

Abstract Plus Training Manual for Administrators

Version 2.0
(Based on Abstract Plus Version 3.1)

**Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division of Cancer Prevention and Control
National Program of Cancer Registries
Registry Plus™ Software for Cancer Registries**



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Chapter 1: Introduction

Overall Learning Objectives

These are the overall learning objectives for this Abstract Plus training manual for Administrators:

- Identify the various features of Abstract Plus version 3.1
- Learn how to Log in into Abstract Plus, and learn how to Log in as Administrator and maintain the Administrator password
- Learn about the Abstract Plus menu items; in particular the Administrator menu items and major functions of the Administrator role within Abstract Plus
- Create and manage Abstract Plus user accounts
- Learn how to configure the Abstract Plus application, including setting application preferences and creating and maintaining display types
- Become familiar with the auditing features of Abstract Plus and the process of creating and setting up Abstract Plus audits for Auditors to perform

Overview of the Abstract Plus Administrator Training Manual

The Abstract Plus Administrator Training Manual provides you with the information to understand and use the administrator features of Abstract Plus. This manual describes the functions available to the Administrator. The major sections include logging in to Abstract Plus, logging in to the Administrator features of the program, creating and managing user accounts, configuring the application for abstracting, and configuring the application for auditing. Also, each chapter contains questions that test your knowledge of the Abstract Plus administrator features and activities that allow you to practice your new skills on your own.

Abstract Plus Features

Abstract Plus version 3.1 is a free-of-charge cancer data collection tool developed by the Centers for Disease Control and Prevention (CDC) that supports two main functions; abstracting and auditing. The application can be customized by central cancer registries to be used centrally, as well as for distribution to and use by hospitals and other reporting sources. Although the product is not designed to include all functionality needed in an American College of Surgeons (ACoS)-approved hospital cancer registry, it is suitable for reporting to central registries from non-registry hospitals, clinics, laboratories, and other sources for cancer incident reports. The program can also be used for special projects and start-up registries.

The abstracting capability of Abstract Plus is used to summarize medical records into an electronic report of cancer diagnosis and treatment by abstractors or anyone working with cancer data. Abstract Plus supports the abstraction of all data items in national standard data sets, including all text fields, as well as any state-specific data items. The output of Abstract Plus is an electronic abstract in the format of the North American Association of Central Cancer Registries (NAACCR) data exchange layout.

Abstracts entered into Abstract Plus are validated by customizable edits, allowing for interactive error correction while abstracting. Abstract Plus includes Registry Plus Online Help, a collection of standard coding manuals that are cross-referenced, indexed, and context-linked to minimize the need for reference to printed manuals during abstracting.

The all-new auditing capability included in Abstract Plus version 3.1 allows central registries to use the program to perform case completeness and data quality audits of reporting facilities, as well as data quality audits of central registry coders. For assessing case completeness, casefinding audits are available, and for assessing data quality, both reabstraction and recoding audits are available. The application allows for either blinded or un-blinded reabstraction audits, and for recoding audits, un-blinded submitted text can be recoded for both reporting facilities as well as central registry coders.

Please note that due to development priorities, Abstract Plus version 3.1 is being released without the Auditor features; description of Auditor features provided in this manual is for informational purposes only. The Auditor features of Abstract Plus will be released in a future version of the program.

Abstract Plus version 3.1 has been entirely reprogrammed using .NET technology. The application has a new, more user-friendly abstracting interface. New direct grid entry of coded values allows for a more streamlined abstracting experience, as well as easier viewing of text fields, online help, and edit errors.

Abstract Plus version 3.1 also has enhanced security features. All records are saved in Microsoft Access or SQL server databases, and all tables are password protected and encrypted using Microsoft functions. All users must have a User ID and password to access the abstracting features of the application, and access to administrative and auditor functions requires the entry of special restricted passwords. A security challenge question feature is also included in case a user forgets his or her password, which enables the user to securely reset their password without administrator intervention.

Abstract Plus User Roles

Abstract Plus users consist of abstractors, central cancer registrars, and other individuals or groups who work with cancer data. Abstract Plus includes 3 types of users, or roles:

User	Description
Abstractor/ General User	<p>The Abstractor or general user manages data entry and has access to all of the abstracting features of the program.</p> <p>Abstractors can add new abstracts, edit existing abstracts, copy, print, and delete abstracts, and can import and export abstracts in NAACCR file format. Abstractors can also view available reports and update their password and personal security challenge questions.</p> <p>All Abstractors must have a user account, and log in to the application using a User ID and password.</p>

User	Description
Auditor	<p>The Auditor manages audit entry and reporting and has access to all of the abstracting features of the program described above for the general user; however, Auditors also have access to all of the auditing features of the program.</p> <p>Auditors can open and close audits, and perform casefinding, reabstraction, and recoding audits (including pre- and post-reconciliation tasks), and run available audit reports. Auditors can also export newly identified tumors in NAACCR file format from casefinding efforts, and can export completed reabstraction and recoding audits.</p> <p>All Auditors must have a general user account, and log in to the application using a User ID and password. Auditors access auditing functions using a special Auditor password.</p>
Administrator	<p>The Administrator manages the setup of the program and has access to all of the abstracting features of the program described above for the general user and all of the auditing features available to the Auditor; however Administrators have access to additional administrative features of the program. They can perform administrative functions such as managing the Administrator password, creating and modifying general user accounts, specifying application preferences, creating and managing abstracting display types, and creating and managing audit display types, discrepancy codes and databases.</p> <p>All Administrators must have a general user account, and log in to the application using a User ID and password. Administrators access administrative functions using a special Administrator password. Entry of the Administrator password also allows access to all auditing functions (i.e., entry of the Auditor password is not required for Administrators).</p>

System Requirements

Abstract Plus is programmed for the Microsoft Windows 32-bit environment installed on an Intel Pentium or Pentium-compatible computer. The minimum hardware requirements are the same as those of the Microsoft Windows operating system used. Additional system requirements include:

- Microsoft operating system from Windows 98 through Windows Vista
- 128 MB RAM (512 MB minimum recommended)
- Latest version of Microsoft Internet Explorer (recommended)
- The available hard-disk space requirement for Abstract Plus depends on the number of abstracts that will be created and maintained in the database. A minimum of 70 MB of free hard drive space is required.

Downloading and Installing Abstract Plus

A generic (non-customized) version of Abstract Plus is available from the CDC's Registry Plus Web site (<http://www.cdc.gov/cancer/npcr>). This Web site provides a fully documented generic installation, downloadable fact sheets, and version enhancement information.

Please note, however, most users will require a customized version of the software set up to meet requirements and procedures of a specific locale, usually a state, or for a specific study.

Potential users of Abstract Plus should contact their state central cancer registry staff first to inquire about their customized version and for support. State registry contact information can be found at the National Program of Cancer Registries Web site:

<http://apps.nccd.cdc.gov/cancercontacts/npcr/contactlist.asp>.



Note

You must have administrative privileges to your computer in order to install Abstract Plus. Contact your system administrator to install the program if you do not have administrative privileges.

To download and install Abstract Plus, complete these steps:

1. Open your Internet browser and type in the following URL for the NPCR web site in the address field:

<http://www.cdc.gov/cancer/npcr/>

2. Press **Enter**.
3. In the **Featured Items** section, Under **Tools**, click the **Registry Plus** link.
4. In the **Registry Plus Components** section, click the **Abstract Plus** link.
5. Click the **Technical Information and Installation** link.
6. Read the information provided in the section **Installing and Upgrading Abstract Plus**.
7. Scroll down to the **Installation** section, and click the **Download Abstract Plus** link.
8. To download the latest version of Abstract Plus, click the link to the latest **.exe file**.
9. Click **Run** on the displayed page and follow all the prompts to download and install Abstract Plus.



Important

If you have a prior version of Abstract Plus installed on your computer, and would like to upgrade to Abstract Plus version 3.1, there is no automatic upgrade available. **Do not uninstall your current version** as you will need to export all abstracts out of your current version of Abstract Plus and import them into your newly installed Abstract Plus version 3.1.

Launching Abstract Plus

Once installed, you can launch Abstract Plus:

1. From the Start menu, select **All Programs, Registry Plus, Abstract Plus**, and then **Abstract Plus 3.1**.

User Support

For technical support via e-mail, contact cancerinfo@cdc.gov.

The CDC Registry Plus Development group is funded primarily to support NPCR-funded state central cancer registries. As a result, CDC helps state central cancer registries set up the software and perform basic customizations. CDC also provides periodic software updates and problem-solving to the extent of available resources. CDC does not provide on-site services, and does not support hospitals, clinics, laboratories, or other private users.

Abstract Plus is intended for redistribution to cancer reporters after customization by the central registry. The state central registry or other institution redistributing Registry Plus software should provide all support to end users.

State registry contact information can be found at the National Program of Cancer Registries Web site: <http://apps.nccd.cdc.gov/cancercontacts/npcr/contactlist.asp>.

Other users of Abstract Plus will need to independently understand and maintain the software application.

Chapter 2: Abstract Plus General User Basics

Learning Objectives

In this chapter, you will learn to:

- Create your own user account upon initial access to the program
- How to address first-time log in and routine log in to Abstract Plus as an Abstractor/general user
- Familiarize yourself with the Abstract Plus main window and identify Abstract Plus abstracting menu options
- Change your general user password
- Reset your password if forgotten, by answering your security challenge questions
- Update your security challenge questions and answers after initial set up
- Exit Abstract Plus and use the Backup option
- Use the Restore option to restore your abstracts database if corrupted

Overview

This chapter covers the all of the features available to general users of Abstract Plus, the majority of which the Abstract Plus Administrator needs to be aware. This chapter describes basics of logging in to and out of Abstract Plus. It includes a description of the process by which a user account is generated, how to log into Abstract Plus for the first time, how to address the security challenge questions presented upon initial log in, how log in to Abstract Plus routinely using a User ID and password, how to maintain your general user password, how to exit the application and use the Backup feature, and how to use the Restore feature to restore a corrupted abstracts database.

Logging In

After installing Abstract Plus version 3.1, upon initial launch of the program, you will be prompted to create a new user account. You will then need to log in using the new login information you entered along with an initial password of Welcome1, change your password, and then answer security or “challenge” questions. Your answers to these questions will be used to validate your identity if you forget your Abstract Plus password---if you forget your password, Abstract Plus will ask you for the answers you provided to these security questions, and then allow you to reset your password if the questions are answered correctly.

The creation of a user account is enabled for the general user **only** upon initial launch of the program. If other users already exist in your Abstract Plus application (i.e. the program has already been launched and user account(s) created), you will need to [log in as Administrator](#) to create a user account.

When logged in with your own User ID and password, you are recorded as the abstractor when conducting either general abstracting or auditing tasks (unless your Administrator has modified this system option). This information can be used as selection criteria for reports

and exports, and can also be used for general tracking purposes to associate abstractors with their specific abstracts, and auditors with the audits that they have conducted.

Creating a User Account upon Initial Access and First-Time Log In

After installing Abstract Plus version 3.1, if you are the first person to launch the program, you will be prompted to create a new user account. You will then be prompted to log in to Abstract Plus using your newly-created User ID and an initial password of **Welcome1**.

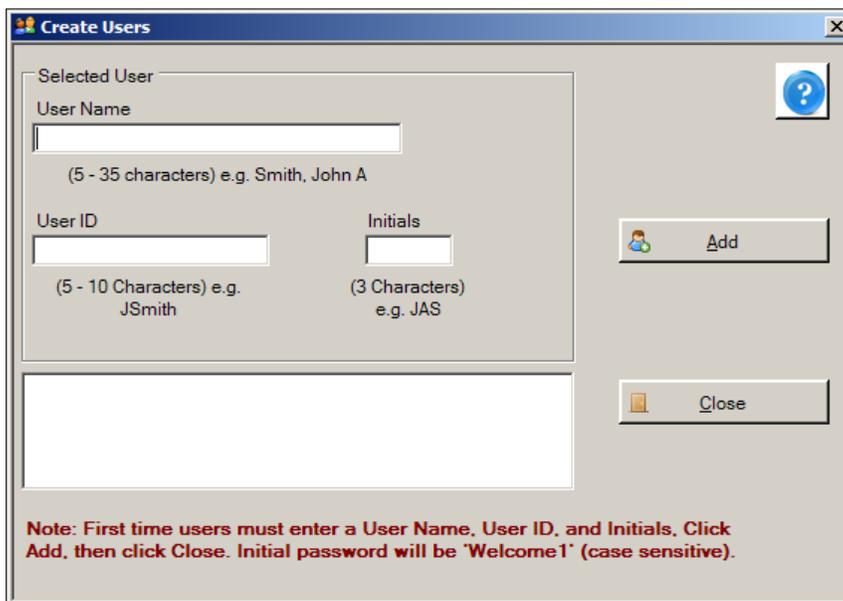


If other users already exist in your Abstract Plus application (i.e. the program has already been launched and user account(s) created), you will need to log in as Administrator to create a user account.

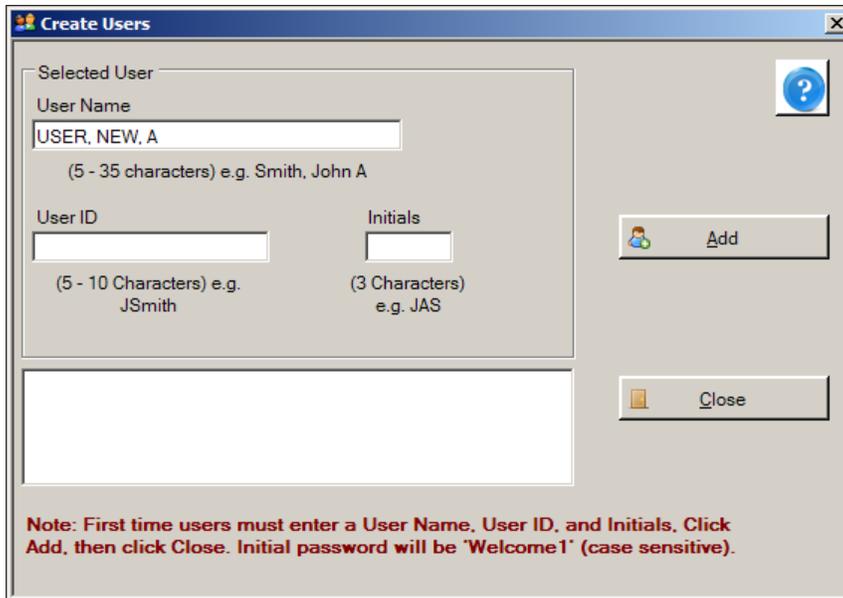
To create a new user account upon initial launch of the program, and log in to the application for the first time complete these steps:

1. To launch the program, from the Start menu, select **All Programs, Registry Plus, Abstract Plus**, and then **Abstract Plus 3.1**.

Result: The **Create Users** window opens.



2. Enter your full name in the **User Name** field. The format for name entry is last name, and then first name and middle initial, e.g., Smith, John A. In the example shown, the user name being entered has the last name USER, first name NEW, and middle initial A.

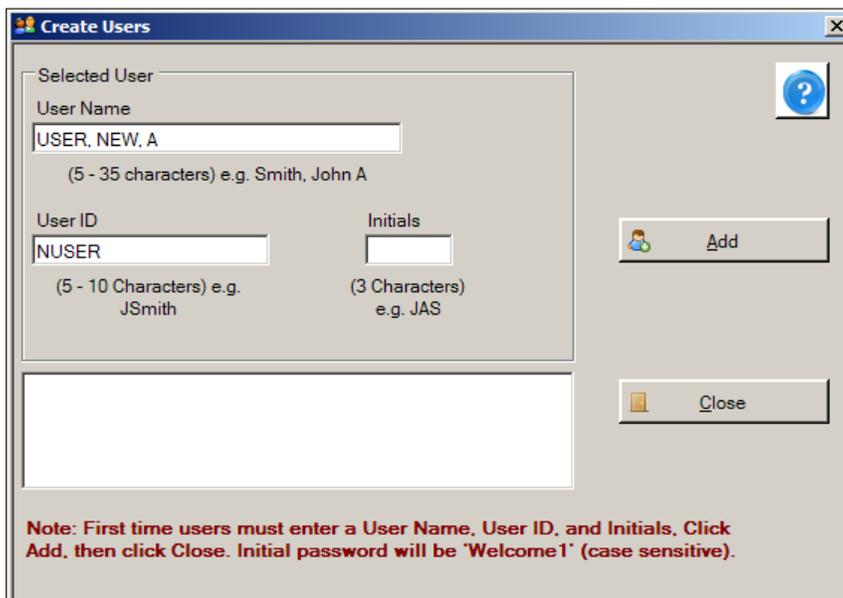


The screenshot shows the 'Create Users' dialog box with the following fields and values:

- User Name:** USER, NEW, A (5 - 35 characters) e.g. Smith, John A
- User ID:** (5 - 10 Characters) e.g. JSmith
- Initials:** (3 Characters) e.g. JAS

The 'Add' button is visible, and the 'Close' button is also visible. A note at the bottom states: **Note: First time users must enter a User Name, User ID, and Initials. Click Add, then click Close. Initial password will be 'Welcome1' (case sensitive).**

3. Enter a **User ID** in the **User ID** field. User IDs can only be characters, and are 5-10 characters in length. In the future, you will enter your User ID when logging in to Abstract Plus. In the example shown, the User ID being entered is NUSER.

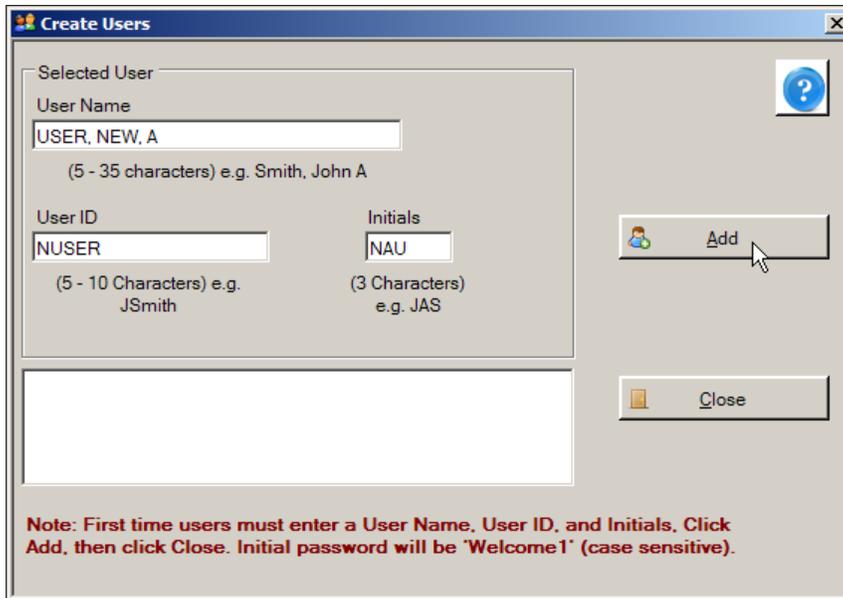


The screenshot shows the 'Create Users' dialog box with the following fields and values:

- User Name:** USER, NEW, A (5 - 35 characters) e.g. Smith, John A
- User ID:** NUSER (5 - 10 Characters) e.g. JSmith
- Initials:** (3 Characters) e.g. JAS

The 'Add' button is visible, and the 'Close' button is also visible. A note at the bottom states: **Note: First time users must enter a User Name, User ID, and Initials. Click Add, then click Close. Initial password will be 'Welcome1' (case sensitive).**

4. Enter your initials in the **Initials** field. Your initials will be displayed on the main Abstract Plus window to indicate when you are logged in to the application, and may be automatically recorded in the Abstracted By field when abstracting abstracts or conducting audits if this application preference is enabled when configuring the application. This information is recorded in order to associate abstractors with the abstracts they have generated, and auditors with the audits that they have conducted. In the example shown, the initials entered are NAU.



Selected User

User Name
USER, NEW, A
(5 - 35 characters) e.g. Smith, John A

User ID
NUSER
(5 - 10 Characters) e.g. JSmith

Initials
NAU
(3 Characters) e.g. JAS

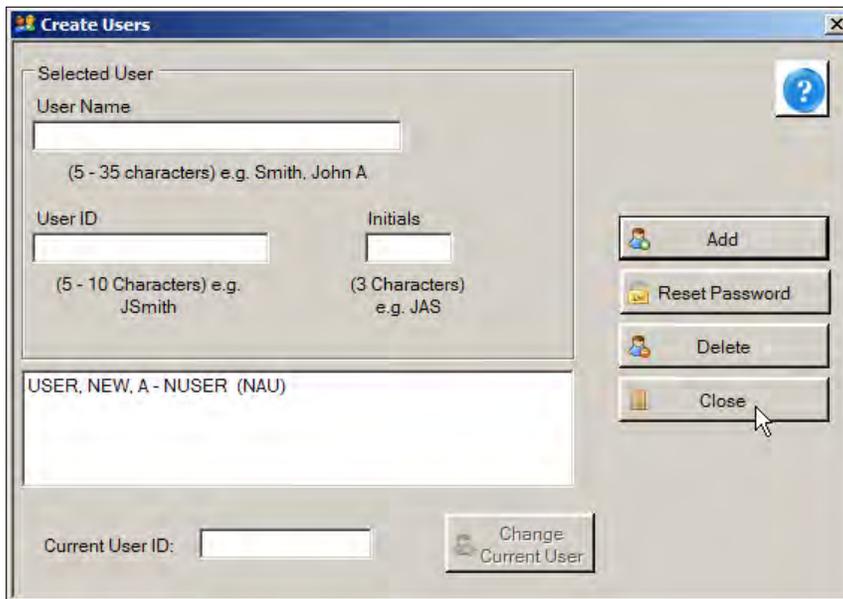
Add

Close

Note: First time users must enter a User Name, User ID, and Initials. Click Add, then click Close. Initial password will be 'Welcome1' (case sensitive).

5. Click **Add**.

Result: The system adds the new user account to the users list.



Selected User

User Name
(5 - 35 characters) e.g. Smith, John A

User ID
(5 - 10 Characters) e.g. JSmith

Initials
(3 Characters) e.g. JAS

USER, NEW, A - NUSER (NAU)

Add

Reset Password

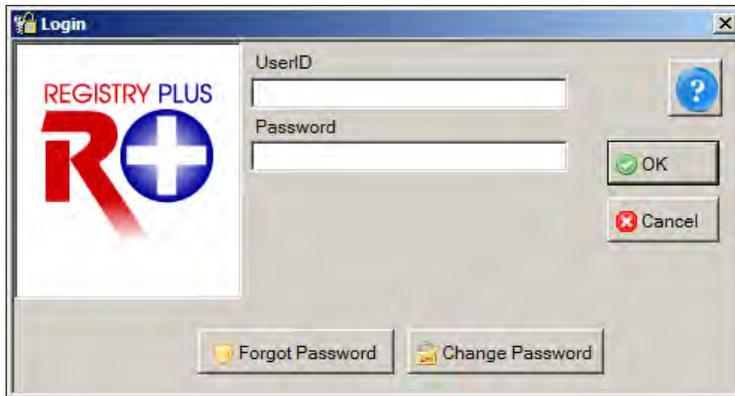
Delete

Close

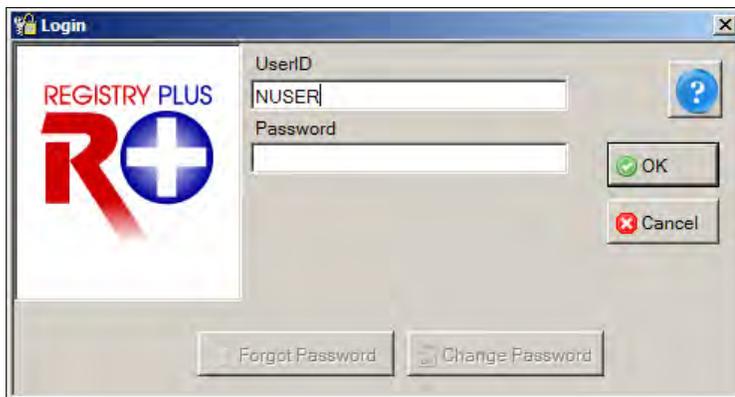
Current User ID:

6. Click **Close**.

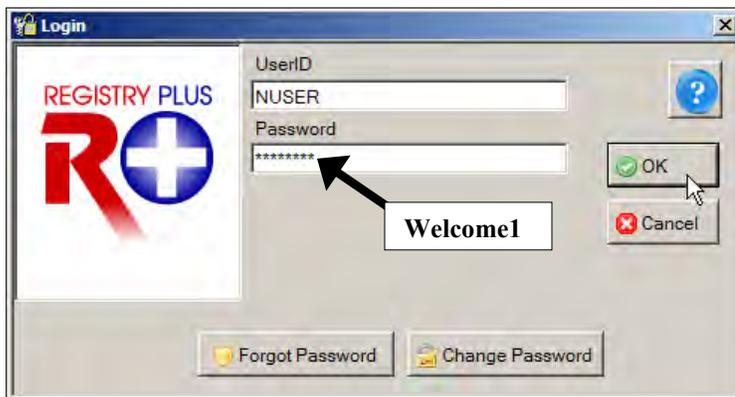
Result: The **Login** window opens.



7. Enter your **User ID** in the **User ID** field.



8. Enter **Welcome1** in the **Password** field.

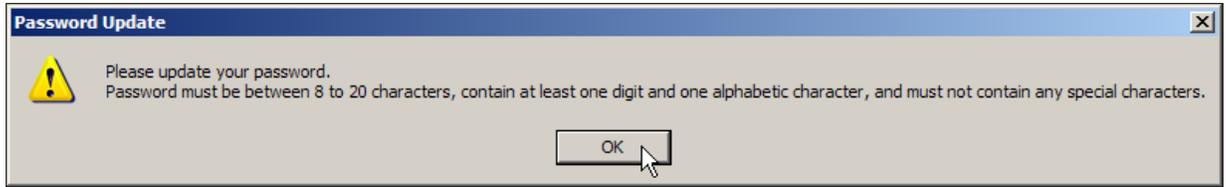


Note

When entering your password, asterisks will be displayed rather than your password for added security. Note that passwords are case sensitive.

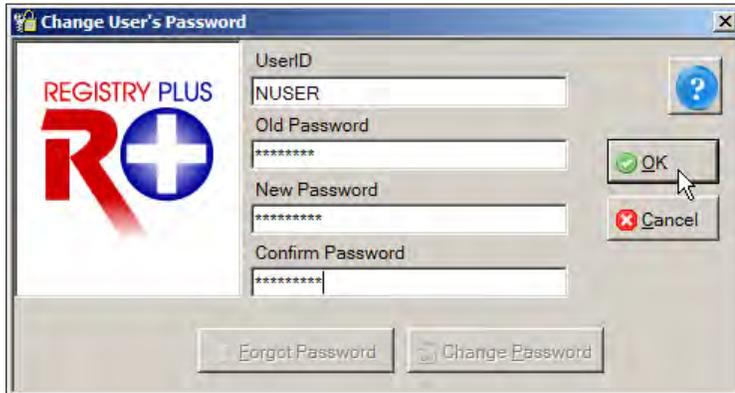
9. Click **OK**.

Result: A **Password Update** message is issued that lets you know you need to change your password. This occurs upon initial log in only. When changing your password, you must change it to a password that meets the password requirements set when configuring the application.



10. Click **OK**.

Result: The Change User's Password window opens, displaying your User ID and Old Password (which is **Welcome1** at this point).



11. Enter a new password in both the **New Password** and **Confirm Password** boxes, and click **OK**. You must type the same new password in both boxes.



Note

By default, your new password must be between 8 and 20 characters, contain at least one digit and one alphabetical character, and must not contain any special characters; password requirements are maintained by the Administrator.

Result: The **Define User's Security Questions** window opens, with your User ID displayed.

Define User's Security Questions

Please answer any 3 questions from the below lists to help Abstract Plus to verify your identity. Should you forget your password, you will be asked to answer at random any 1 of the questions you answer here in order to reset your password.

Warning: Challenge questions must be setup to enter Abstract Plus.

UserID

--- Select One ---

--- Select One ---

--- Select One ---

To complete your initial log in to Abstract Plus, you are required to select the specified number of security questions and answer them. By default you will need to select and answer 3 questions; however, this number may be modified when configuring the application. Your answers to these questions will be used to validate your identity if you forget your general user Abstract Plus password. If you forget your password, Abstract Plus will ask you for the answers you provided to your chosen security questions, and then allow you to reset your password if the questions are answered correctly. If you forget both your password and your answers to your selected security questions, you will need to log in as Administrator to reset your password.

12. Select a **question** from the first drop-down list and enter your **answer** in the box below the question.

Define User's Security Questions

Please answer any 3 questions from the below lists to help Abstract Plus to verify your identity. Should you forget your password, you will be asked to answer at random any 1 of the questions you answer here in order to reset your password.

Warning: Challenge questions must be setup to enter Abstract Plus.

UserID: NUSER

--- Select One ---

- How many children do you have?
- How many siblings do you have?
- How old were you at your wedding? (Enter age as digits.)
- In what city did you honeymoon? (Enter full name of city only)
- In what city is your vacation home?
- In what city was your father born in? (Enter full name of city only)
- In what city was your high school?

Submit Questions

13. Continue selecting questions and answering them until each question is answered.

Define User's Security Questions

Please answer any 3 questions from the below lists to help Abstract Plus to verify your identity. Should you forget your password, you will be asked to answer at random any 1 of the questions you answer here in order to reset your password.

Warning: Challenge questions must be setup to enter Abstract Plus.

UserID: NUSER

How many children do you have? 1

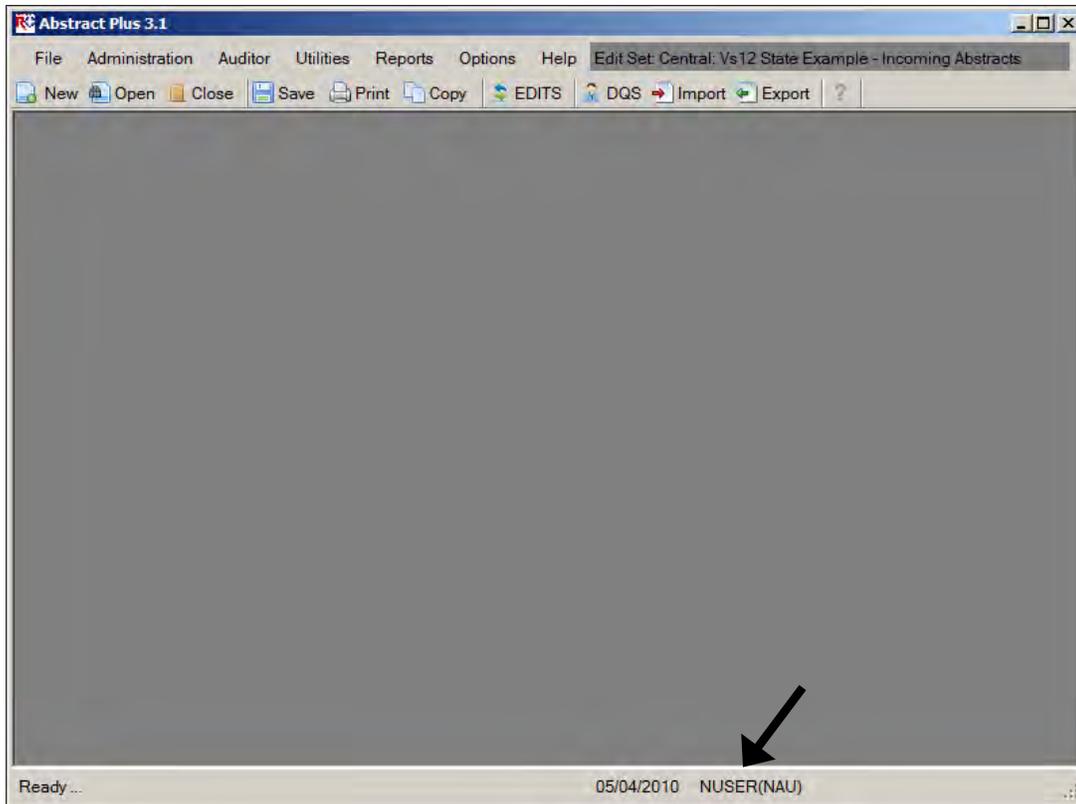
How many siblings do you have? 2

How old were you at your wedding? (Enter age as digits.) 23

Submit Questions

14. Once all questions are selected and answers entered, click **Submit Questions**.

Result: The Abstract Plus **main window** opens, with you logged in as a general user. Note that your User ID is displayed at the bottom of the window.



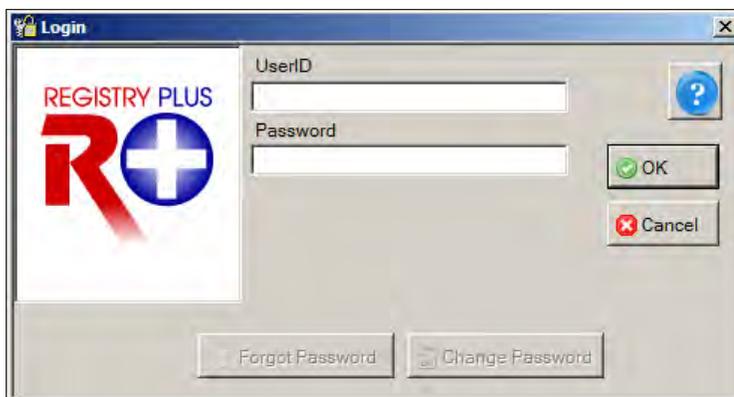
Routine Log In

After installation and initial log in to Abstract Plus, you will have a User ID and password for routine log in to your Abstract Plus general user account.

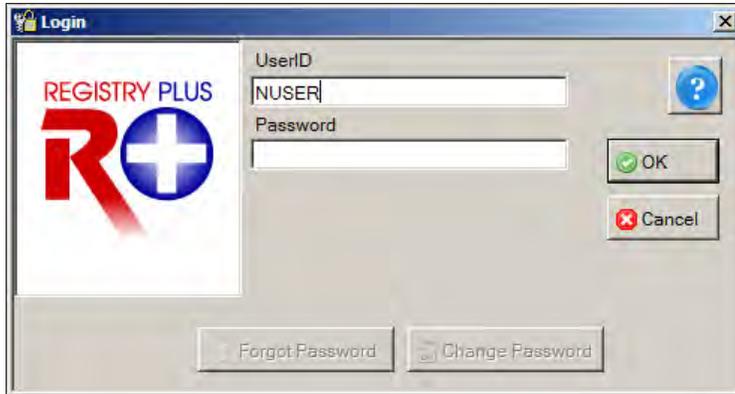
For routine log in to Abstract Plus, complete these steps:

1. To launch the program, from the Start menu, select **All Programs, Registry Plus, Abstract Plus**, and then **Abstract Plus 3.1**.

Result: The **Login** window opens.



2. Enter your **User ID** in the **User ID** box. In the example shown, the User ID being entered is NUSER.



3. Enter your **password** in the **Password** box, and Click **OK**.

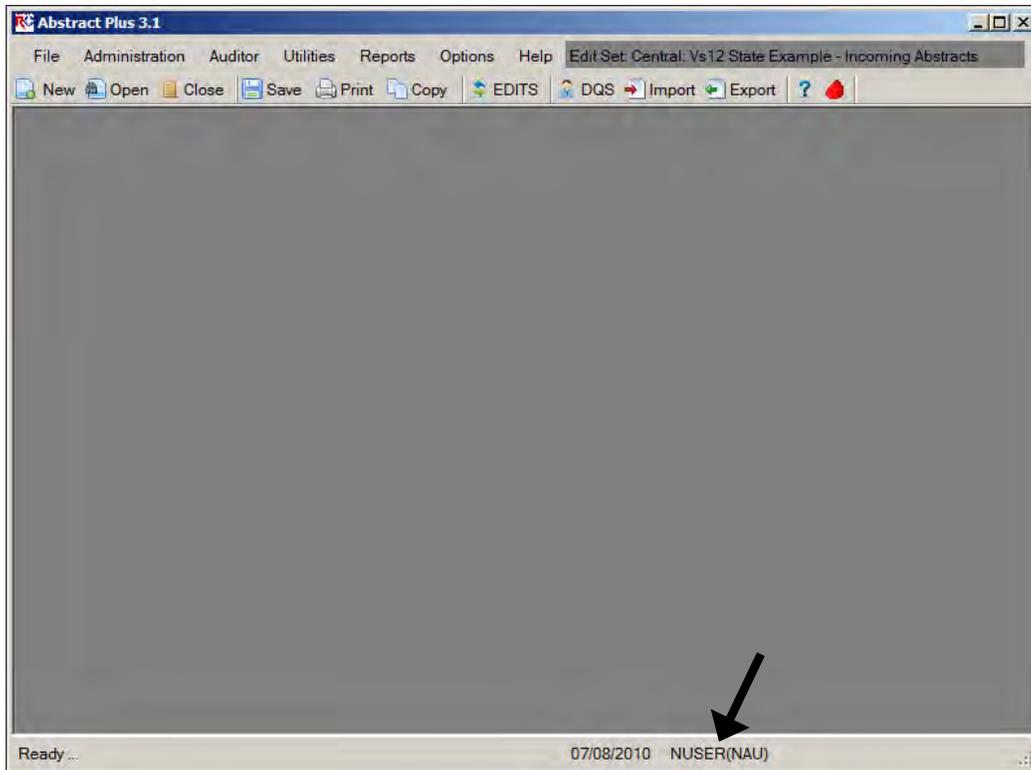


Note

When entering your password, asterisks will be displayed rather than your password for added security. Note that passwords are case sensitive.



Result: The Abstract Plus **main window** opens, with you logged in as a general user. Note that your User ID is displayed at the bottom of the window.



Activity 1 - Logging in to Abstract Plus

Using what you have just learned, launch Abstract Plus and log in as a General User.

If you have not yet accessed the program, see page 7 of this manual or click [here](#) for instructions for initial login to the program.

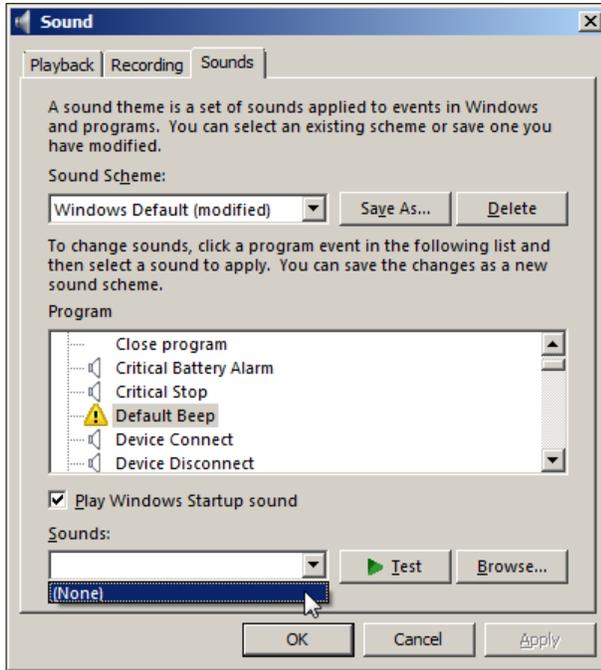
The Abstract Plus Main Window

The Abstract Plus main window provides access to all of the application's features. Your User ID is displayed at the bottom of the window, and important system messages are displayed in the lower left-hand corner of the window. The default edit set is displayed in the upper right-hand corner of the window. When logged in as a general user, you will automatically have access to all of the application's abstracting features via the main menu items. Some menu options are also available as buttons in the toolbar as shown below. Access to Administrator and Auditor functions require entry of special passwords.



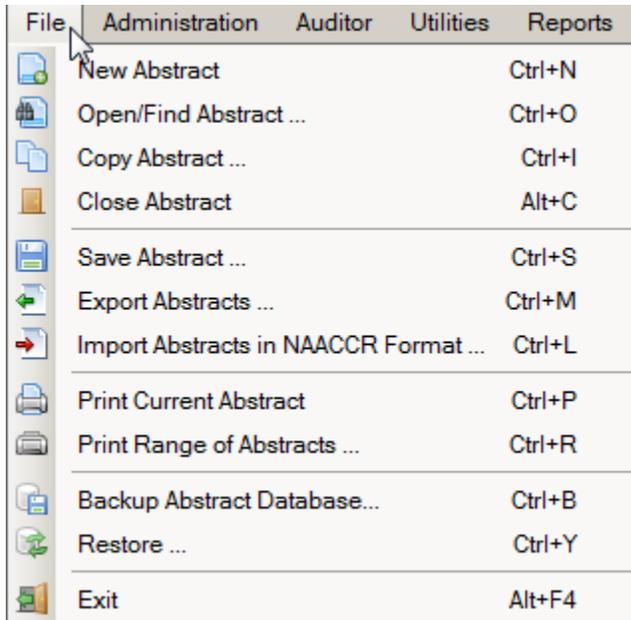
Tip

By default Microsoft comes with sound effect features. One of those features is a "beep" feedback sound in response to pressing the tab or enter, etc. keys. If you do not like these sounds being issued as you use Abstract Plus, you can turn them off by going to Start→Control Panel→Sound→Sounds Tab→select Default Beep→select None from the Sounds pull-down menu→Click OK.



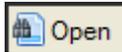
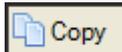
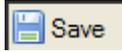
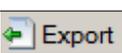
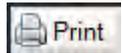
The File Menu

The File menu is used to access the majority of features that are used to work with abstracts. To access the File menu items, click on the **File** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.



The following table describes the Abstract Plus File menu sub-options:

Sub-option (Keystroke)	Toolbar Icon	Function
New Abstract (Ctrl+N)	 New	Create a new abstract

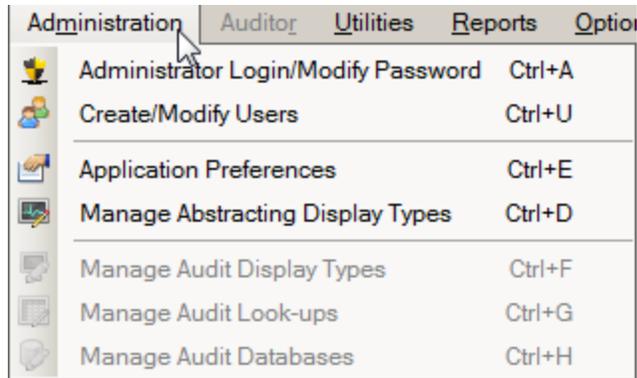
Open/Find Abstract... (Ctrl+O)		Search for and open an existing abstract
Copy Abstract... (Ctrl+I)		Copy an open abstract
Close Abstract (Alt+C)		Close an open abstract
Save Abstract... (Ctrl+S)		Save entered information
Export Abstracts... (Ctrl+M)		Export abstracts out of the Abstract Plus database into a NAACCR-formatted file
Import Abstracts in NAACCR Format... (Ctrl+L)		Import abstracts in a NAACCR-formatted file into the Abstract Plus database
Print Current Abstract (Ctrl+P)		Preview the displayed abstract and/or print it
Print Range of Abstracts... (Ctrl+R)		Select and print a range of abstracts or save in a file
Backup Abstract Database (Ctrl+B)		Create backup database to be used by Restore feature if database becomes corrupted
Restore... (Ctrl+Y)		Restore/replace corrupted database with a previously saved backup database
Exit (Alt+F4)		Log off Abstract Plus with an option to back up the database with your work

**Note**

Please see the **Abstract Plus Training Manual for Abstractors** for more information regarding Abstract Plus abstracting and general user functions.

The Administration Menu

The Administration menu is used to access the administrative features of the program, such as managing user accounts and setting up the application for abstraction and auditing. No toolbar icons are available for any Administration menu options. To access the Administration menu items, click on the **Administration** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.



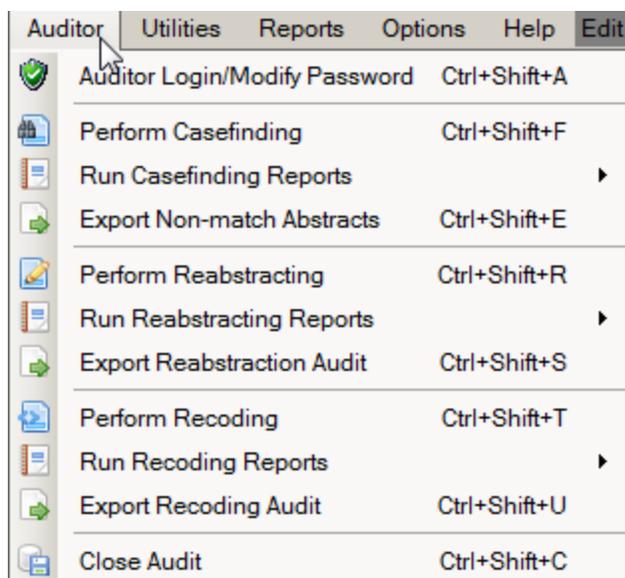
Entry of a special Administrator password is required in order to access the Administration menu items; the application will prompt you for the Administrator password when you attempt to access any of the Administration menu items. Administrator functions will be described in greater detail in later chapters of this training manual.

The following table describes the Abstract Plus Administration menu sub-options:

Sub-option (Keystroke)	Function
Administrator Login/Modify Password (Ctrl+A)	Log in as Administrator or change the Administrator password
Create/Modify Users (Ctrl+U)	Add, edit, or delete a user account or reset a password
Application Preferences (Ctrl+E)	Maintain all general, security, database and report application settings
Manage Abstracting Display Types (Ctrl+D)	Create, edit, or delete display types available for the abstracting features
Manage Audit Display Types (Ctrl+F)	Create, edit, or delete display types available for the auditing features (currently disabled)
Manage Audit Look-ups (Ctrl+G)	Maintain special audit lookup tables (currently disabled)
Manage Audit Databases (Ctrl+H)	Create, edit, or delete audit databases (currently disabled)

The Auditor Menu

The Auditor menu is used to access all of the available auditing features, such as opening and closing audits, and performing casefinding, reabstraction, and recoding audits. No toolbar icons are available for any Auditor menu options. To access the Auditor menu items, click on the **Auditor** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.



Entry of a special Auditor password is required in order to access the Auditor menu items; the application will prompt you for the Auditor password when you initially access any of the Auditor menu items. **Note:** If the Administrator password has already been entered, entry of the Auditor password is not required; Administrators automatically have access to all auditing features.



Please see the **Abstract Plus Training Manual for Auditors** for more information regarding Auditor functions.

Please note that due to development priorities, Abstract Plus version 3.1 is being released without the Auditor features. Description of Auditor features provided in this manual is for informational purposes only. The Auditor features of Abstract Plus will be released in a future version of the program.

The following table describes the Abstract Plus Auditor menu sub-options:

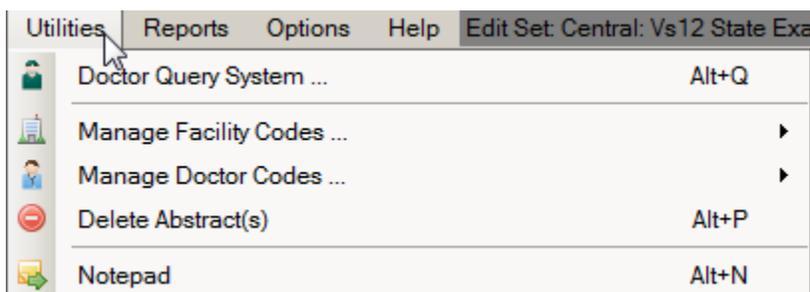
Sub-option (Keystroke)	Function
Auditor Login/Modify Password (Ctrl+Shift+A)	Login as Auditor, and/or modify Auditor password
Perform Casefinding (Ctrl+Shift+F)	Perform a casefinding audit on opened audit
Run Casefinding Reports	Run casefinding audit pre-reconciliation and final reports
Export Non-match Abstracts (Ctrl+Shift+E)	Export unreported tumors found upon casefinding audit in NAACCR file format
Perform Reabstracting (Ctrl+Shift+R)	Perform a reabstracting audit on opened audit
Run Reabstracting Reports	Run reabstraction audit pre-reconciliation and final reports
Export Reabstraction Audit	Export text file with reabstracting audit data for further analysis

(Ctrl+Shift+S)	
Perform Recoding (Ctrl+Shift+T)	Perform a recoding audit on opened audit
Run Recoding Reports	Run recoding audit pre-reconciliation and final reports
Export Recoding Audit (Ctrl+Shift+U)	Export text file with recoding audit data for further analysis
Close Audit (Ctrl+Shift+C)	Close the audit

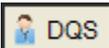
The Utilities Menu

The Utilities menu is used to access a few supplementary functions included in the program, such as re-running edits in batch mode, querying your local database of doctors, and managing facility and doctor codes.

To access the Utilities menu items, click on the **Utilities** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.



The following table describes the Abstract Plus Utilities menu sub-options:

Sub-option (Keystroke)	Toolbar Icon	Function
Doctor Query System (Alt+Q)		Query and search the doctor database; DQS can be accessed whether or not an abstract is opened, or a physician field selected
Manage Facility Codes...		Import (can use Alt+I keystroke) or edit (can use Alt+J keystroke) local facility codes
Manage Doctor Codes...		Import (can use Alt+K keystroke) or edit (can use Alt+L keystroke) local physician codes
Delete Abstract(s) (Alt+P)		Delete selected abstracts
Notepad (Alt+N)		Launch Notepad to view created text files



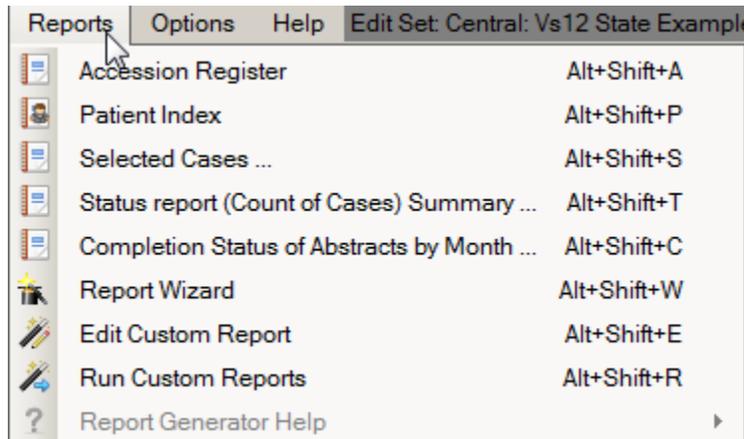
Note

Please see the **Abstract Plus Training Manual for Abstractors** for more information regarding Abstract Plus utilities.

The Reports Menu

The Reports menu is used to access all of the available reports regarding abstracts in the Abstract Plus database. No toolbar icons are available for any Reports menu options.

To access the Reports menu items, click on the **Reports** menu item, and select the desired report, or use the appropriate keystroke combination for the desired report.



The following table describes the Abstract Plus Reports menu sub-options:

Sub-option (Keystroke)	Function
Accession Register (Alt+Shift+A)	Opens the Accession Register Report, which includes a line listing of all abstracts in the database, sorted by reporting hospital and accession number
Patient Index (Alt+Shift+P)	Opens the Patient Index Report, which includes a line listing of all abstracts in the database, sorted alphabetically by name
Selected Cases (Alt+Shift+S)	Opens a line listing report which includes abstracts based on user-specified criteria
Status Report (Count of Cases) Summary... (Alt+Shift+T)	Opens a report that includes the total number of complete and incomplete abstracts by export status within a user-specified date range
Completion Status of Abstracts by month (Alt+Shift+C)	Opens a report that includes abstract completion status by year and month of Date of Adm/1 st Contact within a user-specified date range
Report Wizard (Alt+Shift+W)	Newly-added feature to enable users to generate their own custom reports
Edit Custom Reports (Alt_Shift+E)	Edit an existing custom report

Run Custom Reports (Alt+Shift+R)	Runs selected custom reports that have been added to the application using the Report Wizard
Report Generator Help	Opens online help for the Report Wizard; optional installation by Administrator required

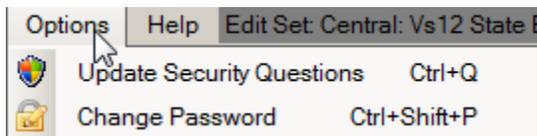
**Note**

Please see the **Abstract Plus Training Manual for Abstractors** for more information regarding Abstract Plus abstract reports. Audit Reports are described in more detail in later chapters of this manual.

The Options Menu

For security purposes, users may want to change their passwords and security questions on a routine basis. The Options menu is used to update the user's security questions or change their password. No toolbar icons are available for any Options menu selections.

To access the Options menu items, click on the **Options** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.



The following table describes the Abstract Plus Options menu sub-options:

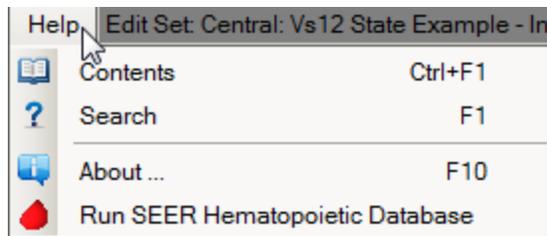
Sub-option (Keystroke)	Function
Update Security Questions (Ctrl+Q)	Opens the Update User's Security Questions window with the current User ID displayed along with the current security questions and answers specified by the user; new answers to existing questions may be entered, as well as new questions and answers
Change Password (Ctrl+Shift+P)	Opens Change User's Password window, where the user can enter their current password, and a new password in both New Password and Confirm Password in order to change their password

**Note**

For more information regarding updating personal security questions, see page 38 of this manual or click [here](#). For more information regarding changing your general user password, see page 31 of this manual or click [here](#).

The Help Menu

The Help menu is used to access the online help that is available within the program. To access the Help menu items, click on the **Help** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.



The following table describes the Abstract Plus Help menu sub-options:

Sub-option (Keystroke)	Toolbar Icon	Function
Contents... (Ctrl+F1)		View the contents of Abstract Plus online Help
Search for help on... (F1)		Enter search terms for topics on which you need more information
About (F10)		View Abstract Plus, Collaborative Staging, and Edits metafile version information
Run SEER Hematopoietic Database		Launch the SEER Hematopoietic Database stand-alone application to help you code hematopoietic and lymphoid neoplasms cases diagnosed beginning January 1, 2010

New Abstract Plus Abstracting and Editing Features

One of the primary activities that Abstract Plus is used for is the abstraction of information from medical records. As mentioned, Abstract Plus version 3.1 has been entirely reprogrammed using .NET technology, and has a new, extremely user-friendly abstracting interface. New direct grid entry of coded values and quick select options for pull-down menus allow for an easy, streamlined abstracting experience, as well as easier viewing of text fields, online help, and edit errors.

As you will learn, the majority of features offered for abstraction of regular abstracts are also offered for abstracting tasks for casefinding, reabstraction, and recoding audits.

The Abstract Plus Abstracting Process

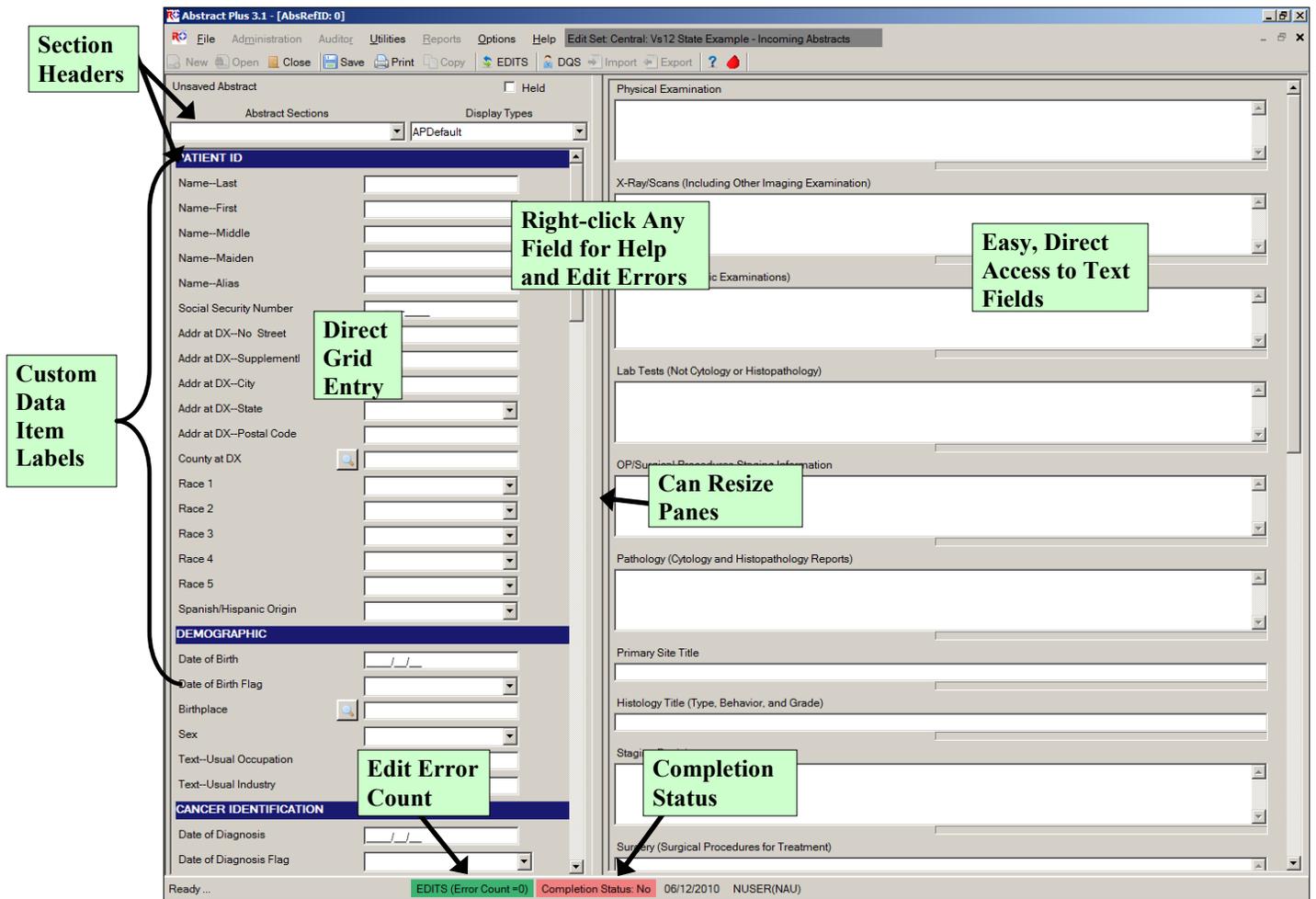
The basic process of generating and updating an abstract is as follows:

- i. Create the abstract with the patient's identifiers, such as name and social security number and save. After you create an abstract, you can save it at any time and return to your work at a later time.
- ii. Enter codes and text in the data entry fields. Save the abstract to retain the information you have entered.
- iii. Correct errors. Each time you open or save the abstract, Abstract Plus can automatically edit the entered information for accuracy and completeness using the edit set and required fields selected upon set up of the application.
- iv. After you have entered all your data and corrected all errors, the system saves your new abstract as complete. You will see the edits error count and completion status

indicators at the bottom of the abstracting window turn from red to green, indicating that the abstract is complete.

The Abstract Plus Abstracting Window

The Abstract Plus Abstracting window is divided into 2 main sections: a data entry grid for coded values on the left, and a data entry grid for text fields on the right. When you left-click and hold your mouse on the vertical divider bar in the center of the window, a splitter is highlighted which you can drag to the left or right to resize the view of codes or text fields, and the application remembers your last placement of the divider bar. You can vertically scroll the view of coded values and text fields independently to easily and concurrently view codes and associated text.



The Abstract Plus version 3.1 user-friendly abstracting interface includes the following abstracting features:

- a. The abstracting interface is called a **display type**. A display type basically includes information regarding the fields displayed/collected, critical (or required) fields, edit set selections, and collaborative staging preferences, and is configured by the Abstract Plus Administrator upon setup of the application. The data items in a display type are labeled and ordered by the Administrator, as well as grouped into logical sections, which also have customizable labels.

**Note**

Regardless of the customized label a data item may have, when a data item is selected, the associated NAACCR item name is always displayed in the lower left-hand corner of the window. This information is helpful when looking up information regarding a data item in the online help reference books.

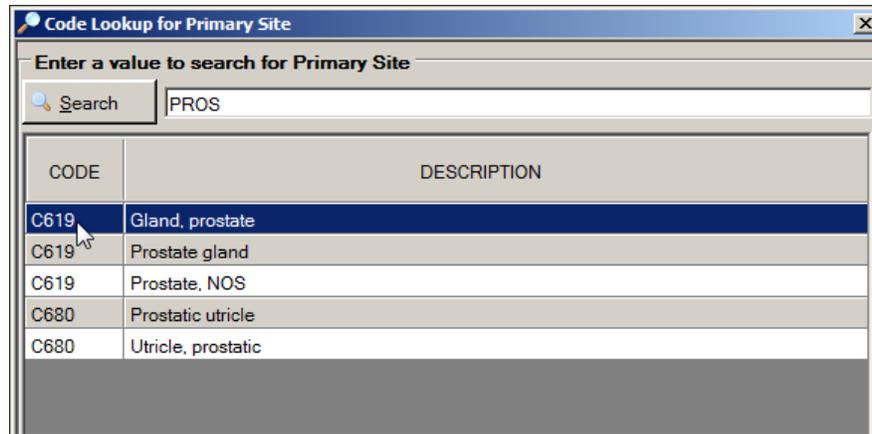
- b. Many data items offer **code selection from drop-down lists**. In addition, the drop-down lists feature an auto-complete, **find-as-you-type** function that allows the user to type in the first letter, or first few letters, of the desired code label, and the application auto-selects the first item in the list beginning with that letter. In the example shown below, an A has been typed into the Race 1 field, and the application auto-selects the value of American Indian, Aleutian, or Eskimo:

**Tip**

If you begin typing in the data item, but find you need to revise what you have typed, press the backspace key to delete what you have already entered, and start typing again. This enables the find-as-you-type feature to automatically find your revised entry.

- c. For data items with extensive listing of coded values, such as histology, there is lookup assisted data entry with an **advanced search feature**. You can either enter the code directly if known, or click on the magnifying glass icon to the left of the data item (or press F4) to use the search feature:

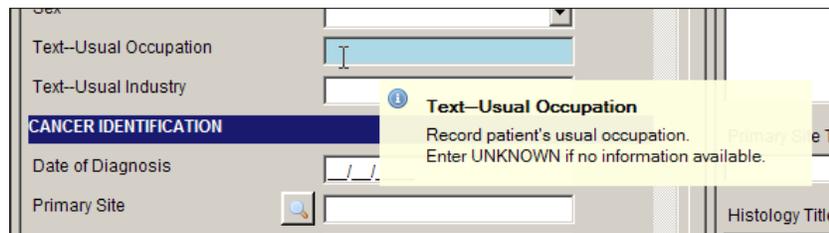
Enter a full or partial search term or code to search for, and then double-click on the code of your choice to transfer the value to the data item in the data entry grid.



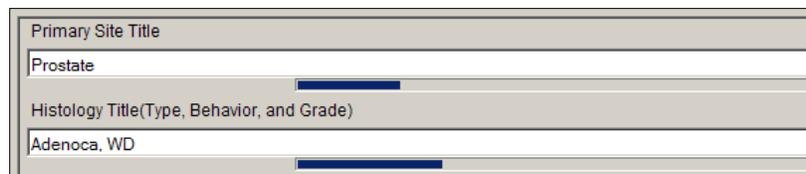
- d. Depending on the system preferences set by your Abstract Plus Administrator, users can **automatically calculate Age at Diagnosis** once date of birth and diagnosis are entered, and can **calculate Collaborative Staging** by clicking on the calculator icon to the left of the data item:



- e. **Prompt messages** may be associated with each data item, so that when the abstractor clicks into the field, a pop-up box comes up with a message or instructions about abstracting that field:



- f. When entering text, a **progress bar** is displayed below each text field indicating how much space is left so that you can properly prioritize the information you are entering:

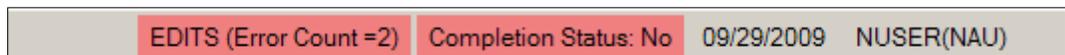


- g. **Keyboard and mouse alternatives** are now available for every function in the software. Note that Keystroke options are displayed on menus for all menu items, and [Appendix B](#) of this training manual contains a listing of standard Abstract Plus keyboard shortcuts to functions.
- h. All-new **right-click functions** for individual data items, including access to field context help, edits error information, field messages, and a function to clear all Collaborative Stage fields:

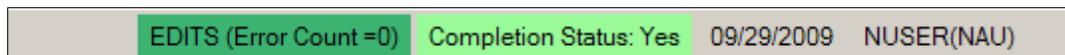
Undo	Ctrl+Z
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Delete	Alt+D
Select All	Alt+A
<hr/>	
Field Context Help	F1
Edits Information	F2
Field Message	F3
Run EDITS	F8
Clear Collaborative Stage Fields	F9

- i. **Color-coded edits error count and abstract completion status** information is clearly displayed to the user at the bottom of the abstracting window, and changes from red to green upon completion of the abstract:

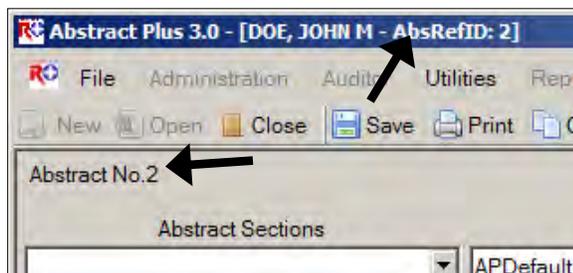
Incomplete abstract containing edit errors:



Complete abstract containing no edit errors:



- j. Once saved, each abstract is assigned a unique **Abstract Reference ID** (or AbsRefID), displayed in the upper left-hand corner of the data entry area of abstracting window, as well as in the title bar of the application along with the patient name:



- k. **Abstracts can be held to prevent export.** The **Held** check box allows an abstractor to prevent a case from being exported even if it is considered complete by the system. This can be used if, for example, the abstractor is searching for additional information to be included before the abstract is exported. If checked, the abstract will not be exported, regardless of Completion Status:



Entering Dates in Abstract Plus 3.1

As of the NAACCR version 12 record layout, all dates are in the YYYYMMDD format. Because the NAACCR standards are so tightly integrated with the Abstract Plus program, dates are entered in the YYYY/MM/DD format in Abstract Plus v3.1.

The Abstractor and Auditor will enter dates in the new YYYYMMDD format as follows:

YYYYMMDD – when complete date is known and valid

YYYYMM – when year and month are known and valid, and day is unknown

YYYY – when year is known and valid, and month and day are unknown

Blank – when no known date applies



Tip

Abstract Plus 3.1 has a date field entry mask on all date fields that already has the slashes in it. Although the application allows you to type the slashes and dashes when entering dates fields, you can save keystrokes by **only typing the 8 characters of the date**. For example for the date of August 1, 2010, the date can be entered as 20100801.

New Data Quality Edits and Error Resolution Features

The screenshot displays the Abstract Plus 3.1 interface. On the left, the 'PATIENT ID' section shows fields for Name-Last (DOE), Name-First (JOHN), Name-Middle (M), Social Security Number (999-99-9999), and Address (123 EAST MAIN ST, ATLANTA, GA - Georgia, 999999999, 087). Below this is the 'DEMOGRAPHIC' section with fields for Date of Birth (1961/03/16), Birthplace (000), Sex (1 - Male), and Usual Occupation/Industry (FARMER/RANCHER). The 'CANCER IDENTIFICATION' section is partially visible at the bottom.

On the right, the 'All Edit Errors' window is open, listing several errors for the 'Central: Vs12 State Example - Incoming Abstracts' edit set. The total number of errors is 43. The errors listed are:

- Missing Critical Field:** Text-DX Proc-PE (Text-DX Proc-Op)
- Missing Critical Field:** Text-DX Proc-Op (Text-DX Proc-Path)
- Missing Critical Field:** Text-DX Proc-Path (Text-Staging)
- Edit Name: Age at Diagnosis (SEER AGEDX)**
Error: Age at Diagnosis not valid
Fields In Edit: Age at Diagnosis = <BLANK>
- Edit Name: Behavior ICDO3 Conversion (NAACCR)**
Error: <BLANK> is not a valid value for Behavior Code ICD-O-3
Fields In Edit: Behavior Code ICD-O-3 = <BLANK>
- Edit Name: Cause of Death (SEER COD)**
Error: Cause of Death not valid
Fields In Edit: Cause of Death = <BLANK>
- Edit Name: Class of Case (COC)**
Error: <BLANK> is not a valid value for Class of Case
Fields In Edit: Class of Case = <BLANK>
- Edit Name: Diagnostic Confirmation (SEER DXCONF)**
Error: Diagnostic Confirmation not valid
Fields In Edit: Diagnostic Confirmation = <BLANK>
- Edit Name: Grade**
Error: <BLANK> is not a valid value for Grade
Fields In Edit: Grade = <BLANK>

The status bar at the bottom indicates 'EDITS (Error Count =43) Completion Status: No 10/21/2010 NUS'.

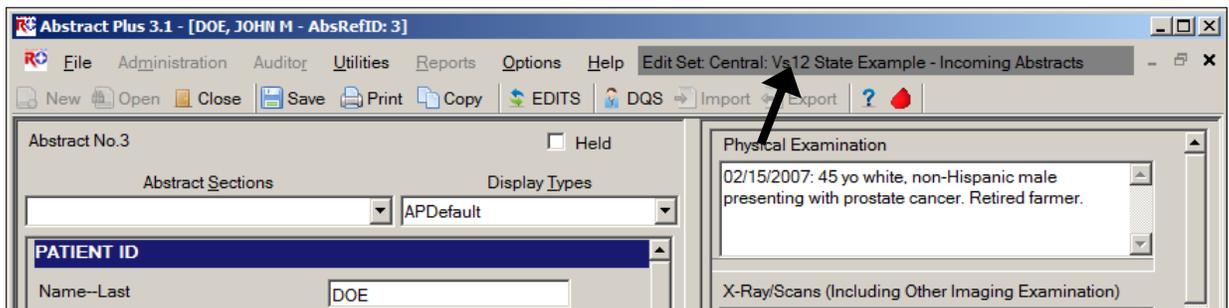
Each time an abstract is opened or saved, Abstract Plus automatically edits the entered information for accuracy and completeness using the edit set and required fields chosen by your Abstract Plus Administrator.



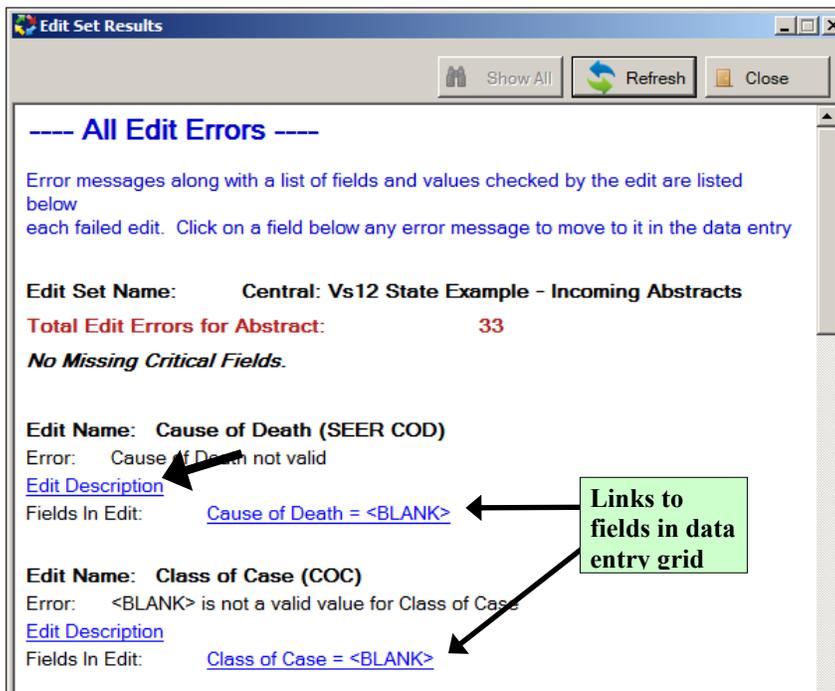
You must resolve all edit errors and fill in all critical (required) fields in order to **complete** the abstract.

Abstract Plus version 3.1 has all-new edit error display features that greatly facilitate the error resolution process. Editing features include:

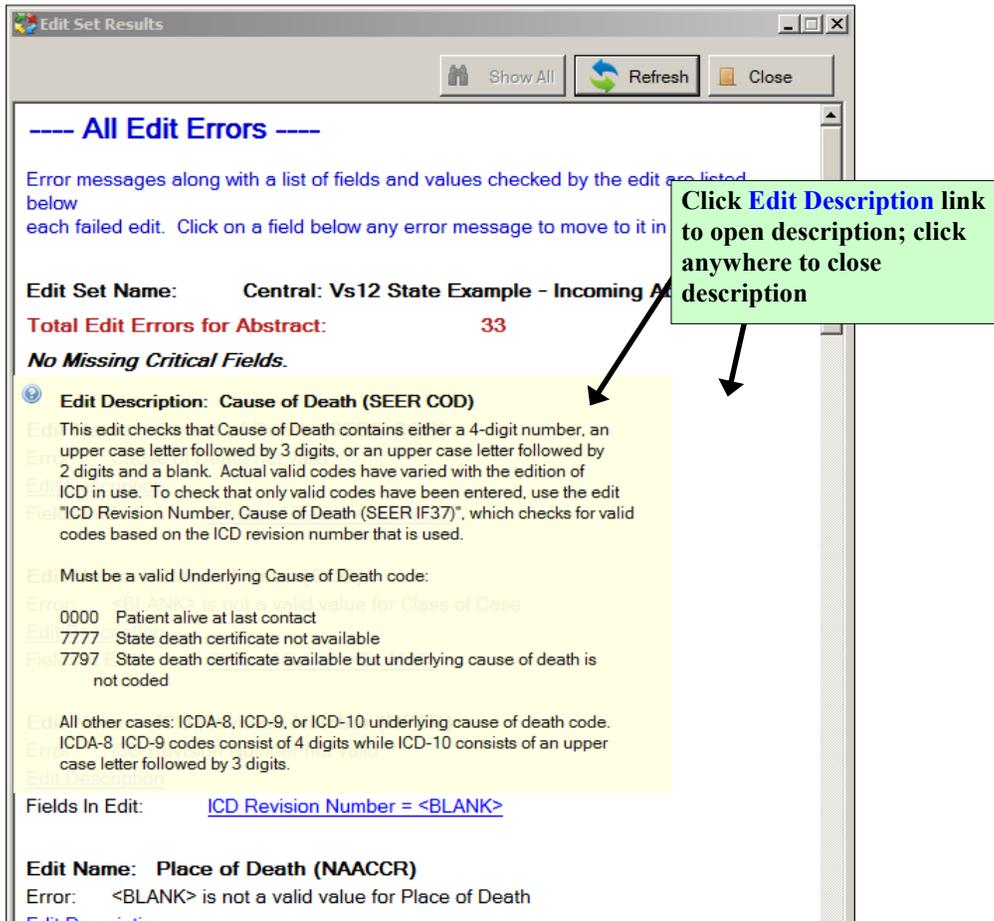
- a. The **edit set** being run on the abstract is clearly **displayed** at the top of the abstracting window. In the example shown, the edit set being applied is named **Central Vs 12 State**
Example: Incoming Abstracts:



- b. When edits are run, the **Edit Set Results** window automatically opens and displays the full information for any edit errors that exist, or lets you know that there are no errors. The Edit Set Results window lists the total number of edit errors for the abstract, missing critical (required) fields, and the edit errors. For each edit error, the failed edit name, error message, and fields involved in the edit are listed. Using the information listed in the Edit Set Results window to help you resolve the edit errors, you can click on a link to a field to move to it in the data entry grid and make corrections:

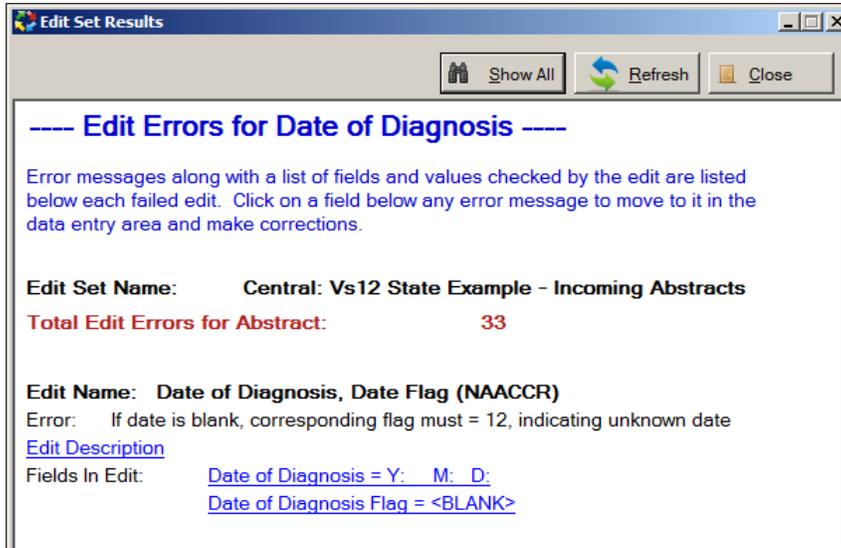


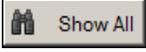
When greater detail regarding the edit is required to resolve the edit error, click on the **Edit Description link**, which expands to display the edit description; once opened, you can click anywhere to close the edit description:



- c. Edit errors can be viewed for the entire abstract, or just for individual fields. You can view **all edit errors** for the abstract as shown above by clicking on the EDITS icon on the toolbar , right-clicking and selecting **Run Edits**, or by pressing **F8**.

Or you can choose to view **edit errors by individual data field** by right-clicking and selecting **Edits Information**, or by clicking **F2**. In the example shown, the edit errors for the individual field of Date of Diagnosis are being viewed:



When viewing edit errors for an individual field, you can **switch** from the individual data field edit errors view to the all edit errors view by clicking on the **Show All**  button.



