

# **User Guide** for **CE Tracker**

*A Software Application for Tracking  
ED Staff Continuing Education*

*Provided by  
Illinois EMS for Children  
February 2007*

*Illinois EMS for Children*  
**CE Tracker User Guide**

**Table of Contents**

<u>Section</u>	<u>Page</u>
Introduction .....	1
Installation.....	1
Data Entry Screen Features .....	2
Notes Regarding Data Entry .....	3
Reports .....	4
Data Backup .....	5
Deleting and Archiving Records.....	5
Working with Archived Data .....	7
Error Log.....	8
Uninstalling the Program.....	8
Source Code Availability .....	8
Appendix A. Data Dictionary .....	9
Appendix B. Microsoft® Windows 98 Considerations .....	10

## Introduction


CE Tracker is a free software application developed by Illinois Emergency Medical Services for Children (EMSC). It was designed to help facilities in Illinois, particularly those recognized through the EMSC facility recognition program, to track continuing education for their emergency department (ED) and hospital staff. Although Illinois EMSC will provide support for users of the application, it is not responsible for the accuracy of data entered locally at each individual facility or how the reports are used.

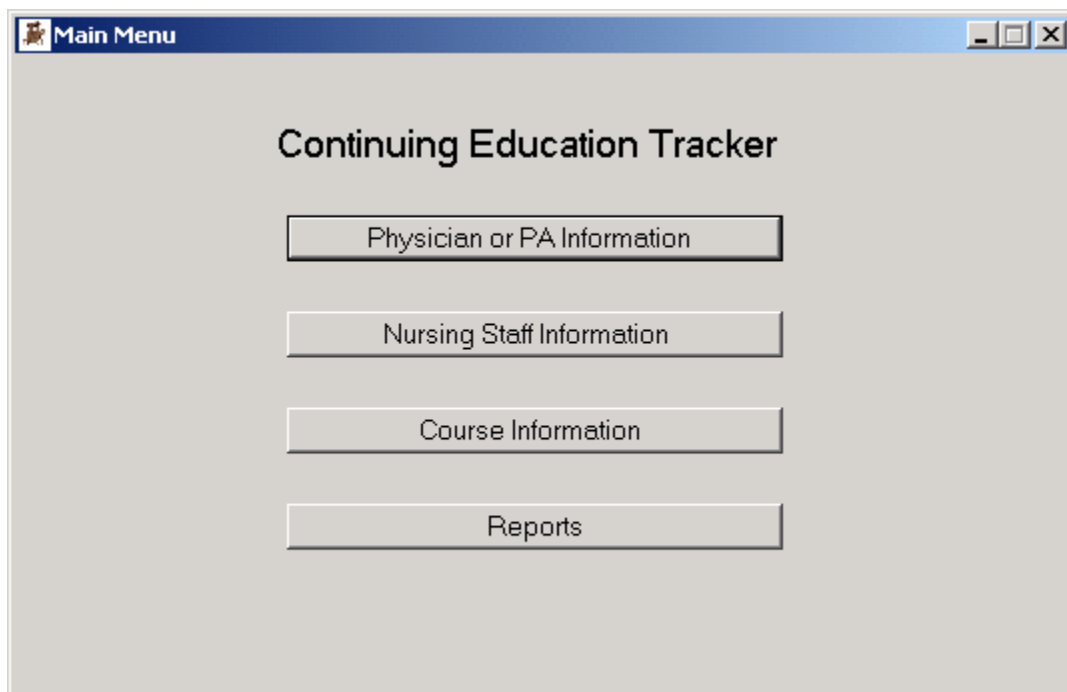
The application was designed with a simple user-friendly interface. As a result, this guide should allow you to begin performing data entry and generating reports after a quick review (pages 1-4). However, a more detailed tutorial is also provided if you find it necessary. The tutorial takes approximately 30 minutes to complete.

