incoming Files:

90505.2 ICARE ROLES (including data)
Note: You already have the 'ICARE ROLES' File.
I will OVERWRITE your data with mine.

90506 ICARE DEFINITIONS (including data)
Note: You already have the 'ICARE DEFINITIONS' File.
I will OVERWRITE your data with mine.

90506.4 ICARE GUI TABS (including data)
Note: You already have the 'ICARE GUI TABS' File.
I will OVERWRITE your data with mine.

90506.5 ICARE VIEW SOURCE
Note: You already have the 'ICARE VIEW SOURCE' File.

90506.9 ICARE TIMEFRAMES (including data)
Note: You already have the 'ICARE TIMEFRAMES' File.
I will OVERWRITE your data with mine.

90507.1 ICARE WEB LINKS (including data)
Note: You already have the 'ICARE WEB LINKS' File.
I will OVERWRITE your data with mine.

```



```

90507.7  ICARE COMM ALERTS EXPORT
Note: You already have the 'ICARE COMM ALERTS EXPORT' File.

90507.8  ICARE COMMUNITY ALERTS DEFINITIONS (including data)
Note: You already have the 'ICARE COMMUNITY ALERTS DEFINITIONS' File.
I will OVERWRITE your data with mine.

90508    ICARE SITE PARAMETERS
Note: You already have the 'ICARE SITE PARAMETERS' File.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//
Want KIDS to INHIBIT LOGONs during the install? NO//
Want to DISABLE Scheduled Options, Menu Options, and Protocols? 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//  VIRTUAL

Install Started for BQI*2.9*3 :
          Jul 22, 2022@12:35:56

Build Distribution Date: Jul 22, 2022
Installing Routines:
          Jul 22, 2022@12:35:57

Running Pre-Install Routine: PRE^BQI29P3

Installing Data Dictionaries:
          Jul 22, 2022@12:35:58

Installing Data:
          Jul 22, 2022@12:35:59
Installing PACKAGE COMPONENTS:

Installing REMOTE PROCEDURE:

Installing OPTION:          Jul 22, 2022@12:35:59

Running Post-Install Routine: POS^BQI29P3

Creating [BQI ACANTHAMOEBA CULTURE LNC] taxonomy...
Creating [BQI ACANTHAMOEBA NUCLEIC LNC] taxonomy...
Creating [BQI ANAPLASMOSIS ANTIBODY LNC] taxonomy...
Creating [BQI ANAPLASMOSIS ANTIGEN LOINC] taxonomy...
Creating [BQI ANAPLASMOSIS CULTURE LNC] taxonomy...
Creating [BQI ANAPLASMOSIS MICROSCO LNC] taxonomy...
Creating [BQI ANAPLASMOSIS NUCLEIC LOINC] taxonomy...
Creating [BQI ANTHRAX ANTIBODY LOINC] taxonomy...
Creating [BQI ANTHRAX ANTIGEN LOINC] taxonomy...
Creating [BQI ANTHRAX DNA LOINC] taxonomy...
Creating [BQI ANTHRAX OTHER LOINC] taxonomy...
Creating [BQI ARBORVIRAL ANTIBODY LOINC] taxonomy...
Creating [BQI ARBORVIRAL ANTIGEN LOINC] taxonomy...
Creating [BQI ARBORVIRAL CULT ID LOINC] taxonomy...

```

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Creating [BQI ARBORVIRAL NUCLEIC LOINC] taxonomy...
Creating [BQI BABESIOSIS ANTIBODY LOINC] taxonomy...
Creating [BQI BABESIOSIS MICROSCOPIC LNC] taxonomy...
Creating [BQI BABESIOSIS NUCLEIC LOINC] taxonomy...
Creating [BQI BLASTOMYCES ANTIBODY LOINC] taxonomy...
Creating [BQI BLASTOMYCES ANTIGEN LOINC] taxonomy...
Creating [BQI BLASTOMYCES CULT ID LOINC] taxonomy...
Creating [BQI BLASTOMYCES NUCLEIC LOINC] taxonomy...
Creating [BQI BLOOD LEAD CAPILLARY LNC] taxonomy...
Creating [BQI BLOOD LEAD LOINC] taxonomy...
Creating [BQI BLOOD LEAD UNSPEC LNC] taxonomy...
Creating [BQI BLOOD LEAD VENOUS LOINC] taxonomy...
Creating [BQI BOTULISM CULTURE LOINC] taxonomy...
Creating [BQI BOTULISM TOX NUC ACID LNC] taxonomy...
Creating [BQI BOTULISM TOXIN LOINC] taxonomy...
Creating [BQI BOTULISM TOXIN PANEL LOINC] taxonomy...
Creating [BQI BRUCELLOSIS ANTIBODY LOINC] taxonomy...
Creating [BQI BRUCELLOSIS DNA LOINC] taxonomy...
Creating [BQI BRUCELLOSIS OTHER LOINC] taxonomy...
Creating [BQI BRUCELLOSIS PANEL LOINC] taxonomy...
Creating [BQI CALIF SEROGRP ANTIBODY LNC] taxonomy...
Creating [BQI CALIF SEROGRP NUCLEIC LNC] taxonomy...
Creating [BQI CAMPYLOBACTERIOSIS AG LNC] taxonomy...
Creating [BQI CAMPYLOBACTERIOSIS CULT LC] taxonomy...
Creating [BQI CAMPYLOBACTERIOSIS NUCL LC] taxonomy...
Creating [BQI CARB MONOX PULSE CO OXI LC] taxonomy...
Creating [BQI CARBON MONOXIDE BLOOD LNC] taxonomy...
Creating [BQI CHANCROID OTHER LOINC] taxonomy...
Creating [BQI CHIKUNGUNYA ANTIBODY LNC] taxonomy...
Creating [BQI CHIKUNGUNYA NUCLEIC LOINC] taxonomy...
Creating [BQI CHLAMYDIA ANTIGEN LOINC] taxonomy...
Creating [BQI CHLAMYDIA CULTURE LOINC] taxonomy...
Creating [BQI CHLAMYDIA NUCLEIC LOINC] taxonomy...
Creating [BQI CHOLERA ANTIGEN LOINC] taxonomy...
Creating [BQI CHOLERA OTHER LOINC] taxonomy...
Creating [BQI COLORADO TICK ANTIBODY LNC] taxonomy...
Creating [BQI COVID ECR ANTIBODY LOINC] taxonomy...
Creating [BQI COVID ECR ANTIGEN LOINC] taxonomy...
Creating [BQI COVID ECR ASSAYS LOINC] taxonomy...
Creating [BQI COVID ECR CULTURE LOINC] taxonomy...
Creating [BQI COVID ECR NUCLEIC LOINC] taxonomy...
Creating [BQI COVID ECR PANELS ANTIBODY] taxonomy...
Creating [BQI COVID ECR PANELS GENOMIC] taxonomy...
Creating [BQI COVID ECR SPIKE PROTEIN] taxonomy...
Creating [BQI CRE CULTURE ID LOINC] taxonomy...
Creating [BQI CRE PRODUCTION LOINC] taxonomy...
Creating [BQI CRE RESISTANCE LOINC] taxonomy...
Creating [BQI CRYPTOSPORIDIOSIS ANTIGEN] taxonomy...
Creating [BQI CRYPTOSPORIDIOSIS MICRO] taxonomy...
Creating [BQI CRYPTOSPORIDIOSIS NUCLEIC] taxonomy...
Creating [BQI CYCLOSPORIASIS MICROSCOPIC] taxonomy...
Creating [BQI CYCLOSPORIASIS NUCLEIC LNC] taxonomy...
Creating [BQI DENGUE ANTIBODY LOINC] taxonomy...
Creating [BQI DENGUE ANTIGEN LOINC] taxonomy...
Creating [BQI DENGUE NUCLEIC ACID LNC] taxonomy...
Creating [BQI DENGUE PANELS ANTIBODY LNC] taxonomy...
Creating [BQI DENGUE PANELS NUCLEIC LNC] taxonomy...
Creating [BQI DENGUE TOTAL ANTIBODY LNC] taxonomy...
Creating [BQI DIPHTHERIA LOINC] taxonomy...
Creating [BQI EAST EQUINE ANTIBODY LOINC] taxonomy...
Creating [BQI EAST EQUINE NUCLEIC LOINC] taxonomy...