Tip

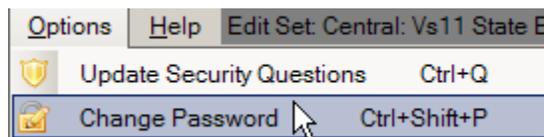
You can make corrections to fields by clicking on the links to the fields in the Edit Set Results windows. To see your corrections reflected, click the **Refresh**  button.

Changing Your General User Password

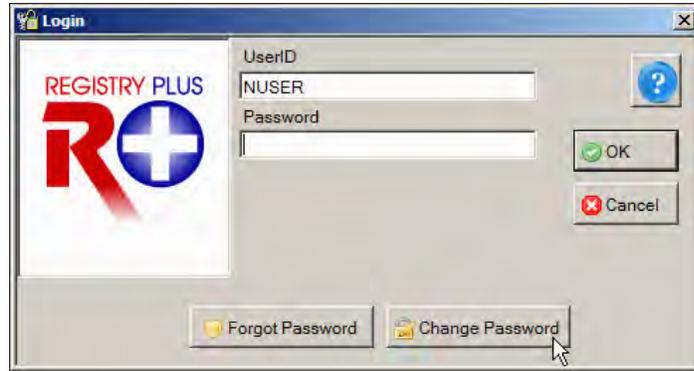
For security purposes, you may be prompted to change your general user password periodically, based on the Password Policy specified upon configuration of the application. Upon set up of the application, as Administrator, you will specify password requirements, how often the user needs to change their password, as well as how many of their last passwords they cannot repeat.

To change your Abstractor/general user password, complete these steps:

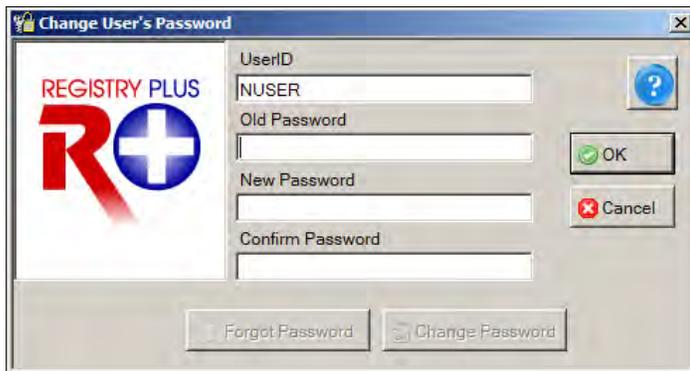
1. Open the **Change User's Password** window. This may be done in 2 ways:
 - a. From **Options Menu**, select **Change Password**.



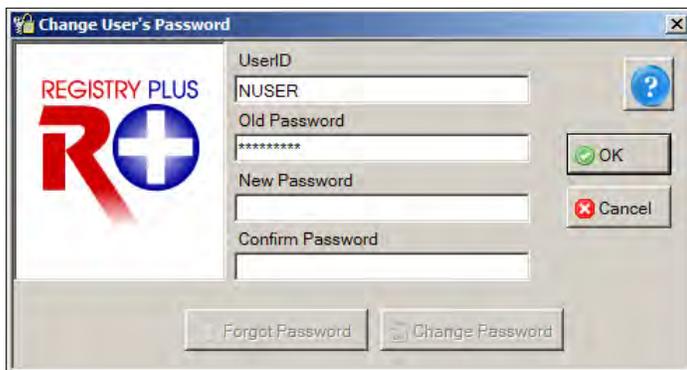
- b. When logging in to Abstract Plus, enter your **User ID**, tab or click into the Password box, and then click **Change Password** on the Login window.



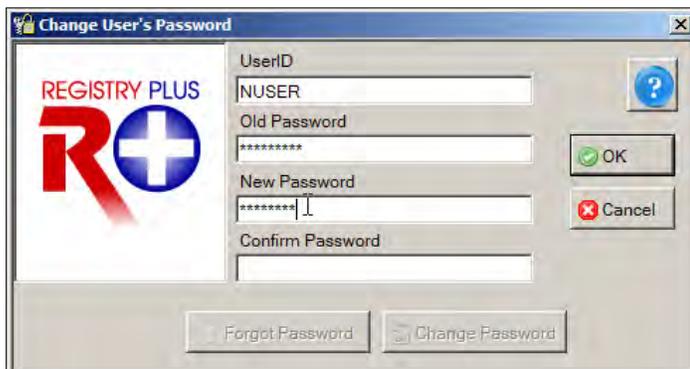
Result: The **Change User's Password** window opens, with your User ID displayed.



2. Enter your **Current Password** in **Old Password** box.



3. Enter a **New Password** in **New Password** box that meets the password requirements specified upon configuration of the application.





Note

By default, the new password must be between 8 and 20 characters, contain at least one digit and one alphabetical character, and must not contain any special characters, however, these requirements may be modified when configuring the application.

4. Re-enter your **New Password** in the **Confirm Password** box.



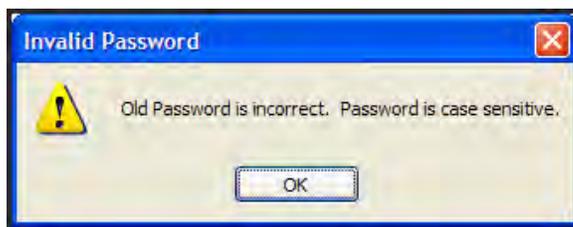
5. Click **OK** to change your password.

Result: Your password is changed, and the Abstract Plus main window is opened.

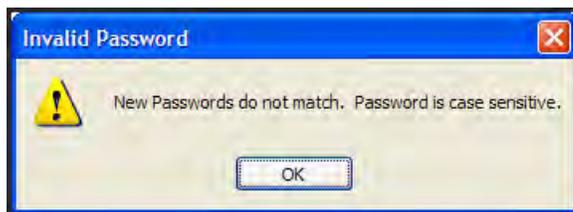
Possible Errors when Changing Your Password

There are three possible errors you may receive when attempting to change your password:

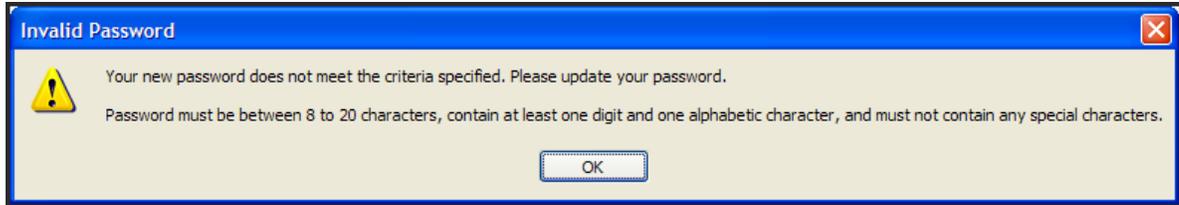
1. **Old password is incorrect.** You must correctly enter your old password in order to successfully change it. Click **OK**, and then correctly re-enter your old password.



2. **New passwords do not match.** The new password entered into the **New Password** and **Confirm Password** boxes must match exactly. Click **OK**, and then correctly re-enter your new password in the New and Confirm password boxes.



3. **New password does not meet specified password requirements.** Your new password must meet the password requirements specified by the application. Click **OK**, and then re-enter a new password that meets the stated password requirements.



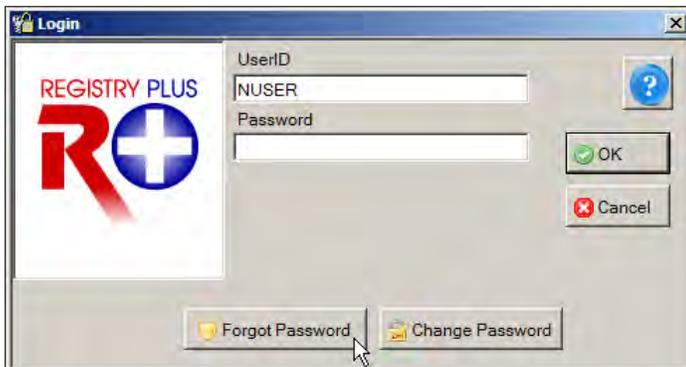
Resetting a Forgotten Password

In the event that you should forget your password, Abstract Plus version 3.1 has a security challenge question feature that will allow you to reset your own password without having to log in as Administrator. The security challenge question feature enables you to securely reset your password by answering a specified number of the security questions that you selected and answered upon initial login to Abstract Plus.

Your answers to these questions are used to validate your identity. Abstract Plus will ask for the answers that you provided to your chosen security questions, and then allow you to reset your password if the questions are answered correctly. If you forget both your password and your answers to your security questions, you will need to log in as Administrator to reset your password.

To reset your password if you have forgotten it, complete these steps:

1. When logging in to Abstract Plus, enter your **User ID**, tab or click into the Password box, and then click **Forgot Password** on the Login window.



Result: The **Reset User's Password** window opens, with your User ID displayed, as well as the number of security questions specified upon set up of Abstract Plus.

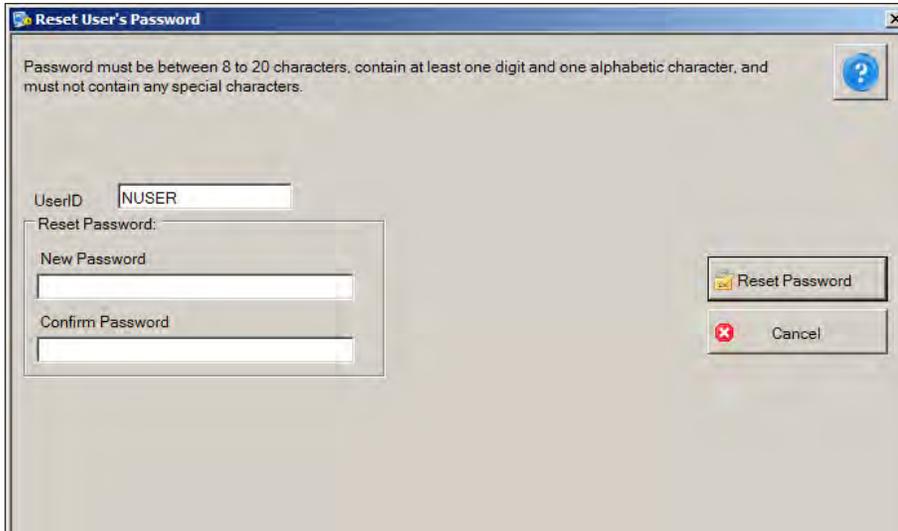


2. Enter the answer to each displayed question with the same answer you provided upon initial login to Abstract Plus.

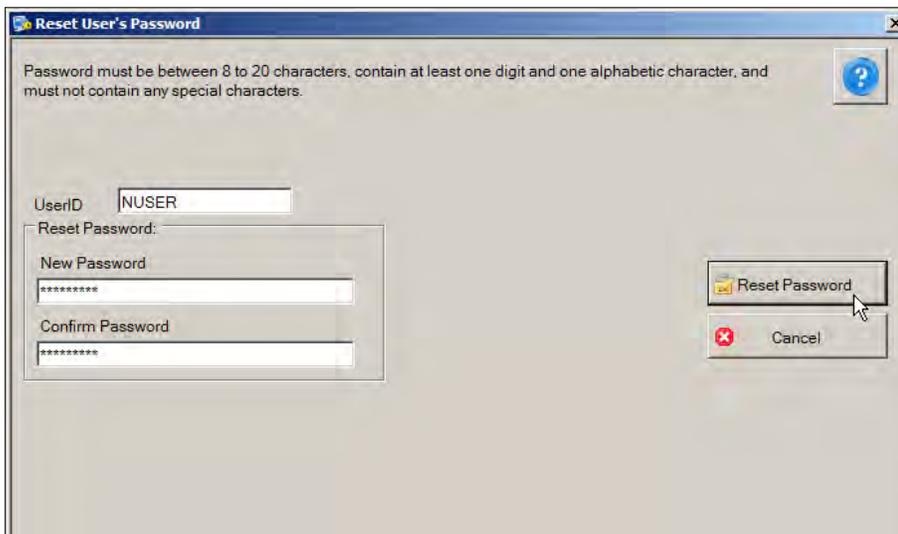


3. Click **Validate Questions** once all questions are answered.

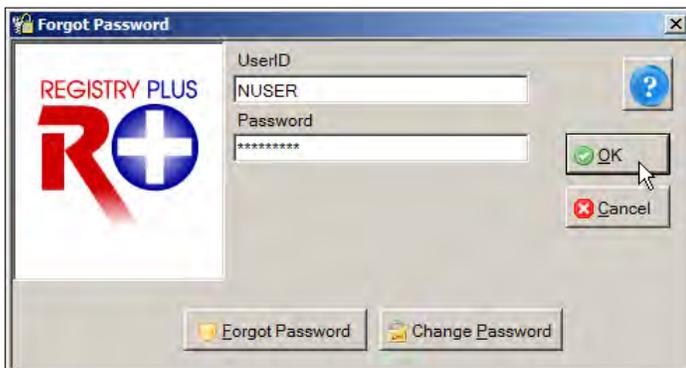
Result: The **Reset User's Password** window opens, with your User ID displayed.



4. Enter a **New Password** in both the **New** and **Confirm** password boxes, and then click **Reset Password**.



Result: The **Forgot Password** window opens, with your User ID displayed.



5. Enter your **New Password** in Password box, and click **OK**.

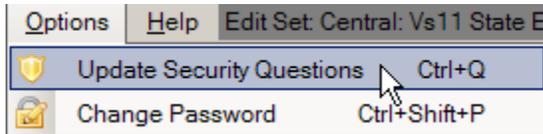
Result: The Abstract Plus **main window** opens, with you logged in as a general user. Your password has been successfully set to the new password you have specified.

Updating Personal Security Questions

Once you are logged in to Abstract Plus, you can update your selected security questions and/or answers at any point. For example, if you selected the security question of “How many children do you have?” and you just had a new child enter your family, you can update your answer to this question.

To update your security questions and/or answers, complete these steps:

1. From **Options Menu**, select **Update Security Questions**.



Result: The **Update User’s Security Questions** window opens, with your User ID displayed, as well as the current security questions and answers which you have specified. For added security asterisks are displayed rather than your answers to the questions.

 A screenshot of a window titled 'Update User's Security Questions'. The window contains a text box for 'UserID' with the value 'NUSER'. Below it are three dropdown menus for security questions: 'How many siblings do you have?', 'How old were you at your wedding? (Enter age as digits.)', and 'How many children do you have?'. Each dropdown menu has a corresponding text input field containing a series of asterisks. To the right of the input fields are two buttons: 'Submit Questions' (with a green plus icon) and 'Cancel' (with a red X icon). A help icon (question mark in a circle) is in the top right corner.

2. You can select new questions and answer them or supply new answers to your previously selected questions. When you have completed your changes, click **Submit Questions**.

 A screenshot of the same 'Update User's Security Questions' window. The 'UserID' field still contains 'NUSER'. The first two dropdown menus remain the same. The third dropdown menu, 'How many children do you have?', now has the number '2' entered in its corresponding text input field. The 'Submit Questions' button now has a mouse cursor over it, indicating it is being clicked.

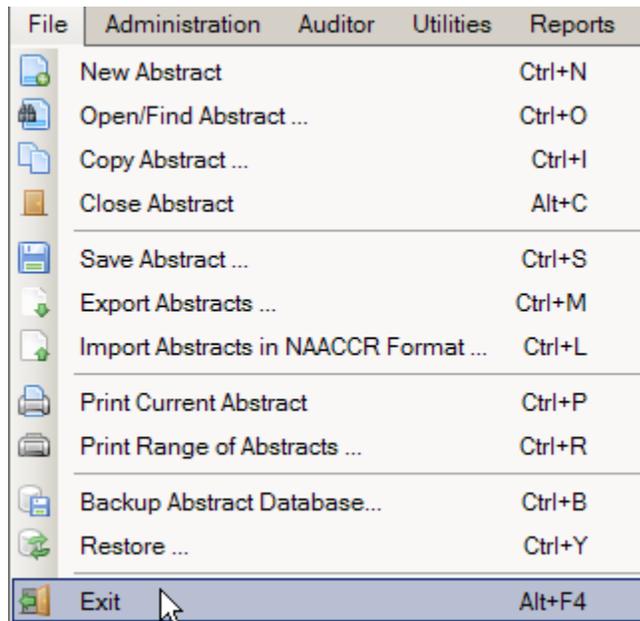
Result: You are returned to the Abstract Plus **main window**, with your changes saved for future use.

Exiting Abstract Plus and Using the Backup Option

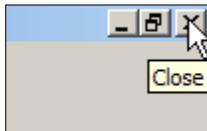
When logging off and exiting Abstract Plus, the application will prompt you to back up the current abstract database.

To log off / exit Abstract Plus and use the database backup option, complete these steps:

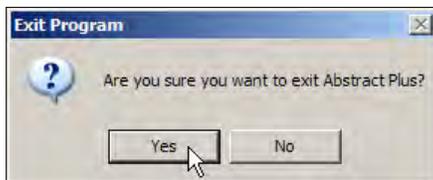
1. Exit Abstract Plus. This can be done in 3 ways:
 - a. Click on the **File** menu, and select **Exit**.



- b. Use the keystroke **Alt+F4**.
- c. Click the **X** in upper right corner of screen.

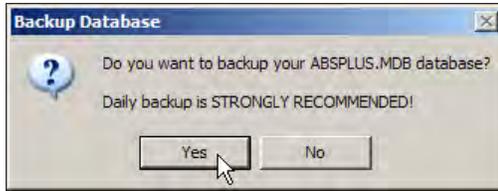


Result: The **Exit Program** window opens, and asks if you are sure you want to exit the program.



2. Click **Yes**.

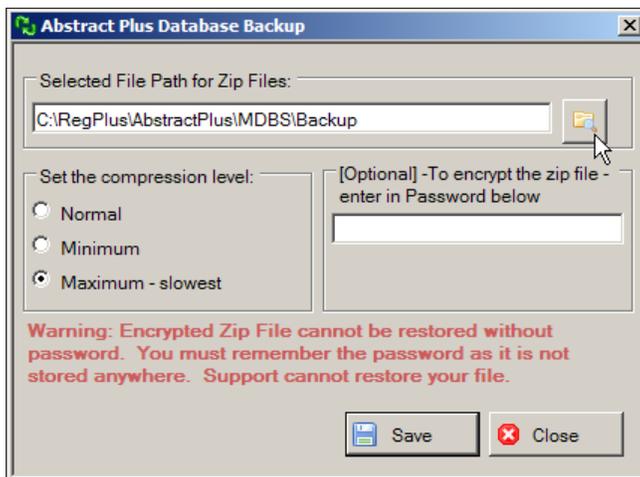
Result: The **Backup Database** window opens, and asks if you would like to backup your Abstract Plus abstracts database (ABSPLUS.MDB).



Although you can choose not to backup your database, it is **highly recommended** that you backup your database after finishing an abstracting session during which changes were made (abstracts were added, updated, or deleted). Note that the Backup and Restore Database menu options are **not available when using SQL Server database**

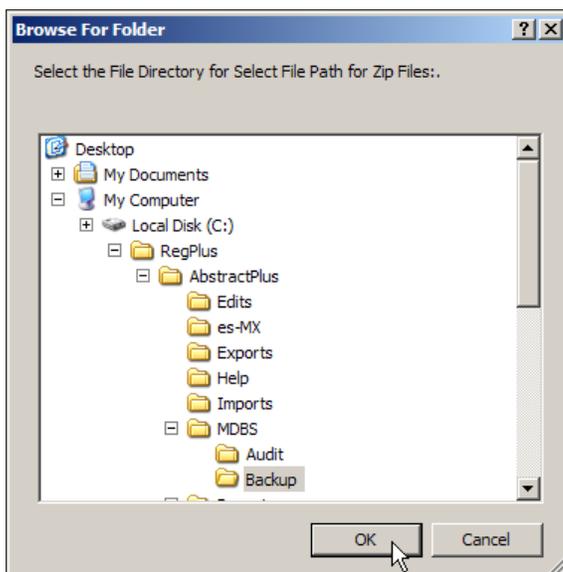
3. Click **Yes**.

Result: The **Abstract Plus Database Backup** window opens with defaults set.



4. To change the default path, navigate to and identify the location on your computer or network where you would like to save your backup file by clicking the **Folder** icon .

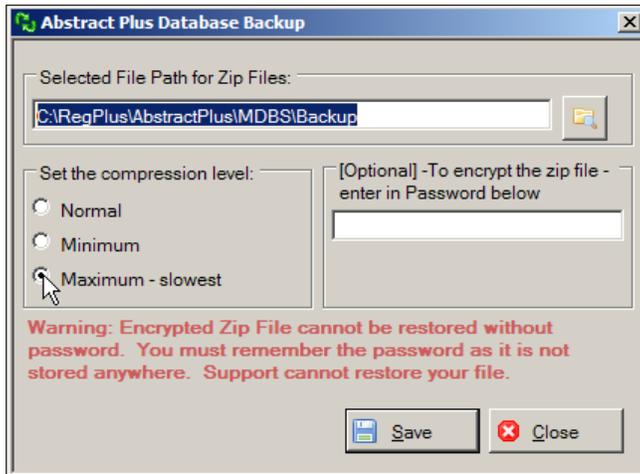
Result: The **Browse for Folder** window opens.



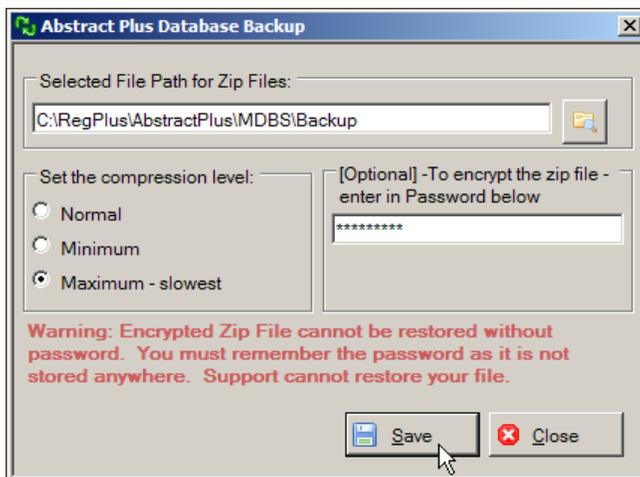


The default location for saving backup files is C:\RegPlus\AbstractPlus\MDBS\Backup. You may navigate to a different location if you so choose.

5. To accept the default location for saving the backup, click **OK**.
6. Select the desired **compression level** for the zip file if other than the default.



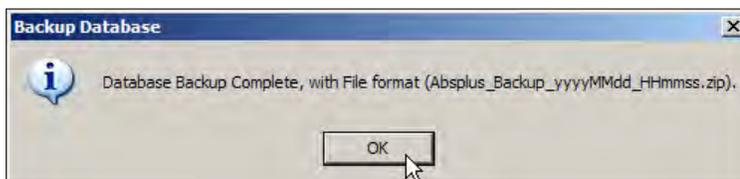
7. Enter a **password** to encrypt the zip file (optional), and click **Save** to create the backup and exit or click **Close** to exit the application without saving the backup file.



Important

If you choose to password-protect your backup file, the encrypted zip file **cannot** be restored without the specified password. It is very important that you remember this password!

Result: The backup is saved in the zip file, and a confirmation window opens. A progress bar is also displayed at the bottom of the screen.



**Note**

A progress bar is also displayed at the bottom of the screen.

8. Click **OK**.

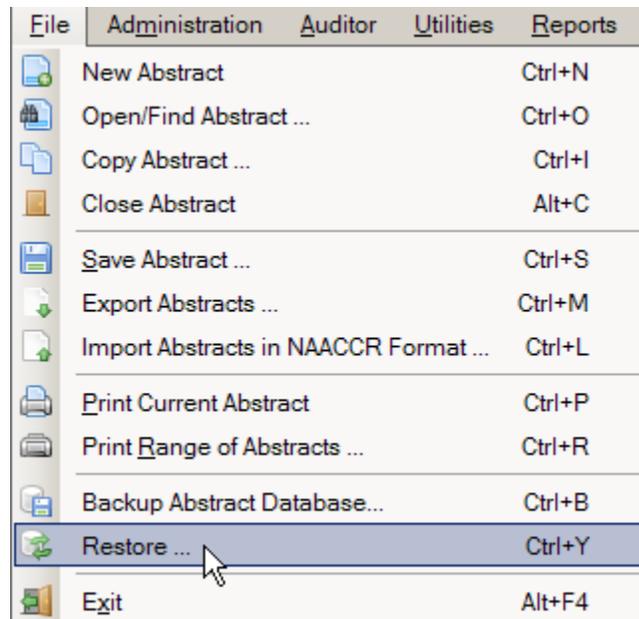
Result: The Abstract Plus application **closes**.

Using the Restore Option

In the event that your Abstract Plus abstracts database (ABSPLUS.MDB) is corrupted, if you have used the Backup option to backup your database you will be able to restore your database using the Restore option. The Restore option allows you to go back to a file that you saved with the same Abstract Plus version on a date when you encountered no problems. This is why it is so strongly recommended that you back up your work when exiting the application.

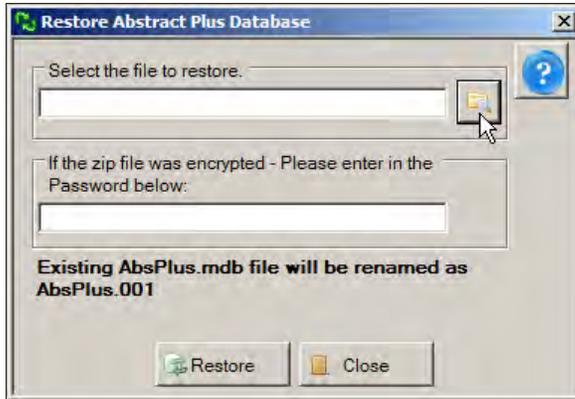
To use the Restore option to restore your Abstract Plus abstract database to an earlier saved backup, complete these steps:

1. Open the Restore Database window. This can be done in 2 ways:
 - a. Click on the **File** menu, and select **Restore**.



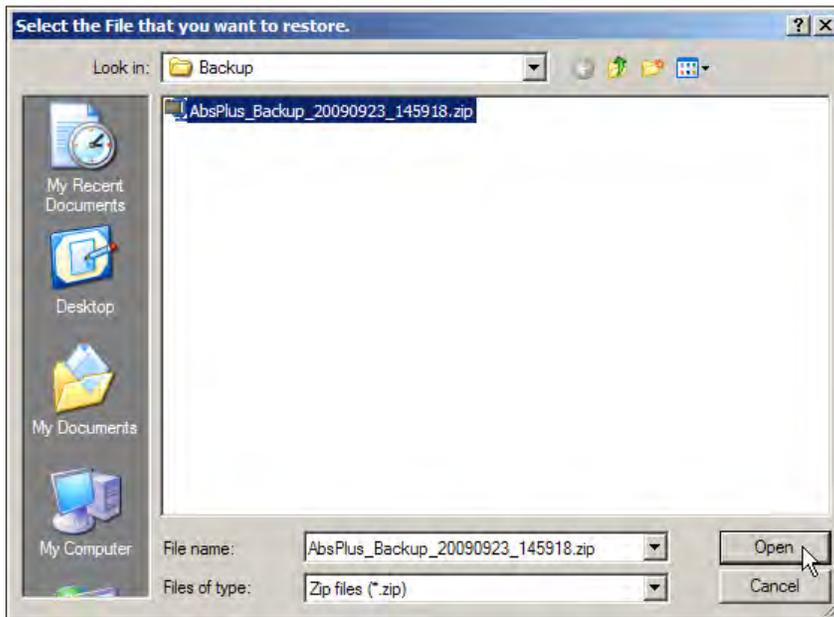
- b. Use the keystroke **Ctrl+Y**.

Result: The **Restore Abstract Plus Database** window opens.



2. Navigate to and identify the zipped backup file on your computer or network by clicking the **Folder** icon .

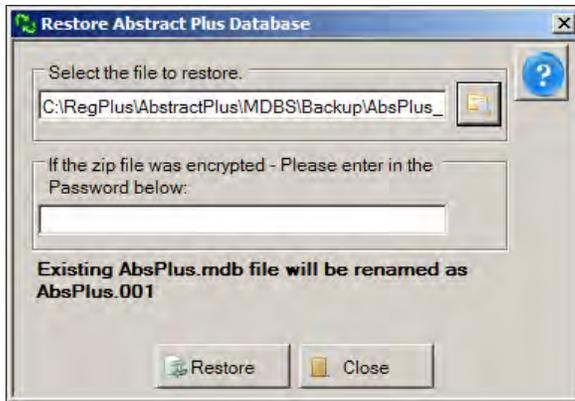
Result: The **Select the file you want to restore** window opens with a list of backup files displayed.



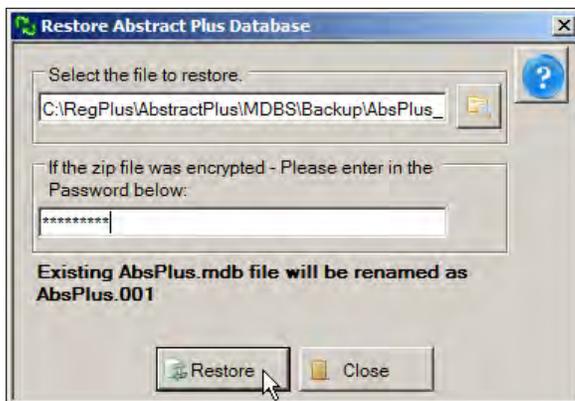
The default location for saving backup files is C:\RegPlus\AbstractPlus\MDBS\Backup. You may need to navigate to a different location if you saved your backup file in a location other than the default location.

3. Select the backup file to which you wish to restore your current Abstract Plus abstract database, and click **Open**.

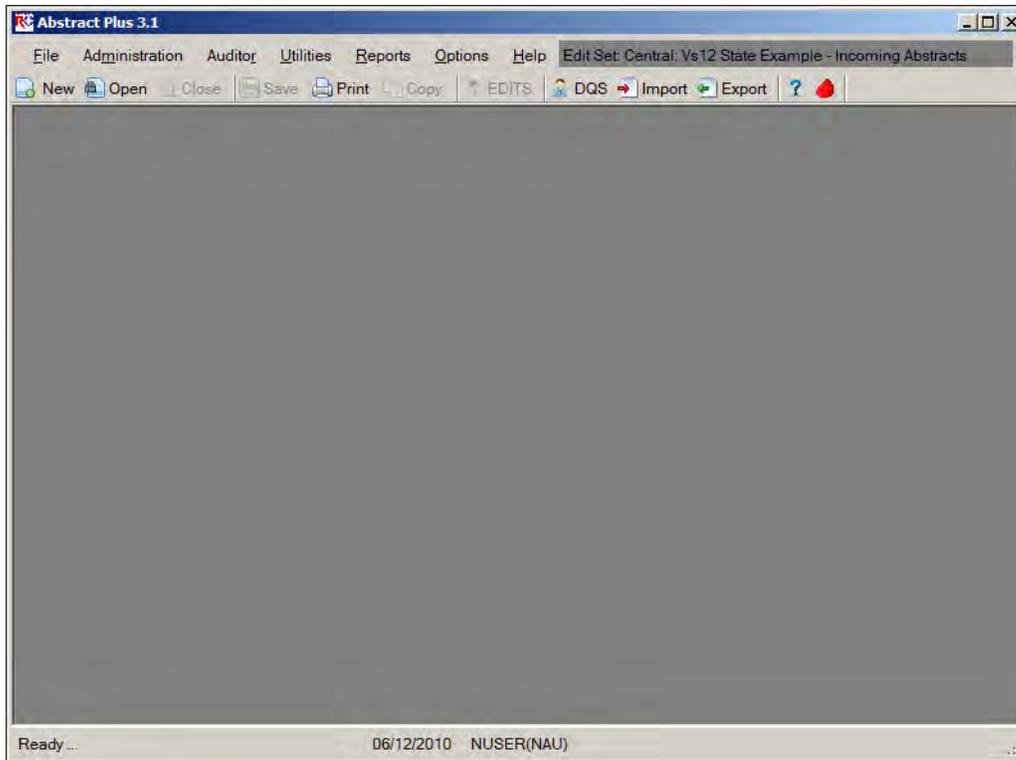
Result: You are returned to the **Restore Abstract Plus Database** window, with the selected backup file displayed.



4. If you password protected the selected backup file, enter the password in the password box, and click **Restore**.



Result: The Abstract Plus main window opens, with the selected abstracts backup database restored. You may now resume abstracting activities.



Questions

Answer these questions about Abstract Plus General User Basics (the answers are in Appendix A, on page 216):

1. What are the first things you need to do upon initial login into Abstract Plus?
2. What is the point of the security challenge questions in Abstract Plus?
3. Why is it important that you have your own User ID and password?
4. When logging off Abstract Plus, how can you ensure that the work you did during the session is secure and safe?

Chapter 3: Abstract Plus Administrator Basics

Learning Objectives

In this chapter, you will learn to:

- Identify the different types of functions that are specific to the Administrator role in Abstract Plus
- Log in to the Abstract Plus Administrator functions
- Maintain the Administrator password

Overview

This chapter provides an overview of basic Abstract Plus Administrator concepts. It includes a description of the different types of functions carried out by the Administrator, how to log into the Abstract Plus administration features using the special Administrator password, and how to change the Administrator password.

Abstract Plus Administrator Tasks

The main duties of the Abstract Plus Administrator are:

- Creating user accounts for new users, and maintaining existing user accounts
- Setting up the application for abstraction by specifying various application preferences, and maintaining abstracting display types
- Setting up the application to be used for performing casefinding, reabstracting, or recoding audits, including managing auditing display types and look-ups, and creating audit databases to be used by Auditors to perform audits

The above tasks are covered in greater detail in later chapters of this training manual. To access the Administration menu items, click on the **Administration** menu item, and select the desired sub-option, or use the appropriate keystroke combination for the desired sub-option.

Logging In As Administrator

For security purposes and to ensure standardized use of the application, access to the Administrator functions is restricted and password-protected. Once you have logged in to Abstract Plus with your general User ID and password, you may then log in as an Administrator. Abstract Plus will prompt you to enter a special Administrator password when you try to access any of the Administrator menu items.

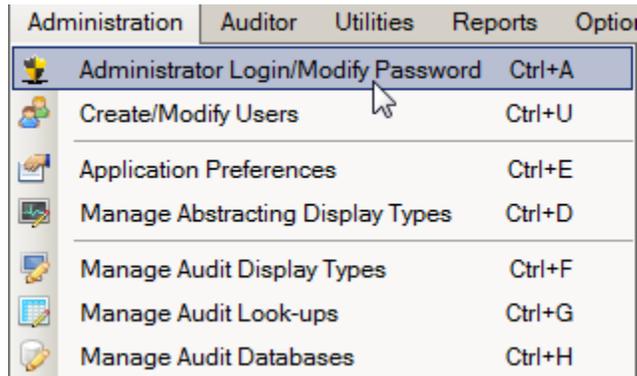


The Abstract Plus Administrator role has access to all functions of the software, including all of the auditing functions; entry of the Administrator password allows access to Auditor functions without entry of the Auditor password.

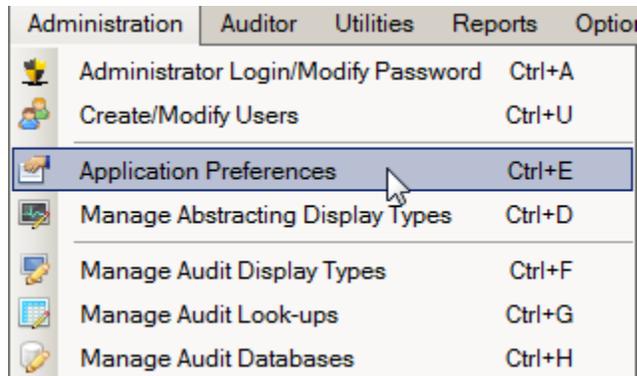
To login as the Administrator and access the Administrator functions of Abstract Plus, complete these steps:

1. Open the Administrator Login window. This can be done in 3 ways:

- a. Click on the **Administration** menu, and select **Administrator Login/Modify Password**.



- b. Click on the **Administration** menu, and select **any sub-option** from the menu.



- c. Use the keystroke **Ctrl+A**.

Result: The **Administrator Login** window opens.



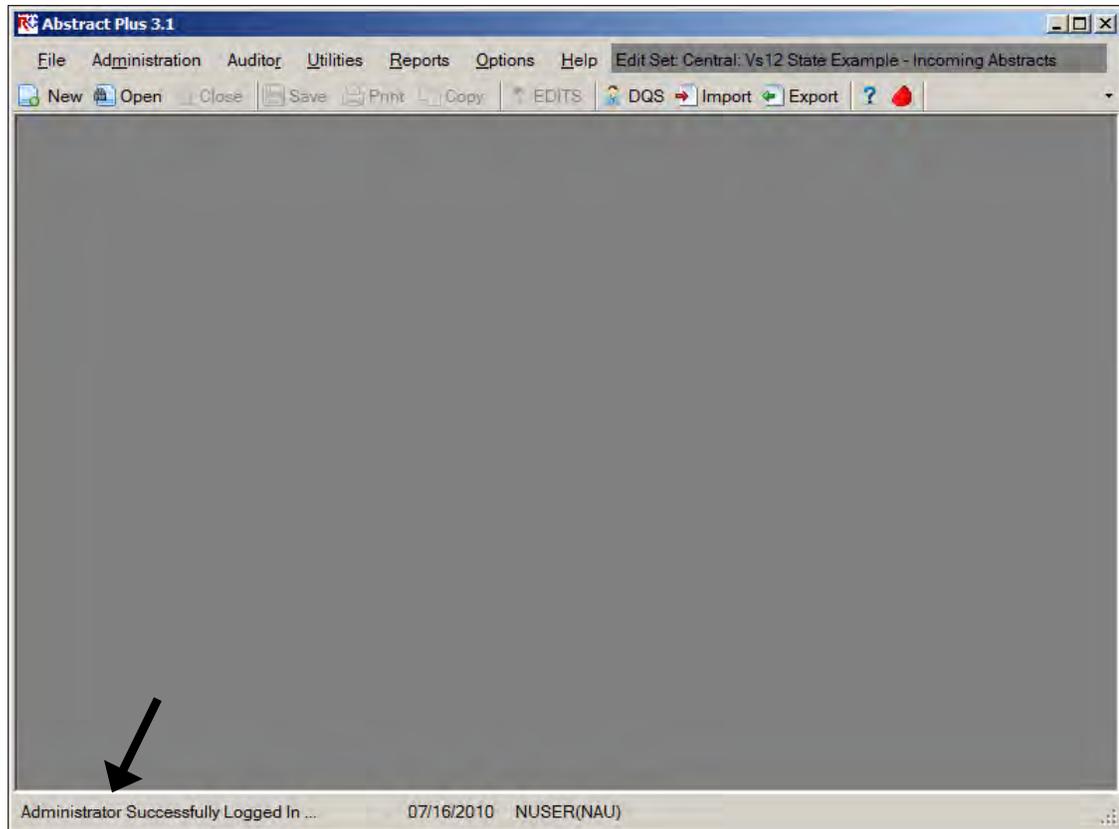
2. Enter **Admin** in the **Password** box, and click OK.



Note

Admin is the default Administrator password that comes with Abstract Plus. It is recommended that this be modified upon setup of the application.

Result: The Abstract Plus **main** window opens, with a message in the lower left-hand corner of the window letting you know that you are successfully logged in as Administrator. You will now have access to all features of the program: abstracting, auditing and administration.



Activity 2 - Logging in to Abstract Plus as Administrator

Using what you have just learned, log in as Administrator.

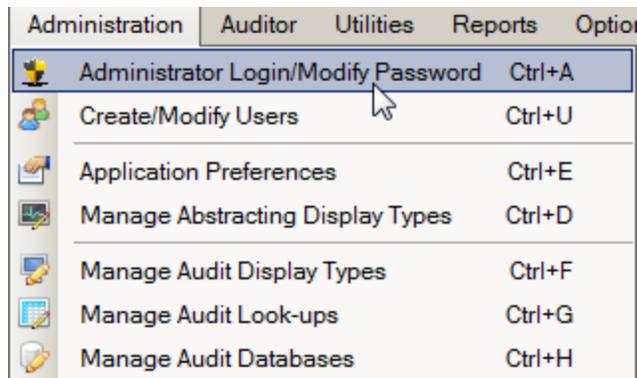
If you have not yet accessed the program, see page 46 of this manual or click [here](#) for instructions regarding logging in as Administrator. Please leave yourself logged in as Administrator, so that you may carry out the next few activities.

Maintaining the Administrator Password

For security purposes, you will want to change the default Administrator password from **Admin** to something more secure that only you and your other Administrators know.

To change Administrator password complete these steps:

1. Open the Administrator Login window. This can be done in 2 ways:
 - a. Click on the **Administration** menu, and select **Administrator Login/Modify Password**.



b. Use the keystroke **Ctrl+A**.

Result: The **Administrator Login** window opens.



2. Click **Change Password**.

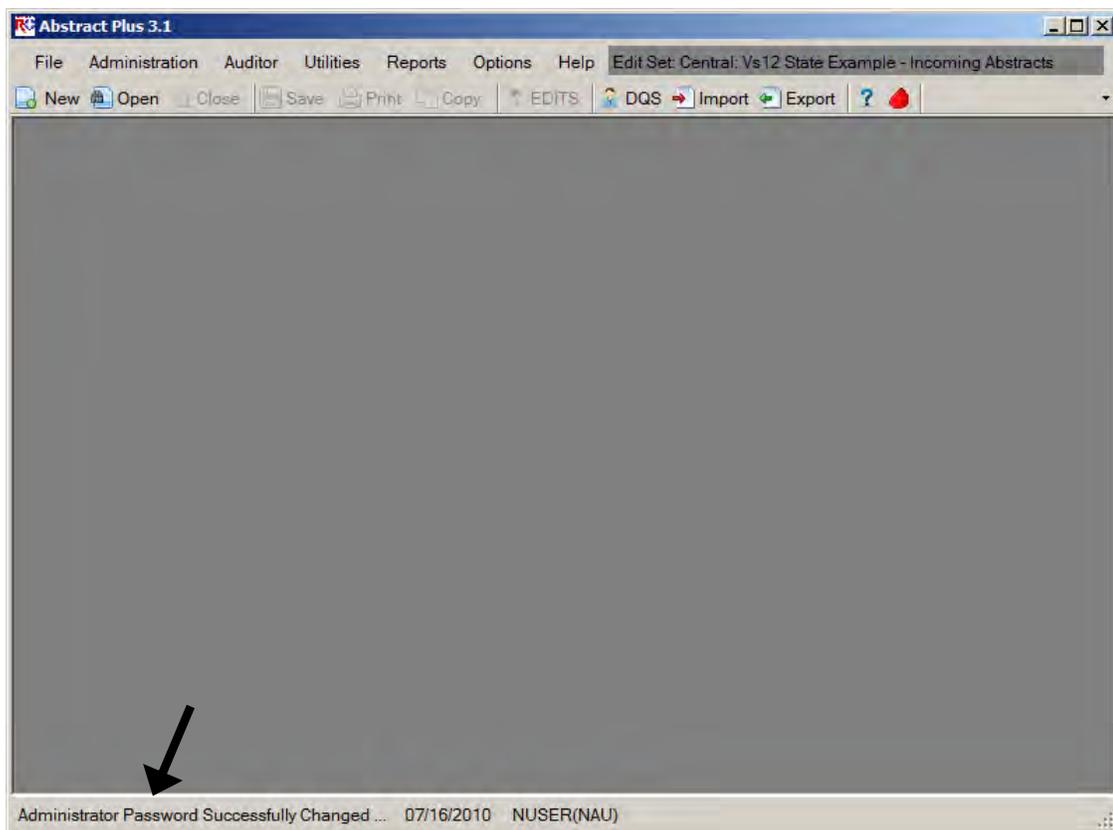
Result: The **Change Administrator Password** window opens.



3. Enter **Admin** (or your current Administrator password) in the **Password** box.
4. Enter the **new password** to which you would like to change the Administrator password in the **New** and **Confirm Password** boxes, and click **OK**.



Result: The Abstract Plus **main** window opens, with a message in the lower left-hand corner of the window stating that the Administrator password has been successfully changed.



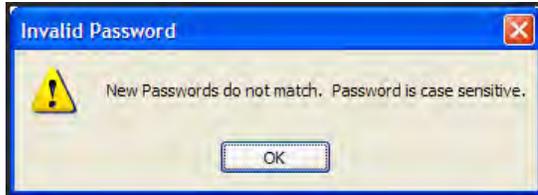
Possible Errors when Changing the Administrator Password

There are two possible errors you may receive when attempting to change your Administrator password:

1. **Old password is incorrect.** You must correctly enter your old password in order to successfully change it. Click **OK**, and then correctly re-enter your old Administrator password.



2. **New passwords do not match.** The new password entered into the **New Password** and **Confirm Password** boxes must match exactly. Click **OK**, and then correctly re-enter your new password in the New and Confirm password boxes.



Questions

Answer these questions about Abstract Plus Administrator Basics (the answers are in Appendix A on page 216).

1. What are the basic Administrator functions in Abstract Plus version 3.1?
2. Can anyone who can log in to Abstract Plus use the Administrator features?
3. Does the Administrator need to enter the special Auditor password in order to access the Auditor features of the program?

Chapter 4: Abstract Plus Configuration

Learning Objectives

In this chapter you learn:

- How to set Abstract Plus application preferences
- All about display types
 - What a display type is, and the five main steps used to build a display type
 - How to start a new display type
 - How to copy an existing display type and modify it
 - How to select fields and section headings into a display type
 - How to set field properties for individual data items in a display type
 - How to select an edit set and individual edit options for a display type
 - How to set Collaborative Staging calculation preferences for a display type
 - How to delete a display type
- About Abstract Plus database encryption, and how to obtain more information regarding accessing the encrypted databases in order to be able to customize the application for local or project-specific use
- How to customize the application for local or project-specific use
 - How to add custom or local fields to the application (i.e., any field not listed in NAACCR Volume II Data Dictionary) so that they can be selected into a display type
 - How to add custom look-ups to the application so that they can be associated with custom or local fields
 - How to use your own edits runtime metafile with the application, allowing for selection of your customized edit sets when generating display types

Overview

In this chapter you learn how to configure the Abstract Plus application, including how to set application preferences such as all general, security, database and report application settings and to create display types. A display type is basically the user interface where the Abstract Plus Abstractor or Auditor will enter data, and consists of an ordered subset of standard NAACCR and local data items collected by your central registry, an edit set with associated options specified, and Collaborative Staging calculation preferences.

Selecting Application Preferences

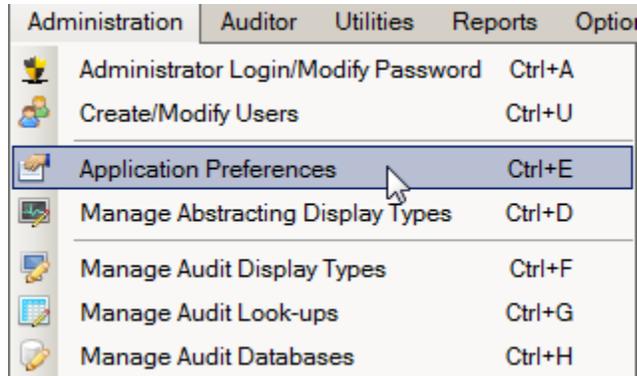
The Administrator initially configures Abstract Plus and controls certain features of the program by specifying various application preferences. Application preferences include general settings (such as whether or not to automatically calculate age at diagnosis), security

challenge question(s), password policies and settings, and default database and report settings.

Please note that there are no activities associated with the setting of system preferences; rather, the following instructions that should be followed to initially set up the application.

To specify Abstract Plus system preferences, complete these steps:

1. Open the Application Properties window. This can be done in 2 ways:
 - a. Click on the **Administrator** menu, and select **Application Preferences**.

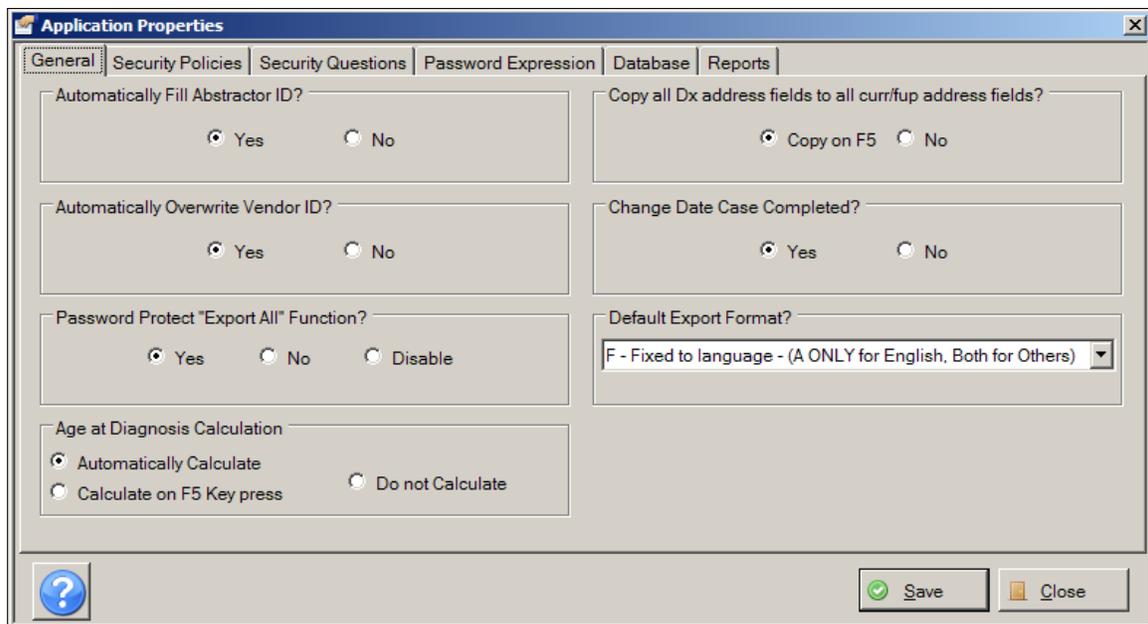


- b. Use the keystroke **Ctrl+E**.

Result: The **Application Properties** window opens defaulted to the **General** tab.

The Application Properties window consists of a series of tabs which display different windows addressing various application settings: General, Security Policies, Security Questions, Password Expression, Database, and Reports.

The General Tab



As mentioned, upon opening the Application Properties window, the General tab is displayed by default. The following table describes the application settings included on the General tab:

Setting	Description
Automatically Fill Abstractor ID?	Option to have the data item of Abstracted By [#570] automatically filled for new abstracts with the initials of the user currently logged on; default setting is Yes.
Automatically Overwrite Vendor ID?	Option to have the data item of Vendor Name [#2170] automatically filled with the Abstract Plus vendor name on imported abstracts; any existing vendor name information in the imported abstracts will be overwritten
Password Protect "Export All" Function?	Option to restrict the function Export All Abstracts in Database to Administrators or to disable this feature for general users
Age at Diagnosis Calculation	Option to automatically calculate the data item of Age at Diagnosis [#230] when the data items Birth Date [#240] and Date of Diagnosis [#390] have been entered or changed, have the user press F5 to calculate, or have the user manually enter the data item
Copy all DX address fields to all curr/fu address fields?	Option to allow user to copy the Address at Diagnosis data items of Addr at DX---No & Street [#2330], Addr at DX---City [#70], Addr at DX---State [#80], Addr at DX---Postal Code [#100], and Addr at DX---Supplemental [#2335] to the corresponding current address fields by pressing F5 when the user has the cursor in the data item of Addr Current—No & Street [#2350]
Change Date Case Completed?	Option to automatically update the data item of Date Case Completed [#2090] if the abstract becomes incomplete after once being designated complete
Default Export Format?	Option to set the default export file format for exported abstracts to NAACCR type A record or comma-delimited format

- Under **Automatically Fill Abstractor ID?**, click **Yes** or **No** to specify whether or not you would like the data item of Abstracted By [#570] automatically filled for new abstracts with the initials of the current user. If **No** is selected, Abstracted By will be left blank and can be filled in manually by the user. The default setting of **Yes** is highly recommended in order to prevent entry errors.
- Under **Automatically Overwrite Vendor ID?**, click **Yes** or **No** to specify whether or not you would like the data item of Vendor Name [#2170] automatically filled with the Abstract Plus vendor name on imported abstracts. If **Yes** is selected any existing vendor name information in the imported abstracts will be overwritten. If **No** is selected then existing Vendor Name information in the imported abstracts will be retained.

4. Under **Password Protect —Exprt All” Function?**, click **Yes** if you would like to restrict the function Export All Abstracts in Database to Administrators and require entry of the Administrator password prior to export; **No** if you do not want to restrict this function, and allow general users to use the Export All feature; or **Disable** if you would like to disable this feature for general users, and gray out the feature in the export dialog window.
5. Under **Age at Diagnosis Calculation**, click **Yes** if you would like to calculate the data item of Age at Diagnosis [#230] when the data items Birth Date [#240] and Date of Diagnosis [#390] have been entered or changed (the user cannot manually override the calculated value); click **Calculate on F5 Key press** if you would like the program to calculate by pressing F5 when the Age at Diagnosis field is selected in the abstracting grid (the user can manually change the calculated value); or click **Do Not Calculate** if you would like to require manual entry of the data item.
6. Under **Copy all DX address fields to all curr/fu address fields?**, click **Copy on F5** if you would like to have the user copy the Address at Diagnosis data items of Addr at DX--No & Street [#2330], Addr at DX---City [#70], Addr at DX---State [#80], Addr at DX--Postal Code [#100], and Addr at DX---Supplemental [#2335] to the corresponding current address fields by pressing F5 when the user has the cursor in the data item of Addr Current—No & Street [#2350]; or click **No** if you would like to require the user to enter the current address data items manually.
7. Under **Change Date Case Completed?**, click **Yes** if you would like to automatically update the data item of Date Case Completed [#2090] if an abstract becomes incomplete after once being designated complete; click **No** if you would like Date Case Completed to always represent the date the case was first completed.
8. Under **Default Export Format?**, Use the drop-down menu to select the default export file format you would like the program to use when exporting abstracts:
 - a. **A—NAACCR Layout**: When selected, NAACCR type-A records will be the default selection on the export dialog window, and comma delimited will be available for as an alternative selection.
 - b. **C--Comma-delimited**: When selected, comma-delimited records will be the default selection on the export dialog window, and NAACCR type-A will be available as an alternative selection.
 - c. **F--Fixed to language**: When selected, only one export format will be made available to the user on the export dialog window, based on the language of the installation. For English, only the choice of NAACCR type-A records is available. For Spanish, only delimited is available.
9. Once you have specified your preferences on the General Tab, click the **Security Policies Tab**.

Result: The **Application Properties** window opens the **Security Policies tab**.

The Security Policies Tab

Recall that all Abstract Plus users must have a User ID and password to access the abstracting features of the application, and that a security challenge question feature is also included in case a user forgets his or her password, which enables the user to securely reset their password without Administrator intervention.

The Administrator sets challenge question and password policy attributes on the Security Policies Tab. The following table describes the application settings included on the Security Policies Tab:

Setting	Description
Number of challenge questions to answer upon initial setup	Number of security challenge questions that the user must enter upon initial log in and setup of the challenge question feature; the user is asked the specified number of questions, and answers are saved by the application for future user validation
Number of challenge questions to answer to reset password	Number of security challenge questions that a user must answer to be permitted to reset their password; the questions presented for password reset are randomly selected from the questions answered by the user upon initial log in or update of their questions
Password Expires every ___ days	Number of days after which a user's Abstract Plus password will expire
Keep # passwords in history	Number of historical passwords kept by Abstract Plus for each user; users can not re-use a saved historical password
Enforce strong passwords	Option to enable password restrictions

10. Under Challenge Question Policy:

- a. In the **Number of challenge questions to answer upon initial setup** field, enter the number of questions that you would like the user to have to answer upon initial setup of the challenge question feature. The first time the user logs in to Abstract Plus, the program will require the user to answer, and will store the answers for the specified number of challenge questions. The challenge questions that are presented to the user upon initial log in are defined on the [Security Questions](#) tab.
- b. In the **Number of challenge questions to answer to reset password** field, enter the number of challenge questions that you would like the user to be required to answer in order to be able to reset their own password. Abstract Plus will randomly pick this number of questions from the available challenge questions list for the user, and will present the questions to the user when they try to reset their password. The user will have to answer each question correctly (i.e., enter the same answer as they did upon initial setup or update) in order to be permitted to reset their password.



If both of the Challenge Question Policy options are set to zero, then the challenge question feature will be disabled.
It is highly recommended NOT to disable this feature.

11. Under Password Policy:

- a. In the **Passwords expire every ___ days** field, enter the number of days after which you would like a user's Abstract Plus password to expire.
- b. In the **Keep # passwords in history** field, enter the number of historical passwords you would like for Abstract Plus to keep for each user. Users will not be able to reuse a password until the number specified in this field is met.
- c. Click the **Enforce strong passwords** check box if you would like to place restrictions on the passwords that users can generate for themselves. Password restrictions are enforced via the Regular Expression defined on the [Password Expression](#) tab.

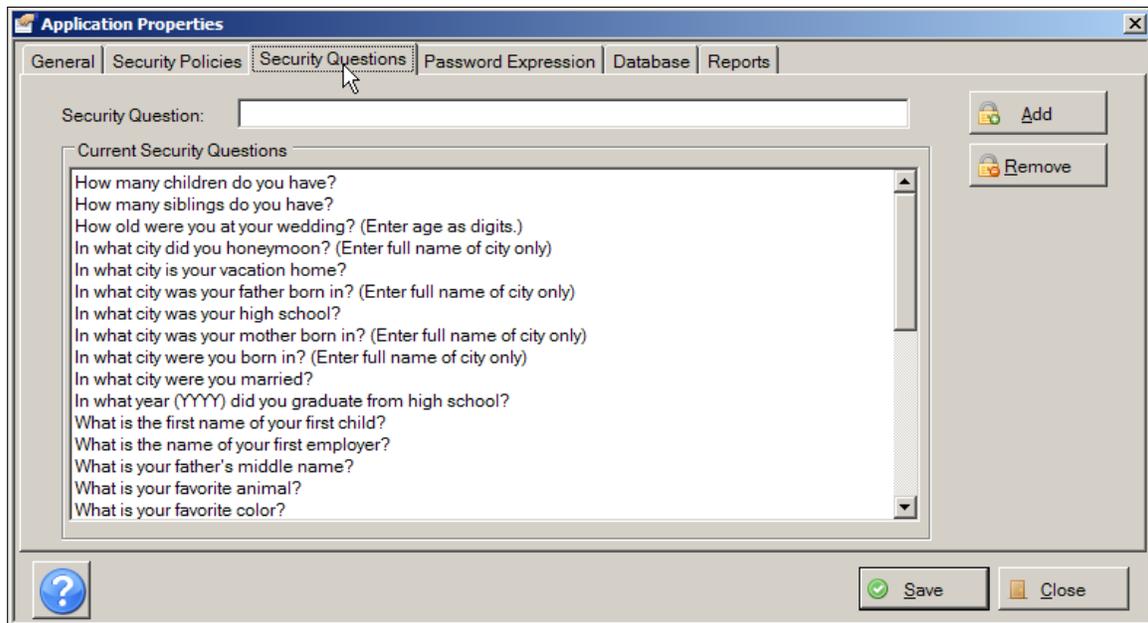


For security purposes, enforcing strong passwords is **strongly** recommended.

12. Once you have specified your preferences on the Security Policies tab, click the Security Questions Tab.

Result: The **Application Properties** window opens the **Security Questions tab**.

Security Questions Tab

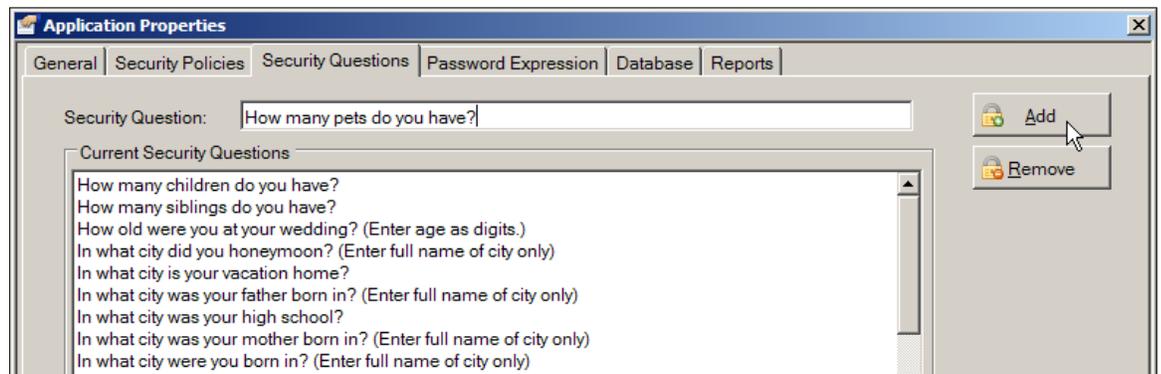


The Abstract Plus Administrator can customize the list of challenge questions presented to users upon initial log in by adding or removing security questions to the list displayed on the Security Questions tab. Abstract Plus comes preloaded with 35 challenge questions.

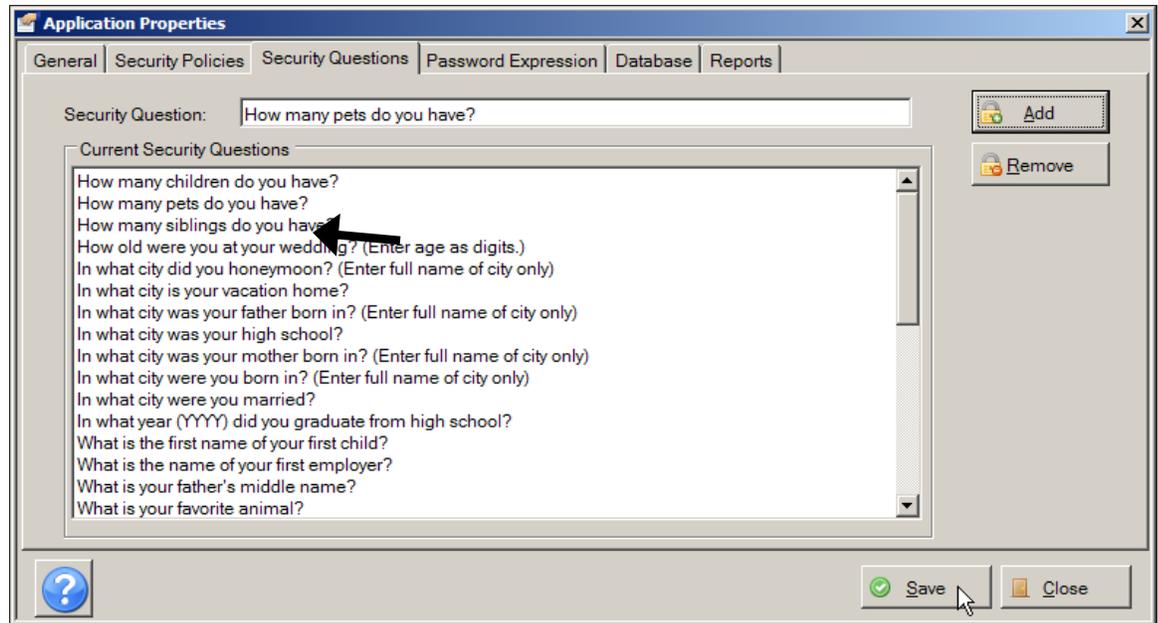
Adding Security Questions

To add a new security question to the Current Security Questions list, complete these steps:

1. Type a question into the **Security Question** box, and click **Add**. Be sure to specify a format for any dates or numbers.



Result: The question entered is added to the Current Security Questions List.



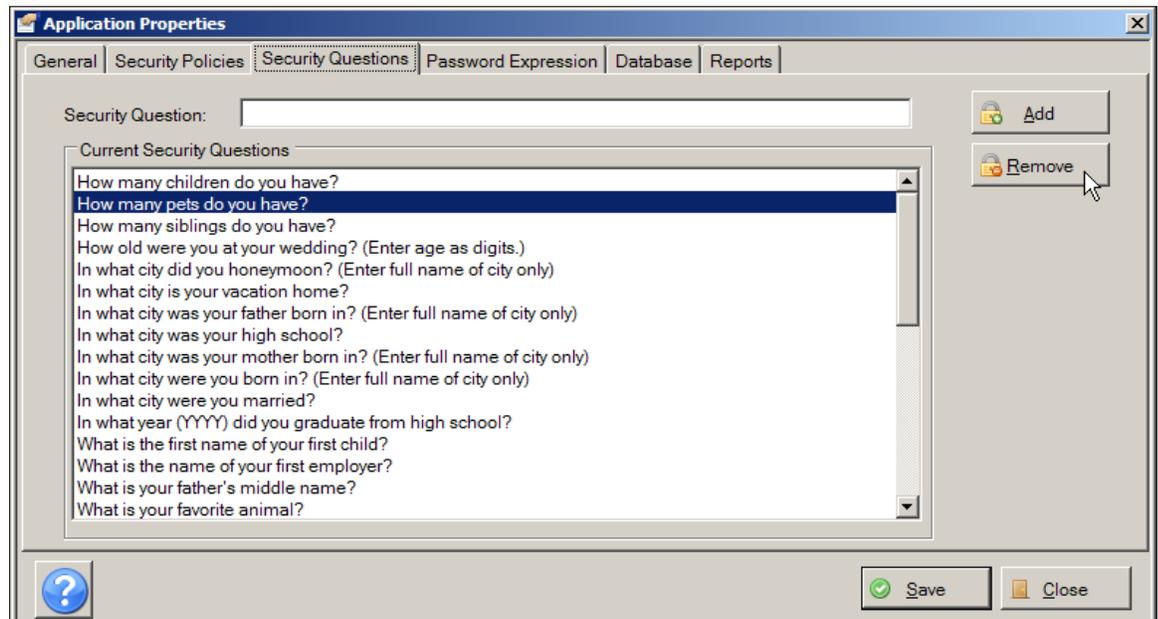
2. Click **Save**.

Result: The new question is saved.

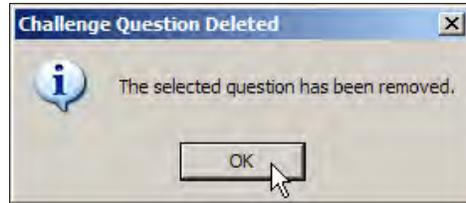
Removing Security Questions

To remove a Security Question from the Current Security Questions list, complete these steps:

1. Select the question you want to remove from the **Current Security Questions** list, and click **Remove**.

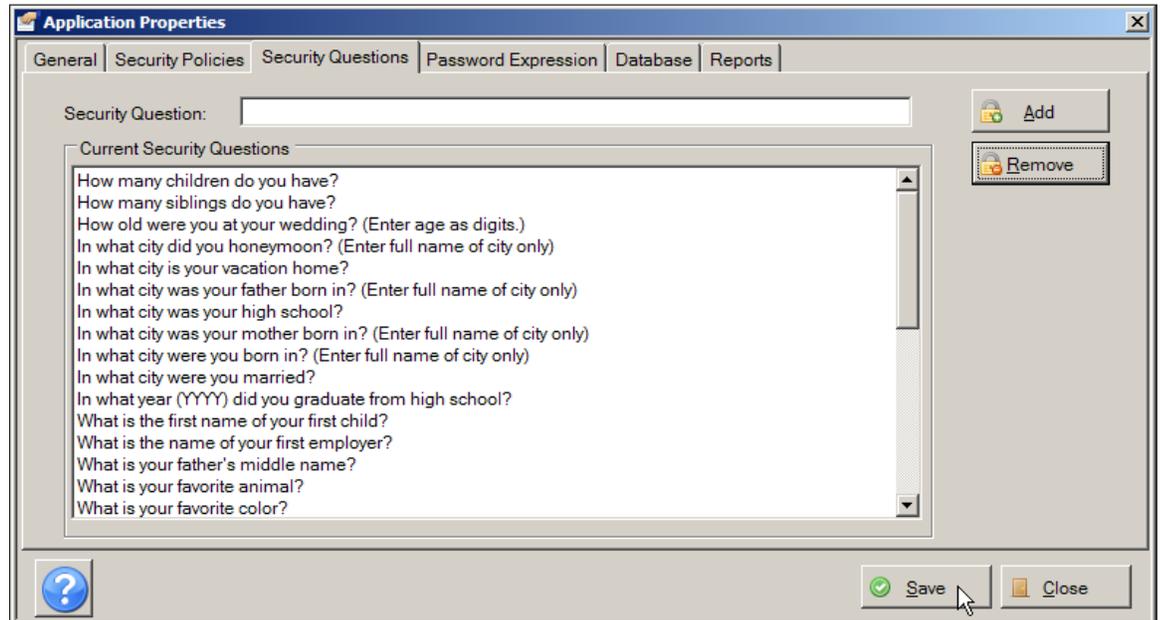


Result: The application lets you know that the challenge question has been removed.



2. Click **OK** on the confirmation message window.

Result: You are returned to the Security Questions tab, where the deleted challenge question is no longer listed.



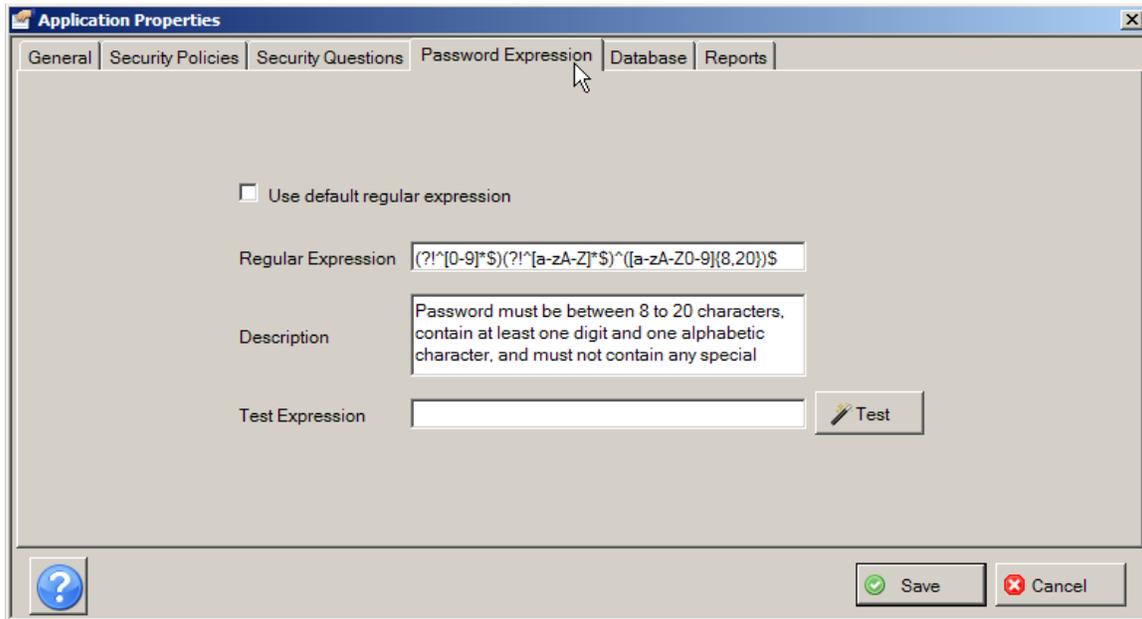
3. Click **Save**.

Result: The Current Security Questions are updated.

13. Once you have specified your challenge questions on the Security Questions tab, click the **Password Expression** tab.

Result: The **Application Properties** window opens the **Password Expression** tab.

The Password Expression Tab



The Administrator can define password restriction rules on the Password Expression tab via a regular expression (Regex) which specifies what types of passwords are acceptable. The default regular expression provided with the application requires users to enter passwords that are **8 to 20 characters in length, contain at least one digit and one alphabetic character, and must not contain any special characters.**

The following table describes the application settings included on the Password Expression tab:

Setting	Description
Use default regular expression	When checked, this resets the regular expression to the original default expression provided by Abstract Plus
Regular Expression	The RegEx used by the application to check passwords to ensure that they meet the standards defined. The default regular expression is <code>(?!^[0-9]*\$)(?!^[a-zA-Z]*\$)^[a-zA-Z0-9]{8,20}\$</code> (Password must be between 8 to 20 characters, contain at least one digit and one alphabetic character, and must not contain any special characters); Other or additional password restrictions may be implemented by editing the Regular Expression
Description	Textual description of the password restriction enforced by the Regular Expression; communicates the password restriction rules to the user
Test Expression	To test a regular expression, enter the expression in the Test Expression box and click Test

To use a regular expression other than the default expression provided, enter the expression into the **Regular Expression box**, along with a description of the password restrictions it enforces in the **Description box**. The Description is viewed by the user when setting their password, and communicates the password restriction rules to the user.

The Administrator can generate their own regular expressions and then test them by entering the expression in the **Test Expression box** and clicking **Test**.

Sample Expressions / Translations

The following table provides a few other example regular expressions for potential use:

Expression	Translation
<code>^(?=[^\\d_].*?\\d)\\w(\\w[!@#%\$%])}{8,20}</code>	Restrict passwords to a length of 8 to 20 alphanumeric characters and select special characters. The password also cannot start with a digit, underscore, or special character and must contain at least one digit.
<code>^(?=(.*[a-z]){1,})(?=(.*[d]){1,})(?=(.*[\\W]){1,})(?!.*s).{7,30}\$</code>	Requires at least 1 lowercase, 1 uppercase, 1 numeric, 1 non-word, must be between 7 and 30 characters, and no whitespace.
<code>^(?=.*\\d)(?=.*[a-z])(?=.*[A-Z]).{8,10}\$</code>	Must be between 8 and 10 characters. Must contain a combination of uppercase, lowercase, and numeric digits, with no special characters.
<code>^(?=.*[a-z].*[a-z])(?=.*[A-Z].*[A-Z])(?=.*d.*d)(?=.*\\W.*\\W)[a-zA-Z0-9\\S]{9,}\$</code>	Requires at least two lowercase letters, two uppercase letters, two digits, and two special characters. There must be a minimum of 9 characters total, and no white space characters are allowed.



Important

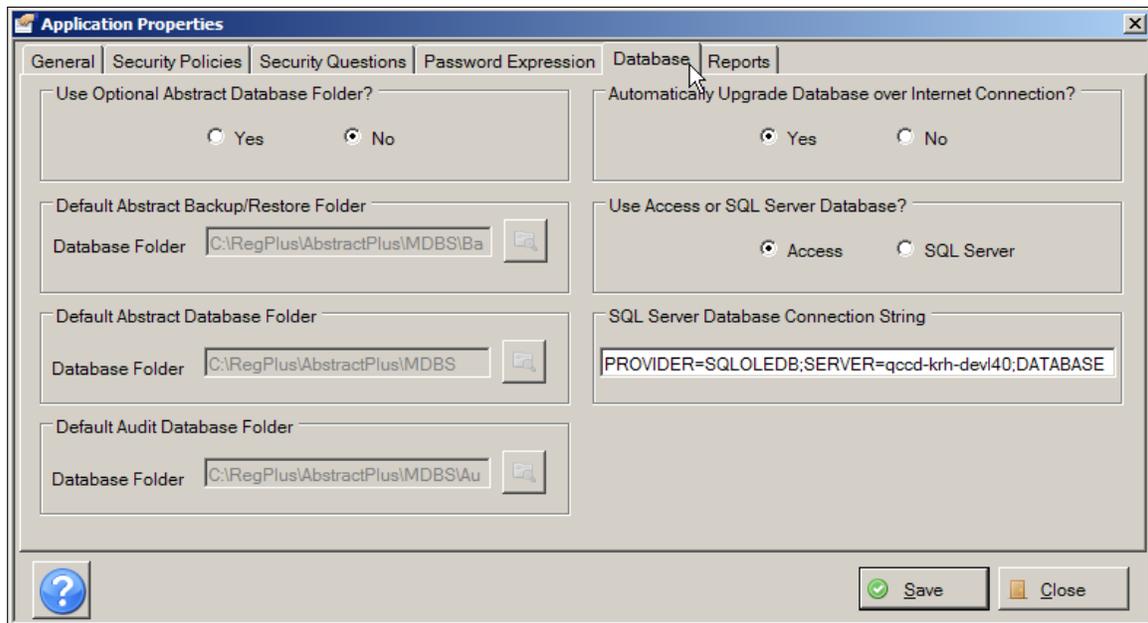
If you are not very comfortable writing regular expressions it is recommended that you do not make any change to the default expression, or use one of the example expressions provided.

Always be sure to test any new expression entered to make sure it is functioning properly.

- Once you have configured your password restrictions on the Password Expression tab, click the **Database tab**.

Result: The **Application Properties** window opens the **Database tab**.

The Database Tab



The Administrator uses the Database tab to specify default folders in which to store the Abstract Plus abstract and audit databases, as well as automatic upgrade and Access/SQL Server database options.

