

*e*Index Global Identifier Product Suite*

e*Index™ 4.1.1 to 4.5.2 Release Bulletin

Version 4.5.2



SEEBEYOND

Copyright

The information contained in this document is subject to change and is updated periodically to reflect changes to the applicable software. Although every effort has been made to ensure the accuracy of this document, SeeBeyond Technology Corporation (SeeBeyond) assumes no responsibility for any errors that may appear herein. The software described in this document is furnished under a License Agreement and may be used or copied only in accordance with the terms of such License Agreement. Printing, copying, or reproducing this document in any fashion is prohibited except in accordance with the License Agreement. The contents of this document are designated as being confidential and proprietary; are considered to be trade secrets of SeeBeyond; and may be used only in accordance with the License Agreement, as protected and enforceable by law. SeeBeyond assumes no responsibility for the use or reliability of its software on equipment that is not supported by SeeBeyond.

e*Gate, e*Way, e*Xchange, EBI, eBusiness Web, iBridge, Intelligent Bridge, IQ, e*Index, SeeBeyond, the SeeBeyond logo, and SeeBeyond Technology Corporation are trademarks and service marks of SeeBeyond Technology Corporation. All other brand or product names are either trademarks or registered trademarks of their respective companies or organizations.

Copyright © 1999–2002 by SeeBeyond Technology Corporation. All Rights Reserved. This work is protected as an unpublished work under the copyright laws.

INTEGRITY and INTEGRITY Data Re-Engineering Environment are trademarks of Vality Technology Incorporated. Vality is a registered trademark of Vality Technology Incorporated.

This work is confidential and proprietary information of SeeBeyond and must be maintained in strict confidence.

Version 452.200204

All rights reserved.

Table of Contents

Release Information	1-1
About this Bulletin.....	1-1
Overview	1-1
General Information.....	1-2
Overview	1-2
Where to Find More Information	1-2
Installation Changes.....	1-2
<i>Database</i>	1-2
<i>Schema</i>	1-2
Upgrade Changes.....	1-3
Logging On.....	1-3
New Icons	1-3
e*Index Data Dictionary Renamed.....	1-3
Initialization File Updates	1-3
Available Platforms	1-4
<i>SeeBeyond Products</i>	1-4
<i>Database Software</i>	1-4
<i>Operating Systems</i>	1-5
Validity Rule Set Modifications.....	1-6
Overview	1-6
Version Update	1-6
<i>File Changes</i>	1-6
<i>UI.RUL</i>	1-6
<i>UI.PAT</i>	1-7
<i>UI.DCT</i>	1-7
<i>UI.CLS</i>	1-7
<i>UI.STN</i>	1-8
<i>UI.TBL</i>	1-8
Validity and the Control Broker	1-8
Address Parsing.....	1-8
e*Index Global Identifier GUI Enhancements	1-9
Overview	1-9
New Icon	1-9
Terminology Changes.....	1-9
Display Configurability.....	1-9
French Character Set.....	1-10
Field-level Enhancements.....	1-10
Person Categories	1-10
Non-unique IDs	1-10
Functional Access Changes	1-10
Application Window Enhancements	1-11
Summary Tab.....	1-12
Comparison Search Window	1-13
Potential Duplicate Changes.....	1-13
Audit Trail and Potential Duplicate Search Changes.....	1-13
Search Window Changes	1-14
<i>Other ID</i>	1-14
<i>Person Category</i>	1-14
<i>General Search Page</i>	1-15

Search Results Page	1-15
Mixed Case Entry and Case-Insensitive Searching	1-16
Address Searching	1-16
Merge Functionality Changes	1-18
Merge History	1-18
Address Types and Telephone Types	1-18
Changing Local ID Statuses	1-18
Displaying the Merged UID Associated with a Local ID	1-19
User Audit Log	1-20
Region-specific Security	1-21
e*Index Administrator (Data Dictionary) Enhancements	1-22
Overview	1-22
New Icon	1-22
Terminology Changes	1-22
New Control Keys	1-22
Modified Control Keys	1-23
Obsolete Control Keys	1-24
Maintenance Function Changes	1-24
<i>New Functions</i>	1-24
<i>Obsolete Functions</i>	1-25
<i>Common Maintenance Functions</i>	1-25
<i>Table Maintenance Functions</i>	1-26
Non-unique ID Definition Maintenance	1-27
Configurable Candidate Selection (CSS)	1-27
Display Configuration	1-28
Country Specific Options	1-29
<i>To Perform Country Specific Customizations</i>	1-30
Event Notification Maintenance	1-31
Region Code Maintenance	1-31
Rule Set Maintenance	1-32
System Maintenance	1-33
e*Index Security GUI Enhancements	1-35
Overview	1-35
New Icon	1-35
Terminology Changes	1-35
About the New Design	1-39
<i>New Functionality</i>	1-39
<i>New Maintenance Windows</i>	1-40
<i>New User and Group Properties Windows</i>	1-40
Region-Specific Security	1-41
Event Notification	1-42
<i>Event Notification Window</i>	1-43
<i>Implementing Event Notification</i>	1-43
Obsolete Functions	1-43
e*Index Database Enhancements	1-44
Overview	1-44
New Platform Support	1-44
New Database Tables	1-44
<i>Person Data Tables</i>	1-44
<i>Case-insensitive Search Tables</i>	1-45
<i>Security Tables</i>	1-45
<i>Country-specific Options Tables</i>	1-46
<i>Code Table Data Tables</i>	1-47
<i>Configurable Query Tables</i>	1-47
<i>Outbound Event Tables</i>	1-48
<i>Miscellaneous Tables</i>	1-48

Contents

<i>Display Configuration Tables</i>	1-49
Modified Database Tables	1-49
Database Views	1-50
Obsolete Database Tables	1-51
Database Indexes	1-52
Routines	1-52
Reporting Changes	1-52
e*Index Schema Enhancements	1-53
Overview	1-53
New Monk APIs.....	1-53
Modified Monk APIs	1-56
Obsolete Monk APIs	1-57
Schema Changes.....	1-57
<i>ui-fns.monk</i>	1-58
<i>ui-stdver-eway-funcs.monk</i>	1-58
<i>ui-custom.monk</i>	1-58
<i>Event Type Definition File</i>	1-59
<i>uidb.dsc</i>	1-59
Notes on the Database Migration.....	1-60
Overview	1-60
Potential Duplicates	1-60
Validity Rule Set Files	1-60
Custom Database Components.....	1-60

Release Information

About this Bulletin

Overview

This release bulletin for e*Index Global Identifier 4.5.2 describes the differences between e*Index 4.1.1 and 4.5.2. For detailed information on any of the functionality covered in this document, please refer to the supporting documentation or online help. For information about the differences between e*Index 4.5.1 and e*Index 4.5.2, see the *e*Index Global Identifier Release Bulletin*.

The following diagram illustrates the contents of each major topic in this chapter.

About e*Index 4.5.2	Learn about installation changes, supported platforms, and where to find additional information
Vality Updates	Learn about the changes made to the Vality environment and rule set files
e*Index GUI Updates	Learn how the e*Index GUI was modified between versions
Administrator Updates	Learn how e*Index Administrator (previously e*Index Data Dictionary) was modified between versions
Security Updates	Learn how e*Index Security was modified between versions
Database Updates	Learn about the changes to the e*Index database structure between versions
e*Index Schema	Learn about the changes to the e*Index Schema and Monk API between versions

General Information

Overview

The section of the chapter provides general information about supported platforms, general updates, and installation procedures for e*Index 4.5.2.

Where to Find More Information

When you upgrade to e*Index 4.5.2, you automatically install updated help systems; you can find information about GUI features in each GUI's help system.

Updated user's guides can be found in the electronic library for e*Index. These guides are located in the `\docs` directory on the e*Index CD-ROM. User's guides are provided in PDF format, and require Adobe® Acrobat® Reader (available free over the Internet at <http://www.adobe.com>).

Installation Changes

Database

The installation procedure has been modified slightly for the e*Index database to accommodate the additional support for Sybase and Microsoft SQL Server. You need to install the appropriate Database e*Way for the database platform you use. If you are migrating your database from version 4.1.1, only Oracle is supported.

Previously when you installed the database, you ran the second installation file, `create2.bat`, from the database server. For version 4.5.2, this file must be run from a client workstation. An additional database script, `install_ssap.bat`, is included to install region-specific security. If you run this file against the e*Index database, you must assign regions to both user profiles and to systems in order to view any member data. The database installation procedures are described in chapters 3, 4 and 5 of the *e*Index Global Identifier Installation Guide*.

Schema

When installing the e*Gate Schema files, you now have the option of installing the sample Schema or just installing the e*Gate binary and library files, along with certain Monk files. For more information, refer to chapter 2 of the *e*Index Global Identifier Installation Guide* or the *e*Index Global Identifier Upgrade Guide*.

Upgrade Changes

The most important change for this release is the addition of the upgrade package from version 4.1.1 to 4.5.2. The Schema and GUI upgrades are fairly standard, but the database upgrade from 4.1.1 to 4.5.2 is a complex task and requires some analysis and planning. For more information about the database upgrade procedure, see the *e*Index 4.1.1 to 4.5.2 Upgrade Guide*.

Logging On

All e*Index applications use new login windows. On the previous login windows, you could change your login password and, if necessary, access the e*Index initialization file. In the current release, you no longer perform these functions on the login window. You can modify the initialization file, **stc_ua.ini**, by opening it directly in any text editor, and you can change your login password using the new Change Password function of the e*Index applications. The new Change Password procedure for each application is described in chapter 2 of the appropriate user's guide.

New Icons

All e*Index GUI applications have new desktop icons. These icons are illustrated in the sections of this chapter that describe the changes to each application.

e*Index Data Dictionary Renamed

With the new administrative and configuration capabilities of e*Index Data Dictionary, its name has changed to reflect the expanded functionality. The new name of e*Index Data Dictionary is e*Index Administrator.

Initialization File Updates

To support multiple database platforms, the structure of the e*Index initialization file, **stc_ua.ini**, has been modified slightly. It contains three sample database stanzas, one for each supported database platform (Oracle, Sybase, and Microsoft SQL Server). The database stanzas are standard, and did not change from the previous version. The **Platform** variable was removed from the **STC** section, since the database platform is already specified in each database stanza. For more information, see Chapter 6 of the *e*Index Global Identifier Installation Guide*.

Available Platforms

e*Index Global Identifier requires the following software from SeeBeyond and other vendors, and can operate on the operating systems listed below.

SeeBeyond Products

e*Index now requires the following versions of e*Gate and the Database e*Ways:

- e*Gate Integrator 4.5.0 and later
- Oracle e*Way, Sybase e*Way, or ODBC e*Way 4.5.0 or later, depending on the database platform
- HL7 Templates for e*Gate 4.5.0 or later (only if you send HL7 messages)
- e-Mail e*Way 4.5.0 or later (only if you use the Event Notification function)

Database Software

e*Index supports three different database platforms: Oracle, Sybase, and Microsoft SQL Server.

■ Oracle

Oracle software must be installed as follows in order to install the e*Index database on an Oracle database platform.

- Oracle 8.1.7 Server on the database server
- Oracle 8.1.7 Client on the client workstations and e*Gate host or participating host

Note: SeeBeyond recommends installing Oracle 8.1.7.2.1.

■ Sybase

Sybase software must be installed in one of the following combinations in order to install the e*Index database on a Sybase database platform.

- Sybase 12.0 Server on the database server
- Sybase 12.0 Client on the client workstations and e*Gate host or participating hosts

■ Microsoft SQL Server

Microsoft SQL Server software must be installed as follows in order to install the e*Index database on a Microsoft SQL Server database platform.

