



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Clinical Reporting System**

## **(BGP)**

### **Installation Guide and Release Notes**

Version 11.0  
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Office of Information Technology (OIT)  
Division of Information Resource Management  
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## Preface

The Government Performance and Results Act (GPRA) requires federal agencies to report annually on how the agency measured against the performance targets set in its annual plan. The Indian Health Service (IHS) GPRA measures include clinical prevention and treatment, quality of care, infrastructure, and administrative efficiency functions.

The IHS Clinical Reporting System (CRS) is a Resource and Patient Management System (RPMS) software application designed for national reporting, as well as Area Office and local monitoring of clinical GPRA and developmental measures. CRS was first released for FY 2002 performance measures (as GPRA+) and is based on a design by the Aberdeen Area Office (GPRA2000).

This manual provides instructions on using the CRS. Version 11.0 adds fiscal year (FY) 2011 clinical performance measures to existing FY 2002 through FY 2010 measures.

CRS is the reporting tool used by the IHS Office of Planning and Evaluation to collect and report clinical performance results annually to the Department of Health and Human Services (HHS) and to Congress.

Each year, an updated version of CRS software is released to reflect changes in the logic descriptions of the different denominators and numerators. Additional performance measures may also be added. Local facilities can run reports as often as they want and can also use CRS to transmit data to their Area Office. The Area Office can use CRS to produce an aggregated Area Office report for either annual GPRA or Area Office director performance reports.

CRS produces reports on demand from local RPMS databases for both GPRA and developmental clinical performance measures that are based on RPMS data, thus eliminating the need for manual chart audits for evaluating and reporting clinical measures.

To produce reports with comparable data across every facility, the GPRA measures definitions were “translated” into programming code with the assistance of clinical subject matter experts. CRS uses predefined taxonomies to find data items in the RPMS Patient Care Component to determine if a patient meets the performance measure criteria. Taxonomies contain groups of codes (e.g., diagnoses or procedures) or site-specific terms. Each performance measure topic has one or more defined denominators and numerators.

Administrative and clinical users can review individual or all measures at any time to:

- Identify potential data issues in their RPMS; for example, missing or incorrect data.
- Monitor their site's performance against past national performance and upcoming agency goals
- Identify specific areas where the facility is not meeting the measure in order to initiate business process or other changes
- Quickly measure impact of process changes on performance measures
- Identify IHS Area Offices meeting or exceeding measures to provide lessons learned

Users of the RPMS CRS include:

- Area Office and site quality improvement staff
- Compliance officers
- GPRA coordinators
- Clinical staff, such as physicians, nurses, nurse practitioners, and other providers
- Area Office directors
- Any staff involved with quality assurance initiatives
- Staff who run the various CRS reports

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## 1.0 About This Manual

This manual provides user instructions on installing Version 11.0 of the Clinical Reporting System (CRS). The manual provides installation instructions for both the Resource and Patient Management System (RPMS) server side software and the Visual CRS graphical user interface (GUI).

### 1.1 Key Changes in Version 11.0

#### 1.1.1 Changes to National GPRA Reports

- Allow users to run the Government Performance and Results Act (GPRA) Forecast Patient List report for patients added after a specific date.
- Allow users to run the GPRA & Program Assessment Rating Tool (PART) Performance Report on a search template of patients.

#### 1.1.2 Logic Changes to National GPRA & PART Report Measures

- **GPRA Developmental Measures:**
- Added the following new GPRA Developmental measures: Adult Immunizations: Pneumovax (with more accurate vaccine dosage); Cancer Screening: Pap Smear Rates (female Active Clinical patients ages 25–64 who have had a pap smear in the past 4 years); HIV Screening (added measures for positive, negative and no result broken down by age and gender, and added two new logic definitions with different changes to pregnancy denominator logic); Visit Statistics (new topic)
- Removed the following GPRA Developmental measures: Childhood Immunizations measure 4:3:1:3:3:1:4 (moved to official GPRA measure); H1N1 Immunizations topic
- **Adult Immunizations - Influenza:** Added CVX/HL7 Codes 140 and 141 to influenza immunization definition.
- **Childhood Immunizations:** (1) GPRA measure changed to 4:3:1:3:3:1:4 measure, which adds four doses of Pneumococcal to the required vaccines. (2) Added CVX/HL7 Code 132 to DTaP, IPV, HiB, and Hep B immunization definitions.
- **Pap Smear Rates:** Added logic for Women's Health Pap smears to ensure the Pap smear result does not have a value of "ERROR/DISREGARD."