```

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Creating [BQI EHRlichiosis ANTIBODY LNC] taxonomy...
Creating [BQI EHRlichiosis ANTIGEN LOINC] taxonomy...
Creating [BQI EHRlichiosis DNA LOINC] taxonomy...
Creating [BQI EHRlichiosis OTHER LOINC] taxonomy...
Creating [BQI GIARDIA ANTIGEN LOINC] taxonomy...
Creating [BQI GIARDIA NUCLEIC ACID LNC] taxonomy...
Creating [BQI GONORRHEA CULTURE LOINC] taxonomy...
Creating [BQI GONORRHEA NUCLEIC LOINC] taxonomy...
Creating [BQI H1N1 LOINC CODES] taxonomy...
Creating [BQI HANTAVIRUS ANTIBODY LOINC] taxonomy...
Creating [BQI HANTAVIRUS ANTIGEN LOINC] taxonomy...
Creating [BQI HANTAVIRUS RNA LOINC] taxonomy...
Creating [BQI HEMORRHAGIC FEVR ANTIBODY] taxonomy...
Creating [BQI HEMORRHAGIC FEVR ANTIGEN] taxonomy...
Creating [BQI HEMORRHAGIC FEVR NUCLEIC] taxonomy...
Creating [BQI HEP A NUCLEIC LOINC] taxonomy...
Creating [BQI HEP B ANTIBODY LOINC] taxonomy...
Creating [BQI HEP B ANTIGEN LOINC] taxonomy...
Creating [BQI HEP B NUCLEIC LOINC] taxonomy...
Creating [BQI HEP C ANTIGEN LOINC] taxonomy...
Creating [BQI HEP C NUCLEIC LOINC] taxonomy...
Creating [BQI HEP E ANTIBODY LOINC] taxonomy...
Creating [BQI HEP E NUCLEIC ACID LOINC] taxonomy...
Creating [BQI HIB ANTIGEN LOINC] taxonomy...
Creating [BQI HIB CULTURE ID LOINC] taxonomy...
Creating [BQI HIB NUCLEIC ACID LNC] taxonomy...
Creating [BQI HISTOPLASMOSIS ANTIBODY LC] taxonomy...
Creating [BQI HISTOPLASMOSIS ANTIGEN LNC] taxonomy...
Creating [BQI HISTOPLASMOSIS CULTURE LNC] taxonomy...
Creating [BQI HISTOPLASMOSIS NUCLEIC LNC] taxonomy...
Creating [BQI HIV ANTIBODY LOINC] taxonomy...
Creating [BQI HIV ANTIGEN LOINC] taxonomy...
Creating [BQI HIV ANTIGEN/ANTIBODY LOINC] taxonomy...
Creating [BQI HIV CULT ID LOINC] taxonomy...
Updating [BQI HIV ID SPEC CONFIRM LOINC] taxonomy...
Creating [BQI HIV NUCLEIC LOINC] taxonomy...
Creating [BQI HIV VIRAL LOAD LOINC] taxonomy...
Creating [BQI INFLUENZA A ANTIGEN] taxonomy...
Creating [BQI INFLUENZA A CULTURE] taxonomy...
Creating [BQI INFLUENZA A NUCLEIC] taxonomy...
Creating [BQI INFLUENZA ANTIGEN LOINC] taxonomy...
Creating [BQI INFLUENZA CULT ID LOINC] taxonomy...
Creating [BQI INFLUENZA NUCLEIC LOINC] taxonomy...
Creating [BQI JAKOB CREUTZ PROTEIN LOINC] taxonomy...
Creating [BQI JAPAN ENCEPH ANTIBODY LNC] taxonomy...
Creating [BQI JAPAN ENCEPH ANTIGEN LOINC] taxonomy...
Creating [BQI JAPAN ENCEPH NUCLEIC LOINC] taxonomy...
Creating [BQI LEGIONNAIRE ANTIBODY LNC] taxonomy...
Creating [BQI LEGIONNAIRE ANTIGEN LOINC] taxonomy...
Creating [BQI LEGIONNAIRE CULTURE LNC] taxonomy...
Creating [BQI LEGIONNAIRE NUCLEIC LNC] taxonomy...
Creating [BQI LEPTOSPIROSIS ANTIBODY LNC] taxonomy...
Creating [BQI LEPTOSPIROSIS ANTIGEN LNC] taxonomy...
Creating [BQI LEPTOSPIROSIS CULT ID LNC] taxonomy...
Creating [BQI LEPTOSPIROSIS NUCLEIC LNC] taxonomy...
Creating [BQI LISTERIOSIS MONOCYTOGENES] taxonomy...
Creating [BQI LISTERIOSIS SPECIES LOINC] taxonomy...
Creating [BQI LYME ANTIBODY LOINC] taxonomy...
Creating [BQI LYME CULTURE ID LOINC] taxonomy...
Creating [BQI LYME NUCLEIC ACID LOINC] taxonomy...
Creating [BQI MALARIA ANTIGEN LOINC] taxonomy...

```

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Creating [BQI MALARIA MICRO LOINC] taxonomy...
Creating [BQI MALARIA NUCLEIC LOINC] taxonomy...
Creating [BQI MEASLES ANTIBODY LOINC] taxonomy...
Creating [BQI MEASLES ANTIGEN LOINC] taxonomy...
Creating [BQI MEASLES CULT ID LOINC] taxonomy...
Creating [BQI MEASLES NUCLEIC ACID LOINC] taxonomy...
Creating [BQI MEASLES PANEL IGM ANTIBODY] taxonomy...
Creating [BQI MEASLES PANEL NUCLEIC LNC] taxonomy...
Creating [BQI MELIOIDOSIS ANTIBODY LNC] taxonomy...
Creating [BQI MELIOIDOSIS CULT ID LOINC] taxonomy...
Creating [BQI MELIOIDOSIS NUCLEIC LOINC] taxonomy...
Creating [BQI MENINGITIDIS ANTIGEN LNC] taxonomy...
Creating [BQI MENINGITIDIS CULTURE ID] taxonomy...
Creating [BQI MENINGITIDIS NUCLEIC LNC] taxonomy...
Creating [BQI MERS NUCLEIC ACID LOINC] taxonomy...
Creating [BQI MUMPS ANTIBODY LOINC] taxonomy...
Creating [BQI MUMPS ANTIGEN LOINC] taxonomy...
Creating [BQI MUMPS CULTURE ID LOINC] taxonomy...
Creating [BQI MUMPS NUCLEIC LOINC] taxonomy...
Creating [BQI MUMPS PANEL ANTIBODY LNC] taxonomy...
Updating [BQI LISTERIOSIS MONOCYTOGENES] taxonomy...
Updating [BQI LISTERIOSIS SPECIES LOINC] taxonomy...
Updating [BQI LYME ANTIBODY LOINC] taxonomy...
Updating [BQI LYME CULTURE ID LOINC] taxonomy...
Updating [BQI LYME NUCLEIC ACID LOINC] taxonomy...
Updating [BQI MALARIA ANTIGEN LOINC] taxonomy...
Updating [BQI MALARIA MICRO LOINC] taxonomy...
Updating [BQI MALARIA NUCLEIC LOINC] taxonomy...
Updating [BQI MEASLES ANTIBODY LOINC] taxonomy...
Updating [BQI MEASLES ANTIGEN LOINC] taxonomy...