- Microsoft SQL Server 7.0 on the database server
- Microsoft SQL Server 7.0 (client components only) on the client workstations and e*Gate host or participating hosts

Operating Systems

Support was increased for the Tru64 operating system to include version 5.0A. The e*Index database can be installed on any operating system supported by the database software you chose. Currently, the e*Gate Schema for e*Index is supported on the following platforms:

- Windows NT 4.0 with Service Pack 4.0 or later
- Solaris 2.6 or later
- HP-UX 11.0 or 11i
- AIX 4.3.3 or 5.1
- Tru64 4.0F or 5.0A

The e*Index client workstation is supported on the following platforms:

- Windows 2000 SP2
- Windows NT 4.0 with Service Pack 4.0 or later
- Windows 95
- Windows 98

Initial Load Updates

For e*Index 4.5.x, the initial load is no longer performed by running an executable file. The new initial load program uses two e*Index Schemas to convert legacy data into the e*Index database in batches. This allows you more flexibility in running the initial load and improves processing. The load is still performed in two steps. Data is validated and standardized in the first step, and loaded into the database in the second step. For more information about the new initial load Schemas, see the *e*Index Initial Load User's Guide* for e*Index 4.5.2.

Vality Rule Set Modifications

Overview

This section provides information about the changes made to the Vality Real Time environment for e*Index and changes to the rule set files. Note that, for the migration from version 4.1.1 to 4.5.2, it is assumed that the 4.5.2 rule set will be customized to provide matching logic similar to that defined in your 4.1.1 rule set in order to maintain processing consistency.

Version Update

e*Index 4.1.1 uses Vality 3.6, but e*Index 4.5.2 has been upgraded to Vality 3.11. The Vality commands used in the default **UI.RUL** file are all supported by Vality 3.11. For more information about the differences between Vality versions 3.6 and 3.11, refer to the appropriate Vality documentation.

File Changes

Between e*Index 4.1.1 and 4.5.2, several changes were made to the e*Index rule set files for name matching (the **UI** rule set). The most notable changes include advanced matching commands in the **UI.RUL** file and expanded pattern-action commands in **UI.PAT**. This section describes the changes to each file.

UI.RUL

The default rules file (**UI.RUL**) provided in the e*Index rule set for the matching algorithm was enhanced with a more fine-tuned matching logic. The changes include adding a cutoff weight and a new section with override weights for the DOB, Sex, and SSN fields. For more information about the statements that were added, see "Modifying Rules (.RUL) Files" in chapter 6 of the *e*Index Administrator User's Guide*. For more information about the Vality commands used, see the *INTEGRITY Real Time User Guide for C* (published by Vality).

The code below illustrates the new sections.

```
WGT DOB AR=A DW=-10 AV=ALL BV=ALL
WGT SEX AR=A DW=-10 AV=ALL BV=ALL
WGT SSN AR=A AW=5 DW=-5 AM=.001 BM=.001 XM=.001 AV=ALL BV=ALL
;
CUTOFF 0.1
```

In addition, the values for the match statements in the second section of the rules file were changed. The sample below illustrates the modified statements.

```
MATCH UNCERT SF STD_FNAME 0.9 0.001 800
MATCH UNCERT LN LNAME 0.9 0.001 800
MATCH CNT_DIFFSY SSN 0.999 0.0001 2
MATCH CNT_DIFFBD DOB 0.9 0.001 1
MATCH CHAR SX SEX 0.9 0.5
```

Finally, the MISSINGOK command was added for the SSN field in the VARTYPE section.

The above changes necessitated changes to the default duplicate threshold (specified by the DUPTHRES control key) and the match threshold (specified by the MATCHTHRES control key). The new values are 7.25 for DUPTHRES and 29 for MATCHTHRES.

UI.PAT

This file was modified to provide more complete pattern-action commands. The new file must contain the following lines to generate phonetic codes, so they should not be modified.

```
;Find first name only no last name
& | \; | \; | **
COPY [1] {FN}
COPY [1] {SF}
CONVERT {SF} @ui.tbl
RETYPE [1] 0
RETYPE [2] 0
;Find last name only no first name
\; | ? | \; | **
COPY_S [2] {LN}
RETYPE [1] 0
RETYPE [2] 0
```

UI.DCT

The field lengths and byte offsets have changed to accommodate new column sizes in the database. The first name, last name, and standardized first name fields all increased from 30 characters to 100. The SSN field increased from 11 characters to 16. The phonetic first name and phonetic last name fields decreased from 30 characters to 8 (since NYSIIS codes are only 8 characters in length). These changes also change the total length of each record passed to Vality and the byte offset for each field.

UI.CLS

There were no changes to this file between versions 4.1.1 and 4.5.2.

UI.STN

The size of the input record changed from 170 to 350 due to the field length changes in the match key dictionary. This affects line 1 and line 4 of the file.

UI.TBL

No changes were made to the **UI.TBL** file, however the way the information is stored in the database has changed. The file content is no longer stored in and downloaded from the *ui_ctrl_file* table. The file content is stored in and downloaded from the *ui_nickname* table. This means you no longer need to load nickname information using the Rule Set Maintenance function of e*Index Administrator, but you can modify the nickname table directly. Make sure you understand Vality name override tables and first name standardization rule before modifying this table.

Vality and the Control Broker

In previous versions of e*Index, it was a requirement that the Control Broker for e*Index be started from the `\client\bin` directory due to restrictions on the Vality rule set files. In the current version of e*Index, the Control Broker no longer needs to be started from `\client\bin` due to changes to how the VTICFG environment variable is set. On the client workstations, VTICFG is automatically set to the current working directory ("."); on the Schema server, VTICFG is defined by `ui-set-vticfg` in the function `ui-stdver-init`, which is set to `\get-data-dir\bin` (by default, `\<eGate>\client\bin`).

Address Parsing

Unlike e*Index 4.1.1, e*Index 4.5.2 uses two Vality rule sets. The rule set for name matching is similar to that used by 4.1.1 (with the changes mentioned above). The new rule sets are used for parsing the components of addresses, and you have the option of choosing a rule set specific to Australia, Great Britain, France, Ireland, or the United States. The address-parsing rule sets support searching by addresses in the e*Index GUI.

e*Index Global Identifier GUI Enhancements

Overview

Major updates and enhancements have been made to the e*Index GUI to improve flexibility and to expand on the member information that can be displayed. New functions were added to the e*Index GUI, including the ability to enter data in mixed-case format, a user audit log, address searching, the ability to change the status of a local ID record, and so on. This section describes the new functionality of the e*Index GUI.

New Icon



e*Index Global
Identifier Icon

e*Index Global Identifier has a new desktop icon. To access e*Index Global Identifier from the desktop, you need to click the new icon.

Terminology Changes

For this version of e*Index three fields on the e*Index GUI have been renamed. The functionality of these fields remains the same; only the names have changed.

- **Facility** has been changed to **System**.
- What was previously **System** is now **Source**.
- **Sex** has been changed to **Gender**.

*Note: With the new display configurability (see below), field names may be modified by the System Administrator. The fields you see on your e*Index windows may not match the descriptions in the e*Index Global Identifier User Guide.*

Display Configurability

Another major change to the e*Index GUI is the ability to customize the fields that appear on the GUI windows. You can specify a name for each field and determine which fields will be visible and which will be hidden. This flexibility allows you to determine the type of information you will display and store, and how much information you will display. Field configuration is performed in the Configuration Maintenance function of the e*Index Data Dictionary (see "Display Configuration" later in this bulletin).

French Character Set

Country localization for e*Index has been expanded to include the French character set. The e*Index GUI now accepts and recognizes data entered in French characters. To support searching on French addresses, the FRADDR address rule set was added. For more information, see "French Localization" later in this chapter.

Field-level Enhancements

Several new fields have been added to e*Index. By default, most of these fields are hidden, but can be configured to display on the GUI windows. The new fields include: Person Category, Address 3, Address 4, Driver License, License State, Deceased, Date of Death, Death Cert., Nationality, Pension No., Pension No. Expiration Date, Repatriation No., District of Residence, LGA, Military Branch, Military Rank, Military Status, and the miscellaneous fields String 1 through String 10 and Date 1 through Date 5. In addition, the Middle Name field replaces the Middle Initial field, and can display either the middle initial or the middle name. Your system administrator can now specify which fields are required when entering person data.

Person Categories

e*Index now provides the ability to group the members in the e*Index database by category. The Person Category field allows you to group members according to categories defined by your business requirements. Categories may include groups such as employees, customers, patients, and so on. By assigning members to person categories, you provide the ability to search for a specific subset of members in the database.

Non-unique IDs

e*Index has always stored a member's unique IDs as assigned by the various systems within an organization. The new version of e*Index also allows you to store a member's *non*-unique IDs. Non-unique IDs could include such identification codes as an insurance policy number shared by all members of a family, an account number shared by all members of a family, a department code shared by a group of employees, and so on. Non-unique ID types are defined in e*Index Administrator.

Functional Access Changes

Previously in e*Index, the functions Update, Local ID Update, and Deactivate were accessed directly from the primary toolbar and from the Functions menu. In the new version of e*Index, these functions are all accessed through the **Search & View Persons** function. Once you perform a search for a

member and display the member profile, you can update the profile, update the local ID, update the member's alias names, or deactivate the profile. The windows on which local IDs and aliases are updated have changed (for more information, see "Adding an Alias to a Member Profile" and "Adding a Local ID to a Member Profile" in chapter 4 of the *e*Index Global Identifier User Guide*).

The functions Local ID Update, Update, and Deactivate have been removed from the Functions menu

Functions	
Add	Ctrl+Shift+A
Audit Trail	Ctrl+Shift+T
Compare	Ctrl+Shift+C
Merge	Ctrl+Shift+M
Potential Duplicate	Ctrl+Shift+D
Search & View persons	Ctrl+Shift+S
UnMerge	Ctrl+Shift+U

Application Window Enhancements

Previously, all the information stored in a member profile could be displayed on one window. With the addition of new data fields and the ability to store multiple addresses and telephone numbers, additional windows are required in order to display a member's full information. Member information is now displayed on a series of tabbed pages in the lower portion of the application windows. When you select a new tab on the application window, the type of member information that is visible changes. The upper portion of the application windows displays identifying information about the member, such as their UID, name, date of birth, and so on. No matter which tabbed page you display, this information always appears in the upper portion of the window.

Member profiles are now displayed on a series of tabbed pages

The screenshot shows the 'View/Update' window for a member profile. The top section is titled 'Identification' and contains fields for UID (100-005-8900), Status (ACTIVE), Last Name (WARREN), First Name (ELIZABETH), Middle Name (JUNE), DOB (05/14/1960), Gender (FEMALE), SSN (555-44-4555), R/Access (NONE), and Person Category (PATIENT). Below this is a tabbed interface with tabs for Demographics, Miscellaneous, Addresses, Phones, Aliases, Local IDs, Other IDs, and Comments. The 'Demographics' tab is selected, showing fields for Title, Religion (AGNOSTIC), Race (OTHER), Suffix, Language (ENGLISH), Veteran Status (NONE), Marital Status (MARRIED), Ethnic Group (AMERICAN), Maiden (JOHNSON), Father's Name (MARK), Spouse's Name (DAVID), and Mother's Maiden (CENTON), Mother's Name (DARCY). At the bottom, there is a toolbar with buttons for Mrg Hist, Edit, Save, Audit Trail, Pot. Dup, Previous, Next, Print, Deactivate, and Close.

Member information is displayed under the following tabbed pages:

- **Summary:** This optional page displays similar information to the standard e*Index 4.1.1 Detail Inquiry window. This page only appears if the PVSUMMARY control key is set to Y.
- **Demographics:** This page displays general information about a member, such as their racial and ethnic backgrounds, religion, language, and so on.
- **Miscellaneous:** This page displays any type of information about the member that your organization defines. These are customizable fields, provided to display data types that are specific to your requirements.
- **Addresses:** This page displays all of the different addresses associated with the member profile.
- **Phones:** This page displays all of the different telephone numbers associated with the member profile.
- **Aliases:** This page displays all of the member's aliases.
- **Local IDs:** This page displays all local ID and system pairs associated with the member profile, along with the status of each pair.
- **Other IDs:** This page displays all non-unique IDs associated with the member profile.
- **Comments:** This page displays all of the comments that have been written to the member profile.