## Installation

**Note:** *This application uses the Microsoft® .NET (pronounced “dot-net”) framework. It will attempt to install .NET if it is not found on your system. If you receive a message that you are not authorized to install .NET, please contact your local network administrator. Separately, some fictitious examples of individuals and courses have been entered to help you explore data entry and reporting features. These individuals and courses should be deleted (using buttons labeled “Delete”) before working with real data.*

CE Tracker is designed to work on computer workstations with Microsoft® 2000 or XP operating systems.<sup>1</sup> Double click the setup file (it will appear as either *Setup* or *Setup.exe*) in the list of files on the CD. By default, the application will be installed on your computer in the folder *C:\Program Files\Illinois EMSC\CE Tracker*. During installation you may change this location, but if you do so then it is important to document the new location for future reference. A pop-up window confirms successful installation.

After installation, click on the *CE Tracker* application desktop icon (image of a bear: ) or select the application from the program menu. The following window should appear.



<sup>1</sup> The application will also work on a Microsoft® Windows 98 system, but additional steps are required. Please see appendix B of this user guide for details regarding Windows 98 installation and limitations.

### Data Entry Screen Features

The first three buttons of the main menu take you to data entry screens. The interface for all of these screens is consistent. Its five main features are highlighted here, using the physician/PA information (accessed by clicking the first button of the main menu) as an example.

2) When selecting on any subject in the list, details are automatically displayed in the fields shown in the rest of the display. Otherwise these fields will appear "grayed out" and data cannot be entered into them.

1) A list of subjects appears in the upper left. (Note: For course information, the list is organized into a "tree" using "+" symbols for drilling down rather than a line listing.)

3) Drop-down lists facilitate data entry by offering standard responses. Unless noted otherwise, free-text can also be entered into these fields (i.e., responses are **not** confined to the list).

4) Buttons allow for adding a new subject, saving changes to the fields for a subject, and deleting a subject.

5) Panel subsections display subsets of information for the subject, such as courses for a physician. Within these panels, a clearly labeled button takes you to a separate, similar-looking screen for handling the subset (in this example, the courses for Dr. Smith).

**Edit Physician and PA Information**

**Physicians and PA's**

<ul style="list-style-type: none"> <li>Jones, David</li> <li>Smith, John</li> </ul>	First Name John	Last Name Smith	Middle Initial A
Credential MD	License Number 123456789	Expiration Date 12/30/2007	Comments
Hire Date 1/10/2003	Unit ED		

**Certifications**

	Initial Certification Date	Expiration Date	Exempt from Expiration
▶ ABEM/ADBE	1/1/2005	12/31/2006	<input type="checkbox"/>
ACOS	1/1/2003		<input checked="" type="checkbox"/>

**Courses**

	Course Name	Completion Date	CME 1	CME 1A	CME 1B	CME 2	CME 2A	CME 2B
▶	PALS	1/11/2006	0	16	0	0	0	0
	Pediatric Pain M	1/1/2006	0	0	0	0	0	4
	ACLS	1/31/2006	0	8	0	0	0	0

## Notes Regarding Data Entry

Several methodological aspects of data entry in the application need to be highlighted.

- 1) **Use the Save Changes button to save new or edited records.**  
Data entered in a screen are not saved to the database until this button is clicked. After clicking the button, a pop-up confirmation window appears. If changes have been made and this button is not clicked, a warning appears that data may be lost.
- 2) **Enter an individual into the application as *either* a Physician/PA or Nursing Staff.**  
Data regarding an individual is added differently for physicians/PAs and nursing staff. Buttons on the main menu call up screens that look similar, but the respective drop-down lists will offer different credentials, certifications (when accessed via the *Certifications* panel), and type of CE (when accessed via the *Courses* panel).
- 3) **Enter course data *either* by individual *or* by course.**  
Users may enter course attendance by going through the panel for *Courses* in the individual screen, as in Feature #5 from the previous page, or by clicking on the *Course Information* button of the main menu. When using the individual's panel, only that individual's course work appears. This is useful for entering continuing education pertinent to one person, such as reading a journal article. By contrast, the *Course Information* screen accessed from the main menu allows the same course to be entered for many individuals. This is useful for a classroom course or a conference when multiple staff participate.
- 4) **Enter total continuing education credits and overlapping specialty credits for a course.**  
When coursework is entered, the total credits for the course are entered in an upper panel, and specialty hours in a lower panel. The hours may overlap. A fictitious example is shown below, showing 8 hours total CEU, but also 8 specialty hours for both Pediatrics and Critical Care.