Updating [BQI MEASLES CULT ID LOINC] taxonomy...
Updating [BQI MEASLES NUCLEIC ACID LOINC] taxonomy...
Updating [BQI MEASLES PANEL IGM ANTIBODY] taxonomy...
Updating [BQI MEASLES PANEL NUCLEIC LNC] taxonomy...
Updating [BQI MELIOIDOSIS ANTIBODY LNC] taxonomy...
Updating [BQI MELIOIDOSIS CULT ID LOINC] taxonomy...
Updating [BQI MELIOIDOSIS NUCLEIC LOINC] taxonomy...
Updating [BQI MENINGITIDIS ANTIGEN LNC] taxonomy...
Updating [BQI MENINGITIDIS CULTURE ID] taxonomy...
Updating [BQI MENINGITIDIS NUCLEIC LNC] taxonomy...
Updating [BQI MERS NUCLEIC ACID LOINC] taxonomy...
Updating [BQI MUMPS ANTIBODY LOINC] taxonomy...
Updating [BQI MUMPS ANTIGEN LOINC] taxonomy...
Updating [BQI MUMPS CULTURE ID LOINC] taxonomy...
Updating [BQI MUMPS NUCLEIC LOINC] taxonomy...
Updating [BQI MUMPS PANEL ANTIBODY LNC] taxonomy...
Updating [BQI MUMPS PANEL ANTIBODY LNC] taxonomy...
Creating [BQI MUMPS PANEL NUCLEIC LNC] taxonomy...
Creating [BQI MYCOBCT INF CULTURE LOINC] taxonomy...
Creating [BQI MYCOBCT INF NUCLEIC LOINC] taxonomy...
Creating [BQI NAEGELEERIA PAM CULT LOINC] taxonomy...
Creating [BQI OPIOID QUALITATIVE LNC] taxonomy...
Creating [BQI OPIOID QUANTITATIVE LNC] taxonomy...
Creating [BQI PARATYPHOID ANTIBODY LNC] taxonomy...
Creating [BQI PERTUSSIS ANTIBODY LOINC] taxonomy...
Creating [BQI PERTUSSIS ANTIGEN LOINC] taxonomy...
Creating [BQI PERTUSSIS CULT LOINC] taxonomy...
Creating [BQI PERTUSSIS NUCLEIC LOINC] taxonomy...
Creating [BQI PERTUSSIS PANEL LOINC] taxonomy...
Creating [BQI PESTICIDE CHOLINEST LOINC] taxonomy...
Creating [BQI PESTICIDE LOINC] taxonomy...

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Creating [BQI PESTICIDE PANELS CHOL LNC] taxonomy...
Creating [BQI PESTICIDE PANELS LOINC] taxonomy...
Creating [BQI PLAGUE ANTIBODY LOINC] taxonomy...
Creating [BQI PLAGUE ANTIGEN LOINC] taxonomy...
Creating [BQI PLAGUE CULTURE ID LOINC] taxonomy...
Creating [BQI PLAGUE NUCLEIC LOINC] taxonomy...
Creating [BQI POLIO ANTIBODY LOINC] taxonomy...
Creating [BQI POLIO CULTURE LOINC] taxonomy...
Creating [BQI POLIO PANEL LOINC] taxonomy...
Creating [BQI POWASSAN ANTIBODY LOINC] taxonomy...
Creating [BQI POWASSAN NUCLEIC LOINC] taxonomy...
Creating [BQI PSITTACOSIS ANTIBODY LNC] taxonomy...
Creating [BQI PSITTACOSIS CULTURE ID LNC] taxonomy...
Creating [BQI PSITTACOSIS NUCLEIC LOINC] taxonomy...
Creating [BQI Q FEVER ANTIBODY LOINC] taxonomy...
Creating [BQI Q FEVER ANTIGEN LOINC] taxonomy...
Creating [BQI Q FEVER CULTURE ID LOINC] taxonomy...
Creating [BQI Q FEVER NUCLEIC LOINC] taxonomy...
Creating [BQI RABIES ANTIBODY LOINC] taxonomy...
Creating [BQI RABIES ANTIGEN LOINC] taxonomy...
Creating [BQI RABIES CULTURE ID LOINC] taxonomy...
Creating [BQI RABIES NUCLEIC ACID LOINC] taxonomy...
Creating [BQI RICIN ANTIBODY LOINC] taxonomy...
Creating [BQI RICIN LOINC] taxonomy...
Creating [BQI ROCKY MTN FVR ANTIBODY] taxonomy...
Creating [BQI ROCKY MTN FVR ANTIGEN LNC] taxonomy...
Creating [BQI ROCKY MTN FVR CULTURE ID] taxonomy...
Creating [BQI ROCKY MTN FVR NUCLEIC LNC] taxonomy...
Creating [BQI RSV ANTIGEN LOINC] taxonomy...
Creating [BQI RSV CULTURE ID LOINC] taxonomy...
Creating [BQI RSV NUCLEIC ACID LOINC] taxonomy...
Creating [BQI RUBELLA ANTIBODY LOINC] taxonomy...
Creating [BQI RUBELLA CULTURE ID LNC] taxonomy...
Creating [BQI RUBELLA NUCLEIC LOINC] taxonomy...
Creating [BQI RUBELLA PANEL ANTIBODY] taxonomy...
Creating [BQI RUBELLA PANEL NUCLEIC LNC] taxonomy...
Creating [BQI SALMONELLA CULTURE ID LNC] taxonomy...
Creating [BQI SALMONELLA NUCLEIC LOINC] taxonomy...
Creating [BQI SARS ANTIBODY LOINC] taxonomy...
Creating [BQI SARS CULTURE ID LOINC] taxonomy...
Creating [BQI SARS NUCLEIC ACID LOINC] taxonomy...
Creating [BQI SARS UNSPECIFIED LOINC] taxonomy...
Creating [BQI SHIGA E COLI ANTIBODY LNC] taxonomy...
Creating [BQI SHIGA E COLI ANTIGEN LNC] taxonomy...
Creating [BQI SHIGA E COLI CULTURE LOINC] taxonomy...
Creating [BQI SHIGA E COLI NUCLEIC LNC] taxonomy...
Creating [BQI SHIGA E COLI UNSPEC LOINC] taxonomy...
Creating [BQI SHIGELLA CULTURE LOINC] taxonomy...
Creating [BQI SHIGELLA E COLI NUC LNC] taxonomy...
Creating [BQI SHIGELLA NUCLEIC LOINC] taxonomy...
Creating [BQI SMALLPOX NUCLEIC ACID LNC] taxonomy...
Creating [BQI ST LOUIS ENCEPH ANTIBODY] taxonomy...
Creating [BQI ST LOUIS ENCEPH ANTIGEN] taxonomy...
Creating [BQI ST LOUIS ENCEPH NUCLEIC] taxonomy...
Creating [BQI STREP PNEUMO INV ANTIGEN] taxonomy...
Creating [BQI STREP PNEUMO INV CULTURE] taxonomy...
Creating [BQI TICKBORNE RELAPSE ANTIBODY] taxonomy...
Creating [BQI TICKBORNE RELAPSE CULT LNC] taxonomy...
Creating [BQI TICKBORNE RELAPSE NUCL LNC] taxonomy...
Creating [BQI TRICHINOSIS ANTIBODY LOINC] taxonomy...
Creating [BQI TRICHINOSIS DNA LOINC] taxonomy...

