Event Capture
Graphical User Interface

Patch Installation Guide

Version 2.0

July 1998

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Department of Veterans Affairs

Office of Information and Technology

Product Development

Revision History

Date	Revision	Description	Author
August 2014	EC*2*114	Revisions for ICD-10: Updated Title page. Updated document with patch number. Updated Scope, page 1, added ICD-9-CM and ICD-10-CM to Acronyms table, page 2 and revised KIDS Installation Example, page 5. Updated Client Requirements, p. 3. Updated the GUI context version, page 4. Updated cross-reference to installation instructions, page 4. Updated first sentence in section 4.1, p. 7. Replaced term "can" with "should" regarding server and port, page 12. Updated #8 in section 4.4 instructions, p. 14. Replaced SETUP.EXE with the EC2_0p114.EXE (GUI Installation wizard executable file name) in section "4.3 ECS GUI Client Installation." p. 7	M. Dill, A. Andriyevskiy, J. Nemetz, E. Phelps

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1 Introduction

1.1 Purpose

The purpose of this Installation Guide is to provide details on the installation of Event Capture System (ECS) software Graphical User Interface (GUI) for Patch EC*2.0*114. The intended audience includes Technical Services, National Veterans Health Information Systems, and technology Architecture (VistA) Support and Software Quality Assurance.

1.2 Scope

The EC*2.0*114 patch enables ECS to use the International Classification of Diseases, Tenth Revision Clinical Modification (ICD-10-CM) as the diagnostic coding system based on the ICD-10 Activation Date.

Background

On January 16, 2009, the Centers for Medicare & Medicaid Services (CMS) released a final rule for replacing the 30-year-old International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code set with ICD-10-CM code set with dates of service, or date of discharge for inpatients, that occur on or after the ICD-10 Activation Date.

The ICD-10-CM classification system consists of more than 68,000 codes, compared to approximately 13,000 ICD-9-CM codes. The ICD-10-CM system expands the number of characters allotted from five to seven alphanumeric characters. This value does not include the decimal point, which follows the third character for the ICD-10-CM code set.

ICD-9-CM	ICD-10-CM
3-5 characters	3-7 characters
1st character is numeric (chapters 1-17) or alpha (E or V) (supplemental chapters)	1st character is alpha (all letters except U)
2nd, 3rd, 4th and 5th characters are numeric	2nd character is numeric; 3rd, 4th, 5th, 6th and 7th characters can be alpha or numeric
Decimal after first 3 characters	Decimal after first 3 characters

The EC*2.0*114 patch and related Lexicon patches accommodate the:
- entry, display, lookup, viewing, printing, storing, and transmission of the ICD-10-code sets ECS
- use of ICD-10-CM in place of ICD-9-CM as the diagnostic coding system for outpatient encounters with an encounter date *on or after* the ICD-10 Activation Date and inpatient treatment episodes with a discharge date *on or after* the ICD-10 Activation Date
- VHA use of dual code sets (ICD-9-CM and ICD-10-CM) to accommodate outpatient dates of service and inpatient discharge dates *prior to* and *following* the compliance date (the ICD-10 Activation Date) as well as for reporting and research purposes

Note: The "procedures" terms used within the ECS package are defined within the EC NATIONAL PROCEDURE file (#725) which contains a set of nationally defined procedures necessary for data collection in Decision Support System (DSS). These procedures are not CPT codes, ICD-9, or ICD-10 codes and are defined by the DSS Program Office or its designee.

1.3 Acronyms

Term	Definition
CPRS	Computerized Patient Record System
DD	Data Definitions
DSS	Decision Support System
DSO	Decision Support Office
EC	Event Capture
ECS	Event Capture System
GP	GUI Parameter
GUI	Graphical User Interface
ICD-9-CM	International Classification of Diseases, Ninth Revision, Clinical Modification
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification
KIDS	Kernel Installation & Distribution System
TM	Tool Menu
VA	Department of Veterans Affairs
VistA	Veterans Health Information Systems and Technology Architecture

2 Install Requirements

2.1 Package Integration

The following package versions (or higher) must be installed prior to loading this patch.

Kernel	8.0
Toolkit	7.3
Event Capture	2.0
RPC Broker	1.1
MailMan	8.0
VA FileMan	22.0

2.2 Server Requirements

Any site not currently running the ECS application and wishing to install ECS GUI must install all previous EC patches. For details on how to install the previous EC patches, please refer to the corresponding patch descriptions and EC 2.0 Installation Guide.