The screenshot shows a window titled "Course Information for Individual" with a subtitle "Courses for Ayn Rand". On the left is a list of courses: "ACLS 1/31/2006" and "PALS 1/11/2006", with "PALS 1/11/2006" selected. On the right, there are two main sections:

- Total Credits for Course:** Contains two input fields: "CEU" with the value "8" and "CME" with the value "0".
- Credits for Course by Specialty:** Contains a red note: "Note: After entering total hours above, enter hours for the same course below according to specialty". Below this are five specialty input fields: "Pediatrics" (8), "Trauma" (0), "EMS" (0), "Disaster Preparedness" (0), and "Critical Care" (8). Below these are two "Other Specialty" sections, each with a "Describe:" text box and an "Hours:" input field set to "0".

At the bottom of the window are four buttons: "Add new course to this individual's list", "Save Changes", "Delete", and "Close".

## Reports

Reports are generated by clicking the **Reports** button of the main menu and then selecting the specific report type (Summary Report for Individuals, Detailed Report for Individuals, Report by Certification, Report by Specialty Courses, or Course Roster). For all reports, a consistent interface is used. Its seven main features are highlighted here. (Note: An individual will not appear in the report unless he/she has taken at least one course with associated credit hours.)

1) Beginning and Ending Date fields set the time period for the report.

2) Refresh button resets the report. Click this after adjusting the beginning and ending dates.

3) Print button to initiate printing. (Remember to note the page number in the upper right corner of the report - it will be useful for restricting the printout to the pages of interest.)

4) Export button exports the report to either Adobe® Acrobat (.pdf) or Microsoft® Excel (.xls) file. (Note: the export feature is not available for computers using a Microsoft® Windows 98 operating system).

The screenshot shows the 'CE Tracker Reports' window. At the top, there are two date dropdown menus: 'Beginning Date: 8/ 1/2005' and 'Ending Date: 8/ 1/2006'. To their right are three buttons: 'Refresh Report', 'Print', and 'Export'. Below these is a navigation bar with icons for back, forward, home, search, and refresh. On the left is a 'Page Index' window showing a tree view with 'Nursing Staff' and 'Physician/PA' expanded. The main area displays a report titled 'Illinois EMS for Children CE Tracker Summary Report for Individuals' for 'Courses Completed from 8/1/2005 Through 8/1/2006', accessed on 8/1/2006. The report is divided into sections for 'Nursing Staff', with entries for 'Johnson, Jeff J., APN' and 'Rand, Ayn Q., RN'. Each entry has a table of 'CE Type' and 'Hours', with a 'Total' row. The report is labeled 'Page 1' in the top right corner.

5) Page Index window. Click on the + symbol to drill down.

6) Navigation Bar Icons move between pages, zoom (magnifying glass), and search text (binoculars).

7) Main viewing window displays a print preview for the report.

## Data Backup

The application saves data automatically whenever the *Save Changes* button is clicked. As with any computer work, the entire application should be backed up regularly using the backup strategy at your facility.

As an additional means of backup, the data are stored in a file named *CEv3.mdb* in the application folder (by default, *C:\Program Files\Illinois EMSC\CE Tracker*). This storage file may be backed up by copying it to a separate folder, storage device, or even a separate computer on a network. Restoring the backup consists of simply copying the backup over the file in the application folder.