```

```

Creating [BQI TRICHINOSIS OTHER LOINC] taxonomy...
Creating [BQI TUBERCULOSIS ASSAYS LOINC] taxonomy...
Creating [BQI TUBERCULOSIS CULTURE LOINC] taxonomy...
Creating [BQI TUBERCULOSIS NUCLEIC LOINC] taxonomy...
Creating [BQI TUBERCULOSIS SKIN TST LNC] taxonomy...
Creating [BQI TULAREMIA ANTIBODY LOINC] taxonomy...
Creating [BQI TULAREMIA ANTIGEN LOINC] taxonomy...
Creating [BQI TULAREMIA CELL WALL LOINC] taxonomy...
Creating [BQI TULAREMIA CULTURE ID LOINC] taxonomy...
Creating [BQI TULAREMIA NUCLEIC ACID LNC] taxonomy...
Creating [BQI TULAREMIA PANEL ANTIBODY] taxonomy...
Creating [BQI TYPHOID ANTIBODY LOINC] taxonomy...
Creating [BQI TYPHOID CULTURE ID LOINC] taxonomy...
Creating [BQI TYPHOID NUCLEIC ACID LNC] taxonomy...
Creating [BQI VALLEY FEVER ANTIBODY LNC] taxonomy...
Creating [BQI VALLEY FEVER ANTIGEN LOINC] taxonomy...
Creating [BQI VALLEY FEVER CULTURE LOINC] taxonomy...
Creating [BQI VALLEY FEVER NUCLEIC LOINC] taxonomy...
Creating [BQI VARICELLA ANTIBODY LOINC] taxonomy...
Creating [BQI VARICELLA ANTIGEN LOINC] taxonomy...
Creating [BQI VARICELLA CULTURE ID LNC] taxonomy...
Creating [BQI VARICELLA NUCLEIC LOINC] taxonomy...
Creating [BQI VIBRIOSIS DNA LOINC] taxonomy...
Creating [BQI VIBRIOSIS OTHER LOINC] taxonomy...
Creating [BQI VISA VRSA CULTURE ID LNC] taxonomy...
Creating [BQI VISA VRSA RESIST GENE LNC] taxonomy...
Creating [BQI VISA VRSA SUSCEPTIBILITY] taxonomy...
Creating [BQI WEST EQUINE ANTIBODY LOINC] taxonomy...
Creating [BQI WEST EQUINE ANTIGEN LOINC] taxonomy...
Creating [BQI WEST EQUINE NUCLEIC LOINC] taxonomy...
Creating [BQI WEST NILE ANTIBODY LOINC] taxonomy...
Creating [BQI WEST NILE ANTIGEN LOINC] taxonomy...
Creating [BQI WEST NILE NUCLEIC LOINC] taxonomy...
Creating [BQI YELLOW FEVER ANTIBODY LNC] taxonomy...
Creating [BQI YERSINIOSIS CULT ID LOINC] taxonomy...
Creating [BQI YERSINIOSIS NUCLEIC LOINC] taxonomy...
Creating [BQI ZIKA ANTIBODY LOINC] taxonomy...
Creating [BQI ZIKA NUCLEIC ACID LOINC] taxonomy...
Creating [BQI ZIKA PANEL ANTIBODY LNC] taxonomy...
Creating [BQI ZIKA PANEL NUCLEIC LOINC] taxonomy...
Creating [BQI COVID ECR PANELS NUCLEIC] taxonomy...
Creating [BQI COVID ECR PANELS GAMMA] taxonomy...
Creating [BQI HEMORRHAGIC FEVR PANEL NCL] taxonomy...
Creating [BQI COVID DRUGS] taxonomy... ..

