

**EVENT CAPTURE  
GRAPHICAL USER INTERFACE**

**TECHNICAL MANUAL**



**Software Version 2.0**

**Patch EC\*2\*112**

**June 2012**

**Department of Veterans Affairs  
Office of Information and Technology (OIT)  
Product Development**



## Revision History

<b>Date</b>	<b>Revision</b>	<b>Description</b>	<b>Author</b>
June 2012	4.0	Updates made for EC*2.0*112	Megan Lucas
01/05/2005	3.0	Updates with Patch EC*2.0*61	Anderson, Berry
06/08/01	2.0	Updates with EC GUI	Crosskey, Johnny
July 1998	1.0	Initial Version	Stella, Karen



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# 1 Introduction

The Event Capture Technical Manual serves a dual purpose:

1. Provides technical information to aid Information Resources Management (IRM) service staff with implementing and maintaining the software.
2. Provides security information for Information Security Officers (ISO).

## 1.1 Product Perspective

The Event Capture software provides a mechanism to track and account for procedures and delivered services that are not handled in any other Veterans Health Information Systems and Technology Architecture (VistA) software. It also provides a variety of management and workload reports. The procedures and services tracked through Event Capture are associated with:

- The patient to whom they were delivered
- The provider requesting the service or procedure
- The Decision Support System (DSS) Unit responsible for delivering the service

DSS Units typically represent the smallest identifiable work unit in a clinical service at the medical center and are defined by the Veterans Affairs Medical Center (VAMC). A DSS Unit can represent any of the following:

- An entire service
- A section of a service
- A small section within a section
- A medical equipment item used in patient procedures

For every DSS Unit, each of the following must be defined:

- *Service* - The service associated with a DSS Unit.
- *Cost Center* - Fiscal identifier for the service using the particular DSS Unit. (Cost centers are defined in detail in MP-4, Part v, Appendix B of the Fiscal Service cost manuals.)
- *Medical Specialty* - The specialty section associated with the DSS Unit.

**Each EC GUI user must be assigned the EC GUI CONTEXT option.**

## 1.2 Security Keys

Security keys are assigned using the option Key Management in VistA and then choosing the submenu Allocation of Security Keys.

ECALLU	Give users access to all DSS Units (super user).
ECMGR	Give users access to Event Capture System (ECS) Management Menu.
ECNORPT	Restrict the user from access to the Event Capture Reports.
ECSPSH	Give users access to upload data from a spreadsheet.

## 1.3 Functions of the Software

Event Capture with all patches installed provides the following functions:

- Allows each VAMC to utilize the software for its own resource/costing needs
- Implements DSS Units
- Assigns user access
- Allows single and batch data entry for patient procedures
- Generates reports for workload and other statistical tracking
- Provides a Graphical User Interface (GUI) to the ECS application
- Allows user to upload patient encounter data to Event Capture from a spreadsheet
- Allows user to switch between Computerized Patient Record System (CPRS) and ECS via the use of a hot button in the tools menu of either application

## 1.4 Related Documentation

The following documentation is available for EC V. 2.0:

Event Capture V. 2.0 User Manual

Event Capture V. 2.0 Installation Guide

Documentation and additional information for this product—including background, technical and procurement information—can now be found on the Intranet at the following address:

<http://www.va.gov/vdl/application.asp?appid=39>



## **2 Implementation and Maintenance**

### **2.1 Namespace**

The namespace for Event Capture is EC. The excluded namespaces are ECT, ECW, ECX and EC1.

### **2.2 Site Configuration**

Event Capture does not require site parameters.

### **2.3 Resource Requirements**

There are approximately 250 Event Capture routines that take up approximately 500K of disk space (including pre- and post-init routines).

## 3 Routines

### 3.1 Callable Routines

The Event Capture software does not support any public entry points.

### 3.2 Routines to Map

There are no specific requirements for routine mapping.