**Note:** *The CEv3.mdb file is compatible with Microsoft® Access, and it may be opened by this application. However, doing so risks violating the integrity of the stored data. If you would like to examine or work with the data in Access, please copy the file to a separate directory and work with only the copy.*

## Deleting and Archiving Records

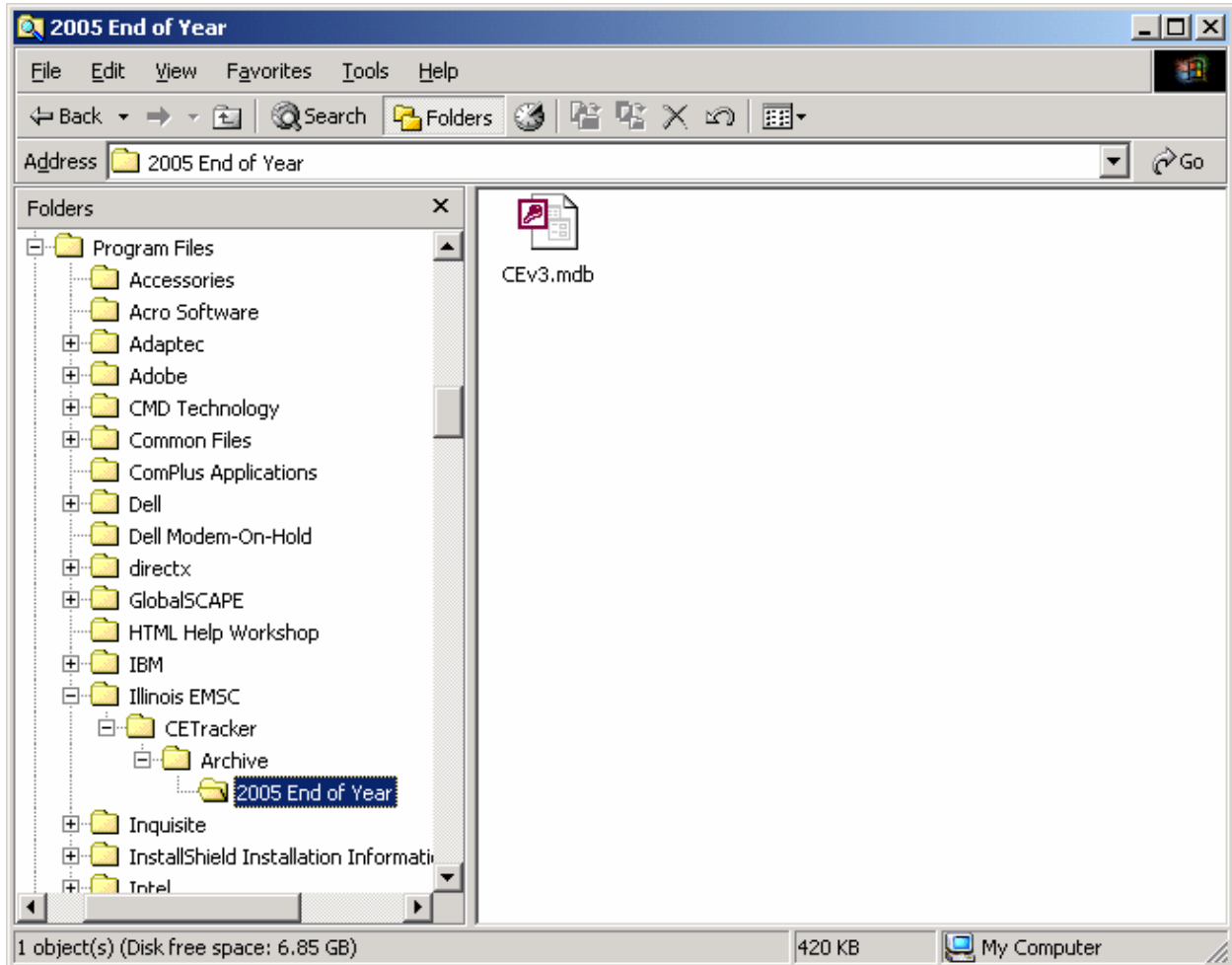
Deleting data for this application may take place in one of two forms:

1. Simple Deletion Without Archiving. Sometimes you may want to delete information that you do not need to archive. For example, a course may have been incorrectly added for an individual, and it needs to be removed from her/his list of courses. A **Delete** button is available on all data entry forms throughout the application for this purpose. Simply click on this button, and then verify the deletion by clicking Yes in the confirmation pop-up window that follows.