Note: *The Add window does not display the Local IDs, Aliases, or Comments page.*

Summary Tab

With the previous redesign of the e*Index GUI, member information that once appeared on one window now appears on several tabbed pages in order to accommodate additional information. This caused critical member information to be spread over several windows. The Summary page was created to display information similar to that displayed on the original e*Index Detail Inquiry window. The Summary page is configurable, and only appears if the PVSUMMARY control key is set to Y. With the Summary page enabled, you can view all vital information on one window. This is the first page to appear when you select a member profile from the search results list.

For complete information about the new Summary page, see chapter 3 of the *e*Index Global Identifier User's Guide*.

Use the Summary page to view a summary of member information

View/Edit Person

Identification View

UID: 100-000-0000 Status: ACTIVE Update Date: 06/26/2001 19:10:07

Last Name: WARREN First Name: ELIZABETH Middle Name: JUNE

DOB: 05/14/1960 Gender: FEMALE SSN: 555-44-4555

R/Access: NONE Person Category: CUSTOMER

Summary | Demographics | Miscellaneous | Addresses | Phones | Aliases | Local IDs | Other IDs | Comments

Primary Address

Address1: 2434 SHORELINE DRIVE Address2: Address3: Address4: City: CAPE BURR County: CAPE BURR State: CT Zip: 09876 Country: UNITED STATES

Primary Phone

(989) 555-7874 Ext: Father's Name: MARK Mother's Name: DARCY Spouse's Name: DAVID Maiden: JOHNSON Suffix: Race: OTHER Ethnic Group: AMERICAN

Aliases

Last Name	First Name	Middle Name
JOHNSON	ELIZABETH	JUNE
JOHNSON	LIZ	
WARREN	LIZ	

Local IDs

System	Local Identifier	Status
WAYFIELD	-	ACTIVE
CAPE BURR CENTER	43-535353	ACTIVE
SHEFFIELD CENTER	345-835-8834	ACTIVE

Mrg Hist Edit Save Audit Trail Pot Dup Previous Next Print Deactivate Close

Comparison Search Window

Previously, when you searched for a member profile using the left **Search** button on the Comparison window, the member information did not appear until you clicked the **Search** button again. This has been modified so the Comparison window automatically updates after a search is performed.

Potential Duplicate Changes

On the Potential Duplicate Search page, the **Department** field was removed. On the Potential Duplicate Results page, the matching probability weight is no longer displayed in the **Reason** column, but now appears in a new column named **Weight**. The reason for the potential duplicate flag still appears in the **Reason** column.

Audit Trail and Potential Duplicate Search Changes

For an Audit Trail search, the field **Person Category** has been added to the possible search criteria. For both the Audit Trail and Potential Duplicate searches, the **Department** field has been removed. The fields on the Audit Trail Results window have been modified as well. For more information about the fields displayed on the Audit Trail Results page, see "About Audit Trail Results Fields" in chapter 4 of the *e*Index Global Identifier User Guide*.

Previously, there was an issue in the Audit Trail search functionality that caused a system error when the number of records for an audit trail search exceeded the value specified for the control key **ATSRCHLMT** (audit trail search limit). This error is no longer produced.

Previously when an alias was added to a person record, no history record was created. In version 4.5.2, a history record is created in this instance and the alias appears on the audit trail window.

Search Window Changes

Several changes were made to the Search window for this release, including the addition of the Person Category field, the Other ID Search section, and the General Search page. The Search page on the Search window has been renamed to **Standard Search**. For more detailed information about the changes to the Search window, see "Searching for Member Profiles" in chapter 3 of the *e*Index Global Identifier User Guide*.

Other ID

A new search section, **Other ID**, has been added to the Standard Search page. This section allows you to search for a member in the database using a non-unique ID and non-unique ID name as the criteria.

A new section, Other ID, has been added to the Standard Search page

The screenshot shows the 'Search' window with the 'Standard Search' tab selected. The 'Other ID' section is a new addition, located below the 'System/Local ID' section. It contains two input fields: 'Other ID Name' and 'Other ID'. The 'Demographic' section includes fields for Last Name (WARREN), First Name (ELIZABETH), Middle Name (J), DOB (05/14/1960), Range (10), Gender (FEMALE), Mother's Maiden, Maiden (GORDON), SSN (555-44-4555), and Person Category (CUSTOMER). The 'Social Security Number' section has an SSN field. The 'System/Local ID' section has System and Local ID fields. The 'Other ID' section has Other ID Name and Other ID fields. At the bottom, there are buttons for Audit Trail, Pot. Dup, Alpha, Phnetic, General, Print, Clear, and Close.

Person Category

The search window has been modified by the addition of the **Person Category** field to the Demographic Search section. Using this field, you can make a search more specific by selecting the type of member profile you want to find (such as customer, employee, patient, and so on). This new field is not required in order to perform a search.

An additional field, Person Category, has been added to the Demographic section of the Standard Search page

The screenshot shows the 'Search' window with the 'Standard Search' tab selected. The 'Demographic' section is expanded, showing various fields for personal information. The 'Person Category' dropdown menu is highlighted, showing 'CUSTOMER' as the selected option. Other fields include UID, Last Name, First Name, Middle Name, DOB, Range, Gender, Mother's Maiden, Maiden, SSN, Social Security Number, System/Local ID, and Other ID.

General Search Page

A new page, the **General Search** page, has been added to the Search window. This page provides the ability to perform a search on any combination of data contained in the *ui_person* table. Note that each search must include at least one indexed field. The records returned for a general search are not weighted for matching probability.

A new page, General Search, has been added to the Search window

The screenshot shows the 'Search' window with the 'General Search' tab selected. This page provides a more comprehensive set of search criteria. Fields include UID, Last Name, First Name, Middle Name, DOB, Gender, SSN, Person Category, Suffix, Marital Status, Title, Language, Ethnic Group, Religion, R/Access, Veteran Status, Race, Maiden, Father's Name, Spouse's Name, Mother's Maiden, Mother's Name, and ten String/Date fields for additional search criteria.

Search Results Page

Previously on the Results page of the Search window, the results of a search could be sorted by any column except **Gender**. The ability to sort by the **Gender** column is provided in the current release. A new column containing

the social security number was added to the search results list on the Results page of the Search window. This column also appears on the Search Result Report that can be printed from the Result page.

Mixed Case Entry and Case-Insensitive Searching

In previous versions of e*Index, data was traditionally stored in all uppercase characters and data entry into the e*Index GUI was limited to uppercase only. Previous versions also performed searches that were case-sensitive (with the exception of phonetic searches). This release provides the option to enter mixed-case data into the e*Index GUI and to enter search criteria in mixed cases. It also allows you to perform case-insensitive searches from the GUI. Most of the name criteria fields are case-insensitive; the **String1** through **String10** fields are case-sensitive.

For Address searches, the parsed fields (by default, **Address1** and **Address2**) are case-insensitive. You can configure which of the **Address1** through **Address4** fields are parsed. For any of these fields that you set to be parsed, the search criteria is case-insensitive. For any fields that are not set to be parsed, the criteria is case-sensitive. The remaining fields are filter fields, and are always case-sensitive.

Address Searching

e*Index 4.5 and later includes new Vality rule set files that provide the ability to parse address components for addresses in the United States, Great Britain, Ireland, France, or Australia. These rule sets support the new address search capability by parsing addresses into their various components (such as street type, street direction, street name, house number, and so on). When you enter search criteria into the address search fields, e*Index parses that data and compares it against the parsed addresses stored in the database. The results of an address search are not weighted for matching probability.

For complete information about the new address searching functionality, see chapter 3 of the *e*Index Global Identifier User's Guide*.

Search for member records by their address information on the Address Search window

The screenshot shows the 'Address Search' window with the following fields:

- Address Type: HOME
- Address1: SHORELINE
- Address2: (empty)
- City: SHEFFIELD
- State: (empty)
- Zip: (empty)
- Address3: (empty)
- Address4: (empty)
- County: (empty)
- Country: (empty)

Buttons at the bottom: Search, Clear, Close.

The list of matching records returned from an address search differs in appearance from the list returned from a demographic search. The address search results list displays a list of addresses that match the search criteria in the upper portion of the window. In the lower portion of the window, e*Index displays member information for the member associated with the address selected in the upper portion of the window.

A list of matching addresses appears in the upper portion of the window

Member information associated with the highlighted address appears in the lower portion of the window

The screenshot shows the 'Address Search' window with the following data:

Address Type	Address1	Address2	Address3
HOME	2347 SHORELINE		
HOME	3247 SHORELINE ST.	UNIT 5	
HOME	3247 SHORELINE DRIVE		
HOME	3248 SHORELINE DRIVE		
HOME	4876 SHORELINE DRIVE	UNIT 5	

Member Information:

- UID: 100-000-0004
- Status: ACTIVE
- Last Name: WARTON
- First Name: EMILY
- Middle Name: (empty)
- DOB: 12/18/1949
- Gender: FEMALE
- SSN: 222-11-1222

Aliases			Local IDs		
Last Name	First Name	Middle Name	System	Local Identifier	Status
SANDERS	EMILY		SHEFFIELD CENTER	427-420-9874	ACTIVE

Buttons at the bottom: Search, Clear, Close.

Merge Functionality Changes

The process of performing a field-level merge has been changed slightly for this version of e*Index. Previously you could select any field to be saved in the final merged profile. In the new version of e*Index, this process is the same for all information except addresses. Address information can only be selected in blocks. You can no longer select a portion of the address to be saved. For example, if you want to select the street address to be saved in the final merged profile, you must select the entire address. Note that all local IDs are automatically selected to be kept in the final merged profile; you cannot deselect a local ID. For more detailed information about the new merge process, see "Merging Member Profiles" in chapter 4 of the *e*Index Global Identifier User Guide*.

Merge History

In previous versions of e*Index, the Merge History tree displayed the Merge Date/Time and the User only for the resulting profile of a merge. The two child profiles **did** not contain anything in those fields. In the current version of e*Index, the Merge History tree displays this information for each of the child records, and the resulting merged profile does not contain anything in those fields.

In the current version, when you double-click on either of the two child profiles for a merge, the View/Edit Person window displays an image of the profile as it was immediately prior to the merge. **Previously, double-clicking on a child profile from a merge displayed an image of the profile in its current state.**

Address Types and Telephone Types

Because the new version of e*Index provides the ability to add multiple addresses and telephone numbers to a member profile, you need to specify an address or telephone number type before saving the address or telephone number. For example, if you are entering a member's home address, you need to specify **Home** as the type. Address and telephone types are defined in the e*Index Administrator (for more information, see "Maintenance Function Changes" later in this bulletin).

Changing Local ID Statuses

When two records are merged, all the local IDs associated with both records are retained in the active record with a status of **Active**. This may result in a member profile having two active local IDs from the same system. Previously, you could not change the status of one of these local ID records to **Merged** in order to reconcile data in the active record. The current release provides the ability to change the status of a local ID record by selecting the

desired status from a drop-down menu on the Local ID page of the View/Edit Person window. You can choose any of these three statuses for a local ID record: **Active**, **Deactivated**, **Merged**.