- **Tobacco Use and Exposure Assessment:** (1) Added CPT Codes D1320, 99406, 99407, G0375 (old code), G0376 (old code), 1034F, 1035F, 1036F, 1000F, G8455, G8456, G8457, G8402, and G8453 to patient education codes for tobacco screening definition. (2) Added health factor categories TOBACCO (SMOKING), TOBACCO (SMOKELESS – CHEWING/DIP), and TOBACCO (EXPOSURE) to tobacco screening definition. (3) Added health factors Current Smoker, status unknown, Current smoker, every day, and Current smoker, some day to Tobacco User and Current Smoker definitions.
- **Tobacco Cessation:** (1) Added CPT Codes D1320, 99406, 99407, G0375 (old code), G0376 (old code), 4000F, G8402 or G8453 to patient education codes for tobacco cessation counseling definition. (2) Added health factors Current Smoker, status unknown, Current smoker, every day, and Current smoker, some day to Tobacco User definition. (3) Added health factors Previous (Former) Smoker, Previous (Former) Smokeless to quit tobacco use definition.
- **Alcohol Screening (FAS Prevention):** Added CPT Codes 99408, 99409, G0396, G0397, H0049, or H0050 to patient education codes for alcohol-related patient education definition.
- **Obesity Assessment:** Removed refusals from the Body Mass Index (BMI) numerator.
- **Comprehensive CVD-Related Assessment:** (1) Removed refusals from depression screening numerator. (2) Added CPT codes D1320, 99406, 99407, G0375 (old code), G0376 (old code), 1034F, 1035F, 1036F, 1000F, G8455, G8456, G8457, G8402, and G8453 to patient education codes for tobacco screening definition. (3) Added health factor categories TOBACCO (SMOKING), TOBACCO (SMOKELESS–CHEWING/DIP), and TOBACCO (EXPOSURE) to tobacco screening definition. (4) Changed logic to also look for secondary providers for Medical Nutrition Therapy.
- **Prenatal HIV Screening:** Excluded pharmacy-only visits (Clinic Code 39) from pregnancy visit definition.

### 1.1.3 Key Logic Changes to Non-GPRA Measures

- For key logic changes to non-GPRA measures, please refer to the CRS 2011 (version 11.0) Selected Measures Report Performance Measure List and Definitions document located on the CRS Web site at <http://www.ihs.gov/cio/crs/documents/SelectedMeasuresV11.pdf>.

#### 1.1.4 Additional Key Enhancements and Revisions

Updated CRS 2007 version 7.0 (not CRS 2011 version 11.0), National GPRA Reports menu by adding menu option “XP11” to be used to create a comprehensive GPRA export for GPRA year 2011. This data will be based on performance measure logic contained in CRS 2007 version 7.0.

## 2.0 Installation Notes

**Note:** Read the entire Notes File prior to attempting any installation.

**Prefix:** BGP  
**Current Version:** 11.0

### **Important Note:**

This distribution of the CRS contains Version 11.0 of CRS and the GUI front end to the CRS system. The server-side (i.e. “roll-and-scroll” or backend) version 11.0 of the package can be installed alone or both the GUI and the server-side versions can be installed. Currently, there is no requirement to install the GUI.

Please install version 11.0 of CRS (bgp\_1100.k) at all sites regardless of whether the site opts to install and use the GUI portion of the package. Version 11.0 of CRS and the GUI have different requirements so please take note of the requirements section for each piece of the software.

## 2.1 CRS Distribution Contents and Required Resources

### 2.1.1 Contents of Distribution

File	Description
bgp_1100.k	Kernel Installation and Distribution System (KIDS) file containing software
bgp_110i.pdf	Installation guide in PDF format (this manual)
bgp_110t.pdf	Technical Manual in PDF format
bgp_110u.pdf	User Manual in PDF format
bgp_110u_logicselected.pdf	CRS Clinical Performance Measure Logic Manual in PDF format
bgp_110u_visual.pdf	Visual CRS User Manual in PDF format
bgp_1100client.zip	Visual CRS software for Client's PC

### 2.1.2 Required Resources

- IHS Clinical Reporting System version 10.0 through Patch 1 (bgp\*10.0\*1)



## 2.2 Visual CRS (GUI) Distribution Contents and Required Resources

### 2.2.1 Contents of GUI CRS Distribution

- bgp\_1100client.zip

The following two files are contained in the zip file:

- bgp\_1100setup.exe
- bgp\_1100.msi

### 2.2.2 Required Resources for GUI CRS

Additional requirements for installing and using Visual CRS on a client's PC:

- **On the RPMS Server:**
  - BMX v4.0
  - IHS Clinical Reporting System version 11.0
- **On the Client (User's) PC:**
  - Windows XP Service Pack 3 or higher
  - Microsoft Office 2003 or later
  - .NET Framework v3.5sp1

If the CRS GUI is not going to be installed, ignore these requirements.