Each user needs to have the option EC GUI CONTEXT added to their secondary menu.

2.3 Client Requirements

ECS GUI may be run in a test environment before installation, but it is not necessary. EC runs on the standard hardware platforms used by Department of Veterans Affairs (VA) Healthcare facilities. These systems consist of VMS/Cache or Linux/Cache platforms.

The GUI client is a 32-bit Windows application developed with Delphi 5 software. To run this application the workstation should use a Windows 7 operating system.

3 Server Installation

1. Use the INSTALL/CHECK MESSAGE option on the PackMan menu to unload the KIDS distribution included with this message.

2. Select the Installation menu from the Kernel Installation and Distribution System Menu.

3. From this menu, you may elect to use the following options (when prompted for INSTALL NAME, enter EC*2.0*114):

   a. Backup a Transport Global - This option creates a backup message of any routines exported with the patch. It will NOT backup any other changes such as DDs or templates.
   b. Compare Transport Global to Current System - This option allows you to view all changes that will be made when this patch is installed. It compares all components of this patch (routines, DDs, templates, etc.).
   c. Verify Checksums in Transport Global - This option allows you to ensure the integrity of the routines that are in the transport global.
   d. Print Transport Global - This option allows you to view the components of the KIDS build.

4. Use the Install Package(s) option and select the package EC*2.0*114.

5. When the prompt 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO////' appears, answer **YES** unless your system does this in a nightly TaskMan process. (NOTE: The new default for this question is NO.)

6. When the prompt 'Want KIDS to INHIBIT LOGONs during the install? NO////' appears, answer **NO** (unless otherwise indicated). (NOTE: The new default for this question is NO.)

7. When the prompt 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//' appears, answer **YES** (unless otherwise indicated).

8. When the prompt 'Enter options you wish to mark as 'Out Of Order':' appears, enter the following options: **EC GUI Context version 2.1.3.4**   ... EC GUI CONTEXT

9. When the prompt 'Enter protocols you wish to mark as 'Out Of Order':' appears, press <**Enter**>.

10. Install the Event Capture GUI client software following the instructions in ECS GUI Client Installation found in section 4.3.

The Event Capture GUI executable file "ECS GUI.exe", that is unbundled after running the install in step 10, may be copied to another machine without additional supporting files.

3.1 KIDS Installation Example

```
Select Installation Option: 6  Install Package(s)
Select INSTALL NAME:    EC*2.0*114    7/26/12@13:43:32
     => EC*2*114

This Distribution was loaded on Jul 26, 2012@13:43:32 with header of
   EC*2*114
   It consisted of the following Install(s):
     EC*2.0*114
Checking Install for Package EC*2.0*114

Install Questions for EC*2.0*114

Incoming Files:


   721      EVENT CAPTURE PATIENT  (Partial Definition)
Note:  You already have the 'EVENT CAPTURE PATIENT' 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// YES

Enter options you wish to mark as 'Out Of Order': EC GUI CONTEXT      EC GUI
Context version 2.1.3.4

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

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

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

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// ;;999  HOME  (CRT)


 Install Started for EC*2.0*114 :
             Jul 26, 2012@13:44:29

Build Distribution Date: Jul 24, 2012

 Installing Routines:
             Jul 26, 2012@13:44:29

 Running Pre-Install Routine: DEL38^EC2P114

Deleting old SECONDARY ICD-9 Screen nodes.
```

```
 Installing Data Dictionaries:
              Jul 26, 2012@13:44:30
                                EC*2.0*114
▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯

 Installing PACKAGE COMPONENTS:

 Installing REMOTE PROCEDURE

 Installing OPTION
              Jul 26, 2012@13:44:30

 Updating Routine file...

 Updating KIDS files...

 EC*2.0*114 Installed.
              Jul 26, 2012@13:44:30

Install Completed
 Not a production UCI

 NO Install Message sent
─────────────────────────────────────────────────────────────────────────────
             ┌──────────────────────────────────────────────────────┐
   100%       │           25            50            75              │
             │                                                        │

Install Completed
```

4 Client Installation

4.1 RPC Broker

This installation guide assumes that your Server has the required RPC Broker software set up. If this is not the case, you should first install this software. The installation is beyond the scope of this Installation Guide, but the RPC Broker files and installation instructions can be found on the VAs RPC Broker web page. These files must be installed before running the ECS GUI application.