### 3.3 Routine List

Take the following steps to obtain the MUMPS routines contained in the Event Capture software:

1. Programmer Options menu
2. Routine Tools menu
3. First Line Routine Print option
4. All Routines? No => <RET>
5. Routine Selector: **EC\***
6. Routine Selector: 'ECT\*
7. Routine Selector: 'ECW\*
8. Routine Selector: 'ECX\*
9. Routine Selector: 'EC1\*
10. Routine Selector: <RET>

**Note:** Steps 6-10 above are to exclude those routines from appearing in your list.

## 4 Files

### 4.1 Global Placement

Event Capture with all patches installed creates the following globals: ^EC, ^ECC, ^ECD, ^ECH, ^ECJ, ^ECL, and ^ECR. Global protection and placement should be made on all of them. It is possible that one or more of these globals already exist on your system.

### 4.2 File List

Event Capture with all patches installed exports the following files. VHA Directive 10-93-142 prohibits local modification of these files. Use the List File Attributes option in VA FileMan if you want to print the Data Definitions (DD).

File Number	File Name
720.1	EVENT CAPTURE LOG
720.3	EC EVENT CODE SCREENS
720.4	EC PROCEDURE REASON
720.5	EC EVENT CODE SCREENS/PROC REASON LINK
721	EVENT CAPTURE PATIENT
723	MEDICAL SPECIALTY
724	DSS UNIT
725	EC NATIONAL PROCEDURE
726	EVENT CAPTURE CATEGORY
727.815	EVENT CAPTURE LOCAL EXTRACT

### 4.3 Templates and File Flow

Take the following steps to obtain the templates and map the file flow relationships for Event Capture with all patches installed.

Templates	File Flow (Relationships between files)
<ol style="list-style-type: none"><li>1. VA FileMan Menu</li><li>2. Print File Entries Option</li><li>3. Output from what file: <b>Print Template</b> <b>Sort Template</b></li><li>4. Sort by: <b>Name</b></li><li>5. Start with name: <b>XXXX</b></li><li>6. Within name, sort by: <b>&lt;RET&gt;</b></li><li>7. First print field: <b>Name</b></li></ol>	<ol style="list-style-type: none"><li>1. VA FileMan Menu</li><li>2. Data Dictionary Utilities Menu</li><li>3. Map Pointer Relationships</li><li>4. Select PACKAGE NAME: <b>Event Capture</b></li><li>5. Remove FILE: <b>&lt;RET&gt;</b></li><li>6. Add FILE: (<b>Enter name or number for files you want to include in the output. This prompt will repeat.</b>)</li><li>7. Enter name of file group for optional graph header: <b>EVENT CAPTURE// &lt;RET&gt;</b></li></ol>

## 5 Exported Options

### 5.1 Menu Outline

The major menu options, as they appear in this manual, are fixed and are not subject to modification except by the software developer(s). The following is a list of the major menu options as they appear in the character based interface system. The Event Capture software contains one primary menu option, Event Capture Menu, which contains the following four submenus:

- Data Entry
- Spreadsheet
- Reports
- Management Menu

### 5.2 Menu Diagram

The following are submenu items on the Main Menu in the Event Capture software:

#### **Main Menu**

Data Entry

Spreadsheet

Reports

Management Menu

The submenu items, when selected, provide you with additional options:

#### **Data Entry**

Data Entry by Patient

Data Entry by Procedure

Multiple Dates/Multiple Procedures

#### **Spreadsheet**

## **Reports**

Patient Summary Report  
DSS Unit Activity Report  
DSS Unit Workload Report  
Provider Summary Report  
Ordering Section Summary Report  
Provider (1-7) Summary Report  
PCE Data Summary Report  
Inactive Person Class Report  
Procedure Reasons Report  
ECS Records Failing Transmission to PCE Report  
DSS User Access Report  
National/Local Procedure Report  
Category Report  
Print Category and Procedure Summary (Report)  
Event Code Screens with CPT Codes Report  
National/Local Procedures Code with Inactive CPT Codes  
DSS Units with any Associated Stop Code Errors  
Event Capture Encounters Report  
Event Code Screens with Inactive Default Associated Clinic  
DSS Units/Event Code (EC) Screens Selected Procedure Code Report

## **Management Menu**

Location  
DSS Unit  
Access by User  
Category  
Procedure  
Event Code Screen  
Inactive EC Screen  
Exit

## **6 Archiving and Purging**

The Event Capture software does not provide for the archiving or purging of its data.