If the .NET Framework v3.5 sp1 is not installed it will automatically be downloaded and installed when the client installation is started.

## 2.3 Before You Begin

- Make a copy of this distribution for offline storage
- Print all notes/readme files
- Create a printed audit trail, in case there are any problems with the installation

To capture terminal output during the installation, use an auxport printer attached to the terminal on which the installation is being performed.

## 3.0 Installation Instructions

**Note:** This installation is a KIDS install. For any questions on how to do a KIDS installation, please contact your Area Office information systems support personnel.

In all UCIs running the IHS CRS:

1. Ensure that users are unable to use the CRS for the duration of this installation
2. Save all routines (^%RO (CACHE) and globals (^%GO (CACHE) in the BGP0\* namespace for use in returning to the prior existing version, if needed.

**Notes:**

1. *Do not* delete any of these routines prior to installation.
2. If this is a first install, there will be no routines or globals in this namespace.
3. If no problems are noted with the new installation, remove saved routines from your system 7–10 days after this install.

3. Install bgp\_1100.k. This file is the KIDS file for the IHS CRS.
  - a. Load the distribution into KIDS using **Option 1** on the **KIDS Installation menu**. The distribution was released in a file named bgp\_1100.k
  - b. Verify the load using **Option 2** on the **KIDS Installation menu**.
  - c. Consider using **Options 3** and **4** on the **KIDS Installation menu** to print and compare the Transport global.
  - d. For results, use the **KIDS Install File Print** option to view/print the IHS CLINICAL REPORTING SYSTEM V11.0 entry.

**Note:** For assistance with a KIDS install, call your Area Office support personnel.

4. After the install completes, assign security keys, as appropriate, using the following table.

Name	Descriptive Name	Description
BGPZAREA	BGP Area Report	This key unlocks the Area Office report options on the main BGPMENU. Note: This key should

Name	Descriptive Name	Description
		be assigned <i>only</i> at the Area Office level.
BGPZMENU	BGP Main Menu–CRS	This key unlocks the main CRS menu. It should be assigned to all users who need to run GPRA/CRS reports.
BGPZ PATIENT LISTS	BGP Patient Lists	This key allows the holder to obtain patient lists. The patient lists contain sensitive patient/clinical information. This key should be given <i>only</i> to those users who have a need for such information.
BGPZ SITE PARAMETERS	BGP Site Parameters	This key should be given to those with authority to update the site parameters.
BGPZ TAXONOMY EDIT	BGP Taxonomy Edit	This key should be given <i>only</i> to users who will need to update taxonomies.

### 3.1 Installation of the CRS GUI

There are two parts to the CRS GUI install: installation on the RPMS server and installation on the local (client) PC. See the steps below for installation instructions.

#### A. Installation on the RPMS server

1. Make sure BMX Version 4.0 has been installed in RPMS on the RPMS Server.
2. Make sure CRS version 11.0 has been installed in RPMS on the RPMS server. (See instructions above.)

**Note:** If a previous version of Visual CRS is being used you will not need to perform Steps 3 to 5. If this is the first time Visual CRS is being used perform Steps 3 to 5.

3. Assign option BGPGRPC as a secondary menu option with a synonym of **BGPG** for each user.
4. Assign option BMXRPC as a secondary menu option with a synonym of **BMX** for each user.

#### B. Installation on each user's (client) PC

1. Place bgp\_1100client.zip into a directory of your choice and unzip the file. There are two files included in the zip file: bgp\_1100.msi and bgp\_1100setup.exe.
2. If a previous version of the Visual CRS product is installed it will need to be removed. Go to the **Start** menu. Then go to **Control Panel** then click **Add/Remove Programs** and select and remove **Visual CRS**.
3. Double click the bgp\_1100setup.exe file that was distributed with Visual CRS. If asked, accept the License Agreement and follow the instructions for downloading and installing Microsoft .Net Framework 3.5 sp1 (this will only occur if the most current version of Microsoft.Net Framework 3.5 sp1 is not on the local PC). This step takes approximately 20-30 minutes over a DSL connection.
4. Follow the prompts on the **Visual CRS Setup Screens** and accept all of the defaults.
5. Double click the **Visual CRS** shortcut that appears on the desktop.
6. If this is the first install you will need to add a new connection. Please refer to the BMX 4.0 User Manual for instructions.
7. When the RPMS Login window appears, enter your RPMS access and verify codes, and then click OK.
8. If data for multiple facilities is stored on the same RPMS database, the Select Division window is displayed. Select a Division, and then click OK.