The following table describes the application settings included on the Database tab:

Setting	Description
Use Optional Abstract Database Folder?	Option to allow the backup abstracts, abstracts, and audit database folders to be stored in a user-specified location/folders rather than the default locations of C:\RegPlus\AbstractPlus\MDBS\Backup, C:\RegPlus\AbstractPlus\MDBS, and C:\RegPlus\AbstractPlus\MDBS\Audit The Use Optional Abstract Database Folder? option must be set to Yes in order to be able to modify any of the database locations
Default Abstract Plus Backup/Restore Folder	Option to change the default Backup Database location from C:\RegPlus\AbstractPlus\MDBS\Backup to a user-specified location
Default Abstract Database Folder	Option to change the default Abstract Database location from C:\RegPlus\AbstractPlus\MDBS to a user-specified location (required files needed in user-specified location)
Default Audit Database Folder	Option to change the default Audit Database location from C:\RegPlus\AbstractPlus\MDBS\Audit to a user-specified location (audit databases needed in user-specified location)

Setting	Description
Automatically upgrade database over Internet connection?	Option to have Abstract Plus automatically check for upgrades to the user's installation via the Internet upon opening the application
Use Access or SQL Server database	Option to use an SQL Server database rather than the default Access database; if SQL Server is selected, the server connection string must be entered in the SQL Server Database Connection String field
SQL Server Database Connection String	Server connection string for abstract database when SQL Server is selected as the database type

15. Under **Use Optional Abstract Database Folder?**, click **Yes** or **No** to specify whether or not you would like to store the backup abstracts, abstracts, and audit database folders in user-specified location/folders rather than the default locations of C:\RegPlus\AbstractPlus\MDBS\Backup, C:\RegPlus\AbstractPlus\MDBS, and C:\RegPlus\AbstractPlus\MDBS\Audit.
16. Under **Default Abstract Plus Backup/Restore Folder**, if you would like to specify a location for the **Backup Database other than the default location** of C:\RegPlus\AbstractPlus\MDBS\Backup, click the **Browse** folder icon to the right of the Database Folder box and navigate to the folder of your choice. Click **Save** to save the change.
17. Under **Default Abstract Database Folder**, if you would like to specify a location for the **Abstract Database other than the default location** of C:\RegPlus\AbstractPlus\MDBS, click the **Browse** folder icon to the right of the Database Folder box and navigate to the folder of your choice. Click **Save** to save the change.
18. Under **Default Audit Database Folder**, if you would like to specify a location for the **Audit Database other than the default location** of C:\RegPlus\AbstractPlus\MDBS\Audit, click the **Browse** folder icon to the right of the Database Folder box and navigate to the folder of your choice. Click **Save** to save the change.



Note

The **Use Optional Abstract Database Folder?** option must be set to **Yes** in order to be able to modify any of the database locations. Required files will be needed in the user-specified location.

19. Under **Automatically upgrade database over Internet connection?** click **Yes** or **No** to specify whether or not you would like to have Abstract Plus automatically check for upgrades to the user's installation via the Internet upon opening the application. If **Yes** is selected, when Abstract Plus is opened, it will automatically check for upgrades via the Internet, and if an upgraded version is available the user receives a prompt allowing them to download and install the upgrade, or to cancel. If no Internet connection is available, the user will not receive the prompt. When set to **No**, there will be no automatic check for upgrades, whether or not an internet connection is available.

20. Under **Use Access or SQL Server database**, click **Access** if you would like to use the default database type of Microsoft Access database, or click **SQL Server** if you would like to use an SQL server for your database.

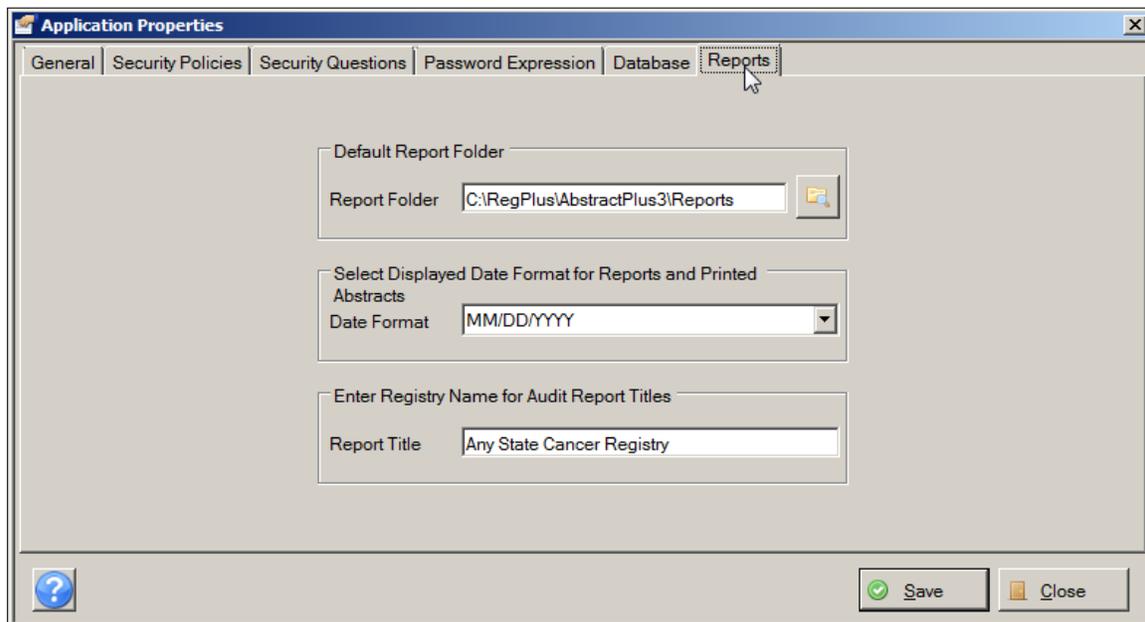


The SQL Server database option is available for the **abstracts database only**; Audit databases will always be in Access.

21. Under **SQL Server Database Connection String**, if you are using the SQL Server database option, enter the connection string to the SQL Server in the box provided.
22. Once you have configured your database settings on the Database tab, click the **Reports** tab.

Result: The **Application Properties** window opens the **Reports** tab.

The Reports Tab



On the Reports tab, the Administrator specifies the default folder in which to store Abstract Plus reports when saving reports, as well as the formal central registry name as it is to be viewed on audit report titles.

23. Under **Default Report Database Folder**, if you would like to specify a location for the **Reports other than the default location** of C:\RegPlus\AbstractPlus\Reports, click the **Browse** folder icon to the right of the Database Folder box and navigate to the folder of your choice (required files needed in user-specified location). Click **Save** to save the change.
24. Under **Select Displayed Date Format for Reports and Printed Abstracts**, select the date format in which you would like dates to be displayed on all Abstract Plus reports (abstracts and audits) and printed abstracts. A variety of formats based on the YYYYMMDD, MMDDYYYY, and DDMMYYYY date formats are available.
25. Under **Enter Registry Name for Audit Report Titles**, enter your **central registry's name**, as you would like it to be listed in all Abstract Plus audit report titles.

26. When you have finished specifying applications preferences, click **Save**, and then click **Close**.

Configuring Abstracting Display Types

A display type is basically the user interface where the Abstractor or Auditor enters abstract data. Display types are highly customizable, and are configured by the Abstract Plus Administrator. Display types include information regarding fields collected, required fields (i.e., fields that can't be blank), edit sets, individual edit options, and Collaborative Staging preferences. Any standard data items and state-specific fields can be included in a display type, and can be assigned customized labels, ordered into sections, and have various properties that can be set, such as default values.

Creating an Abstracting Display Type

You can create different display types for different facilities, types of cancer reporters, or audits. Abstract data are entered and edited using the display type assigned to the abstract. To generate a display type, you first name and add it to the application, and then go through five main steps to build the display type:

1. Select Fields
2. Select Critical Fields
3. Select Edit Set
4. Select Individual Edit Options
5. Select Collaborative Staging Preference.

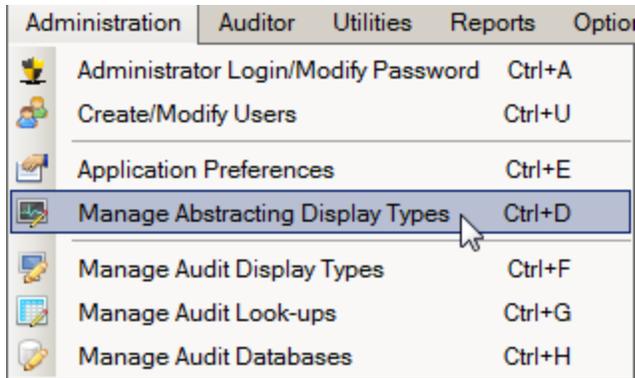
You can create a display type in one of two ways. You can start from scratch by adding a new display type or you can copy an existing display type and revise it. Either way you create a display type, you can customize it for your own needs.

Opening the Manage Display Types Window

The Administrator creates and maintains display types using the **Manage Display Types** window.

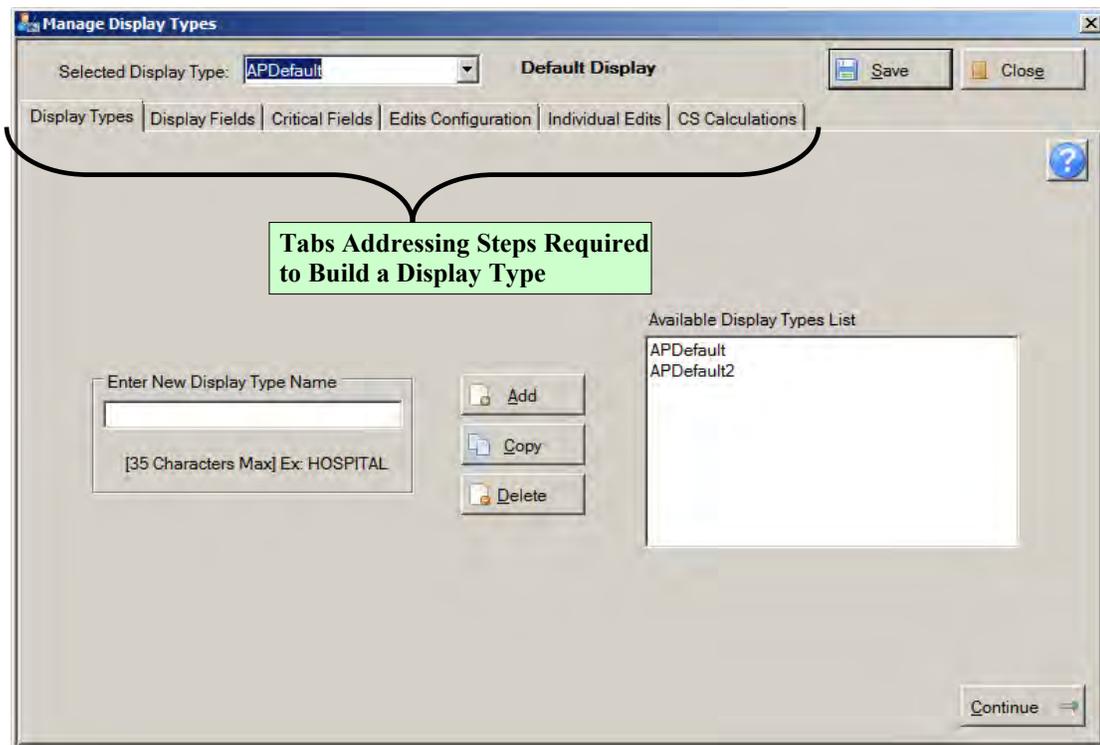
To open the Manage Display Types window and work with display types, complete these steps:

1. Opening the Manage Abstracting Display Types window can be done in 2 ways:
 - a. Click on the **Administration** menu, and select **Manage Abstracting Display Types**.

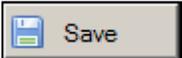


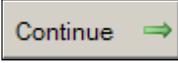
b. Use the keystroke **Ctrl+D**.

Result: The **Manage Display Types** window opens defaulted to the **Display Types** tab.

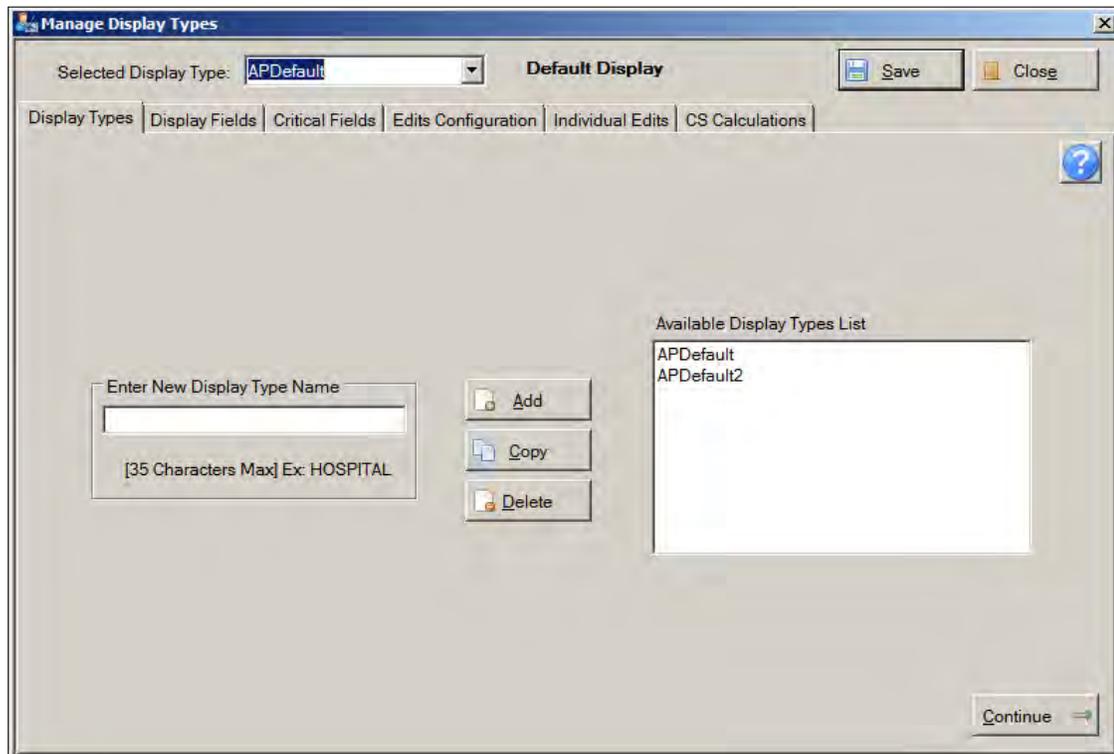


The Manage Display Types window consists of a series of **tabs** which open different windows addressing the various steps required to build or update a display type: Display Types, Display Fields, Critical Fields, Edits Configuration, Individual Edits, and CS (Collaborative Staging) Calculations. At the top of the Manage Display Types window is a **Selected Display Type** pull-down menu from which you can select the display type that you would like to modify. The Manage Display Types window also includes the following:

Use this icon...	To...
	Save the selections on the window.

Use this icon...	To...
	Close the window without saving the information; you will be prompted to save any changes if desired
	Save the selections on the window, and continue to the next tab
	Open the help information for the current Manage Display Types window tab

The Display Types Tab



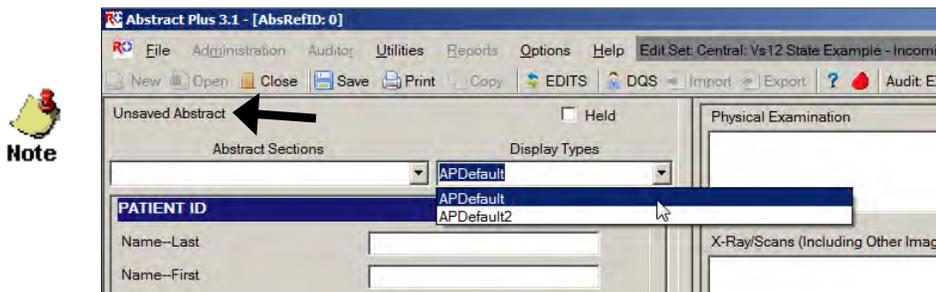
Upon opening the Manage Display Types window, the **Display Types** tab is displayed by default. The Administrator uses the Display Types tab to **add** a new display type, **copy** an existing display type under a new name, and **edit** or **delete** an existing display type. A list of existing abstracting display types is displayed in the **Available Display Types List** on the right.

Included Abstracting Display Types

Abstract Plus version 3.1 comes with two abstracting display types already configured for use. Any of these display types can be copied and used as a starting point for your own central registry's display types. The display types included with the Abstract Plus version 3.1 installation are described in the following table:

Display Type	Description
APDefault	This abstracting display type is assigned to all new abstracts by default and is compliant with NPCR minimal data collection requirements as listed in the NAACCR Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Chapter VIII: Required Status Table (which includes collecting only those Collaborative Staging data items required to calculate derived Summary Stage 2000); use of this default display type will result in the collection of data that will meet NPCR requirements for annual data submission to NPCR
APDefault2	This abstracting display type includes all of the same fields as the APDefault abstracting display type, but also includes all Collaborative Staging (CS) data items, i.e., CS items required for the calculation of all derived Summary Stage and AJCC staging fields

By default, the APDefault display type is assigned to all new abstracts when abstracting. However, the Abstractor may modify this selection by choosing another display type from the **Display Types** pull-down menu on the abstracting window **prior to saving any information** entered for the new abstract:



The display type selections available to the Abstractor from the **Display Types** pull-down menu are based on those listed on the **Available Display Types List** on the **Display Types** tab.

Adding a New Abstracting Display Type

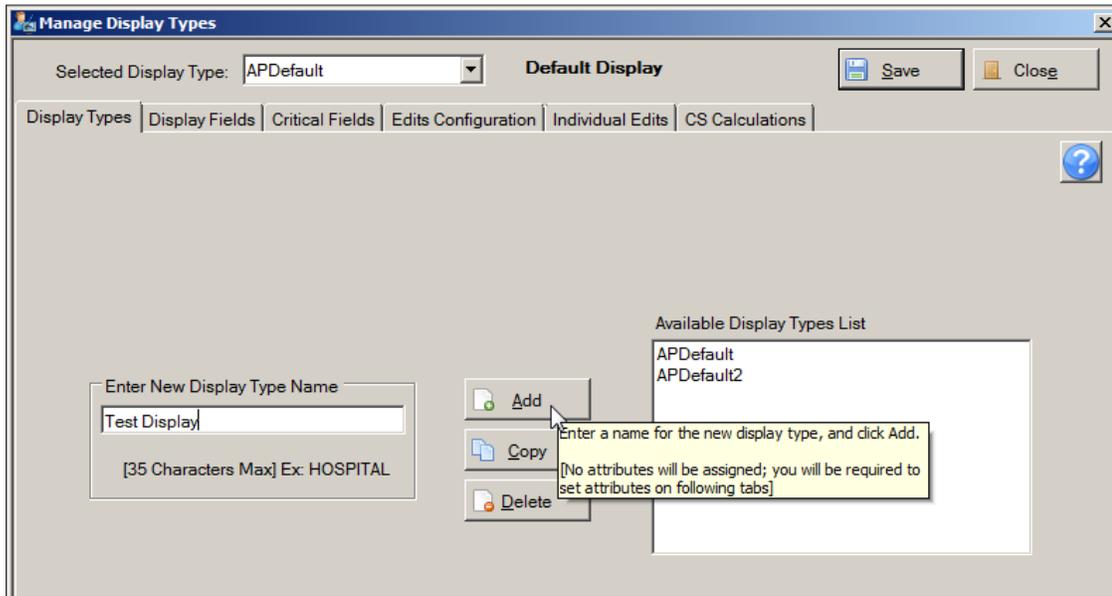
One way to create an abstracting display type is to add a new one.

To add a new abstracting new display type, complete these steps:

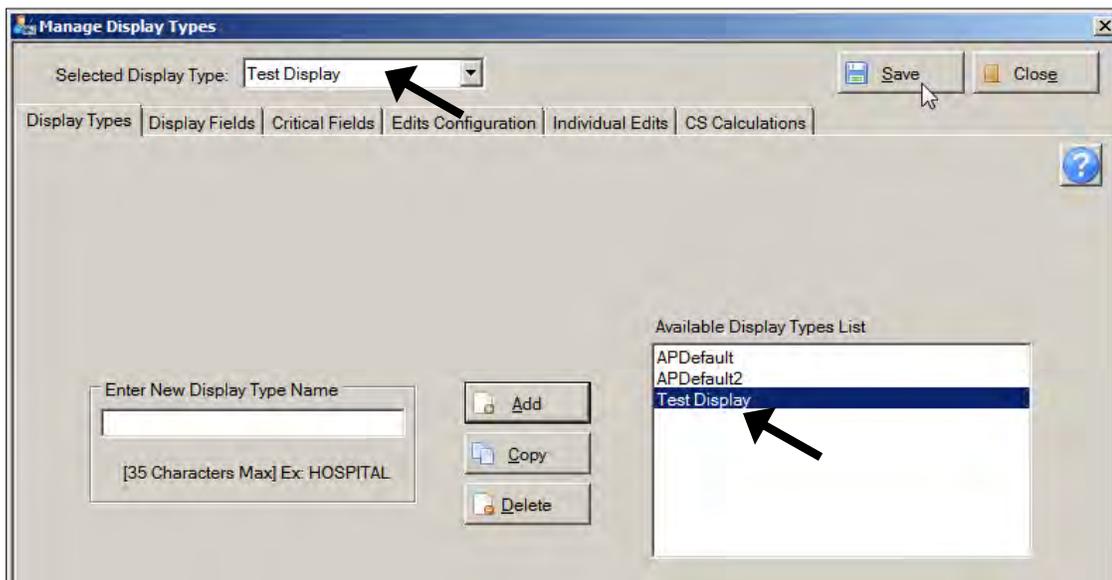
1. Open the Manage Abstracting Display Types window, either by clicking on the **Administration** menu, and selecting **Manage Abstracting Display Types**, or using the **Ctrl+D** keystroke.

Result: The **Manage Display Types** window opens defaulted to the **Display Types** tab.

2. Type a **name for the new display type** in the **Enter New Display Type Name** box on the left, and click **Add**. In the example shown, a new abstracting display type named TEST DISPLAY is being added to the application.



Result: The new display type is added to the **Available Display Types List**, and automatically becomes the selected display type in the **Selected Display Type** pull-down menu at the top of the Manage Display Types window so that you may continue your work on the new display type and go through the remaining steps required to build the display type.



Note

No display type attributes other than the display type name will be assigned to the new display type at this point. Other attributes, such as fields included in the display type, must be set using the other Manage Display Types tabs.

3. Click **Save**.

Activity 3 - Creating a New Display Type by Adding New

Using what you have just learned, add a new abstracting display type to the application called **Test Display**.

Please see page 69 of this manual or click [here](#) for instructions regarding adding a new display type. You will delete the Test Display display type in Activity 5.

Copying an Existing Abstracting Display Type

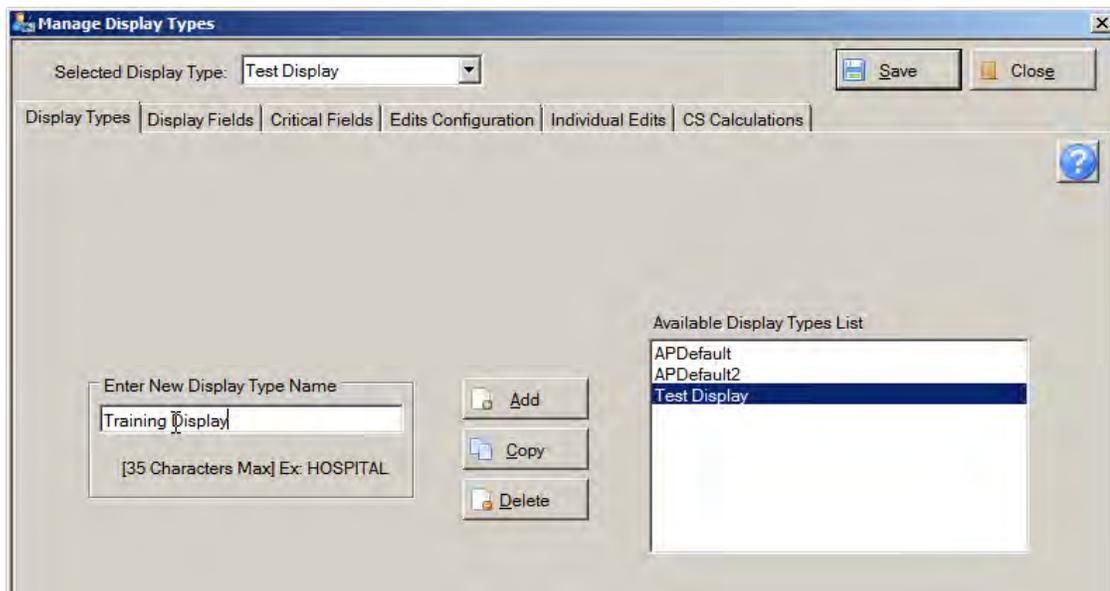
The other way to create a display type is to copy an existing display type and revise it to meet your needs.

To create a new abstracting display type by copying an existing one, complete these steps:

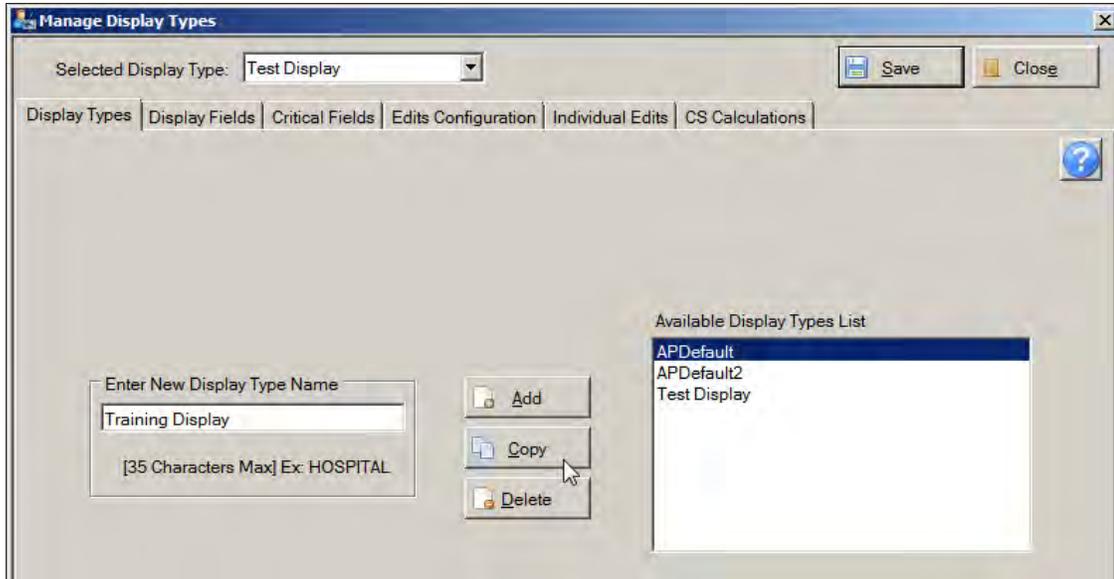
1. Open the Manage Abstracting Display Types window, either by clicking on the **Administration** menu, and selecting **Manage Abstracting Display Types**, or using the **Ctrl+D** keystroke.

Result: The **Manage Display Types** window opens defaulted to the **Display Types** tab.

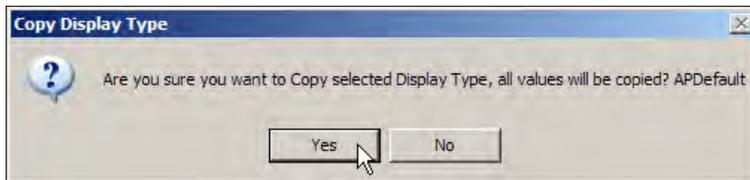
2. Type a **name for the new display type** in the **Enter New Display Type Name** box on the left. In the example shown, the name of the new display type being created is Training Display.



3. Select the existing abstracting display type that you would like to copy from the **Available Display Types List** on the right, and click **Copy**. In the example shown, the APDefault display type is being copied under the name of Training Display.

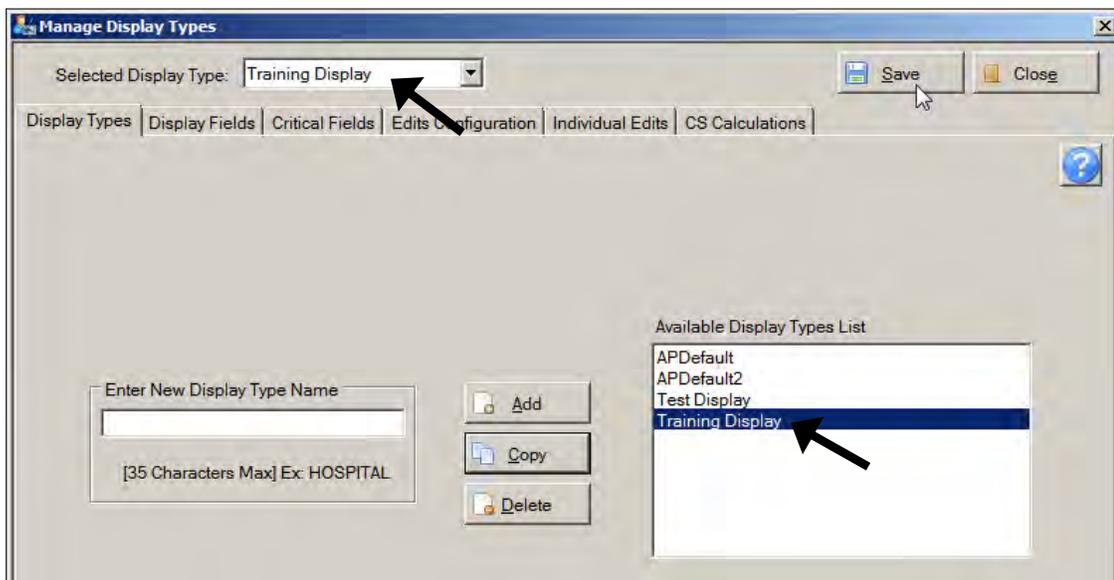


Result: The application prompts you to confirm that you would like to copy the currently selected display type.



4. Click **Yes**.

Result: The new display type is added to the **Available Display Types List** and automatically becomes the selected display type in the **Selected Display Type** pull-down menu at the top of the Manage Display Types window so that you may go through any of the remaining steps required to modify the display type.





All display type attributes of the copied display type will be assigned to the new display type at this point. Modifications may now be made to the display type to suit your needs using the other Manage Display Types tabs.

5. Click **Save**.

Activity 4 - Creating a New Display Type by Copying

Using what you have just learned, copy the **APDefault** display type under the name of **Training Display**.

Please see page 71 of this manual or click [here](#) for instructions regarding copying an existing display type under a new name. You will continue to modify the Training Display display type in the next few activities.

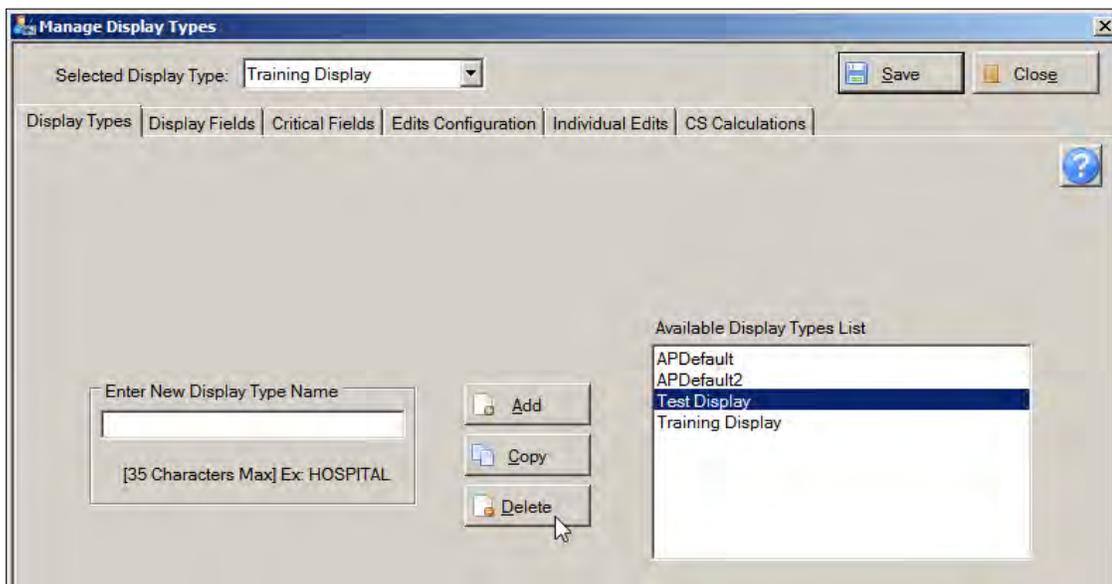
Deleting a Display Type

To delete an abstracting display type, complete these steps:

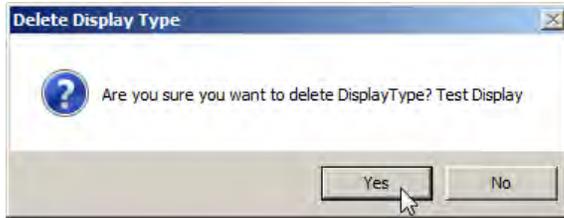
1. Open the Manage Abstracting Display Types window, either by clicking on the **Administration** menu, and selecting **Manage Abstracting Display Types**, or using the **Ctrl+D** keystroke.

Result: The **Manage Display Types** window opens defaulted to the **Display Types** tab.

2. Select the **display type** that you would like to delete from the **Available Display Types List** on the right, and click **Delete**.

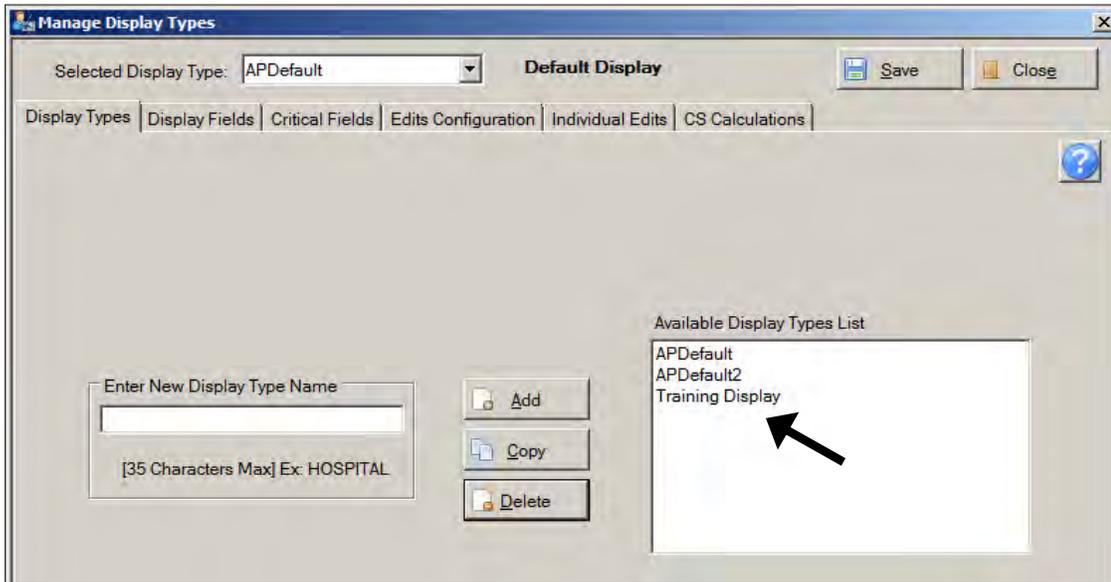


Result: The application prompts you to confirm that you would like to delete the currently selected display type.



3. Click **Yes**.

Result: The display type is deleted from the application, and is no longer listed in the **Available Display Types List**.



Activity 5 - Deleting a Display Type

Using what you have just learned, delete the **Test Display** display type.

Please see page 73 of this manual or click [here](#) for instructions regarding copying an existing display type under a new name.

Five Steps for Building a Display Type

Whether you create a new abstracting display type by adding a new one or copying an existing one, as mentioned earlier, there are five steps you will need to go through next to build the display type. You do not have to use the options in all five steps. Once you have named and created a new display type on the Display Types tab, the remaining tabs on the Manage Display Types window take you through the steps to build or update the display type. This table describes these steps:

On this tab . . .	You select the following for the display type. . .
1. Display Fields	fields that are to be collected with the display type, set properties for individual fields, and group fields into sections if desired

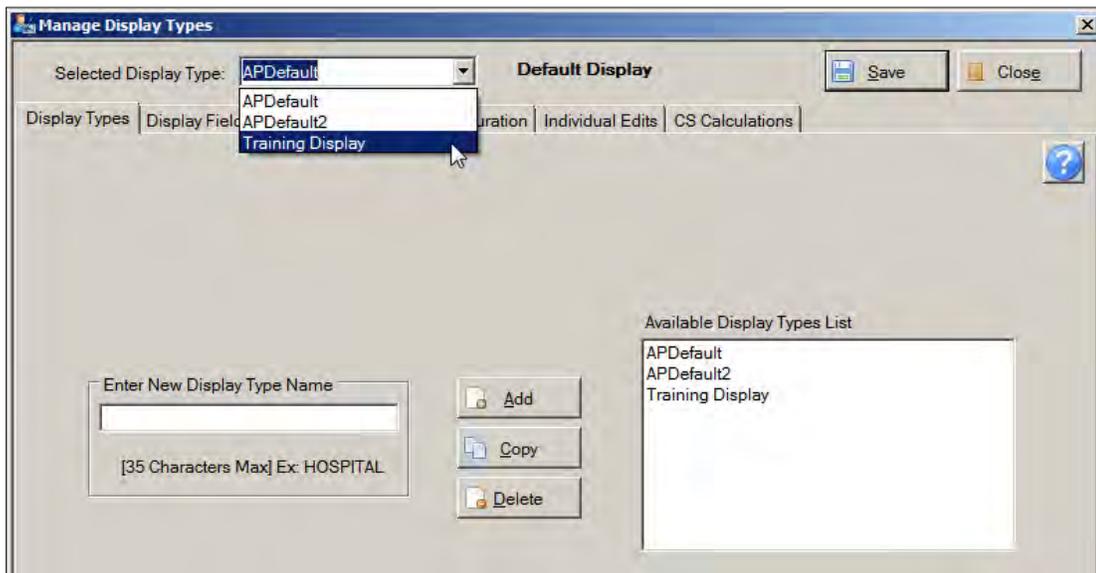
On this tab . . .	You select the following for the display type. . .
2. Critical Fields	fields that must contain information to complete an abstract (required fields)
3. Edits Configuration	edit set (determines how the system edits the abstracted data), and set edit set execution options
4. Individual Edits	edit set execution options for individual edits, over-riding the options selected for the edit set
5. CS Calculations	Collaborative Staging calculation options

Step 1: The Display Fields Tab

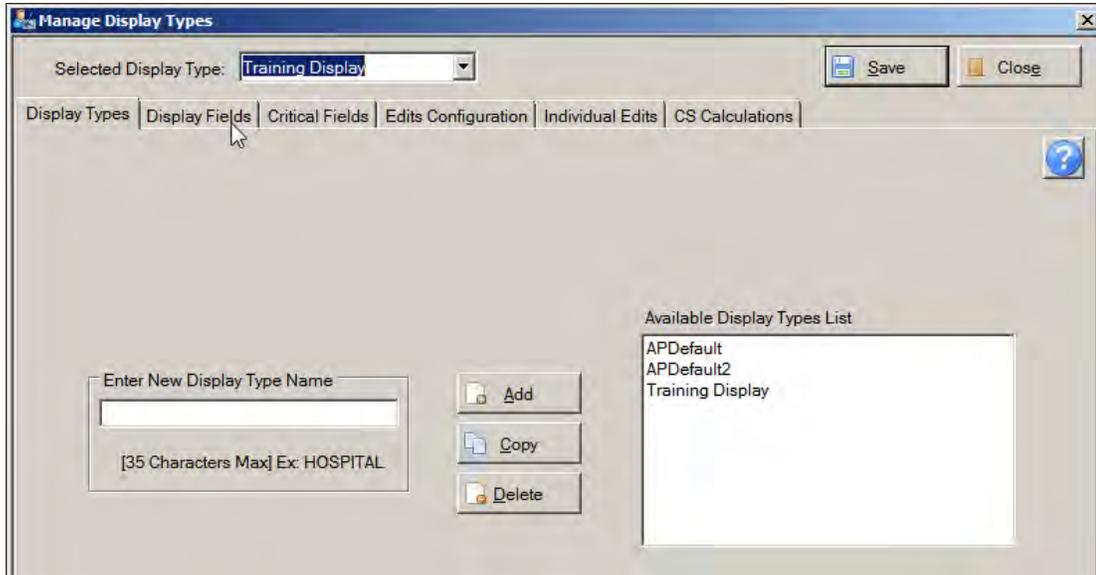
After adding a new or copying an existing display type to create a new display type, you then modify the display type. The first step is to select data fields into the display type, which includes setting field properties such as a customized field label or default value, if desired. At the discretion of the Administrator, the fields in the display type can be organized into logical sections, which also have customizable labels. Section headings, for example, Hospital Specific and Demographic, are user-specified and can organize the fields for clearer viewing and facilitation of data entry by the Abstractor.

To open the Display Fields tab, complete these steps:

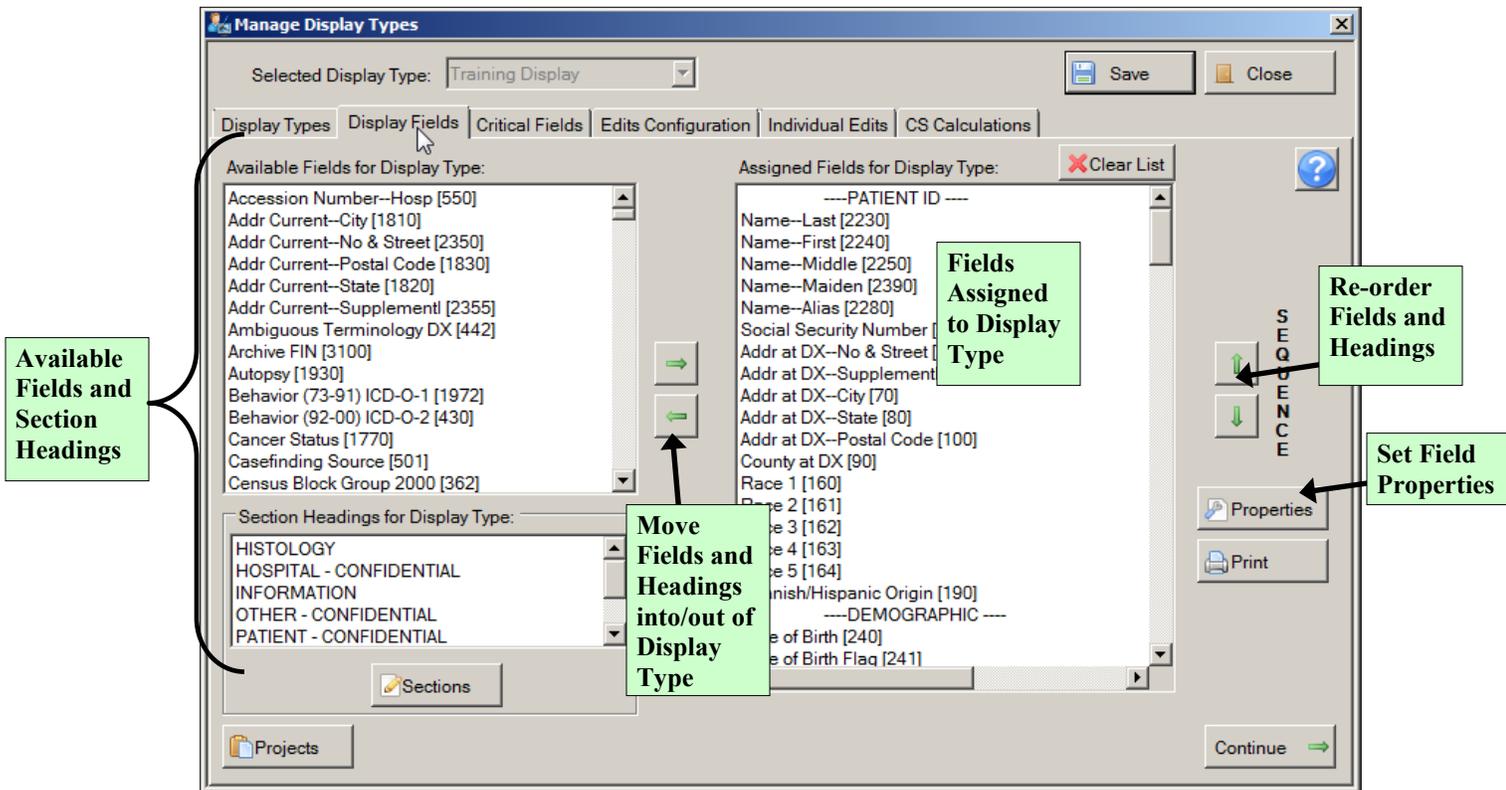
1. **Select** the display type you would like to build or update from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Display display type is being selected and modified.



2. Click the **Display Fields** tab.



Result: The **Manage Display Types** window opens the **Display Fields** tab for the selected display type.



The Administrator uses the Display Fields tab to select the fields for which data is to be collected into or out of the display type, and group the fields into sections if desired. Using the left and right arrow buttons, fields and section headings are moved from the lists of available data fields and section headings on the left side of the window to the list of data fields and section headings on the right to include them in the selected display type. The Sequence up and down arrow buttons are used to re-order the fields and section headings once they have been added to the display type.

Adding Section Headings to a Display Type

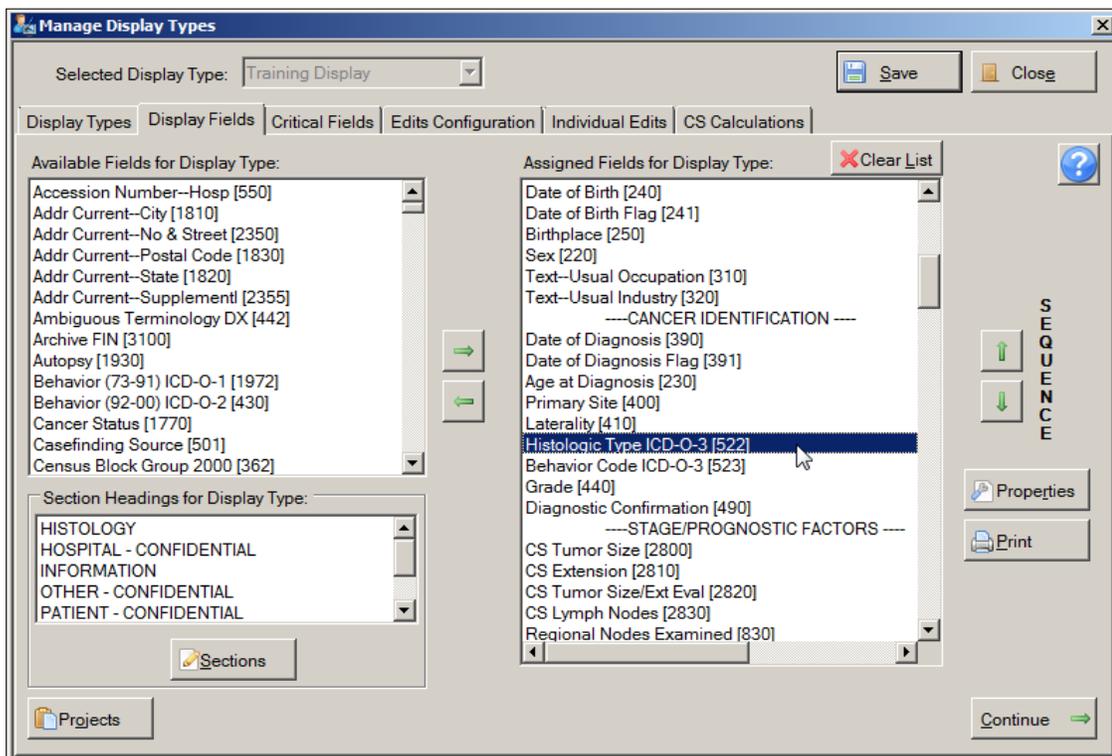
Section headings are added to a display type to organize the fields in the display type into logical groups of related fields.



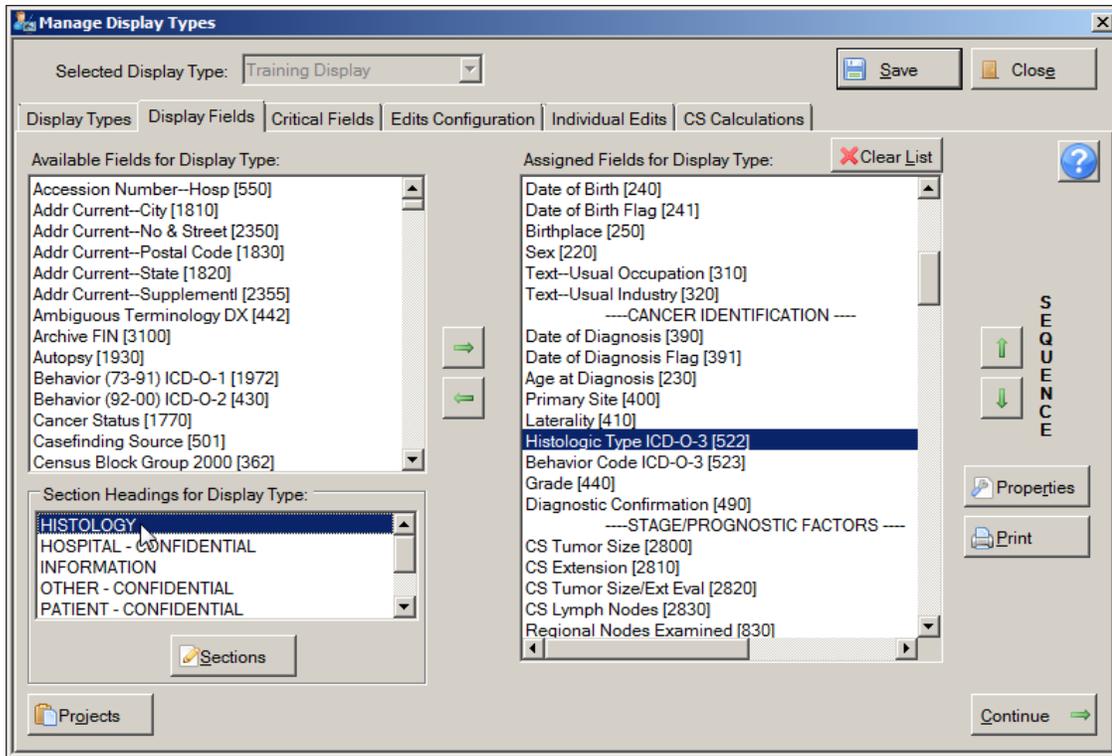
At a minimum, at least one section heading is required to be assigned to each display type, and must be placed as the first item in the display type.

To add an existing section heading to a display type, complete these steps:

1. In the Assigned Fields for Display Type list, select the field above which you would like to place the Section header. In the example shown, the section heading of HISTOLOGY is being moved into the Training Display display type above the field of Histologic Type ICD-O-3, so the field of Histologic Type ICD-O-3 is selected from the Assigned Fields for Display Type list.

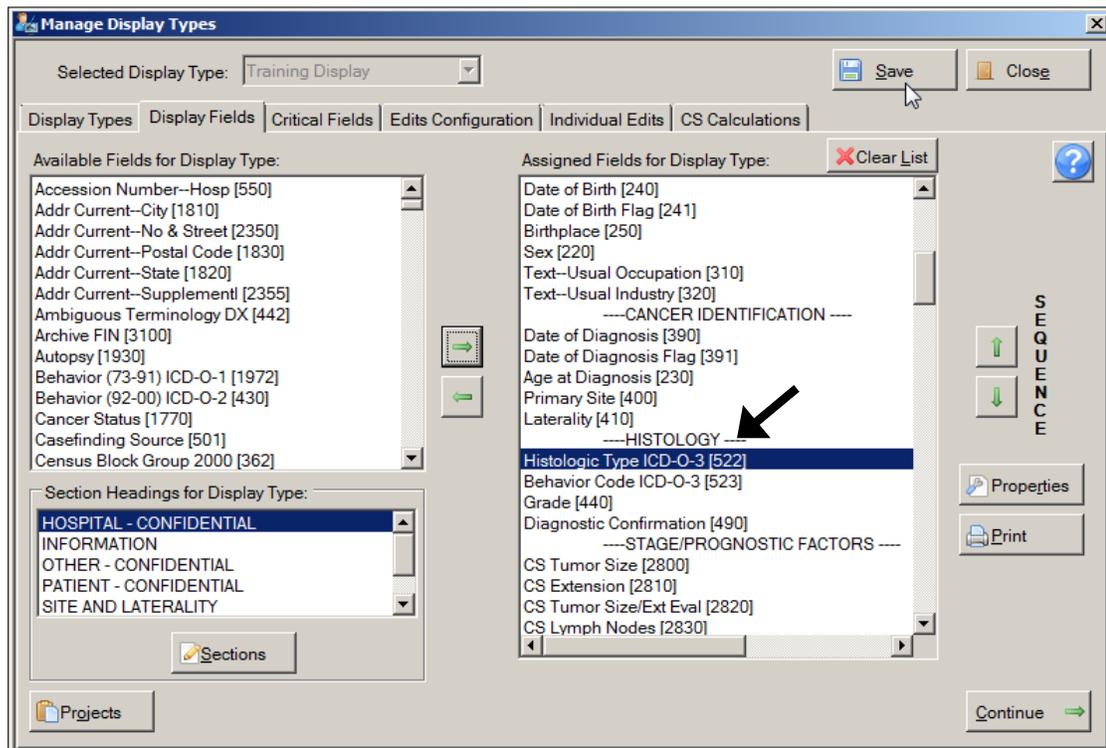


2. In the **Section Headings for Display Type** list on the lower left of the Display Fields tab, select the section heading that you would like to move into the display type. In the example shown, the section heading of HISTOLOGY is being moved into the Training Display display type.



3. Click the green right-pointing arrow  to move the heading into the display type.

Result: The section heading is removed from the Section Headings for Display Type list on the left, and is moved into the Assigned Fields for Display Type list on the right, above the currently-selected field in the list.



- If the placement of the header is not as desired, use the SEQUENCE up () and down () arrows to move the section heading up or down in the order of the display type to the desired position.
- Click **Save**.

Activity 6 - Adding a Section Heading to a Display Type

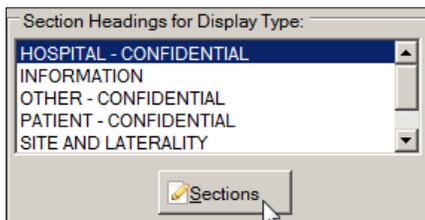
Using what you have just learned, **add the section heading of HISTOLOGY** to the Training Display display type, and position the heading **directly above the Histologic Type ICD-O-3 field** in the Assigned Fields for Display Type list. Feel free to add other section headings as well. Please see page 77 of this manual or click [here](#) for instructions regarding adding section headings to display types.

Managing Section Headings

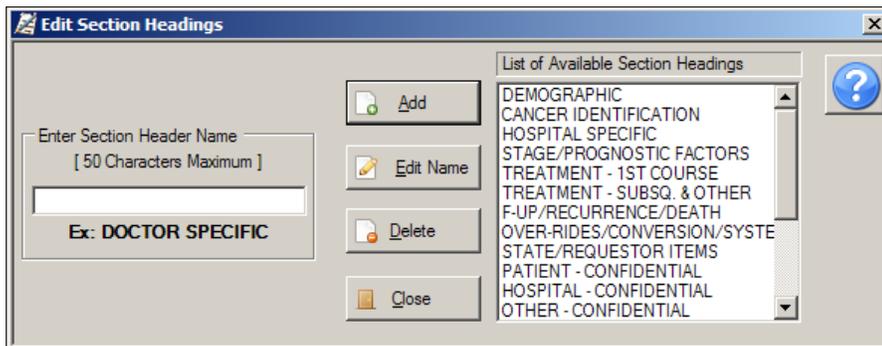
Although Abstract Plus version 3.1 comes with many section headings, you are not limited to these section headings. The Administrator can create new section headings, rename existing section headings, and delete section headings.

To manage the Section Headings for Display Type list, complete these steps:

- On the **Display Fields** tab, click **Sections** in the lower left-hand area of the window.



Result: The **Edit Section Headings** window opens.

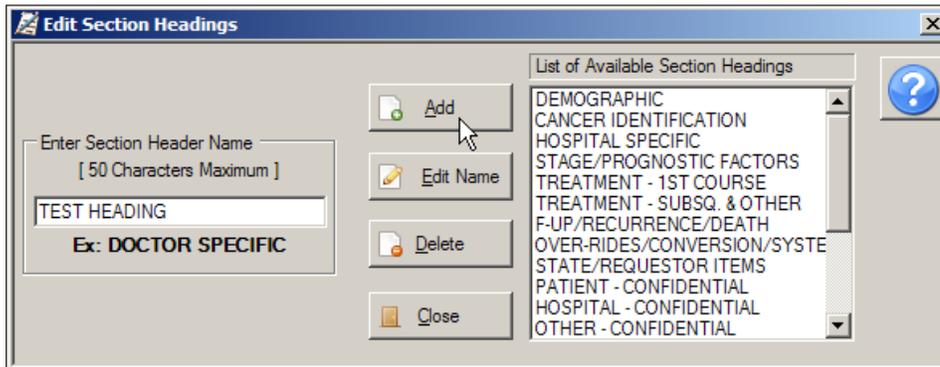


The Administrator uses the Edit Section Headings window to **add** a new section heading to the application, **edit the name** of an existing section heading, or **delete** an existing section heading. A list of existing section headings is displayed in the **List of Available Section Headings** on the right.

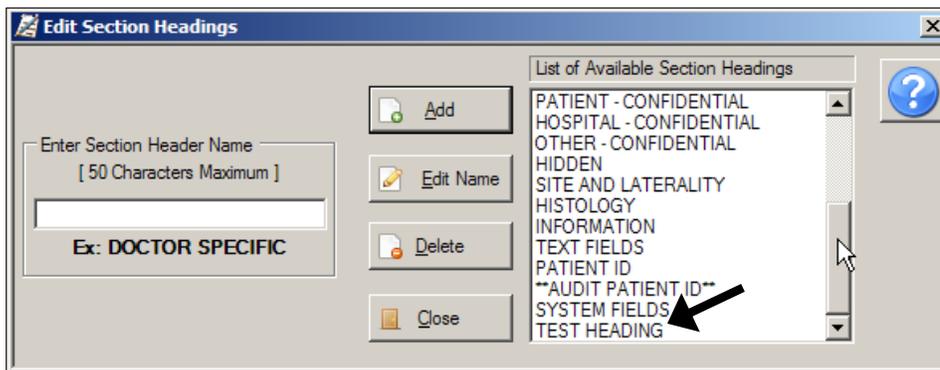
Adding a New Section Heading

To add a new section heading to the application, complete these steps:

1. On the Edit Section Headings window, type a **name for the new section heading** in the **Enter Section Header Name** box on the left, and click **Add**. In the example shown, a new section heading named TEST HEADING is being added to the application.



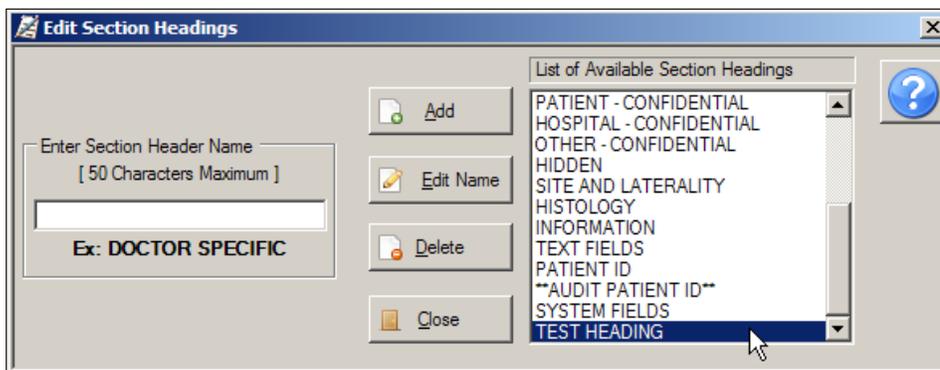
Result: The new section heading is added to the **List of Available Section Headings** on the right.



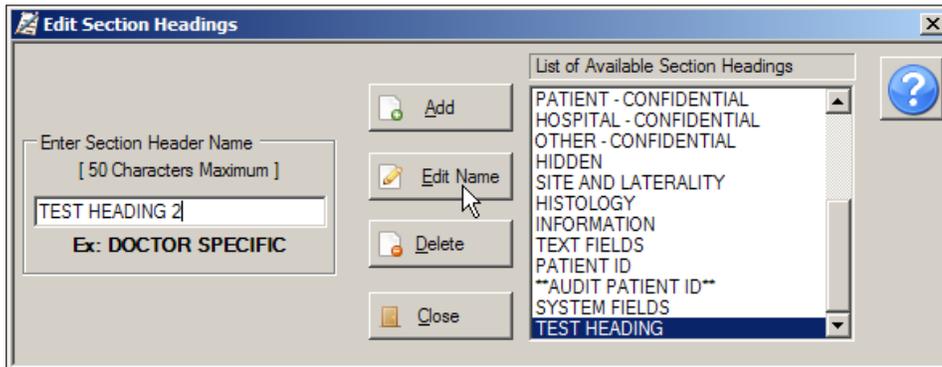
Editing the Name of an Existing Section Heading

To edit the name of an existing section heading, complete these steps:

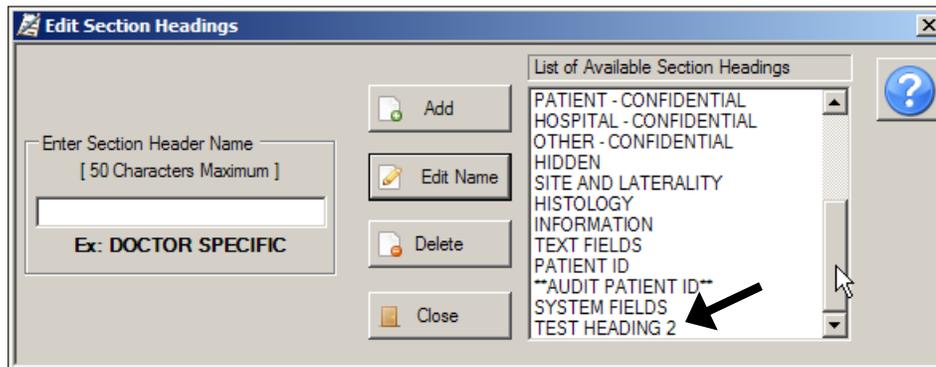
1. **Select** the section heading that you would like to rename from the **List of Available Section Headings** on the right. In the example shown, the section heading named TEST HEADING is being re-named, so it is selected from the List of Available Section Headings.



2. Type the **new name for the existing section heading** in the **Enter Section Header Name** box on the left, and click **Edit Name**. In the example shown, the section heading named TEST HEADING section heading is being re-named to TEST HEADING 2.



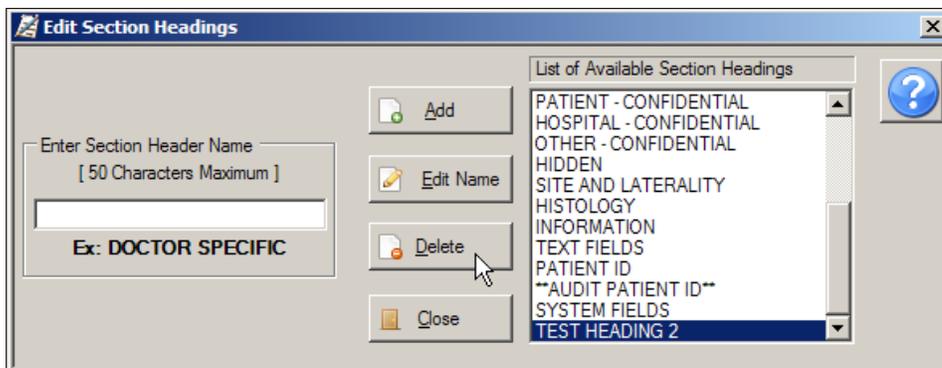
Result: The section heading is renamed in the List of Available Section Headings.



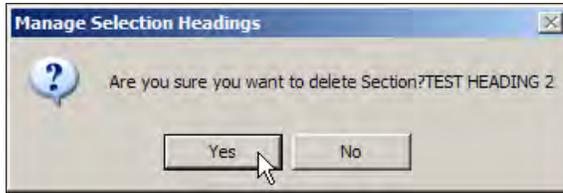
Deleting a Section Heading

To delete a section heading, complete these steps:

1. **Select** the section heading that you would like to delete from the **List of Available Section Headings** on the right, and click **Delete**. In the example shown, the section heading being deleted is named TEST HEADING 2, so it is selected from the List of Available Section Headings.



Result: The application prompts you to confirm that you would like to delete the currently selected section heading.



2. Click **Yes**.

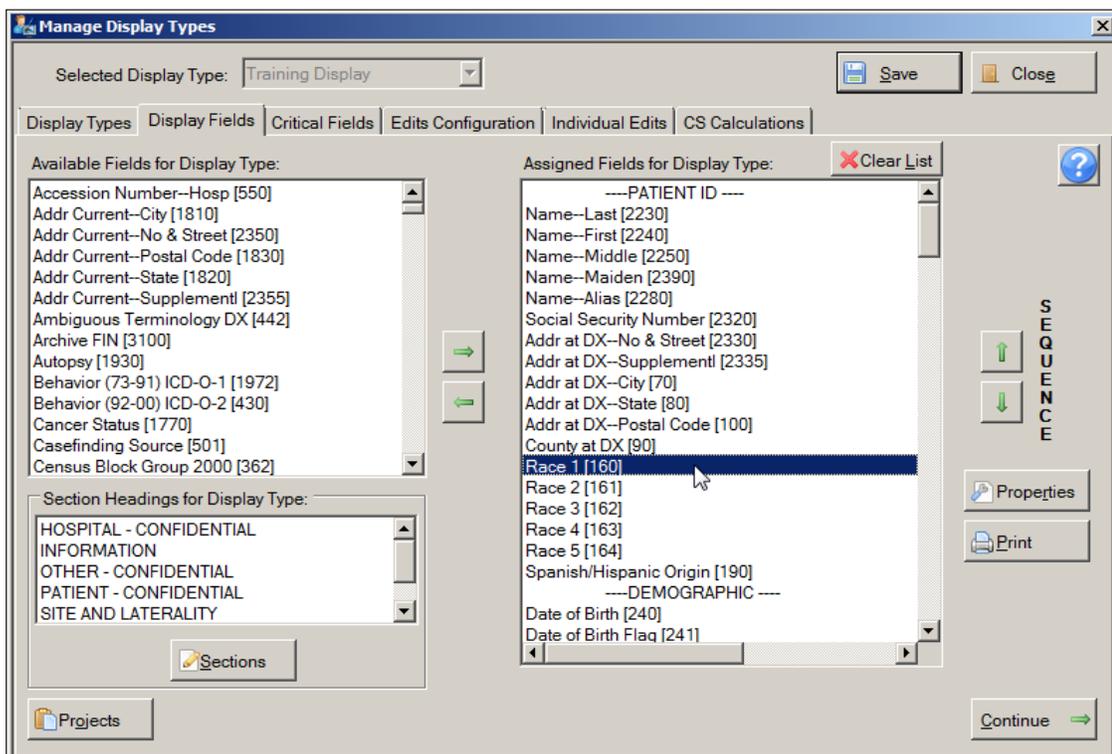
Result: The section heading is deleted from the application, and is no longer listed in the List of Available Section Headings.

Adding Fields to a Display Type

After adding section headings to the Assigned Fields for Display Type list, you then add fields to the display type. When adding fields to a display type it is important to keep in mind what data items you would like to collect, and of those data items, which you would like to require (i.e., make a critical field, cannot be blank), as well as what data items for which you would like to present a default value to Abstractor. It is also important to know what data items your central registry system will eventually require, for example, system fields such as Morph Coding Sys-Current.

To add fields to a display type, complete these steps:

1. In the **Assigned Fields** for Display Type list, **select the field or section heading above which** you would like to **place the field** that you are adding to the display type. In the example shown, the Addr Current fields are being added to the Training Display display type above the field of Race 1, so the field of Race 1 is selected from the Assigned Fields for Display Type list.

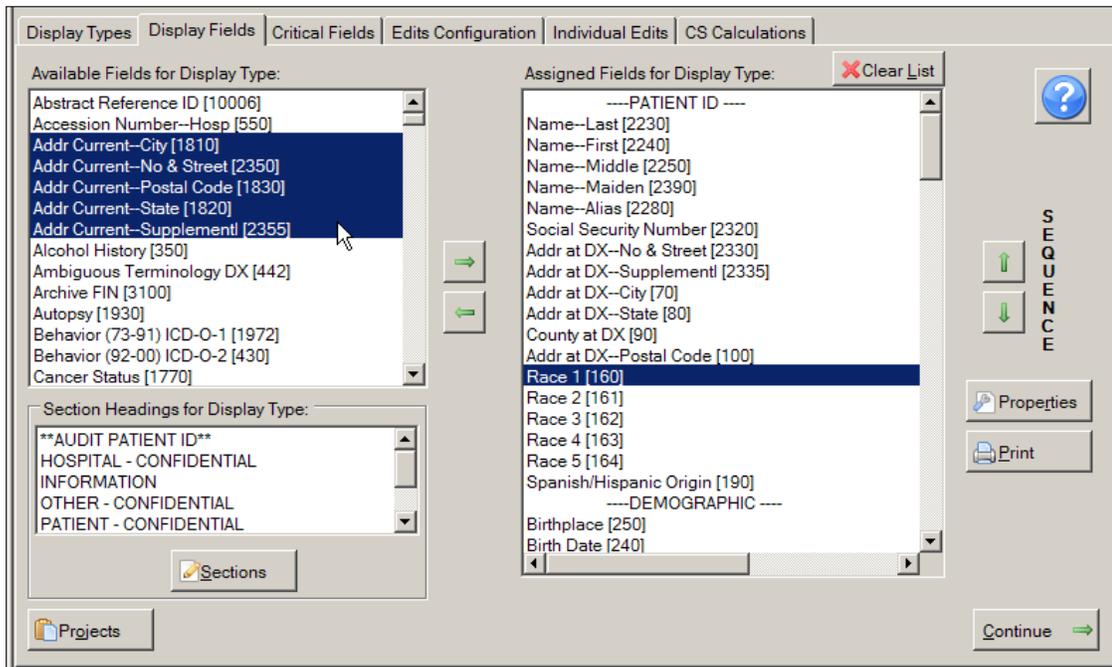


- In the **Available Fields for Display Type** list on the upper left of the Display Fields tab, select the field or fields that you would like to move into the display type. In the example shown, the Addr Current fields are being added to the Training Display display type.

If your central registry collects any state-specific or non-standard fields (i.e., any field not listed in the NAACCR Volume II Data Dictionary: <http://www.naacr.org/standards/volumeii>), and/or has any state-specific look-ups, the fields and look-ups can be added to the application. Please see the **Abstract Plus System and IT Personnel Requirements** document for more information about adding custom fields and or custom look-ups to the application.



CDC will create customized installations of Abstract Plus for NPCR-funded registries only. Other interested parties should follow the instructions provided in the Abstract Plus System and IT Personnel Requirements document to add custom fields and look-ups to the application for use in their jurisdiction.

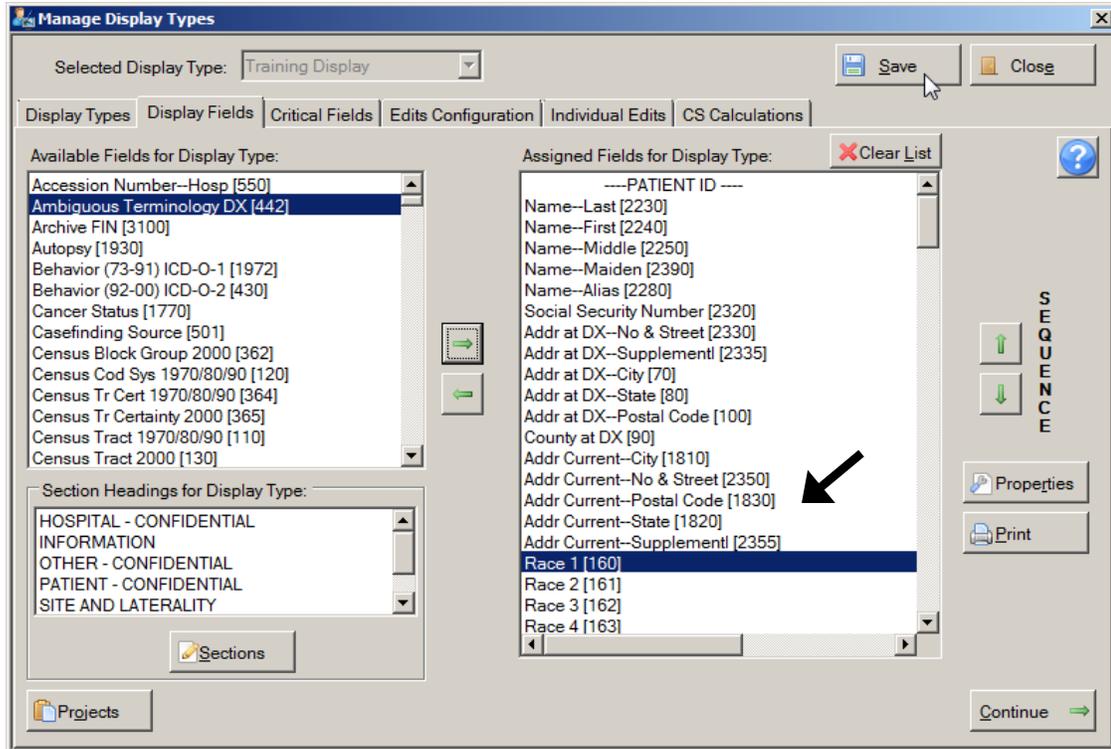


Tip

To select one field, click the name of the field. To select a group of fields together, click the first field, press and hold the SHIFT key, and then click the last field in the group. To select multiple fields that are not in order, press and hold the CTRL key and click each field.

- Click the green right-pointing arrow  to move the field or fields into the display type.

Result: The field(s) is removed from the Available Fields for Display Type list on the left, and is moved into the Assigned Fields for Display Type list on the right, above the currently-selected field in the list.



4. If the order of the placed fields is not as desired, use the SEQUENCE up () and down () arrows to move the field or fields up or down in the order of the display type to the desired position.



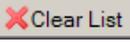
Tip

When you move the available fields into a display type, the system places the fields directly above the field that you have selected in the Assigned Fields for Display Type list. If you have not selected a field in the Assigned Fields for Display Type list the system places the fields at the top of the Assigned Fields for Display Type list.

5. You can save updates to the fields either by clicking **Save**, or the **Continue** button, which saves updates and opens the next tab, Step 2, Critical Fields.

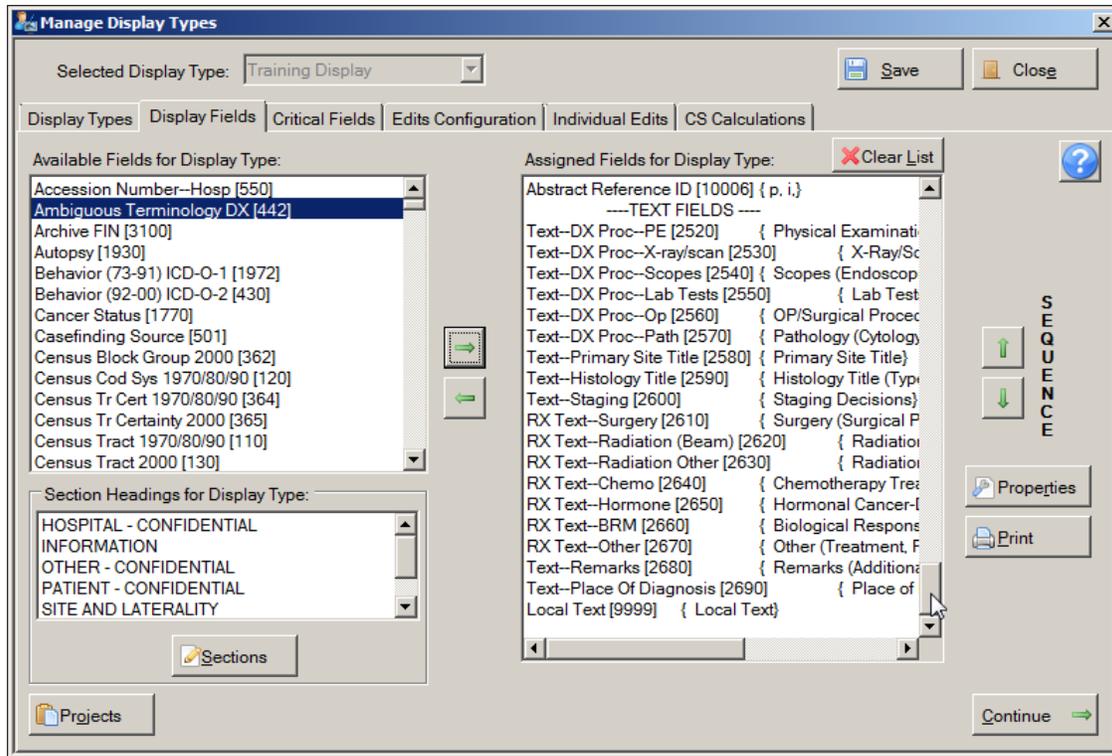


Important

Clicking  (Clear List) at the top of the Assigned Fields for Display Type list will remove all fields and sections from a display type. This should be done with caution.

NAACCR Text Fields and Display Types

As you learned in Chapter 2 of this manual, [the Abstract Plus Abstracting window](#) is divided into 2 main sections: a data entry grid for coded values on the left, and a data entry grid for text fields on the right. When generating display types, it is important to note that the text fields are handled differently than regular data fields. Rather than being able to select the individual text fields into and out of a display type, **all NAACCR text data items** [items #2520 – 2690] **are included in every display type** in a special section at the very bottom of the display type called **TEXT FIELDS**:



These are the text fields that are displayed to the Abstractor in the data entry grid on the right in the abstracting window.