```

```

Checking production...
Adding 'GetCANES' business service...
Adding 'SendCANES' business operation...
Applying CANES production settings...
Configuring BCOM production...
Starting BCOM production...
11:50:37.142:Ens.Director: Production 'BCOM.SFTP' starting...
11:50:37.361:Ens.Director: Production 'BCOM.SFTP' started.

```

Updating Routine file...

Updating KIDS files...

BQI\*2.9\*3 Installed.

Jul 22, 2022@12:36:08

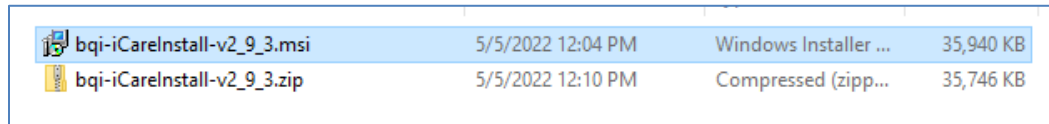
```
Not a VA primary domain  
NO Install Message sent  
Install Completed
```

Figure 4-6: Installation Completed

## 4.2 Sample GUI Client Installation

The following section outlines the installation procedure for loading the iCare GUI client application onto a single workstation. Options are available to install the iCare client on multiple workstations through automated deployment methods. Please refer to Appendix A GUI Deployment Options for descriptions of these options.

As shown in Figure 4-3, navigate to the folder on the client machine that contains the iCare installation program and launch the `bqi-iCareInstall-v2_9_3.msi` program:





 bqi-iCareInstall-v2_9_3.msi	5/5/2022 12:04 PM	Windows Installer ...	35,940 KB
 bqi-iCareInstall-v2_9_3.zip	5/5/2022 12:10 PM	Compressed (zipp...	35,746 KB

Figure 4-7: Install Program

As shown in Figure 4-4, click **Next** on the Welcome screen to continue.



Figure 4-8: Welcome Screen

As shown in Figure 4-5, click **Next** on the **Destination Folder** screen to continue.



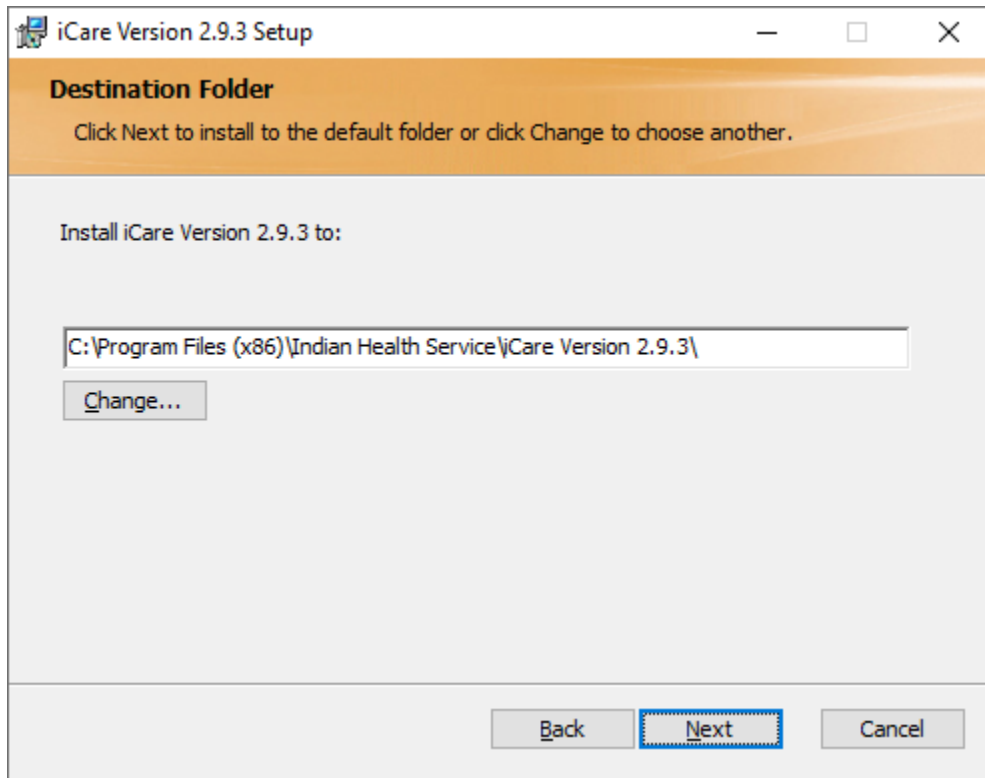


Figure 4-9: Destination Folder Screen

As shown in Figure 4-6, click **Install** to confirm installation.