You are now in the Visual CRS software.

## 4.0 Sample Installations

### 4.1 Sample Installation of CRS on RPMS Server

```

Select Kernel Installation & Distribution System Option:

KIDS  Kernel Installation & Distribution System ...
NTEG  Build an 'NTEG' routine for a package
PG    Programmer mode
      Calculate and Show Checksum Values
      Clean Error Trap
      Delete Unreferenced Options
      Error Processing ...
      Global Block Count
      List Global
      Map Pointer Relations
      Number base changer
      Routine Tools ...
      Test an option not in your menu

Select Installation Option: 1 Load a Distribution
Select Installation Option: 1 Load a Distribution
Enter a Host File: c:\cmi\bgp_1100.k

KIDS Distribution saved on Dec 08, 2010@15:07:16
Comment: IHS CLINICAL REPORTING SYSTEM V11.0

This Distribution contains Transport Globals for the following Package(s):
Build IHS CLINICAL REPORTING 11.0 has been loaded before, here is when:
      IHS CLINICAL REPORTING 11.0   Install Completed
                                   was loaded on Nov 18, 2010@07:16:16

OK to continue with Load? NO// y YES

Distribution OK!

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

Build IHS CLINICAL REPORTING 11.0 has an Enviromental Check Routine
Want to RUN the Environment Check Routine? YES//
      IHS CLINICAL REPORTING 11.0
Will first run the Environment Check Routine, BGP1POS

      Patch "BGP*10.0*1" is installed.
Use INSTALL NAME: IHS CLINICAL REPORTING 11.0 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

```

```
You have 3 PENDING ALERTS
      Enter "VA to jump to VIEW ALERTS option

Select Installation Option: install Package(s)
Select INSTALL NAME:      IHS CLINICAL REPORTING 11.0      Loaded from Distribution
      Loaded from Distribution 12/8/10@15:12:15
      => IHS CLINICAL REPORTING SYSTEM V11.0 ;Created on Dec 08, 2010@15:07:16

This Distribution was loaded on Dec 08, 2010@15:12:15 with header of
      IHS CLINICAL REPORTING SYSTEM V11.0 ;Created on Dec 08, 2010@15:07:16
It consisted of the following Install(s):
IHS CLINICAL REPORTING 11.0
Checking Install for Package IHS CLINICAL REPORTING 11.0
Will first run the Environment Check Routine, BGP1POS

      Patch "BGP*10.0*1" is installed.
      Patch "BJPC*2.0*5" is installed.

Install Questions for IHS CLINICAL REPORTING 11.0

Incoming Files:

      90241.01 BGP CONTROL FILE (including data)
Note: You already have the 'BGP CONTROL FILE' File.
I will REPLACE your data with mine.

      90241.02 BGP SITE PARAMETERS
Note: You already have the 'BGP SITE PARAMETERS' File.

      90241.03 BGP SUMMARY CATEGORIES (including data)
Note: You already have the 'BGP SUMMARY CATEGORIES' File.
I will REPLACE your data with mine.

      90377.02 BGP 10 INDIVIDUAL MEASURES (including data)
Note: You already have the 'BGP 10 INDIVIDUAL MEASURES' File.
I will OVERWRITE your data with mine.

      90545.01 BGP 11 MEASURES (including data)
Note: You already have the 'BGP 11 MEASURES' File.
I will OVERWRITE your data with mine.

      90545.02 BGP 11 INDIVIDUAL MEASURES (including data)
Note: You already have the 'BGP 11 INDIVIDUAL MEASURES' File.
I will OVERWRITE your data with mine.

      90545.03 BGP 11 DATA CURRENT
Note: You already have the 'BGP 11 DATA CURRENT' File.

      90545.04 BGP 11 DATA PREVIOUS
Note: You already have the 'BGP 11 DATA PREVIOUS' File.

      90545.05 BGP 11 DATA BASELINE
```

Note: You already have the 'BGP 11 DATA BASELINE' File.

90545.06 BGP 11 NATIONAL PATIENT LISTS (including data)  
Note: You already have the 'BGP 11 NATIONAL PATIENT LISTS' File.  
I will OVERWRITE your data with mine.

90545.08 BGP 11 TAXONOMIES (including data)  
Note: You already have the 'BGP 11 TAXONOMIES' File.  
I will OVERWRITE your data with mine.