***Note:** This also changes the method by which a local ID is deactivated. Previously, you selected a **Deactivate** button to deactivate a local ID record. For this release, you select the **Deactivated** status from a drop-down menu in the status column of the Local ID page (as shown below).*

Change the status of a local ID record by selecting a status from a drop-down list

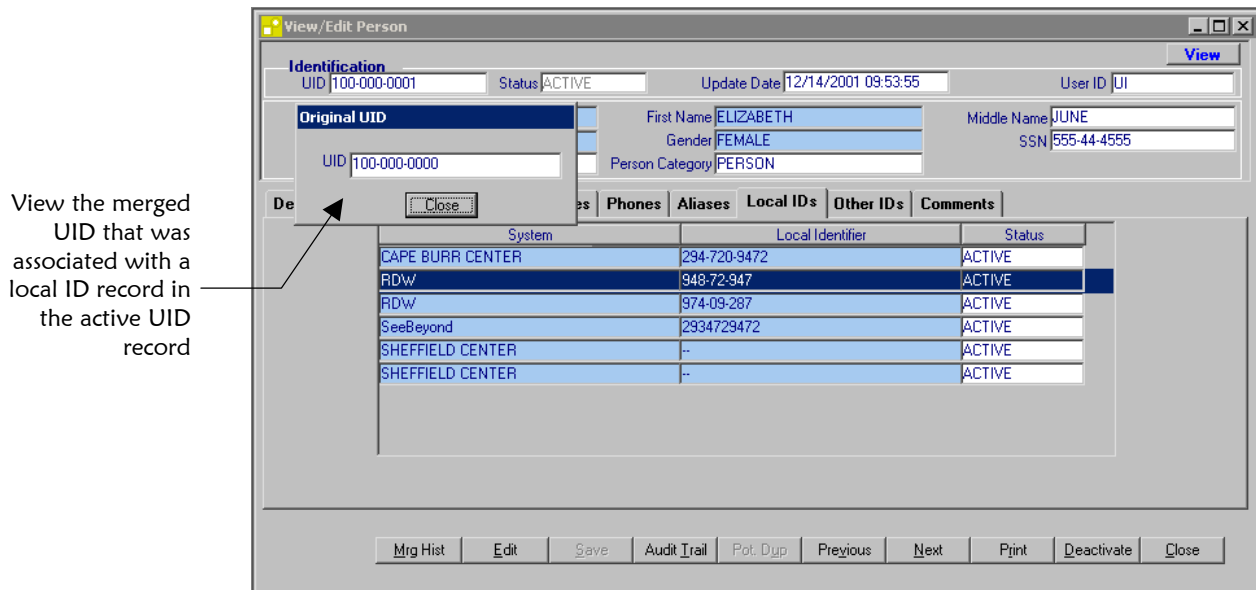
The screenshot shows the 'View/Edit Person' window for Elizabeth Warden. The 'Local IDs' tab is selected, displaying a table with columns for System, Local Identifier, and Status. A drop-down menu is open over the 'Status' column, showing the following data:

System	Local Identifier	Status
CAPE BURR CENTER	294-720-9472	ACTIVE
RDW	948-72-947	ACTIVE
RDW	974-09-287	ACTIVE
SeeBeyond	2934729472	DEACTIVATED
SHEFFIELD CENTER	238-462-642	MERGED
SHEFFIELD CENTER	429-742-974	

Buttons at the bottom of the window include: Mrg Hist, Cancel, Save, Audit Trail, Pot. Dup, Previous, Next, Print, Deactivate, and Close.

Displaying the Merged UID Associated with a Local ID

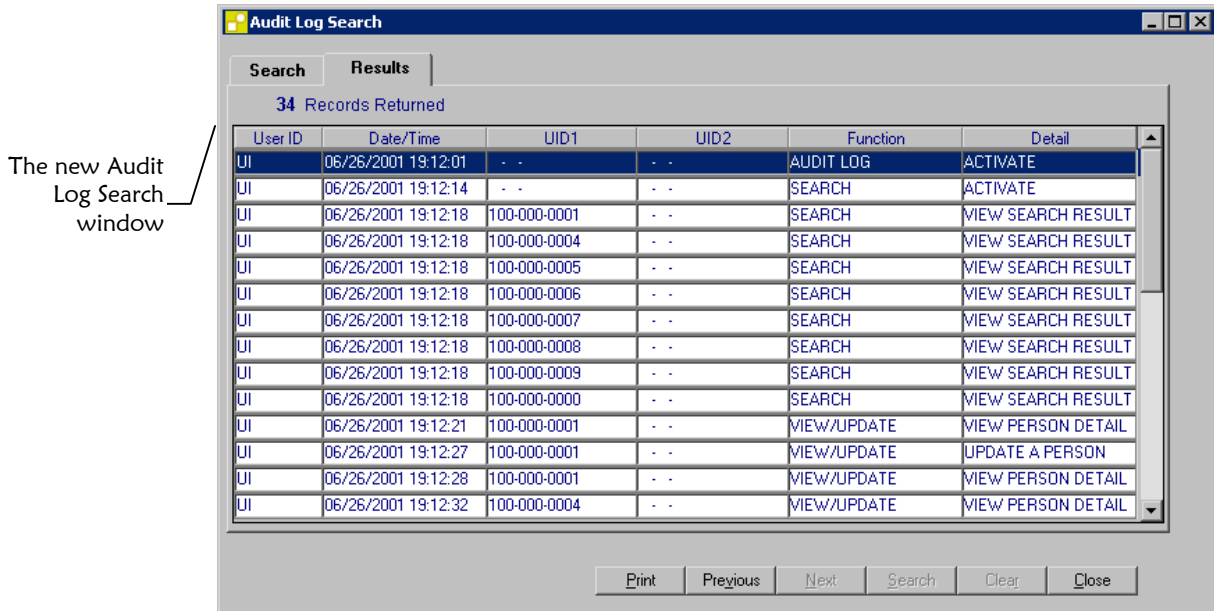
When two member profiles are merged, all the local IDs associated with the profiles are transferred to the merge result record. e*Index provides a simple way to determine the merged UID number that was previously associated with a local ID record. Display the active member profile on the View/Edit Person window, and then select the Local IDs tab. On the Local IDs tab, right-click the local ID whose original UID you want to view. The UID appears in a pop-up window.



User Audit Log

The User Audit Log function maintains a history of each instance the *ui_person* table is accessed from the e*Index GUI. Information maintained in the audit table includes the user ID of the user who accessed the table, the date and time the table was accessed, and the UIDs of the member profiles that were accessed. You can select an entry in the audit log to view detailed information about the member profiles accessed.

For complete information about the new User Audit Log function, see chapter 3 of the *e*Index Global Identifier User's Guide*.



Region-specific Security

Region-specific security affects how member information is viewed in e*Index. This type of security is optional, and only affects e*Index if it is installed in the database.

With region-specific security, you can only view information about members who are associated with a system within the regions assigned to you. While this is straightforward on most e*Index windows, it becomes more complicated for the Merge, Unmerge, and Merge history functions. You can only merge member profiles that are associated with systems in your regions, and you can only unmerge a profile if both merged profiles are associated with systems in your regions.

For example, member A is associated with a system within the regions assigned to you but member B is associated with a system outside the regions assigned to you. If member A and member B are merged, you cannot unmerge their profiles. Only users who have access to both systems can unmerge the profiles. In addition, you are unable to view a full merge history for member A.

For more information about region specific security, see "Region Code Maintenance" and "Region-Specific Security" later in this chapter. You can also find more information in Chapter 3 of the *e*Index Security User's Guide* and of the *e*Index Administrator User's Guide*.

e*Index Administrator (Data Dictionary) Enhancements

Overview

Major updates and enhancements have been made to the e*Index Data Dictionary GUI, beginning with a name change to e*Index Administrator. Several new functions were added and changes were made to many existing functions to make e*Index more customizable. This section describes the changes to the e*Index Administrator GUI.

New Icon



e*Index Data
Dictionary Icon

e*Index Administrator has a new desktop icon. To access e*Index Administrator from the desktop, you need to click the new icon.

Terminology Changes

Several changes were made to the e*Index Administrator windows to accommodate field name changes and additions to e*Index.

- The following terminology changes were made:
 - **Sex Maintenance** is now **Gender Maintenance**.
 - **Facility Maintenance** is now **System Maintenance**.
 - What was previously **System Maintenance** is now **Source Maintenance**.
 - **Country Maintenance** is now **Country Code Maintenance**.
 - **VIP Maintenance** is now **VIP Flag Maintenance**.

New Control Keys

Five new system parameters, ALSRCHLMT, MIXEDCASE, PVSUMMARY, SHORTID, and UVAUDITLOG, were created for e*Index.

- **ALSRCHLMT**
This parameter allows you to specify a limit on the number of user audit records that can be returned from a search against the audit log. This parameter can be set to any integer.
- **MIXEDCASE**
This parameter allows you to specify whether data entered into the e*Index GUIs are uppercase only or whether the data can be entered in both uppercase and lowercase letters. When the value for this control key is set to **Y**, mixed-case entry is allowed. When the value is set to **N**, only

uppercase letters can be entered into the GUI. Only set this key to **Y** if you store data received from external systems in mixed cases.

Important! *This functionality applies to all windows in all three e*Index applications, including the Login and Change Password windows. Make sure that if this control key is set to **N** that all users know to enter their passwords in uppercase characters when they log on.*

- **PVSUMMARY**

This parameter allows you to specify whether the Summary page of the View/Edit Person window on the e*Index GUI is visible or not. When this control key is set to **Y**, the Summary page is visible; when set to **N** the Summary page is hidden. For more information about this page, see "Summary Tab" on page 1-12.

- **SHORTID**

This parameter allows you to specify whether the SSN column in the *ui_person* table can accept values shorter than nine digits, enabling the SSN field in the *ui_person* table to store identifiers other than a SSN. This column corresponds to different fields on the GUI depending on the country format used. By default, the corresponding fields include Social Security Number for the United States, NHS Number for England and Ireland, Medicare Number for Australia, and Numero de Securite Sociale for France. Set this control key to **Y** to allow varying ID lengths; set it to **N** to enforce the length specified by the field mask.

- **UVAUDITLOG**

This parameter controls whether user audit logging is enabled for e*Index. When the value for this control key is set to **Y**, then a record is written to the *ui_audit* table each time the *ui_person* table is accessed, allowing you to monitor access to person information. When this control key is set to **N**, access to *ui_person* is not logged.

Important! *If you set this control key to **Y**, be sure to archive the *ui_audit* table regularly as this table grows very quickly.*

Modified Control Keys

Two control keys were modified between versions 4.1.1 and 4.5.2.

- **COUNTRY**

The possible values for the control key COUNTRY were changed to accommodate the new address searching functionality. The COUNTRY control key determines which country format to use. The available options are AUS (Australia), FRA (France), GBR (Great Britain), IRE (Ireland), and USA (United States).

- **EXTNSVSRCH**

In version 4.1.1, the EXTNSVSRCH control key controlled extensive

searching for both GUI and e*Way searches. With the new configurable query, this control key now only controls extensive searching for alphanumeric searches through the GUI. If you want to use extensive searching for phonetic and backend searching, you need to modify the configurable query. For more information about modifying the configurable query to perform extensive searching, see "Configuring Extensive Searching" in chapter 5 of the *e*Index Administrator User's Guide*.

Obsolete Control Keys

With the new display configuration options, several control keys are no longer required. The Display Configuration settings now determine whether the fields managed by these control keys are visible on the e*Index GUI windows (see "Display Configuration" later in this section). The following control keys have been removed from the database:

- DBTIME
- ETHNICAVL
- FATHERAVL
- MOTHERAVL
- SHOWMN
- SPOUSEAVL
- TITLEAVL

Maintenance Function Changes

Several changes have been made to the maintenance functions of e*Index Administrator. For detailed information about new procedures, windows, and functions, see the *e*Index Administrator User's Guide*.

New Functions

Several new maintenance functions were added to e*Index Administrator to accommodate the new data fields that were added to e*Index. Two functions that were previously only available for international installations, **Postcode Maintenance** and **District of Residence Maintenance**, are now available for all installations.

The new functions include:

- **Address Type Maintenance:** Allows you to define the different address types used by the members in the database, such as home, work, mailing, and so on.

- **Citizenship Maintenance:** Allows you to add information about the nations of which your members are citizens.
- **Drivers License Issuer:** Allows you to define the various organizations that issue drivers licenses for the members in the database.
- **Nationality:** Allows you to define the various nationalities of the members in your organization.
- **Non-unique ID Types:** Allows you to define the types of identification codes used by your organization that are not unique for each user.
- **Person Category:** Allows you to define the different types of members who participate throughout your business. For example, your database may contain both patients and physicians; or it may contain both employees and customers.
- **Phone Type:** Allows you to add the different types of telephone numbers used by the members in your database, such as home, cellular, facsimile, and so on.
- **Region Code:** Allows you to define the regions to which the systems in your organization belong. Region codes are only used for region-specific security purposes.
- **State Code:** Allows you to define abbreviations for the different states in which members reside.