Although all text fields are automatically included in all display types and are restricted to the TEXT FIELDS section, the **order** in which the text fields are displayed to the Abstractor in the data entry grid on the right in the abstracting window may be modified by selecting the text field in the Assigned Fields to Display Type list, and using **SEQUENCE** up () and down () arrows to move the text field up or down in the display order within the TEXT FIELDS section to the desired position.

Activity 7 - Adding Fields to a Display Type

Using what you have just learned, **add all of Addr Current-- fields** to the Training Display display type, and position them **directly above the Race 1 field** in the Assigned Fields for Display Type list. Reorder the fields so that they are listed in the following order:

1. Addr Current—No & Street
2. Addr Current—Supplemental
3. Addr Current—City
4. Addr Current—State
5. Addr Current—Postal code

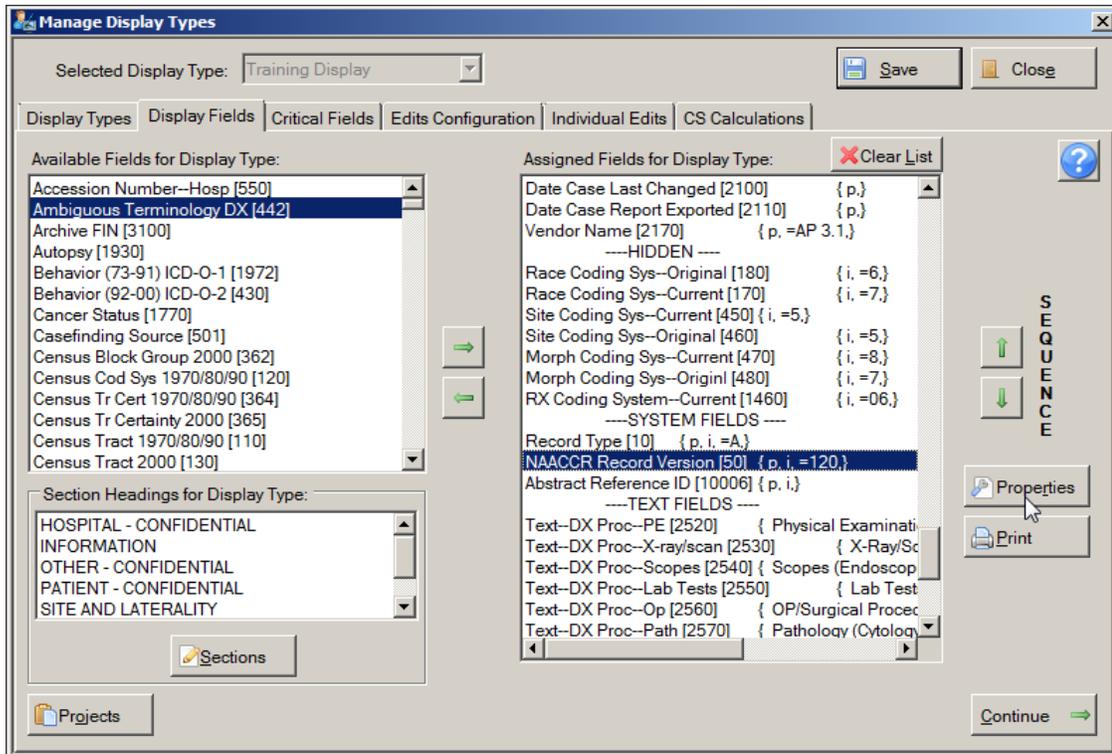
Feel free to experiment and add other fields as well. Please see page 82 of this manual or click [here](#) for instructions regarding adding fields to display types.

Assigning Property Values to Individual Fields

Once a field has been added to a display type, special properties may be specified for the field, such as a customized label or default value.

To assign property values to a field, complete these steps:

1. In the **Assigned Fields for Display Type** list, locate and **select the data item** for which you would like to specify field properties. In the example shown, properties are being reviewed for the field of NAACCR Record Version.



2. Click **Properties**.

Result: The **Properties** window opens for the selected field.

These are the fields in the Properties window:

Property	Description
Protected	When check box is checked, value of field is displayed to the Abstractor, but cannot be edited
Invisible	When check box is checked, the field is not visible to the Abstractor, but a defaulted value is edited and transmitted with the abstract
Field Display Label	User-specified label for the field; by default the standard NAACCR data item name is used for a field label, but this default label can be customized
Field Default Value	Value that is initially displayed in the field.
Field Message	Information entered for the Field Message property appears in a text box that pops up when the Abstractor places the cursor in the field; for example, a reminder regarding the format of a date field entry
Use Default Field Message	Some fields that come with default field messages, you can choose whether to use the default message or enter your own in the Field Message box; when check box is checked, the default field message is used
Default Field Message	For fields that come with default messages, the default message will be displayed here

In the example shown, the field of NAACCR Record Version has been protected, set to invisible, and defaulted to a value of 120.



Tip

Defaulting values for a field can save the Abstractor the time of abstracting values into these fields, in particular for situations where the majority of abstracts end up with the field coded to the default value. If the Protected and Invisible properties are not checked for a defaulted field, the Abstractor may modify the presented default values if necessary.

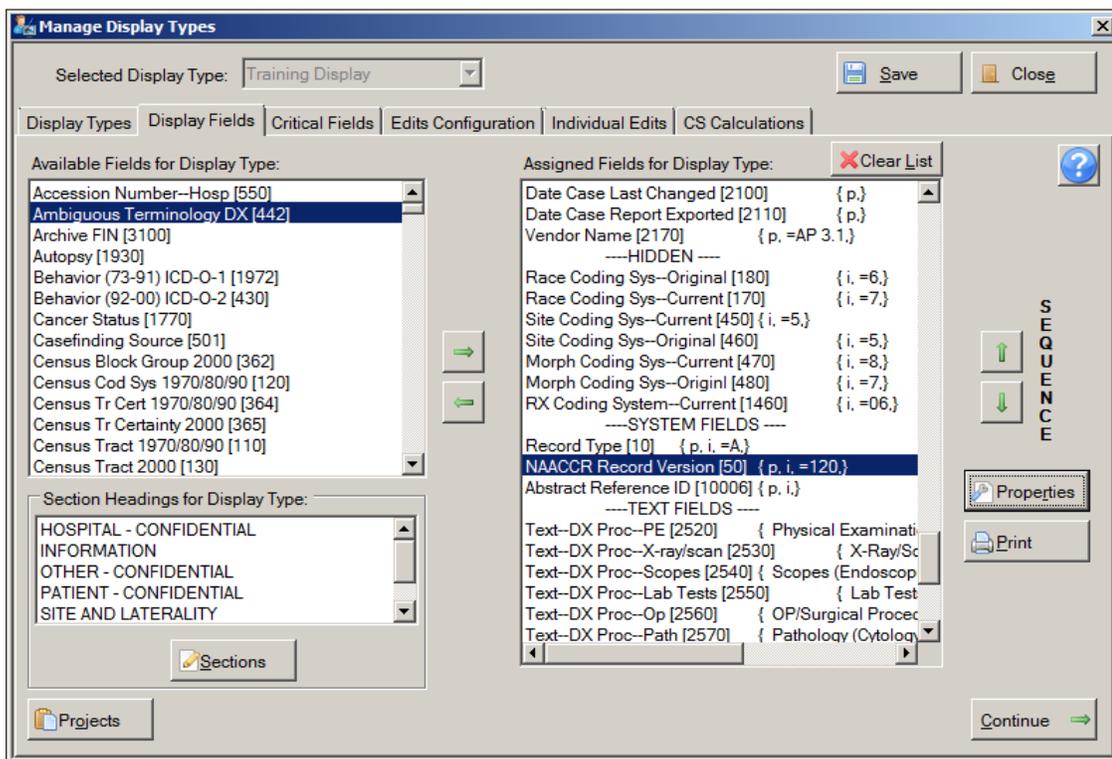


Important

Important Information Regarding Assigning Default Values to Collaborative Staging (CS) Site-Specific Factors (SSFs): Abstract Plus version 3.1 automatically fills in default values for CS SSFs that are undefined for the schema being entered. However, some central registries may choose not to collect a certain SSF regardless of whether or not it is defined for the entered schema---i.e., there may be some SSFs that the registry is not collecting at all. **For any SSF that is not being collected by the registry for any schema, the SSF can be defaulted to 988, protected and made invisible.** In this way the SSF field no longer participates in the automatic defaulting, and is always submitted to the registry as 988.

3. Click **Cancel**.

Result: You are returned to the Display Fields tab.



Now take notice of the **symbols in brackets** to the right of the NAACCR Record Version field name. These symbols represent the **properties** assigned to the field.

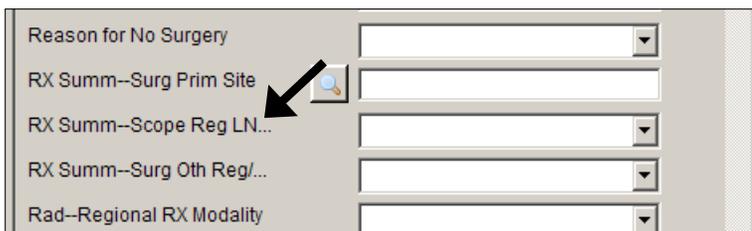
Field property definitions are displayed between the brackets {} to the right of the field name and NAACCR number in the Assigned Fields for Display Type list. In addition, they are separated with commas and are always listed in the same order, as defined in the following table:

Property Symbol	Description
p	Protected – value cannot be changed by auditor
i	Invisible – value cannot be seen in the entry screen
=	Default Value Follows equal sign – value that will automatically be added to this field in the entry screen.
Field label if assigned	Field Display Label

The following table illustrates some examples of set properties and the symbols that are displayed for the set properties in the Assigned Fields for Display Type list:

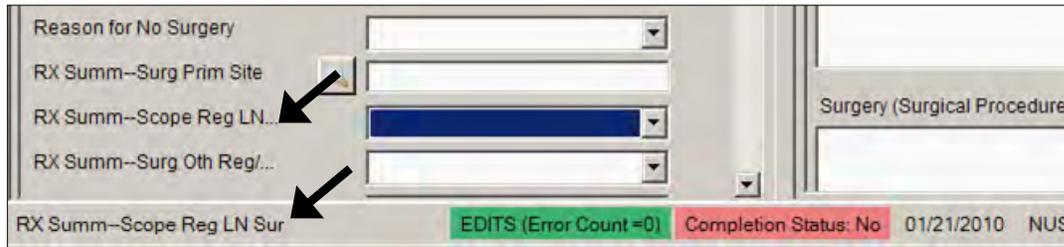
Property Setting	Description
Record Type [10] { NAACCR Record Type }	The field of Record Type, NAACCR item #10, will be labeled as NAACCR Record Type on the data entry grid
Record Type [10] { =A, }	The field of Record Type, NAACCR item #10, will be defaulted to a value of A; the field may be modified by the Abstractor
Record Type [10] { i, =A, }	The field of Record Type, NAACCR item #10 is set to invisible, and defaulted to a value of A; the field cannot be modified by the Abstractor because it will not be visible in the data entry grid
Record Type [10] { p, i, =A, NAACCR Record Type }	The field of Record Type, NAACCR item #10 is set to protected, invisible, assigned a default value of A, and has a customized label of NAACCR Record Type

If a field label, whether it be the default formal NAACCR data item name, or a custom label specified via the Properties window, is longer than what can be displayed in the abstracting window, the first 20 or so characters of the label will be displayed, followed by "...” to represent that there are more characters in the field label.



Although the option to customize a field’s label in the display type is available, note that the field will be listed by the standard NAACCR data item name when the Abstractor goes to view the majority of context help for the data item, e.g., looking up the field in NAACCR Volume II Data Dictionary, or viewing edits error information. To facilitate the retrieval of supplemental information for a field regardless of the customized label

that is assigned to the field in the display type, the standard NAACCR data item name of the current field in the data entry grid is displayed in the lower left-hand corner of the abstracting window:



Setting Properties for NAACCR Text Fields

As mentioned, the text fields that are displayed to the Abstractor in the data entry grid on the right in the abstracting window are handled differently than other fields in the display type. Since the NAACCR text data items [items #2520 – 2690] are included in the TEXT FIELDS section in every display type and displayed to the Abstractor, the **Protected and Invisible properties cannot be set** for the text fields. In addition the **Field Default Value property cannot be set** for the text fields.

However, the remaining properties of the **Field Display Label** and the **Field Message can be set** for the text fields. In particular, customized field messages specified for text fields that state specifically what information is expected to be entered in the text field can be very helpful to the Abstractor.

System Fields and Display Types

A final consideration when generating abstracting display types is the inclusion of and provision of default values to any system- or coding system-related fields that your central registry system may require when the completed abstract is eventually submitted for processing at your central registry. The below table contains a list of NAACCR data items, along with their suggested default values, that are recommended for inclusion in display types. If you do not want the Abstractor to see these fields or their values, you can assign default values to the fields, and then set the fields to protected and invisible. In this way, the fields will be transmitted with the complete abstract, but the Abstractor will not have to abstract or even be aware of the fields.

NAACCR Data Item Name	Data Item #	Column #	Suggested Default Value
Record Type	10	001	A
FIN Coding System	35	002	2
NAACCR Record Version	50	017	120
Race Coding Sys-Current	450	187	7
Race Coding Sys-Original	180	188	7
Site Coding Sys-Current	450	558	5
Site Coding Sys-Original	460	559	5

NAACCR Data Item Name	Data Item #	Column #	Suggested Default Value
Morph Coding Sys-Current	470	560	8
Morph Coding Sys-Original	480	561	8
RX Coding System-Current	1460	1593	06
First Course Calc Method	1500	1595	2
SEER Coding Sys-Current	2120	1930	9
SEER Coding Sys-Original	2130	1931	9
COC Coding Sys-Current	2140	1932	08
COC Coding Sys-Original	2150	1934	08
ICD-O-3 Conversion Flag	2116	2015	0

Activity 8 - Adding Properties to Display Type Fields

Using what you have just learned, assign the properties in the following table to the specified fields in the **Training Display display** type. For each field for which you are setting properties, remember to:

- i. **Locate and select** the field in the **Assigned Fields to Display Type** list.
- ii. Click **Properties**.
- iii. Specify the properties.
- iv. Click **OK**.

See page 86 of this training manual or [click here](#) for instructions on adding properties to display type fields.

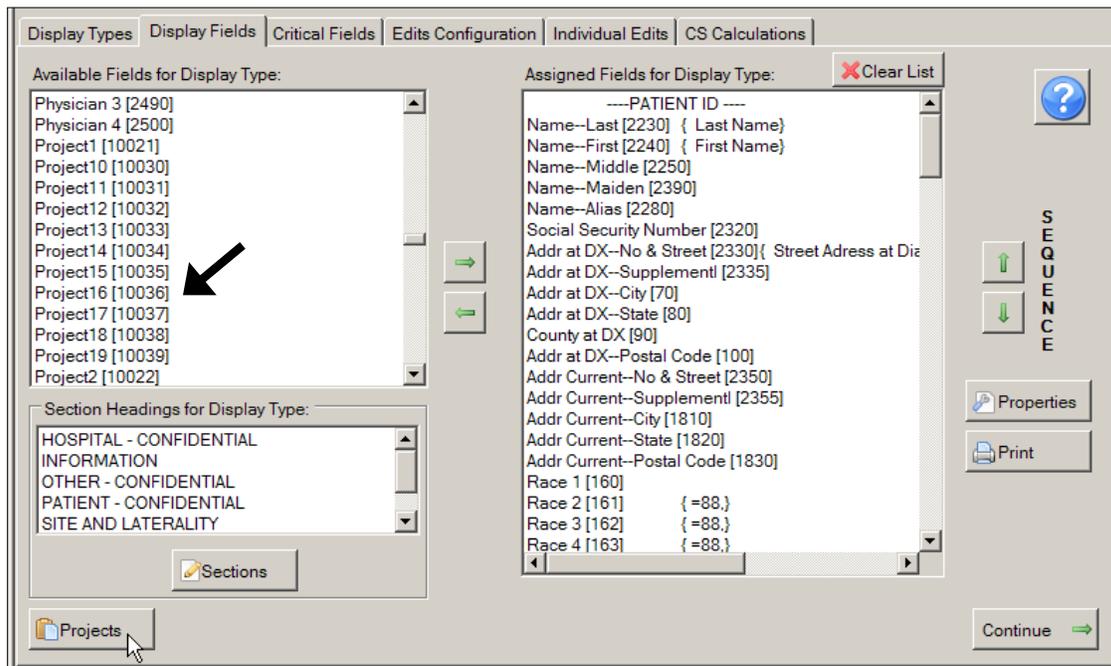
For this field	Set this field property	To...
NAACCR Record Version [50]	Protected and Invisible	Verify these are checked
Name—Last [2230]	Field Display Label	Last Name
Name—First [2240]	Field Display Label	First Name
Addr at DX—No & Street [2330]	Field Display Label	Street Address at Diagnosis
Race 2 [161]	Field Default Value	88
Race 3 [162]	Field Default Value	88
Race 4 [163]	Field Default Value	88
Race 5 [164]	Field Default Value	88

For this field	Set this field property	To...
Text-DxProc-PE [2520]	Field Message	Please be concise and include all relevant information

Managing Abstract Plus Projects

A Project is an avenue for labeling an abstract and grouping abstracts together. With Abstract Plus version 2, all abstracts had to be assigned to a "Project". At least one project had to exist in the system, and by default, version 2 of Abstract Plus came with a Project called STATE to which each new abstract needed to be physically assigned.

As the overwhelming majority of Abstract Plus users did not utilize the Projects feature of Abstract Plus version 2.0, although the use of Projects is still available, it is no longer required. In Abstract Plus version 3.1, Projects are optional True/False application-specific fields that are available from the Available Fields for Display Type List and can be added to any display type (in the same manner as any standard NAACCR data item). As a result, unless the central registry intentionally requires a Project field, abstracts are no longer required to be assigned to a project.

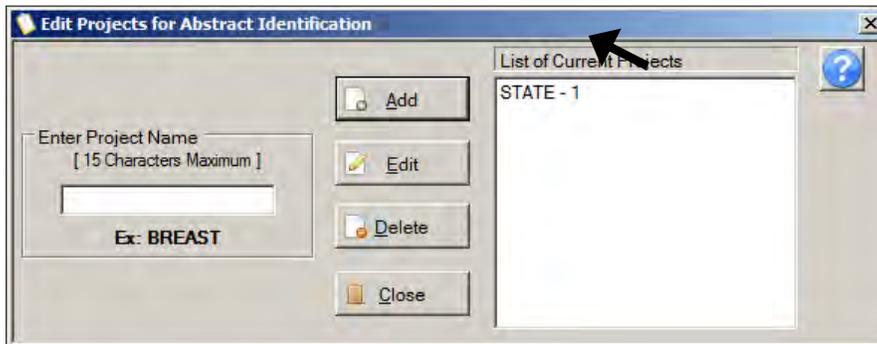


In addition, properties for Project fields can also be set, and work the same way as for standard NAACCR data items with the exception of the Field Display Label property. The Field Display Label of a Project field is automatically set by the Administrator when the Project field is added to the application and associated with one of the 20 Project fields in the Available Fields for Display Type list on the Display Fields tab. Abstract Plus version 3.1 comes with 20 Project fields that can be customized and added to the application and display types.

To manage Projects for Abstract Plus display types, complete these steps:

1. On the **Display Fields** tab, click **Projects**.

Result: The **Edit Projects for Abstract Identification** window opens.



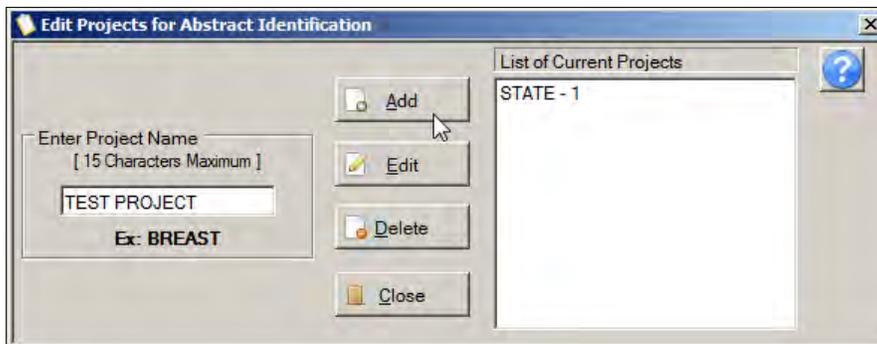
The Administrator uses the Edit Projects for Abstract Identification window to **add** a new Project to the application, **edit** the name of an existing Project, or **delete** an existing Project. A list of existing Projects is displayed in the **List of Current Projects** on the right. By default, Abstract Plus version 3.1 comes with an example STATE Project already added to the application.

Adding a New Project Field to the Application

When a new Project field is added to the application, it is automatically associated with the next available Project field in the Available Fields for Display Type list on the Display Fields tab. The List of Current Projects list tracks what Project field name is associated with which of the 20 Project fields in the Available Fields for Display Type list. The example STATE Project field that comes with the application is associated with the **Project1 [10021]** field in the Available Fields for Display Type list, so the STATE Project field is listed as STATE – 1 in the List of Current Projects to the right.

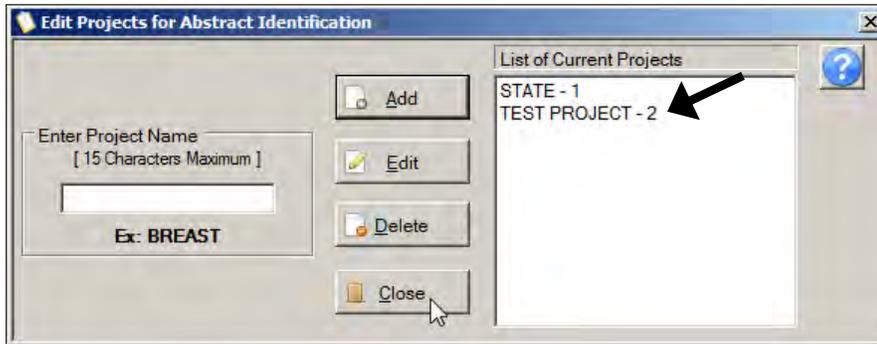
To add a new Project field to the application, complete these steps:

1. On the Edit Projects for Abstract Identification window, type a **name for the new Project** in the **Enter Project Name** box on the left, and click **Add**. In the example shown, a new Project named TEST PROJECT is being added to the application.



Result: The new Project is added to the **List of Current Projects** on the right, and is automatically associated with the next available Project field in the Available Fields for Display Type list on the Display Fields tab. In the example shown, the TEST PROJECT Project field is associated with the **Project2 [10022]** field in the Available Fields for

Display Type list, so the TEST PROJECT Project field is listed as TEST PROJECT– 2 in the List of Current Projects to the right.

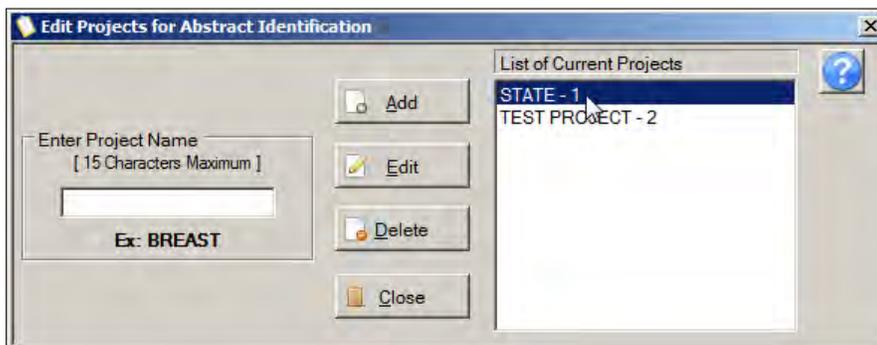


2. Click **Close**.

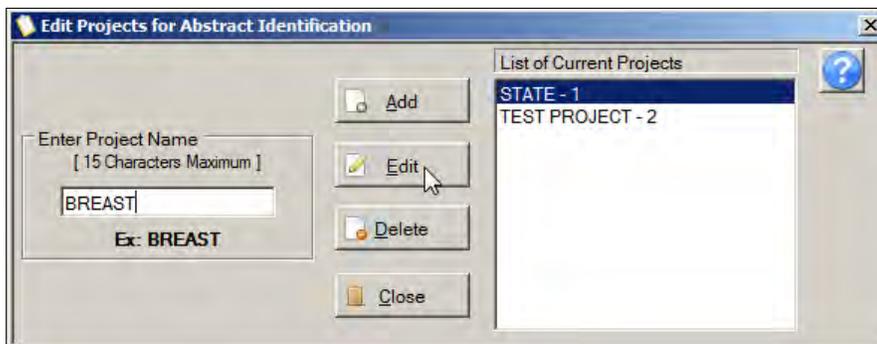
Editing an Existing Project Field Name

To edit the name of an existing Project, complete these steps:

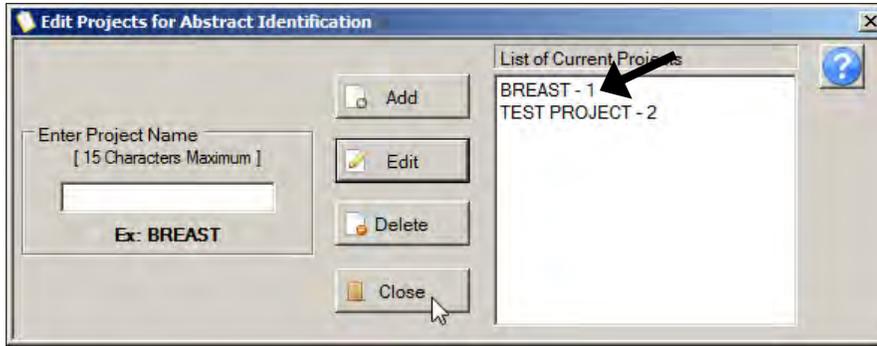
1. **Select** the Project that you would like to rename from the **List of Current Projects** on the right. In the example shown, the example Project named STATE is being re-named, and is selected from the List of Current Projects.



2. Type the **new name for the existing Project** in the **Enter Project Name** box on the left, and click **Edit**. In the example shown, the Project named STATE is being re-named to BREAST.



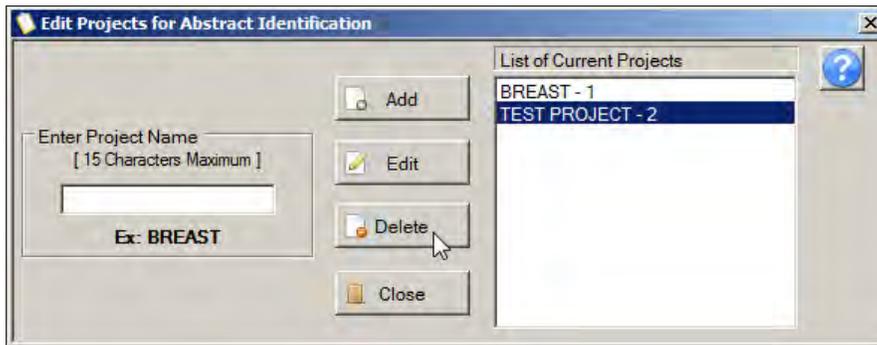
Result: The Project is renamed in the List of Current Projects.



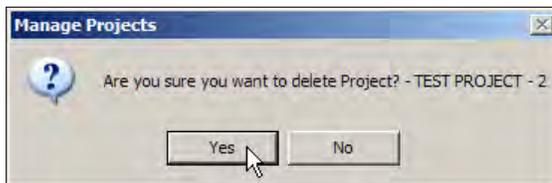
Deleting a Project Field from the Application

To delete a Project field from the application, complete these steps:

1. **Select** the Project that you would like to delete from the **List of Current Projects** on the right, and click **Delete**. In the example shown, the Project being deleted is named TEST PROJECT, and is selected from the List of Available Projects.

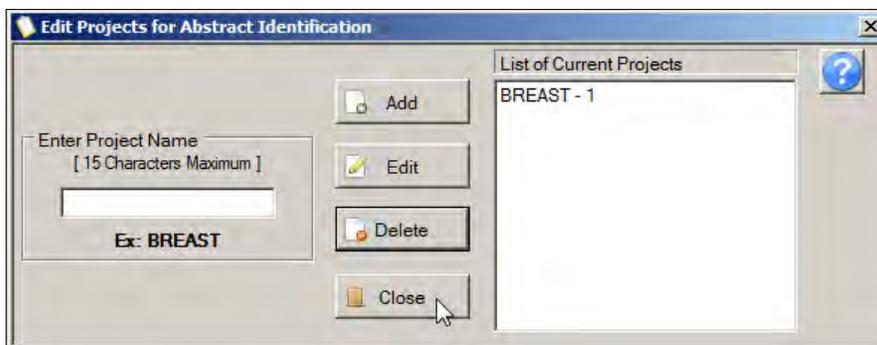


Result: The application prompts you to confirm that you would like to delete the currently selected Project.



2. Click **Yes**.

Result: The Project is deleted from the application, and is no longer listed in the List of Current Projects.



3. Click **Close**.



You cannot delete a Project field if it has been added to a display type and has an abstract assigned to it.

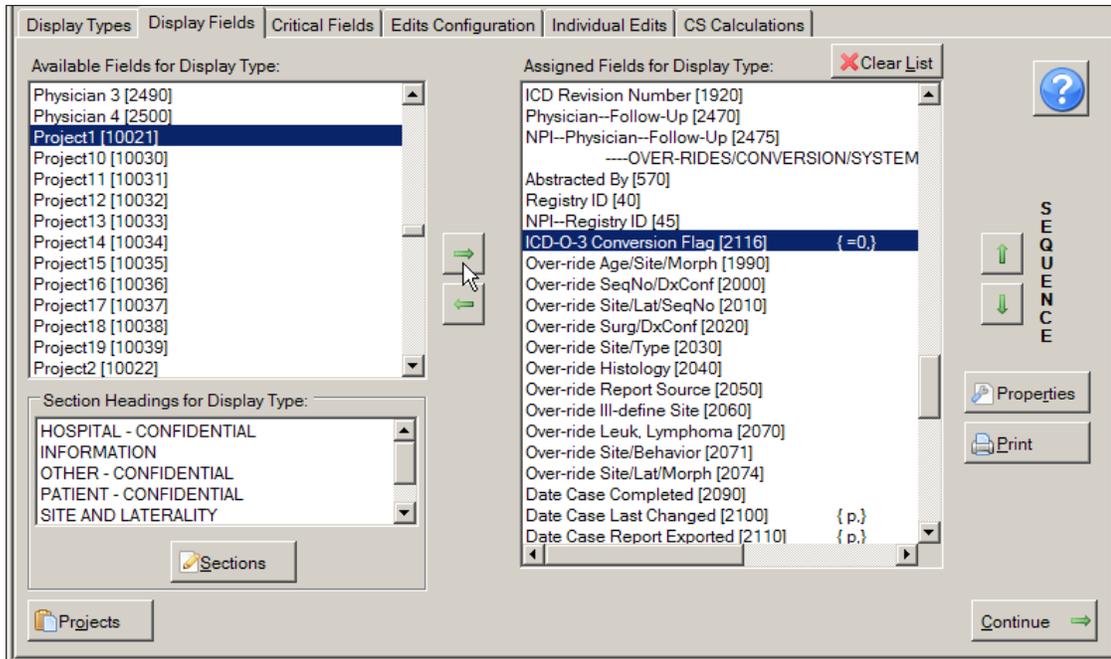
Assigning a Project Field to a Display Type

Once a Project field has been added to the application, it can then be assigned to a display type. Project fields are assigned to display types in the same way as standard NAACCR fields, however, the field property of **Field Display Label** is automatically assigned the **Project field name**, and the **Field Default Value** is defaulted to **TRUE - 1**.

To assign a project to a display type, complete these steps:

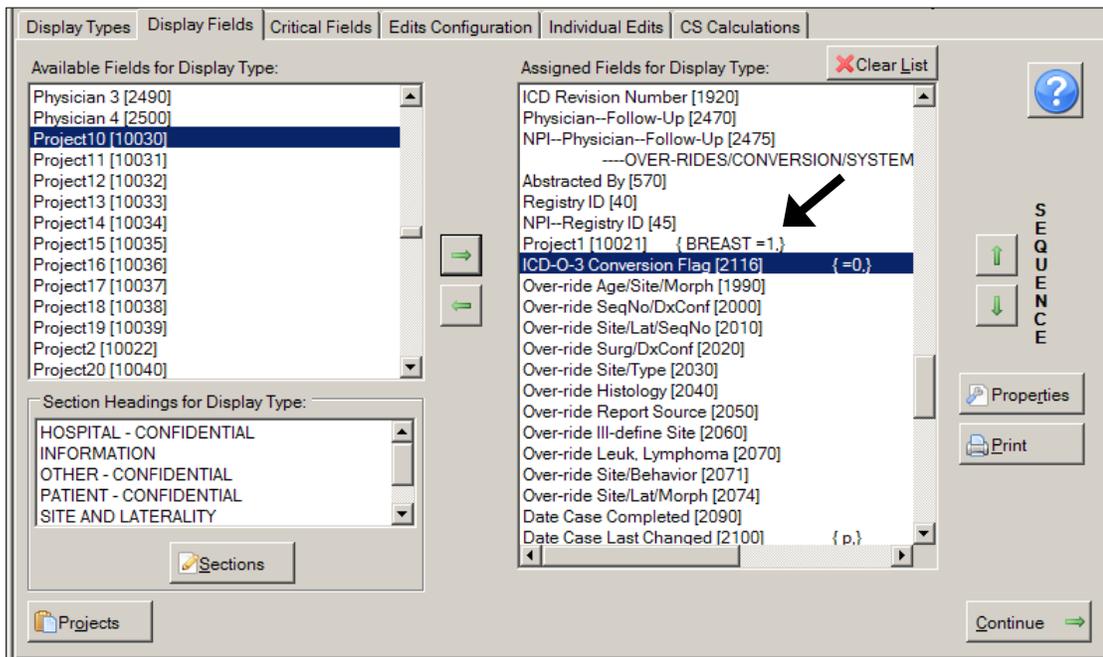
1. In the Assigned Fields for Display Type list, **select the field above which** you would like to **place the Project field** that you are adding to the display type. In the example shown, the Project1 [10021] is being added to the Training Display display type above the field of ICD-O-3 Conversion Flag [2116], so the field of ICD-O-3 Conversion Flag is selected from the Assigned Fields for Display Type list.

2. In the **Available Fields for Display Type** list on the upper left of the Display Fields tab, select the Project field that you would like to move into the display type. In the example shown, the Project1 [12021] is being added to the Training Display display type.



3. Click the green right-pointing arrow  to move the Project field into the display type.

Result: The Project field is removed from the Available Fields for Display Type list on the left, and is moved into the Assigned Fields for Display Type list on the right, above the currently-selected field in the list.



Notice that the field property of **Field Display Label** is automatically assigned the **Project field name**, and the **Field Default Value** is defaulted to **TRUE - 1**. In the example shown, the Project1 [10021] Project field has Project field name of BREAST, and has been defaulted to a value of 1 (True).

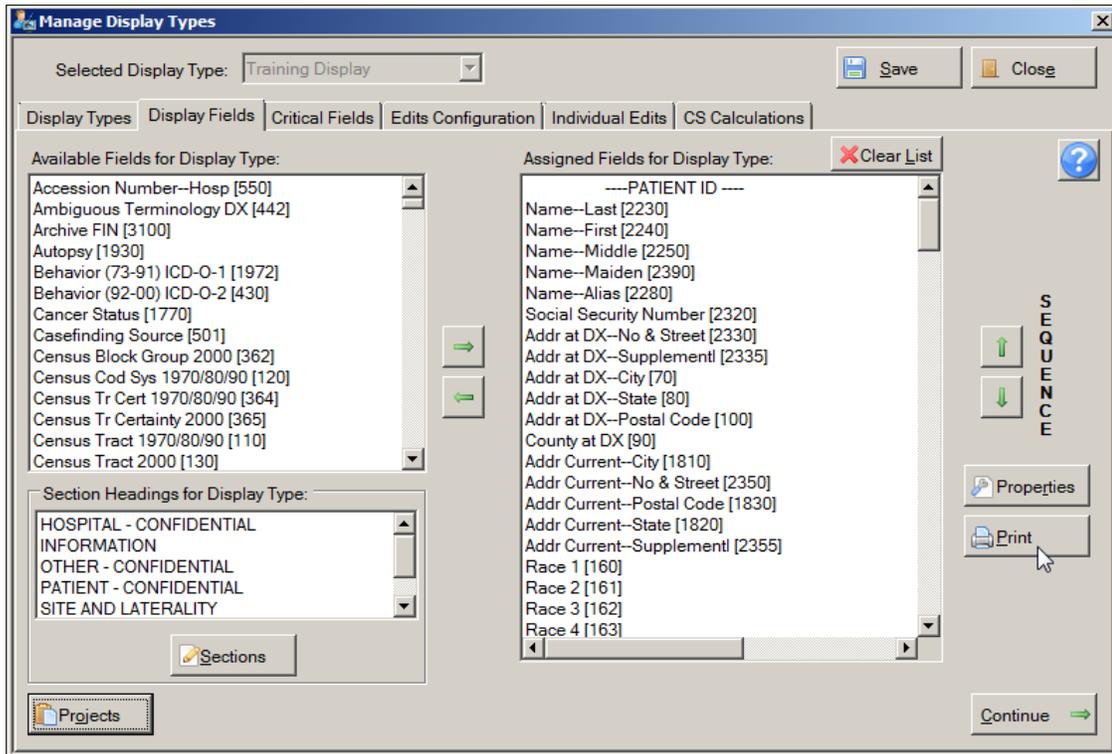
4. Click **Save**.

The Display Fields Report

A Display Fields report is available which can be very helpful when adding fields to a display type, and for display type documentation purposes.

To view, print, or save a copy of the Display Type Fields report, follow these steps:

1. On the Display Fields tab, click **Print**.



Result: The Display Fields report opens in the Abstract Plus Report Viewer window.

The Display Fields report lists the display fields that have been selected into the display type, along with field properties that were set.

Seq	Item No	Field Name	Description	Display Label	Section Name	Default Value	Protected	Invisible
1	2230	LastName	Name-Last	Last Name	PATIENT ID			
2	2240	FirstName	Name-First	First Name	PATIENT ID			
3	2250	MiddleName	Name-Middle		PATIENT ID			
4	2260	MaidenName	Name-Maiden		PATIENT ID			
5	2280	Alias	Name-Alias		PATIENT ID			
6	2300	SocSec	Social Security Number		PATIENT ID			
7	2330	DiNumAndSt	Addr at DX--No & Street	Street Address at Diagnosis	PATIENT ID			
8	2336	DiSupp	Addr at DX--Supplement		PATIENT ID			
9	70	DiCity	Addr at DX--City		PATIENT ID			
10	80	DiState	Addr at DX--State		PATIENT ID			
11	90	DiCounty	County at DX		PATIENT ID			
12	100	DiPostalZip	Addr at DX--Postal Code		PATIENT ID			
13	2350	CurNumAndSt	Addr Current--No & Street		PATIENT ID			
14	2356	CurSupp	Addr Current--Supplement		PATIENT ID			
15	1810	CurCity	Addr Current--City		PATIENT ID			
16	1820	CurState	Addr Current--State		PATIENT ID			
17	1830	CurPostalZip	Addr Current--Postal Code		PATIENT ID			
18	190	Race1	Race 1		PATIENT ID			
19	181	Race2	Race 2		PATIENT ID	88		
20	192	Race3	Race 3		PATIENT ID	89		

The Display Fields report contains these column headings:

Column	Description
Seq	The sequence number of the field (its position in the display type)
Item No	The NAACCR data item number for the field
Field Name	The Abstract Plus system name for the field
Description	The standard NAACCR data item name for the field
Display Label	The user-specified name (if any) for a field
Section Name	The display type section to which the field is assigned
Default Value	The default value (if any) assigned to the field
Protected	Indicates whether or not the Protected property has been set for the field
Invisible	Indicates whether or not the Protected property has been set for the field

The Abstract Plus Report Viewer window is divided into 2 main sections: a window in which to view reports on the left, and a pane for viewing report thumbnails on the right. When you left-click and hold your mouse on the vertical divider bar in the center of the window, a splitter appears which you can drag to the left or right to resize the view report and thumbnails views.

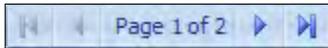
The Report Viewer Main Toolbar



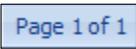
The Report Viewer Main Toolbar includes icons to print and save the Display Fields report, as well as modify the current view of the report. The following table describes the function of each of the icons on the Main Toolbar, as well as listing keystroke equivalents where available for each function.

Icon	Keystroke	Function
	Ctrl+P	Print the report being viewed; opens the print dialog window
	Ctrl+O	Save the report being viewed to various file formats
	Ctrl+Shift+S	Change report page setup: size, orientation and margins
	Ctrl+B	Show/hide the tree of bookmarks of the report being viewed; bookmarks are displayed by default---if there are no bookmarks in the report the Report Viewer will automatically hide the tree of bookmarks
	Ctrl+T	Show/hide the thumbnail view of reports in the pane on the right
	Ctrl+F	Search; Open the Search Toolbar
	F2	View the report in full screen mode
	F3	View the report one page at-a-time
	F4	View the report 2 pages at-a-time
	No keystroke	View multiple pages of the report at-a-time; specify 1x2, 2x3, etc.
	F5	Control page width; when clicked report will enlarge to the page width of Report Viewer window
	No keystroke	Close a report

The Report Viewer Page Navigation Controls



Report page navigation controls are located in the lower left-hand corner of the Report Viewer window and help you navigate through the various pages of the Display Fields report. The following table describes the function of each of the page navigation controls.

Control	Function
	View the first page of the report being viewed
	View the previous page of the report being viewed
	Lists the page number of the current page of the report being viewed
	View the next page of the report being viewed
	View the last page of the report being viewed

The Report Viewer Search Toolbar

The search panel is used to search for specific text within the report. To access feature, click the binocular icon  on the main toolbar.



When opened, the Search Toolbar is located in the lower left-hand corner of the Report Viewer window directly over the Page Navigation controls. The following table describes the function of each of the Search toolbar icons.

Icon	Function
	Closes the Search Toolbar
	Enter the term being searched for in the Find What box
	When clicked, searches the report and finds the next occurrence of the search term entered in the Find What box
	When checked, the search is repeated with case of the search term considered

	When checked, the search is repeated with only whole words of the search term considered
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The Report Viewer Page View Controls



Report page view controls are located in the lower right-hand corner of the Report Viewer window, and include icons to help you control how many pages of the report to view, as well as to zoom in or out on the current report being viewed. The following table describes the function of each of the page view controls.

Control	Keystroke	Function
	Shift+F2	Single Page: View the report one page at-a-time
	Shift+F3	Continuous: View the report with all pages displayed continuously
	Shift+F4	Multiple Pages: based on the selected zoom, all possible pages are displayed to fill the viewer window
	No keystroke	Selected Zoom: View the report at the percent size specified

Saving the Display Fields Report

Abstract Plus offers an extensive number of file formats in reports can be saved. You can save the Display Fields report in the file formats listed under the Save As icon on the Main Toolbar of the Report Viewer:



Activity 9 - Printing the Display Fields Report

Using what you have just learned, print a copy of the Display Fields report for the **Training Display display** type.

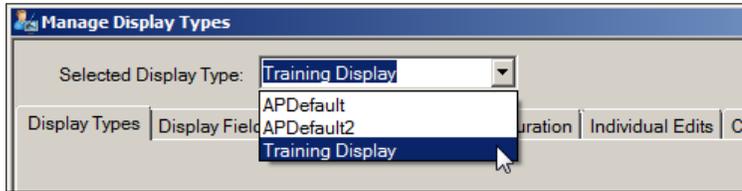
Please see page 98 of this manual or click [here](#) for instructions regarding viewing and printing the Display Fields report.

Step 2: The Critical Fields Tab

After fields have been added to the display type, the Administrator then specifies which (if any) of the included fields are **Critical** fields. In Abstract Plus display types, Critical (or required) fields must be filled in by the Abstractor in order to complete and release an abstract. When edits are run on the abstract, Critical fields are indicated clearly to the Abstractor on the Edit Set Results Window.

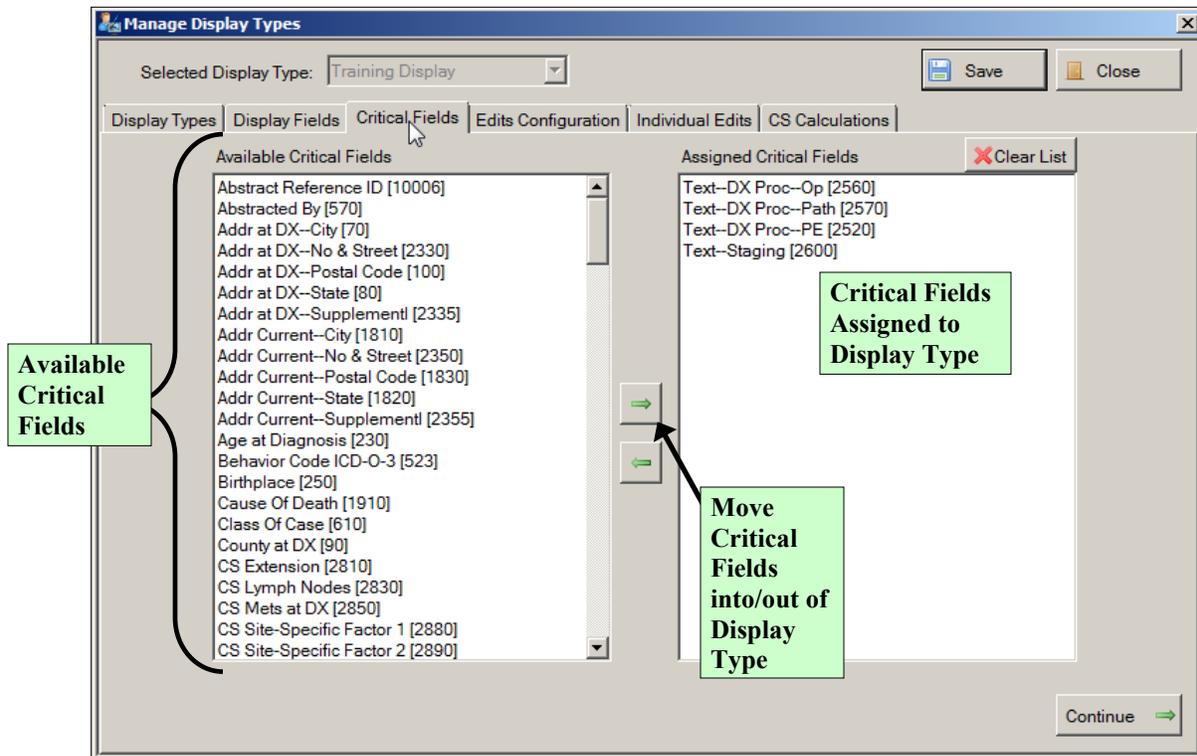
To assign critical fields to a display type, complete these steps:

1. **Select** the display type you would like to build or update from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Display display type is being selected and modified.



2. Click the **Critical Fields** tab.

Result: The **Manage Display Types** window opens the **Critical Fields** tab for the selected display type.



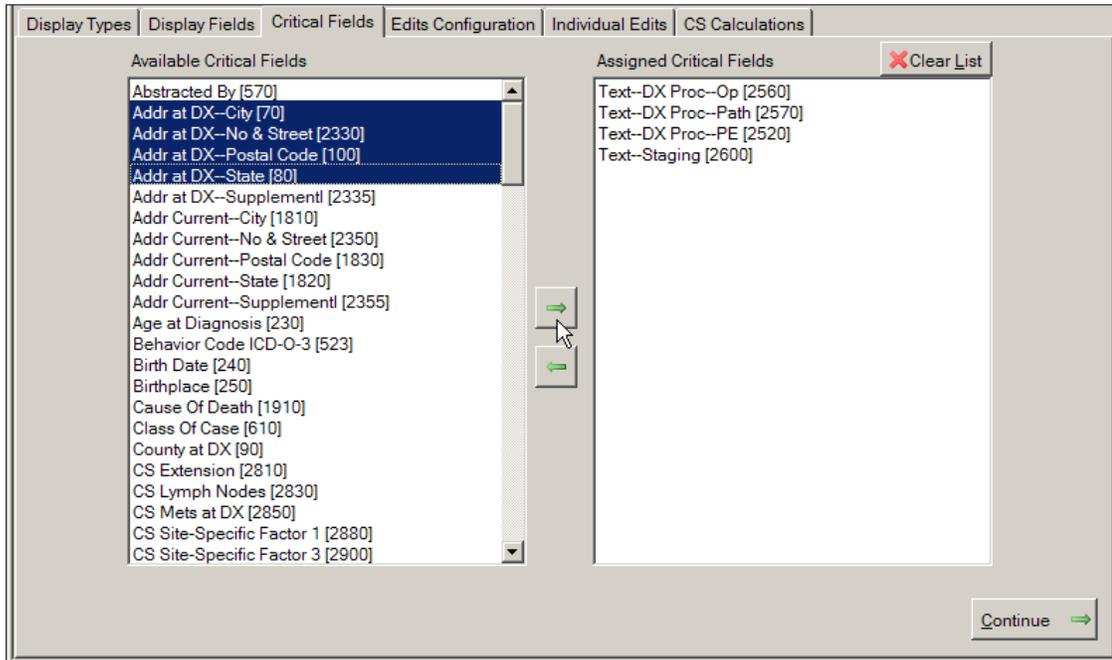
On the Critical Fields tab, the application displays the fields that you selected into the Assigned Fields for Display Type list on the Display Fields tab in alphabetical order as available critical fields. The Administrator uses the Critical Fields tab to specify Critical Fields for a display type. Using the left and right arrow buttons, fields are moved from the Available Critical Fields list on the left to the Assigned Critical Fields list on the right to include them in the selected display type.



Tip

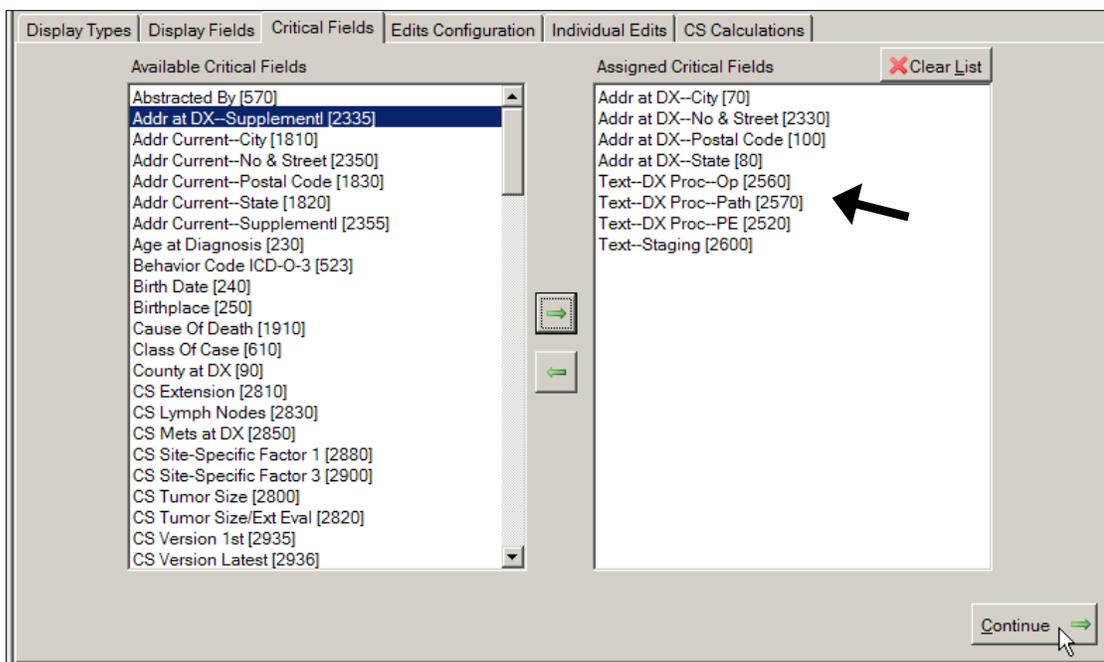
With Abstract Plus, required fields can be enforced via the Critical Fields feature, or via the running of data quality edits on the abstract. It is a good idea to maintain field requirements in one place, i.e., either via the Critical Fields feature of Abstract Plus **or** via the edit set associated with the display type.

- From the Available Critical Fields list on the left, select the fields that you would like to designate as critical, or required. In the example shown, the fields of Addr at DX---City, No & Street, Postal Code, and State are being designated as required for the Training Display display type.



- Click the green right-pointing arrow  to move the Critical field or fields into the display type.

Result: The field(s) is removed from the Available Critical Fields list on the left, and is moved into the Assigned Critical Fields list on the right. When abstracting abstracts with the selected display type, the Abstractor will not be able to complete an abstract without filling in the critical fields.



5. Click **Continue** to save your changes and move on to Step 3, the Edits Configuration tab.



Note

You can also save your work by clicking **Save**. Clicking **Clear List** will remove all fields from the Critical Fields list.

Activity 10 - Selecting Critical Fields into a Display Type

Using what you have just learned, designate the following fields as Critical Fields for the Training Display display type:

1. Addr at DX—City [70]
2. Addr at DX—No & Street [2330]
3. Addr at DX—Postal Code [100]
4. Addr at DX—State [80]

Feel free to experiment and add other Critical fields as well. Please see page 103 of this manual or click [here](#) for instructions regarding adding Critical fields to display types.

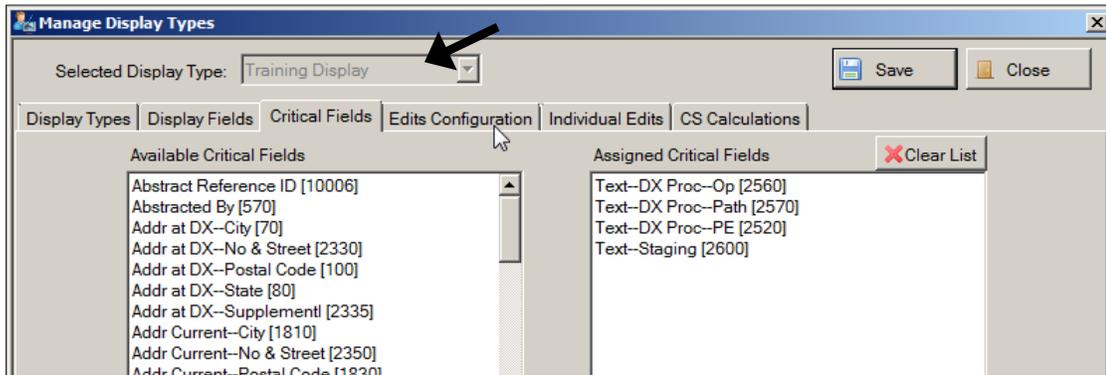
Step 3: The Edits Configuration Tab

In this step, you choose the edit set for your display type. To ensure that the information contained within an abstract makes sense and codes are coded correctly, both individually and in relation to one another, data quality "edits" are applied to each abstract as it is saved.

An edit set contains a collection of individual edits. If there are errors when an abstract is saved or edits are run, Abstract Plus displays those errors in the Edit Set Results window so the abstractor can correct them. An abstract can not be completed and released to the central registry until all errors have been resolved, and all critical fields have been filled in.

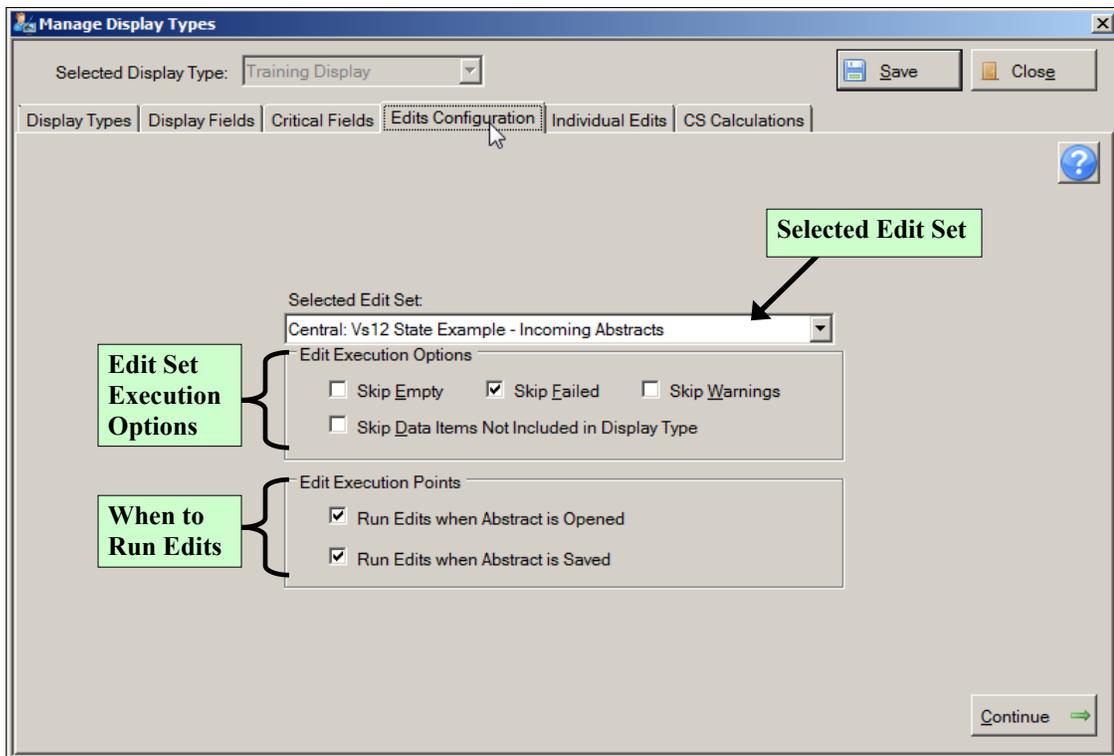
To select an edit set, complete these steps:

1. Make sure that the display type you would like to build or update is **selected** from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Display display type is being selected and modified.



2. Click the **Edits Configuration** tab.

Result: The **Manage Display Types** window opens the **Edits Configuration** tab for the selected display type.



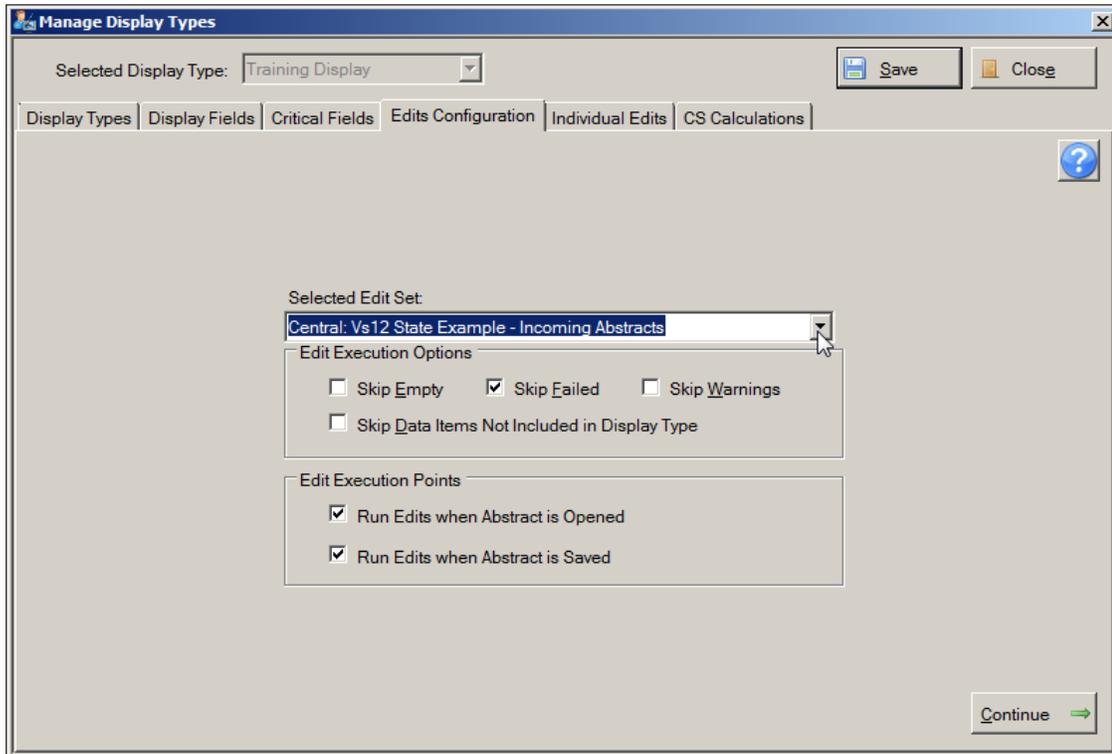
The Administrator uses the Edits Configuration tab to specify an edit set for the display type, and to set important edit set execution options.



Tip

Recall that required fields can be enforced via the Critical Fields feature or via the running of data quality edits on the abstract. It is a good idea to maintain field requirements in one place, i.e., either via the Critical Fields feature of Abstract Plus **or** via the edit set associated with the display type.

3. **Select** the desired **edit set** from the **Selected Edit Set** pull down menu. This is the edit set that will be run on abstracts being abstracted with the selected display type. In the example shown, the Central: Vs12 State Example—Incoming Abstracts edit set is selected for the Training Display display type.



The edits sets listed in the Selected Edits Set list are based on the edits metafile that is included in the C:\RegPlus\AbstractPlus\Edits folder. By default, the most current standard NAACCR edits metafile is included with the application (<http://www.naacr.org/standards/volumeiv>). If your central registry has any state-specific edit sets (i.e., any edit not included in the standard NAACCR metafile), your state-specific edits metafile can be added to the application. The edit set for current install can be changed at any time by replacing the edits runtime metafile in the C:\RegPlus\AbstractPlus\Edits folder with your own customized metafile; please see the **Abstract Plus System and IT Personnel Requirements** document for more information.



Important

CDC will create customized installations of Abstract Plus that include custom metafiles for NPCR-funded registries only (metafile to be provided by registry); other interested parties should follow the instructions provided in the **Abstract Plus System and IT Personnel Requirements** document to add custom edits to the application for use in their jurisdiction.

In addition to selecting an edit set, the Administrator may choose to set certain global **Edit Set Execution Options**. These are the Edit Execution Options on the Edits Configuration tab:

Option	Description
--------	-------------

Option	Description
Skip Empty	Prevents an edit from running if any of the fields that it edits are blank.
Skip Failed	Prevents a multi-field edit from executing if any field in its list has failed its single-field edit.
Skip Warnings	Prevents the return of warning messages by converting the return value to pass.
Skip Data Items Not Included in the Display Type	Prevents an edit from running if any of the fields that the edit is checking are not included in the display type; use of this feature will prevent unwarranted edit error errors for an abstract due to discrepancies between the fields included in a display type and the fields edited by the selected edit set for the display type

4. **Click** the check boxes for the **edit set execution options** you would like to specify for the selected display type.

In addition to running edits upon request from the Abstractor (clicking EDITS, or pressing F8 or F2), the Administrator can specify whether or not to run edits upon the opening or saving of an abstract. These are the **Edit Execution Points** on the Edits Configuration tab:

Option	Description
Run Edits When Abstract is Opened	When checked, after creation of an abstract edits will run on the abstract each time it is opened
Run Edits When Abstract is Saved	When checked, edits will run each time an abstract is saved

5. **Click** the check boxes for the **edit execution points** you would like to specify for the selected display type.



By default, both of these options are selected; edits will run each time an abstract is opened or saved (this is the recommended setting).

6. Click **Continue** to save your changes and move on to Step 4, the Individual Edits tab.



You can also save your work by clicking **Save**.

Result: The system saves the edit set selection and opens the window for the next step in building a display type, the Individual Edits tab.

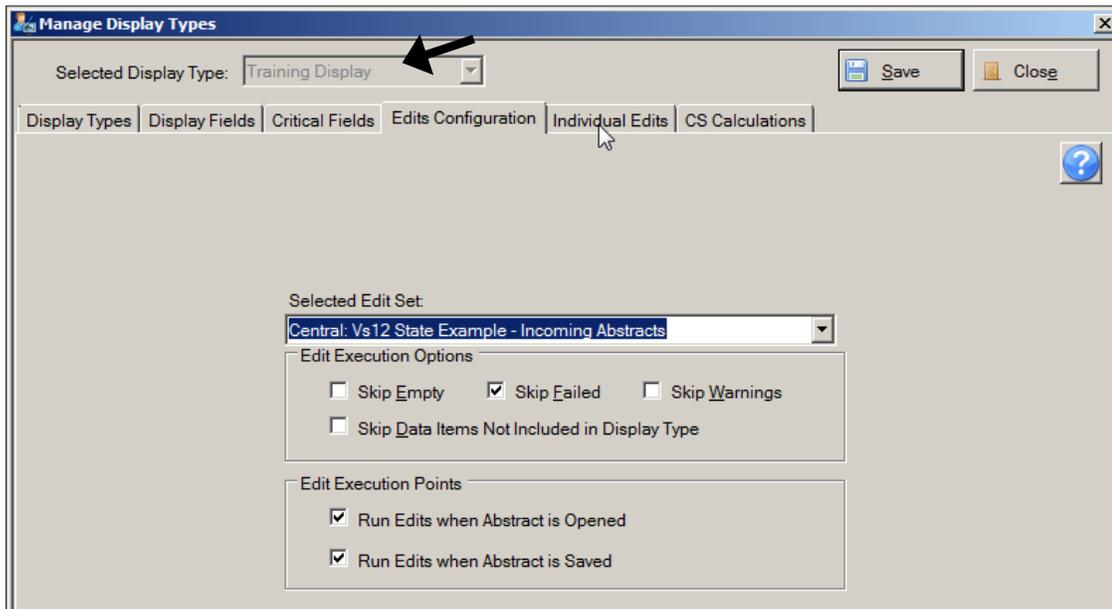
Step 4: The Individual Edits Tab

In this step, for any **individual edit** in the edit set, the Administrator can over-ride the global edit set execution options chosen on the Edits Configuration tab in step 3 for the entire edit

set. The Administrator can select individual edit options when an available edit set meets the editing needs of the central registry with the exception of a few edits. When individual edit options are set, the edit set options are over-ridden. The setting of individual edit options requires a thorough understanding of the edit set itself.

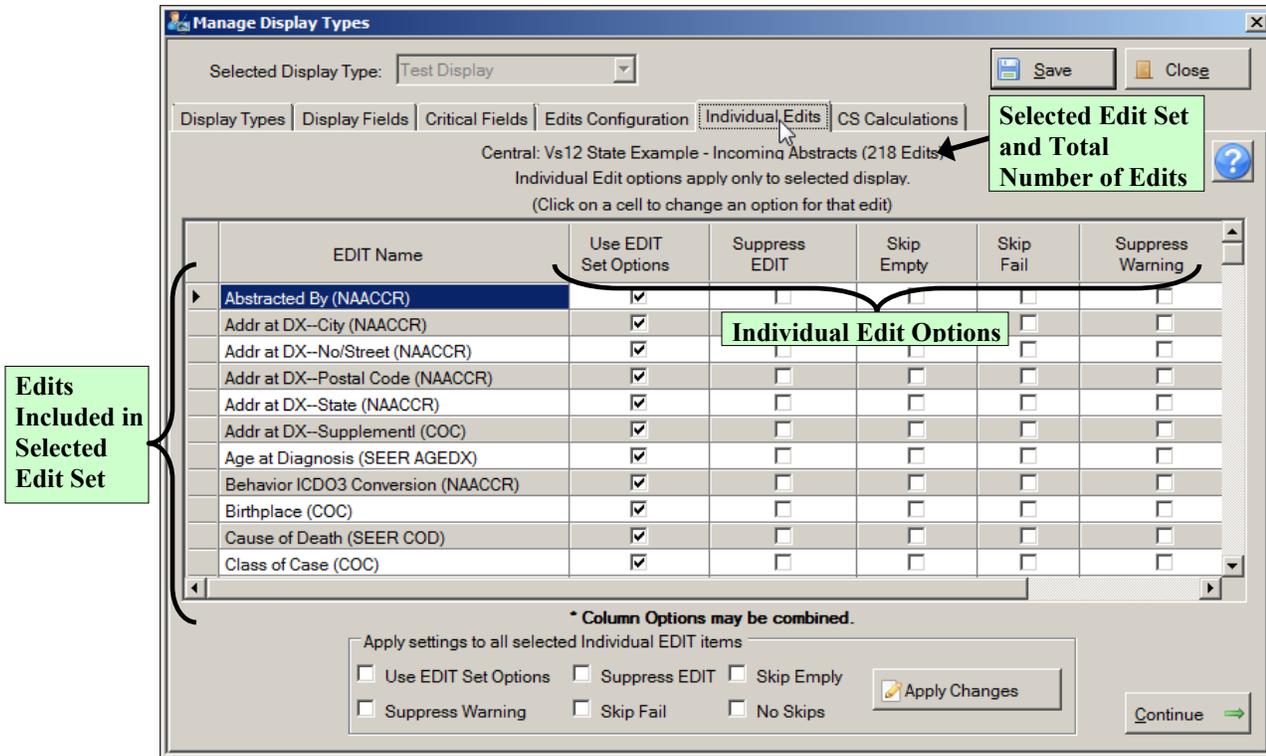
To select individual edit options, complete the following steps:

1. Make sure that the display type you would like to build or update is **selected** from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Display display type is being selected and modified.



2. The Individual Edit tab window should already be opened because you clicked **Continue** in the previous step. If it is not open, click the **Individual Edits** tab.

Result: The **Manage Display Types** window opens the **Individual Edits** tab for the selected display type.



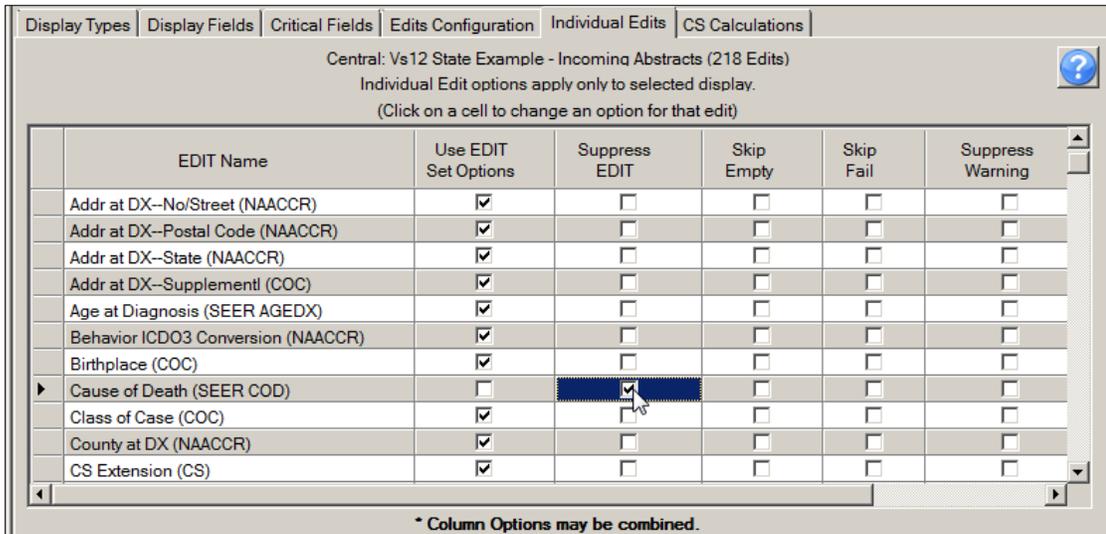
The Individual Edits tab lists the name of the selected edit set and the total number of edits it includes. The names of all of the edits in the selected edit set for the display type are listed in the 1st column on the left and individual edit options on set on the right. Options are set for individual edits by clicking the check box for the option for the specified edit in the grid, or by setting options for multiple edits at the same time using the features at the bottom of the window.

The Individual Edits tab includes these options:

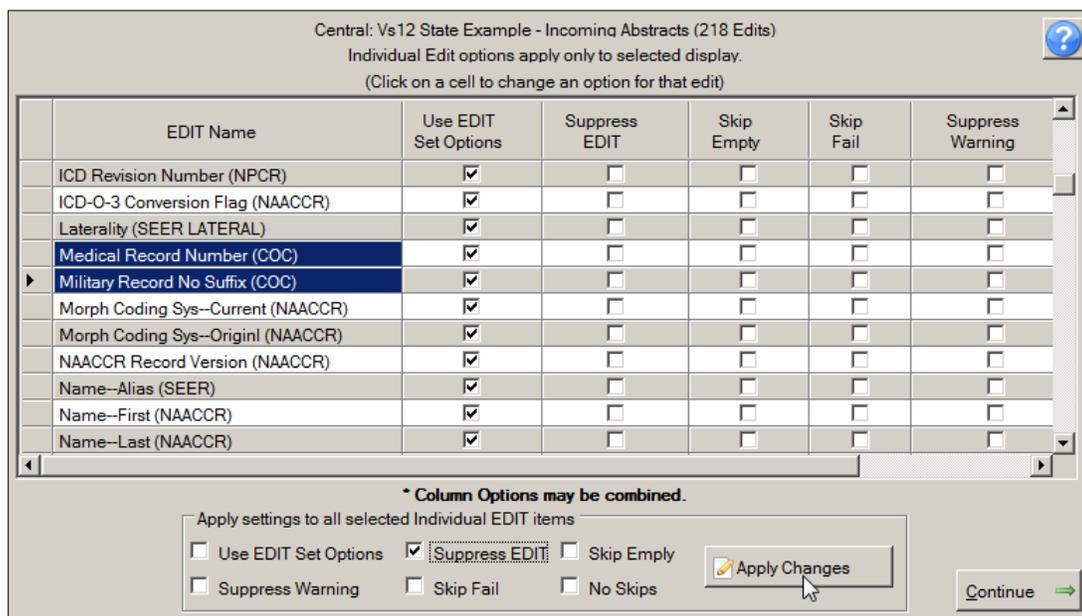
Option	Description
Use EDIT Set Options	This option is checked by default for all edits in the edit set; when checked, only the global options set for the edit set on the Edits Configuration tab will be applied to the individual edit
Suppress EDIT	Prevents the individual edit from executing when the edit set is run on an abstract
Skip Empty	Prevents the individual edit from executing if any of the fields that it edits are blank
Skip Fail	Prevents an individual multi-field edit from executing if any field that it checks has failed its associated single field edit
Suppress Warning	Prevents the return of any warning messages by the edit

Option	Description
No Skips	Edit runs for the field, over-riding any global Skip Empty or Skip Fail options that may be set for the edit set on the Edits Configuration tab

To select any of the individual edit options for an individual edit, **locate the edit** for which you would like to set options in the grid, and **click the check box in the columns** of the desired options. Note that the Skip Empty and Skip Fail options may be combined for an edit by clicking the check boxes in both columns.



To select any of the individual edit options for multiple edits at the same time, **highlight the edits in the EDIT Name column** using your ctrl and shift keys on your keyboard, click the check box in the columns of **the desired options in the center panel** at the bottom of the window, and click **Apply Changes**.



3. Select any **individual edit options** for any of the individual edits in the edit set.



Tip

Before you select an edit set, you should be aware of all of the edits in the set and how they edit the data.

To get a detailed view of the edit set and individual edits, you must use the EditWriter software.

Edit Sets

To quickly view the edits in an edit set, select the edit set on the Edits Configuration tab, and view its contents on the Individual Edits tab.

- Click **Continue** to save your changes and move on to Step 5, the CS Calculations tab.



Note

You can also save your work by clicking **Save**.

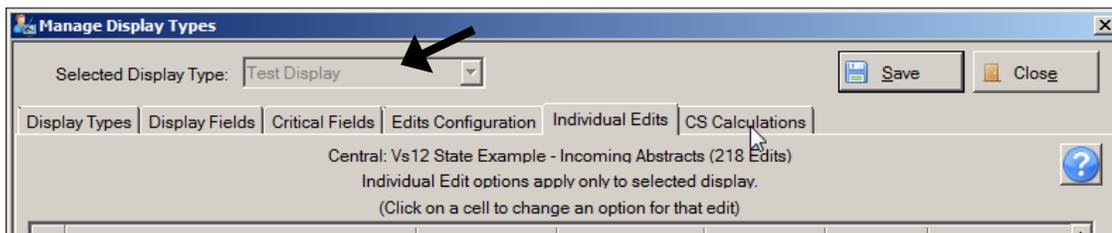
Result: The system saves any individual edit option selections and opens the window for the next step in building a display type, the CS Calculations tab.

Step 5: CS (Collaborative Staging) Calculations Tab

The Abstract Plus application can calculate stage according to three separate systems: SEER Summary Stage 77, SEER Summary Stage 2000, and AJCC Stage Group. In step 5 on the CS (Collaborative Staging) Calculation tab, the Administrator has the option to select among these three Collaborative Staging (CS) preferences. Single or multiple staging systems may be selected, depending on what CS fields are being collected with the display type, and what derived CS fields you would like to store in your central registry.