## **7 Package-wide Variables**

There are no package-wide variables in this version of the Event Capture software.

## 8 External / Internal Relations

### 8.1 External Relations

The most current version of software that is available is listed below:

Product Name	Minimum Version
Kernel	8.0
VA FileMan	22.0
MailMan	8.0
PIMS (Scheduling)	5.3
Patient Care Encounter (PCE)	1.0
RPC Broker	1.1
CPRS	3.0

### 8.2 Database Integration Agreements (DBIAs)

Take the following steps to obtain the DBIAs for the Event Capture software:

Custodial Package	Subscriber Package
1. FORUM	1. FORUM
2. DBA Menu	2. DBA Menu
3. Integration Agreements Menu	3. Integration Agreements Menu
4. Custodial Package Menu	4. Subscriber Package Menu
5. Active by Custodial Package Option	5. Print Active by Subscriber Package Option
6. Select Package Name: <b>EC</b>	6. Start with subscriber package: <b>Event Capture</b>
	7. Go to Subscribing Package: <b>Event Capture</b>

### 8.3 Internal Relations

All of the Event Capture options are designed to stand alone. Each option can be independently invoked.

### 8.4 External Interfaces

PCE Application Programmer Interface (API)



## 9 Security

### 9.1 Security Management

The Event Capture software does not impose any additional legal requirements on the user, nor does it relieve the user of any legal requirements.

### 9.2 Security Keys

Take the following steps to obtain information about the security keys contained in the Event Capture software:

1. VA FileMan Menu
2. Print File Entries option
3. Output from what file: SECURITY KEY// <RET>
4. Sort by: **Name**
5. Start with name: **EC**
6. Go to name: Last// **ECX**
7. Within name, sort by: <RET>
8. First print field: **Name**
9. Then print field: **Description**

### 9.3 VA FileMan Access Codes

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
720.1	EVENT CAPTURE LOG						
720.3	EC EVENT CODE SCREENS						
720.4	EC EVENT CODE SCREENS	@	@	@	@	@	@
720.5	EC EVENT CODE SCREENS/ PROC REASON LINK	@	@	@	@	@	@
721	EVENT CAPTURE PATIENT						
723	MEDICAL SPECIALTY						
724	DSS UNIT						
725	EC NATIONAL PROCEDURE						
726	EVENT CAPTURE CATEGORY						

Entries in the MEDICAL SPECIALTY file (#723) are set by the Decision Support System (DSS) Program Office or its designee. Any additions, deletions, or modifications will be distributed nationally through the release of the Event Capture software.

Entries in the EC NATIONAL PROCEDURE file (#725) are also set by the Decision Support system (DSS) Program Office or its designee. The Event Capture Management Menu provides the option to add locally recognized procedures to this file. These local entries will be added by using the Event Capture software at the internal entry number above 90,000.

## **9.4 Mail Groups and Alerts**

The Event Capture software does not require any mail groups, nor does it generate any mail alerts.

## **9.5 Remote Systems**

Event Capture does not send data to any remote system.

## **9.6 Contingency Planning**

Your site should have a backup emergency plan in place in the event that the system goes down.

## **9.7 Interfacing**

Event Capture does not require special interfacing.

## **9.8 Electronic Signatures**

Event Capture does not use electronic signatures.