2. Deletion With Archiving. You may also want to delete information with the ability to archive it for later reference. For example, annually removing records of employees who have left the facility will streamline the drop-down list of individuals, but it is good practice to store these data. For *CE Tracker*, an archive simply consists of making a backup of the data file identified with a date.

**NOTE:** *The following steps assume that the user is familiar with working with files and folders in Windows. If this is not the case, please contact your Information Technologies department and arrange to work with someone who has such expertise.*

As noted in the section above regarding data backup, the records are stored in a file named *CEv3.mdb* in the application folder (by default, this folder is *C:\Program Files\Illinois EMSC\CE Tracker*). To store a copy of this file as an archive, create a new set of folders that identify the archive. An example of this approach appears in the image below. In this case, two folders were created; first a folder called “Archive” and then, within it, a folder called “2005 End of Year”. The *CEv3.mdb* file from the end of 2005 has been copied to the “inner” folder. The folder names identify the nature of the archive.



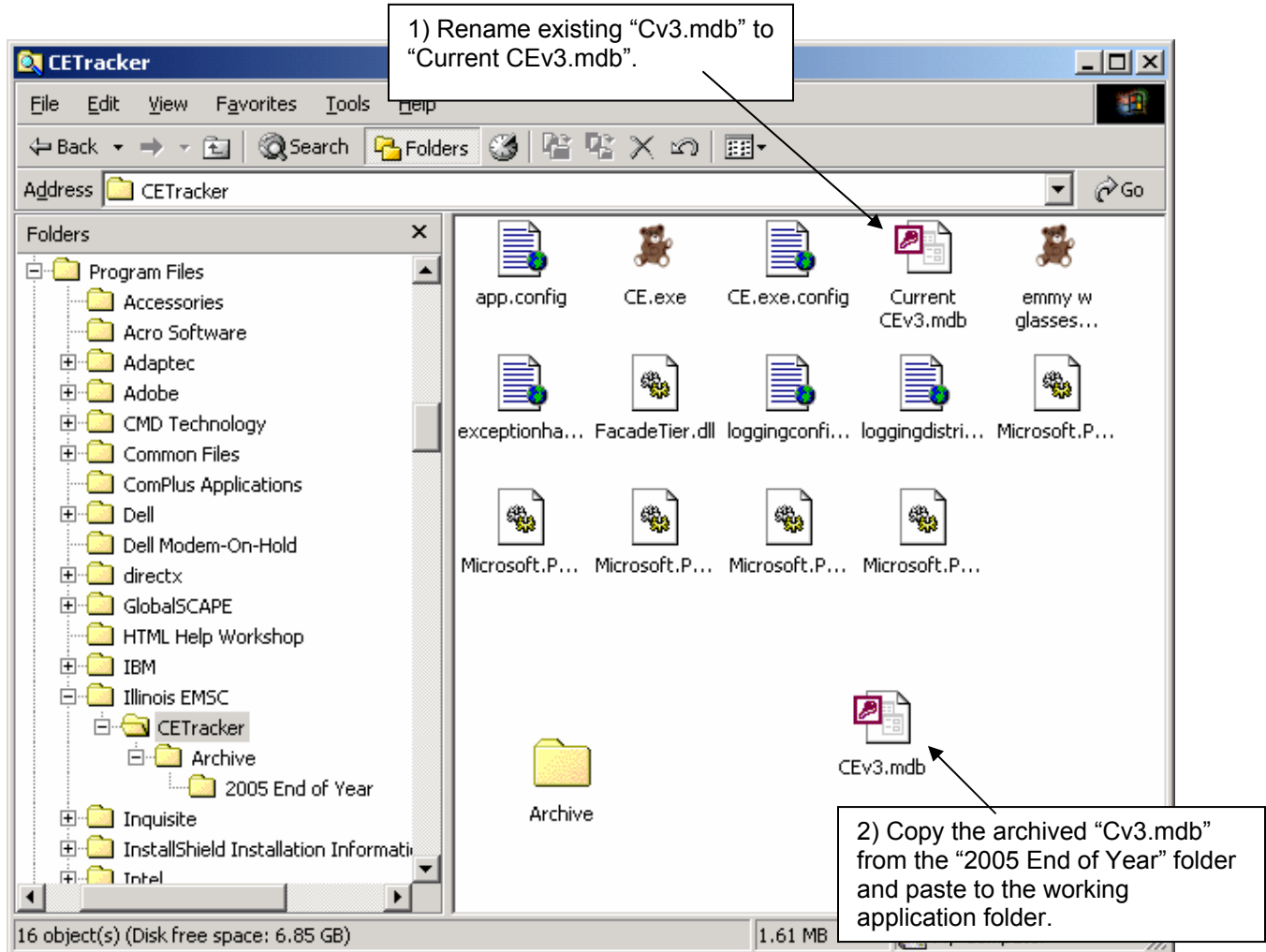
Once the data have been backed up, proceed as in step 1 on page 5 above by using the **Delete** button throughout the data entry forms of the application. (See the next section for working with archived data.)