4.2 Command Line Parameters

Note: The parameters may be in any order. Parameters S and P are a set, i.e., they must both be present or they will be ignored.

Parameter	Example (Default)	Description
S=	S=BrokerServer	The name of the ECS GUI BrokerServer as defined in the Host file. The default is 'BrokerServer'
P=	P=nnnn	The ServerPort used by the ECS GUI BrokerServer. Example P=9200

4.3 ECS GUI Client Installation

Follow these instructions to install the ECS GUI:

1. Save the .exe file to one of your network drives. Do not save it directly to the desktop.
2. Double-click on **EC2_0p114.EXE**. The InstallShield Wizard launches.

Example: Preparing to Install Progression Monitor
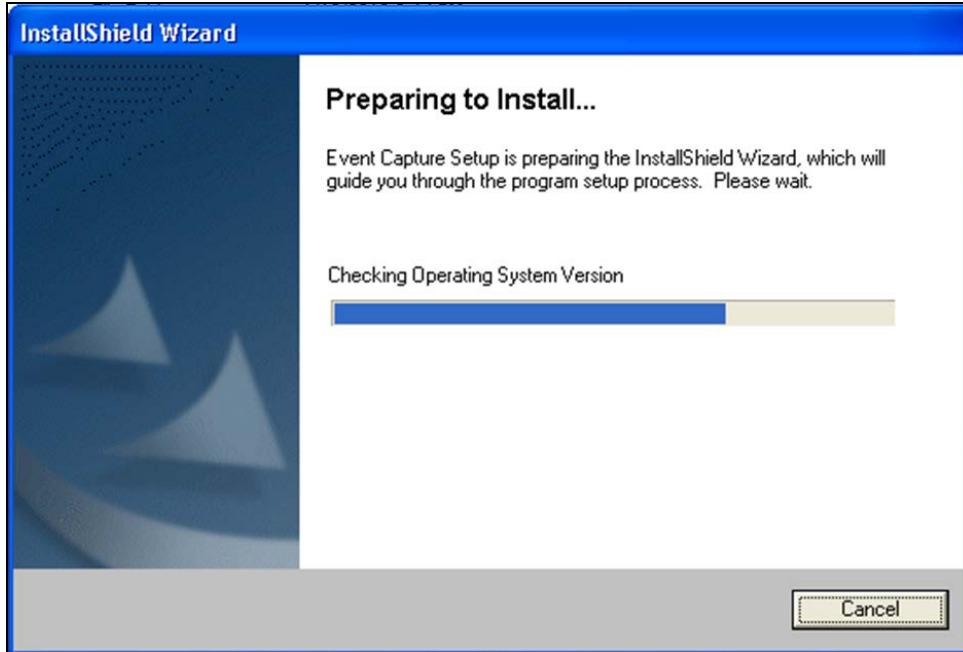

3. When the Welcome to the InstallShield Wizard for Event Capture screen displays, click **Next**.

    Example: Welcome to the InstallShield Wizard for Event Capture Screen
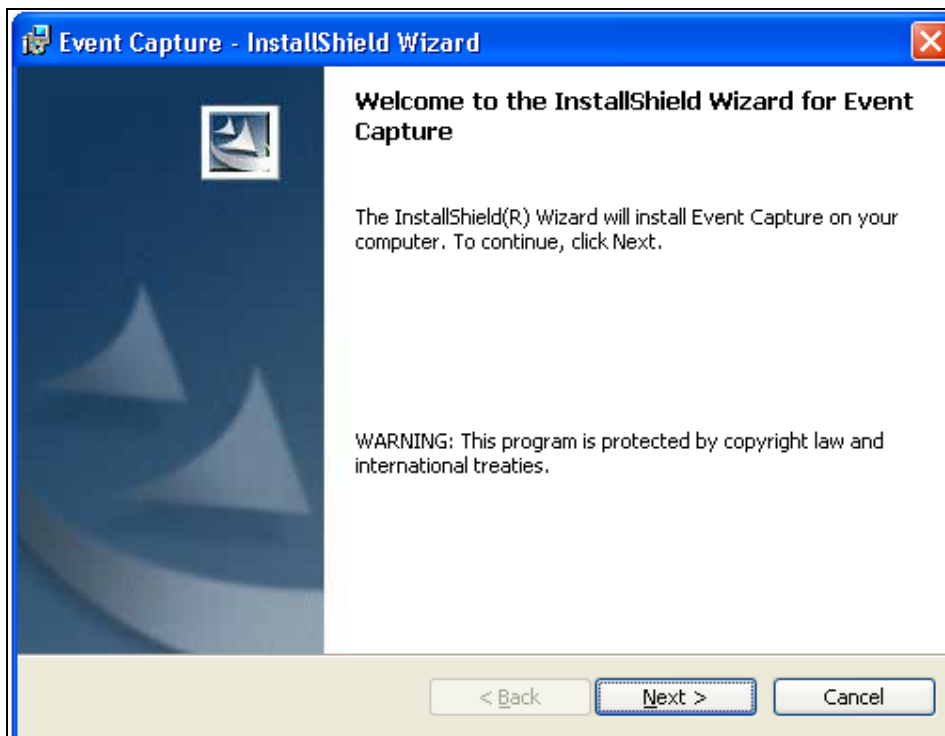
4. On the Destination Folder screen, click **Next** to install to the default destination folder (C:\Program Files\VISTA\EC\). To install to a different folder, click **Change**.
Note: For WIN7, the installation creates the file in the 'Program Files (x86)' directory.