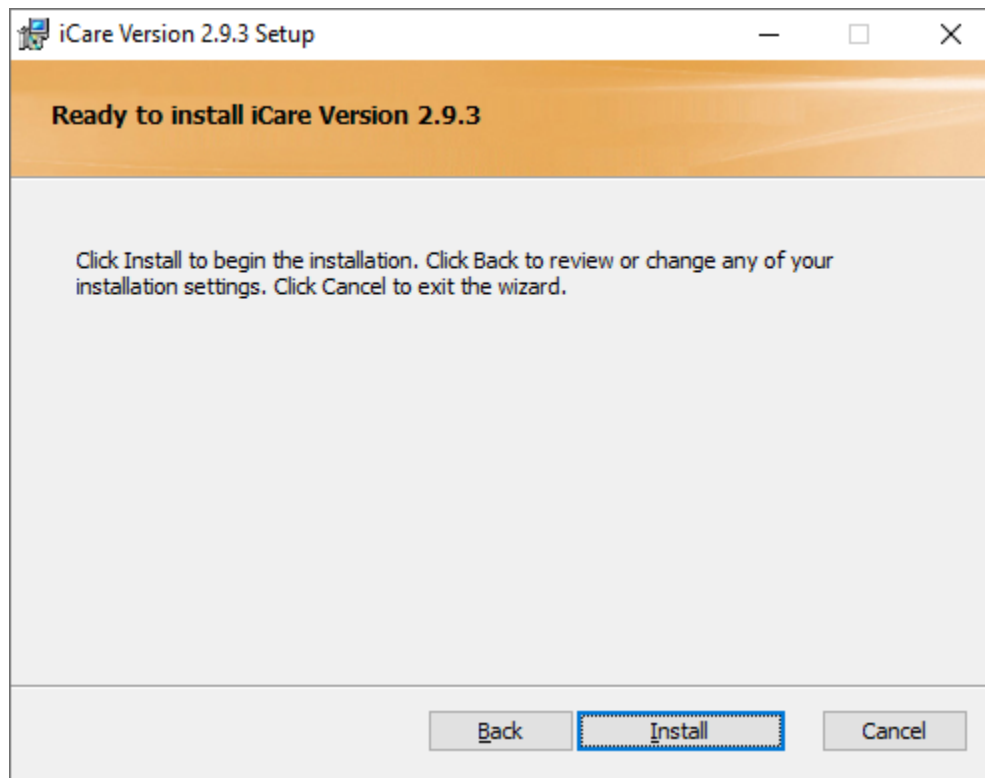


Figure 4-10: Confirm Installation Screen

As shown in Figure 4-11, wait for the installation to be complete.

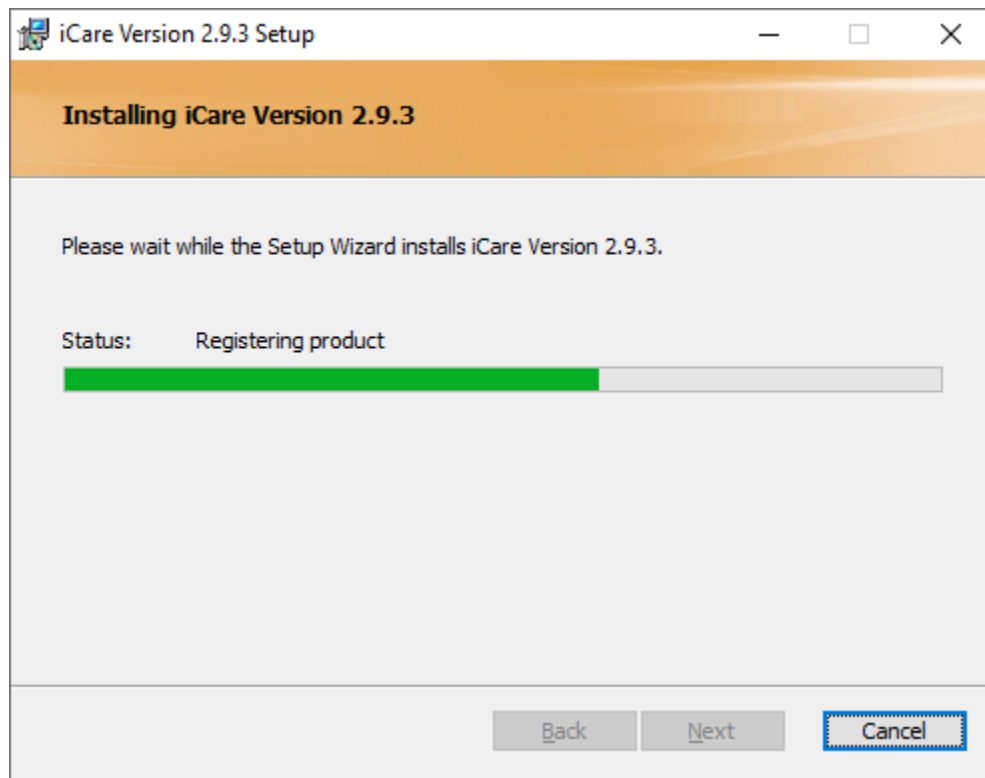


Figure 4-11: Installing Screen

As shown in Figure 4-12, click **Finish** to complete the installation.

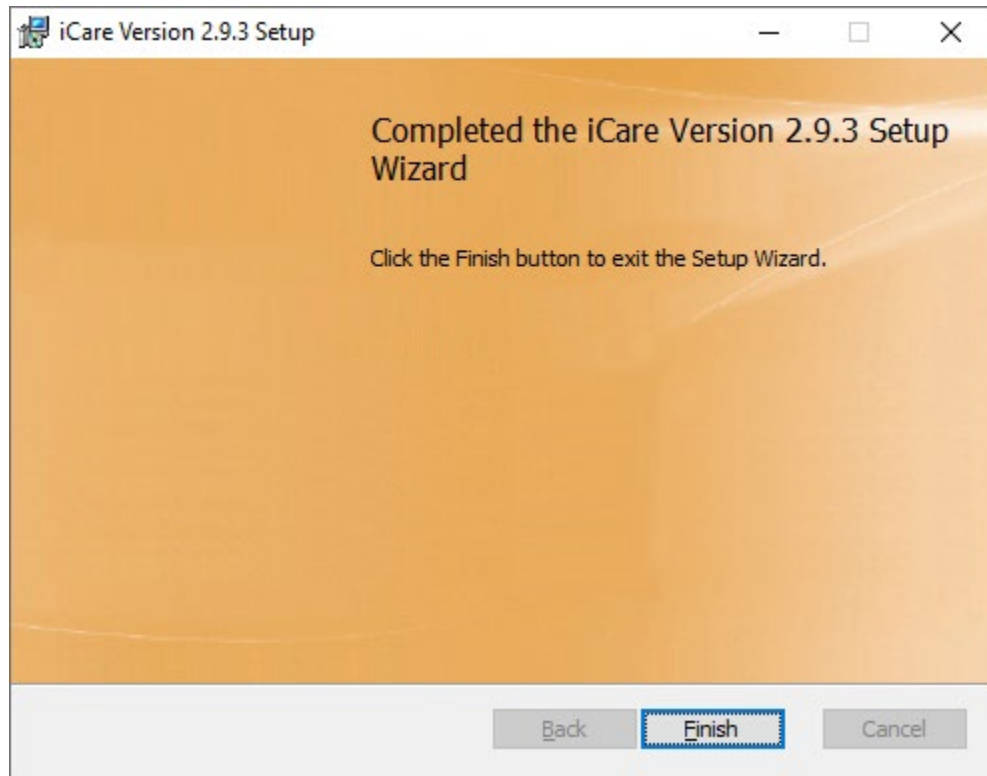


Figure 4-12: Installation Complete Screen

## 5.0 Installation Configuration

### 5.1 Disk Space

Auditing was implemented for Certification and for each iCare release after v2.3 Patch 4; be aware of disk space. See *IHS User Security Audit 1.0* manual for more information.

### 5.2 Journaling

No changes to journaling is needed in this version. The ^BQIPAT and ^BTPWPQ globals should be in the same special non-journaled database as globals: TMP and XTMP.