## Working with Archived Data

To work with archived data, the archived CEv3.mdb file must be used in place of the current version of this file. To do so, perform two steps in this order.

1. Rename the existing CEv3.mdb file in the working application folder (again, by default, this is *C:\Program Files\Illinois EMSC\CE Tracker*). **It is important to rename this file so that it is not overwritten – this protects your current data.**
2. Copy the archived file to the working folder.

An example of this approach appears in the image below.



*CE Tracker* will now access the archived data when the application runs. Do not update archived data unless you want to create yet another folder structure for storing this information (e.g. "Archive with Updates").

When finished working with the archive, quit the application. Then, in the working application folder, delete the CEv3.mdb file (it contains the archived records), and change the name back for the current data file. In the example above, the file "Current CEv3.mdb" would be renamed back to "CEv3.mdb". The application will proceed to run using the current data.

## Error Log

When CE tracker runs, it records any operations errors in a file named *Trace.log* in the application folder (by default, *C:\Program Files\Illinois EMSC\CE Tracker*). If an error occurs that terminates the program, please email this *Trace.log* file to Dan Leonard at [dleonar@lumc.edu](mailto:dleonar@lumc.edu) for follow-up.

## Uninstalling the Program

To uninstall the program, use the “Add/Remove Programs” feature of the Control Panel on your computer.

## Source Code Availability

Illinois EMSC provides this application free of charge. Source code is available on request. Please contact Dan Leonard at [dleonar@lumc.edu](mailto:dleonar@lumc.edu) for further information.

## Appendix A. Data Dictionary

The following items are entered in the CE Tracker application using the Table and Column (Field) structure of Microsoft® Access.