Obsolete Functions

The Postcode Maintenance function was removed, and you can now use the Zip Code Maintenance function to create and modify information about the postcodes you use. To change the field names on the Zip Code Maintenance window, use the Display Configuration function to modify the field labels for the columns in the *ui_zip* table.

Common Maintenance Functions

In previous versions of e*Index Administrator, all of the maintenance functions were contained under the **Table** option on the Main Menu. In the current version, the maintenance functions that require only an identification code and a description are contained in the new **Common Table** function. All data elements added through these functions are stored in one database table, *stc_common_detail*. The Common Table functions include:

- Address Type
- Citizenship
- Country Code (previously Country)

- Department
- District of Residence (DOR)
- Drivers License Issuer
- Ethnic
- Event
- Event Notification (for more information, see "Event Notification Maintenance" later in this section)
- Gender (previously Sex)
- Language
- Marital Status
- Nationality
- Person Category
- Phone Type
- Race
- Region Code (for more information, see "Region Code Maintenance" later in this section)
- Religion
- Source (previously System)
- State Code
- Suffix
- Title
- Veteran Status
- VIP Flag (previously VIP)

Table Maintenance Functions

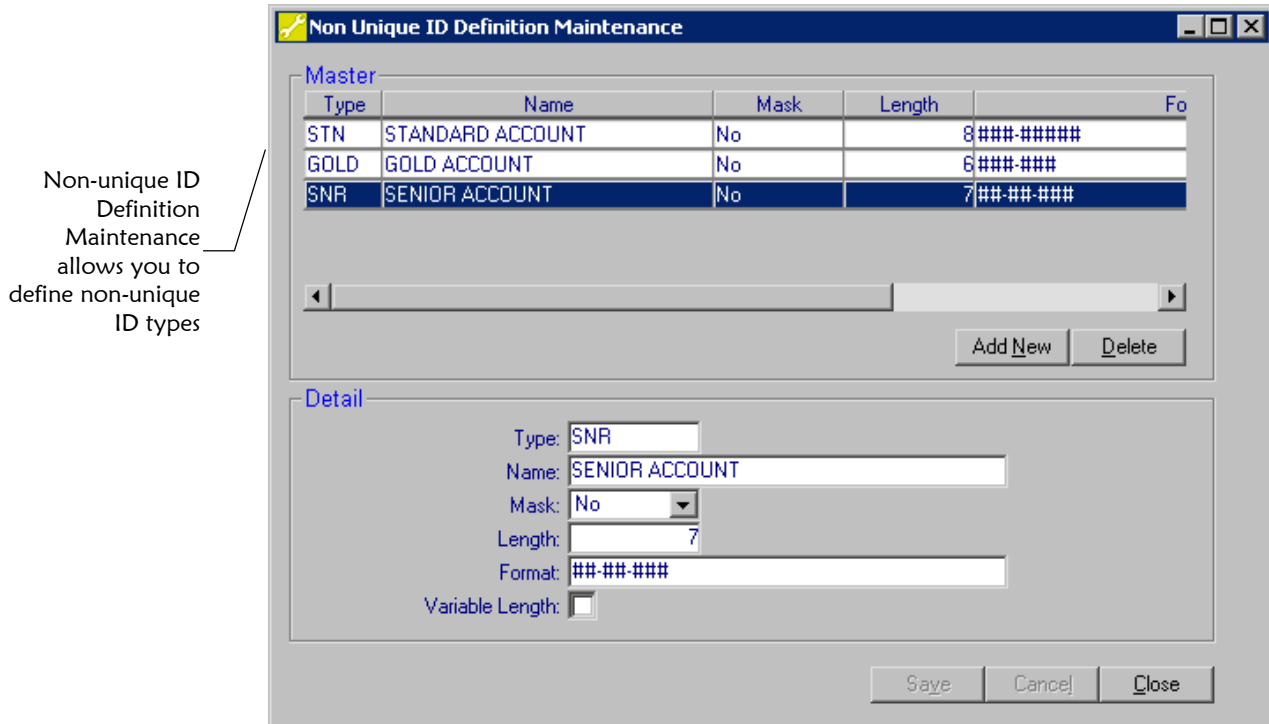
Many of the maintenance functions were moved from the **Table** function on the primary toolbar to the **Common Maintenance** function. The functions that are still accessed through the **Table** function include:

- Application Messages
- Non-Unique ID Type
- Predefined Message
- System
- Zip Code

Non-unique ID Definition Maintenance

Non-unique ID Definition Maintenance is a new maintenance function added to the **Table** option on the Main Menu. This function is used to add non-unique ID types to the database, and to define the length and format of the

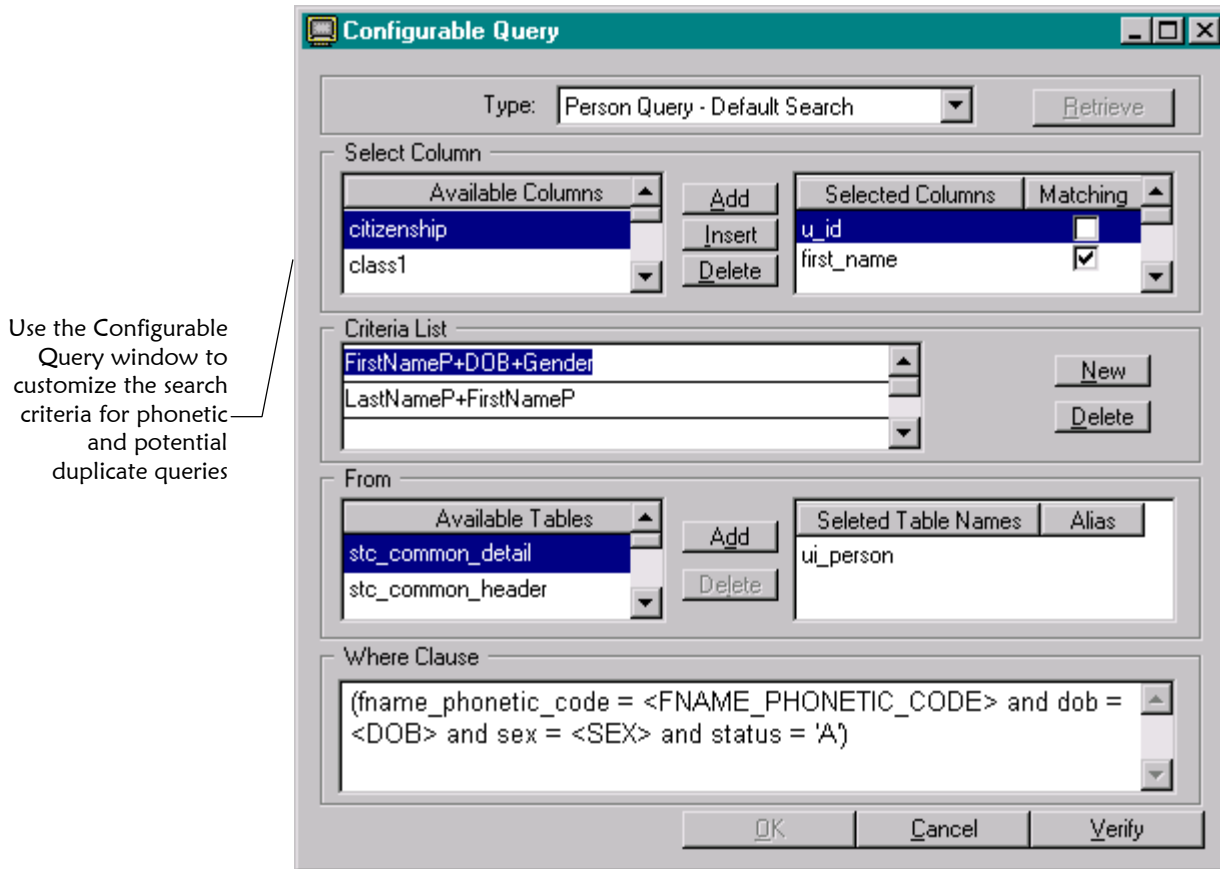
identifiers associated with each ID type. For more information about this window, see chapters 3 and 4 of the *e*Index Administrator User's Guide*.



Configurable Candidate Selection (CSS)

When you perform a phonetic search from the GUI, e*Index uses specific information to form a SQL statement to query the database. e*Index uses similar information to form SQL statements when evaluating possible matches to new profiles being entered through the GUI or the backend APIs. The **Configuration Query** function provides the ability for you to modify the default criteria requirements and conditions so phonetic searches and matching queries are performed using the search criteria and conditions that you define.

Note: The default configurable queries are not enabled for extensive searching. If you want to enable extensive searching for phonetic and backend searches, you need to modify the configurable queries. For information about how to modify the queries for this purpose, see "Configuring Extensive Searching" in chapter 5 of the *e*Index Administrator User's Guide*.



By default, the queries for both phonetic searches and potential duplicate evaluation include the following criteria combinations.

- First name, date of birth, and gender, *or*
- Last name and first name, *or*
- Last name and mother's maiden name, *or*
- Social security number

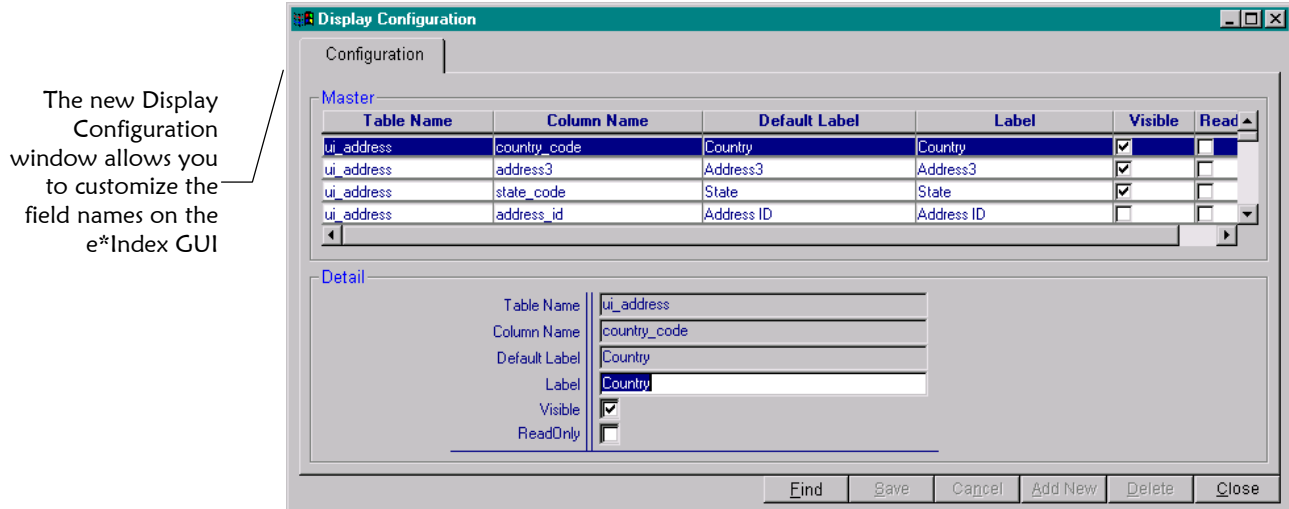
e*Index forms a query to the database based on the phonetic code for each name given in the search criteria.

Important! You must have a strong knowledge of the SQL Query language before using the **Configuration Query** function to make any modifications to the configurable queries. You should also be familiar with the e*Index database structure (for more information, see the e*Index Global Identifier Technical Reference).