### 5.3 Post-Installation

#### 5.3.1 BCOM – IHS COMMUNICATION SUPPORT

During the post-install process, a BCOM process will be set up to transmit the Community Alerts export to the Department of Epidemiology. Previously this was performed by the ‘sendto’ process. The two new processes are GetCANES and SendCANES.

Sign on to the Management Portal to check that the new CANES processes have been set up. Look to the right and see that BCOMnamespace is **Running**. For example, my test namespace is CMBC. Click **View details**.

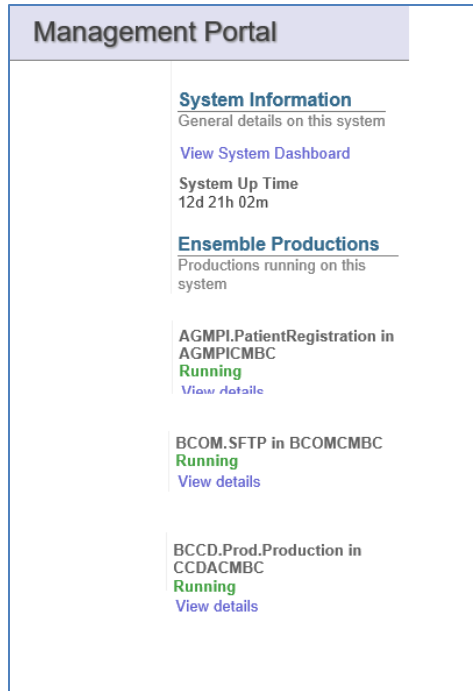


Figure 5-1: Management Portal

You may need to click **Update** to finish the setup. Also, check and make sure that there is an Archive Patch. Be sure that the folder exists

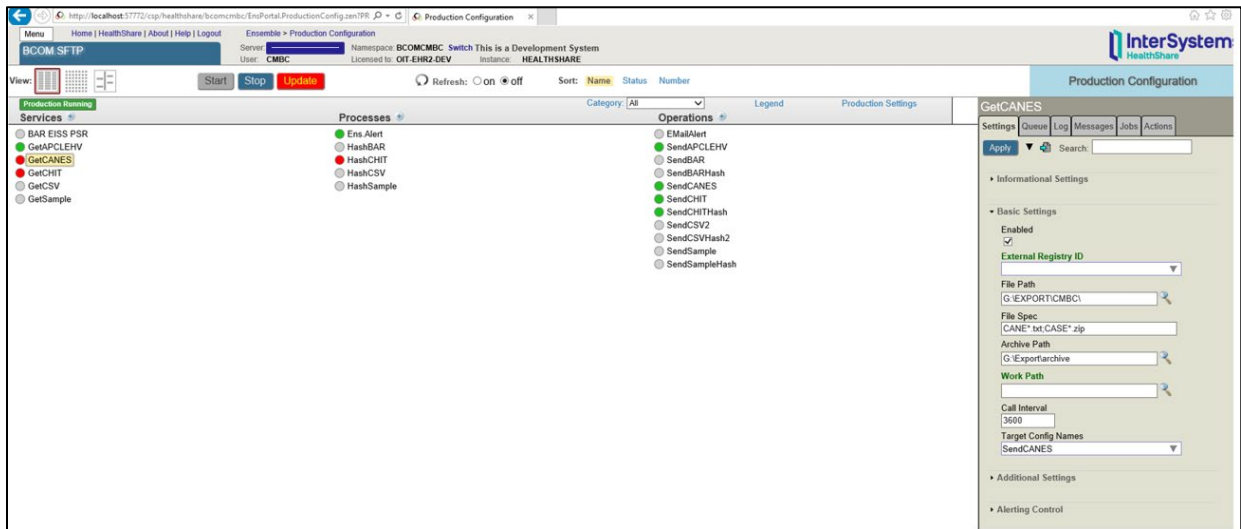


Figure 5-2: Update Setup

### 5.3.2 Post-Installation Tasks

Two TaskMan jobs will be created during the installation of the KIDS build: Update Order Tables and Update Note Tables. These jobs are creating specialized cross-references for use in the new Panel Definitions for Orders and Notes. Because a site can have hundreds, thousands and even millions of orders and notes, these jobs may take time to complete. The tables for Orders and Notes will not be available until these cross-references are finished.

## Appendix A: GUI Deployment Options

### A.1 Basic Single-Workstation Installation

The basic single-workstation procedure is outlined in Section 3.7. Step-by-step instructions are provided for executing the iCare GUI client install package to install directly on a user's workstation.

### A.2 Terminal Services/Citrix Server Installation

For sites that use thin client/terminal services such as Citrix or Microsoft Terminal Services to manage application delivery, the update process for multiple users is simplified, as the iCare client version will only need to be updated on the terminal server machines via standard application install procedures for publishing applications.

### A.3 Windows SMS

Some IHS sites may utilize Microsoft Systems Management Server (SMS) to assist with management of software on desktop machines. The iCare GUI client installation files were created with automated deployment in mind and should be compatible with SMS deployment. The iCare GUI client install is provided as an "msi" Microsoft installer package, along with a setup.exe file that provides .Net bootstrapping to check for installed .Net framework environment, if required.

Based on site administrator feedback from previous versions, the default behavior for the .msi installation includes the automatic removal of previous iCare GUI versions to simplify the deployment process.

The details of deploying/publishing applications via SMS are beyond the scope of this document. Please refer to the Microsoft SMS documentation to identify the procedure to deploy the application with appropriate installation options such as silent install, etc.

### A.4 Active Directory Application Deployment

Microsoft Active Directory is another option for deploying the iCare GUI Client to desktops through an automated process. To use this method, the installation files are placed in a shared network folder that allows at least reader access for all users that will be installing the application. Once this has been created, an Active Directory administrator can go into the Group Policy Editor and assign the application to the appropriate group(s) of users, or machines that are registered in the Active Directory.



Additional details and a walk-through of this process are available: [Group Policy to remotely install software](#).

## A.5 Command Line Argument Options

Command-line arguments are available to provide additional options for managing the server connection list that is provided to the user upon login.

If no command-line arguments are provided, the application will present a blank server connection list and allow the user to enter new connection entries that will be stored in the user's Windows roaming local application folder. The roaming local application folder was chosen based feedback from sites using Citrix thin-client deployments.

The available arguments are defined below. The options may be used together to achieve desired server connection management results.