   **Example: Creating Destination Folder**
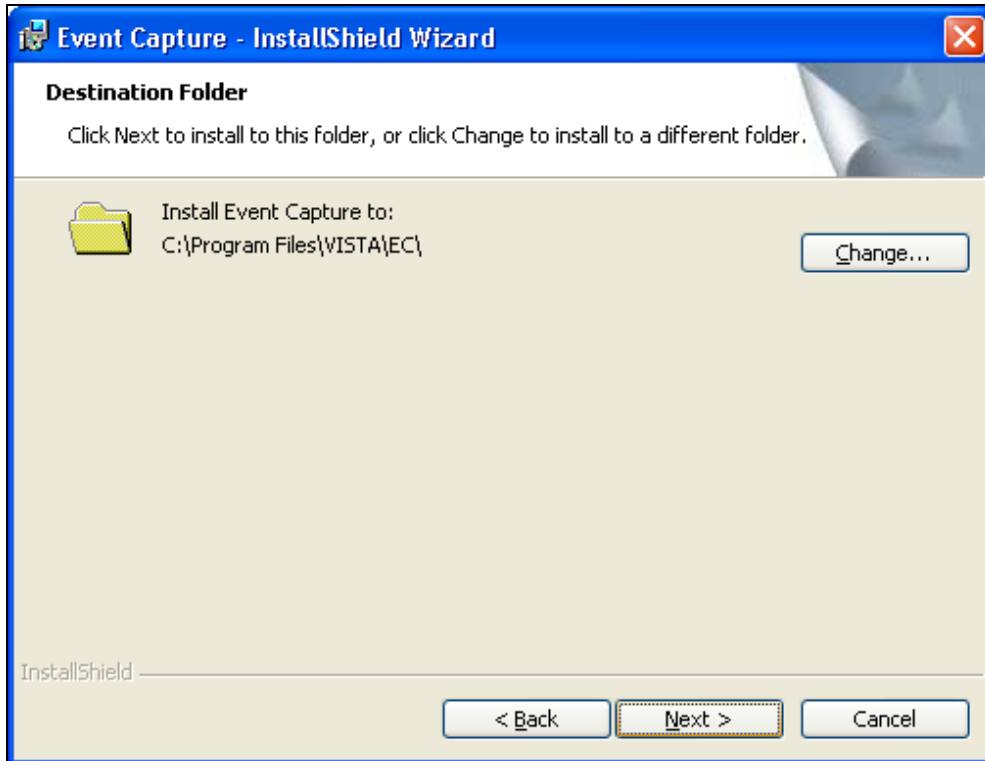
5. Review the information on the Ready to Install the Program screen. If the information is correct, click **Install**. If changes are necessary, click **Back**.