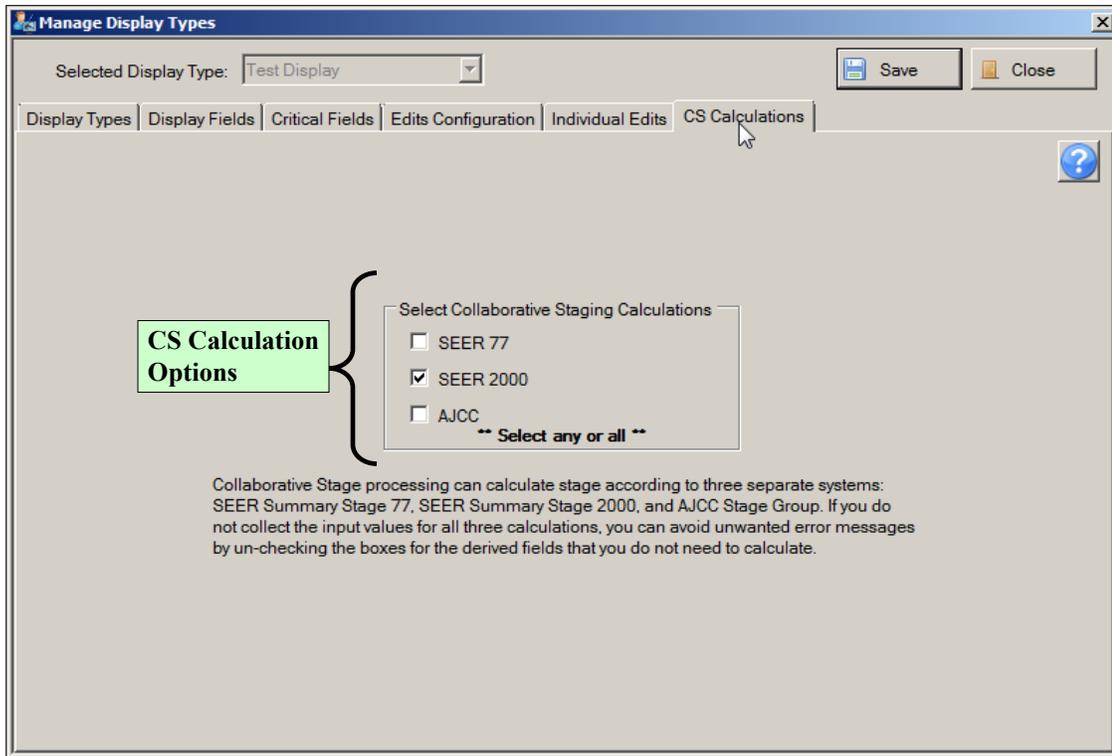
To specify Collaborative Staging preferences for a display type, complete the following steps:

- Make sure that the display type you would like to build or update is **selected** from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Display display type is being selected and modified.



- The **CS Calculations** tab window should already be opened because you clicked **Continue** in the previous step. If it is not open, click the **CS Calculations** tab.

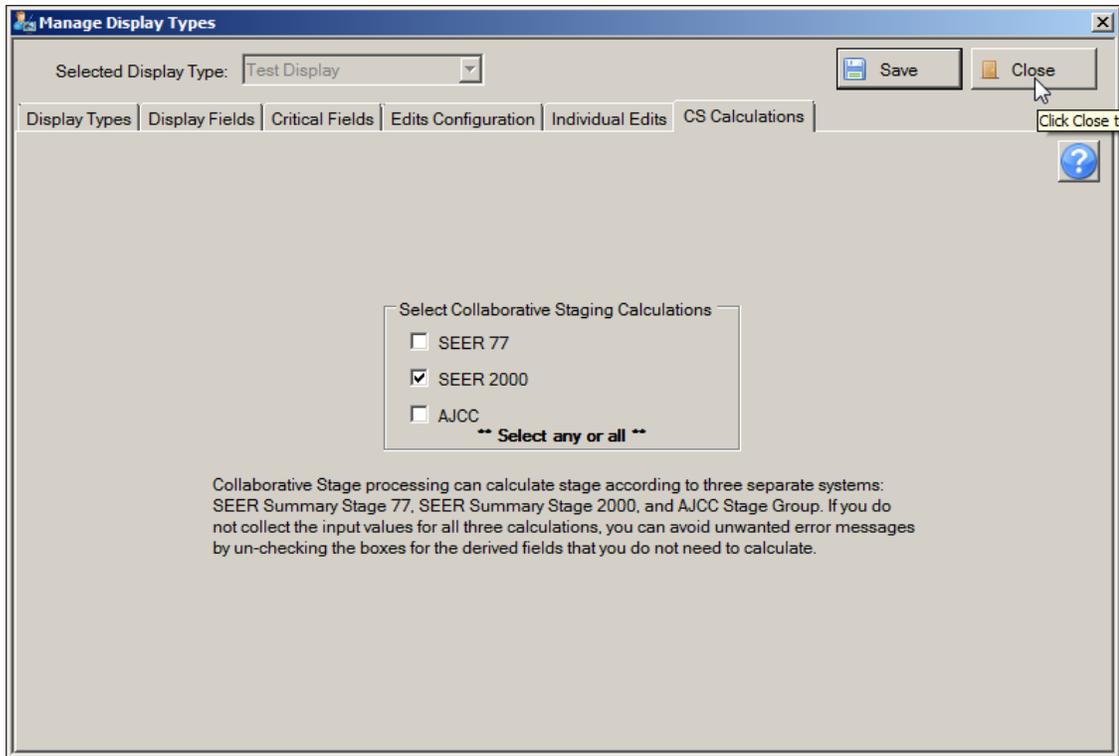
Result: The **Manage Display Types** window opens the **CS Calculations** tab for the selected display type.



Abstract Plus offers the following CS staging preferences:

Process	Description
Compute SEER1977	From the Collaborative Staging fields collected, the derived SEER Summary Stage 1977 is calculated
Compute SEER2000	From the Collaborative Staging fields collected, the derived SEER Summary Stage 2000 is calculated
Compute AJCC	From the Collaborative Staging fields collected, the derived AJCC Stage Group fields are calculated

3. Select the **CS Calculations** that you would like for the display type, and click **Save**.



4. Click **Close** to close the Manage Display Types window.

Result: The Manage Display Types window closes, and you are returned to the main Abstract Plus window.

Activity 11 - Specifying Edits and CS Calculation Settings

Using what you have just learned, **review** the **edit set, individual edits, and CS Calculation options** that have already been set for the **Training Display display** type. Recall that these options were copied over from the APDefault display type. In particular, note the edit set that was selected (Central: Vs12 State Example—Incoming Abstracts), that there are no individual edit options set, and that the only CS Calculation option set to on is the calculation of SEER Summary Stage 2000. Please see page 106 of this manual or click [here](#) for instructions regarding the setting of edits configurations and CS calculation options.

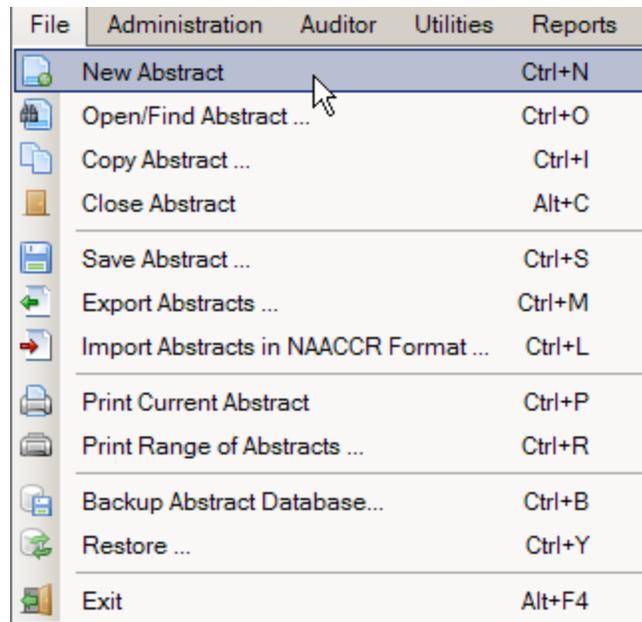
After you have finished reviewing, click Close to close the Manage Display Types window.

Viewing and Testing a New Abstracting Display Type

While the Administrator is generating a new abstracting display type, he or she may want to view and test and test it from the Abstractor's perspective. Once a new abstracting display has been completed, it is **essential that it is fully tested prior to implementation**.

To view and test an abstracting display type, complete the following steps:

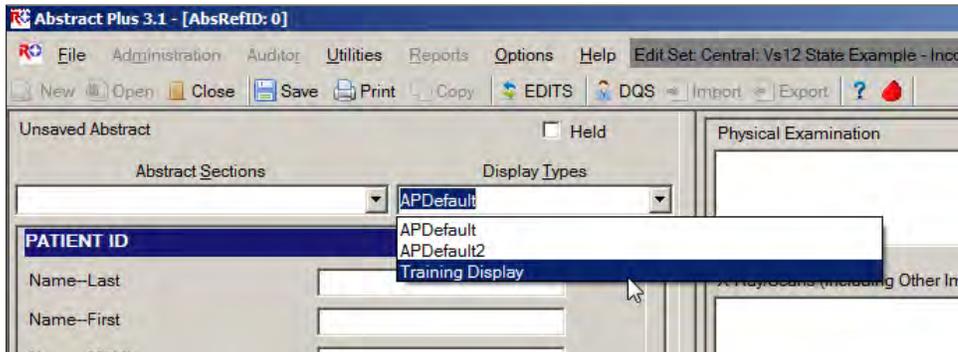
1. Create a new abstract. This can be done in 3 ways:
 - a. Click on the **File** menu, and select **New Abstract**.



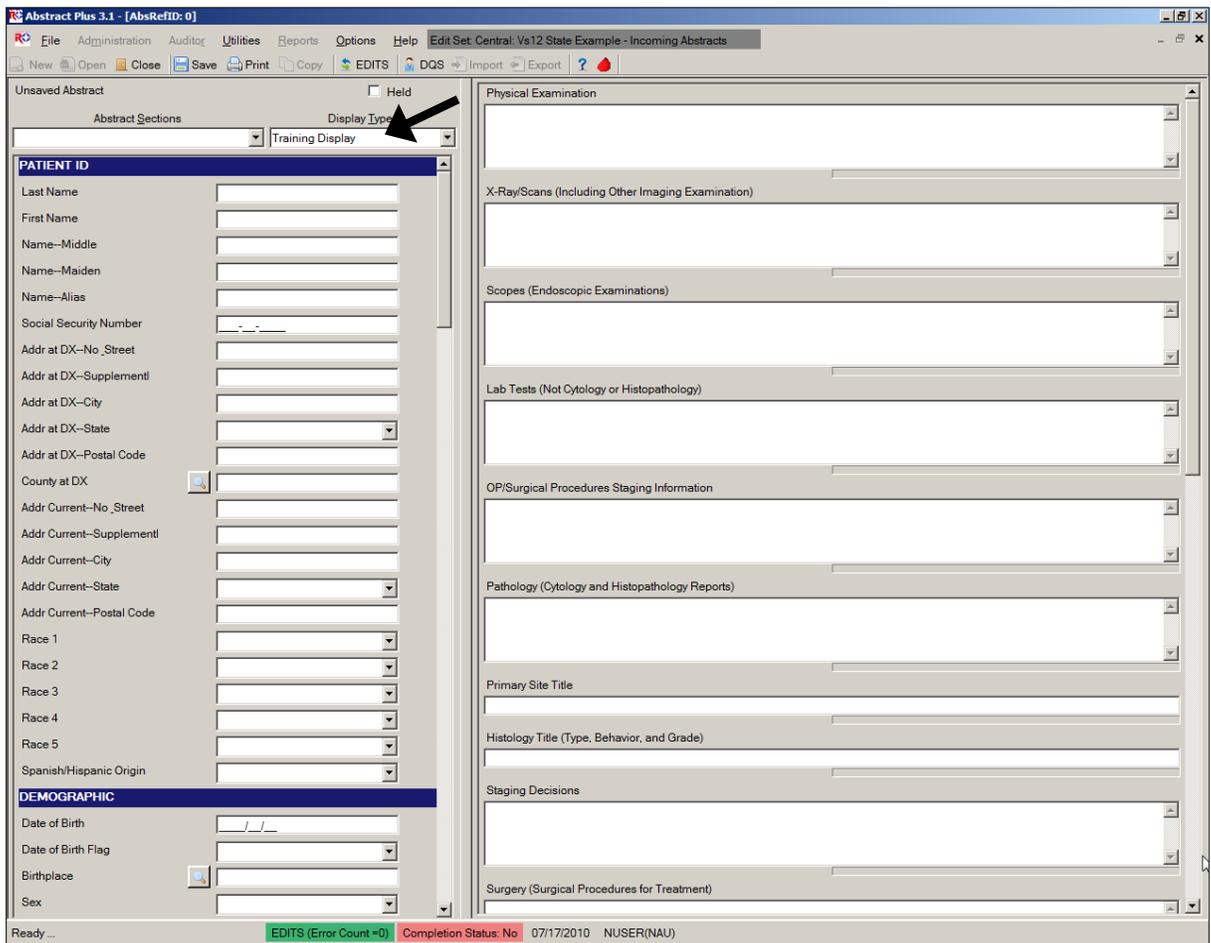
- b. Click the **New** icon  on the Toolbar.
- c. Use the keystroke **Ctrl+N**.

Result: The **Abstract Plus Abstracting window** opens for a new abstract.

- From the **Display Types** pull-down in the upper right-hand corner of the data entry grid, select the new abstracting display type to be viewed or tested. In the example shown, the Training Display display type is being selected.

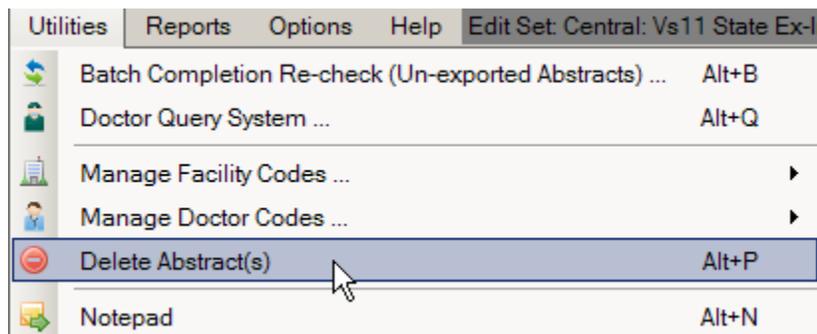


Result: The Abstract Plus Abstracting window is switched to the selected display type.



- Once the new abstracting display type has been selected, the display type can be tested. It is recommended that a test abstract be abstracted from creation through to completion, in order to verify all settings for the display type. In particular the Administrator should verify that:
 - The intended fields are included in the display type in the intended sequence, listed under their intended section headings.

- b. Field Properties (Protected, Invisible, Field Label, Default Value, Field Message) that have been set for particular fields function as intended.
 - i. Double-check that fields for which the Protected property was set can not be edited.
 - ii. Verify that fields for which the Invisible property was set are not visible in the display type.
 - iii. Double-check that any customized field labels are displayed correctly.
 - iv. To test default values for correctness enter a few fields and click Save; default values are filled into fields upon first save of the abstract.
 - v. To test Field Messages for correctness, click into the field and view the pop-up message; be sure to double-check spelling and grammar as well as message content.
 - c. When edits are run, that all critical fields that are blank are listed as Missing Critical Fields as counted as errors in the Edit Set Results window.
 - d. The edit set displayed at the top of the abstracting window is the edit set that was selected for the display type.
 - e. The abstract can physically be completed with the specified fields, critical fields and edit settings.
4. When you have finished testing the display type, **close** the abstract, and be sure to delete any test abstracts that were generated during testing:
- a. From the **Utilities** menu, select **Delete Abstracts**, or use the **Alt+P** keystroke.

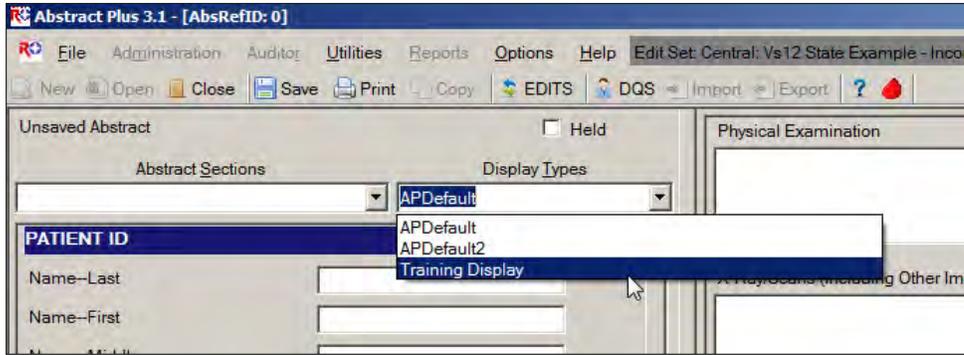


- b. Use the available search criteria on the Delete Abstracts window to search for any test abstracts, select them, and click **Delete**.

Activity 12 - Viewing and Testing Abstracting Display Types

Using what you have just learned, test the Training Display display type in the Abstract Plus Abstracting window, in particular reviewing the display type's functions for the modifications you made to the Training Display display type in Activities 6 - 11:

1. Open a new abstract, and select the Training Display display type from the Display Type pull-down menu in the upper right-hand corner of the data entry grid:



2. Verify the section heading of HISTOLOGY is included in the display type, and that it is positioned directly above the field of Histologic Type ICD-O-3:

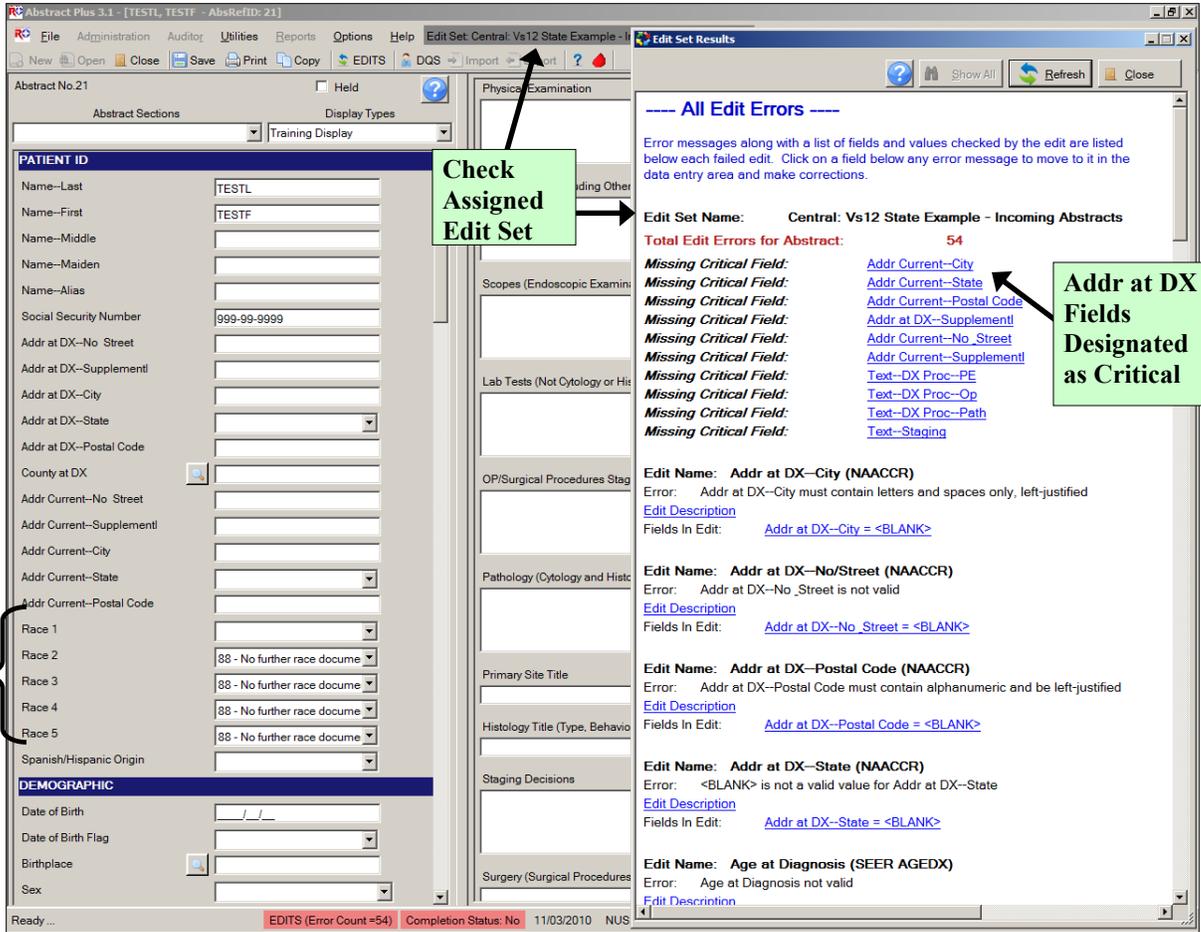
3. Verify that the following fields are included in the display type, are listed in the following order, and are positioned directly above the Race 1 field:
 - i. Addr Current—No & Street
 - ii. Addr Current—Supplemental
 - iii. Addr Current—City
 - iv. Addr Current—State
 - v. Addr Current—Postal code

4. Double-check that NAACCR Record [50] field is not displayed on the data entry grid, as the field properties of Protected and Invisible were set for this field.
5. Verify that the Name—Last [2230] field has a custom label of Last Name, Name—First has a custom label of First Name, and that Addr at DX—No & Street [2330] has a customized label of Street Address at Diagnosis. Notice that the label of Street Address

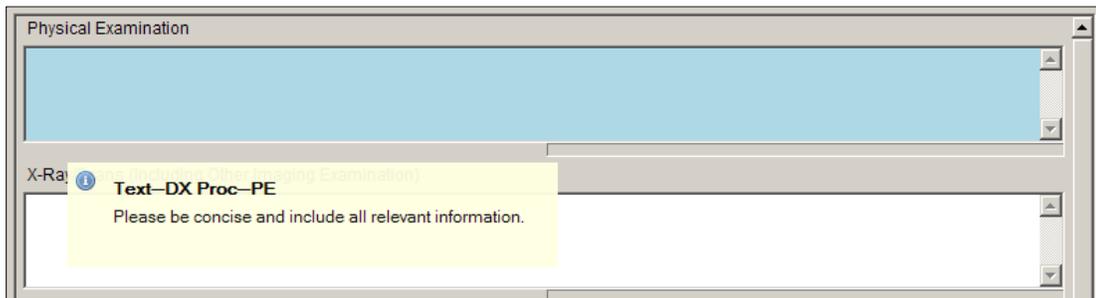
at Diagnosis is most likely too long to be displayed in full and is truncated followed by "...".

PATIENT ID	
Last Name	<input type="text"/>
First Name	<input type="text"/>
Name--Middle	<input type="text"/>
Name--Maiden	<input type="text"/>
Name--Alias	<input type="text"/>
Social Security Number	<input type="text"/>
Street Address at Diagnos...	<input type="text"/>

6. Upon first save of the test abstract, verify that the Race 2 – Race 5 [161-164] fields default to a value of 88.
7. Verify that if left blank, the following fields that were designated as Critical fields generate an error and are listed in the Edit Set Results window as Missing Critical Fields.
 - i. Addr at DX—City [70]
 - ii. Addr at DX—No & Street [2330]
 - iii. Addr at DX—Postal Code [100]
 - iv. Addr at DX—State [80]
 - v. Addr Current—Postal code
8. Double-check that the edit set listed at the top of the abstracting window is Central: Vs12 State Ex—Incoming Abstracts.



- When the cursor is placed in the Text-DxProc-PE [2520] text field in the data entry grid on the right, verify that the field message that pops up reads –Please be concise and include all relevant information.”:



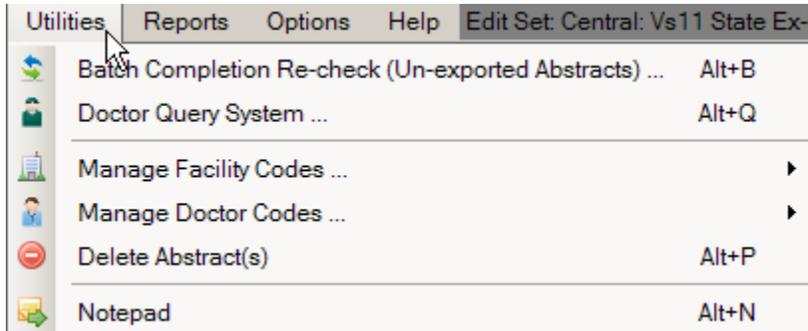
- Continue testing the display type, making sure that you are able to complete the test abstract with the display type.
- Once you have finished testing the display, be sure to delete any test abstracts that you generated from the Abstract Plus application.

Importing Local Hospital and Doctor Codes

The final task of configuring the Abstract Plus application is the addition of hospital and doctor codes specific to the state or locale using the application. The generic installation of

Abstract Plus comes with a small file of fictitious doctor names and codes, as well as a small file of fictitious hospital names and codes. Each central registry user can provide the program with files containing local information for doctors and hospitals. The information regarding the locale's physicians; their names, identifiers, and other items, are needed for the Doctor Query System (DQS), as well as for abstracting any fields containing look-ups for physician codes. The information regarding the locale's hospitals is used for abstracting all fields containing hospital code look-ups.

To import doctor or hospital tables, click on the **Utilities** menu, and select either **Manage Facility Codes** or **Manage Doctor Codes**.



You can choose to either **import** a table of codes, or **edit** the existing codes manually. If you choose to import your doctor and hospital codes, the following files formats are required.

Required Hospital Codes Import File Format

Field Name	Field Length	Column Start	Column Stop
Value*	10	1	10
(Empty)	5	11	15
Label*	40	16	55
ContactName	35	56	90
Phone	13	91	103
NPI Facility Code	10	104	113

*Required fields

Required Doctor Codes Import File Format

Field Name	Field Length	Column Start	Column Stop
Doctor Code*	8	1	8
Address1*	35	9	43
Address2	35	44	78
City*	20	79	98
State*	2	99	100

Zip code*	10	101	110
Phone	13	111	123
Last Name*	20	124	143
First Name*	20	144	163
Organization	45	164	208
Specialty*	20	209	228
Practice	20	229	248
Pathloc	35	249	283
Suppresslet	1	284	284
NPI Doctor Code	10	285	294

*Required fields--displayed within Doctor Query System



Please see the **Abstract Plus System and IT Personnel Requirements** document for more information about adding local hospital and doctor codes to Abstract Plus.

Questions

Answer these questions about configuring Abstract Plus (the answers are in Appendix A, on page 216):

1. Can the security challenge questions presented to users upon initial log in to Abstract Plus be modified?
2. What does the Enforce Strong Password option do?
3. How do you change the password expression that defines password requirements for Abstract Plus?
4. What are the two ways to create a new display type?
5. What are section headings?
6. What is the difference between configuring edit set options and setting individual edit options?
7. How can you protect a field from being edited by an abstractor?

Chapter 5: Creating and Modifying User Accounts

Learning Objectives

In this chapter, you will learn how to:

- Add a user to the application
- Reset a user's password
- Change the current user
- Delete a user from the system

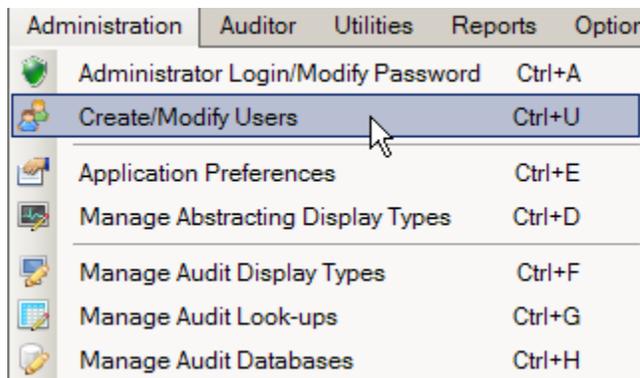
Overview

One of the tasks of the Administrator is to manage user accounts for all of the users using the Abstract Plus application. This chapter provides an overview of basic user account management. It includes a description of how to add new users to the system, reset a user's password, change the current user, and delete users.

Adding a New User

To add a user to the system, complete the following steps:

1. Open the Create/Modify Users window. This can be done in 2 ways:
 - a. From the **Administration** menu, select **Create/Modify Users**.



- b. Use the **Ctrl+U** keystroke.

Result: The Create/Modify Users window opens. The current user is displayed, as well as a list of all users in the system.

The screenshot shows the 'Create/Modify Users' dialog box. The 'Selected User' section contains the following fields:

- User Name:** (5 - 35 characters) e.g. Smith, John A. The field is currently empty.
- User ID:** (5 - 10 Characters) e.g. JSmith. The field contains 'NUSER'.
- Initials:** (3 Characters) e.g. JAS. The field is empty.

Below these fields is a text area containing 'USER, NEW A - NUSER (NAU)'. At the bottom left, the 'Current User ID' field contains 'NUSER'. On the right side, there are buttons for 'Add', 'Reset Password', 'Delete', and 'Close'. At the bottom right, there is a 'Change Current User' button. A help icon (?) is located in the top right corner.

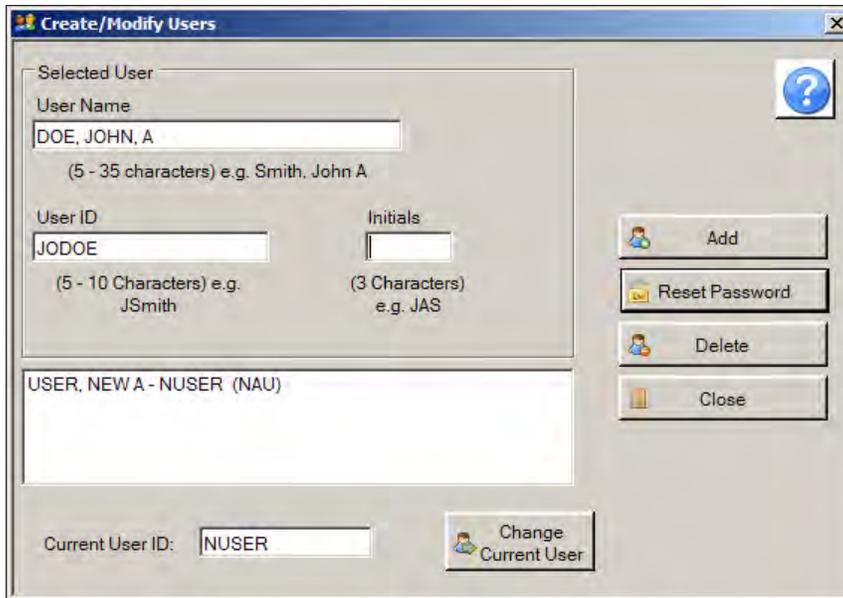
2. Type the **name** of the new user in the **User Name** box using the convention of **Last Name, First Name, Middle initial**. In the example shown, a new user account is being added for a user name John A. Doe, so DOE, JOHN, A is being entered in the User Name box.

The screenshot shows the 'Create/Modify Users' dialog box. The 'Selected User' section contains the following fields:

- User Name:** (5 - 35 characters) e.g. Smith, John A. The field contains 'DOE, JOHN, A'.
- User ID:** (5 - 10 Characters) e.g. JSmith. The field is empty.
- Initials:** (3 Characters) e.g. JAS. The field is empty.

Below these fields is a text area containing 'USER, NEW A - NUSER (NAU)'. At the bottom left, the 'Current User ID' field contains 'NUSER'. On the right side, there are buttons for 'Add', 'Reset Password', 'Delete', and 'Close'. At the bottom right, there is a 'Change Current User' button. A help icon (?) is located in the top right corner.

3. Press **Tab** to move the cursor to the **User ID** box, and **enter a User ID** for the new user. In the example shown, the new user's name is John Doe, so the User ID being assigned is JODOE.



The screenshot shows the 'Create/Modify Users' dialog box. The 'Selected User' section contains the following fields:

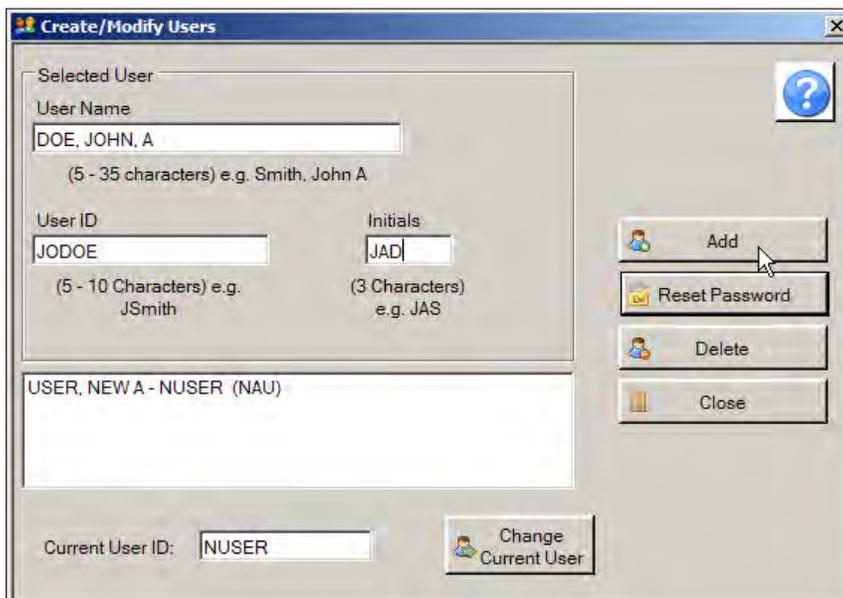
- User Name: DOE, JOHN, A (5 - 35 characters) e.g. Smith, John A
- User ID: JODOE (5 - 10 Characters) e.g. JSmith
- Initials: (3 Characters) e.g. JAS

Below these fields is a list of users: USER, NEWA - NUSER (NAU).

At the bottom, the 'Current User ID' is NUSER, and there is a 'Change Current User' button.

On the right side, there are four buttons: Add, Reset Password, Delete, and Close.

4. Press **Tab** to move the cursor to the **Initials** box, and enter the new user's 3 character initials. In the example shown, the new user's name is John A. Doe, so the User ID being assigned is JAD.



The screenshot shows the 'Create/Modify Users' dialog box. The 'Selected User' section contains the following fields:

- User Name: DOE, JOHN, A (5 - 35 characters) e.g. Smith, John A
- User ID: JODOE (5 - 10 Characters) e.g. JSmith
- Initials: JAD (3 Characters) e.g. JAS

Below these fields is a list of users: USER, NEWA - NUSER (NAU).

At the bottom, the 'Current User ID' is NUSER, and there is a 'Change Current User' button.

On the right side, there are four buttons: Add, Reset Password, Delete, and Close. A mouse cursor is pointing at the 'Add' button.

5. Click **Add**.

Result: The new user is added to the system, and is listed in the list of users in the application.

6. Click **Close** to close the Create/Modify Users window.

Resetting a User's Password

If an Abstract Plus user forgets their password, and does not correctly recall their answers to their security challenge questions, the Abstract Plus Administrator will need to reset the user's password.



When a user's password is reset, it will always be set back to the initial password of **Welcome1**.

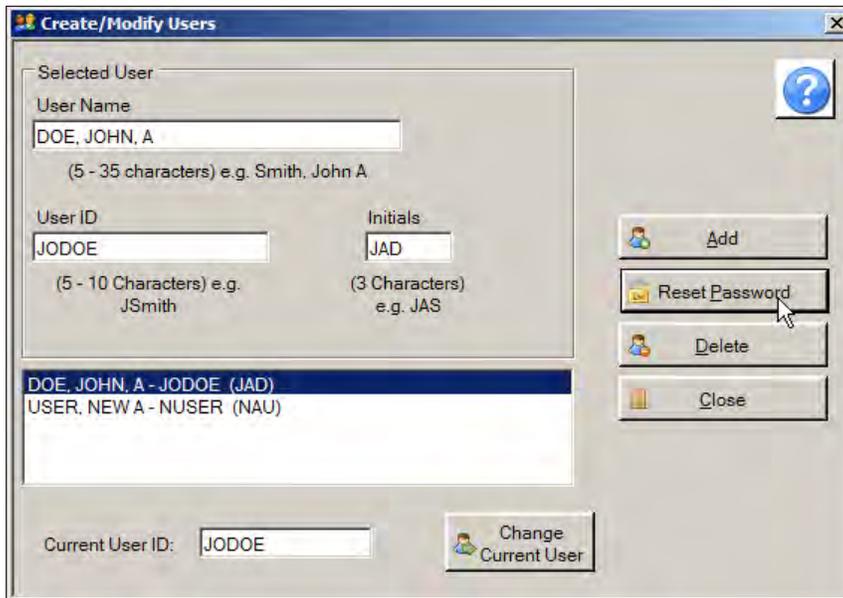
To reset the password for an existing user, complete the following steps:

1. From the **Administration** menu, select **Create/Modify Users**, or use the **Ctrl+U** keystroke.

Result: The Create/Modify Users window opens.

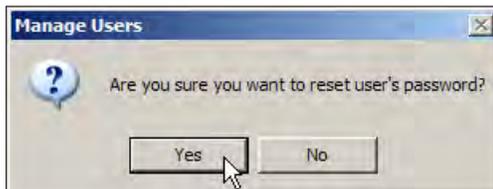
- From the list of all users in the system, **select the user** for which you would like the password reset. In the example shown, the password is being reset for the John Doe user account, so the John Doe user account is being selected.

Result: The system displays the selected user's information in the User Name, Initials, and User ID fields.



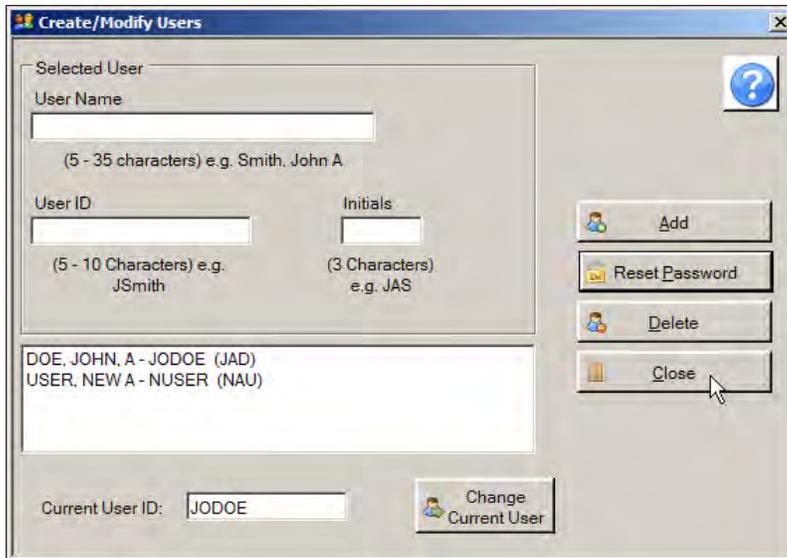
- Click **Reset Password**.

Result: The system asks to you to verify that you would like to reset the password of the currently selected user.



- Click **Yes**.

Result: The system resets the password for the currently selected user to the initial Abstract Plus password of **Welcome1**.



5. Click **Close** to close the Create/Modify Users window.

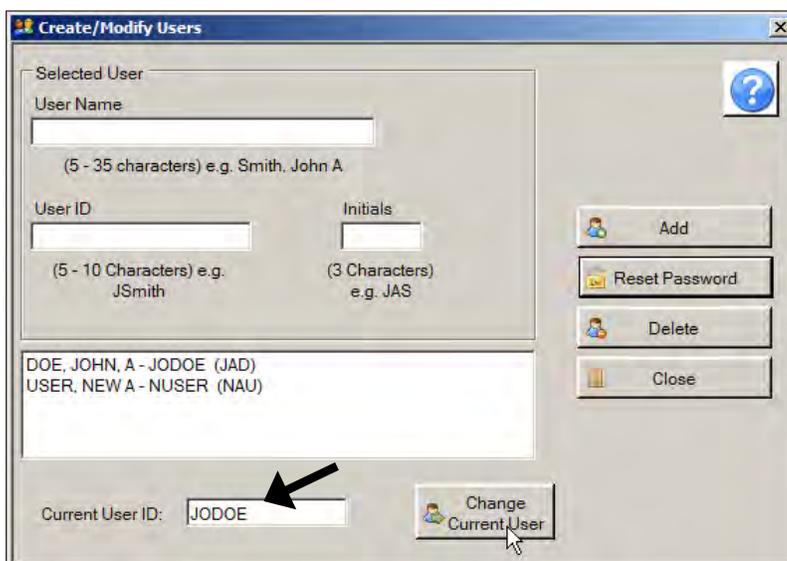
Changing the Current User

The Administrator may be called upon to change the current user in the Abstract Plus application.

To change a current user, complete the following steps:

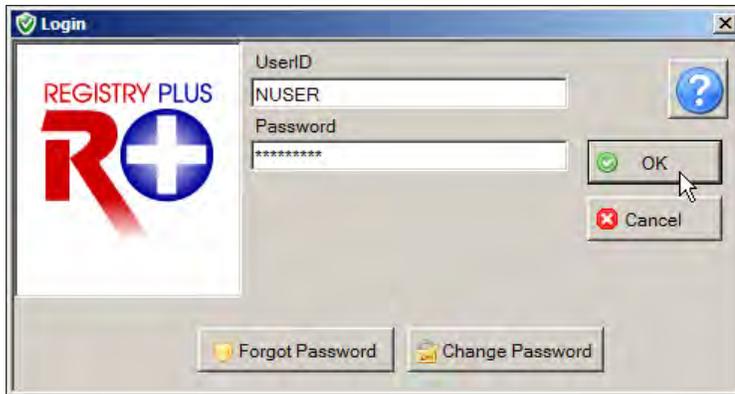
1. From the **Administration** menu, select **Create/Modify Users**, or use the **Ctrl+U** keystroke.

Result: The Create/Modify Users window opens, displaying the User ID of the current user at the bottom of the window. In the example shown, the current user is JODOE.



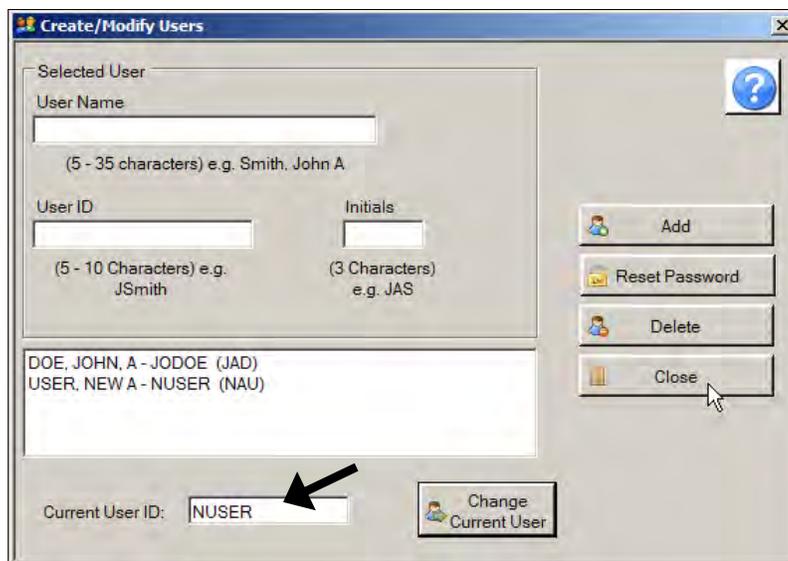
2. Click **Change Current User**

Result: The system displays the Login window.



3. Type in the **UserID** and **Password** for the user to which you would like to switch, and click **OK**. In the example shown, the current user is being changed from JODOE to NUSER.

Result: You are returned to the Create/Modify Users window, where the system has changed the current user to the one that was just logged in; the Current User ID field now displays the new user's User ID.



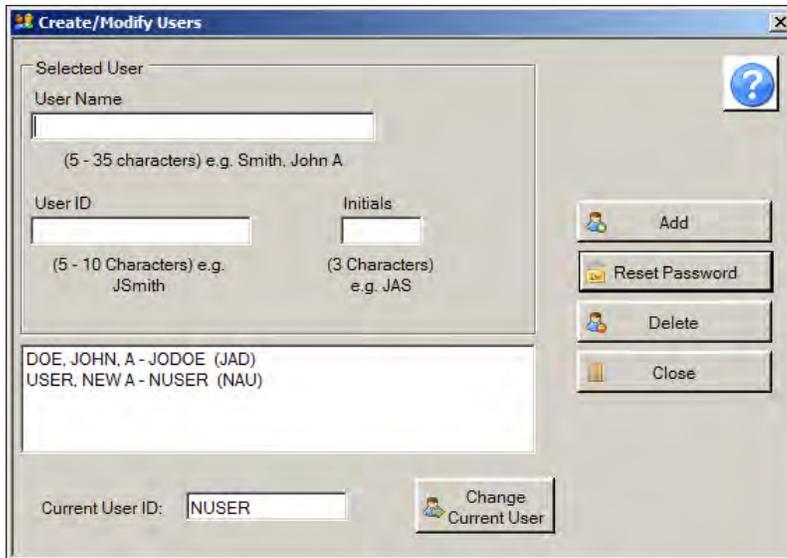
4. Click **Close** to close the Create/Modify Users window.

Deleting a User

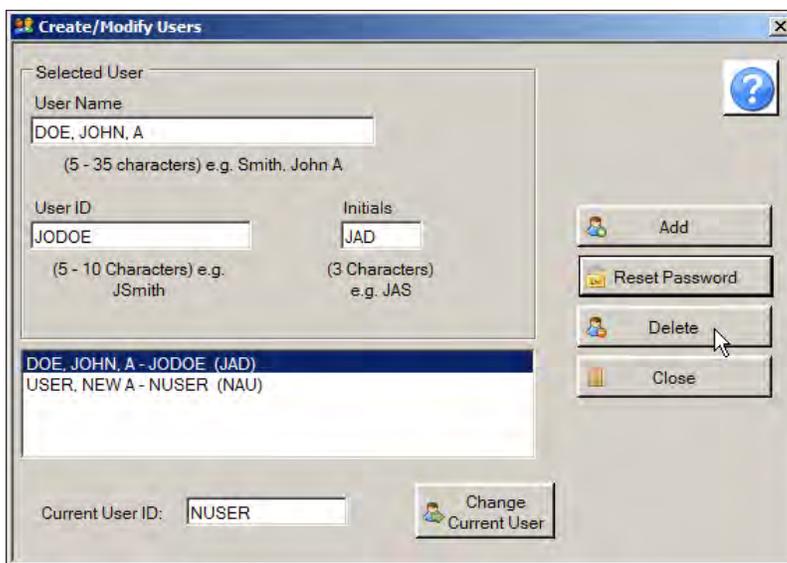
To delete a user from the application:

1. From the **Administration** menu, select **Create/Modify Users**, or use the **Ctrl+U** keystroke.

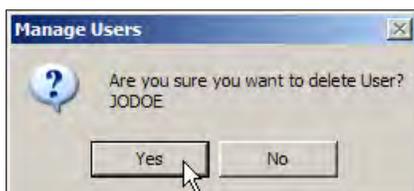
Result: The Create/Modify Users window opens.



2. **Select the user** that you would like to delete, and click **Delete**. In the example shown, the John Doe user is being deleted.

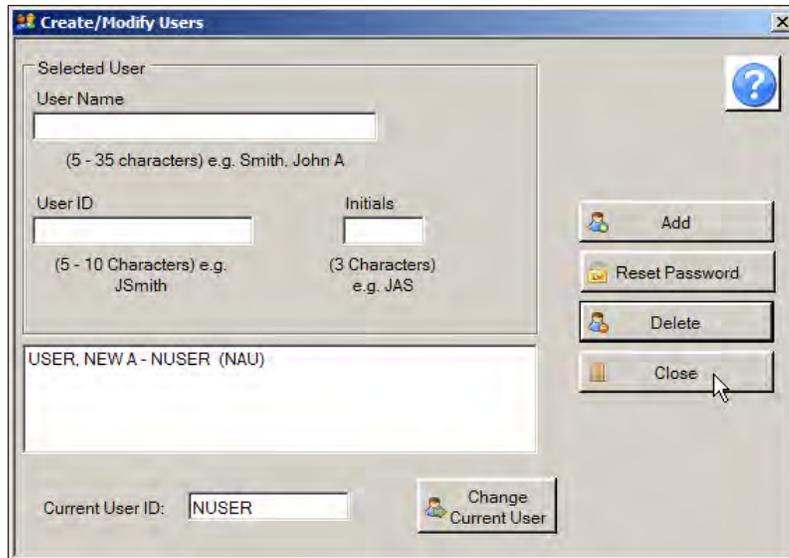


Result: The system asks to you to verify that you would like to delete the currently selected user.



3. Click **Yes**.

Result: The system deletes the currently selected user, and clears the user information from the Create/Modify Users window.



4. Click **Close** to close the Create/Modify Users window.



Be sure that you want to remove a user before you select the Delete User option as the system immediately deletes the selected user.

Tip

Note: You cannot delete the current user.

Activity 13 - Adding and Deleting Users

Using what you have just learned, add a new user to Abstract Plus, and then delete that new user. Please see page 124 of this manual or click [here](#) for instructions regarding adding users to and deleting users from Abstract Plus.

Questions

Answer these questions about managing Abstract Plus user accounts (the answers are in Appendix A, on page 217):

1. How can you easily identify the current user on the Create/Modify Users window?
2. How do you add a new user to Abstract Plus?

Chapter 6: Abstract Plus Audit Configuration

In this chapter, you will learn to:

- Identify the different types of audits you can conduct using Abstract Plus
- Become familiar with the basic steps required to conduct an audit using Abstract Plus
- Configure audit display types
- Modify the various look-ups available for recording special audit information by the Auditor, such as the casefinding source of an identified un-reported tumor for a casefinding audit, or information regarding identified discrepancies for a reabstracting or recoding audit
- Set-up an audit to be carried out by an Abstract Plus Auditor, which includes generation of the audit database
- Train auditors using the example audits that are included in Abstract Plus version 3.1, including how to re-create any of the example audits for training of multiple staff

Overview

This chapter covers general information about the configuration of Abstract Plus for auditing. It includes a description of the different types of audits available, the basic steps necessary to conduct an audit using Abstract Plus, and how to manage audit display types, look-ups, and audits databases.

Please note that due to development priorities, Abstract Plus version 3.1 is being released without the Auditor features. The description of Auditor features provided in this manual is for informational purposes only. The Auditor features of Abstract Plus will be released in a future version of the program.

Abstract Plus Audit Types

The value of cancer data produced by population-based central cancer registries depends on the completeness of case reporting and the accuracy of the information included in the reports submitted to them. As a result, in order to fully evaluate both the completeness and quality of the data in the central registry, data completeness and accuracy must be monitored at the level of the reporting facility, where the data originates. One routine data quality assurance activity is the auditing of facilities reporting to the central registry.

NPCR Program Standards state that NPCR registries must have an overall program of quality assurance that includes conducting case-finding and/or re-abstracting audits from a sampling of source documents for each hospital-based reporting facility at least once every 5 years. Although these audits may include external audits, such as NPCR/SEER, to fully meet this standard, in general registries must independently conduct audits of their reporting facilities. In order to facilitate the performance of reporting facility audits by central registries, all new auditing features have been added to Abstract Plus version 3.1 to support the following types of audits (the following audit descriptions were taken from *Cancer Registry Management Principles & Practice, Third Edition*):

Casefinding Audits

To monitor case completeness of reporting facilities, central registries can carry out **casefinding audits** of their reporting facilities. Casefinding audits involve independently identifying all cases diagnosed and/or treated at a facility that are eligible for reporting to the central registry, usually for a sample time period. Auditors examine various case-finding data sources in the audited facility that cover the audited time period, including medical records disease indices (MRDI), pathology reports, radiation therapy logs, cytology reports, autopsy records, and other sources. Reportable tumors for the specified time period are identified via the audit of the casefinding sources, and then matched against a list of tumors that have been reported by the facility to the central registry. Tumors that are identified at audit but do not match to the list of reported tumors (non-matches, or un-reported tumors) are then reconciled with the facility. After reconciliation efforts, the number of tumors that matched expressed as a percentage of all tumors identified at audit provides an estimate of case completeness for the audited facility. Complete casefinding is necessary to ensure that cancer incidence rates produced by the central registry are accurate.

Reabstraction Audits

To monitor data quality, and to ensure that the actual patient experience reported by the facility is represented in the central registry database, central registries can perform **reabstraction audits**. Reabstraction audits include independently reabstracting a sample of tumor records reported by the facility from the actual source patient medical records, and comparing the reabstracted data to the data already in the registry. The goal of a reabstraction audit is to describe the level of agreement between the data reabstracted from the source records and the data in the central registry. For each reabstracted data item, the auditor's codes are compared to the codes originally reported by the facility to identify and classify discrepancies. If the codes do not match, the discrepancy is classified as a major or minor discrepancy based on definitions established in advance of the audit. Discrepancies that are identified at audit are then reconciled with the facility. After reconciliation efforts, the number of tumors for which agreement was found for a particular data item expressed as a percentage of the total number of tumors reabstracted for that data item provides an estimate of the data accuracy for the audited facility. Reabstraction audits identify specific problem areas in need of improvement.

Recoding Audits

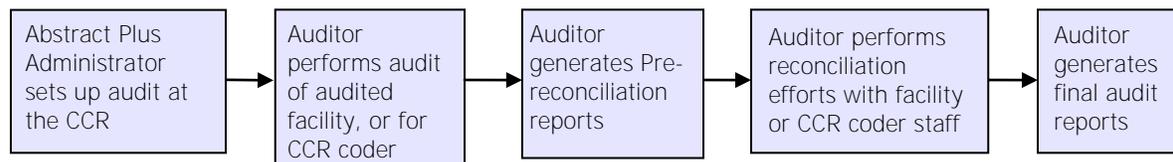
Central registries also perform **recoding audits**. Recoding audits involve independently recoding particular data items from abstracted text that was submitted to the central registry by the reporting facility, rather than reviewing actual source documents. Recoding audits can be conducted for a reporting facility or for a central registry abstractor, in particular newly-hired abstractor. The goal of a recoding audit is to describe the level of agreement between the data recoded from the submitted text and the data in the central registry. For each recoded data item, the auditor's codes are compared to the codes originally reported by the facility (or coded or reviewed and released by a central registry coder) to identify and classify discrepancies. As with reabstraction audits, if the codes do not match, the discrepancy is classified as a major or minor discrepancy based on definitions established in advance of the audit. Discrepancies that are identified at audit are then reconciled with the facility or the central registry coder. After reconciliation efforts, the number of tumors for which agreement was found for a particular data item expressed as a percentage of the total number

of tumors recoded for that data item provides an estimate of the data accuracy for the audited facility or central registry coder.

The all-new auditing capability included in Abstract Plus version 3.1 allows central registries to easily, efficiently, and electronically conduct audits of their reporting facilities and central registry coding staff. Casefinding audit features are available for assessing case completeness. For assessing data accuracy, both reabstraction and recoding audit features are available. The application is extremely flexible, allowing for audit of any standard or state-specific data items. Registries can choose to conduct blinded or un-blinded reabstraction audits. For recoding audits, codes are blinded and un-blinded submitted text can be recoded for both reporting facilities as well as central registry coders.

Basic Abstract Plus Audit Steps

Abstract Plus auditing features enable the Abstract Plus Administrator to set up an audit at the central registry and load it onto a laptop that has Abstract Plus installed for use by the Auditor. Highly configurable and user-friendly interfaces are available for all audit types. In addition, extensive reports, including graphs to allow for a visual representation of audit findings, are available to facilitate audit reconciliation efforts and communication of final audit results. Multiple audits for multiple facilities may be generated and loaded onto the same computer. All audit data are encrypted for added security. The auditor can save and return to their work at any time.



The Abstract Plus auditing process includes the following general steps:

1. The Administrator sets up the audit at the central registry, and loads the audit database onto the Auditor's laptop or computer. Multiple audits may be loaded onto the same computer for the same or different facilities or coders. The setup of an audit includes naming the audit, configuring and assigning an audit display type, and the loading of records to be audited into the audit.



Note

Records for auditing need to be prepared outside of Abstract Plus and must be in NAACCR record format for loading into to Abstract Plus audit database. Please see page 185 of this training manual, or click [here](#) for more information regarding the preparation of data files.

2. The Auditor then performs the audit of the facility or central registry coder.
3. Once the audit has been completed, the Auditor generates pre-reconciliation audit reports and shares them with the facility or central registry coding staff.
4. Using the pre-reconciliation reports, the Auditor then performs reconciliation efforts with the facility or central registry coder staff. Unreported tumors and data discrepancies are discussed, and the Auditor records final decisions.
5. Once reconciliation efforts have been completed, the Auditor generates the final audit reports, and shares them with the facility or central registry coding staff.

6. For further analysis of audit results or track audit results from year-to-year, audit results may be exported after completion of the audit. Unreported tumors can be exported in NAACCR file format, and reabstraction and recoding audit results can be exported into a text file. See page 204 of this manual or click [here](#) to learn more about exporting audits.



Abstract Plus auditing features are described in detail in the **Abstract Plus Training Manual for Auditors**. In order for an Administrator to have a full understanding of Abstract Plus audit features, the **Administrator** must read and understand the contents of the **Auditor** manual.

Configuring Audit Display Types

Recall that a display type is basically the user interface where the Abstractor or Auditor enters abstract data. For casefinding audits, the Auditor uses an audit display type to abstract information for newly-identified tumors upon audit. The casefinding abstracting window is very similar to the regular abstracting window in Abstract Plus.

For reabstracting or recoding audits, the Auditor uses an audit display type for the reabstraction/recoding process, as well as for the recording of reconciliation efforts. Display types for reabstracting and recoding audits are slightly different than regular abstracting and casefinding audit display types, as the Abstract Plus Reabstracting/Recoding window includes some special fields and features specifically for reabstraction/recoding audits.

Like abstracting display types, audit display types are highly customizable, and are configured by the Abstract Plus Administrator. Audit display types include information regarding fields collected, required fields (i.e., fields that can't be blank), edit sets, individual edit options, and Collaborative Staging preferences. Any standard data items and state-specific fields can be included in an audit display type, and can be assigned customized labels, ordered into sections, and have various properties that can be set, such as default values.

Creating an Audit Display Type

You can create different display types for different facilities and types of audits. Abstracted, reabstracted, and recoded audit data are entered and edited using the display type assigned to the audit. To generate an audit display type, you first name and add it to the application, and then go through the same five main steps to build the display type: as you would for a regular abstracting display type:

1. Select Fields
2. Select Critical Fields
3. Select Edit Set
4. Select Individual Edit Options
5. Select Collaborative Staging Preference.

For reabstracting and recoding audit display types when you name the audit and add it to the application, you will also specify options for blinding original codes and text. In addition, extra field properties are available for reabstracting and recoding display types to accommodate the reabstraction/recoding of values for the fields being audited, as well as the

recording of other audit fields, such as Auditor comments and information regarding identified discrepancies.

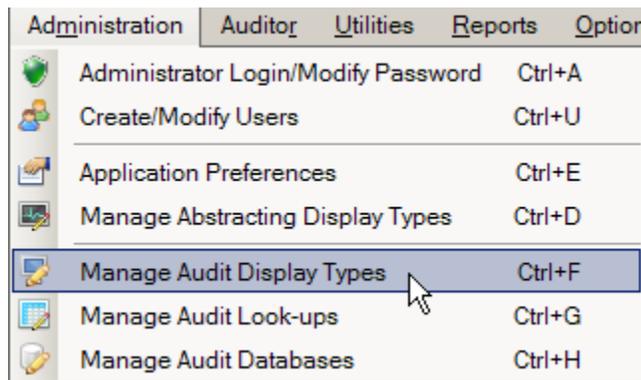
An audit display type can be created in one of two ways: 1) start from scratch by adding a new audit display type or 2) copying an existing abstracting or auditing display type and revise it. Either way you create an audit display type, you can customize it for your own needs.

Opening the Manage Audit Display Types Window

The Administrator creates and maintains audit display types using the **Manage Audit Display Types** window.

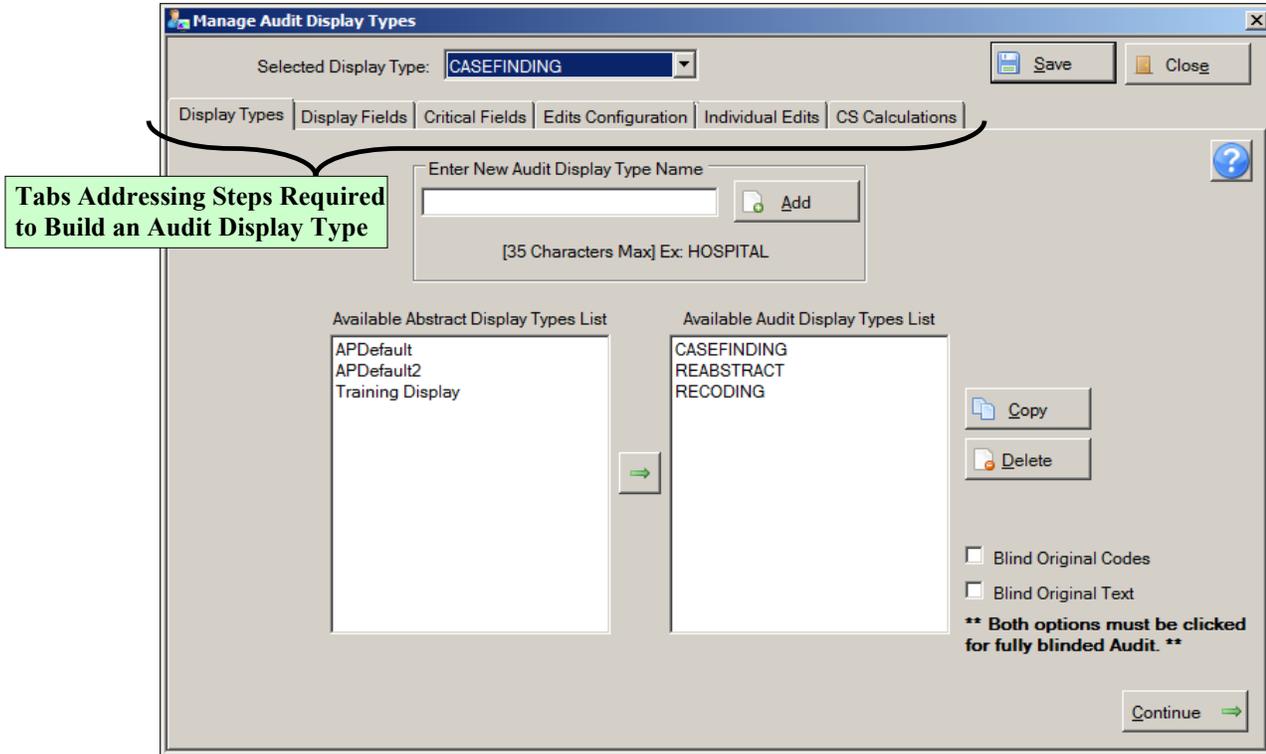
To open the Manage Audit Display Types window and work with audit display types, complete these steps:

1. Opening the Manage Audit Display Types window can be done in 2 ways:
 - a. Click on the **Administration** menu, and select **Manage Audit Display Types**.

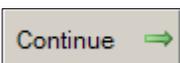


- b. Use the keystroke **Ctrl+F**.

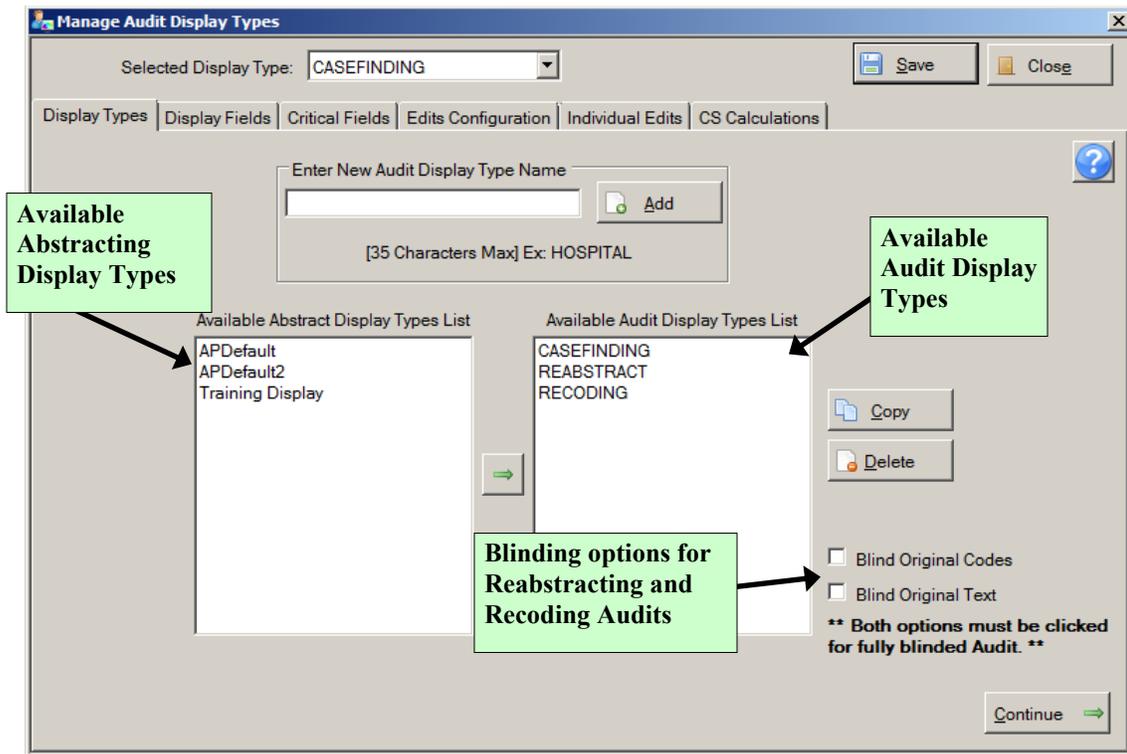
Result: The **Manage Audit Display Types** window opens defaulted to the **Display Types** tab.



The Manage Audit Display Types window consists of a series of **tabs** which open different windows addressing the various steps required to build or update an audit display type: Display Types, Display Fields, Critical Fields, Edits Configuration, Individual Edits, and CS (Collaborative Staging) Calculations. At the top of the Manage Audit Display Types window is a **Selected Display Type** pull-down menu from which you can select the audit display type that you would like to modify. The Manage Audit Display Types window also includes the following:

Use this icon...	To...
	Save the selections on the window.
	Close the window without saving the information.
	Save the selections on the window and continue to the next tab
	Open the help information for the current Manage Audit Display Types window tab

The Display Types Tab for Audits



As mentioned, upon opening the Manage Audit Display Types window, the **Display Types** tab is displayed by default. The Administrator uses the Display Types tab to **add** a new audit display type, create a new audit display type by **copying** an existing abstracting or audit display type under a new name, and **delete** an existing audit display type. The Display Types tab is slightly differently for audit display types than for regular display types. A list of existing abstracting display types is displayed in the **Available Abstract Display Types List** on the left, and a list of existing audit display types is displayed in the **Available Audit Display Types List** on the right. In addition blinding options are available for original codes and text to accommodate blinded or un-blinded reabstracting and recoding audits.

Included Audit Display Types

Abstract Plus version 3.1 comes with 3 audit display types already configured for use. In addition to any existing abstracting display types, any of the example audit display types can be copied and used as a starting point for your own central registry's audit display types. The audit display types included with the Abstract Plus version 3.1 installation are described in the following table:

Display Type	Description
CASEFINDING	<p>This audit display type is an example display type for a casefinding audit; this display type would be used by the Auditor to abstract information for tumors newly-identified upon casefinding at the audited facility</p> <p>This display type includes limited patient and tumor identifiers, as the Auditor's goal is generally to record only enough information to follow the missed tumor back to the facility for a report of cancer</p>
REABSTRACT	<p>This audit display type is an example display type for a reabstracting audit; this display type would be used by the Auditor to reabstract fields being audited and to record information regarding any identified discrepancies upon reabstraction</p> <p>This display type includes limited patient identifiers, and is set up to audit the fields of Primary Site, Laterality, Histologic Type ICD-O-3, Behavior Code ICD-O-3, Grade, and Date of Diagnosis</p> <p>This display type is set up for a fully-blinded audit---both original text and codes are hidden from the Auditor's view until the reabstraction process is complete</p>
RECODING	<p>This audit display type is an example display type for a recoding audit; this display type would be used by the Auditor to recode fields being audited from original text, and to record information regarding any identified discrepancies upon recoding</p> <p>This display type includes limited patient identifiers, and is set up to recode the fields of Primary Site, Laterality, Histologic Type ICD-O-3, Behavior Code ICD-O-3, Grade, and Date of Diagnosis</p> <p>This display type is set up for a recoding audit that entails the recoding of audited fields from original text, so the original text in not blinded, while the original codes are blinded and hidden from the Auditor's view until the recoding process is complete</p>

Adding a New Audit Display Type

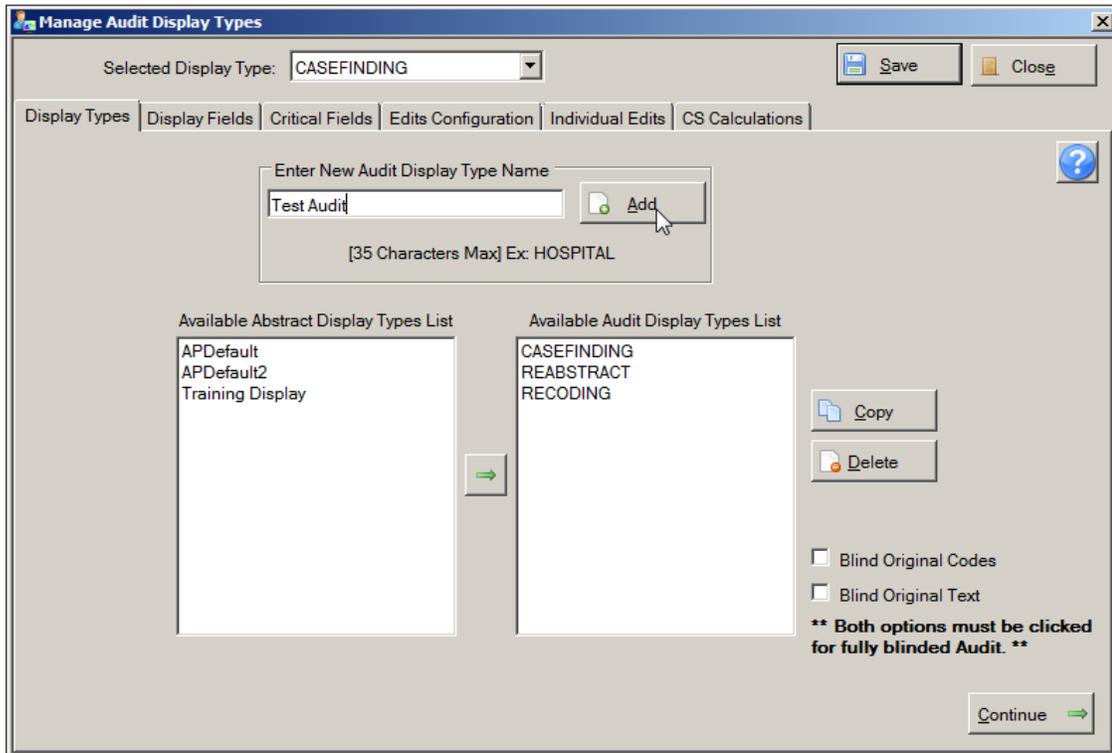
One way to create an audit display type is to add a new one.

To add a new audit display type, complete these steps:

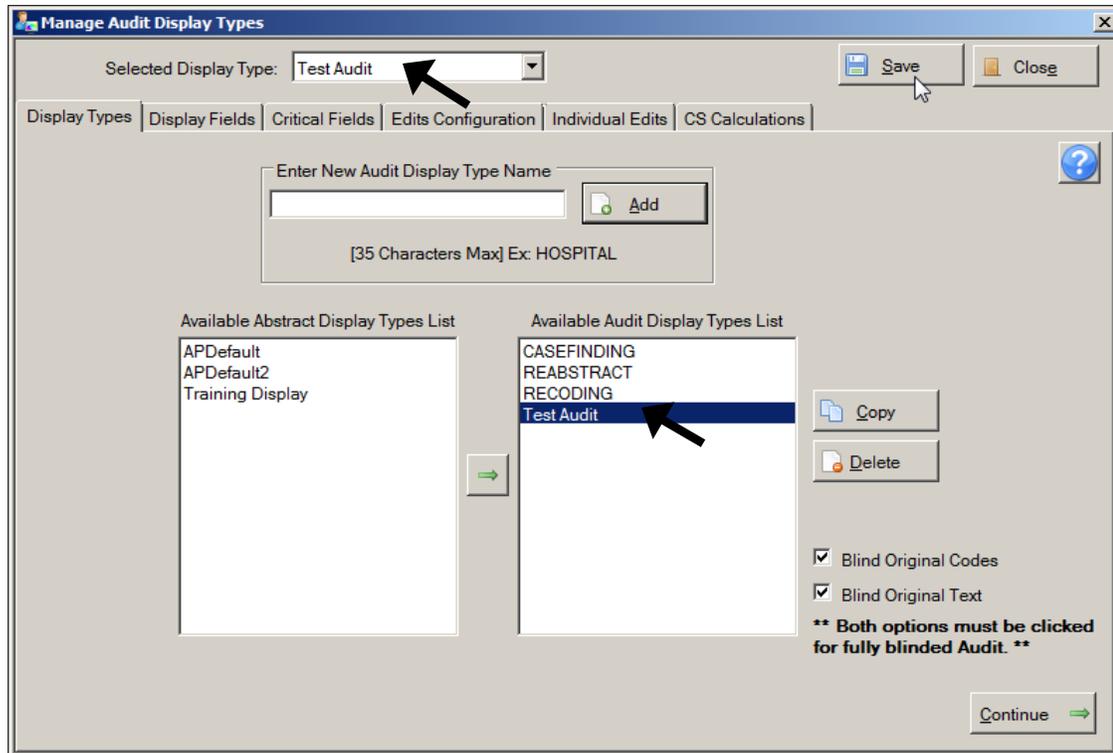
1. Open the Manage Audit Display Types window, either by clicking on the **Administration** menu, and selecting **Manage Audit Display Types**, or using the **Ctrl+F** keystroke.

Result: The **Manage Audit Display Types** window opens defaulted to the **Display Types** tab.

2. Type a **name for the new audit display type** in the **Enter New Audit Display Type Name** box in the middle of the window, and click **Add**. In the example shown, a new abstracting display type named Test Audit is being added to the application.



Result: The new audit display type is added to the **Available Audit Display Types List**, and automatically becomes the selected display type in the **Selected Display Type** pull-down menu at the top of the Manage Audit Display Types window so that you may continue your work on the new audit display type.

**Note**

No display type attributes other than the display type name will be assigned to the new audit display type at this point. Other attributes, such as fields included in the display type, fields to be audited, etc. must be set using the other Manage Display Types tabs.

3. Click **Save**.

Activity 14 - Creating a New Audit Display Type by Adding New

Using what you have just learned, add a new audit display type to the application called **Test Audit**.

Please see page 139 of this manual or click [here](#) for instructions regarding adding a new audit display type.

Copying an Existing Display Type

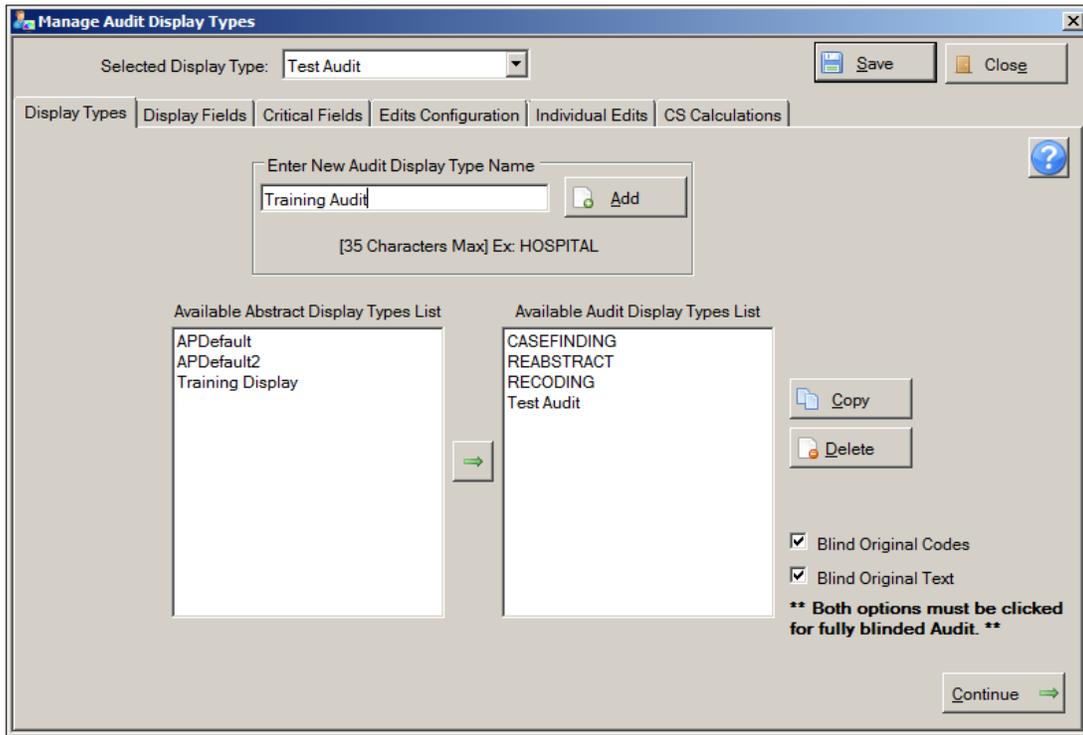
The other way to create an audit display type is to copy an existing abstracting or audit display type and revise it to meet your needs.