## A.6 /configpath:{File path}

```
Example:  
"C:\Program Files (x86)\Indian Health Service\iCare Version 2.7\bqi-  
iCare.exe" /configpath:\\appserver1\shared\iCareConfig\
```

Figure A-1: Configuration Path

When the “/configpath” argument is specified as shown in Figure A-1 the application will check in the defined file path location for the server connection configuration file named `bm_x_config.xml`. If a configuration file is found, then it will load the connection items for the user to select from in the login screen. If no configuration file is found and the folder path specified is valid then a new blank `bm_x_config.xml` configuration file will be created in that location and changes will be stored and managed at that location.

The file location may be any valid storage location, including network shares and local system directories. The user must however have read/write access to the directory.

If an invalid directory is specified, the application will present a message indicating that the location is not valid, and it will ignore the parameter and use the default location.

## A.7 /lockedit

```
Example:  
bqi-iCare.exe /lockedit
```

Figure A-2: Lockedit argument

When the “/lockedit” argument is included as shown in Figure A-2, the application will disallow the user from editing the defined server connection information and will be limited to the items that are defined in the list.

The /lockedit argument is useful in conjunction with the “/configpath” argument specified above to achieve a centrally managed configuration in which users are not allowed to edit the shared configuration file. Refer to Section A.9 for more details.

## A.8 /rpms:

```
Example:
bqi-iCare.exe /rpms:"server1,10501,MyServer
Connection,PRD1,Win,60000,40000"
```

Figure A-3: RPMS argument

The “/rpms” argument, as shown in Figure A-3, allows the specification of a specific server connection entry to be passed into the application from the command-line. The entry that is specified will appear as an entry in the server connection list. This argument may be used in conjunction with the “/lockedit” option to force the user to connect to a single specific location.

The comma-delimited arguments are as follows:

- Server Address (Numeric IP or server name)
- Port Number for the BMXNet listener
- Display name of connection (This will be the title used in the list)
- Name space (optional)
- Windows Authentication (set to Win for Windows authentication)
- Receive Timeout (in milliseconds, recommended 60000)
- Send Timeout (in milliseconds, recommended 40000)

## A.9 Setting Up a Central Shared Server Configuration List

Site managers may choose to implement a central bmx\_config.xml configuration file to be shared by multiple users, new users will not need to enter the server configuration settings when first connecting the iCare GUI to the RPMS server(s). Also, if configuration changes are made to the RPMS server such as a change or network address or BMXNet port number, the changes can be centrally managed by editing the single configuration file.

To configure this approach, the following steps may be followed:

1. An administrator should create the bmx\_user\_config.xml file with the server connections that are desired.

- a. Install iCare GUI on one client machine and configure the BMX connection(s) via the BMX connection tool.
- b. Find the `bm_x_user_config.xml` file on the client machine after you have setup the valid connection(s) by searching within the Users folder for `bm_x*.xml`. A sample file location is shown as an example:

```
Example:
C:\Users\firstname.lastname\AppData\Roaming\IndianHealthService\iCare\bm_x_
ser_config.xml
```

Figure A-4: RPMS argument

```
Example:

<?xml version="1.0" ?>
- <ArrayOfRpmsConnectionSpec xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <RpmsConnectionSpec Name="DEV6" Server="DEMOSRVR01"
ReceiveTimeout="900000" SendTimeout="40000" Port="10561" Namespace="DEV6"
IsDefault="false" UseWindowsAuthentication="false"
UseDefaultNamespace="false" />
  <RpmsConnectionSpec Name="TEST6" Server="DEMOSRVR01"
ReceiveTimeout="900000" SendTimeout="40000" Port="10562" Namespace="TEST6"
IsDefault="false" UseWindowsAuthentication="false"
UseDefaultNamespace="false" />
</ArrayOfRpmsConnectionSpec>
```

Figure A-5:RPMS argument

2. The administrator should start the iCare application using the `/configpath` command line argument to specify the network location where the file is to be stored.
3. Then, the administrator can specify the connections that are desired to be available to the users sharing this configuration file.

**Note:** After signing in to the iCare GUI application, the file at the specified `/configpath` location will contain the connection entries that were entered.

4. Once the `bm_x_config.xml` file has been created in the desired shared location with the appropriate connection entries, each user's application shortcut/launch string should be edited to include the same `/configpath` location so that the connection settings are loaded when the user starts the application.

**Note:** It is recommended that the `/lockedit` argument also be used so that user's sharing the central configuration file are not allowed to edit that file, but instead can only select from the available choices.

5. If you are pushing the iCare application via msi or other Active Directory approach and can edit the shortcut, add the parameter from Section A.9 using the /configpath parameter from Section A.6 to identify the shared configuration file.
6. The /configpath parameter should be added to each user's iCare shortcut as shown below. The /configpath value should be the shared folder where the shared bmx\_user\_config.xml file is stored. The shortcut with parameter would have to be updated this way for each iCare user's GUI instance.

Alternatively, you could copy the standard bmx\_user\_config.xml file (based on the first user you set up to define the connections) to each user's AppData location rather than having to create the connection for each user.

`\AppData\Roaming\IndianHealthService\iCare\`

## Acronym List

Acronym	Meaning
AG	Patient Registration Namespace
AICD	IHS ICD/CPT Lookup & Grouping
AMQQ	Q-Man Namespace
APCD	PCC Data Entry Namespace
APCH	PCC Health Summary Namespace
ATX	Taxonomy Namespace
BAT	IHS Asthma Register Namespace
BDM	Diabetes Management System Namespace
BGP	IHS Clinical Reporting Namespace
BI	Immunization Namespace
BJPC	IHS PCC Suite Namespace
BKM	HIV Management System Namespace
BMC	Referred Care Info System Namespace
BMX	BMXNet
BQI	iCare Namespace
BUSA	IHS User Security Audit Namespace
CMET	Care Management Event Tracking
DI	VA FileMan
DSPM	DESIGNATED PROVIDER MGT SYSTEM
DX	Diagnosis Tags
GUI	Graphical User Interface
HIV	Human Immunodeficiency Virus
HMS	HIV Management System
IHS	Indian Health Service
IPC	Improving Patient Care Collaborative
KIDS	Kernel Installation and Distribution System
OIT	Office of Information and Technology
OS	Operating System
PC	Personal Computer
PCC	RPMS Patient Care Component
PCMH	Patient Centered Medical Home
PIMS	Patient Information Management System
RPMS	Resource and Patient Management System

<b>Acronym</b>	<b>Meaning</b>
SMS	Microsoft Systems Management Server
XB	IHS/VA Utilities Namespace
XU	VA Kernel Namespace

## Contact Information

If you have any questions or comments regarding this distribution, please contact the IT Service Desk (IHS).

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