Example: Ready to Install the Program for Event Capture
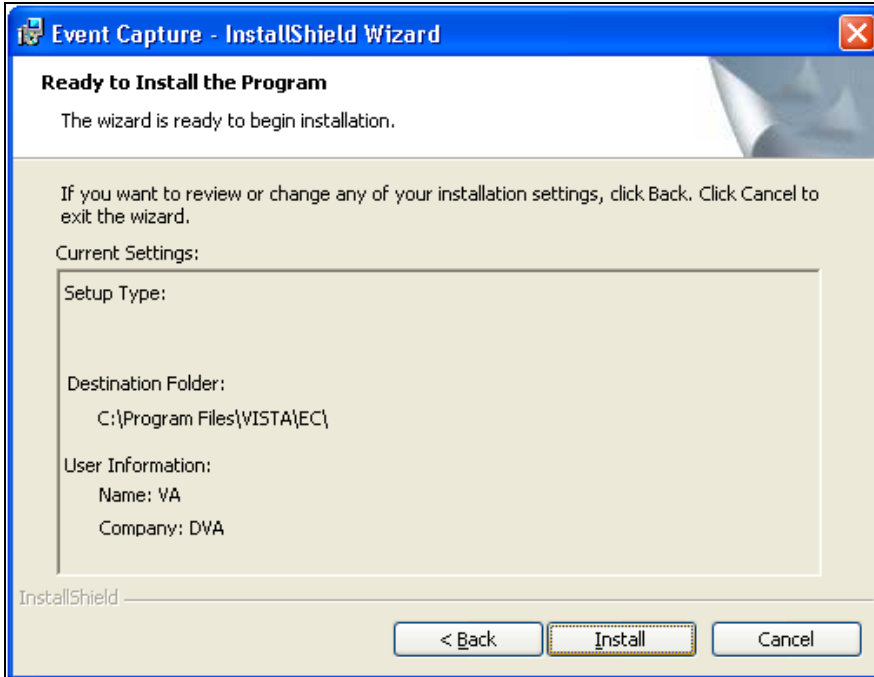
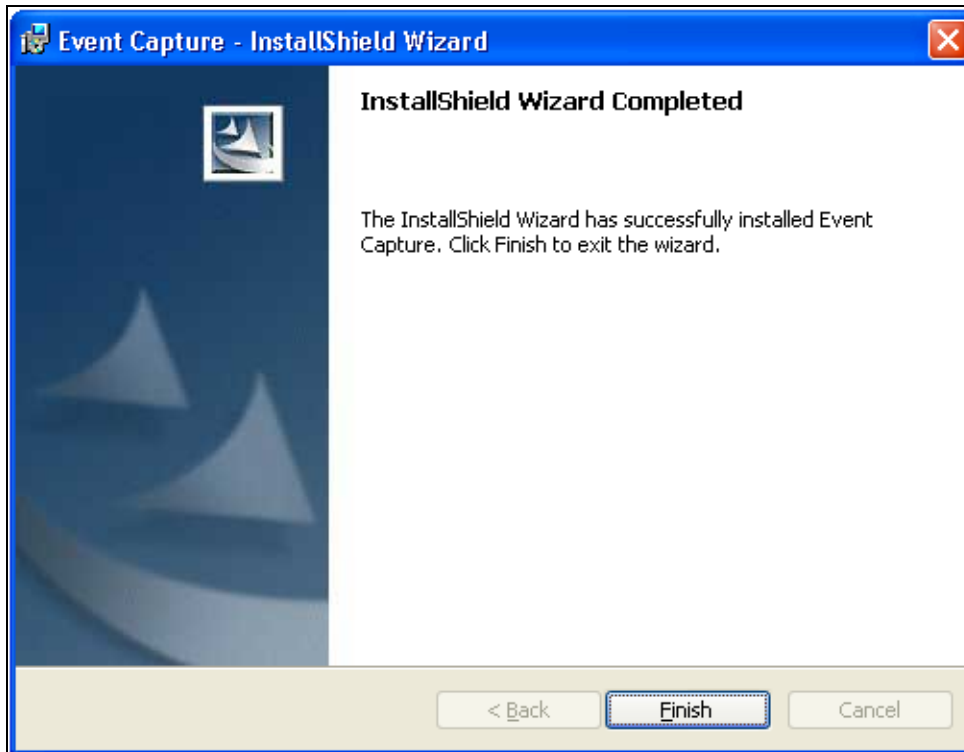6. The Installing Event Capture screen appears and shows the status of the install.