90545.09 BGP 11 TAXONOMY TEMP (including data)  
Note: You already have the 'BGP 11 TAXONOMY TEMP' File.  
I will OVERWRITE your data with mine.

90545.1 BGP 11 MEASURE GROUPS (including data)  
Note: You already have the 'BGP 11 MEASURE GROUPS' File.  
I will OVERWRITE your data with mine.

90545.11 BGP 11 XP OUTPUT  
Note: You already have the 'BGP 11 XP OUTPUT' File.

90545.12 BGP 11 PATIENT ED DATA CURRENT  
Note: You already have the 'BGP 11 PATIENT ED DATA CURRENT' File.

90545.13 BGP 11 PATIENT ED DATA PREVIOUS  
Note: You already have the 'BGP 11 PATIENT ED DATA PREVIOUS' File.

90545.14 BGP 11 PATIENT ED DATA BASELINE  
Note: You already have the 'BGP 11 PATIENT ED DATA BASELINE' File.

90545.15 BGP 11 PAT ED MEASURES (including data)  
Note: You already have the 'BGP 11 PAT ED MEASURES' File.  
I will OVERWRITE your data with mine.

90545.17 BGP 11 ICARE GROUPS (including data)  
Note: You already have the 'BGP 11 ICARE GROUPS' File.  
I will OVERWRITE your data with mine.

90545.18 BGP 11 ICARE CATEGORIES (including data)  
Note: You already have the 'BGP 11 ICARE CATEGORIES' File.  
I will OVERWRITE your data with mine.

90546.08 BGP 11 GUI REPORT OUTPUT  
Note: You already have the 'BGP 11 GUI REPORT OUTPUT' File.

90547.02 BGP 11 ELDER INDIVIDUAL MEASURES (including data)  
Note: You already have the 'BGP 11 ELDER INDIVIDUAL MEASURES' File.  
I will OVERWRITE your data with mine.





```
Installing PACKAGE COMPONENTS:

Installing SECURITY KEY

Installing INPUT TEMPLATE

Installing PROTOCOL

Installing REMOTE PROCEDURE

Installing LIST TEMPLATE

Installing OPTION
      Dec 08, 2010@15:12:51

Running Post-Install Routine: POST^BGP1POS
Updating [BGP INJURY DIAGNOSES] taxonomy...
Updating [BGP FLU IZ CVX CODES] taxonomy...
Updating [BGP FLU IZ CVX CODES] taxonomy...
Updating [BGP PREGNANCY DIAGNOSES 2] taxonomy...
Updating [BGP CPT FLU] taxonomy...
Updating [BGP PREGNANCY DIAGNOSES 2] taxonomy...

Updating Routine file...

Updating KIDS files...

IHS CLINICAL REPORTING 11.0 Installed.
      Dec 08, 2010@15:12:52

Not a VA primary domain

Install Completed

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
```