Table	Columns (Fields)	Type	Size	Description
Certification	Certification	Text	50	Name of certification
	NursOrPhys	Text	50	Group applies to (nursing staff or physician)
Course	CourseID	Long Integer	4	Unique ID number for course
	CourseName	Text	100	Name of course
	Provider	Text	100	Who taught/provided the course
	CompletionDate	Date/Time	8	Date of course completion
	ExpirDate	Date/Time	8	Date of course expiration
	Comments	Memo	---	Comments regarding the course
Credential	Credential	Text	50	Name of credential
	NursOrPhys	Text	50	Group applies to (nursing staff or physician)
Individual	IndividualID	Long Integer	4	Unique ID number for individual
	LastName	Text	100	Last name
	FirstName	Text	100	First name
	MiddleInit	Text	50	Middle initial
	Credential	Text	50	Credential associated with license
	LicenseNumber	Text	50	License number
	LicenseExpDate	Date/Time	8	License expiration date
	HireDate	Date/Time	8	Hire date for the individual at the institution
	Unit	Text	50	Unit where the individual works
	Comments	Memo	-	Comments
IndividualWithCert	IndividualWithCertID	Long Integer	4	Unique ID number for individual with certification
	IndividualID	Long Integer	4	Unique ID number for individual
	Certification	Text	50	Name of certification
	Description	Text	200	Description of certification for individual
	OriginalCertDate	Date/Time	8	Original certification date for individual
	ExpirationDate	Date/Time	8	Certification expiration date for individual
	ExpirationExempt	Yes/No	1	Y/N field to identify if certification does not expire
IndividualWithCourse	IndWithCourse	Long Integer	4	Unique ID number for individual with course
	IndividualID	Long Integer	4	Unique ID number for individual
	CourseID	Long Integer	4	Unique ID number for course
	CME1	Double	8	Hours of CME1
	CME1A	Double	8	Hours of CME1A
	CME1B	Double	8	Hours of CME1B
	CME2	Double	8	Hours of CME2
	CME2A	Double	8	Hours of CME2A
	CME2B	Double	8	Hours of CME2B
	CME	Double	8	Hours of CME
	CEU	Double	8	Hours of CEU
	Peds	Double	8	Pediatrics specialty hours
	EMS	Double	8	EMS specialty hours
	Trauma	Double	8	Trauma specialty hours
	CriticalCare	Double	8	Critical Care specialty hours
	DisPrep	Double	8	Disaster Preparedness specialty hours
	Other1	Text	100	Other specialty name
	Other1Hrs	Double	8	Other specialty hours
	Other2	Text	100	Other specialty name
	Other2Hrs	Double	8	Other specialty hours

## Appendix B. Microsoft® Windows 98 Considerations

CE Tracker was developed using *Microsoft® Visual Studio .NET 2003*. This product includes a free report development component, *Crystal Reports for Visual Studio*. All reports in CE Tracker used this component. Two well-documented issues arise when attempting to run this version of Crystal Reports on a Microsoft® Windows 98 operating system.

- 1) **Installation.** Windows 98 installation requires one or two extra steps for this version of Crystal Reports (these are described on line at <http://technicalsupport.businessobjects.com/KanisaSupportSite/seartween.do;jsessionid=F8A33E3E5BA99DFBE1A9D22D3E67E113?cmd=displayKC&docType=kc&externalId=c2013420&sliceId=&dialogID=360384&stateId=1%200%20356275>).

In particular, after running *Setup*, perform the following:

- a. Copy the file *dbghelp.dll* to the *System32* folder on the client computer. The file is available on the CE Tracker installation CD. In most systems, the target folder is *C:\Windows\System32*. If your computer does not find the *System32* folder at this location, then search for it in your system and correct the target path accordingly. (Note: on some systems, this is the only step required for CE Tracker to work with Windows 98. You may test this by attempting to run a report. If no error message appears, you may stop here. Otherwise proceed to the next item.)
  - b. Manually register the *CRQE.dll* file in the system. This is done by first clicking on **Start** and then **Run** in the toolbar at the bottom of the main screen of Windows 98 systems. A "Run" window will open with a textbox. In this textbox, type the following command (be sure to include the quotes):  
**regsvr32 "C:\program files\common files\Crystal Decisions\1.0\bin\CRQE.dll"**  
A successful registration message should result. If your computer does not find *CRQE.dll* at this location, then search for it in your system and correct the path in the command accordingly.
- 2) **Report Export.** The export capability will not work in Windows 98 using this version of Crystal Reports (for reference, please see the third item – identified as ADAPT00176545 – on page 3 in the following Web site: [http://ftp1.businessobjects.com/webprod/hot\\_fixes/en/crnet11win\\_en\\_sp2.pdf](http://ftp1.businessobjects.com/webprod/hot_fixes/en/crnet11win_en_sp2.pdf)). CE Tracker attempts to identify the client operating system and will not display the export button for reports when it detects Windows 98.