To create a new audit display type by copying an existing display type, complete these steps:

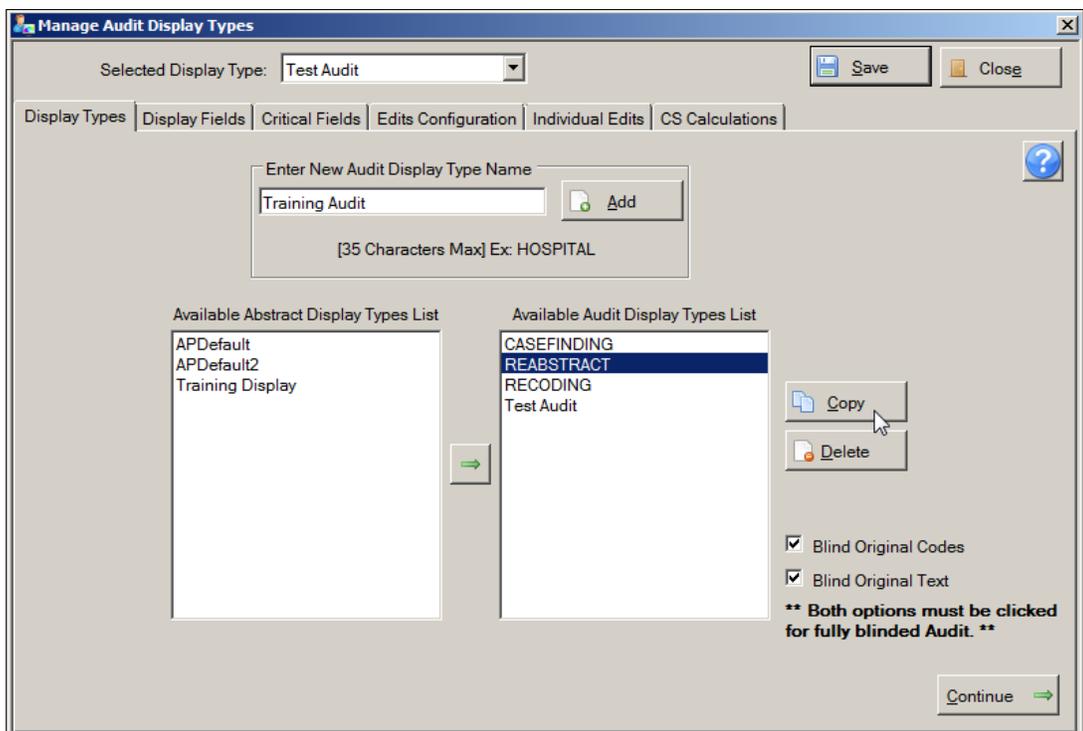
1. Open the Manage Audit Display Types window, either by clicking on the **Administration** menu, and selecting **Manage Audit Display Types**, or using the **Ctrl+F** keystroke.

Result: The **Manage Audit Display Types** window opens defaulted to the **Display Types** tab.

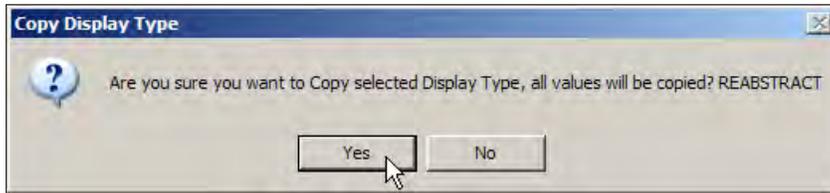
2. Type a **name for the new display type** in the **Enter New Display Type Name** box on the left. In the example shown, the name of the new display type being created is Training Audit.



3. Select the existing abstracting or auditing display type that you would like to copy from either of the **Available Display Types List**, and click **Copy**. In the example shown, the REABSTRACT audit display type is being copied under the name of Training Audit.

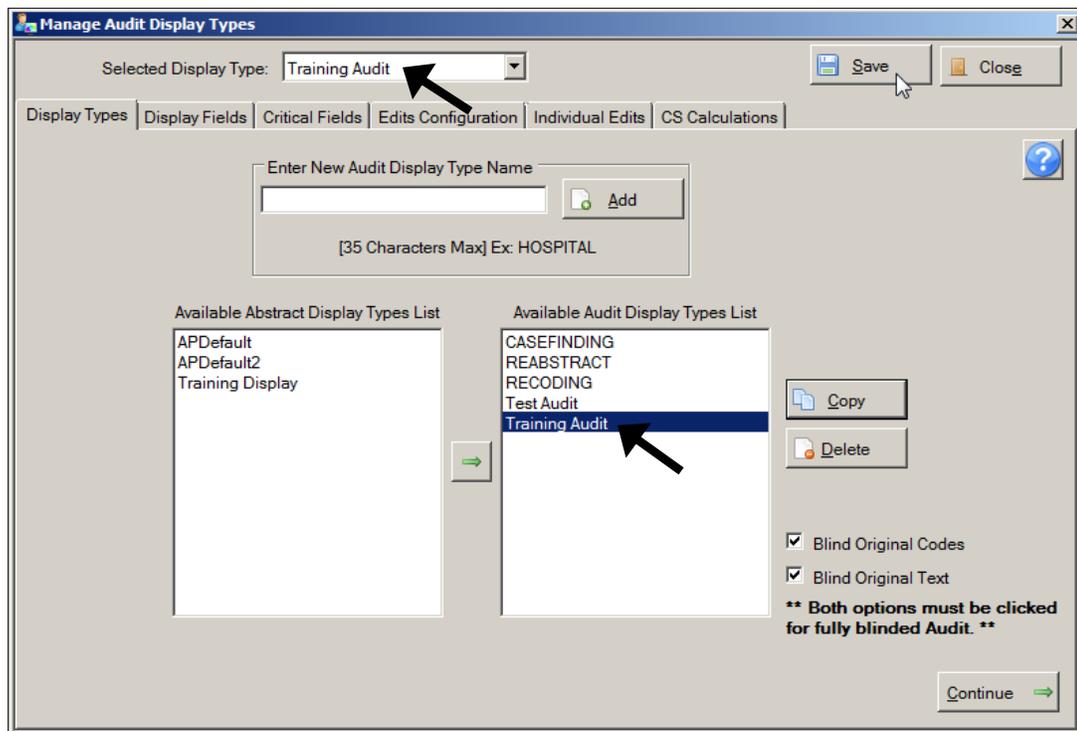


Result: The application prompts you to confirm that you would like to copy the currently selected display type.



4. Click **Yes**.

Result: The new display type is added to the **Available Audit Display Types List**, and automatically becomes the selected display type in the **Selected Display Type** pull-down menu at the top of the Manage Audit Display Types window so that you may go through any of the remaining steps required to modify the display type.



Note

All display type attributes of the copied display type will be assigned to the new display type at this point.

5. Click **Save**.

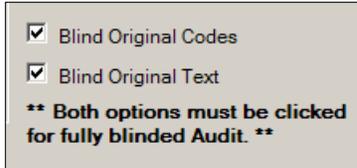
Activity 15 - Creating a New Display Type by Copying

Using what you have just learned, copy the **REABSTRACT** audit display type under the name of **Training Audit**.

Please see page 142 of this manual or click [here](#) for instructions regarding copying an existing display type under a new name. You will continue to modify the Training Audit display type in the next few activities.

Blinding Options for Reabstracting and Recoding Audits

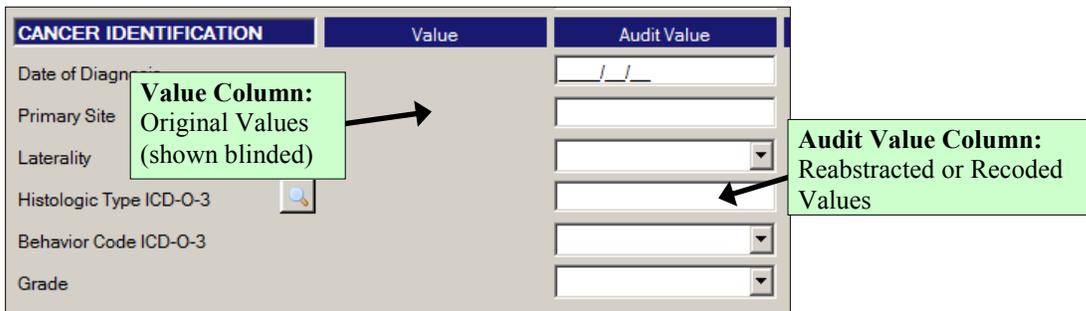
On the Display Types tab, once you have created an audit display type if it is a **reabstracting or recoding audit** display type you would next specify the **blinding options** for the audit. Reabstraction and recoding audits can be **blinded or un-blinded**. In addition, the blinding option can be applied to original codes, original text or both:



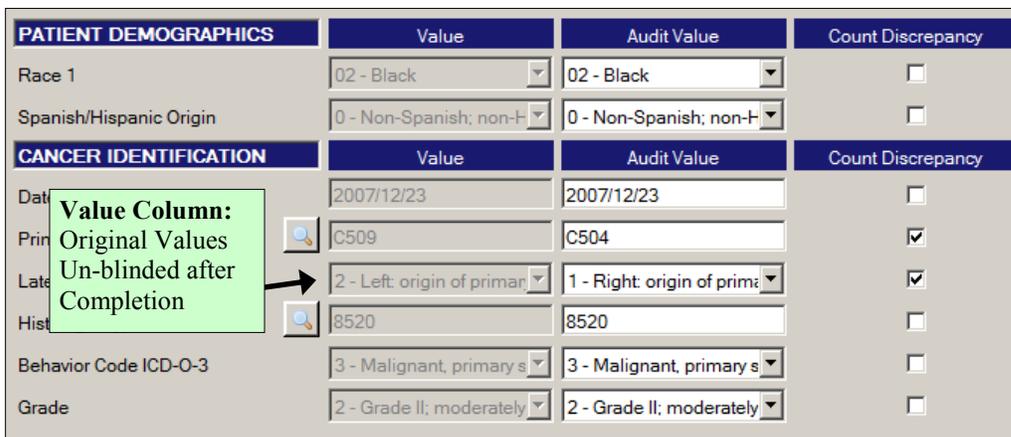
Reabstracting and recoding display types include special columns to display the original values submitted by the audited facility for the audited fields (the **Value** column), as well as to reabstract values for the audited fields (the **Audit Value** column).

Blinding Original Codes (Both Reabstracting and Recoding):

In the example shown, the **Blind Original Codes** option has been checked for the audit display type, so the original values are hidden from the Auditor’s view during reabstraction/recoding of values:

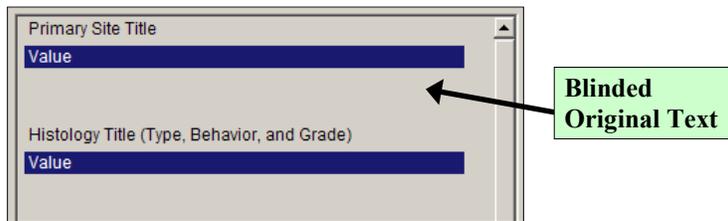


If the reabstraction or recoding audit is blinded, upon **completion of reabstraction or recoding** of all audited fields (i.e., the reabstract/recoding is complete; all required fields have been filled out and no edit errors remain), the original values are then displayed to the Auditor:

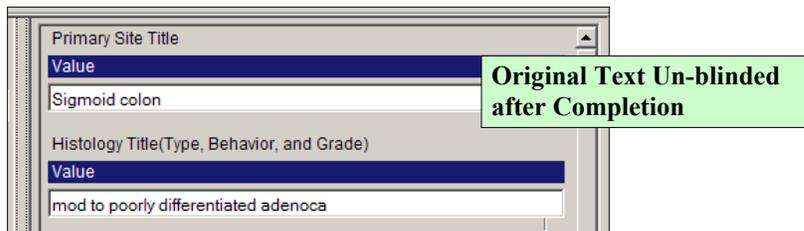


Blinding Original Text (Reabstracting Only):

In the example shown, the **Blind Original Text** option has been checked for the audit display type, so the original text values are hidden from the Auditor's view during reabstracting:



The **Blind Original Text** option applies to reabstracting audit display types only, as original text is **always** displayed to the Auditor for recoding during recoding audits. If the original text for a reabstraction audit is blinded, upon **completion of reabstraction** of all audited fields, the original text values are displayed to the Auditor:



For a fully-blinded **reabstraction** audit, both **Blind Original Codes** and **Blind Original Text** options must be **checked** for the audit display type.



Important

For **recoding** audits, the **Blind Original Codes** option must be **checked**, and the **Blind Original Text** option must be **unchecked**.

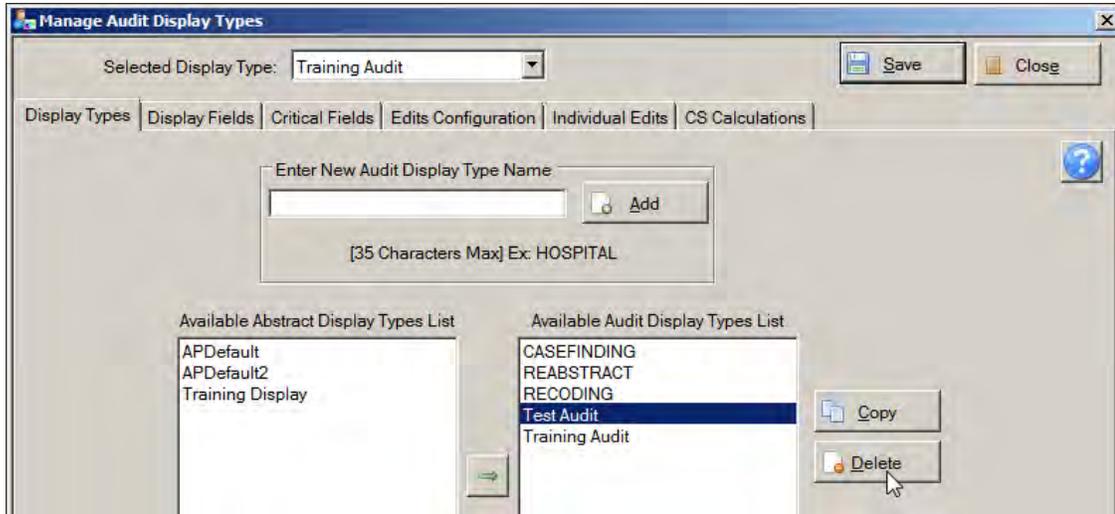
Deleting an Audit Display Type

To delete an audit display type, complete these steps:

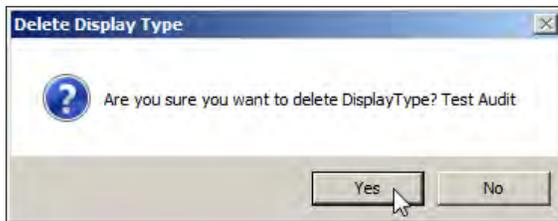
1. Open the Manage Audit Display Types window, either by clicking on the **Administration** menu, and selecting **Manage Audit Display Types**, or using the **Ctrl+F** keystroke.

Result: The **Manage Audit Display Types** window opens defaulted to the **Display Types** tab.

2. Select the audit **display type** that you would like to delete from the **Available Audit Display Types List** on the right, and click **Delete**. In the example shown, the audit display type Test Audit is being deleted.

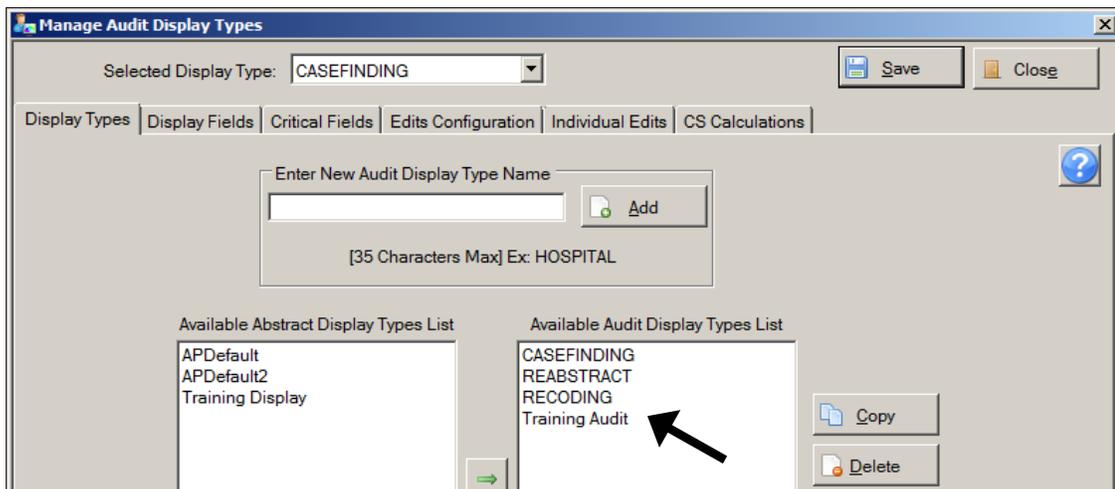


Result: The application prompts you to confirm that you would like to delete the currently selected audit display type.



3. Click **Yes**.

Result: The display type is deleted from the application, and is no longer listed in the **Available Audit Display Types List**.



Activity 16 - Deleting an Audit Display Type

Using what you have just learned, delete the **TEST AUDIT** audit display type.

Please see page 146 of this manual or click [here](#) for instructions on how to delete an audit display type.

Five Steps for Building a Display Type

Whether you create a new audit display type by adding a new one or copying an existing one, as mentioned earlier, there are five steps you will need to go through next to complete the display type. You do not have to use the options in all five steps. Once you have named and created a new audit display type on the Display Types tab, the remaining tabs on the Manage Audit Display Types window take you through the steps to build or update the display type. This table describes these steps:

On this tab . . .	You select the following for the audit display type. . .
1. Display Fields	fields that are to be collected with the display type, set properties for individual fields, and group fields into sections if desired; for reabstraction and recoding audits fields to be audited are specified, as well as the inclusion of audit comments fields and special fields to record information regarding identified discrepancies for reabstracting and recoding audits
2. Critical Fields	fields that must contain information to complete a reabstract or recode (required fields) NOTE: For reabstraction and recoding audits, all fields being reabstracted or recoded must be designated as Critical fields
3. Edits Configuration	edit set (determines how the system edits the abstracted audit data), and set edit set execution options
4. Individual Edits	edit set execution options for individual edits, over-riding the options selected for the edit set
5. CS Calculations	Collaborative Staging calculation options for the abstracted audit data, if applicable

Step 1: The Display Fields Tab

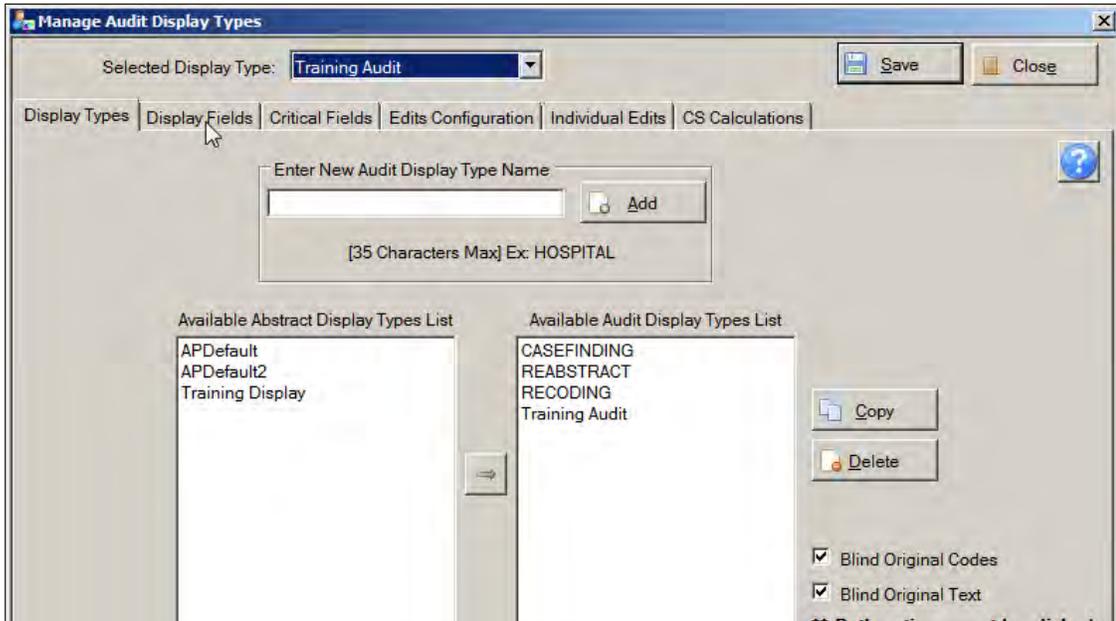
After adding a new or copying an existing display type to create a new audit display type, you then modify the audit display type. The first step is to select data fields into the audit display type, which includes setting field properties such as a customized field label or default value, if desired. At the discretion of the Administrator, the fields in the display type can be organized into logical sections, which also have customizable labels. Section headings, for example, Hospital Specific and Demographic, are user-specified and can organize the fields for clearer viewing and facilitation of data entry by the Auditor.

To add section headings and fields to an audit display type, complete these steps:

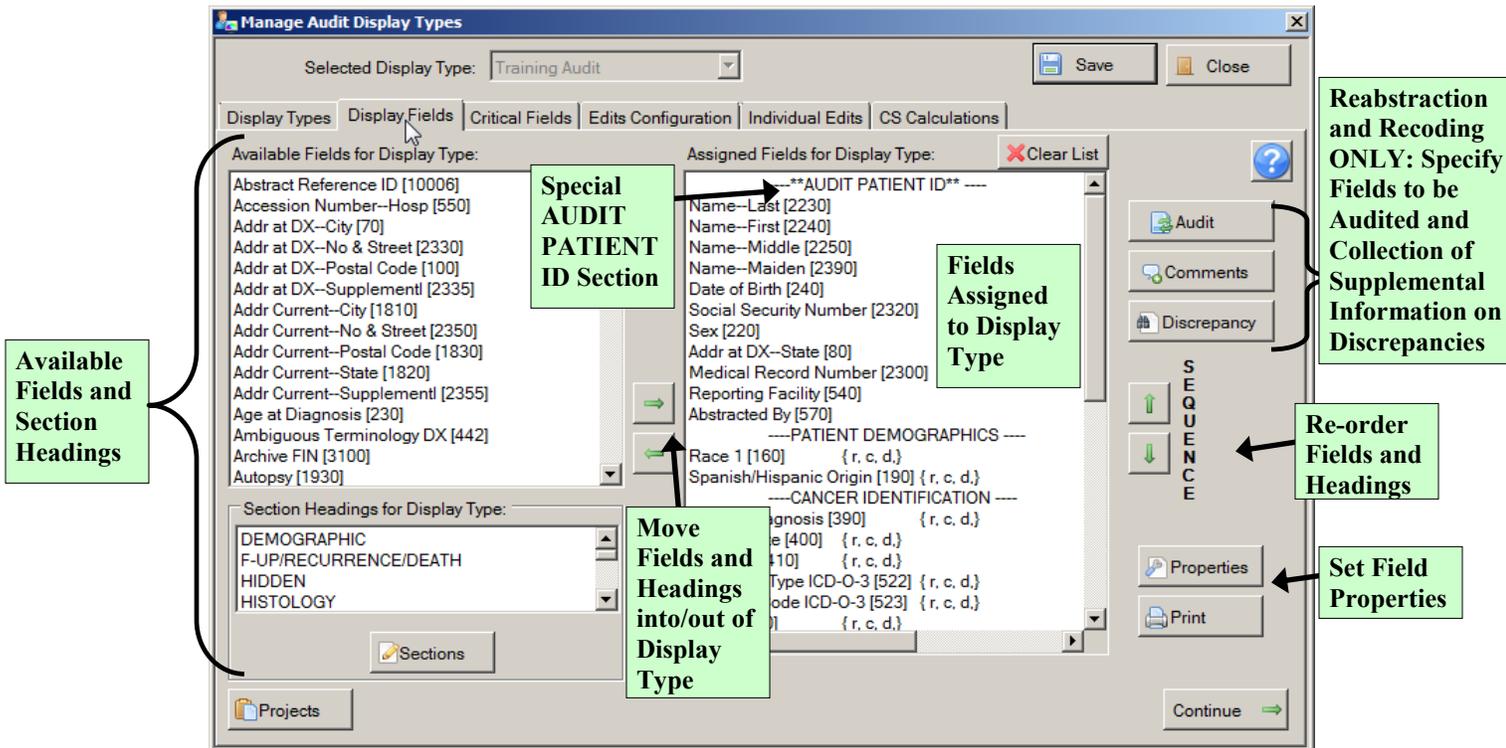
1. **Select** the audit display type you would like to build or update from **Selected Display Type** menu at the top of the Manage Audit Display Types window. In the example shown, the Training Audit display type is being selected and modified.



2. Click the **Display Fields** tab.



Result: The **Manage Audit Display Types** window opens the **Display Fields** tab for the selected audit display type.



The Administrator uses the Display Fields tab to select the fields for which data is to be collected into or out of the audit display type, and group the fields into sections if desired. Using the left and right arrow buttons, fields and section headings are moved from the lists of available data fields and section headings on the left side of the window to the list of data fields and section headings on the right to include them in the selected display type. The Sequence up and down arrow buttons are used to re-order the fields and section headings once they have been added to the display type.

In addition, for reabstraction and recoding audits the fields to be audited are specified, as well as the inclusion of audit comments fields and special fields to record information regarding identified discrepancies for reabstracted and recoded fields.

Adding Section Headings to an Audit Display Type

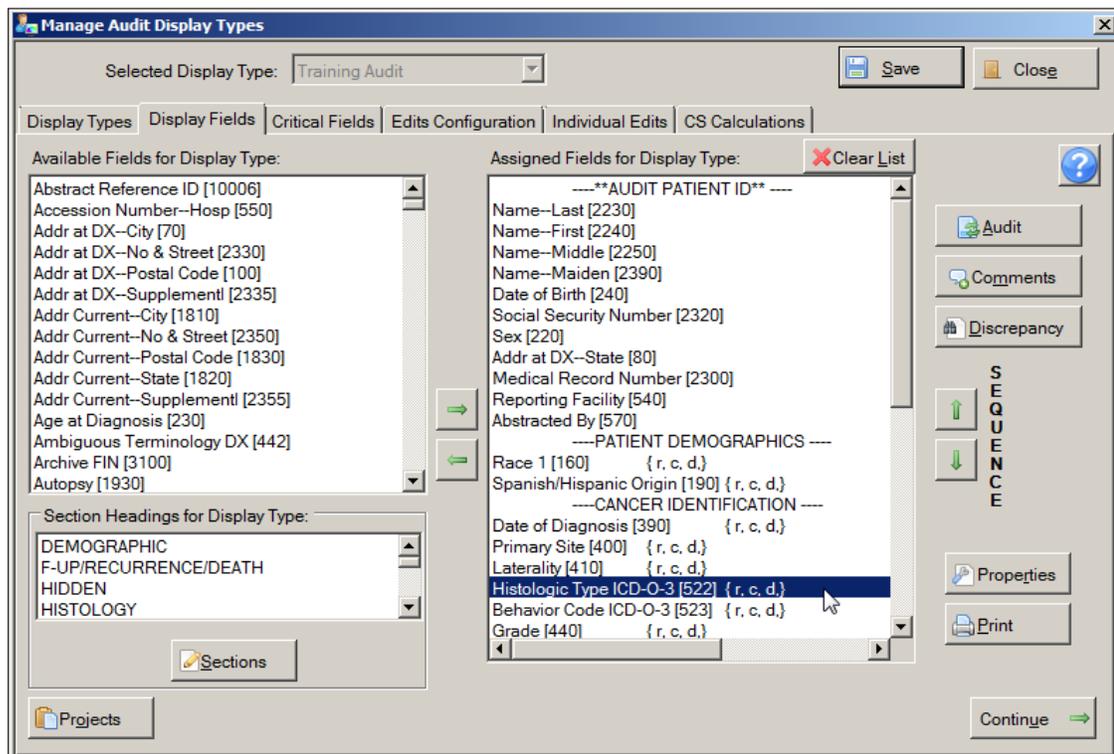
Section headings are added to a display type to organize the fields in the display type into logical groups of related fields.



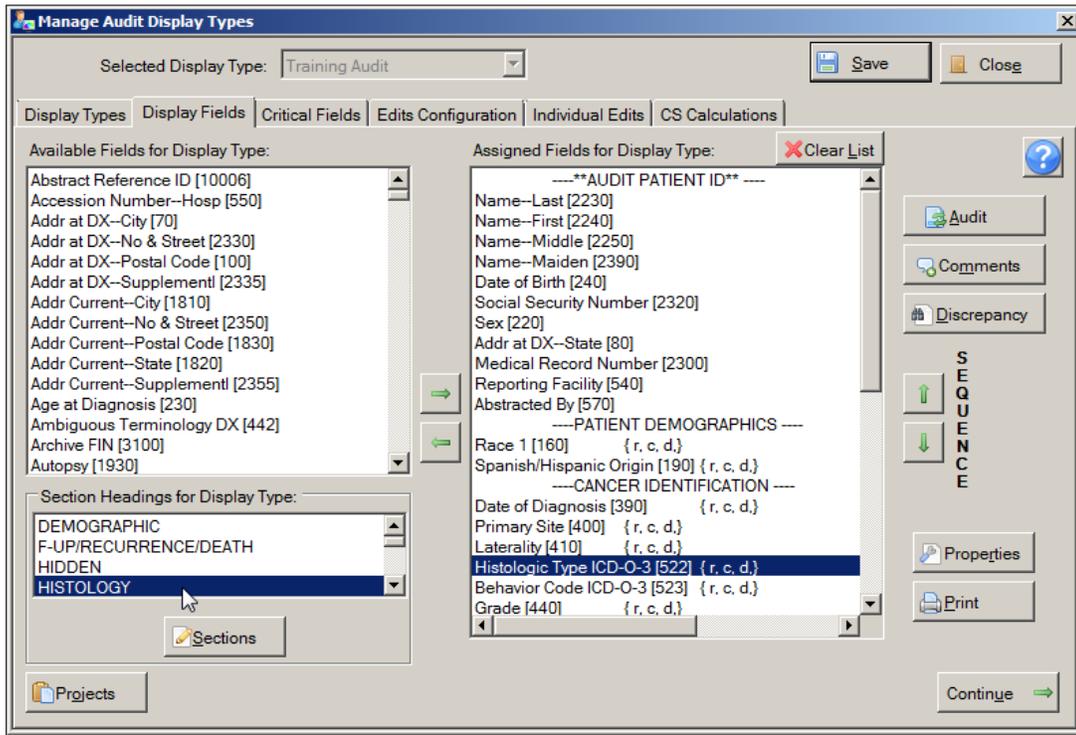
At a minimum, at least one section heading is required to be assigned to each display type, and must be placed as the first item in the display type.

To add an existing section heading to a display type, complete these steps:

1. In the Assigned Fields for Display Type list, **select the field above which** you would like to **place the Section header**. In the example shown, the section heading of HISTOLOGY is being moved into the Training Audit display type above the field of Histologic Type ICD-O-3, so the field of Histologic Type ICD-O-3 is selected from the Assigned Fields for Display Type list.

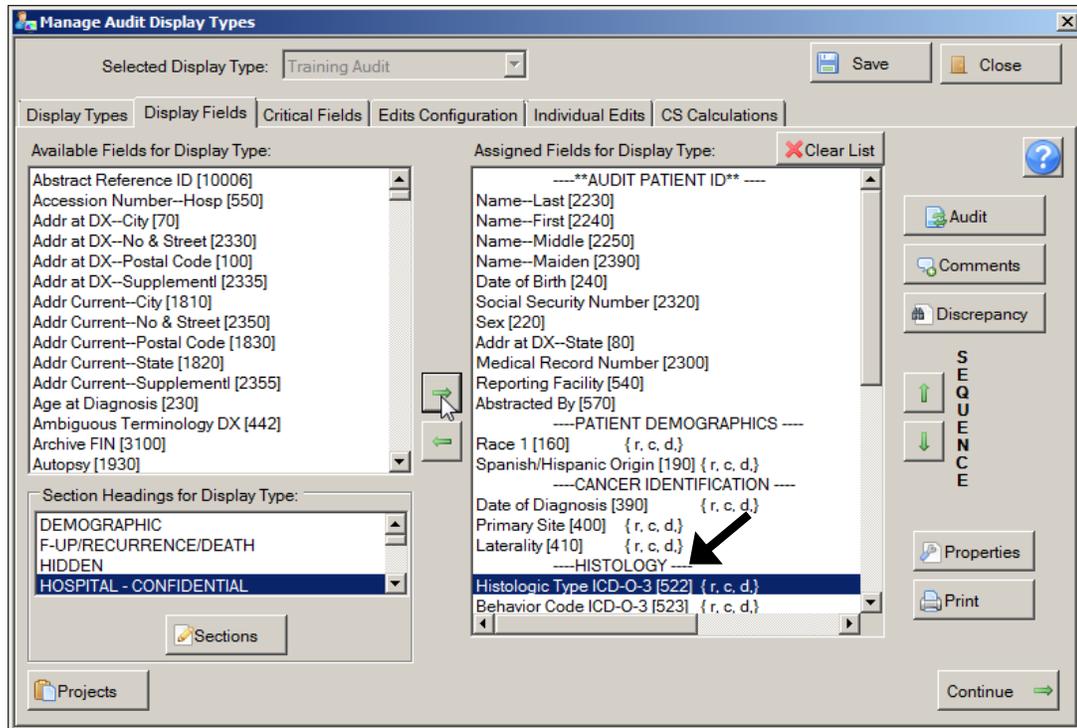


- In the **Section Headings for Display Type** list on the lower left of the Display Fields tab, select the section heading that you would like to add to the display type. In the example shown, the section heading of HISTOLOGY is being moved into the display type.



- Click the green right-pointing arrow  to move the heading into the audit display type.

Result: The section heading is added to the Assigned Fields for Display Type list on the right above the currently-selected field in the list.



4. If the placement of the header is not as desired, use the SEQUENCE up () and down () arrows to move the section heading up or down in the order of the display type to the desired position.
5. Click **Save**.

AUDIT PATIENT ID Section

The Reabstracting and Recoding windows include a special **Audit Patient ID** section which will include pre-filled patient and hospital identification fields for the abstract to be reabstracted or recoded. This section is defined by the section heading of ****AUDIT PATIENT ID****. The fields assigned to the Audit Patient ID section can be modified, and the values displayed to the Auditor for these fields are automatically copied from the original submitted values for the abstract and can not be modified by the Auditor. The automatic filling of these non-audited values saves the Auditor valuable time in the reabstraction or recoding process. The fields included in this section are specified by the Abstract Plus Administrator upon setup of the audit, are used for identification purposes only, and do not contribute towards the calculation of data quality statistics for the reabstraction audit reports. The example shown illustrates how the Audit Patient ID Section is displayed to the Auditor:

AUDIT PATIENT ID	Value	Audit Value
Name--Last		LANE
Name--First		VICKI
Name--Middle		
Name--Maiden		
Date of Birth		1959/05/09
Social Security Number		123-12-3003
Sex		2 - Female
Addr at DX--State		GA - Georgia
Medical Record Number		0000000003
Reporting Facility		1111111111
Abstracted By		NAU



The section heading of ****AUDIT PATIENT ID**** is a special section heading used for reabstracting and recoding audits only, and is not available for addition to regular abstracting display types.

Activity 17 - Adding a Section Heading to a Display Type

Using what you have just learned, **add the section heading of HISTOLOGY** to the Training Audit display type, and position the heading **directly above the Histologic Type ICD-O-3 field** in the Assigned Fields for Display Type list. Feel free to add other section headings as well. Please see page 150 of this manual or click [here](#) for instructions regarding adding section headings to audit display types.

Managing Section Headings

Although Abstract Plus version 3.1 comes with many section headings, you are not limited to these section headings. The Administrator can create new section headings, rename existing section headings, and delete section headings.

To manage the Section Headings for Display Type list, complete these steps:

1. On the **Display Fields** tab, click **Sections**.

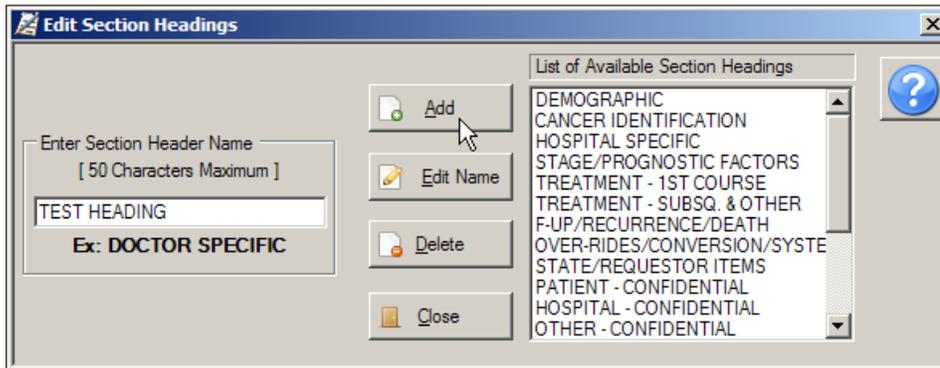
Result: The **Edit Section Headings** window opens.

The Administrator uses the Edit Section Headings window to **add** a new section heading to the application, **edit the name** of an existing section heading, or **delete** an existing section heading. A list of existing section headings is displayed in the **List of Available Section Headings** on the right.

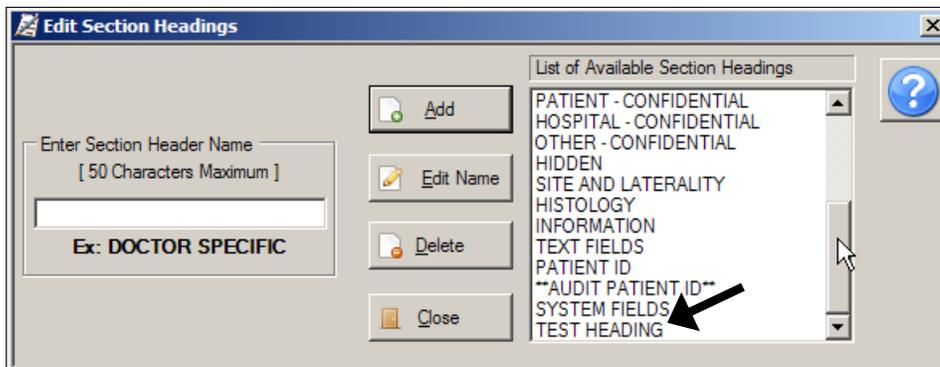
Adding a New Section Heading

To add a new section heading to the application, complete these steps:

1. On the Edit Section Headings window, type a **name for the new section heading** in the **Enter Section Header Name** box on the left, and click **Add**. In the example shown, a new section heading named TEST HEADING is being added to the application.



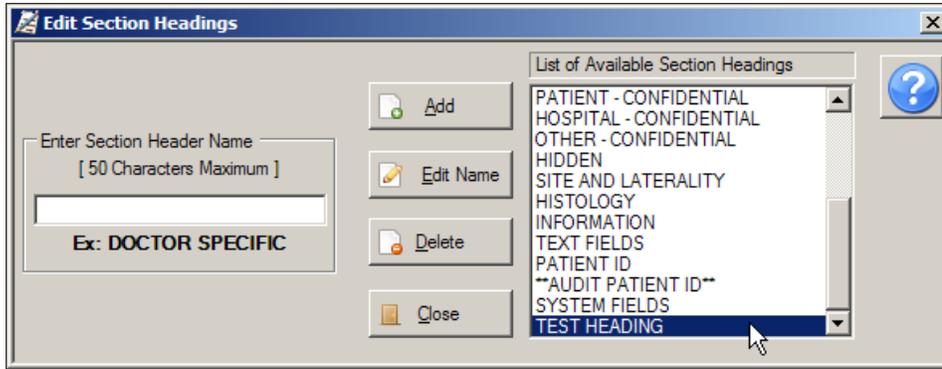
Result: The new section heading is added to the **List of Available Section Headings** on the right.



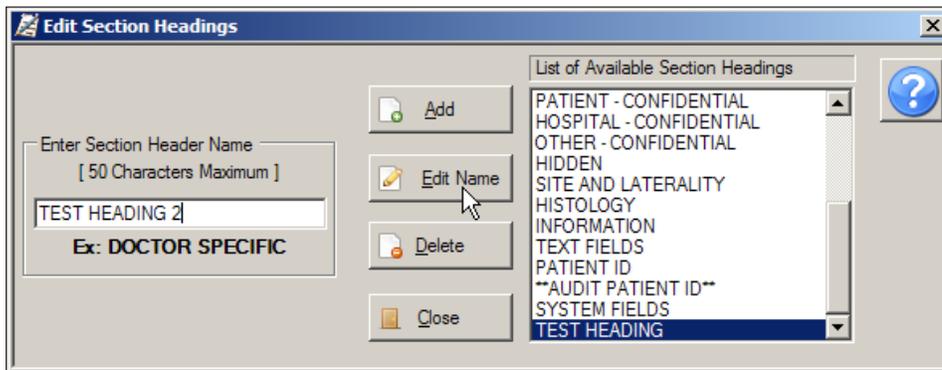
Editing the Name of an Existing Section Heading

To edit the name of an existing section heading, complete these steps:

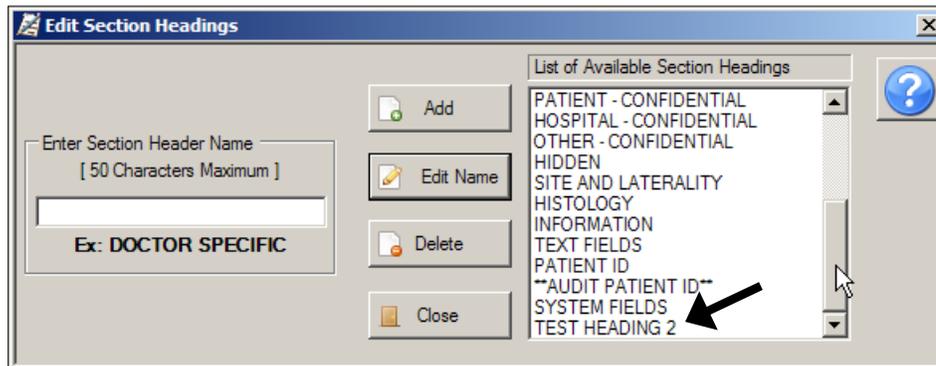
1. **Select** the section heading that you would like to rename from the **List of Available Section Headings** on the right. In the example shown, the section heading named TEST HEADING is being re-named, so it is selected from the List of Available Section Headings.



2. Type the **new name for the existing section heading** in the **Enter Section Header Name** box on the left, and click **Edit Name**. In the example shown, the section heading named TEST HEADING section heading is being re-named to TEST HEADING 2.



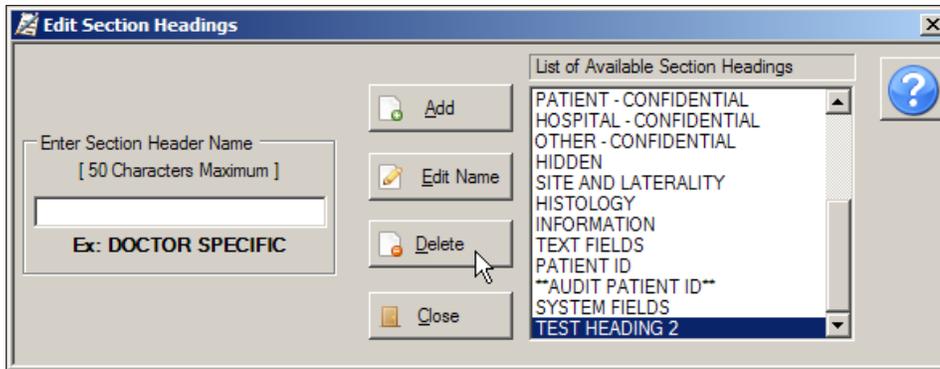
Result: The section heading is renamed in the List of Available Section Headings.



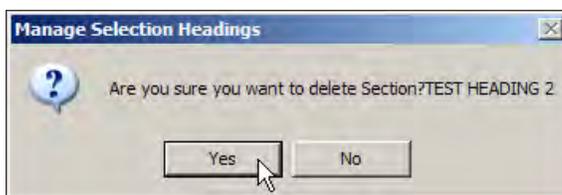
Deleting a Section Heading

To delete a section heading, complete these steps:

1. **Select** the section heading that you would like to delete from the **List of Available Section Headings** on the right, and click **Delete**. In the example shown, the section heading being deleted is named TEST HEADING 2, so it is selected from the List of Available Section Headings.



Result: The application prompts you to confirm that you would like to delete the currently selected section heading.



2. Click **Yes**.

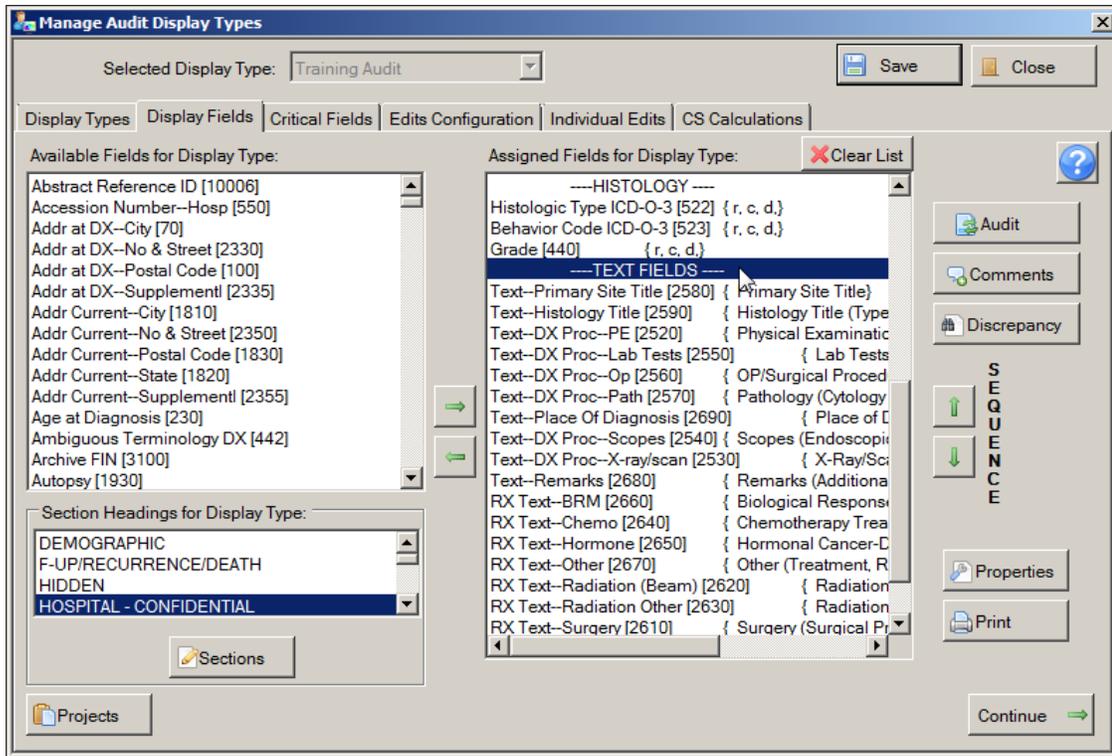
Result: The section heading is deleted from the application, and is no longer listed in the List of Available Section Headings.

Adding Fields to an Audit Display Type

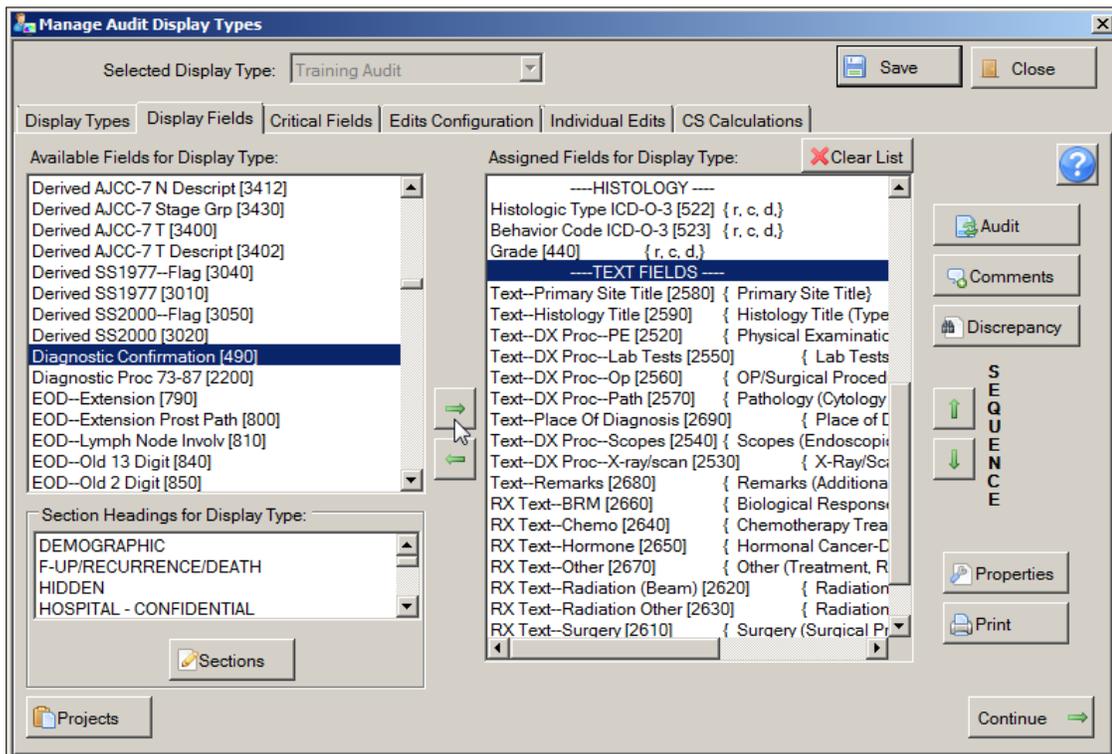
After adding section headings to the Assigned Fields for Display Type list, you then add fields to the audit display type. When adding fields to an audit display type it is important to keep in mind what data items you would like to collect, and of those data items, which you would like to require (i.e., make a critical field, cannot be blank), as well as what data items for which you would like to present a default value to Abstractor. It is also important to know what data items your central registry system will eventually require, for example, system fields such as Morph Coding Sys-Current.

To add fields to an audit display type, complete these steps:

1. In the Assigned Fields for Display Type list, **select the field or section heading above which** you would like to **place the field** that you are adding to the display type. In the example shown, the field of Diagnostic Confirmation is being added to the Training Audit display type above the TEXT FIELDS section heading, so the TEXT FIELDS section heading is selected from the Assigned Fields for Display Type list.



- In the **Available Fields for Display Type** list on the upper left of the Display Fields tab, select the field or fields that you would like to move into the display type. In the example shown, the field of Diagnostic Confirmation is being added to the Training Audit display type.



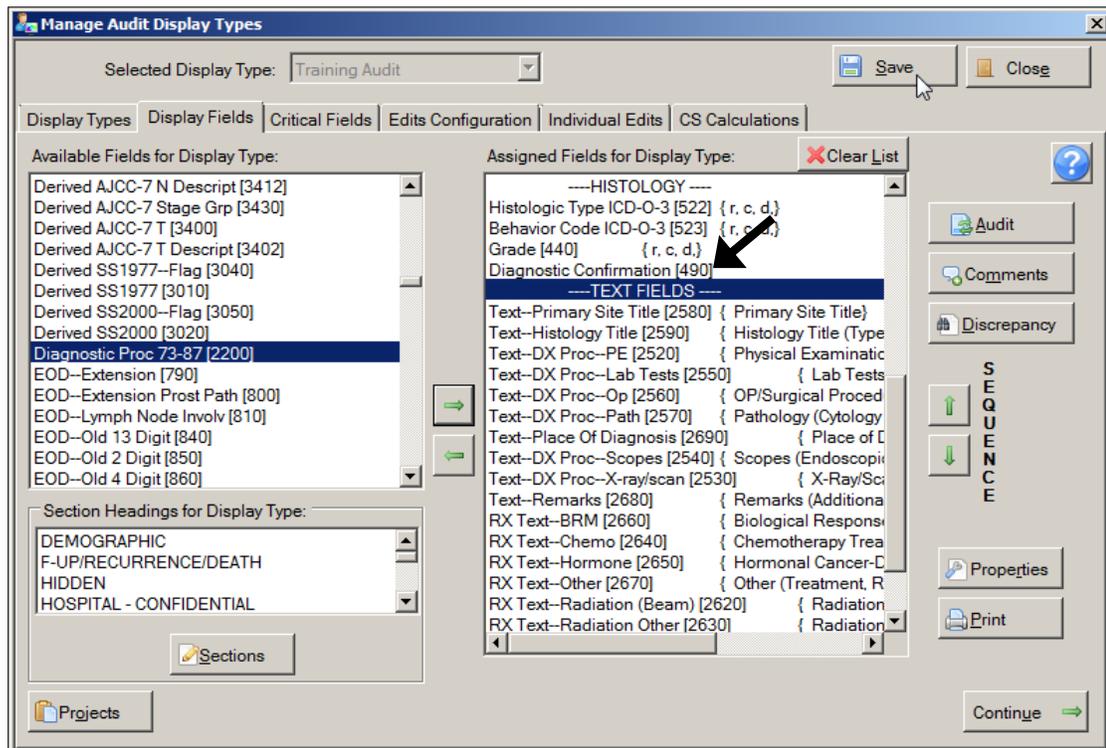


Tip

To select one field, click the name of the field. To select a group of fields together, click the first field, press and hold the SHIFT key, and then click the last field in the group. To select multiple fields that are not in order, press and hold the CTRL key and click each field.

- Click the green right-pointing arrow  to move the field or fields into the audit display type.

Result: The field(s) is removed from the Available Fields for Display Type list on the left, and is moved into the Assigned Fields for Display Type list on the right, above the currently-selected field or section header in the list.



- If the order of the placed fields is not as desired, use the SEQUENCE up () and down () arrows to move the field or fields up or down in the order of the display type to the desired position.



Tip

When you move the available fields into a display type, the system places the fields directly above the field that you have selected in the Assigned Fields for Display Type list. If you have not selected a field in the Assigned Fields for Display Type list the system places the fields at the top of the Assigned Fields for Display Type list.

- You can save updates to the fields either by clicking **Save**, or the **Continue** button, which saves updates and opens the next tab, Step 2, Critical Fields.



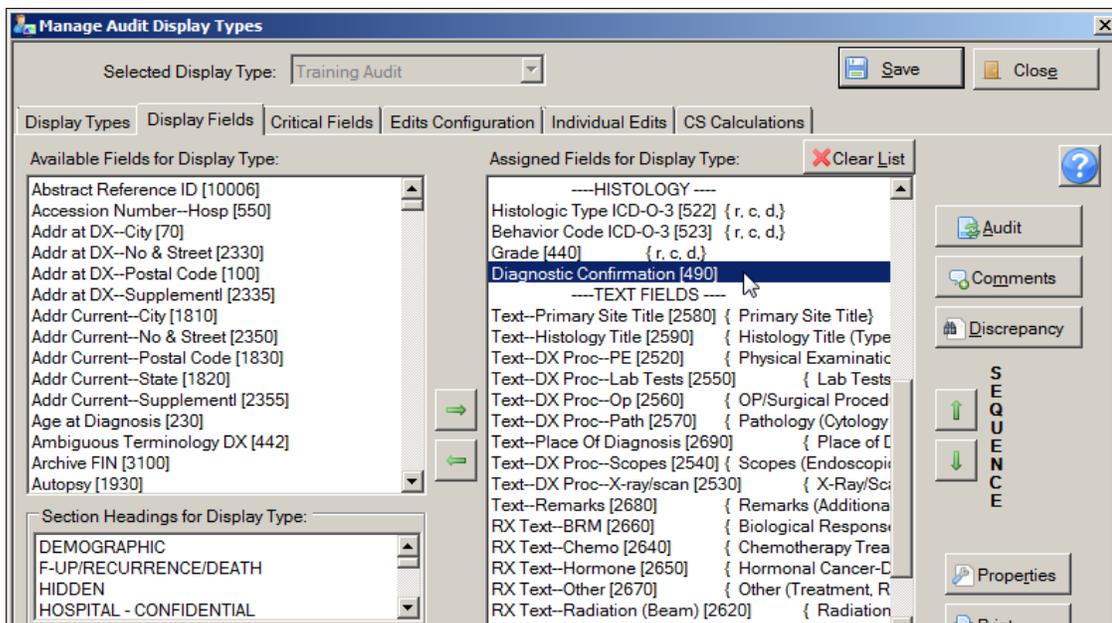
Clicking  (**Clear List**) at the top of the Assigned Fields for Display Type list will remove all fields and sections from the audit display type. This should be done with caution.

Specifying Fields for Reabstracting and Recoding

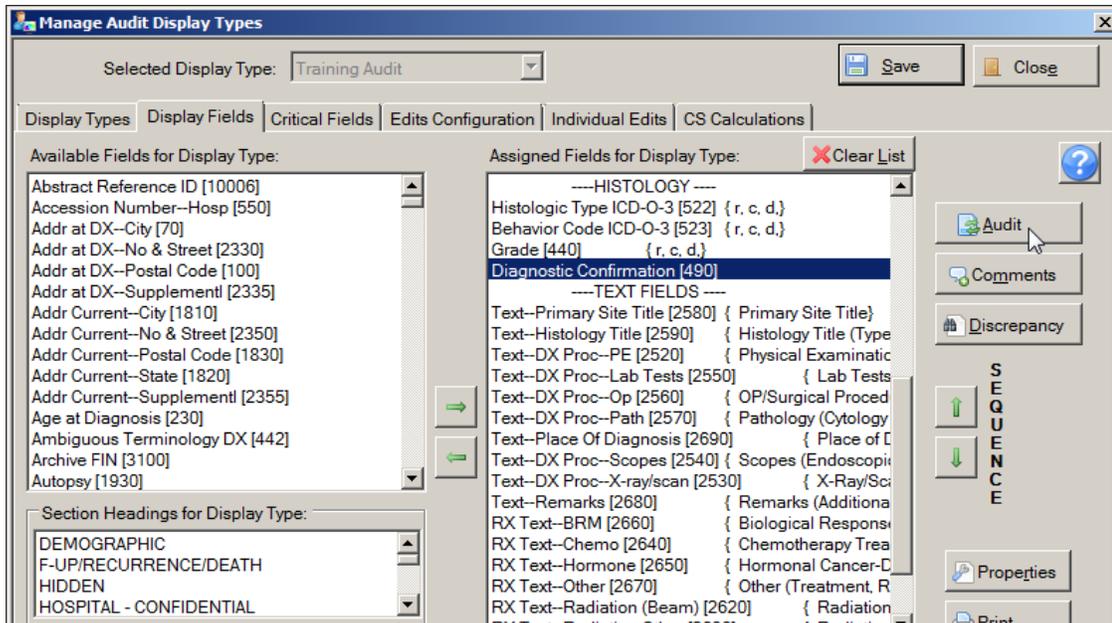
Once fields have been added to an audit display type to be used for either a reabstracting or recoding audit, the Administrator must designate which of the fields included will be reabstracted or recoded by selecting the fields and clicking **Audit**. For fields that have been selected to be audited, Abstract Plus version 3.1 includes **special fields** for reabstracting and recoding audit purposes: a **Count Discrepancy check box** and **Auditor Comment** field are displayed during the reabstracting or recoding process for the fields being audited. In addition, the Administrator can choose to include special **Auditor comment** fields for audited fields by selecting the fields and clicking **Comments**, as well as supplemental fields in which the Auditor can record information regarding any identified discrepancies that exist by clicking **Discrepancy**.

To designate fields to be audited (i.e., reabstracted or recoded) in a reabstracting or recoding audit display type, complete the following steps:

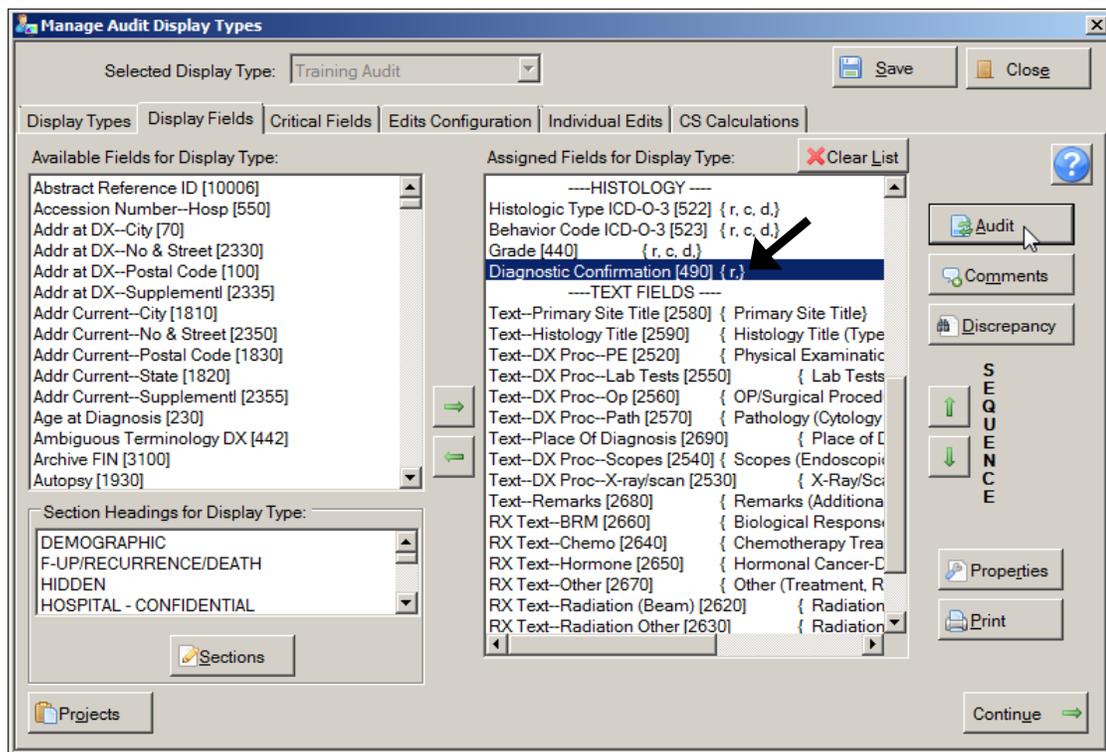
1. In the Assigned Fields for Display Type list, **select the field(s)** to be **reabstracted or recoded**. In the example shown, the field of Diagnostic Confirmation is designated being designated as an audited field, so it is selected from the Assigned Fields for Display Type list.



2. Click **Audit**, in order to designate the field for audit (i.e., reabstracting or recoding).



Result: The field(s) is marked for reabstraction/recoding in the Assigned Fields for Display Type list.



When a field is designated by the Administrator for auditing in an audit display type, when the display type is used by the Auditor to perform the audit the Reabstracting/Recoding window includes special columns to display the original values submitted for the audited fields (the **Value** column), as well as to reabstract or recode values for the audited fields (the **Audit Value** column). In the example shown, a blinded reabstraction audit is being displayed, so the original values are hidden from view:

CANCER IDENTIFICATION	Value	Audit Value
Date of Diagnosis	Value Column: Original Values (shown blinded)	///
Primary Site		
Laterality		
Histologic Type ICD-O-3		
Behavior Code ICD-O-3		
Grade		

Audit Value Column: Reabstracted/Recoded Values

In addition, the Reabstracting/Recoding window will also include **special audit fields** for audit purposes: a **Count Discrepancy check box** and **Auditor Comment** field are displayed during the reabstraction/recoding process. While reabstracting/recoding values, the **Count Discrepancy check box** is automatically checked by the application if a reabstracted or recoded code value differs from the original value, allowing the Auditor the opportunity to double-check the Audit Value code and justify the choice of code with a comment. This feedback is provided without compromising a blind audit, as submitted codes remain hidden from the Auditor until reabstraction or recoding is complete:

PATIENT DEMOGRAPHICS	Value	Audit Value	Count Discrepancy
Race 1		02 - Black	<input checked="" type="checkbox"/>
Spanish/Hispanic Origin			<input type="checkbox"/>

To enter comments, the Auditor clicks into the **Auditor Comment** field, which opens an **Auditor Comment box** where the Auditor can enter their comment:

Audit Value	Count Discrepancy	Auditor Comment
02 - Black	<input checked="" type="checkbox"/>	Race of Black confirmed from pathology report #99 000004.
	<input type="checkbox"/>	
Audit Value	Count Discrepancy	
///	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	

If the audit is blinded, upon **completion of reabstraction or recoding** of all audited fields (i.e., reabstracting/recoding is complete and all required fields have been filled out and no edit errors remain), the original values are displayed to the Auditor in the **Value** column:

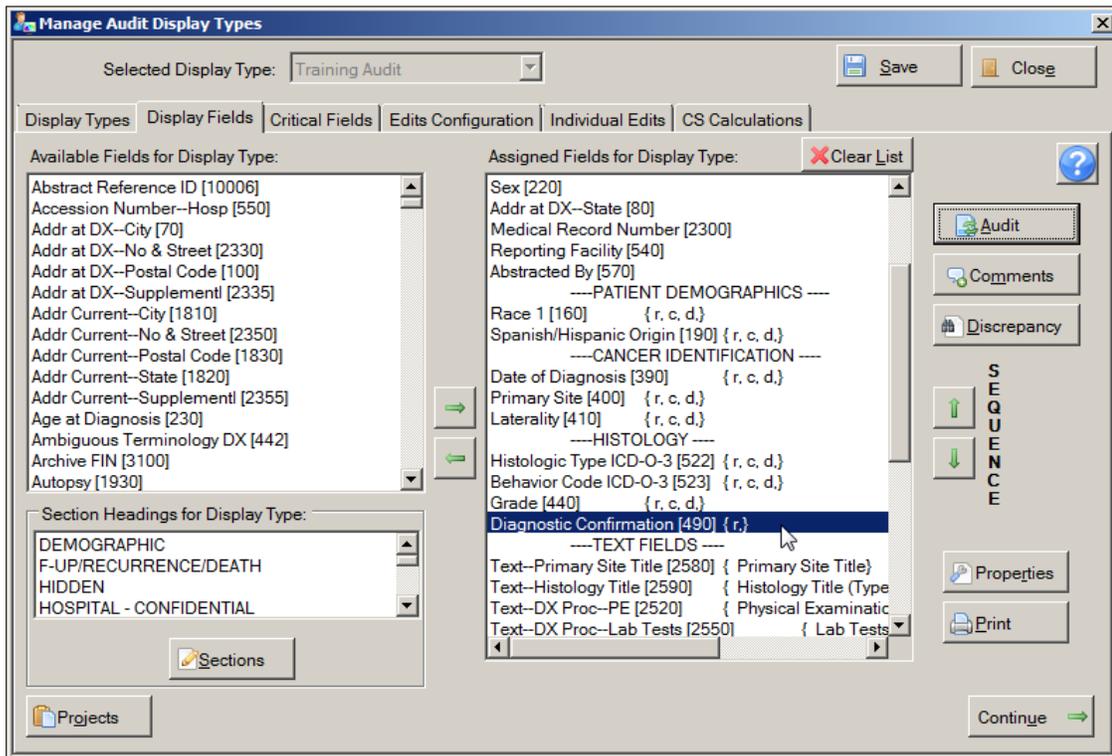
PATIENT DEMOGRAPHICS	Value	Audit Value	Count Discrepancy
Race 1	02 - Black	02 - Black	<input type="checkbox"/>
Spanish/Hispanic Origin	0 - Non-Spanish; non-H	0 - Non-Spanish; non-H	<input type="checkbox"/>
CANCER IDENTIFICATION	Value	Audit Value	Count Discrepancy
Date of Diagnosis	2007/12/23	2007/12/23	<input type="checkbox"/>
Primary Site	C509	C504	<input checked="" type="checkbox"/>
Laterality	2 - Left: origin of primary	1 - Right: origin of primary	<input checked="" type="checkbox"/>
Histologic Type ICD-O-3	8520	8520	<input type="checkbox"/>
Behavior Code ICD-O-3	3 - Malignant, primary s	3 - Malignant, primary s	<input type="checkbox"/>
Grade	2 - Grade II; moderately	2 - Grade II; moderately	<input type="checkbox"/>

Adding Special Discrepancy Comment and Information Fields for Audited Fields

When setting up reabstraction or recoding audits, the central registry can decide whether or not they would like the Auditor to record comments and extra information regarding identified discrepancies, including the severity of the discrepancy (Major or Minor), as well as the nature of and reason for the discrepancy. This extra information can be used for targeting educational efforts regarding the coding of the audited fields by the audited facility staff or central registry coder.

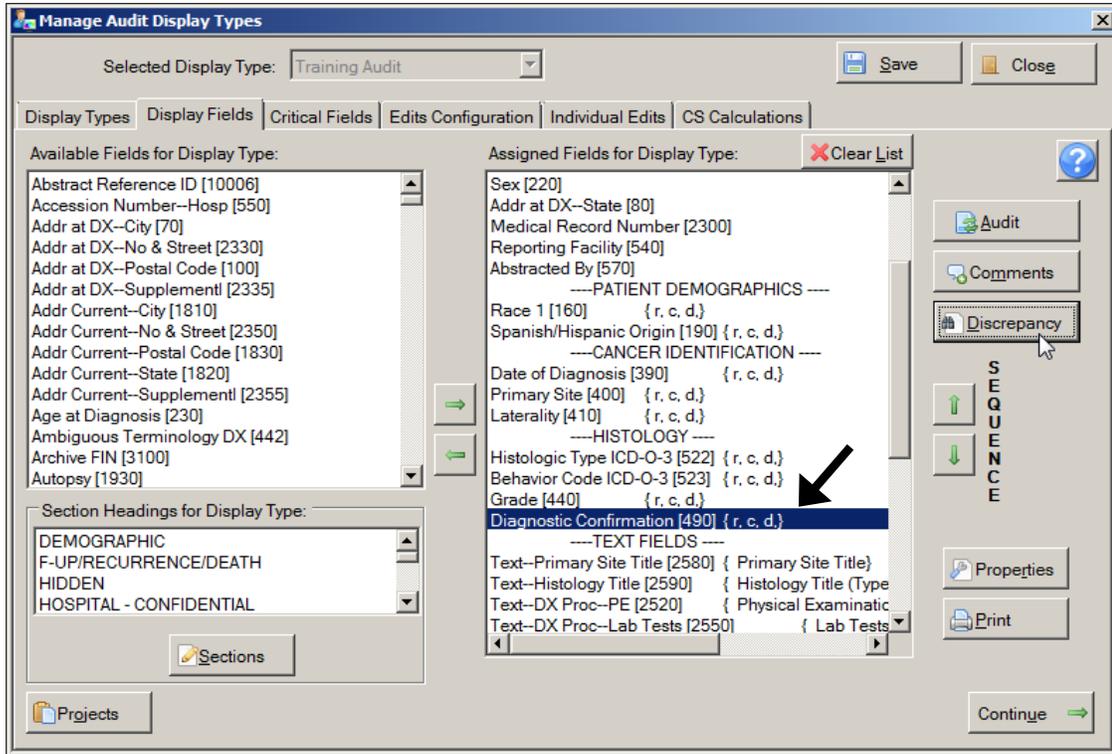
To enable the recording of comments and extra information regarding identified discrepancies for audited fields, complete the following steps:

1. In the Assigned Fields for Display Type list, **select the audit field(s) for which comments and supplemental information is to be recorded.** In the example shown, comments and discrepancy fields are being added for the audited field of Diagnostic Confirmation, so it is selected from the Assigned Fields for Display Type list.



2. Click **Comments**, and then click **Discrepancy**.

Result: The field(s) is marked for the recording of comments and extra information regarding discrepancies in the Assigned Fields for Display Type list.



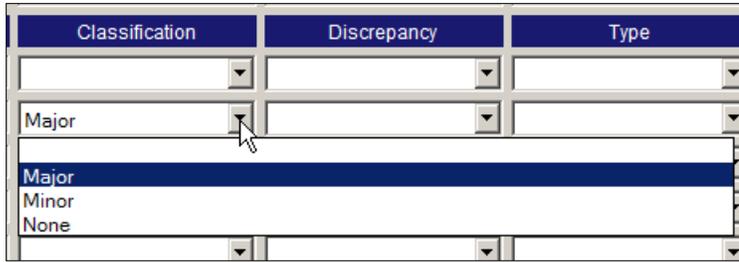
When Comments and Discrepancy are clicked for an audited field in an audit display type, this results in the display of supplemental fields to the Auditor upon completion of the reabstraction/recoding process.

Upon the **completion of reabstraction/recoding** of all audited fields (i.e., the reabstracting/recoding is complete; all required fields have been filled out and no edit errors remain), additional audit columns of **Reconcile Comment**, **Classification**, **Discrepancy**, and **Type** are displayed in the Reabstracting/Recoding window for the Auditor to record extra information regarding any discrepancies that exist.

Value	Audit Value	Count Discrepancy	Auditor Comment	Reconcile Comment	Classification	Discrepancy	Type
2 - Black	02 - Black	<input type="checkbox"/>					
- Non-Spanish, non-H	0 - Non-Spanish, non-H	<input type="checkbox"/>					
Value	Audit Value	Count Discrepancy	Auditor Comment	Reconcile Comment	Classification	Discrepancy	Type
007/12/23	2007/12/23	<input type="checkbox"/>					
509	C504	<input checked="" type="checkbox"/>	UOQ stated in path		Major		
- Left: origin of primar	1 - Right: origin of prim	<input checked="" type="checkbox"/>	R MRM stated in path		Major		
520	8520	<input type="checkbox"/>					
- Malignant, primary s	3 - Malignant, primary s	<input type="checkbox"/>					
- Grade II, moderately	2 - Grade II, moderately	<input type="checkbox"/>					

Classification

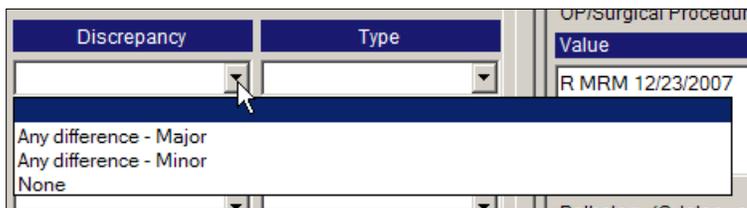
The Auditor records information regarding the **severity of the discrepancy** in the **Classification** column. The discrepancy classification of Major, Minor and None is used by the application in the calculation of data accuracy statistics for audit reports. It is important to note that **only Major discrepancies are counted** as errors by Abstract Plus. Because Classification is required to be specified for all identified discrepancies, by default, **all discrepancies are automatically assigned** a discrepancy classification of **Major**, so that the Auditor need only modify this field to Minor when applicable.



Abstract Plus accommodates central registries that do not use a major/minor discrepancy classification (i.e., those that include all discrepancies in the calculation of data accuracy statistics). By default, all discrepancies will automatically be assigned a classification of major, and will be included in data accuracy calculations.

Discrepancy

The Auditor records detailed information regarding the **nature of the discrepancy** between the original value and the reabstracted/recoded value in the **Discrepancy** column. The values displayed in the Discrepancy column are field-specific; the application displays different values depending on the field being audited. There is a **General Discrepancy** listing of Major, Minor, and None for most fields:



However, there are **field-specific Discrepancy** listings for Primary Site, Histology, date fields, Collaborative Staging fields, and surgery treatment summary (Rx Summ surgery) fields.

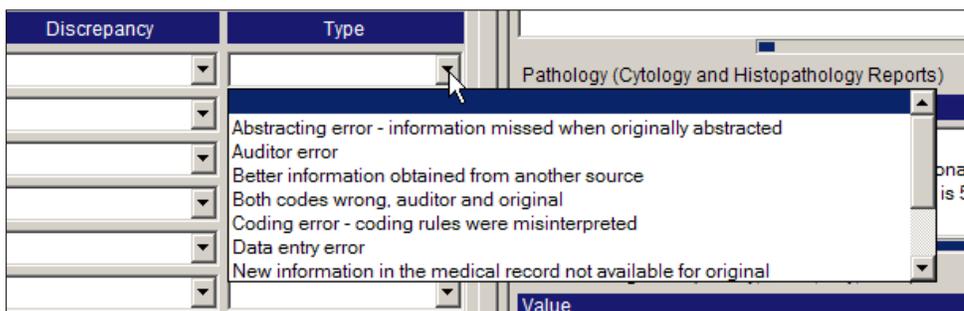
The default field-specific discrepancy values displayed are listed in the following table; however, the specific values displayed can be modified. Please see page 182 of this manual or click [here](#) for more information regarding managing audit look-ups.

Field	Default Field-specific Discrepancy Values
CS Fields	Any difference within CS Ext, CS LN or CS Mets affecting TNM/SS2000 – Major Difference within CS Ext, CS LN or CS Mets not affecting TNM/SS2000 – Minor None
Date Fields	Difference > 1 month – Major Different calendar year – Major No date (0000) versus date – Major None Same calendar year, difference of 1 month – Minor Unk (99) versus known month or year – Major

Field	Default Field-specific Discrepancy Values
Histology	(9590-9596, 9670-9729, 9730-9758) – Minor (9650-9667) versus (9590-9596) or (9670-9729) or (9730-9758) – Major (9650-9677) – Minor Original histology code value less specific than Audit value - Minor Original histology code value less specific than Audit value - Major For all other histologies: Difference in first three digits – Major For all other histologies: Difference in the fourth digit – Minor None
Primary Site	C34.0 versus C34.1-C34.9 – Major C34.1-C34.9 – Minor Difference in first three digits – Major Exception: C76._ versus C80.9 – Minor Original site code value less specific than Audit value - Minor For all other sites: Difference only in fourth digit – Minor None
RX Summary Surgery Fields	Additional Surgery issue None Surgery < 1998, RX Summ - Surg Prim Site: (00,99); (10-98) – Minor Surgery < 1998, RX Summ - Surg Prim Site: (00-09) versus (10-98) – Major Surgery 1998 +,RX Summ - Scope Reg LN Sur: (0,9) versus (1-8) – Major Surgery 1998 +,RX Summ - Scope Reg LN Sur: 0 versus 9; (1-8) – Minor Surgery 1998 +,RX Summ - Surg Other Reg/Dis: (0,9) versus (1-8) – Major Surgery 1998 +,RX Summ - Surg Other Reg/Dis: 0 versus 9; (1-8) – Minor Surgery 1998 +,RX Summ - Surg Prim Site: (00, 99) versus (10-90) – Major Surgery 1998 +,RX Summ - Surg Prim Site: 00 versus 99; (10-90) – Minor

Type

The Auditor records the **reason for the discrepancy** in the **Type** column. The discrepancy type categorizes the cause of the discrepancy for potential further analysis, and is listed on applicable audit reports.