Figure 4-1: Sample installation for IHS Clinical Reporting package 11.0

## 4.2 Sample Installation of the CRS GUI

1. Double click `bgp_1100setup.exe` to display the following window:

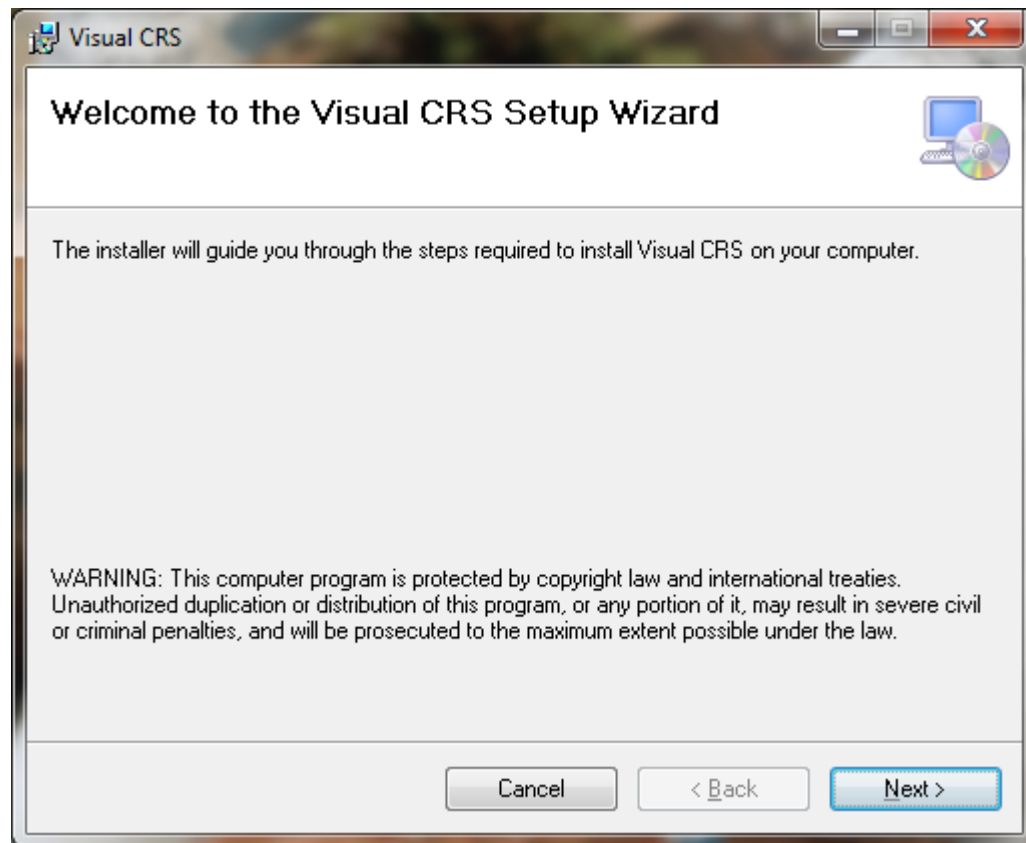


Figure 4-2: Visual CRS Setup Wizard

2. Click **Next**.

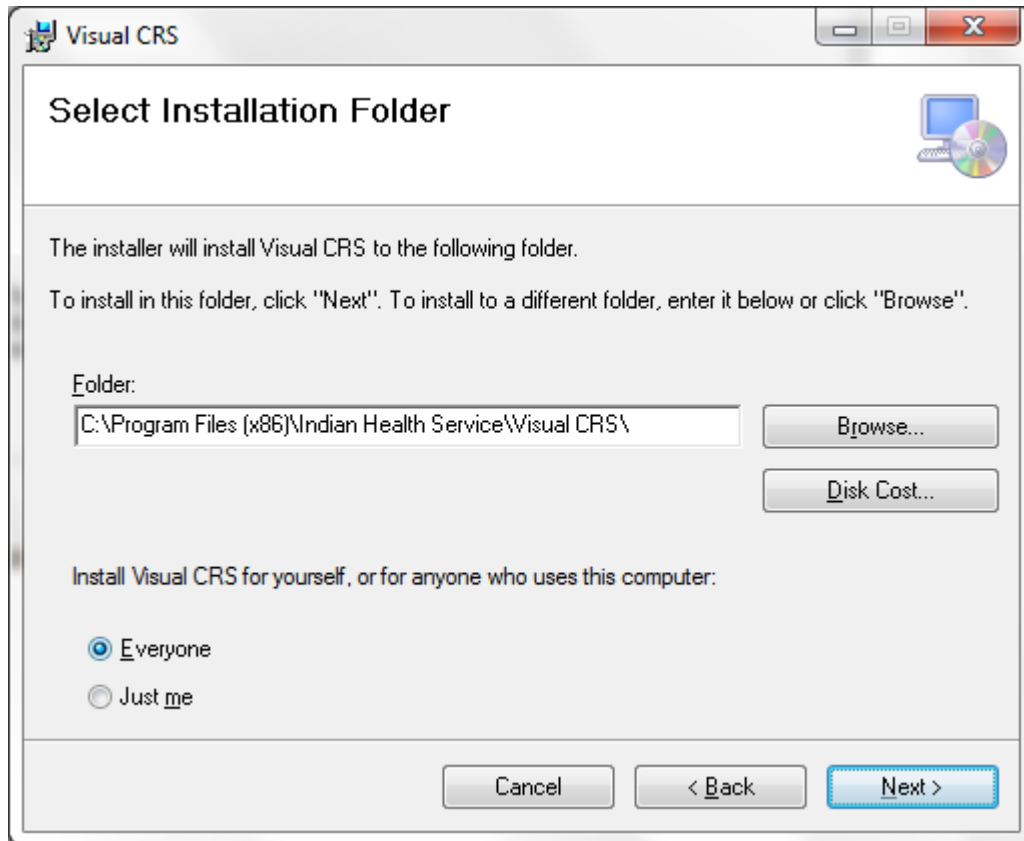


Figure 4-3: Visual CRS installation wizard

3. Click **Next**.

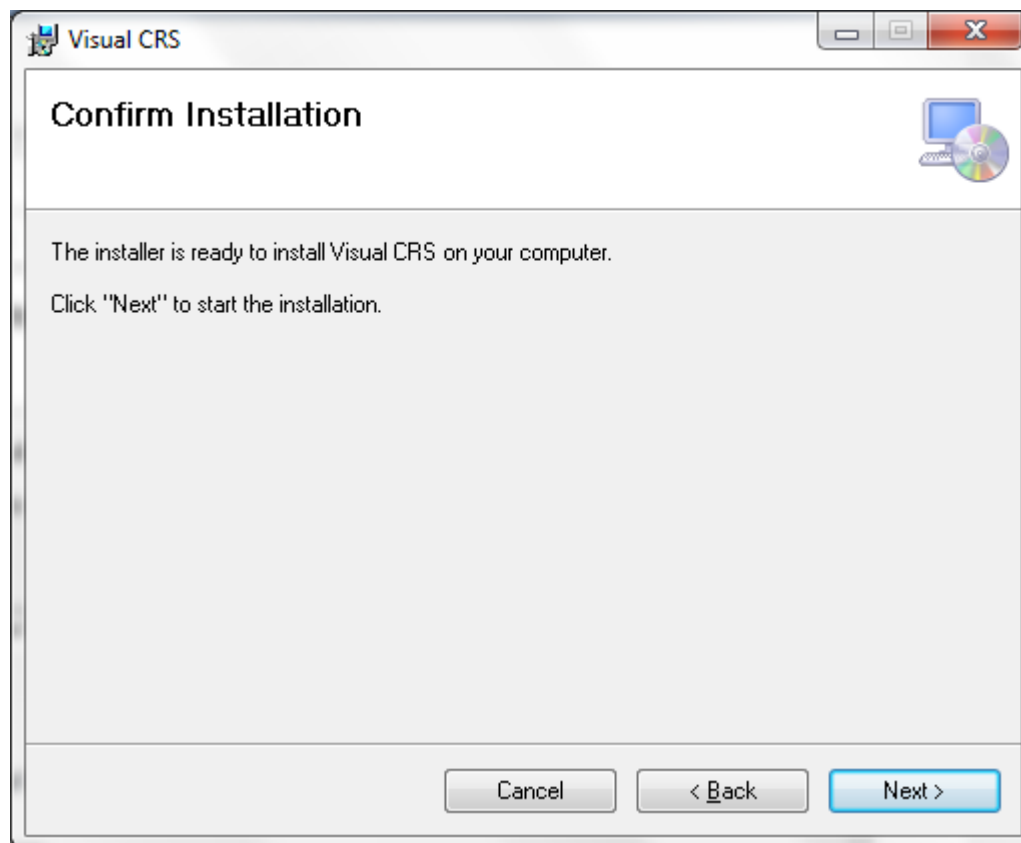