Display Configuration

e*Index Data Dictionary now provides the ability to customize the fields that appear on the GUI windows. To customize fields, you need to use the new **Display Configuration** table maintenance function, which is accessed

through the **Maintenance** option on the Main Menu. You can specify a name for each field and determine which fields will be visible and which will be hidden. This flexibility allows you to determine the type of information you will display and store, and how much information you will display. For example, by default a field named **Address 2** appears on the e*Index windows. Using Display Configuration, you can change the field to appear as **Apt.#** instead. Or, you could elect not to display the field at all. For more information about configuring field labels, see "Configuring e*Index" in chapter 4 of the *e*Index Administrator User's Guide*.

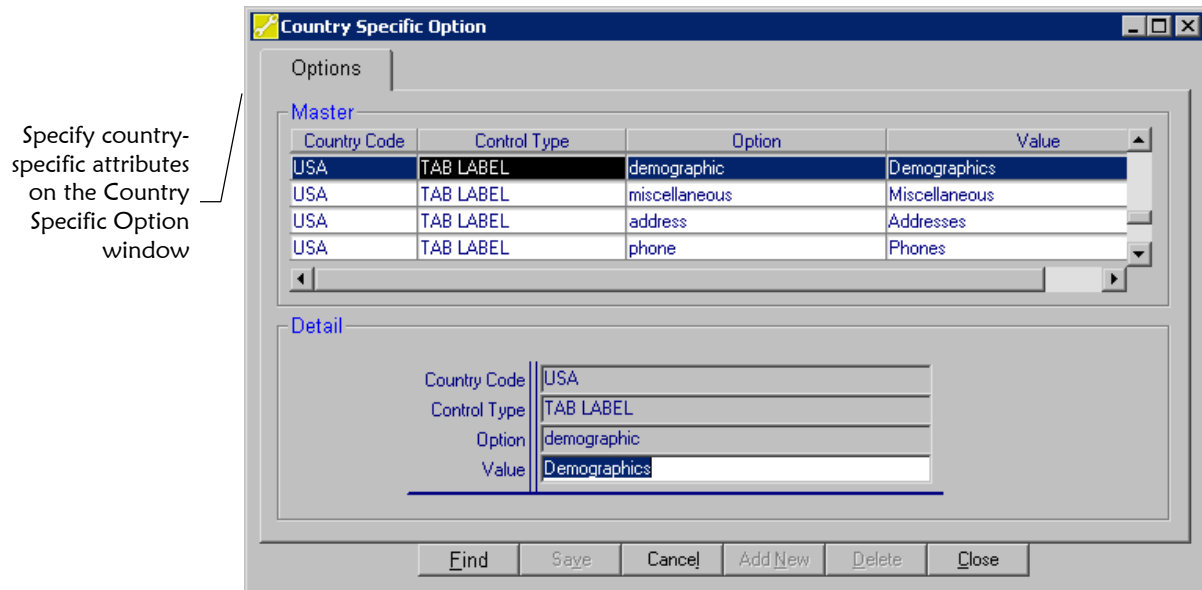


Country Specific Options

The new Country Specific Options function provides a great deal of flexibility in how the e*Index windows are presented, and allows you to specify the format of certain fields and to configure certain aspects of the address search rule set. Using Country Specific Options, you can perform the following tasks:

- Modify the search type labels on the e*Index Search window.
- Modify the tab heading labels on the tabbed pages of the e*Index data windows.
- Define the format of the SSN, zip code, and telephone number fields.
- Specify which address and telephone type to display on the Summary page (if the Summary page is enabled).
- Specify which address rule set to use and define certain address parsing attributes for that rule set.

For more information about Country Specific Options, see Chapter 5 of the *e*Index Administrator User's Guide*.



► To Perform Country Specific Customizations

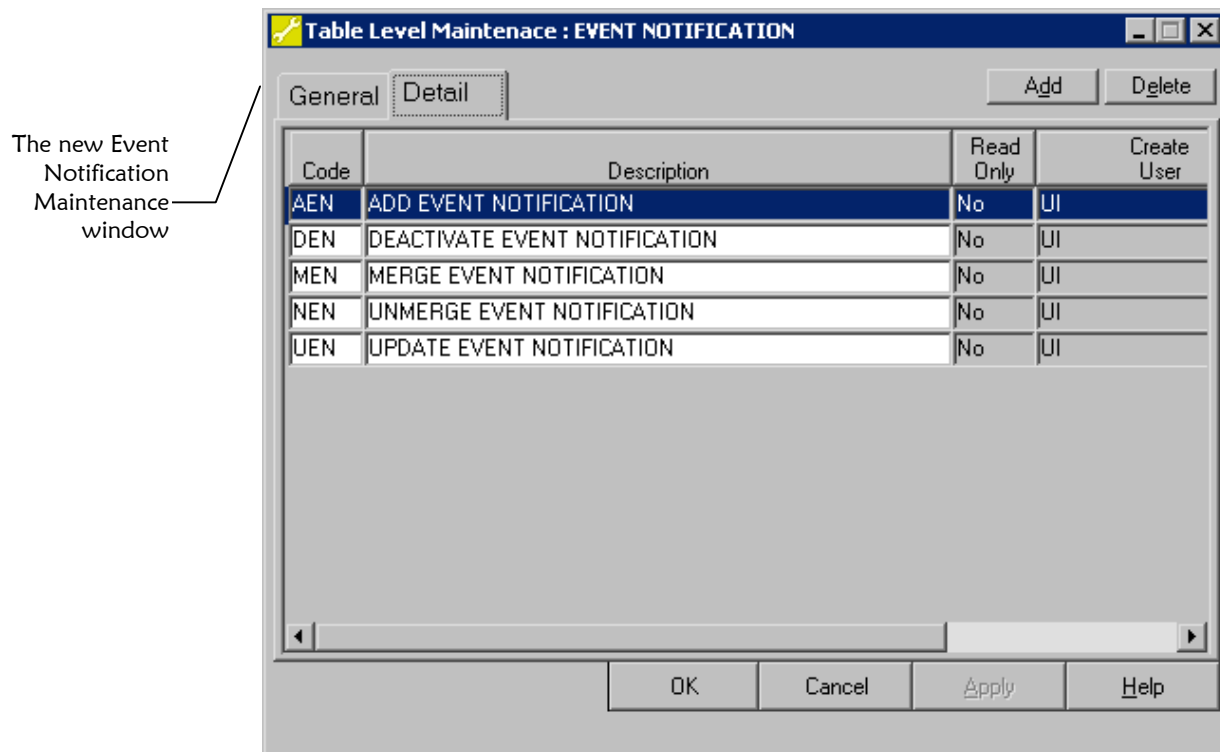
When you customize e*Index for a specific country configuration, there are several steps to follow to ensure that you have completely localized your implementation. Following is a summary of tasks to complete, along with the locations of specific instructions for completing each task.

- 1 In Control Key Maintenance, specify the country for which you are localizing e*Index in the COUNTRY control key. For information about the COUNTRY control key, see "COUNTRY" under "What Control Keys are Available" in chapter 5 of the *e*Index Administrator User's Guide*. For information about modifying control key values, see "Specifying Control Key Values" in the same chapter.
- 2 In Rule Set Maintenance, make sure that the address rule set for the country you specified for the COUNTRY control key is "In Use" and that no other address rule set is "In Use". For information about modifying rule sets, see "Modifying Rule Set Information" in Chapter 6 of the *e*Index Global Identifier User's Guide*.
- 3 Customize country-specific attributes, including address parsing rules; tabbed page titles; search type titles; field formats for the national identifier, telephone numbers, and postal codes; and the address and telephone types to display on the Summary tab. This is an optional step. For more information, see "Configuring Country-Specific Attributes" in chapter 5 of the *e*Index Administrator User's Guide*.
- 4 Specify the fields you want display on the e*Index GUI, which fields are required, and the label for each field. This step is also optional. For more information about field customization, see "Configuring Display Options" in chapter 5 of the *e*Index Administrator User's Guide*.

Event Notification Maintenance

Event Notification Maintenance is a new Common Table Maintenance function designed to enable the new e-mail notification feature (for more information, see "Event Notification" in the following section, "e*Index Security GUI Enhancements"). This maintenance function allows you to create, delete, and modify the types of transactions of which e*Index users can be notified.

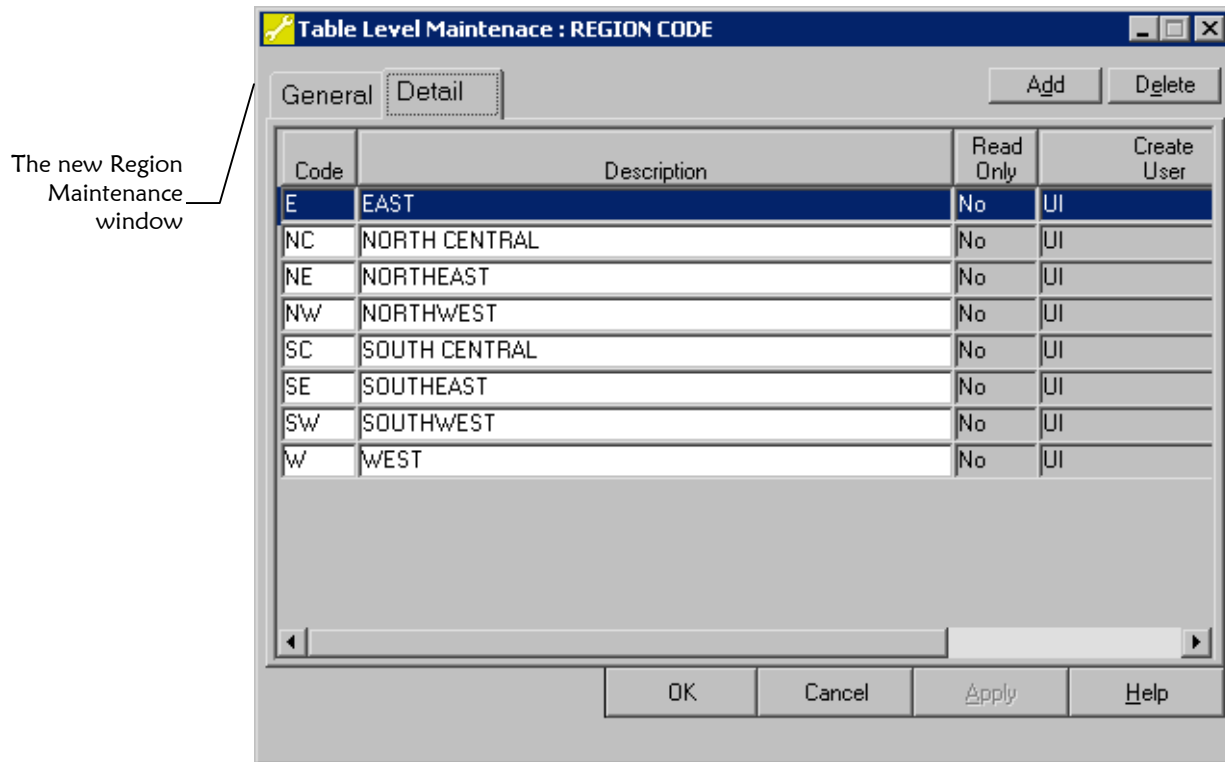
The figure below illustrates the new Event Notification Maintenance window. For more information about this new function, see Chapter 3 of the *e*Index Administrator User's Guide*.



Region Code Maintenance

Region Code Maintenance is a new Common Table Maintenance function designed to enable the new region-specific security feature. If this feature is installed in the e*Index database, user access can be restricted by the regions to which users are assigned. To use this feature, you must create regions using the Common Table Maintenance function in e*Index Administrator, and then associate each system from which member data originates with one of the regions you defined. These steps require using the Region Code Maintenance function and the System Maintenance function. Both are described in chapters 3 and 4 of the *e*Index Administrator User's Guide*.

The figure below illustrates the new Region Code Maintenance window. For more information about this new function, see Chapter 3 of the *e*Index Administrator User's Guide*.