Note that the values displayed in the Type column can be modified. Please see page 182 of this manual or click [here](#) for more information regarding managing audit look-ups. The following are the application default values for the discrepancy Type column:

- Abstracting error - information missed when originally abstracted
- Auditor error
- Better information obtained from another source
- Both codes wrong, auditor and original
- Coding error - coding rules were misinterpreted
- Data entry error
- New information in the medical record not available for original
- No discrepancy
- No coding error - discrepancy due to conversion of original value
- Not resolved
- Reason for error unknown
- Related error



Note

Classification is included for all audited/reabstracted fields, whereas **Discrepancy** and **Type** are optional, extra fields that may be included if your central registry would like to record detailed information regarding the nature and reason for identified discrepancies.

Audit Field Properties

---PATIENT DEMOGRAPHICS---	
Race 1 [160]	{ r, c, d, }
Spanish/Hispanic Origin [190]	{ r, c, d, }
---CANCER IDENTIFICATION---	
Date of Diagnosis [390]	{ r, c, d, }
Primary Site [400]	{ r, c, d, }
Laterality [410]	{ r, c, d, }
---HISTOLOGY---	
Histologic Type ICD-O-3 [522]	{ r, c, d, }
Behavior Code ICD-O-3 [523]	{ r, c, d, }
Grade [440]	{ r, c, d, }
Diagnostic Confirmation [490]	{ r, c, d, }

Field audit properties are displayed between the brackets {} to the right of the audited field name and NAACCR number in the Assigned Fields for Display Type list. In addition, they are separated with commas and are always listed in the same order, as defined in the following table:

Audit Property Symbol	Description
r	The field has been designated for audit (i.e., reabstracting or recoding), and will have the Count Discrepancy, Auditor Comment, and Classification fields displayed to the Auditor

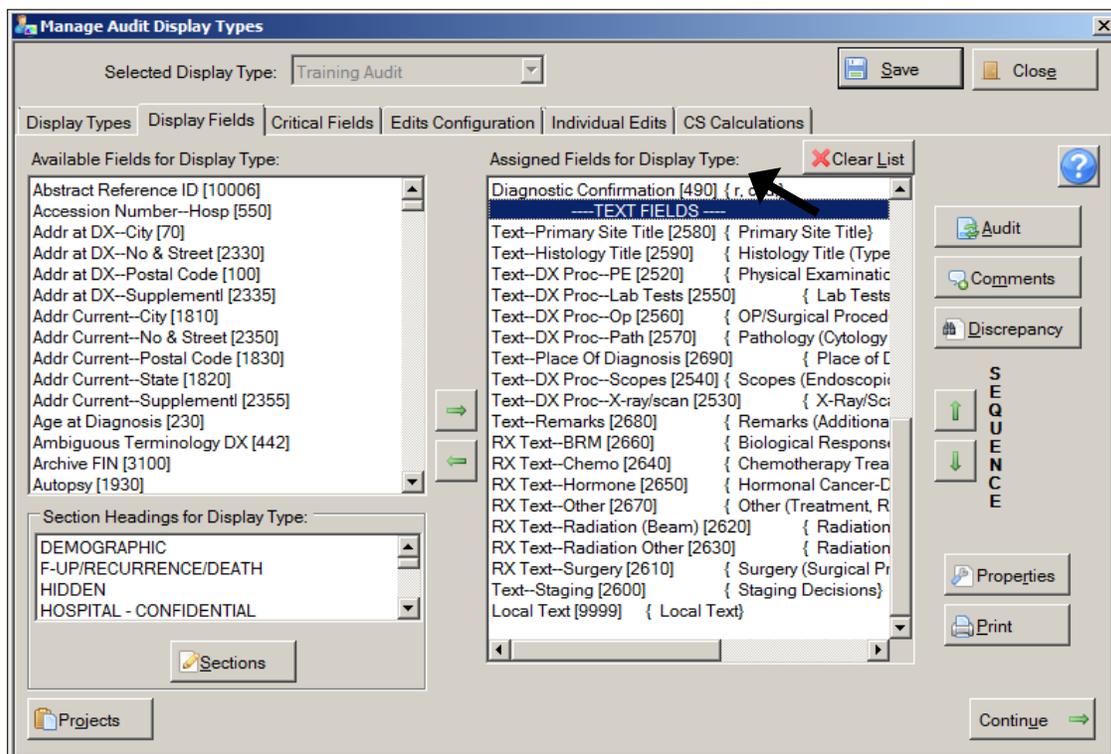
Audit Property Symbol	Description
c	Discrepancy comment fields have been added for the audited field
d	The extra fields of Discrepancy and Type have been added for the audited field

**Note**

Recall that the **Classification, Discrepancy** and **Type** fields are displayed to the Auditor in the Reabstracting/Recoding window **upon completion** of reabstracting or recoding.

NAACCR Text Fields and Audit Display Types

As you learned in Chapter 2 of this manual, [the Abstract Plus Abstracting window](#) is divided into 2 main sections: a data entry grid for coded values on the left, and a data entry grid for text fields on the right. When generating audit display types, it is important to note that the text fields are handled differently than regular data fields. Rather than being able to select the individual text fields into and out of a display type, **all NAACCR text data items [items #2520 – 2690] are included in every audit display type** in a special section at the very bottom of the display type called **TEXT FIELDS**:



These are the text fields that are displayed to the Auditor in the data entry grid on the right in the Reabstracting or Recoding window, or when abstracting fields for an un-reported (Non-match) tumor during a casefinding audit.

Although all text fields are automatically included in all display types and are restricted to the TEXT FIELDS section, the **order** in which the text fields are displayed to the Auditor in

the data entry grid on the right in may be modified by selecting the text field in the Assigned Fields to Display Type list, and using **SEQUENCE** up () and down () arrows to move the text field up or down in the display order within the TEXT FIELDS section to the desired position.

In addition, text fields can be reabstracted for reabstracting audits. As mentioned earlier, original text fields can be blinded for reabstracting audits, but would never be blinded for recoding audits, as the main goal of the recoding audit is to recode values from the original text fields.

Activity 18 - Adding Fields to an Audit Display Type

Using what you have just learned, **add the field of Diagnostic Confirmation** to the Training Audit display type, and position the field **directly above the TEXT FIELDS section heading** in the Assigned Fields for Display Type list.

Designate the field for auditing, and add **audit comment and special discrepancy fields** for recording extra information regarding discrepancies.

Feel free to experiment and add other fields for auditing as well. Please see page 156 of this manual or click [here](#) for instructions regarding adding fields to audit display types.

Assigning Regular Field Properties to Audited Fields

Once a field has been added to an audit display type, in addition to the audit field properties regular field properties may be also specified for the field, such as a customized label or default value, in the same way as for regular abstracting display types. For example, the field of Reporting Facility can be defaulted for casefinding audits to save the Auditor the time in abstracting this field for un-reported (Non-match) tumors. Please see page 86 of this manual, or click [here](#) for more information regarding the assignment of regular field property values to audit fields.

Managing Abstract Plus Projects for Audit Display Types

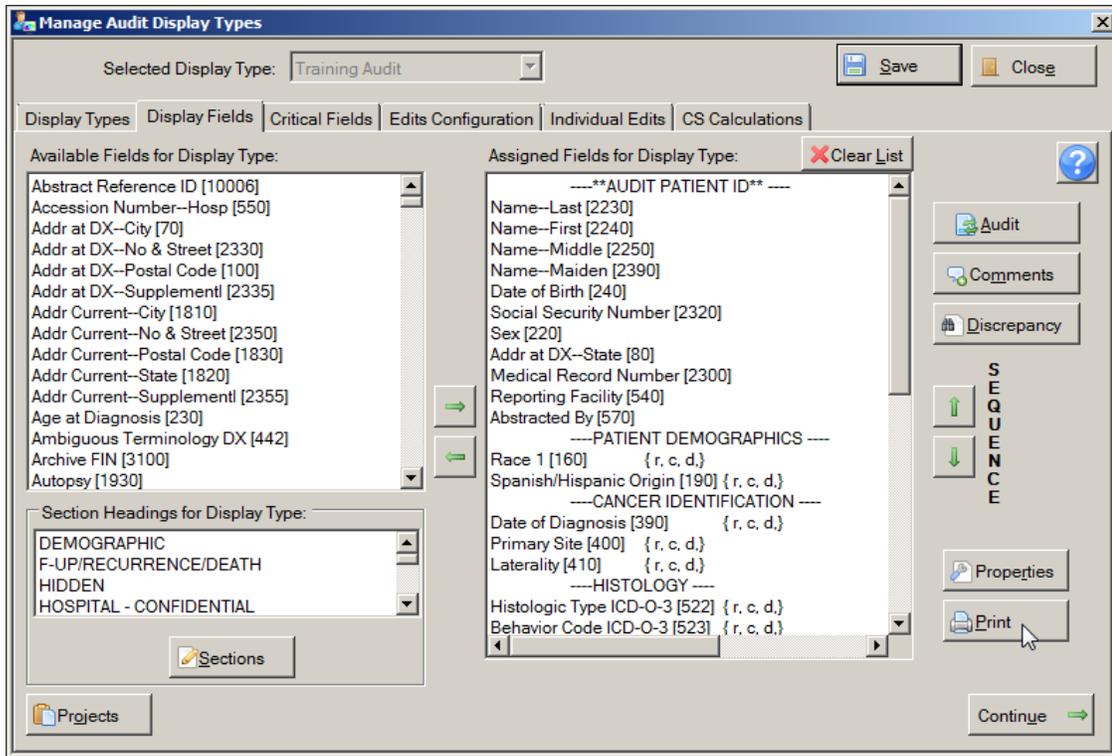
Although most likely not often needed, Project fields can be added to audit display types as well as abstracting display types. Managing Project fields for audit display types works the same exact way as for regular abstracting display types. Please see page 92 of this manual or click [here](#) for more information on Project fields and instruction regarding managing Project fields for display types.

The Display Fields Report

A Display Fields report is available which can be very helpful when adding fields to an audit display type, and for display type documentation purposes.

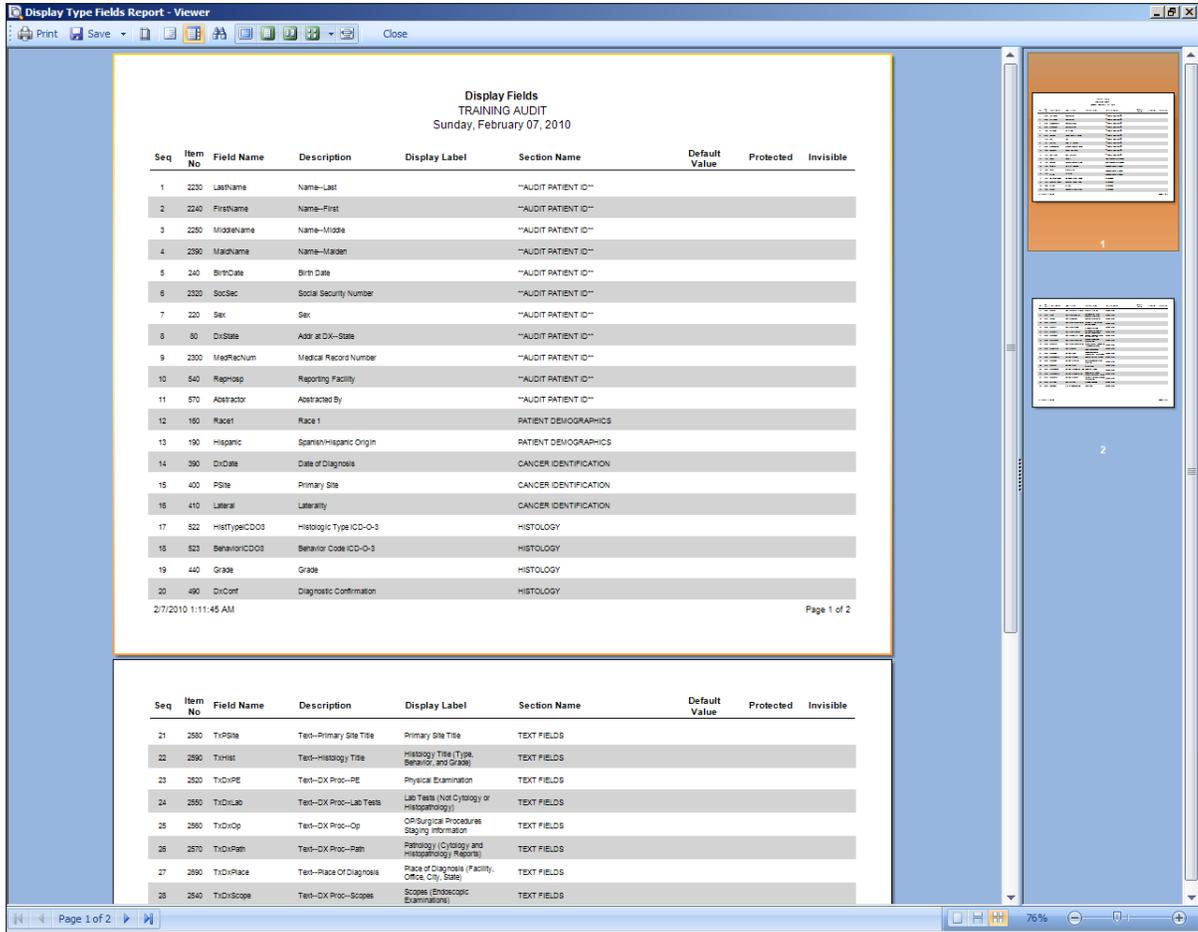
To view, print, or save a copy of the Display Type Fields report, follow these steps:

1. On the Display Fields tab, click **Print**.



Result: The Display Fields report opens in the Abstract Plus Report Viewer window.

The Display Fields report lists the display fields that have been selected into the display type, along with any regular field properties that were set.



The Display Fields report contains these column headings:

Column	Description
Seq	The sequence number of the field (its position in the display type)
Item No	The NAACCR data item number for the field
Field Name	The Abstract Plus system name for the field
Description	The standard NAACCR data item name for the field
Display Label	The user-specified name (if any) for a field
Section Name	The display type section to which the field is assigned
Default Value	The default value (if any) assigned to the field
Protected	Indicates whether or not the Protected property has been set for the field
Invisible	Indicates whether or not the Protected property has been set for the field

The Abstract Plus Report Viewer window is divided into 2 main sections: a window in which to view reports on the left, and a pane for viewing report thumbnails on the right. When you left-click and hold your mouse on the vertical divider bar in the center of the window, a splitter appears which you can drag to the left or right to resize the view report and thumbnails views. Please see page 100 of this training manual, or click [here](#) for more information on using the Report Viewer window to view reports.

Activity 19 - Printing the Display Fields Report

Using what you have just learned, print a copy of the Display Fields report for the **Training Audit** display type.

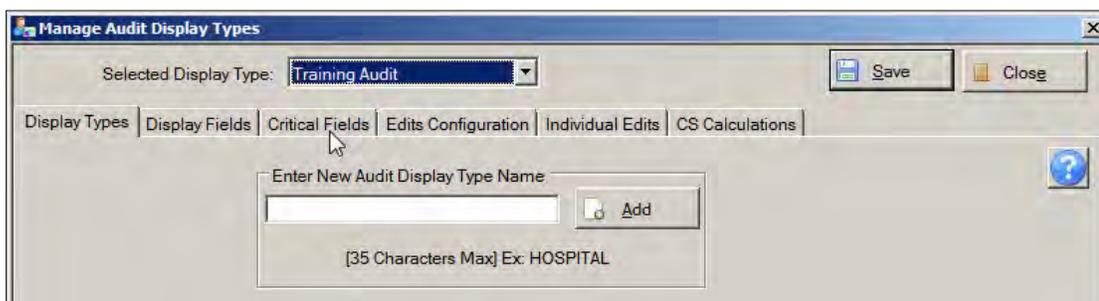
Please see page 98 of this manual or click [here](#) for instructions regarding viewing and printing the Display Fields report.

Step 2: The Critical Fields Tab

After fields have been added to the audit display type, the Administrator then specifies which of the included fields are **Critical** fields. In Abstract Plus audit display types, Critical (required) fields are fields that must be filled in by the Auditor in order to complete and release the abstracted, reabstracted, or recoded information. Because of the way Critical fields feature works in Abstract Plus, for all audit display types (casefinding, reabstraction and recoding) **all fields being abstracted, reabstracted, or recoded must be designated as Critical fields**. When edits are run on the abstract, Critical fields are indicated clearly to the Auditor on the Edit Set Results window.

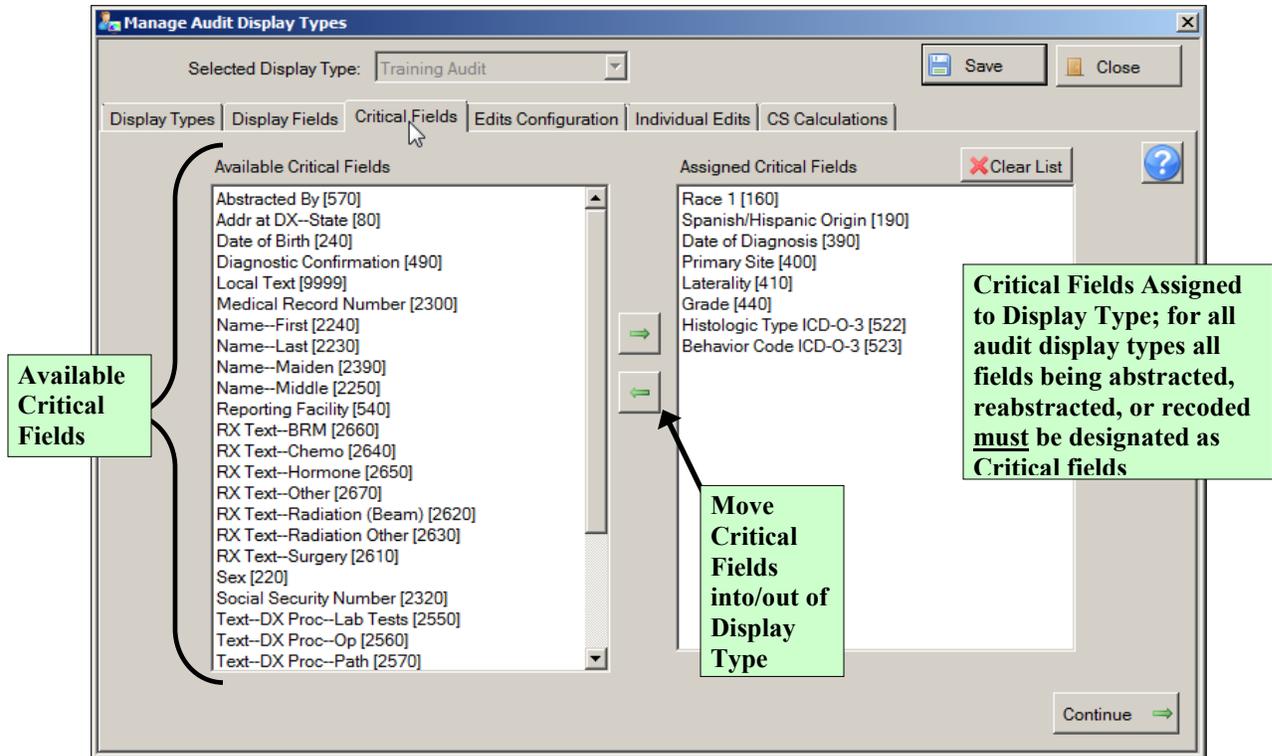
To assign critical fields to an audit display type, complete these steps:

1. **Select** the display type you would like to build or update from **Selected Display Type** menu at the top of the Manage Audit Display Types window. In the example shown, the Training Audit display type is being selected and modified.



2. Click the **Critical Fields** tab.

Result: The **Manage Audit Display Types** window opens the **Critical Fields** tab for the selected audit display type.

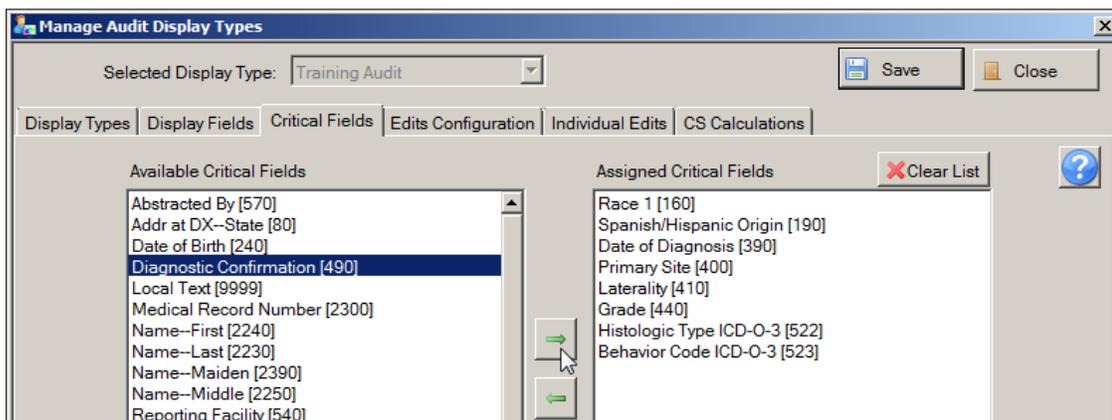


On the Critical Fields tab, the application displays the fields that you selected into the Assigned Fields for Display Type list on the Display Fields tab in alphabetical order as available critical fields. The Administrator uses the Critical Fields tab to specify Critical Fields for an audit display type. Using the left and right arrow buttons, fields are moved from the Available Critical Fields list on the left to the Assigned Critical Fields list on the right to include them in the selected display type.



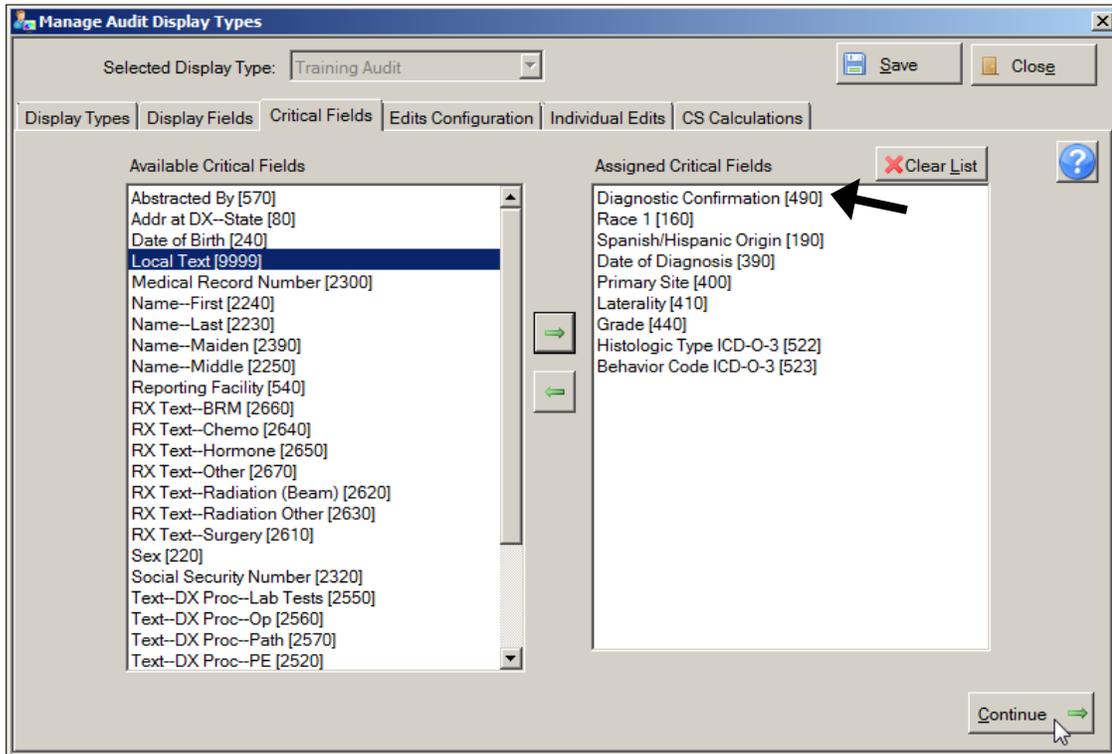
For all audit display types (casefinding, reabstraction and recoding) **all fields being abstracted, reabstracted, or recoded must be designated as Critical fields.**

- From the Available Critical Fields list on the left, select the field(s) that you would like to designate as critical. In the example shown, the field of Diagnostic Confirmation is being designated as critical for the Training Audit display type.



4. Click the green right-pointing arrow  to move the Critical field or fields into the audit display type.

Result: The field(s) is removed from the Available Critical Fields list on the left, and is moved into the Assigned Critical Fields list on the right.



5. Click **Continue** to save your changes and move on to Step 3, the Edits Configuration tab.



You can also save your work by clicking **Save**. Clicking **Clear List** will remove all fields from the Critical Fields list; this should be done with caution.

Activity 20 - Selecting Critical Fields into an Audit Display Type

Using what you have just learned, designate the field of **Diagnostic Confirmation** as a Critical Field for the Training Audit display type.

If you designated any other fields as audited fields for the Training Audit display type in [Activity 18](#), add these fields as Critical fields as well. Please see page 171 of this manual or click [here](#) for instructions regarding adding Critical fields to audit display types.

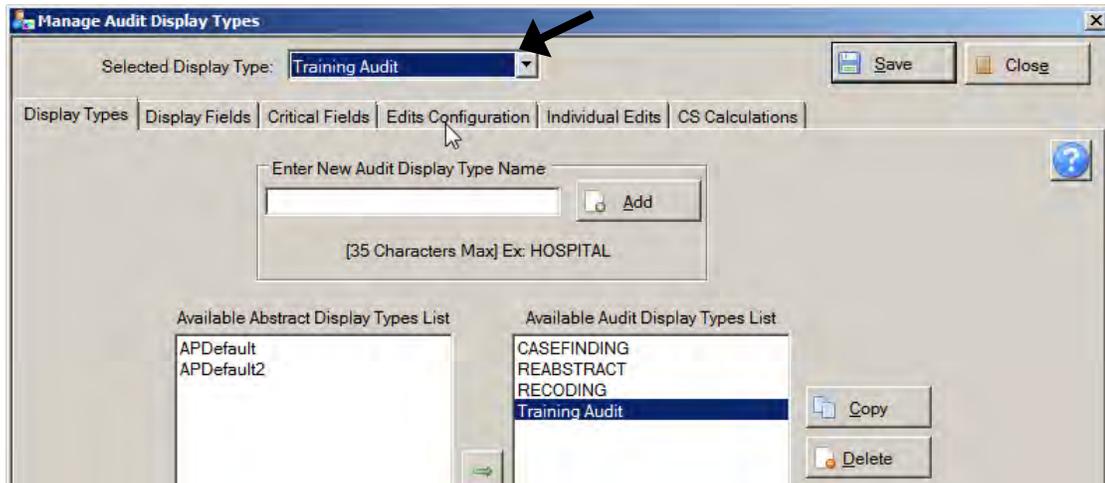
Step 3: The Edits Configuration Tab

In this step, you choose the edit set for your audit display type. To ensure that the information the Auditor is abstracting, reabstracting, or recoding makes sense and codes are coded correctly, both individually and in relation to one another, data quality "Edits" can be applied to audit value codes coded by the Auditor.

An edit set contains a collection of individual edits. If there are errors when audited codes are saved or edits are run, Abstract Plus displays those errors in the Edit Set Results window so the Auditor can correct them.

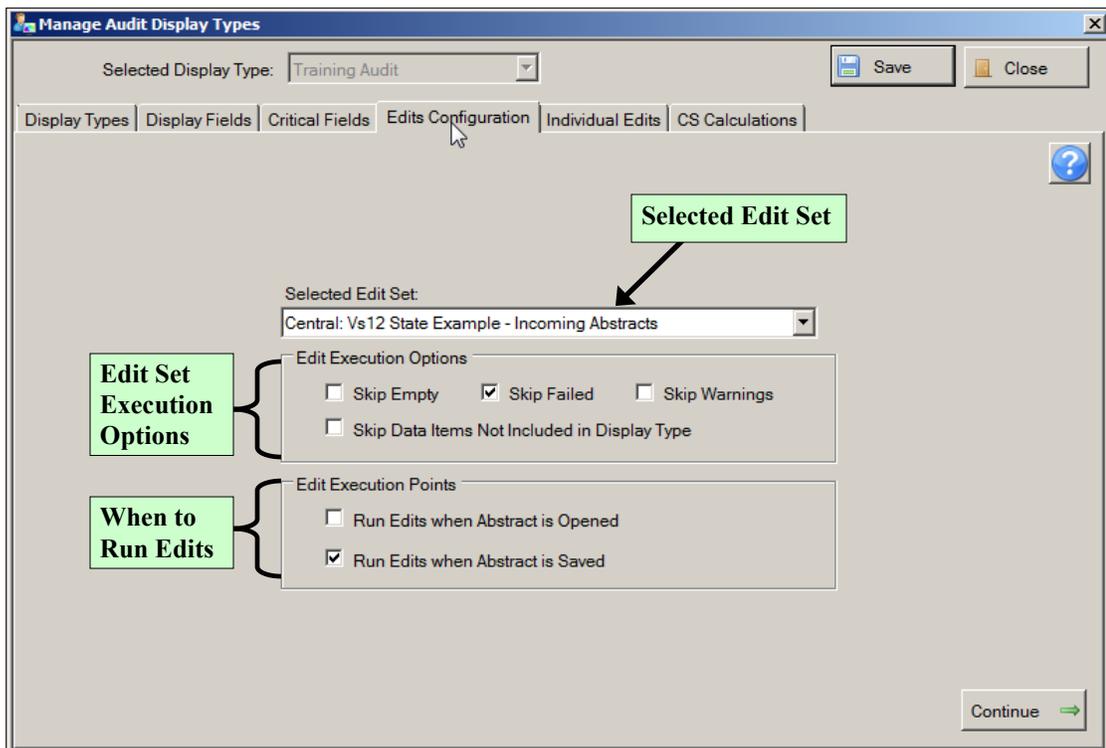
To select an edit set for an audit display type, complete these steps:

1. Make sure that the display type you would like to build or update is **selected** from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Audit display type is being selected and modified.



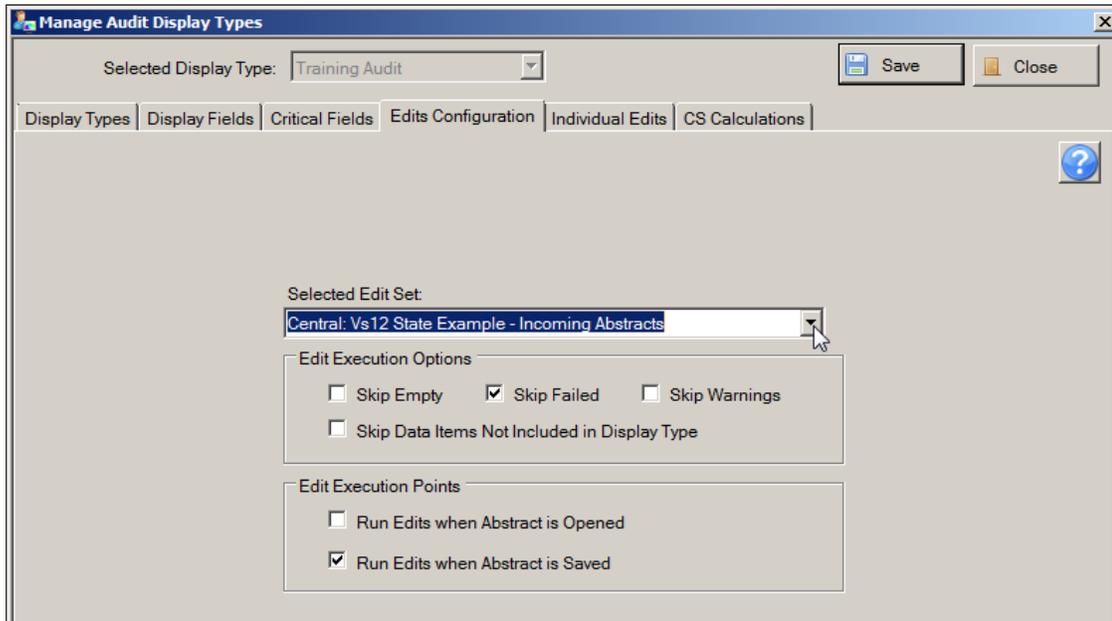
2. Click the **Edits Configuration** tab.

Result: The **Manage Display Types** window opens the **Edits Configuration** tab for the selected audit display type.



The Administrator uses the Edits Configuration tab to specify an edit set for the audit display type, and to set important edit set execution options.

3. **Select** the desired **edit set** from the **Selected Edit Set** pull down menu. This is the edit set that will be run on abstracted, reabstracted, or recoded data saved using the selected audit display type. In the example shown, the Central: Vs12 State Example—Incoming Abstracts edit set is selected for the Training Audit display type.



The edits sets listed in the Selected Edits Set list are based on the edits metafile that is included in the C:\RegPlus\AbstractPlus\Edits folder. By default, the most current standard NAACCR edits metafile is included with the application (<http://www.naaccr.org/standards/volumeiv>). If you would like to use a customized edit set for any audit, your state-specific edits metafile can be added to the application. The edit set for current install can be changed at any time by replacing the edits runtime metafile in the C:\RegPlus\AbstractPlus\Edits folder with your own customized metafile; please see the **Abstract Plus System and IT Personnel Requirements** document for more information.



important

In addition to selecting an edit set, the Administrator may choose to set certain global **Edit Set Execution Options**. These are the Edit Execution Options on the Edits Configuration tab:

Option	Description
Skip Empty	Prevents an edit from running if any of the fields that it edits are blank.
Skip Failed	Prevents a multi-field edit from executing if any field in its list has failed its single field edit.

Option	Description
Skip Warnings	Prevents the return of warning messages by converting the return value to pass.
Skip Data Items Not Included in the Display Type	Prevents an edit from running if any of the fields that the edit is checking are not included in the display type; use of this feature will prevent unwarranted edit error errors for an abstract due to discrepancies between the fields included in a display type and the fields edited by the selected edit set for the display type



Tip

The **Skip Data Items Not Included in the Display Type** option can be especially helpful when setting up audit display types, as audit display types generally include far fewer fields than regular abstracting display types. If a standard edit set is assigned to an audit display type, many edits that check fields not included in the audit display type need to be individually suppressed. To see examples of how audit display types work with and without this option, examine the CASEFINDING example audit display type, which uses this option, versus the REABSTRCT and RECODE example audit display types which do not. The REABSTRCT and RECODE example audit display types have very many edits individually suppressed in the next step, Step 4, Individual Edits.

4. **Click** the check boxes for the **edit set execution options** you would like to specify for the selected audit display type.

In addition to running edits upon request from the Auditor (clicking EDITS, or pressing F8 or F2), the Administrator can specify whether or not to run edits upon the opening or saving of a casefinding abstract, or a reabstracted/recoded abstract. These are the **Edit Execution Points** on the Edits Configuration tab:

Option	Description
Run Edits When Abstract is Opened	When checked, after creation of an abstract edits will run on the abstract each time it is opened
Run Edits When Abstract is Saved	When checked, edits will run each time an abstract is saved

5. **Click** the check boxes for the **edit execution points** you would like to specify for the selected audit display type.
6. Click **Continue** to save your changes and move on to Step 4, the Individual Edits tab.



Note

You can also save your work by clicking **Save**.

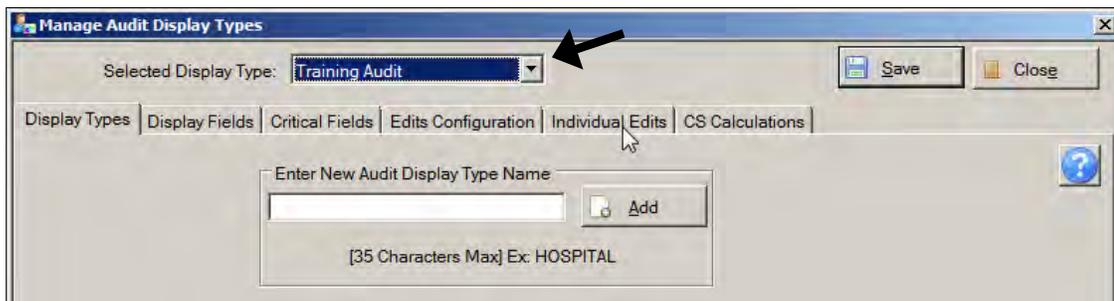
Result: The system saves the edit set selection and opens the window for the next step in building an audit display type, the Individual Edits tab.

Step 4: The Individual Edits Tab

In this step, for any **individual edit** in the selected edit set, the Administrator can over-ride the global edit set execution options chosen on the Edits Configuration tab in step 3 for the entire edit set. The Administrator can select individual edit options when an available edit set meets the editing needs for the audit with the exception of a few edits. When individual edit options are set, the edit set options are over-riden. The setting of individual edit options requires a thorough understanding of the edit set itself.

To select individual edit options for an audit display type, complete the following steps:

1. Make sure that the audit display type you would like to build or update is **selected** from **Selected Display Type** menu at the top of the Manage Display Types window. In the example shown, the Training Audit display type is being selected and modified.



2. The Individual Edit tab window should already be opened because you clicked **Continue** in the previous step. If it is not open, click the **Individual Edits** tab.

Result: The **Manage Display Types** window opens the **Individual Edits** tab for the selected display type.

The screenshot shows the 'Manage Audit Display Types' window with the 'Individual Edits' tab selected. The window title is 'Manage Audit Display Types' and the 'Selected Display Type' is 'Training Audit'. The main content area shows a table of individual edit options for the selected display type. A callout box points to the header of the table, indicating the 'Selected Edit Set and Total Number of Edits'. Another callout box points to the first column of the table, indicating the 'Edits Included in Selected Edit Set'. The table has columns for 'EDIT Name', 'Use EDIT Set Options', 'Suppress EDIT', 'Skip Empty', 'Skip Fail', and 'Suppress Warning'. The first row is 'Abstracted By (NAACCR)' and is highlighted. Below the table, there are checkboxes for 'Use EDIT Set Options', 'Suppress EDIT', 'Skip Empty', 'Suppress Warning', 'Skip Fail', and 'No Skips', along with an 'Apply Changes' button and a 'Continue' button.

EDIT Name	Use EDIT Set Options	Suppress EDIT	Skip Empty	Skip Fail	Suppress Warning
Abstracted By (NAACCR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--City (NAACCR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--No/Street (NAACCR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--Postal Code (NAACCR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--State (NAACCR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--Supplementl (COC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Age at Diagnosis (SEER AGEDX)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behavior ICD03 Conversion (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Birthplace (COC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cause of Death (SEER COD)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class of Case (COC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Individual Edits tab lists the name of the selected edit set and the total number of edits it includes. All of the edits in the selected edit set for the display type are listed in the first column on the left and individual edit options on set on the right. Options are set for individual edits by clicking the check box for the option for the specified edit in the grid, or by setting options for multiple edits at the same time using the features at the bottom of the window.

The Individual Edits tab includes these options:

Option	Description
Use EDIT Set Options	This option is checked by default for all edits in the edit set; when checked, only the global options set for the edit set on the Edits Configuration tab will be applied to the individual edit
Suppress EDIT	Prevents the individual edit from executing when the edit set is run on an abstract
Skip Empty	Prevents the individual edit from executing if any of the fields that it edits are blank
Skip Fail	Prevents an individual multi-field edit from executing if any field that it checks has failed its associated single field edit
Suppress Warning	Prevents the return of any warning messages by the edit
No Skips	Edit runs for the field, over-riding any global Skip Empty or Skip Fail options that may be set for the edit set on the Edits Configuration tab

To select any of the individual edit options for an individual edit, **locate the edit** for which you would like to set options in the grid, and **click the check box in the columns** of the desired options. Note that the Skip Empty and Skip Fail options may be combined for an edit by clicking the check boxes in both columns.

Central: Vs12 State Example - Incoming Abstracts (218 Edits)
Individual Edit options apply only to selected display.
(Click on a cell to change an option for that edit)

EDIT Name	Use EDIT Set Options	Suppress EDIT	Skip Empty	Skip Fail	Suppress Warning
Addr at DX--No/Street (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--Postal Code (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--State (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Addr at DX--Supplementl (COC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Age at Diagnosis (SEER AGEDX)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behavior ICD03 Conversion (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Birthplace (COC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ Cause of Death (SEER COD)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class of Case (COC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
County at DX (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CS Extension (CS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Column Options may be combined.

To select any of the individual edit options for multiple edits at the same time, **highlight the edits in the EDIT Name column** using your ctrl and shift keys on your keyboard, click the check box in the columns of **the desired options in the center panel** at the bottom of the window, and click **Apply Changes**.

Central: Vs12 State Example - Incoming Abstracts (218 Edits)
Individual Edit options apply only to selected display.
(Click on a cell to change an option for that edit)

EDIT Name	Use EDIT Set Options	Suppress EDIT	Skip Empty	Skip Fail	Suppress Warning
ICD Revision Number (NPCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ICD-O-3 Conversion Flag (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laterality (SEER LATERAL)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical Record Number (COC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ Military Record No Suffix (COC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Morph Coding Sys--Current (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Morph Coding Sys--Original (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAACCR Record Version (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name--Alias (SEER)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name--First (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name--Last (NAACCR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Column Options may be combined.

Apply settings to all selected Individual EDIT items

Use EDIT Set Options
 Suppress EDIT
 Skip Empty
 Suppress Warning
 Skip Fail
 No Skips

Apply Changes Continue →

- Select any **individual edit options** for any of the individual edits in the edit set.



Tip

If you have not clicked the **Skip Data Items Not Included in the Display Type** option on the Edits Configuration tab, and you are using a standard NAACCR edit set, you will need to be sure to suppress any individual edits that check fields not included in the audit display type.

- Click **Continue** to save your changes and move on to Step 5, the CS Calculations tab.



Note

You can also save your work by clicking **Save**.

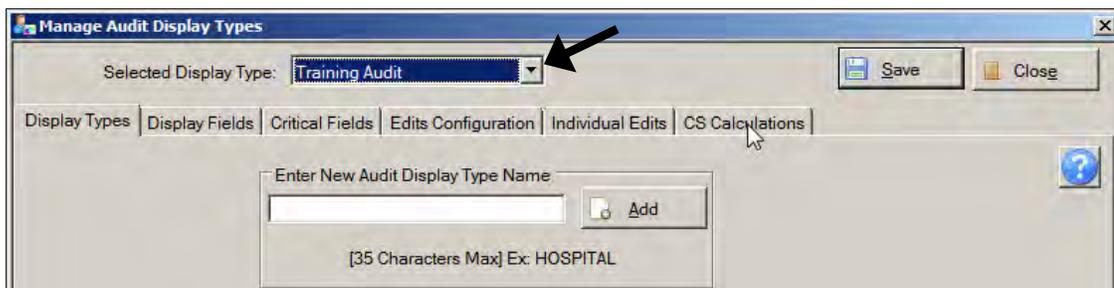
Result: The system saves any individual edit option selections and opens the window for the next step in building a display type, the CS Calculations tab.

Step 5: CS (Collaborative Staging) Calculations Tab

The Abstract Plus application can calculate stage according to three separate systems: SEER Summary Stage 77, SEER Summary Stage 2000, and AJCC Stage Group. In step 5 on the CS (Collaborative Staging) Calculation tab, the Administrator has the option to select among these three Collaborative Staging (CS) preferences. For audit display types, single or multiple staging systems may be selected, depending on what CS fields are being audited. Derived audited staging fields can be compared to originally submitted derived values if the appropriate CS data items are audited.

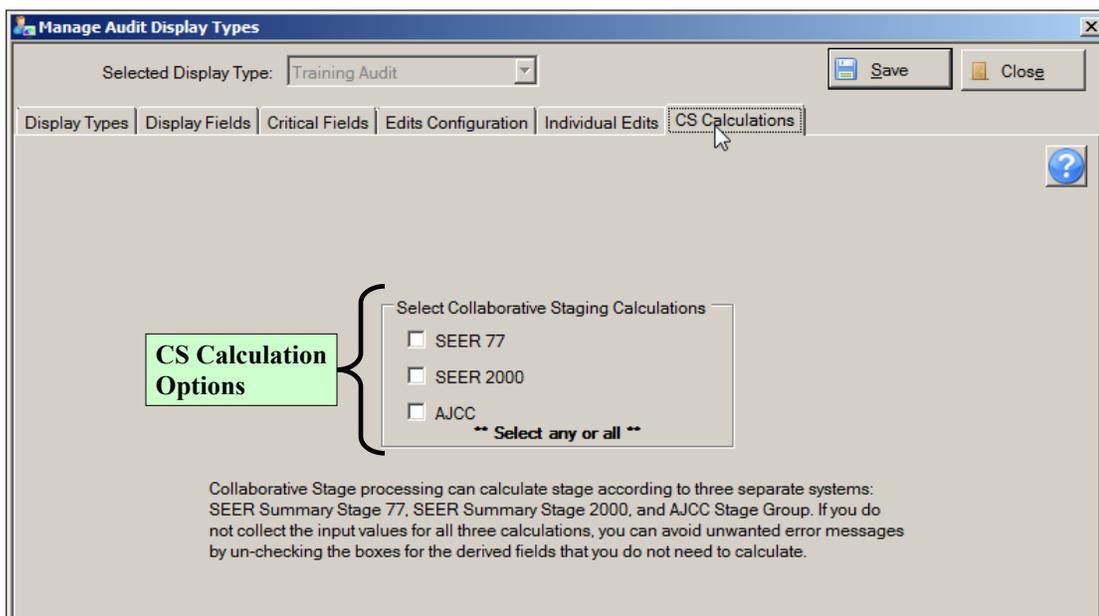
To specify Collaborative Staging preferences for an audit display type, complete the following steps:

1. Make sure that the audit display type you would like to build or update is **selected** from **Selected Display Type** menu at the top of the Manage Audit Display Types window. In the example shown, the Training Audit display type is being selected and modified.



2. The **CS Calculations** tab window should already be open because you clicked **Continue** in the previous step. If it is not open, click the **CS Calculations** tab.

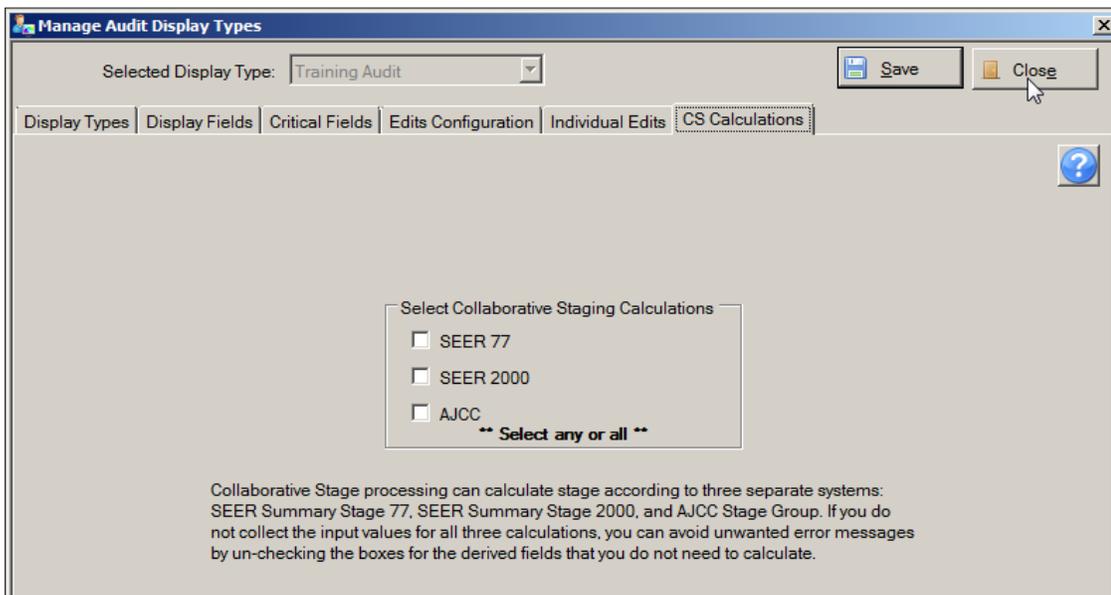
Result: The **Manage Audit Display Types** window opens the **CS Calculations** tab for the selected audit display type.



Abstract Plus offers the following CS staging preferences:

Process	Description
Compute SEER1977	From the Collaborative Staging fields collected, the derived SEER Summary Stage 1977 is calculated
Compute SEER2000	From the Collaborative Staging fields collected, the derived SEER Summary Stage 2000 is calculated
Compute AJCC	From the Collaborative Staging fields collected, the derived AJCC Stage Group fields are calculated

3. Select the **CS Calculations** that you would like for the display type, and click **Save**. In the example shown, the Training Audit display type does not include any CS data items for audit, so no CS Calculation options are selected.



4. Click **Close** to close the Manage Audit Display Types window.

Result: The Manage Audit Display Types window closes, and you are returned to the main Abstract Plus window.

Activity 21 - Specifying Edits and CS Calculation Settings for Audit Display Types

Using what you have just learned, **review** the **edit set, individual edits, and CS Calculation options** that have already been set for the **Training Audit** display type. Recall that these options were copied over from the REABSTRACT audit display type. In particular, note the edit set that was selected (Central: Vs12 State Example—Incoming Abstracts), the few edits that are **not** suppressed on the Individual Edits tab (the majority of edits are suppressed for this audit display type, as very few fields are being audited using the display type and edits that check fields that are not included in the display type must be suppressed). Also note that no CS Calculation options are set to on. Please see page 173 of this manual or click [here](#) for

instructions regarding the setting of edits configurations and CS calculation options for audit display types.

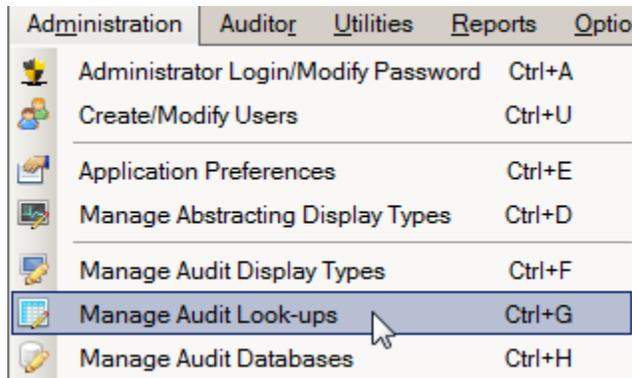
After you have finished reviewing, click Close to close the Manage Audit Display Types window.

Managing Audit Look-ups

As you have already seen, the auditing features of Abstract Plus 3.1 rely on the use of several look-ups specific to audits, which can be modified by the Administrator upon setup of the audit. For example, when performing casefinding audits the Auditor must select a casefinding source or sources for each identified tumor upon audit. When performing reabstracting or recoding audits, the Auditor may record extra information regarding identified discrepancies, including the severity of the discrepancy (Major or Minor), as well as the nature of and reason for the discrepancy. The Auditor makes selections from various pull-down menus in order to record this information. All of the pull-down menus available to the Auditor are based on modifiable tables. The Administrator can add new values, edit existing values, or delete values from any of these look-up tables by using the Manage Audit Look-ups window.

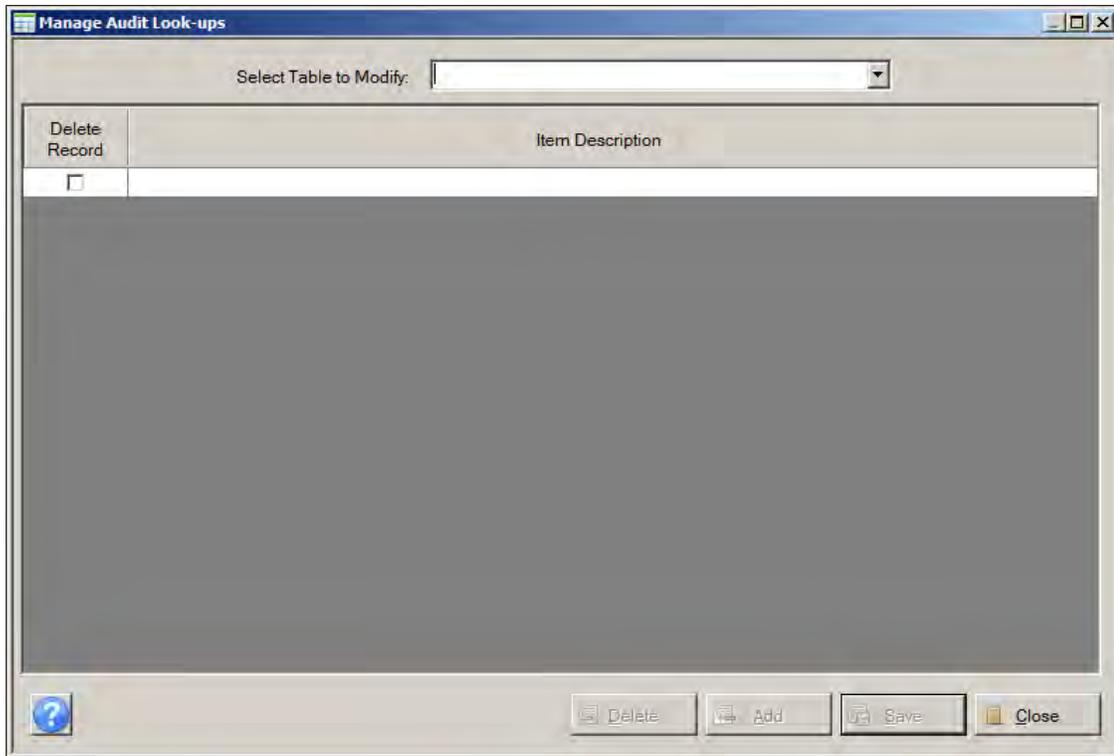
To modify the available values for any audit look-up table, complete the following steps:

1. Open the Manage Audit Look-ups window. This can be done in 2 ways:
 - a. From the **Administration** menu, select **Manage Audit Look-ups**.

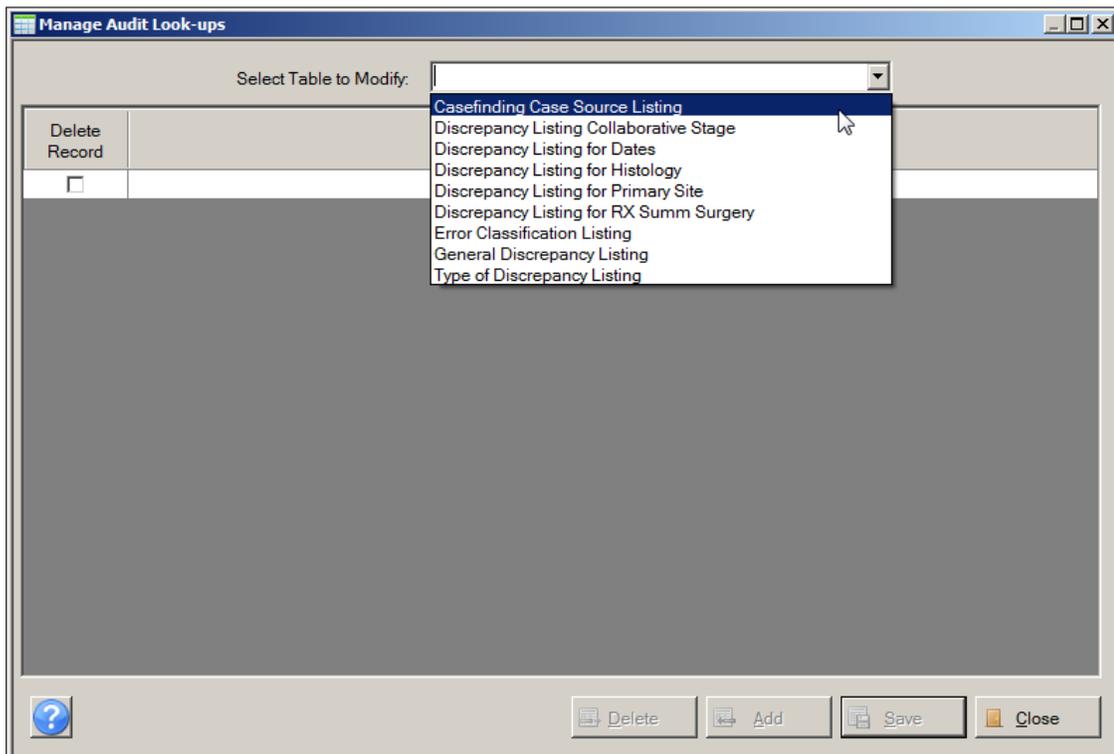


- b. Use the **Ctrl+G** keystroke.

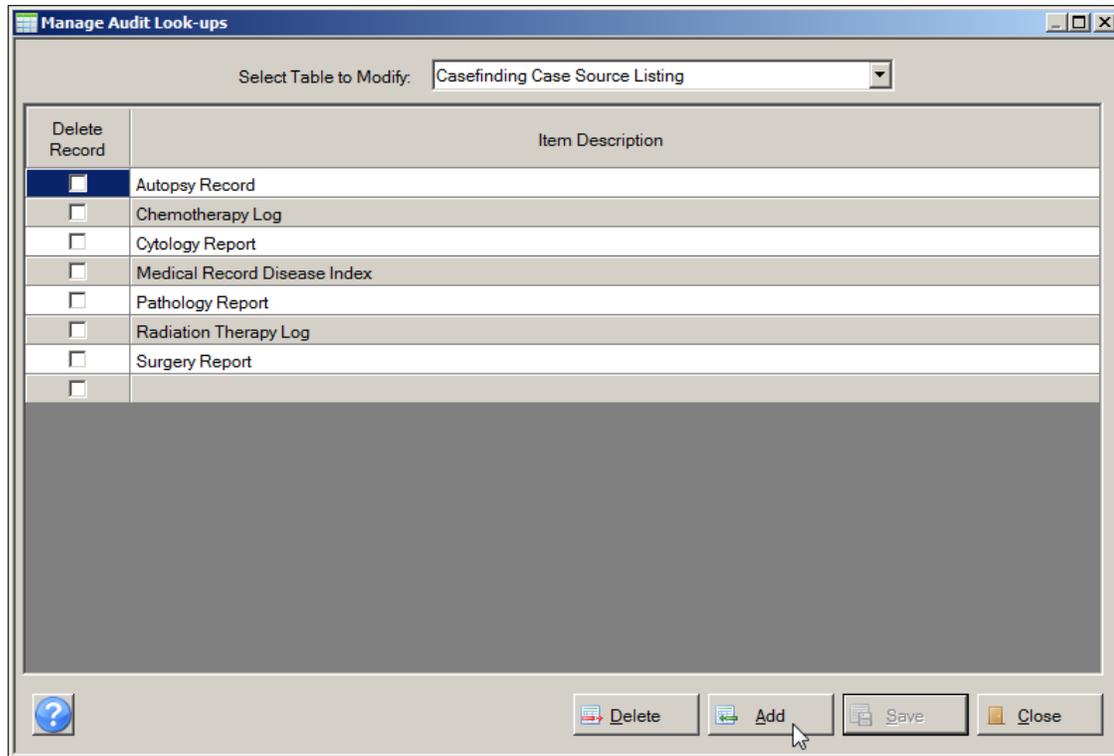
Result: The Manage Audit Look-ups window opens.



2. **Select** the audit look-up table that you would like to modify from the **Select Table to modify** menu at the top of the Manage Audit Look-ups window. In the example shown, the Casefinding Case Source Listing table is being modified, and is selected from the pull-down menu.



Result: The selected audit table opens for modification.



To modify an existing value in the table, simply click into the table cell and make the desired changes. To add a new value to the table click **Add**, and enter the new value in the cell that appears. In order to delete an existing value, check the Delete Record check box for the row you wish to delete, and click **Delete**.

3. Make the desired modifications to the selected table, and click **Save**.
4. When you have completed making and saving modifications to table values, click **Close** to close the Manage Audit Look-ups window.

Result: The Manage Audit Look-ups window closes, and you are returned to the Abstract Plus main window. Any changes that you have made to the audit look-up tables will be available to the Auditor when performing audits.

Currently, the values displayed in the Discrepancy column to the Auditor when performing reabstracting or recoding audits are field-specific; the application displays different values depending on the field being audited. There is a General Discrepancy listing of Major, Minor, and None for most fields, however, there are field-specific Discrepancy listings for Primary Site, Histology, date fields, Collaborative Staging fields, and surgery treatment summary (Rx Summ surgery) fields.



Important

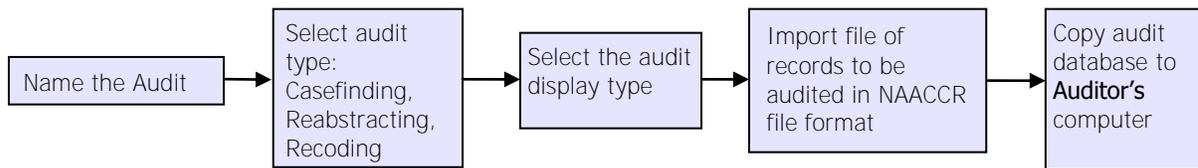
Other field-specific Discrepancy listings look-ups can be added to the application. Please see the **Abstract Plus System and IT Personnel Requirements** document for more information about adding new custom audit look-up tables to the application.

Any changes made to the audit look-ups will require that the Abstract Plus **Master.mdb database be copied** to the computer with which the audits are to be conducted by the Auditor. You will learn more about setting up audits for

the Auditor in the next section, Managing Audit Databases.

Managing Audit Databases

Abstract Plus auditing features enable the Abstract Plus Administrator to set up an audit at the central registry and load the audit onto a laptop that has Abstract Plus installed for use by the Auditor. Multiple audits for multiple facilities may be generated and loaded onto the same computer. All audit data are encrypted for added security. When generating a new audit, the Administrator first names the audit and specifies what type of audit it is, then assigns an audit display type to the audit, imports the records to be audited, and then copies the new audit database to the Auditor's computer.

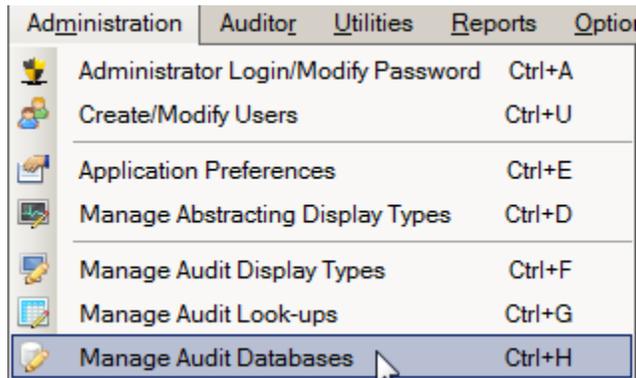


Opening the Manage Audit Databases Window

The Administrator creates and maintains audit databases using the **Manage Audit Databases** window.

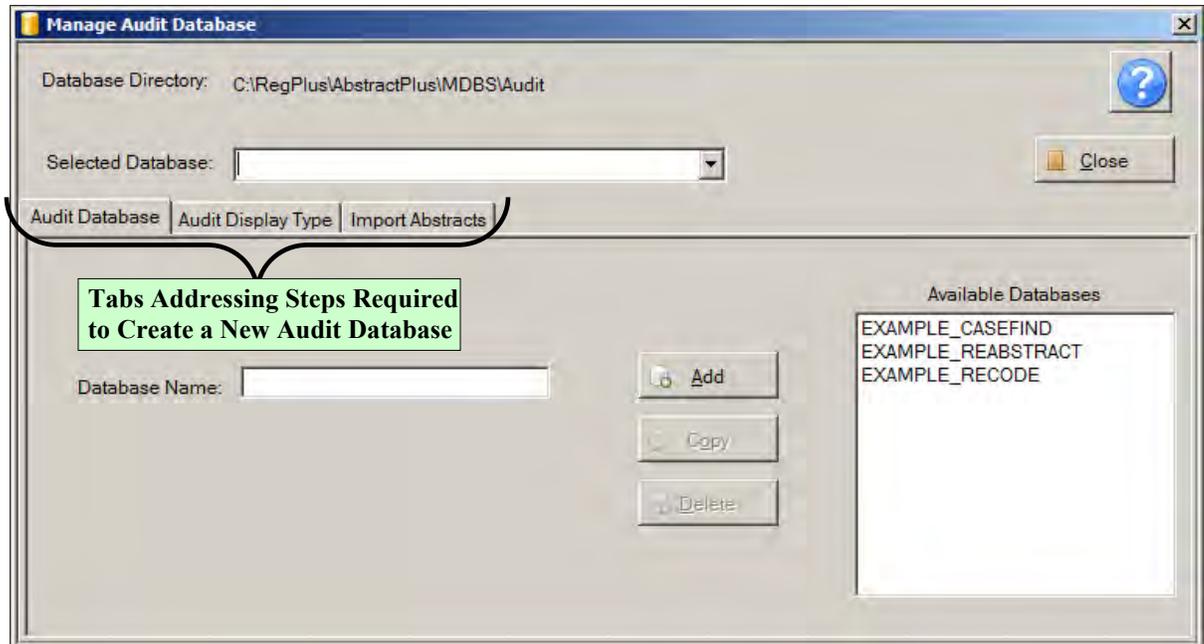
To open the Manage Audit Databases window and work with audit databases, complete these steps:

1. Open the Manage Audit Databases window. This can be done in 2 ways:
 - a. From the **Administration** menu, select **Manage Audit Databases**.



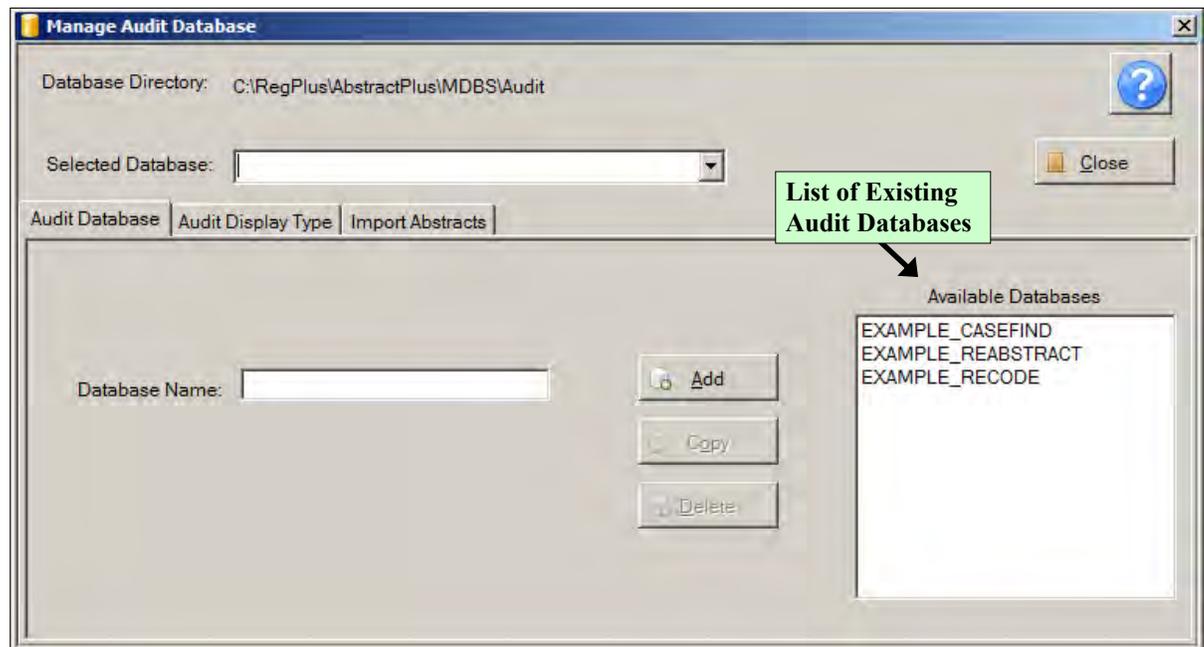
- b. Use the **Ctrl+H** keystroke.

Result: The **Manage Audit Database** window opens defaulted to the **Audit Database** tab.



The Manage Audit Database window consists of a series of **tabs** which open different windows addressing the various steps required to create or update an audit database: Audit Database, Audit Display Type, and Import Abstracts. At the top of the Manage Audit Database window is a **Selected Database** pull-down menu from which you can select the audit database that you would like to modify.

The Audit Database Tab



As mentioned, upon opening the Manage Audit Database window, the **Audit Database tab** is displayed by default. The Administrator uses the Manage Audit Database window to **add** a new audit database, **copy** an exiting audit database, or **delete** an existing audit

database. A list of existing audit databases is displayed in the **Available Databases** list on the right.

Included Audit Databases

Abstract Plus version 3.1 comes with 3 example audit databases already configured for use. These represent the 3 example audits with which the Auditor can train using the Abstract Plus Training Manual for Auditors.

Example Casefinding Audit: EXAMPLE_CASEFIND

The example casefinding audit included in the default installation is named **EXAMPLE_CASEFIND**. This example casefinding audit is basically a “mini” casefinding audit (addressing approximately 10 tumors) that was generated for the purposes of familiarizing Auditors with the casefinding audit features of Abstract Plus 3.1.

EXAMPLE_CASEFIND is a casefinding audit of a fictitious reporting facility named **Test Hospital**, which has a FIN of **1111111111**. The audited time period includes reported tumors diagnosed from October 2007 through December 2007. Note that the data file of tumors that was loaded for this casefinding audit contains simulated data and is quite artificial, as it does not include tumors reported before and after the audited time period. For real casefinding audits, the data file will generally include tumors reported to the central registry by the audited facility for the audited time period as well as tumors reported before and after the audited time period for the purposes of reconciliation.

Example casefinding sources are also provided for the Auditor in order to practice casefinding audit tasks with the example audit. They are located in the **C:\RegPlus\AbstractPlus3\Imports\Example Audit Cases** folder, in Word documents named **Casefinding Reports.doc** and **Pathology Report 10.doc**.

Because this is just an example audit with which to train on the software, very limited casefinding sources are included; primarily only pathology reports along with one cytology report. For real audits many casefinding sources are examined as review of multiple sources is necessary to obtain a complete picture of the diagnosed tumor. Casefinding sources may include, but are not limited to: disease indices, surgery schedules, pathology logs, other cytology and autopsy reports, nuclear medicine documents, radiation oncology, and medical oncology logs.

Example Reabstraction Audit: EXAMPLE_REABSTRACT

The example reabstraction audit included in the default installation is named **EXAMPLE_REABSTRACT**. This example reabstraction audit is basically a “mini” reabstraction audit that was generated for the purposes of familiarizing Auditors with the reabstraction audit features of Abstract Plus 3.1.

EXAMPLE_REABSTRACT is a **blinded** reabstraction audit of a fictitious reporting facility named **Test Hospital**, which has a FIN of **1111111111**. The 4 tumors to be reabstracted were diagnosed from October 2007 through December 2007. Note that the data file of tumors that was loaded for this reabstraction audit contains simulated data.

Example reabstraction medical record sources are also provided in order to practice reabstraction audit tasks with the example audit. They are located in the

C:\RegPlus\AbstractPlus3\Imports\Example Audit Cases folder, in a Word document named **Casefinding Reports.doc (Pathology Reports #1-4)**.

Since this is just an example reabstract audit for training purposes, very limited medical record sources are included; only pathology reports are provided. Real reabstraction audits would entail review of many medical record sources to obtain a complete picture of the diagnosed tumor. Sources may include, but are not limited to: disease indices, surgery schedules, pathology logs, other cytology and autopsy reports, nuclear medicine documents, radiation oncology, and medical oncology logs.

In addition, for this example reabstraction audit a very limited number of fields are being assessed/reabstracted for each tumor---only 8 fields: Race, Ethnicity, Diagnosis Date, Primary Site, Laterality, Histology, Behavior, and Grade. For real reabstraction audits central registries may examine different or additional fields such as Diagnostic Confirmation, treatment fields, and staging fields, and would reabstract a much larger number of tumors, usually of particular primary sites.

Example Recoding Audit: EXAMPLE_RECODE

The example recoding audit included in the default installation is named **EXAMPLE_RECODE**. This example recoding audit is basically a “mini” recoding audit which was generated for the purposes of familiarizing Auditors with the recoding audit features of Abstract Plus 3.1.

EXAMPLE_RECODE is a **blinded** recoding audit of a fictitious reporting facility named **Test Hospital**, which has a FIN of **1111111111**. The 4 tumors to be recoded were diagnosed from October 2007 through December 2007. Note that the data file of tumors that was loaded for this recoding audit contains simulated data, and sufficient text fields were included for the audited tumors so that Auditors can practice recoding audit tasks with the example audit.

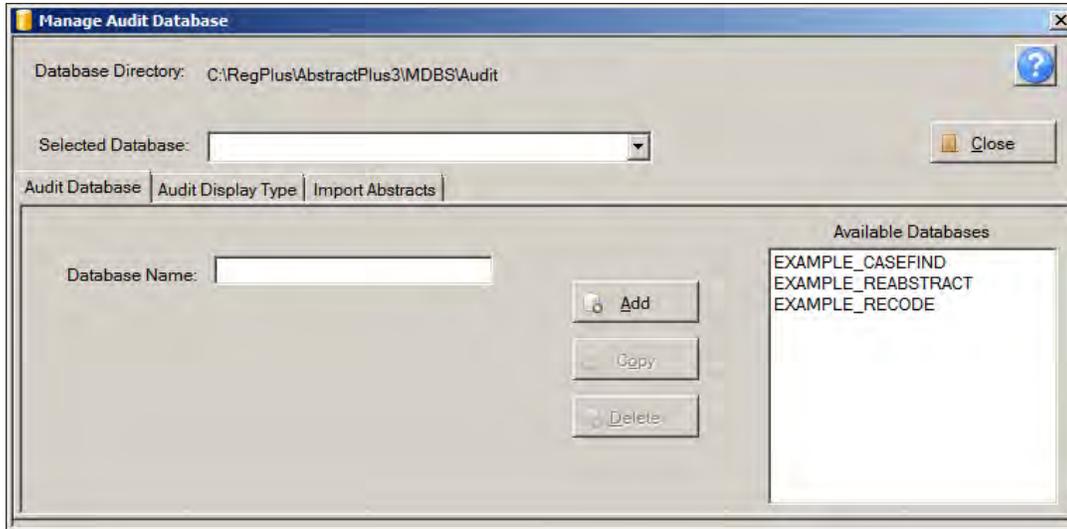
Since this is just an example recode for training purposes, limited example text fields are included. Real recoding audits would entail review of real text submitted by a facility which may provide a more complete picture of the diagnosed tumor. In addition, for this example recoding audit a very limited number of fields are being assessed/recoded for each tumor---only 8 fields: Race, Ethnicity, Diagnosis Date, Primary Site, Laterality, Histology, Behavior, and Grade. For real recoding audits central registries may examine different or additional fields such as Diagnostic Confirmation, treatment fields, and staging fields, and would recode a much larger number of tumors.

Adding a New Audit Database

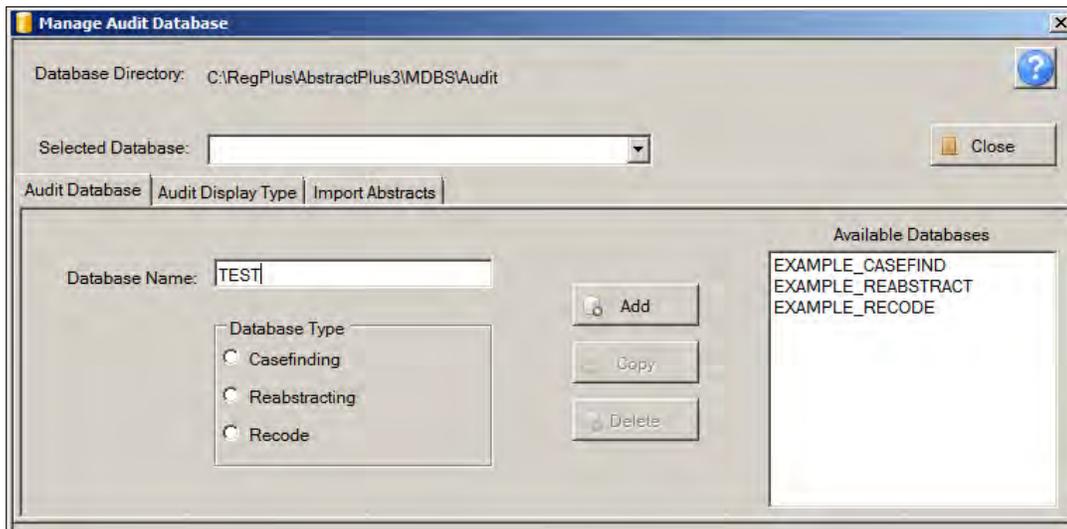
To create a new audit database, complete the following steps:

1. Open the Manage Audit Database window by selecting **Manage Audit Databases** from the **Administration** menu, or by using the **Ctrl+H** keystroke.

Result: The Manage Audit Database window opens defaulted to the Audit Database tab.