## 10 How to Generate On-line Documentation

This section describes some of the various methods by which users may secure Event Capture technical documentation. Online technical documentation pertaining to the Event Capture software, in addition to documentation which is located in the help prompts, may be generated through utilization of several Kernel options. These include XINDEX and VA FileMan List File Attributes. Further information about other utilities that supply online technical documentation may be found in the Kernel Reference Manual.

### **XINDEX**

This option analyzes the structure of a routine(s) to determine in part if the routine(s) adheres to VistA Programming Standards. The XINDEX output may include the following components: compiling list of errors and warnings, routine listing, local variables, global variables, naked globals, label references, and external references. By running XINDEX for a specified set of routines, the user is afforded the opportunity to discover any deviations from VistA Programming Standards that exist in the selected routine(s) and to see how routines interact with one another. That is, which routines call or are called by other routines.

To run XINDEX for the Event Capture software, specify the following namespace at the "routine(s) ?>" prompt: **EC\***. Event Capture initialization routines that reside in the UCI in which XINDEX is being run, as well as compiled template routines found within the Event Capture namespace, should be omitted at the "routine(s)?>" prompt. To omit routines from selection, preface the namespace with a minus sign (-).

### **List File Attributes**

This VA FileMan option allows the user to generate documentation pertaining to files and file structure. Utilization of this option via the "Standard" format will yield the following data dictionary information for a specified file(s): file name and description, identifiers, cross-references, files pointed to by the file specified, files which point to the file specified, input templates, print templates, and sort templates. In addition, the following applicable data is supplied for each field in the file: field name, number, title, global location, description, help prompt, cross-reference(s), input transform, date last edited, and notes.

Using the "Global Map" format of this option generates an output which lists all cross-references for the file selected, global location of each field in the file, input templates, print templates, and sort templates. For a comprehensive listing of Event Capture files, please refer to the Files section of this manual.

## 10.1 On-Line Help

Throughout the entire ECS package, you are able to enter a question mark (?) in the character-based user interface options and F1 in the GUI options to obtain on-line information to help you in your choice of actions at any prompt.

# 11 Glossary

<b>Term</b>	<b>Definition</b>
API	Acronym for Application Programmer Interface
Category	Provides a common level to group associated procedures. Multiple procedures can be defined for each category.
Cost Center	Reveals which service is using the specified DSS Unit. Cost centers are defined in MP-4, Part V, and Appendix B of the Fiscal Service cost manuals.
CPRS	Acronym for Computerized Patient Record System
DBIA	Acronym for Database Integration Agreement
DCM	Acronym for Department Cost Manager
DD	Acronym for Data Definition
DSS	Acronym for Decision Support System
DSS Unit	Defines the lowest level segment used for tracking hospital resources. These units can be a small work unit within a service or a large division within a service. Management at each facility is responsible for tailoring the DSS Units to fit its resource/cost reporting needs.
DSS Unit Number	Four- to seven-character DCM Department code. DSS will be providing guidance to VAMCs regarding what they should enter.
Event Capture	Software designed to provide management tools necessary to track procedures not tracked by other VistA software.
Event Code Screen	Unique combinations of location, DSS Unit, category, and procedure that define patient procedures.
ECS	Acronym for Event Capture System
GUI	Acronym for Graphical User Interface
IRM	Acronym for Information Resources Management
ISO	Acronym for Information Security Officer
Location	Facility or division name as it appears in the INSTITUTION file (#4).
Medical Specialty Unit	Specialty section associated with the DSS
Ordering Section	Medical section actually ordering the patient's procedure.
Parent Service	The controlling service for a DSS Unit.
PCE	Acronym for Patient Care Encounter
Procedure	A specific function performed on, or service provided to, a patient.
Provider	The person performing the procedure.
VA	Acronym for Veterans Affairs
VHA	Acronym for Veterans Health Administration
VistA	Acronym for Veterans Health Information Systems and Technology Architecture
VAMC	Acronym for Veterans Affairs Medical Center
Volume	Associated with the number of procedures performed. This field can also be used to track time actually spent performing the procedures.