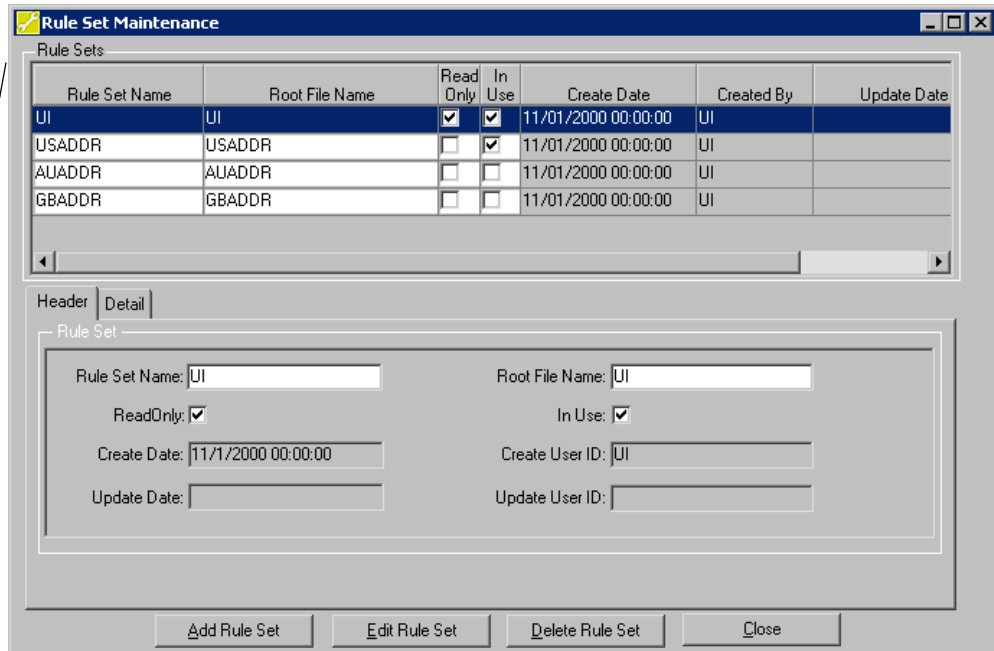
Rule Set Maintenance

e*Index Administrator provides the ability to customize the rule sets used by the matching algorithm to determine the probability of a match between two records. With the new Rule Set Maintenance and Control File Content functions, you can add, delete, and modify rule sets, and you can add, delete, and modify rule set files. Since rule set information is stored in the database, the new functions also provide the ability to load modified rule set data into the database.

These rule sets are very complicated, and should only be modified by someone who is trained in Vality and understands how changes to the rule sets will affect data processing. Once your system is in production, modifying the rule sets may result in data inconsistencies.

The figure on the following page illustrates the new Rule Set Maintenance window. For more information about this new function, see Chapter 6 of the *e*Index Administrator User's Guide*. Rule Set Maintenance was previously provided in a separate application named the e*Index Configuration Tool.

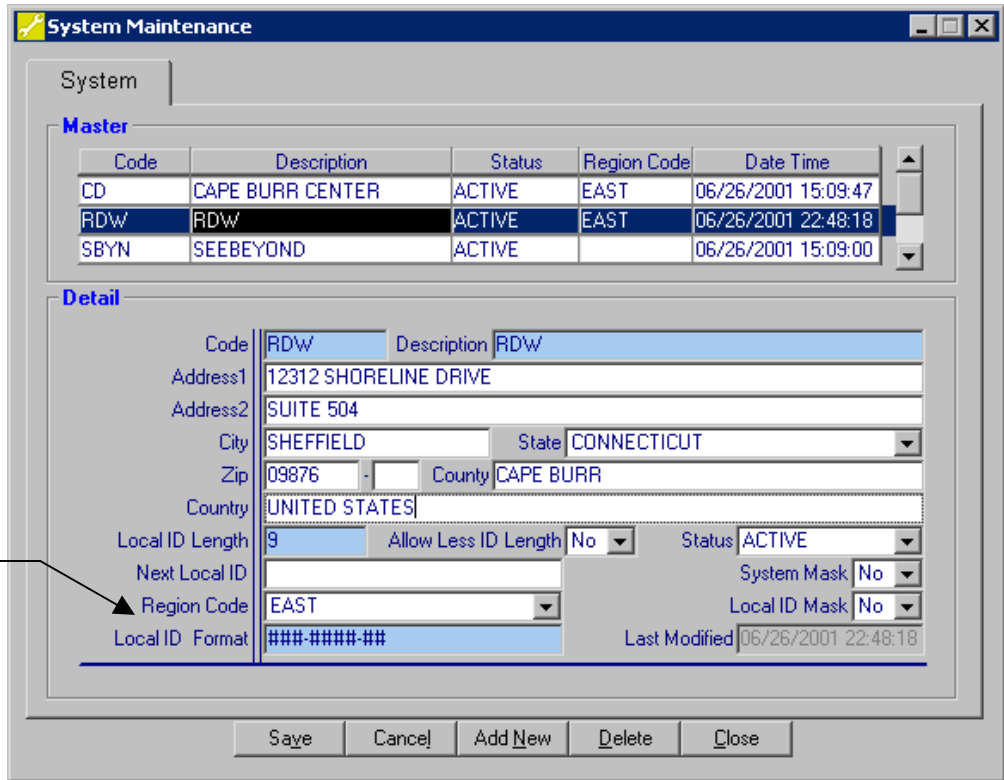
The new rule set maintenance function allows you to work with e*Index rule sets



System Maintenance

The System Maintenance window was modified to accommodate the new region-specific security feature. The layout of the fields is slightly different, but the primary difference is the addition of a Region field. Use this field to specify the region in which each system is located. e*Index users can only access information originating from the regions to which they are assigned (if region-specific security is installed).

The figure on the following page illustrates the modified System Maintenance window. For more information about the System Maintenance window, see Chapter 3 of the *e*Index Administrator User's Guide*.



e*Index Security GUI Enhancements

Overview

From version 4.1.1 to version 4.5.2, the e*Index Security GUI was completely updated and redesigned. This section provides a summary of the updates made to the e*Index Security GUI. For complete information about the new procedures for performing security tasks, see the *e*Index Security User's Guide*.

New Icon



e*Index Security Icon

e*Index Security has a new desktop icon. To access e*Index Security from the desktop, you need to click the padlock icon.

Terminology Changes

The names of the access permissions you can grant to users and user groups have been changed to more accurately reflect their purpose. New functions and actions have been added to e*Index Security to enable access restriction to the new functions and windows of e*Index Global Identifier and e*Index Administrator. In addition, in e*Index 4.1.1 permissions to perform security functions, such as adding user profiles and user groups and assigned access permissions, were automatically granted to users who were either Super Users or Group Supervisors. In e*Index 4.5.2, these access permissions are manually assigned so additional access permissions were created for this purpose. The table below highlights the differences between the 4.1.1 access permissions and the 4.5.2 access permissions. Any permissions not on this list are identical between the two versions.

Table 1-1: Security Access Permission Comparison Between Versions

This 4.1.1 function/permission ...		becomes this 4.5.2 function/permission ...	
Functional Group	Access Permission	Functional Group	Access Permission
None		Audit Log	View Audit Log
None		Address Type	Add Address Type
			Delete Address Type
			Edit Address Type
			View Address Type

This 4.1.1 function/permission ...		becomes this 4.5.2 function/permission ...	
Functional Group	Access Permission	Functional Group	Access Permission
Canned Message Table	Add Canned Message	Pre-defined Messages	Add Pre-defined Messages
	Delete Canned Message		Delete Pre-defined Messages
	Edit Canned Message		Edit Pre-defined Messages
	View Canned Message		View Pre-defined Messages
None		Citizenship	Add Citizenship
			Delete Citizenship
			Edit Citizenship
			View Citizenship
Comment	None	Comments	Add Comments
	Delete Comment		Delete Comments
	Print Comment		Print Comments
None		Configurable Query	Add Configurable Query
			Delete Configurable Query
			Edit Configurable
			View Configurable Query
None		Country Specific Option	Edit Country Specific Option
			View Country Specific Option
None		Display Configuration	Add Display Configuration
			Delete Display Configuration
			Edit Display Configuration
			View Display Configuration
None		District of Residence	Add District of Residence
			Delete District of Residence

This 4.1.1 function/permission ...		becomes this 4.5.2 function/permission ...	
Functional Group	Access Permission	Functional Group	Access Permission
			Edit District of Residence
			View District of Residence
None		Driver License Issuer	Add Driver License Issuer
			Delete Driver License Issuer
			Edit Driver License Issuer
			View Driver License Issuer
None		Event Notification	Add Event Notification
			Delete Event Notification
			Edit Event Notification
			View Event Notification
Facility Table	Add Facility	System Table	Add System
	Delete Facility		Delete System
	Edit Facility		Edit System
	View Facility		View System
None (granted by assigning Super User status)		Group Access	Add Group Access
			Edit Group Access
			View Group Access
None (granted by assigning Super User status)		Group Security	Add Group
			Edit Group
			View Group
None		Nationality	Add Nationality
			Delete Nationality
			Edit Nationality
			View Nationality
None		Non-unique Identifier	Add Non-unique ID
			Delete Non-unique ID
			Edit Non-unique ID
			View Non-unique ID

This 4.1.1 function/permission ...		becomes this 4.5.2 function/permission ...	
Functional Group	Access Permission	Functional Group	Access Permission
Patient Detail	Print Patient Detail	Person Detail	Print Person Detail
Patient Table	Add Patient	Person Table	Add Person
	Deactivate Patient		Deactivate Person
	Edit Patient		Edit Person
None		Person Category	Add Person Category
			Delete Person Category
			Edit Person Category
			View Person Category
Person/Patient Function	Activate Person/Patient	Person Function	
	Comment Person/Patient Search		Comment Person Search
	Print Person/Patient Search		Print Person Search
	Unmask VIP Data		Unmask VIP Data
	View Person/Patient Search		View Person Search
None		Phone Type	Add Phone Type
			Delete Phone Type
			Edit Phone Type
			View Phone Type
None		Region Table	Add Region
			Delete Region
			Edit Region
			View Region
None		Rule Set	Edit Rule Set
			View Rule Set
		Security Control Table	Edit Security Control Key
			View Security Control Key
Sex Table	Add Sex	Gender	Add Gender
	Delete Sex		Delete Gender
	Edit Sex		Edit Gender
	View Sex		View Gender
None		State Code	Add State

This 4.1.1 function/permission ...		becomes this 4.5.2 function/permission ...	
Functional Group	Access Permission	Functional Group	Access Permission
			Delete State
			Edit State
			View State
System Table	Add System	Source Table	Add Source
	Delete System		Delete Source
	Edit System		Edit Source
	View System		View Source
None (granted by assigning Super User or Group Supervisor status)		User Access	Add User Access
			Edit User Access
			View User Access
User Defined Messages	Add Messages	System Messages	Add System Messages
	Delete Messages		Delete System Messages
	Edit Messages		Edit System Messages
	View Messages		View System Messages
None (granted by assigning Super User or Group Supervisor status)		User Security	Add User
			Edit User
			View User
None (granted by assigning Super User or Group Supervisor status)		User-Group Security	Add User-Group
			Edit User-Group
			View User-Group

About the New Design

All of the windows of e*Index Security have a new appearance except Control Key Maintenance. The new design provides more simple drag-and-drop procedures for performing common tasks, such as adding user profiles to user groups and granting access permissions to user groups and user profiles. The new design also provides greater flexibility, allowing you to assign a user profile to more than one user group.