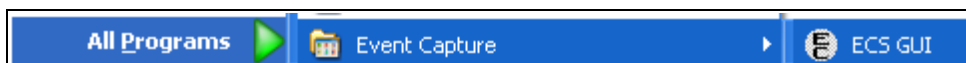**Example: Installing Event Capture Status screen**
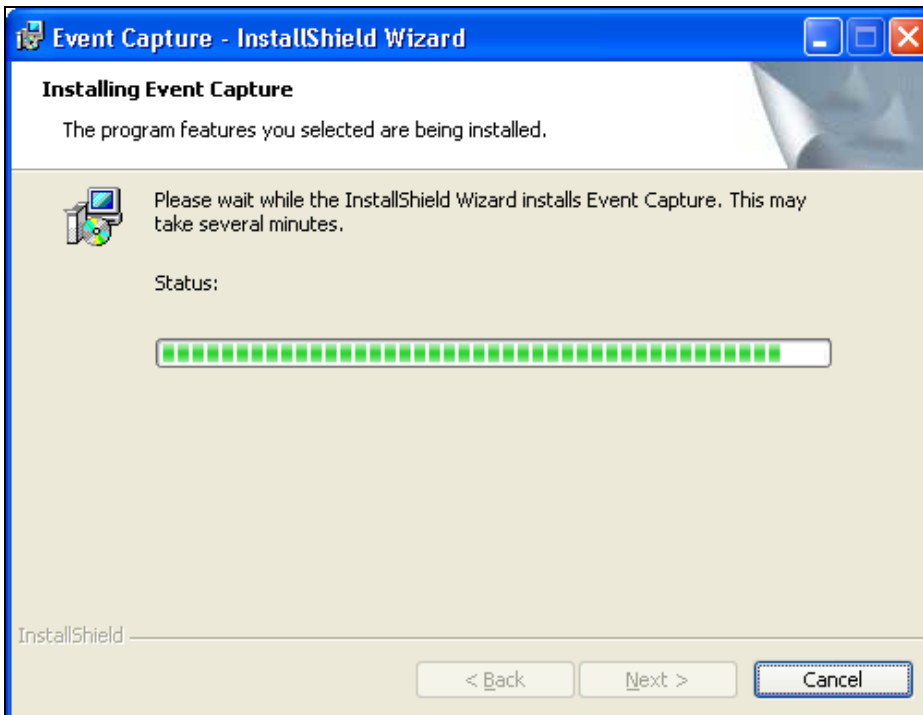
7. The Install Wizard Completed screen appears when the install is complete. Click Finish. Event Capture will now be installed.

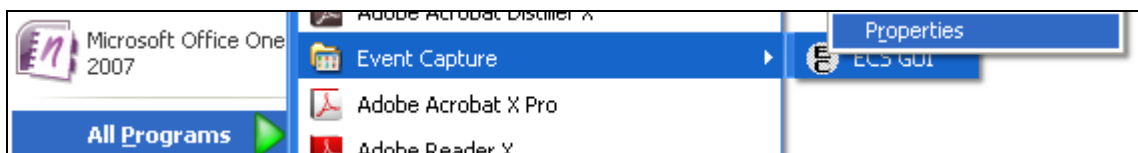**Example: Installing Event Capture Status screen**

8. Go to the Start menu and select All Programs. Select Event Capture and then ECS GUI.

Example: Accessing ECS GUI via Start Menu

9. Right-click on the **ECS GUI** and select **Properties**.

Example: Selecting Properties

10. After the file name (listed in Target), you will need to add the server (example: s=XXXX) and port (example: p=XXXX).

   Note: Be sure to add one space before you add the server and port information.

   Note: The server and port should be provided by your particular site. Without this information, Event Capture will not be able to run.