Figure 4-4: Visual CRS installation wizard

4. Click **Next**.

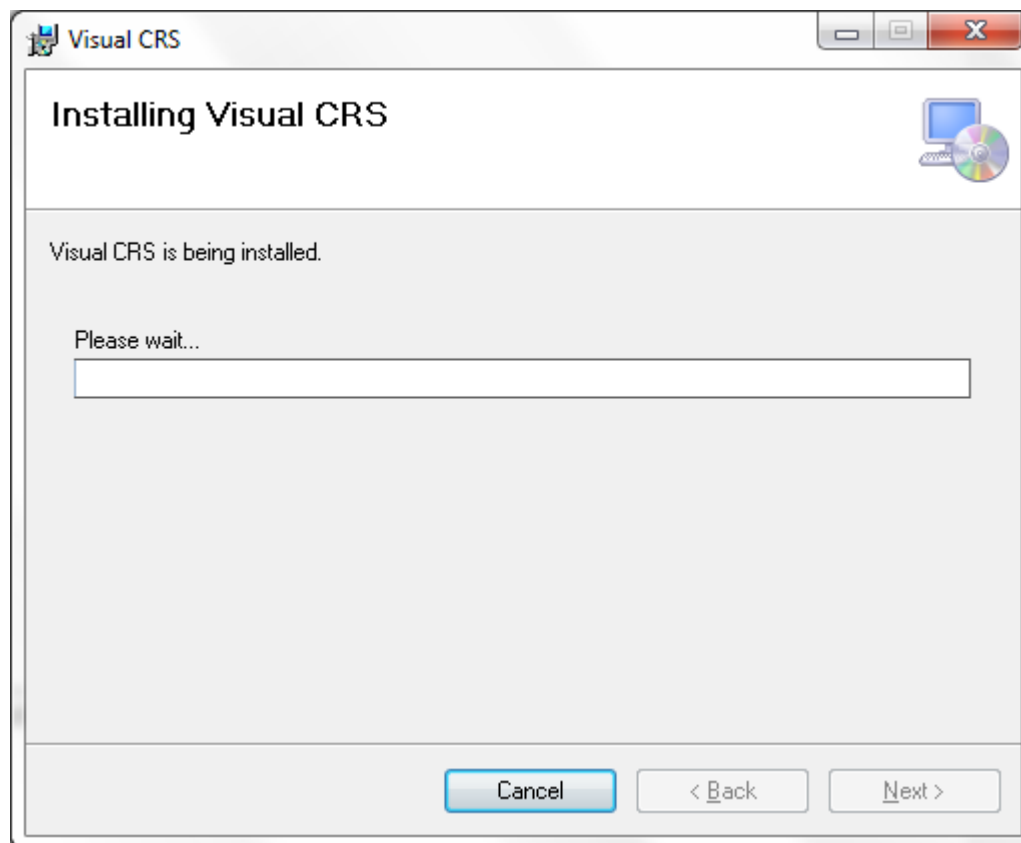


Figure 4-5: Installation of Visual CRS

5. Wait while the application is installed.

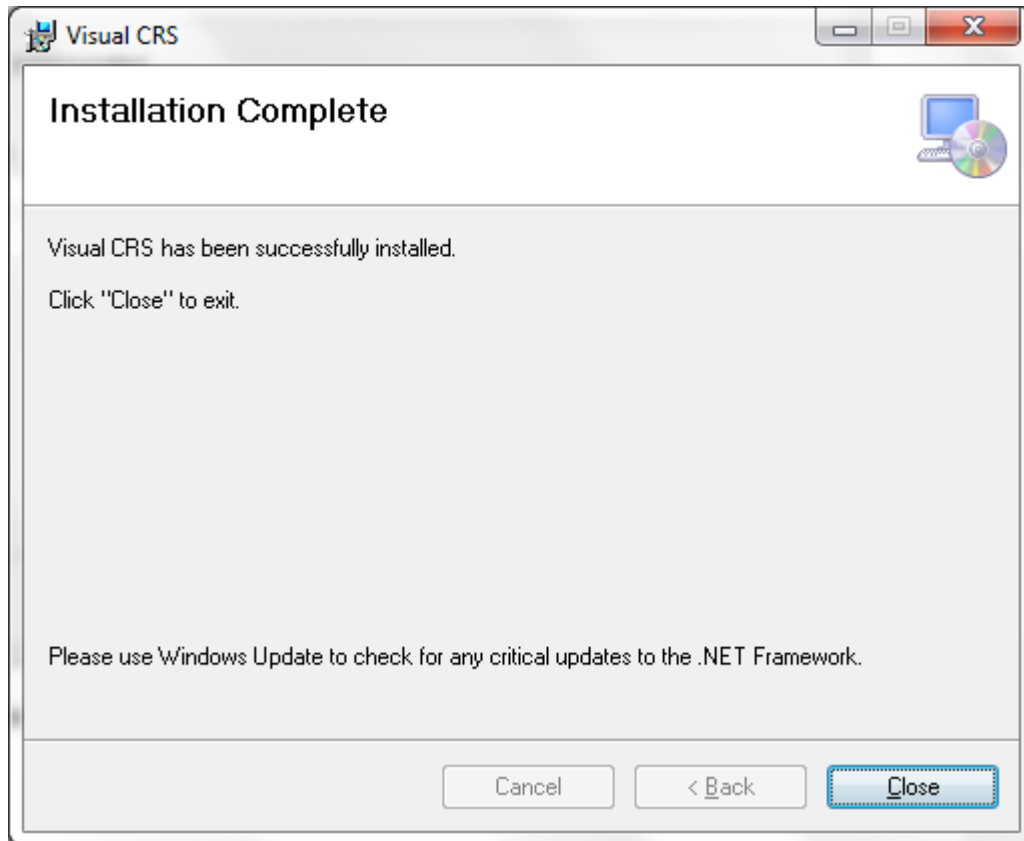


Figure 4-6: Final screen for Visual CRS installation

6. When Visual CRS has been successfully installed the **Installation Complete** screen will display. Click **Close**.

A desktop shortcut named Visual CRS should now be available. Refer to the user manual for instructions on use of the Visual CRS application.

## Contact Information

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

**Phone:** (505) 248-4371 or (888) 830-7280 (toll free)

**Fax:** (505) 248-4363

**Web:** <http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm>

**Email:** [support@ihs.gov](mailto:support@ihs.gov)