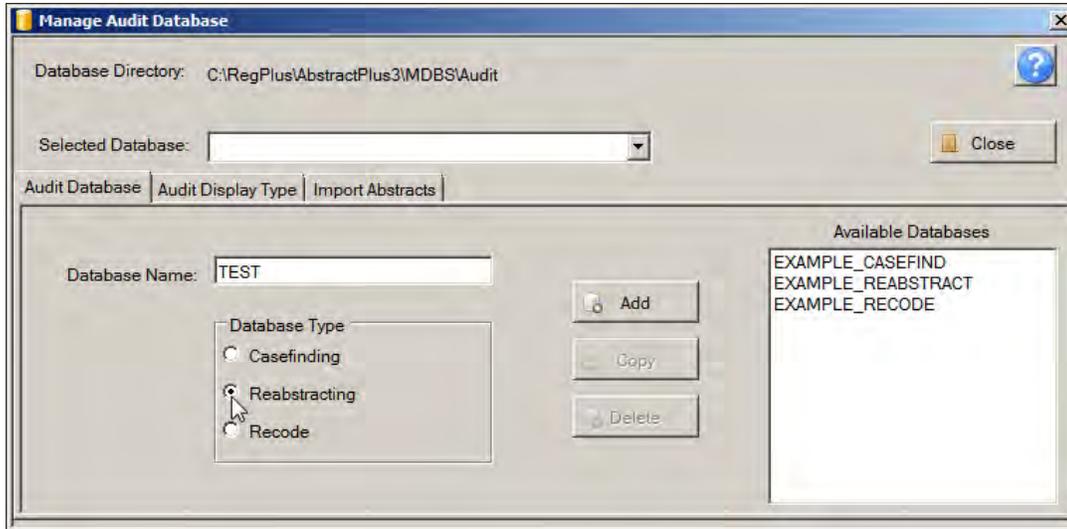


2. Enter a **name** for the new audit in the **Database Name** box. In the example shown, a new audit database named TEST is being generated. Note that for real audit databases, you should give the audit a meaningful name, so that when presented to the Auditor for opening, they will know exactly which audit to open for each audited facility or central registry coder. For example, a reabstraction audit for Test Facility 1 could be named TEST FACILITY 1.



Result: As soon as the name for the new audit has been entered, the **Database Type** selection appears.

3. Select the **audit Database Type**, either casefinding, reabstracting, or recoding. In the example shown, the TEST audit being generated is a reabstracting audit, so Reabstracting is selected.

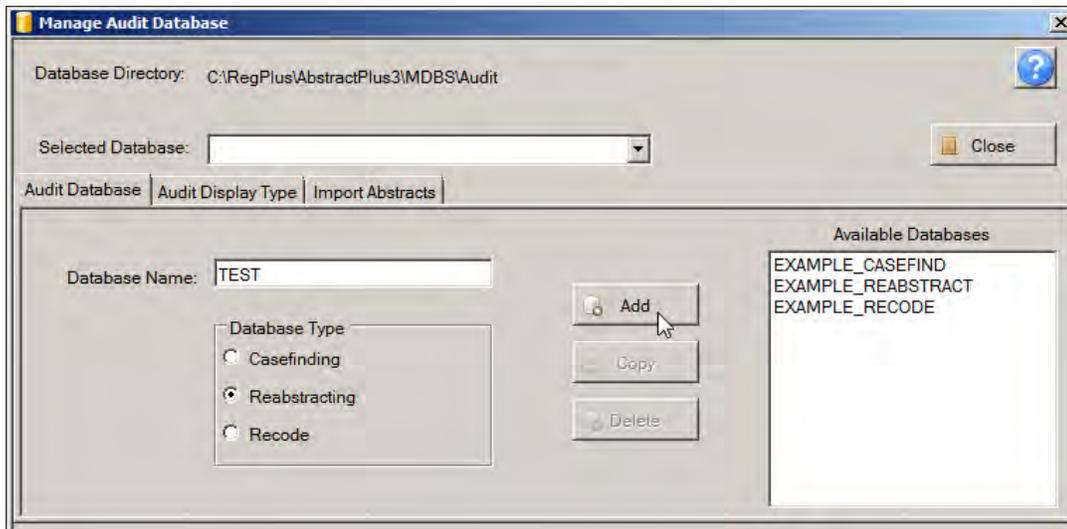


4. Click **Add**.



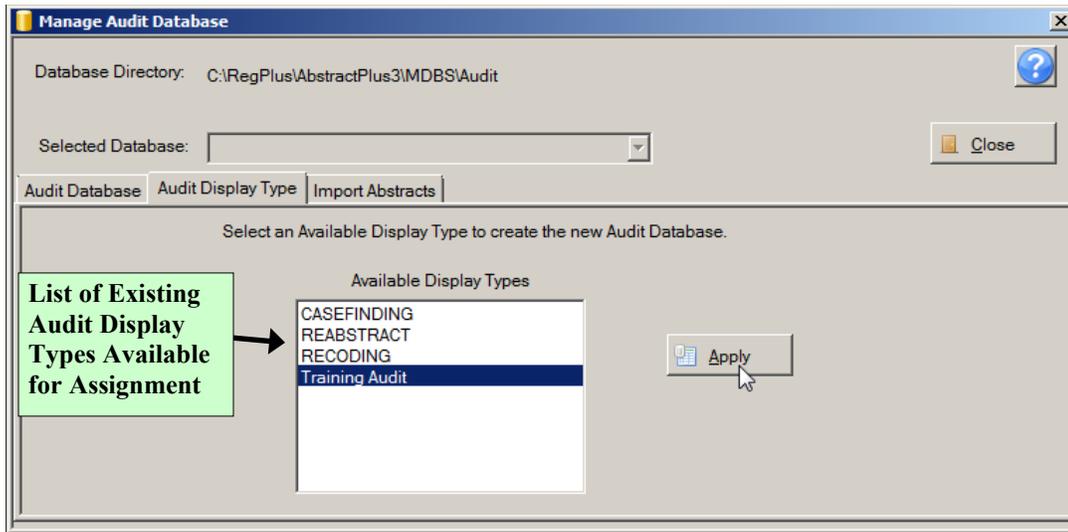
Note

Once the audit Database Type is selected, the application will append the audit type to the end of the new audit database name. All casefinding audits will have the extension of **_CASEFIND**, all reabstraction audits will have the extension of **_REABSTRACT**, and all recoding audits will have the extension of **_RECODE**. For example, if you name a casefinding audit Test Facility 1, it will be named **Test Facility 1_CASEFIND**.



Result: The new audit database is added to the application, and you are automatically directed to the next tab, the Audit Display Type tab.

The Audit Display Type Tab

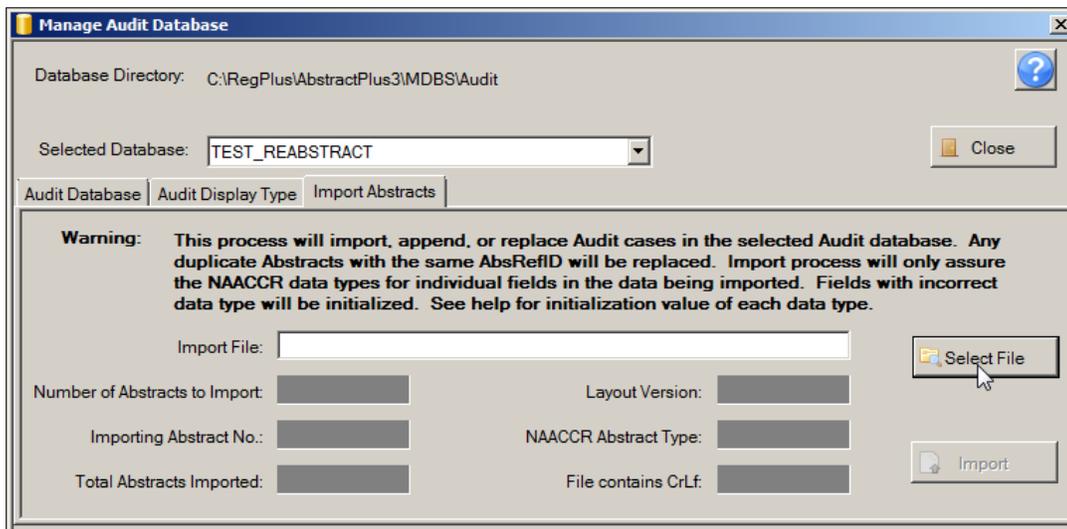


The Administrator uses the Audit Display Type tab window to assign a display type to the new audit database. A list of existing audit display types is displayed in the **Available Display Types** list on the left.

5. **Select the audit display type** that you would like to assign to the new audit database, and click **Apply**. In the example shown, the Training Audit display type is being assigned to the TEST_REABSTRACT audit database.

Result: The selected display type is assigned to the new audit database, and you are automatically directed to the next tab, the Import Abstracts tab.

The Import Abstracts Tab

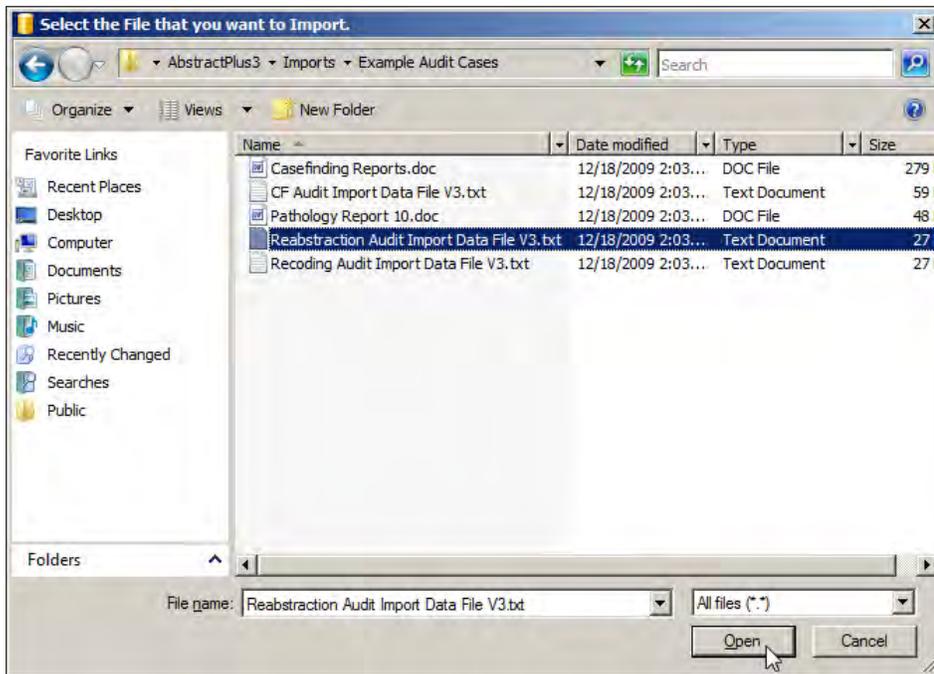


The Administrator uses the Import Abstracts tab window to select the file of records to be audited in NAACCR file format and import them into the new audit database.

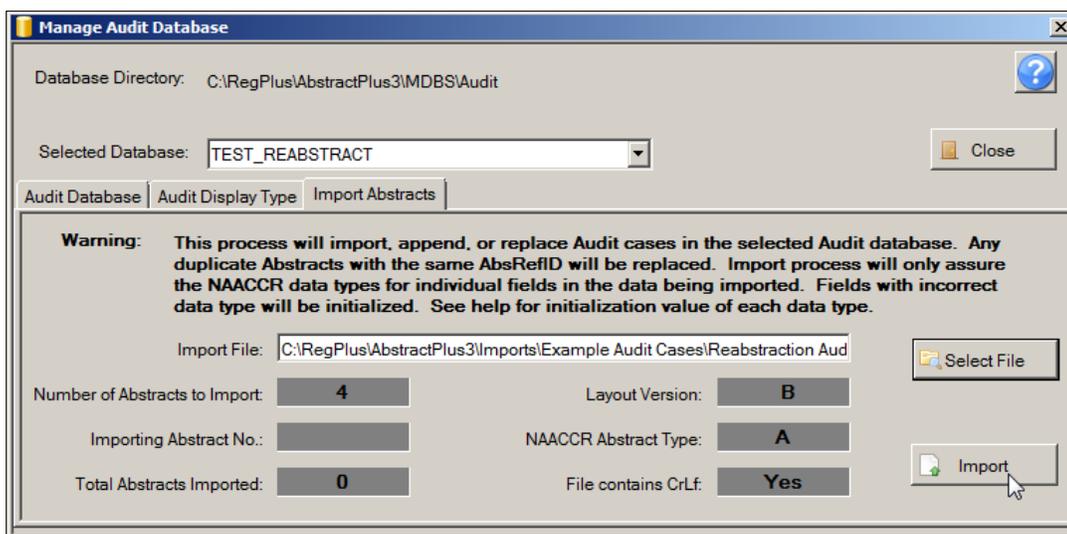
6. Click **Select File**.

Result: The **Select the File that you want to Import** window opens, defaulted to the C:/RegPlus/AbstractPlus3/Imports folder.

7. **Navigate to the audit import file** on your computer or network, select the file, and click **Open**. Note that the example audit import files are located in the C:/RegPlus/AbstractPlus/Imports/Example Audit Cases folder. In the example shown, the data file Reabstraction Audit Import Data File V3.txt is being imported into the TEST_REABSTRACT audit database.

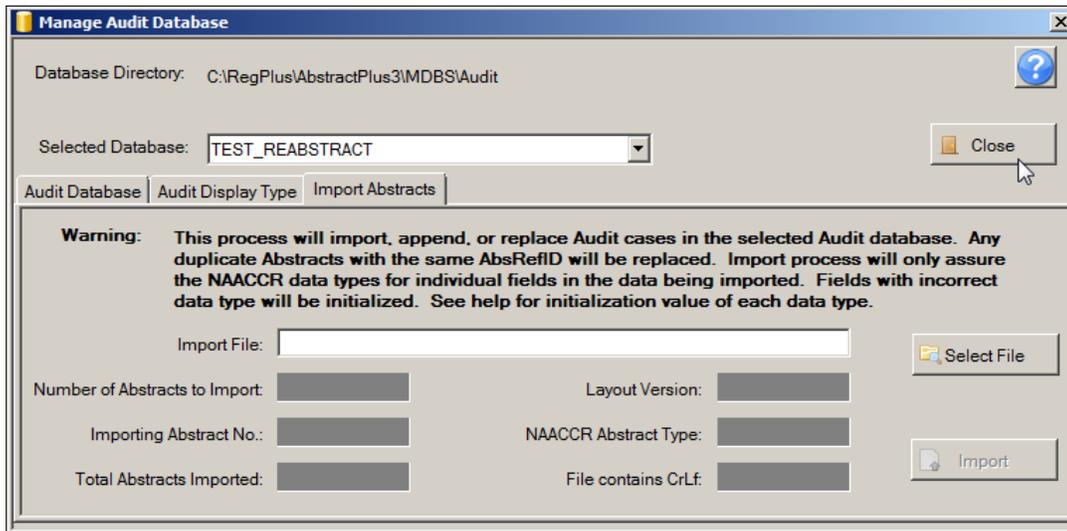


Result: You are returned to the Import Abstracts tab, where information is displayed regarding the file selected for import. The total number of abstracts, NAACCR layout version, and NAACCR Record Type are displayed.



8. Click **Import**.

Result: The abstracts in the import file are counted as they are imported; the **Importing Abstract No** box provides feedback during the import process (how many records have been imported and how many records are left to be imported). When import is complete the **Total Abstracts Imported** will equal the number of abstracts listed in the **Total Abstracts box**, and the status message bar in the lower left-hand corner of the main window will state **Import complete**.



- When you have finished generating audit databases, click **Close** to close the Manage Audit Database window.

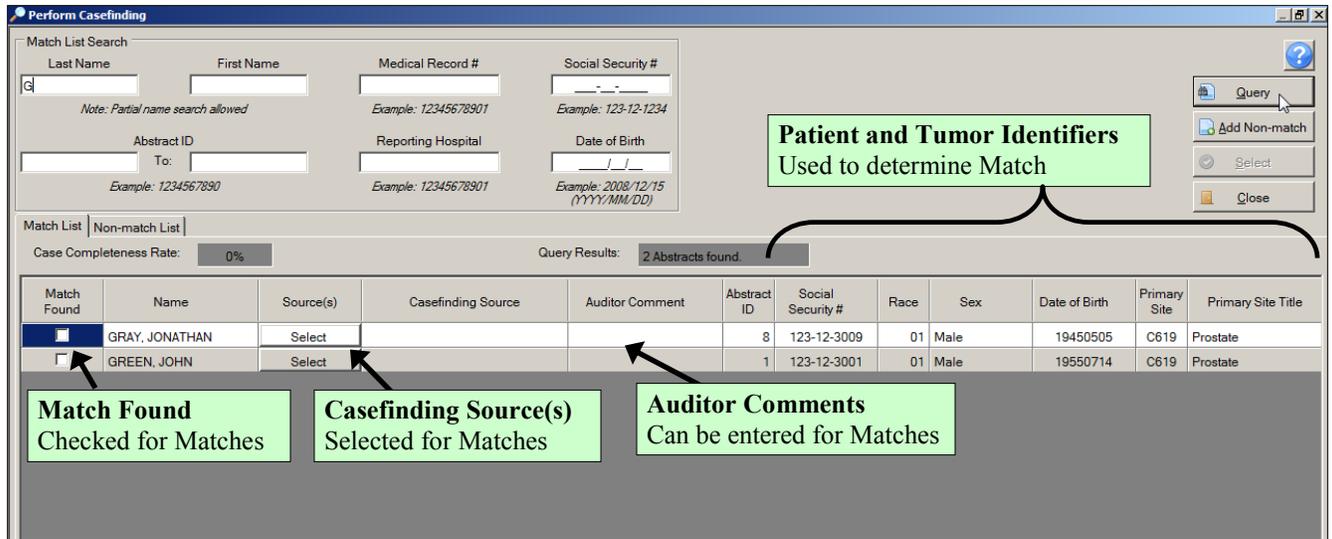
Audit Import File Specifications

The file of audit records to be imported should be in version 12 NAACCR file format, as described in the NAACCR Volume II Data Dictionary (<http://www.naacr.org/standards/volumeii>), Chapter VII Record Layout table.

For the records selected for auditing, audit import files should include the fields being audited, however, the import file should also include other specific fields so that information is correctly displayed to the Auditor.

Fields to Include in Casefinding Audit Import Files

For casefinding audits the import data file will generally include records for tumors reported to the central registry by the audited facility for the audited time period as well as tumors reported before and after the audited time period for the purposes of reconciliation. Within the program, this list of tumors is displayed as a **Match List** to the Auditor when performing casefinding.

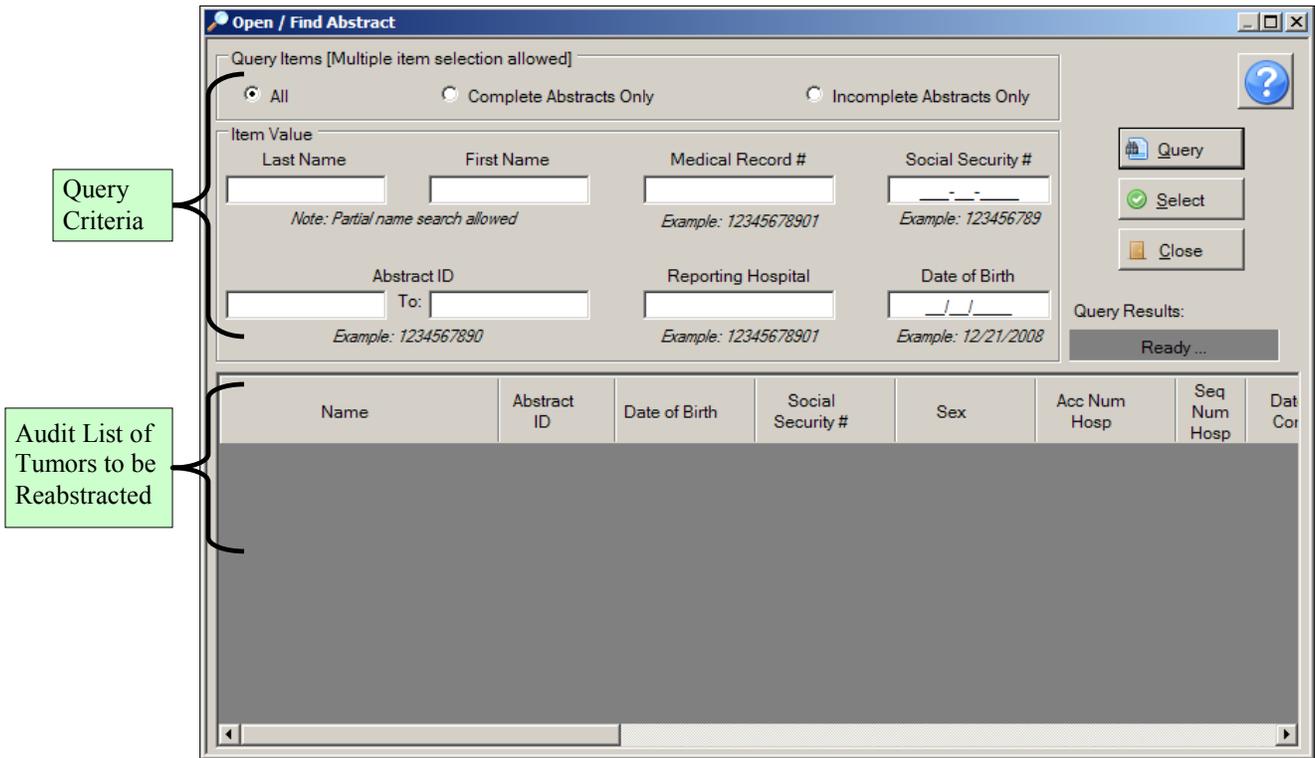


The following patient and tumor identifying fields are displayed in the Match List window, and should be included in the casefinding audit import data file:

NAACCR Data Item	NAACCR Data Item Number	Position	Length
Race1	160	177	2
Sex	220	192	1
Birth Date	240	196	8
Diagnosis Date	390	530	8
Primary Site	400	540	4
Laterality	410	544	1
Histologic Type ICD-O-3	522	550	4
Behavior Code ICD-O-3	523	554	1
Reporting Facility	540	701	10
Sequence Number Hospital	560	740	2
Vital Status	1760	2126	1
Name—Last	2230	3340	25
Name—First	2240	3380	14
Medical Record #	2300	3606	11
Social Security Number	2320	3619	9
Primary Site Title	2580	11565	40

Fields to Include in Reabstracting/Recoding Audit Import Files

For reabstracting and recoding audits the import data file should include all patient and facility identifiers to be included in the Audit Patient ID section, as well as all fields to be audited (i.e., reabstracted/recoded). The records included in the reabstracting or recoding audit file are displayed to the Auditor as an **Audit Tumor List** of tumors to be reabstracted or recoded.



The following patient and tumor identifying fields are displayed on the Audit Tumor list window, and should be included in reabstracting and recoding audit import data files in addition to patient and facility identifiers to be included in the Audit Patient ID and fields to be audited:

NAACCR Data Item	NAACCR Data Item Number	Position	Length
Sex	220	192	1
Birth Date	240	196	8
Diagnosis Date	390	530	8
Primary Site	400	540	4
Laterality	410	544	1
Histologic Type ICD-O-3	522	550	4
Behavior Code ICD-O-3	523	554	1
Reporting Facility	540	701	10

NAACCR Data Item	NAACCR Data Item Number	Position	Length
Accession Number--Hosp	550	731	9
Sequence Number Hospital	560	740	2
Date of 1 st Contact	580	745	8
Date of Last Contact	1750	2116	8
Vital Status	1760	2126	1
Name—Last	2230	3340	25
Name—First	2240	3380	14
Medical Record #	2300	3606	11
Social Security Number	2320	3619	9

Activity 22 - Creating an Audit Database

Using what you have just learned, create a new reabstracting database.

1. **Name** the new audit database **TEST**, and select the **Database Type** of **Reabstracting**.
2. Assign the **Training Audit audit display type** to the new audit database.
3. **Import** the **Reabstraction Audit Import Data File V3.txt** test data file, located in the **C:/RegPlus/AbstractPlus/Imports Example Audit Cases** folder.

Please see page 188 of this manual or click [here](#) for instructions regarding creating new audit databases.

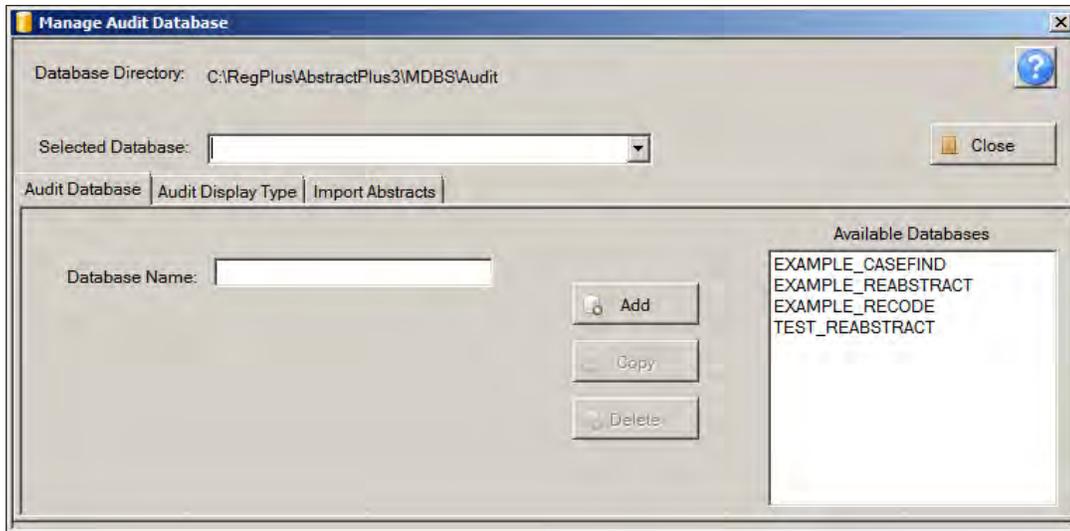
Changing the Assigned Display Type for an Audit Database

Once an audit database has been generated, you can change the audit display type assigned to the audit database without having to re-generate the audit database.

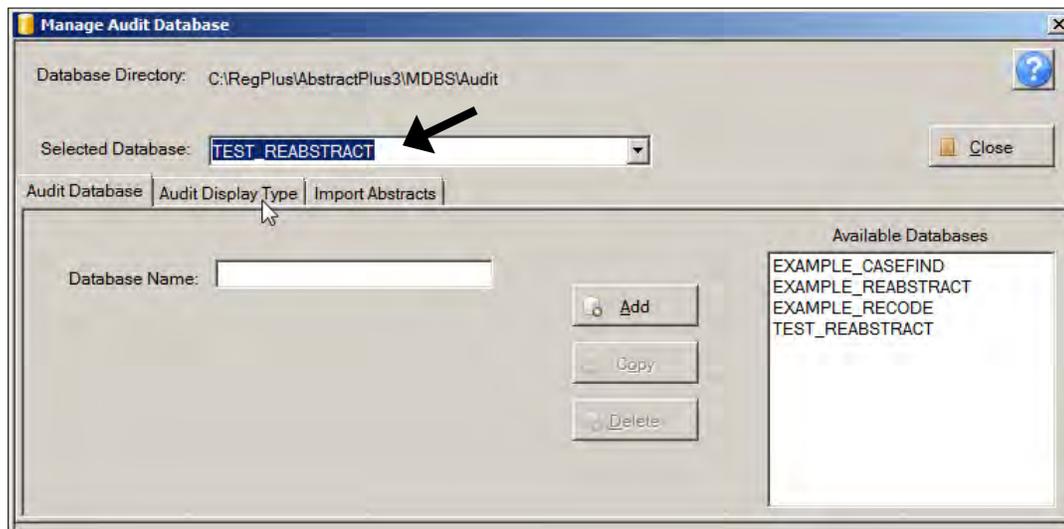
To change the assigned audit display type for an existing audit database, complete the following steps:

1. Open the Manage Audit Databases window by selecting **Manage Audit Databases** from the **Administration** menu, or by using the **Ctrl+H** keystroke.

Result: The Manage Audit Database window opens defaulted to the Audit Database tab.

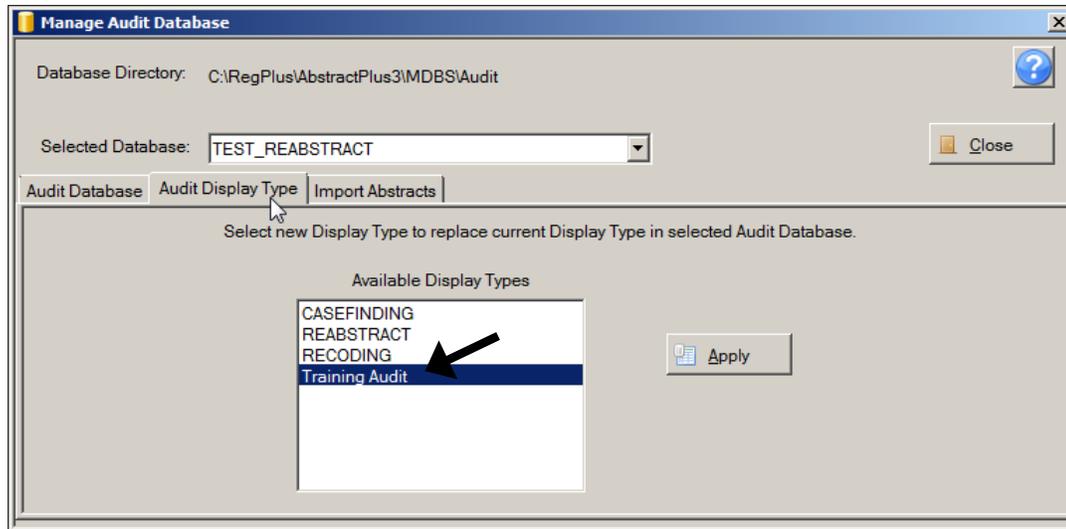


2. From the **Selected Database** pull-down menu at the top of the Manage Audit Database window, **select the audit database** for which you would like to assign a new display type. In the example shown, the TEST_REABSTRACT audit database is selected.

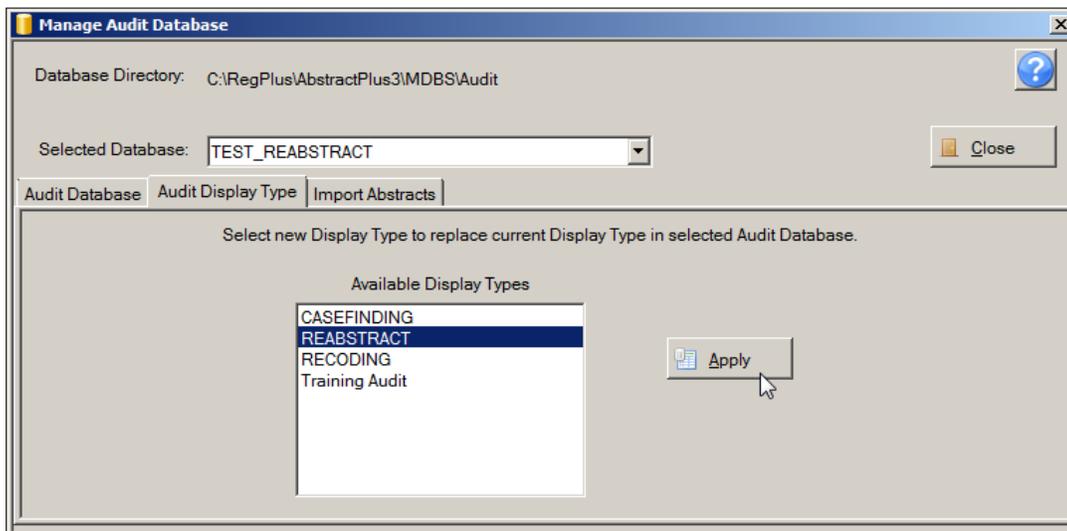


3. Click on the **Audit Display Type** tab.

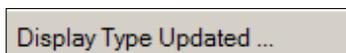
Result: The Audit Display Type tab window opens for the selected audit database. The audit display type that is currently assigned to the audit database is selected in the Available Display Types list.



4. **Select the new audit display type** that you would like to assign to the audit database, and click **Apply**. In the example shown, the new audit display type that is being assigned is the REABSTRACT audit display type.



Result: The new Audit Display Type is assigned to the audit database. The status bar in the lower let-hand corner of the main window lets you know that the display type has been updated:



5. Click **Close** to close the Manage Audit Database window.

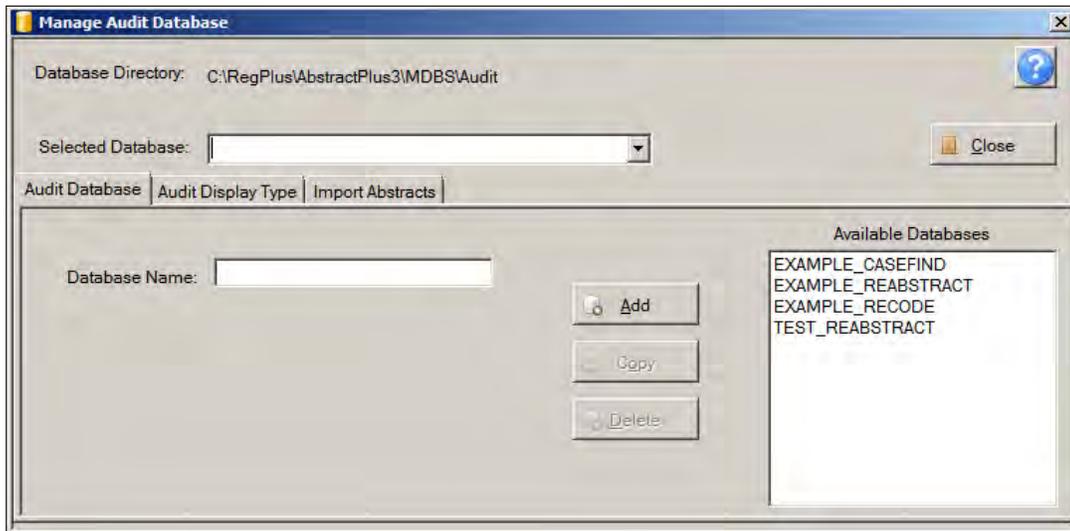
Copying an Existing Audit Database

The Administrator has the option of copying an existing audit database under a new name, and re-importing the file of records to audit.

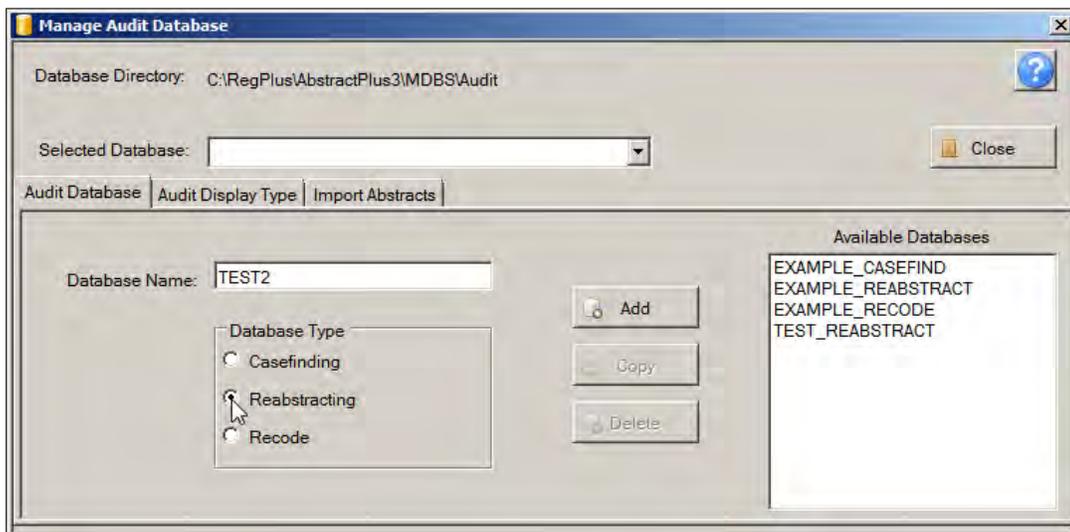
To copy an existing audit database, complete the following steps:

1. Open the Manage Audit Databases window by selecting **Manage Audit Databases** from the **Administration** menu, or by using the **Ctrl+H** keystroke.

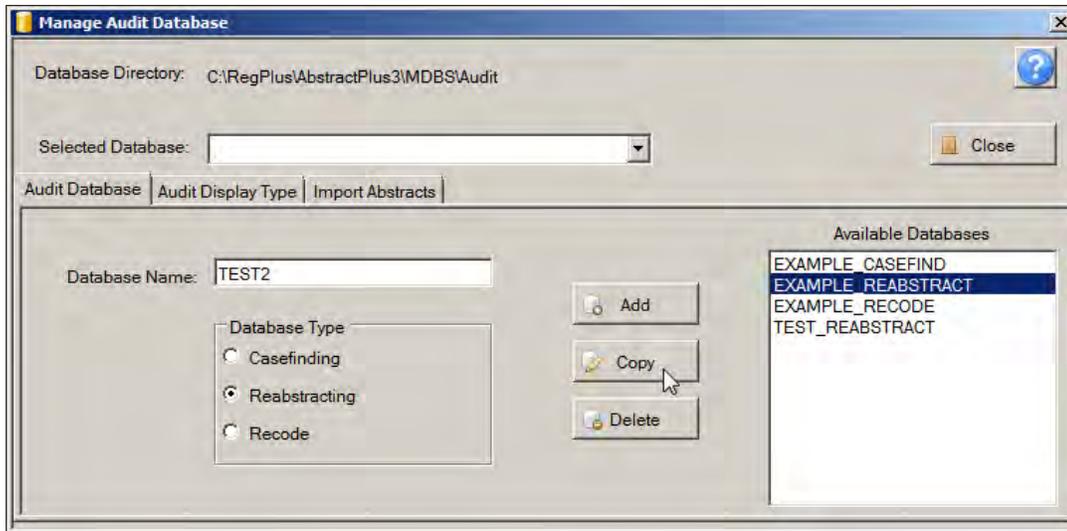
Result: The Manage Audit Database window opens defaulted to the Audit Database tab.



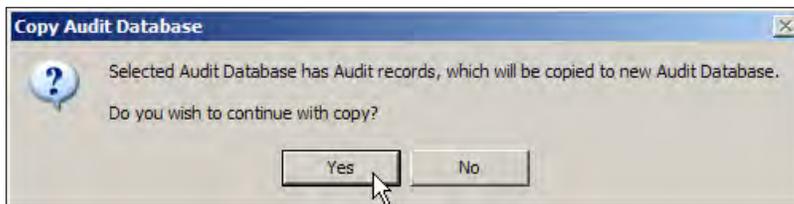
2. Enter a **name** for the new audit database in the **Database Name** box on the left, and select a Database Type for the new audit database. In the example shown, the name of the new audit database is TEST2, and is assigned a Database Type of Reabstracting.



3. From the **Available Databases** list on the right, select the existing audit database that you would like to copy and click **Copy**. In the example shown, the EXAMPLE_REABSTRACT audit database is selected and copied under the TEST2 name.

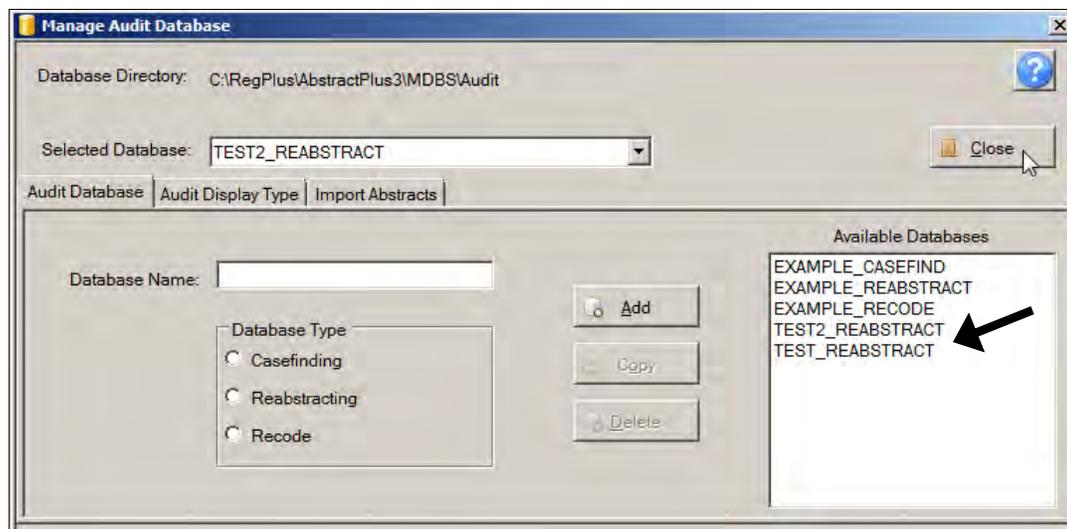


Result: The application asks you to verify that you would like to copy the selected database.



4. Click **Yes**.

Result: The new audit database is added to the application and is now listed in the Available Databases list on the right. If desired, you can re-assign the audit display type, or re-import records to be audited.



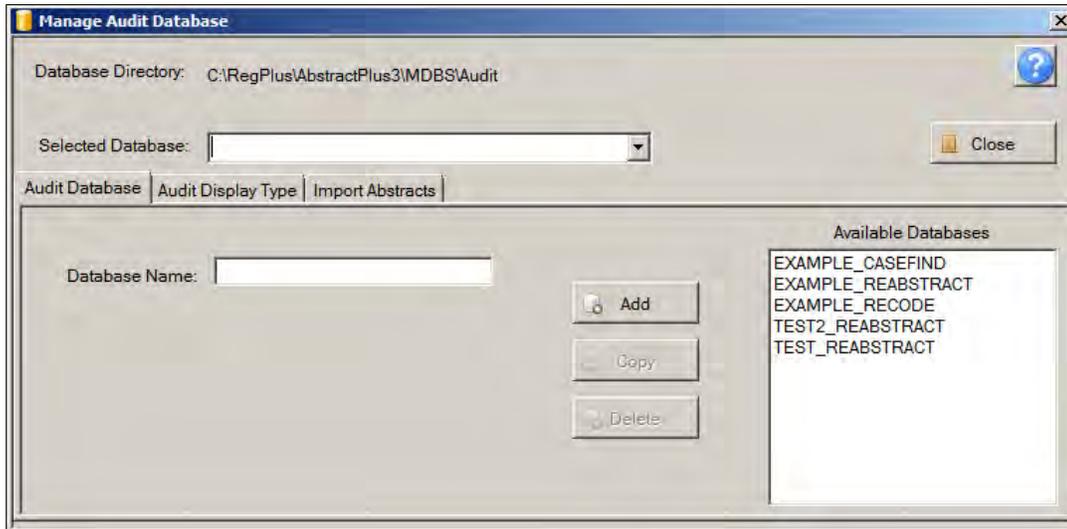
5. Click **Close** to close the Manage Audit Database window.

Deleting an Existing Audit Database

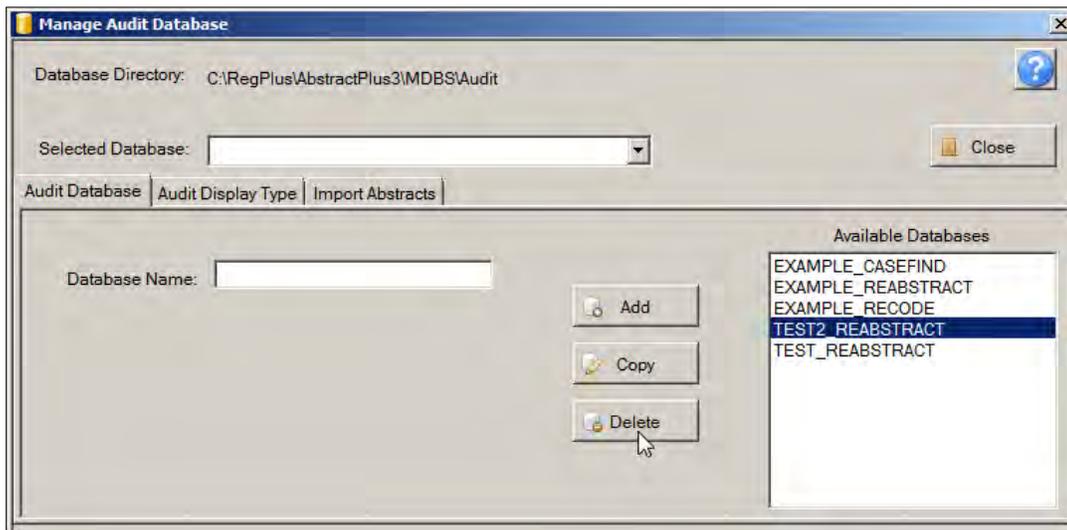
The Administrator can also delete existing audit databases. To delete an existing audit database, complete the following steps:

1. Open the Manage Audit Databases window by selecting **Manage Audit Databases** from the **Administration** menu, or by using the **Ctrl+H** keystroke.

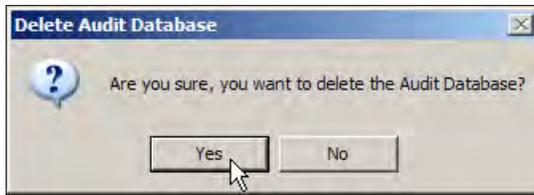
Result: The Manage Audit Database window opens defaulted to the Audit Database tab.



2. From the **Available Databases** list on the right, select the existing audit database that you would like to delete, and click **Delete**. In the example shown, the TEST2_REABSTRACT audit database is being deleted.

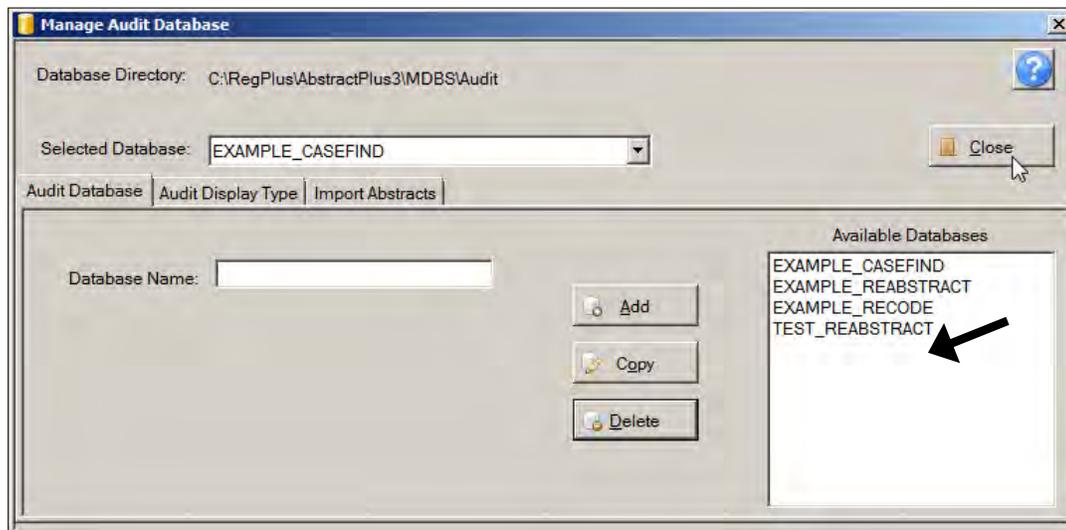


Result: The application asks you to verify that you would like to delete the selected database.



3. Click **Yes**.

Result: The selected audit database is deleted from the application and is removed from the Available Databases list on the right.



4. Click **Close** to close the Manage Audit Database window.

Activity 23 - Deleting an Audit Database

Using what you have just learned, delete the **TEST_REABSTRACT** audit database.

Please see page 201 of this manual or click [here](#) for instructions regarding creating new audit databases.

Copying Audit Databases to the Auditor's Computer

To copy an audit database from the computer on which it was created to the one on which the audit will be performed, the audit database is merely copied from the **C:\RegPlus\AbstractPlus\MDBS\Audit** folder on the first computer to the **C:\RegPlus\AbstractPlus\MDBS\Audit** folder on the second computer.

Re-creating Example Audit Databases

Once an Auditor has completed an example audit on their computer, you can copy an unused copy of the example audit database back onto their computer, or re-create it for repeat training or for training other staff in the Auditor role on the same computer. The components of the example audit databases are described in the following table:

Audit Database Name	Audit Display Type	Imported Abstracts File (located in C:\RegPlus\AbstractPlus\Imports\Example Audit Cases)
EXAMPLE_CASEFIND	CASEFINDING	CF Audit Import Data File V3.txt
EXAMPLE_REABSTRACT	REABSTRACT	Reabstraction Audit Import Data File V3.txt
EXAMPLE_RECODE	RECODING	Recoding Audit Import Data File V3.txt

Questions

Answer these questions about configuring Abstract Plus for auditing (the answers are in Appendix A, on page 217):

1. What types of audits can be conducted using Abstract Plus version 3.1?
2. What are the basic steps required to conduct an audit using Abstract Plus version 3.1?
3. For audit display types, what fields must be designated as Critical fields?
4. What are the main steps required for the creation of an audit database?
5. How are the different types of audit databases (casefinding, reabstraction, recoding) distinguished from one another?

Chapter 7: Exporting Audits

Learning Objectives

In this chapter, you will learn to:

- Export casefinding Non-matches in North American Association of Central Cancer Registries (NAACCR) file format
- Export Reabstraction audit information in a text file
- Export Recoding audit information in a text file

Overview

This chapter covers the basics of exporting information resulting from audits performed using Abstract Plus. It includes a description of the process by which the Auditor exports casefinding Non-match tumors in NAACCR file format, and exports reabstraction and recoding audit information in a text file.



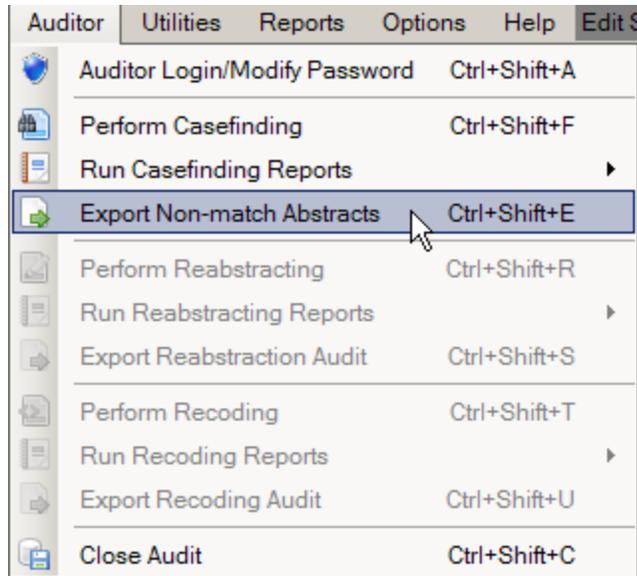
For security purposes, it is strongly recommended that you wait until you have returned to the central registry, or until you are actually going to use the exported information, prior to exporting any audit. Although all other audit data is encrypted and remains secure, exported information is **not** encrypted, and should be stored securely immediately upon export.

Exporting Casefinding Non-matches (Un-Reported Tumors) in NAACCR Format

Upon completion of a casefinding audit in addition to printing the various available casefinding audit reports or saving them in a specific file format, the Non-matched, or unreported, tumors that were abstracted by the Auditor can be exported in NAACCR file format. Export of Non-matches in NAACCR file format enables direct processing of the records for the tumors in the central registry or facility that missed reporting of the tumors.

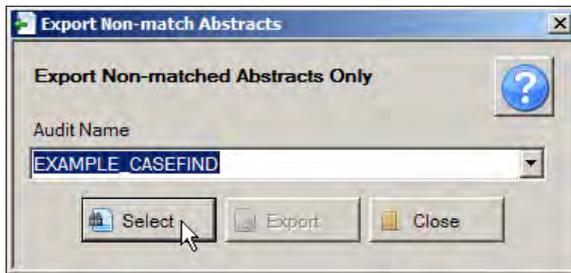
To export Non-match tumors in NAACCR file format, complete these steps:

1. Ensure that you are logged in as Auditor, and have the casefinding audit from which you would like to export Non-matches open.
2. The Export Non-matches window can be opened in 2 ways:
 - a. Click on the **Auditor** menu, and select **Export Non-match Abstracts**.



- b. Use the keystroke **Ctrl+Shift+E**.

Result: The **Export Non-match Abstracts** window opens.



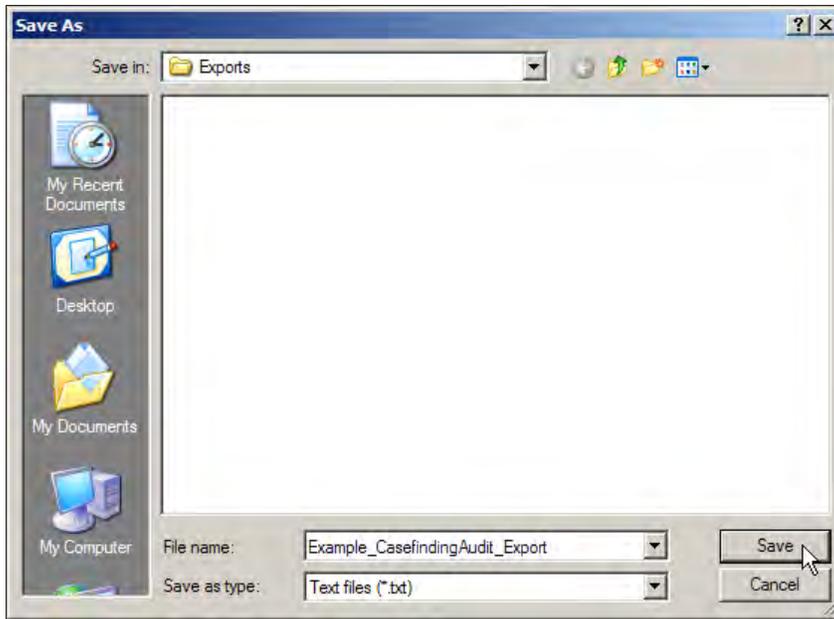
3. If a casefinding audit is currently open it will be automatically selected from the Audit Name drop-down list; otherwise you would select the casefinding audit from which you would like to export Non-matches, and click **Select**.

Result: The Export Non-match Abstracts window displays the number of Non-match abstracts in the selected audit. This is the number of abstracts that will be exported. In the example shown, the EXAMPLE_CASEFIND casefinding audit included 1 Non-match abstract for export.



4. Click **Export**.

Result: The **Save As** window opens defaulted to the Abstract Plus Exports folder.



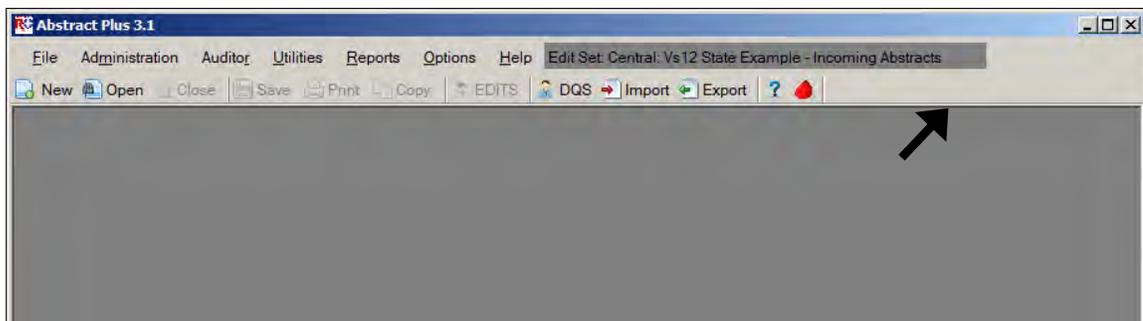
5. Navigate to the **location** on your computer or network where you would like to save the export file, enter the **name of the export file** in the File name box, and click **Save**. In the example shown, the Non-match export file is being saved to the C:\RegPlus\AbstractPlus\Exports folder and is named Example_CasefindingAudit_Export.txt.

Result: You are returned to the Export Non-match Abstracts window, which lets you know that the export process is complete.



6. Select another casefinding audit for export and repeat steps 3-5, or click **Close**.

Result: You are returned to the Abstract Plus main window. The audit from which you have exported Non-matches is closed; the audit name is longer displayed in the upper right-hand corner of the window.



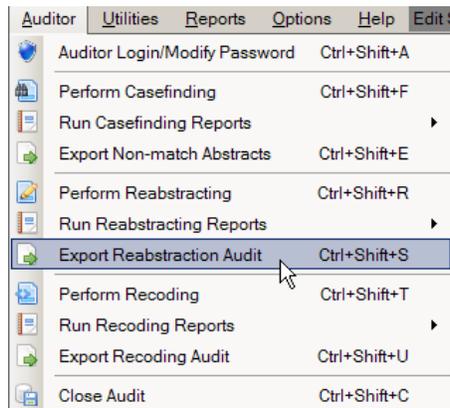
Exporting Reabstraction or Recoding Audit Information in a Text File

Once a reabstraction or recoding audit has been completed, in addition to printing the various available audit reports or saving them in a specific file format, a central registry may wish to export the audit in order to further analyze audit results or track audit results between audits for a particular facility or central registry coder.

When exporting reabstraction or recoding audit records, you can only export records for which the reabstraction/recoding process has been completed. The audit export file is a pipe-delimited text file including both original and audit values listed in the same order as in the display type selected for the audit, with field headers in first row of the file.

To export reabstraction or recoding audit information in a pipe-delimited text file, complete these steps:

1. As the Administrator has automatic access to all auditing features, ensure that you are logged in as Administrator, and have the reabstraction or recoding audit that you would like to export open.
2. The Export Audit window can be opened in 2 ways:
 - a. Click on the **Auditor** menu, and select either **Export Reabstraction Audit** or **Export Recoding Audit**, depending on the particular type of audit you are exporting.



OR

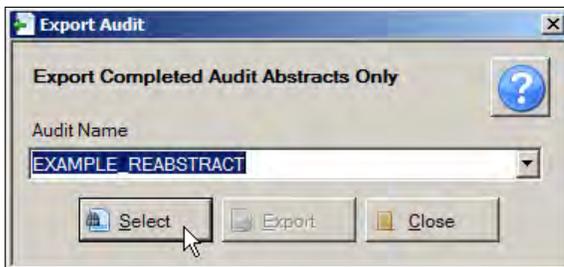


- b. Use the keystroke **Ctrl+Shift+S** to export a reabstraction audit or **Ctrl+Shift+U** for a recoding audit.

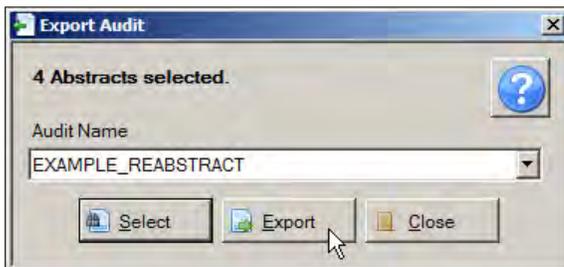
Result: The **Export Audit** window opens.



3. If a reabstraction or recoding audit is currently open it will be automatically selected from the Audit Name drop-down list; otherwise, you would select the reabstraction or recoding audit that you would like to export, and click **Select**.

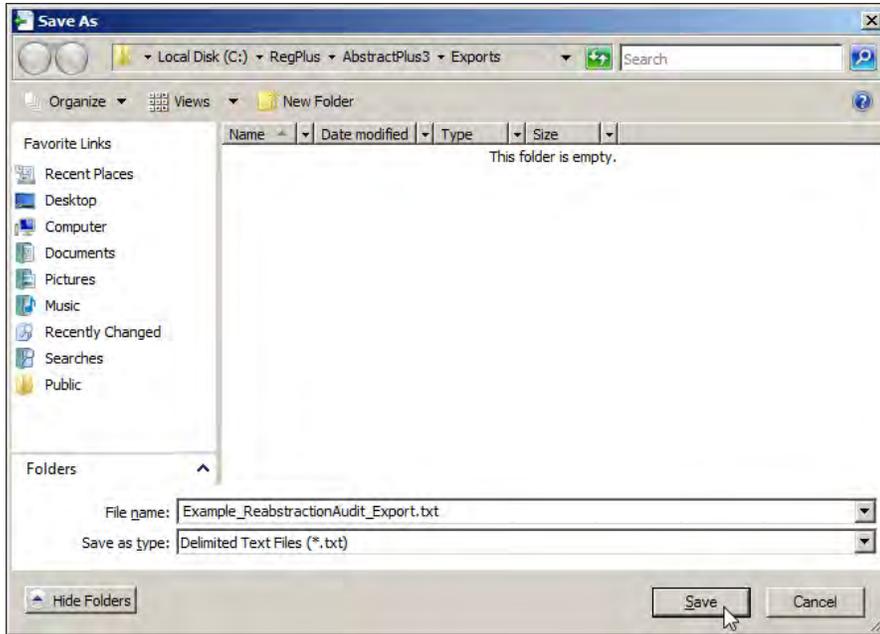


Result: The Export Audit window displays the number of records in the selected audit. This is the number of abstracts that will be exported. In the example shown, the EXAMPLE_REABSTRACT reabstraction audit included 4 audit records for export.



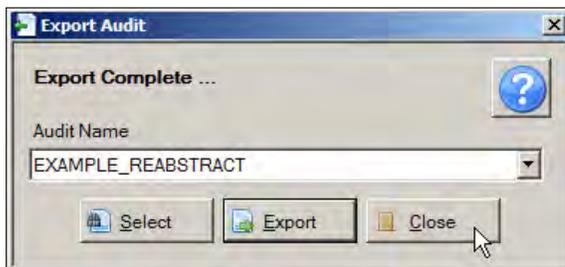
4. Click **Export**.

Result: The **Save As** window opens defaulted to the Abstract Plus Exports folder.



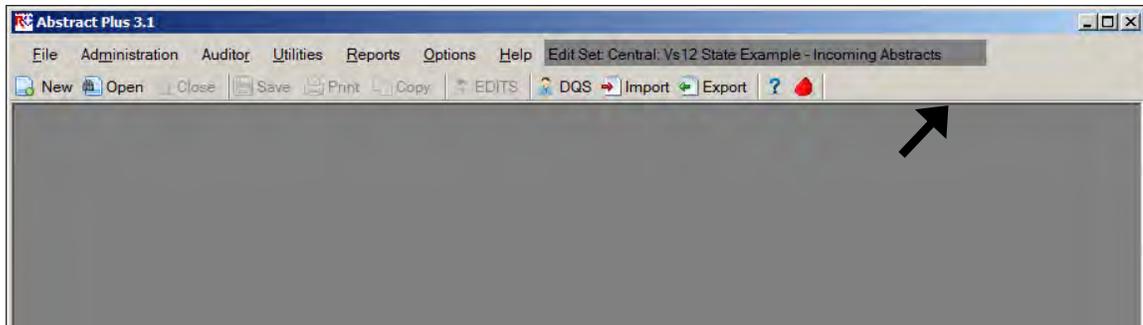
5. Navigate to the **location** on your computer or network where you would like to save the export file, enter the **name of the export file** in the File name box, and click **Save**. In the example shown, the reabstraction audit export file is being saved to the C:\RegPlus\AbstractPlus\Exports folder and is named Example_ReabstractionAudit_Export.txt.

Result: You are returned to the Export Audit window, which lets you know that the export process is complete.



6. Select another reabstraction or recoding audit for export and repeat steps 3-5, or click **Close**.

Result: You are returned to the Abstract Plus main window. The audit from which you have exported records is closed; the audit name is longer displayed in the upper right-hand corner of the window.



Questions

Answer these questions about exporting audit information (the answers are in Appendix A, on page 218):

1. What information can you export from a casefinding audit?
2. What information can you export from a reabstraction or recoding audit?

Chapter 8: Abstract Plus Report Wizard Basics

Learning Objectives

In this chapter, you will learn to:

- Learn about the Abstract Plus Report Wizard
- Learn how to use the Report Wizard to generate a basic custom report

Overview

This chapter provides an overview of the Abstract Plus Reporting Wizard, and the basics of running a custom report.



For security purposes, all Abstract Plus databases are now encrypted. If you have been accessing any of the various Abstract Plus databases in the past via Microsoft Access to generate local reports, you will no longer be able to do so without special instruction to access the now-encrypted databases. Please see page 215 of this manual or click [here](#) for more information on Abstract Plus database encryption.

The Abstract Plus Report Wizard

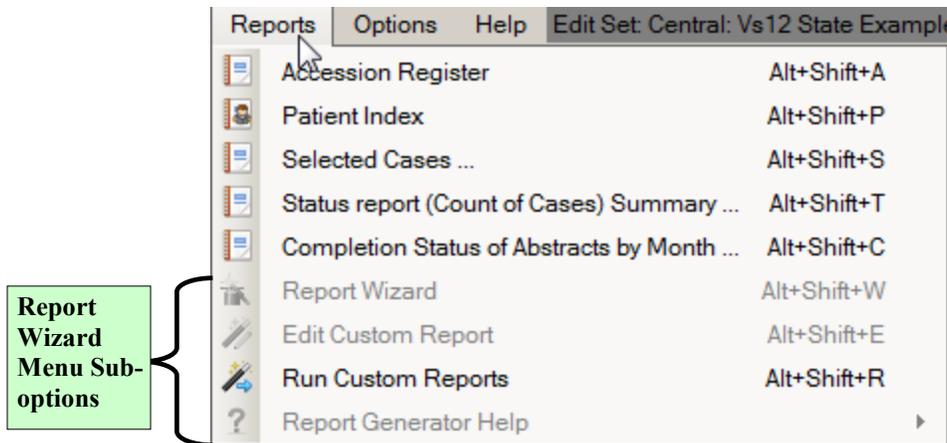
Because Abstract Plus version 3.1 provides for such flexible design of abstracting and audit features but only offers a few standard reports, an ad-hoc reporting capability has been added to the software to offer users the option of enhanced data analysis. The all-new **Report Wizard**, available from the Reports menu, guides users in creating, managing, and running customized reports. Both abstracting and audit data are available through the Report Wizard, which can be used to create simple or complex reports, including cross-tab, hierarchical, and chart reports.



Due to development priorities, the Report Wizard report generation features have been disabled in Abstract Plus version 3.1, and will be released in a future version of the program.

However, you can still run a CDC-developed custom report. To request a custom report, please contact CDC via e-mail: cancerinfo@cdc.gov.

To access the Report Wizard features, click on the **Reports** menu item, and select the desired Report Wizard option, or use the appropriate keystroke combination for the desired option.



The following table describes the Abstract Plus Report Wizard menu sub-options:

Sub-option (Keystroke)	Function
Report Wizard (Alt+Shift+W)	Newly-added feature to enable users to generate their own custom reports (currently disabled)
Edit Custom Reports (Alt+Shift+E)	Edit an existing custom report (currently disabled)
Run Custom Reports (Alt+Shift+R)	Runs selected custom reports that have been added to the application using the Report Wizard
Report Generator Help	Opens online help for the Report Wizard; optional installation by Administrator required (currently disabled)

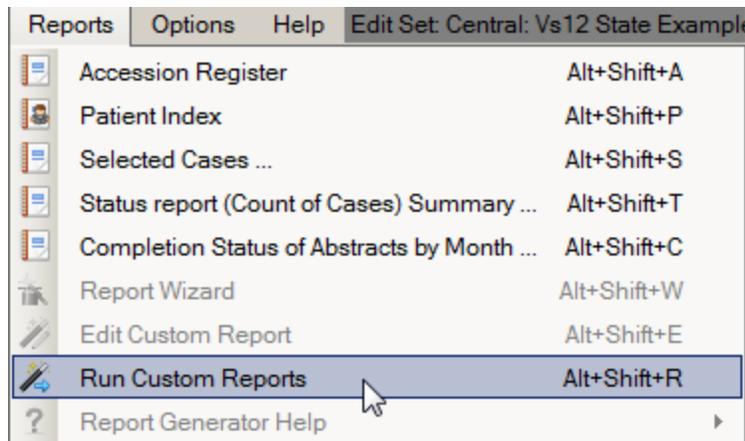
The Abstract Plus Report Wizard provides a friendly Graphical User Interface (GUI) for the creation of custom reports, and does not require the user to have an in-depth knowledge of Sequel Query Language (SQL). The GUI allows the user to create and preview a report to ensure the desired design and all relevant information are captured. Reports can be designed to work with both the Microsoft Access and Microsoft SQL Server database options of Abstract Plus version 3.1.

Running a Saved Custom Report

Once a custom report has been generated by CDC and provided to you, it can then be opened and viewed from within Abstract Plus.

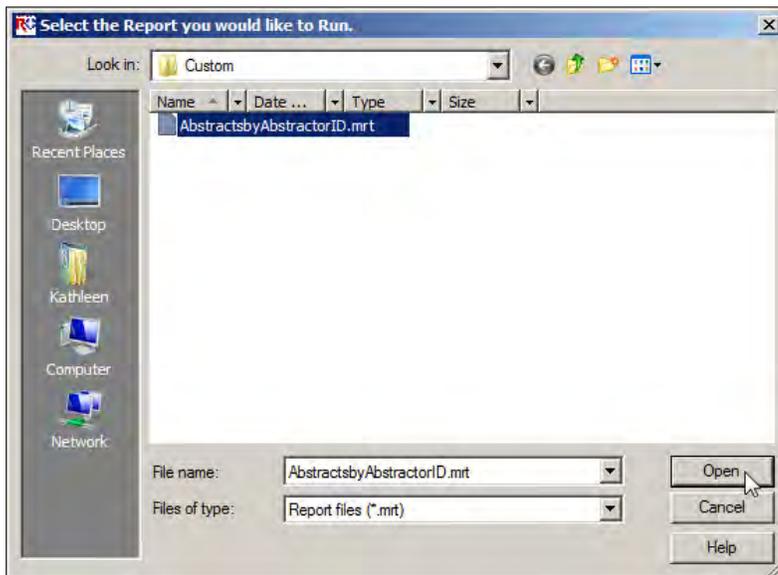
To run a Custom Report, complete the following steps:

1. Custom reports can be opened in 2 ways:
 - a. From **Reports menu**, select **Run Custom Reports**.



- b. Use the **Alt+Shift+R** keystroke.

Result: A **file selection window** opens to allow you to select which custom report to open. Custom reports generated using the Abstract Plus Report Wizard will have the file extension of **.mrt**.



2. **Select the file** for the report you would like to open, and click **Open**.

Result: The report will **compile and display** in the Abstract Plus Report Viewer window.

Cross-Tabs
Abstracts by AbstractorID

Abstracts Name	Abstractor					Total
	12D	HL	MJK	NEW	XYX	
ATARMS, SARGENT		1				1
BRIDE, PRINCESS				2		2
BURKE, KIRK				2		2
DANCER, CANDY				1		1
DAYS, HAPPY				2		2
DRIVER, CABBY	2					2
EDISON, THOMAS					1	1
FLAG, ROYAL				2		2
HINKLE, PINKIE				1		1
MORTON, THEODOR		1				1
QUIGG, GEORGE		1				1
TYSON, JOHN			1			1
Total	2	3	1	10	1	17

3. The report may now be **viewed**, **printed**, or **saved** in one of the variety of file formats available.
4. To close the report, close the Report Viewer window.

Chapter 9: Abstract Plus Database Encryption

As a part of Abstract Plus version 3.1 enhanced security features, all records are saved in Microsoft Access or SQL server databases and all tables are password protected and encrypted using Microsoft functions.

As a result, any activity in the past that has required direct access to the Abstract Plus Access databases will now require special steps to first access the encrypted databases. As mentioned, Abstract Plus can be customized with local (non-standard) fields and look-ups. However this requires direct modification of one of the Abstract Plus databases. In addition, if you have been accessing any of the various Abstract Plus databases in the past via Microsoft Access to generate local reports, you will no longer be able to do so without special instructions to access the now-encrypted databases.

As CDC creates customized installations of Abstract Plus for any NPCR-funded central registry, access to the databases should no longer be required due to the new reporting and audit information exporting features:

- With the all-new Report Wizard, you no longer need to access the databases directly to create customized reports; generation of custom reports is now a user-friendly feature of the program and can be accomplished via the application interface. In addition, you can further access to data in the database by generating and saving custom reports in any format for further analysis of the data.
- For audits, you can export all audit information directly via the Auditor features of the program.

However, all other interested parties that need to customize the application for local use will need to access the encrypted databases, and some NPCR-funded registries still may find the need to access the databases as well.

As a result, special instructions and passwords are available that allow for direct access to the encrypted databases. Please see the **Abstract Plus System and IT Personnel Requirements** document for full details regarding Abstract Plus database encryption, and instructions on gaining access to the encrypted databases if required.

Appendix A: Answers to Chapter Questions

Chapter 2: Abstract Plus General User Basics

These are the answers to the questions (page 45) about the basics for Abstract Plus general users:

1. The first things you need to do upon initial login into Abstract Plus are: 1) create a user account, 2) log in, 3) change your password, and then 4) select and answer security challenge questions.
2. Your answers to the security challenge questions that you select will be used to validate your identity if you forget your Abstract Plus password---if you forget your password, Abstract Plus will ask you for the answers you provided to these security questions, and then allow you to reset your password if the questions are answered correctly.
3. It is important to have your own User ID and password for Abstract Plus for security purposes; **never** share your account information with others. In addition, when logged in using your own User ID and password, your initials will be displayed on the main Abstract Plus window to indicate when you are logged in to the application, and will be automatically recorded in the Abstracted By field when abstracting abstracts or conducting audits; this information is recorded in order to associate abstractors with the abstracts they have generated, and auditors with the audits that they have conducted.
4. When logging off Abstract Plus, you can use the Backup option to save your work to a secure location.

Chapter 3: Abstract Plus Administrator Basics

These are the answers to the questions (page 51) about Abstract Plus Administrator Basics:

1. The basic Administrator functions in Abstract Plus version 3.1 are managing user accounts and setting up the application for abstraction and auditing.
2. No. For security purposes and to ensure standardized use of the application, access to the Administrator functions is restricted and password-protected. Once you have logged in to Abstract Plus with your general User ID and password, you may then log in as an Administrator.
3. No. The Abstract Plus Administrator role has access to all functions of the software, including all of the auditing functions; entry of the Administrator password allows access to Auditor functions without entry of the Auditor password.

Chapter 4: Abstract Plus Configuration

These are the answers to the questions (page 121) about configuring Abstract Plus:

1. Yes. The Abstract Plus Administrator can customize the list of challenge questions presented to users upon initial log in by opening the Application Properties window, clicking the Security Questions tab, and adding or removing security questions to the list displayed on the Security Questions tab.
2. The Enforce Strong Password option enables the password restrictions feature.
3. The Administrator can define password restriction rules by opening the Application Properties window, clicking the Password Expression tab, and modifying the regular expression (Regex) which specifies what types of passwords are acceptable.

4. The Administrator can create a new abstracting display type by adding a new one or copying an existing one and modifying it.
5. Section headings are used to group fields in a display type for clearer viewing and to facilitate data entry by the Abstractor.
6. When you select an edit set, you are selecting a set of edits that will all be applied to the abstract in the same way; i.e., using the same Edit Set execution options (Skip Empty, Skip Failed and Suppress Warnings) for all the edits in the selected Edit Set. When you select individual edit options, you can override Edit Set execution options for any individual edit, or choose to suppress an individual edit, preventing it from running when the edit set is run.
7. To protect a field from being edited by the abstractor, once you have selected the data item for your display type, click Properties, enter a default value for the data item, and then check the Protected check box.

Chapter 5: Managing Users

These are the answers to the questions (page 132) about managing Abstract Plus user accounts:

1. The current user is easily identified on the Create/Modify Users window by looking in the Current User ID box in the bottom of the window.
2. To add a new user to Abstract Plus, from the Administration menu, select Create/Modify Users, or use the Ctrl+U keystroke to open the Create/Modify Users window. Type the name of the new user in the User Name box using the convention of Last Name, First Name, Middle initial. Press Tab to move the cursor to the User ID box, and enter a User ID for the new user. Press Tab to move the cursor to the Initials box, and enter the new user's 3 character initials, and then click Add.

Chapter 6: Abstract Plus Audit Configuration

These are the answers to the questions (page 203) about Abstract Plus Audit Configuration:

1. For assessing case completeness, casefinding audits are available, and for assessing data quality, both reabstraction and recoding audits are available. The application allows for either blinded or un-blinded reabstraction audits and for recoding audits un-blinded submitted text can be recoded for both reporting facilities as well as central registry coders.
2. The basic steps required to conduct an audit using Abstract Plus version 3.1 are: 1) the Administrator sets up the audit, 2) the Auditor performs the audit, 3) the Auditor generates pre-reconciliation audit reports, 4) the Auditor performs reconciliation efforts, and 5) the Auditor generates final audit reports.
3. For all audit display types (casefinding, reabstraction and recoding) all fields being abstracted, reabstracted, or recoded must be designated as Critical fields.
4. The main steps for creating an audit database are to name the audit database, select the audit database type, assign an audit display type, and import records to be audited.
5. Once the audit Database Type is selected, the application will append the audit type to the end of the new audit database name. All casefinding audits will have the extension of

_CASEFIND, all reabstraction audits will have the extension of _REABSTRACT, and all recoding audits will have the extension of _RECODE.

Chapter 7: Exporting Audits

These are the answers to the questions (page 210) about exporting audits:

1. For casefinding audits, Non-matched, or unreported, tumors that were abstracted by the Auditor can be exported in NAACCR file format.
2. The Reabstraction or Recoding audit export file is a tab-delimited text file including both original and audit values in the order of selected display type, with field headers in first row of the file.

Appendix B: Standard Keyboard Shortcuts

Function	Keyboard Combination
Menus	
File Menu	Alt+ F
Administration Menu	Alt+ M
Utilities Menu	Alt+ U
Reports Menu	Alt+ R
Options Menu	Alt+ O
Help Menu	Alt+ H
Right-Click Menu:	
Search Help / Field Context	F1
Edits Information for current field	F2
Field Message	F3
Special Field Lookup	F4
CS or Age calculations	F5
Run EDITS on current Abstract	F8
Undo text change	Ctrl+ Z
Cut selected text	Ctrl+ X
Copy selected text	Ctrl+ C
Paste text from clipboard	Ctrl+ V
Delete selected text	Alt+ D
Select All text in entry field	Alt+ A
Move to first Text Field	Ctrl+ T
Section Headings	Alt+ S
Display Types	Alt+ T
General	
Open a pull-down data item listing	Alt+ Down Arrow
Move to next field	Enter or Tab
Move to previous field	Shift+Enter or Shift+Tab