   Example: Adding Server and Port to the Target Field
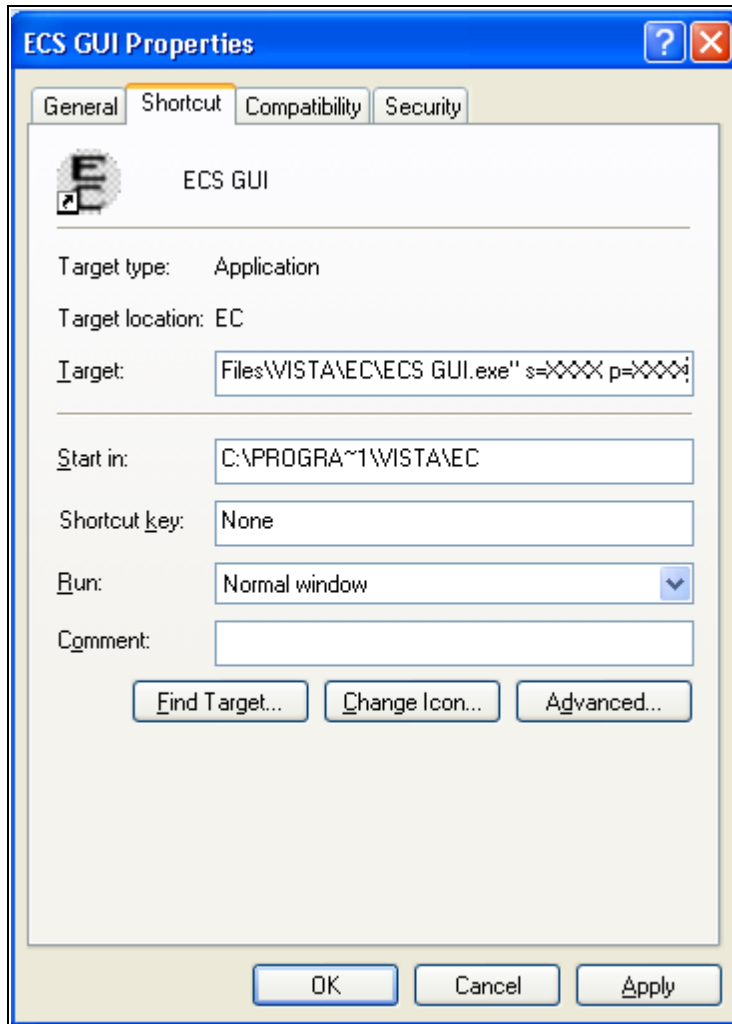
11. Click **Apply.**

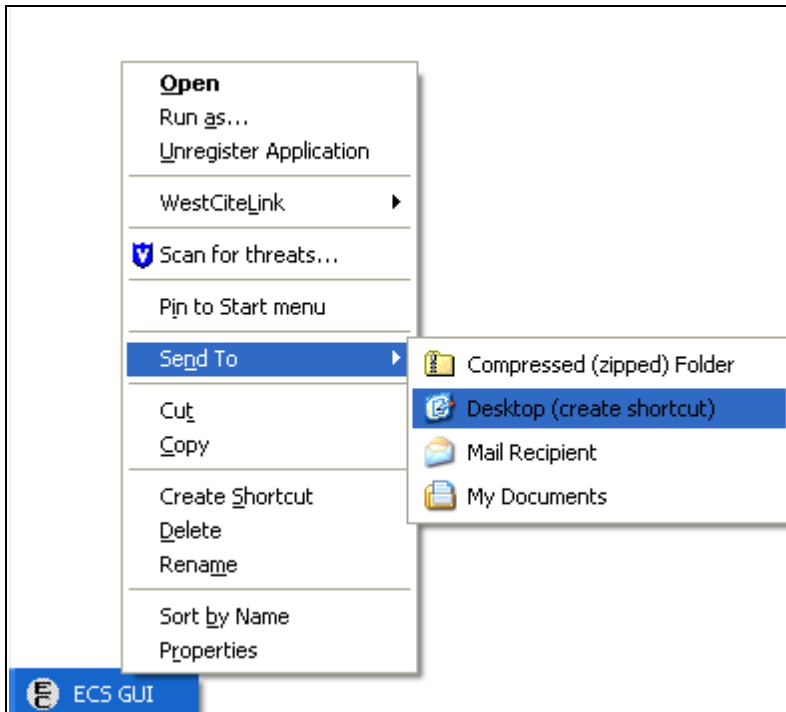12.   The setup is complete. To create a shortcut on your desktop, right-click on the **ECS GUI** icon. Select **Send To** and the **Desktop** (**create shortcut**).

13.   **Note for WIN7 users**: For ECS GUI to operate the side scroll bar, the menu boxes may have to be in CLASSIC MODE. The WIN7 default puts framing around the GUI box that prevents you from scrolling up/down on certain report displays.

This installation installs the GUI executable on the user's workstation at location: C:\Program Files\VISTA\EC (unless another directory was specified on the "Choose Designation Location" screen). Using Windows or NT Explorer, go to the directory location of the executable (on the user's workstation), create a Shortcut, and paste or copy it to the user's Desktop for convenient access to the application.

If any prior versions of the applications exist in the user's directory location referenced above, these should be deleted.

4.4   Accessing ECS GUI via CPRS

A "hot button" that allows you to switch back and forth between the Computerized Patient Record System (CPRS) and ECS applications can be created in VistA by the site's Clinical Coordinator. This button can either be created for a specific user or for all CPRS users. This button is placed in the Tools menu of CPRS GUI so the user has quick access to it within the application.

Instructions

Note: Parentheses denotes abbreviations that can be entered instead of entering the full name of the option.

1. From the CPRS Configuration Menu for Clinical Coordinators, enter GUI Parameters (GP) at the prompt.
2. From the list of options given, enter GUI Tool Menu Items (TM) at the prompt.
3. From the list of options given, enter Package (9).
   Note: By choosing this option, you are giving this functionality to all users. If you want to give this functionality to one user, choose User (1) instead.
4. The user receives two messages; one regarding the parameters set for 'Package' and the other for the Setting of the CPRS GUI Tools Menu for Package.
5. The user is asked to select a sequence. Type a question mark to get a choice of options.
6. Enter a number higher than the last option to add a new option.
7. When asked if you are adding a new option, enter YES.
8. When prompted for a "Name=Command" enter: &Event Capture="c:\program files (x86)\vista\ec\ecs gui.exe"
   Note: "c:\Program Files (x86)\VistA\EC" is the default location of the GUI executable. If you select a different location during the GUI installation use it instead of the default.
9. When asked to select a sequence again, press <Enter> to get out of prompt.

Example: Setting Up EC Option in the Tools Menu of CPRS GUI

```
    AL      Allocate OE/RR Security Keys
    KK      Check for Multiple Keys
    DC      Edit DC Reasons
    GP      GUI Parameters ...
    GA      GUI Access - Tabs,RPL
    MI      Miscellaneous Parameters
    NO      Notification Mgmt Menu ...
    OC      Order Checking Mgmt Menu ...
    MM      Order Menu Management ...
    LI      Patient List Mgmt Menu ...
    FP      Print Formats
    PR      Print/Report Parameters ...
    RE      Release/Cancel Delayed Orders
    US      Unsigned orders search
    EX      Set Unsigned Orders View on Exit
    NA      Search orders by Nature or Status
    CA      Care Management Menu ...
    DO      Event Delayed Orders Menu ...
    LO      Lapsed Order search
    PM      Performance Monitor Report

Select CPRS Configuration (Clin Coord) Option: GP  GUI Parameters

    CS      GUI Cover Sheet Display Parameters ...
    HS      GUI Health Summary Types
    TM      GUI Tool Menu Items
    MP      GUI Parameters - Miscellaneous
    UC      GUI Clear Size & Position Settings for User
    RE      GUI Report Parameters ...
    NV      GUI Non-VA Med Statements/Reasons
    EX      GUI Expired Orders Search Hours
    RM      GUI Remove Button Enabled
    NON     GUI Remove Button Enabled for Non-OR Alerts
    CLOZ    GUI Edit Inpatient Clozapine Message
    COAG    GUI Anticoagulation Parameters ...
            **> Out of order:  On hold
    EIE     GUI Mark Allergy Entered in Error

Select GUI Parameters Option: TM  GUI Tool Menu Items

CPRS GUI Tools Menu may be set for the following:

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

Enter selection: 9  Package   ORDER ENTRY/RESULTS REPORTING

Parameters set for 'Package' may be replaced if ORDER ENTRY/RESULTS REPORTING
is installed in this account.
```

```
-- Setting CPRS GUI Tools Menu for Package: ORDER ENTRY/RESULTS REPORTING --
Select Sequence: ?

     Sequence                          Value
     --------                          -----
     1                                 &Time=Clock.exe
     2                                 &Calculator=Calc.exe
     3                                 &Windows Introduction=WinHlp32 Wind
     4                                 &Notepad=Notepad.exe


Select Sequence: 5
Are you adding 5 as a new Sequence? Yes// YES

Sequence: 5//      5
Name=Command: &Event Capture="c:\program files\vista\ec\ecs gui.exe"
```

For more information on this "tools" option, consult the CPRS user guide at:

http://www4.va.gov/vdl/application.asp?appid=61

This installation installs the GUI executable on the user's workstation at location: C:\Program Files\VISTA\EC (unless another directory was specified on the "Choose Designation Location" screen). Using Windows or NT Explorer, go to the directory location of the executable (on the user's workstation), create a Shortcut, and paste or copy it to the user's Desktop for convenient access to the application.

If any prior versions of the applications exist in the user's directory location referenced above, these should be deleted.