New Functionality

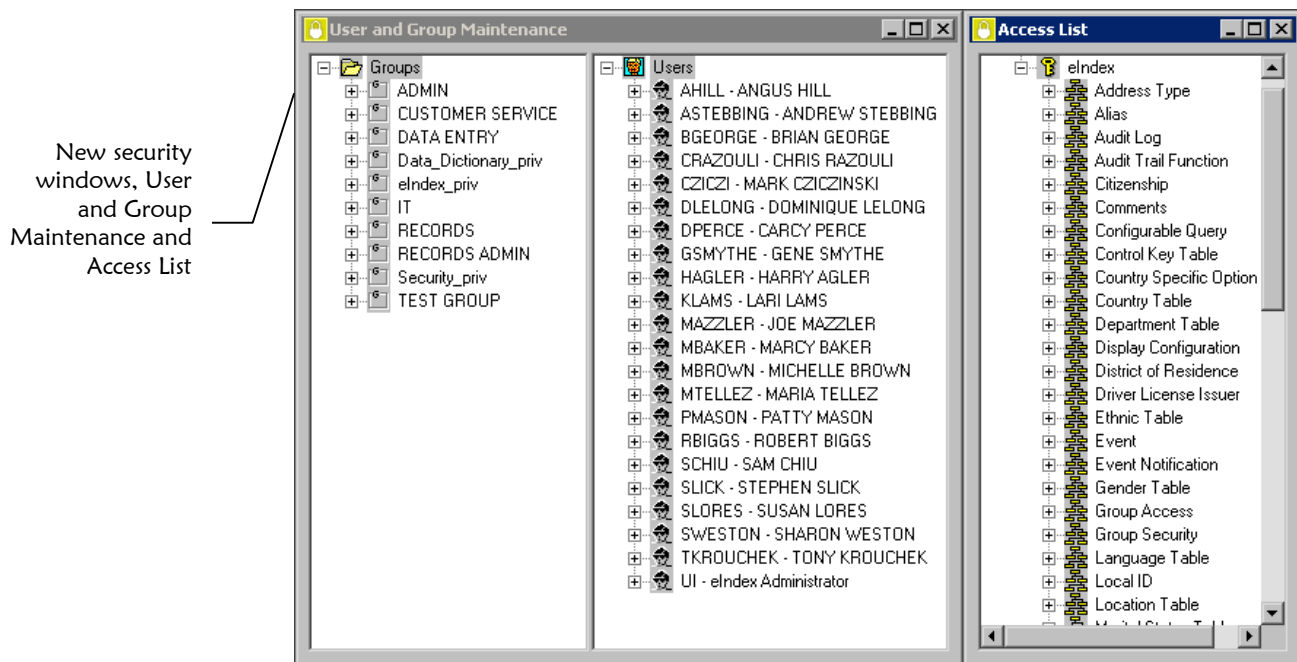
The new e*Index Security allows you to add a user profile to as many user groups as is necessary to ensure they are granted all the necessary access

permissions. Expiring user profiles from user groups is a one-step procedure, performed by highlighting the appropriate user profile and clicking an icon tool on the application toolbar. Expiring access permissions from user groups and user profiles is a similar procedure, as is reinstating user profiles to user groups and reinstating access permissions to user profiles and user groups.

This release also includes the ability to assign region-specific security (see "Region-Specific Security" later in this section) and to notify specific users via e-mail when certain events occur in the e*Index GUI (see "Event Notification" later in this section).

New Maintenance Windows

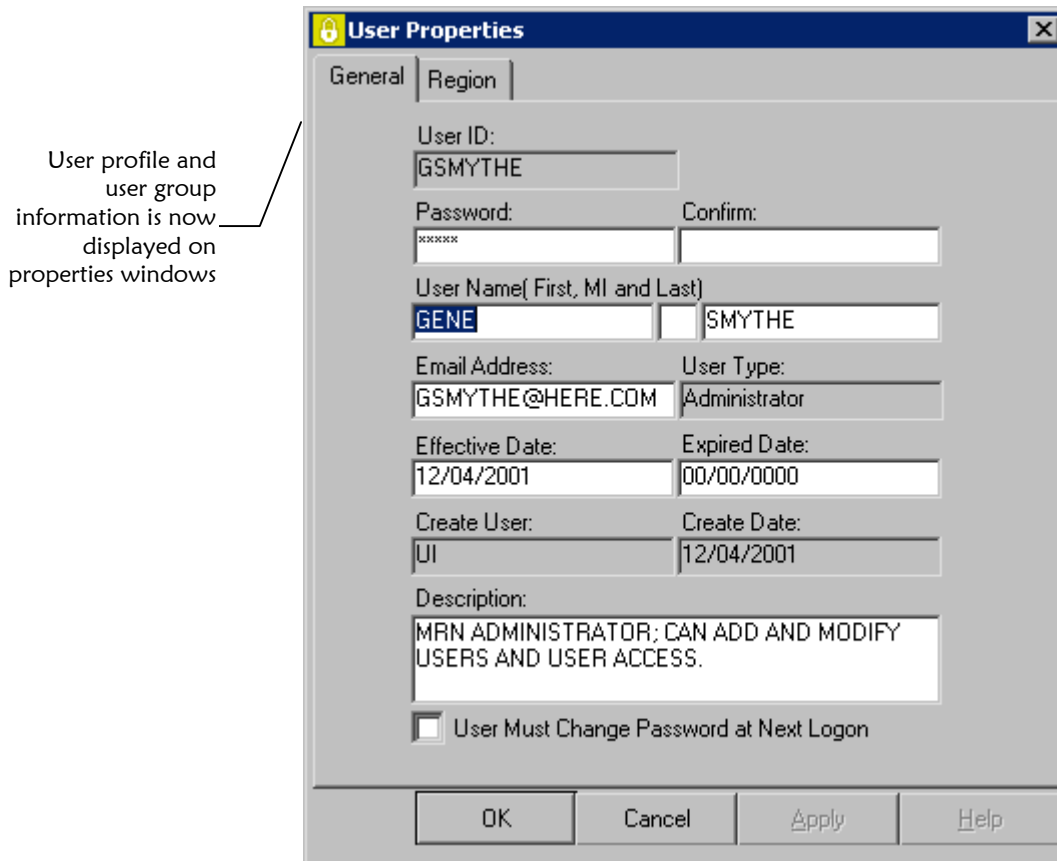
The User Maintenance window and the User Group Maintenance window are replaced by one window, the User and Group Maintenance window. With this design, all user profiles and user groups appear on the same window, and the Access List, which contains all available access permissions, appears next to the User and Group Maintenance list. This design allows you to perform security tasks using drag-and-drop functionality, and replaces the Security Wizard and Available Options windows from version 4.1.1.



New User and Group Properties Windows

The windows that display information about the user profiles and user groups do not perform the same functions as in previous releases. Most of the old functionality, such as assigning user profiles to user groups or searching for user profiles, has been moved to the User and Group Maintenance window. You can use the new properties windows to add user

profiles and user groups, and to modify information about those profiles and groups. You can also specify the dates between which the user group or user profile is active. The figure below displays the User Properties window.



Region-Specific Security

Region-specific security is a new capability that allows user access to be assigned by region. For example, if you receive member information from system A and system B in the Western region, and from system C in the Central region, then a user profile who is assigned only to the Western region can view member information in the e*Index GUI for members of system A and system B, but not for system C. This function can only be used if the following steps are taken:

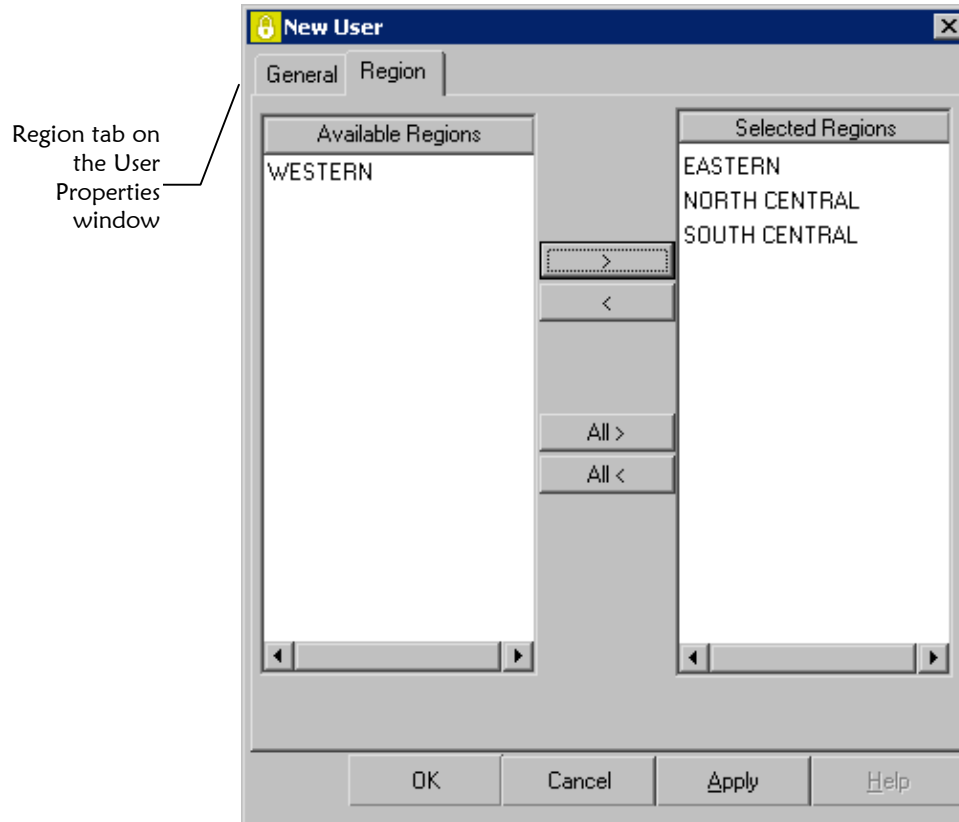
- Region-specific security is installed in the e*Index database.

Note: Installing this option is described in the e*Index Global Identifier Installation Guide.

- Regions are defined in e*Index Administrator.
- The systems from which the e*Index data originates are defined in e*Index Administrator and are associated with the appropriate regions.

- The user profiles in e*Index Security are assigned to the appropriate regions.

You can assign user profiles to regions on the Regions page of the New User or User Properties window.



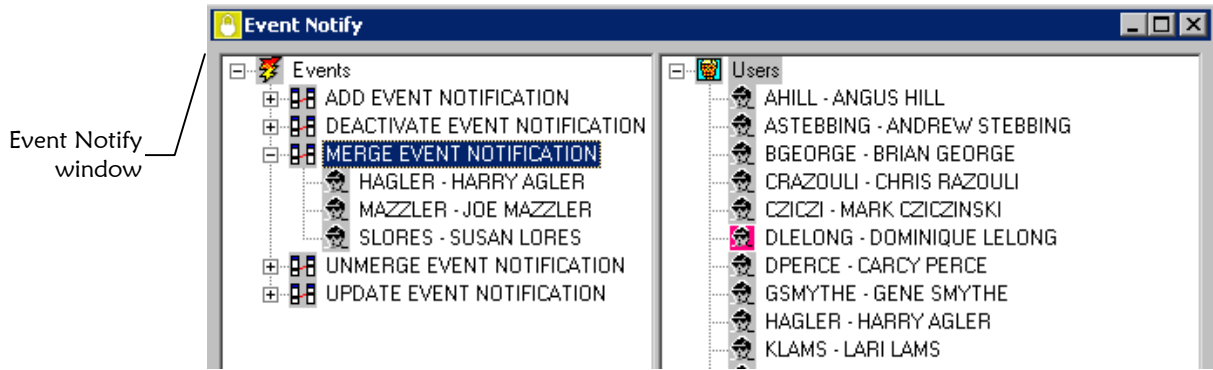
Event Notification

Event Notification is another new function for e*Index Security. This function allows you to specify that certain users receive e-mail notifications for the certain events whenever those events occur in the e*Index GUI. For example, you can specify that a set of users receive e-mail notifications when a merge is performed through the e*Index GUI. The events of which you can notify users include:

- Member Profile Adds
- Member Profile Updates
- Member Profile Deactivations
- Member Profile Merges
- Member Profile Unmerges

Event Notification Window

Use the Event Notify window to specify the user profiles to be notified of e*Index events. Event notification is assigned using a simple drag-and-drop procedure. A current and accurate e-mail address must be associated with each user profile to which event notification is assigned.



Implementing Event Notification

In order for event notification to be functional, you need to configure an e-mail e*Way to deliver the notifications. You must also modify the polling e*Way to publish to the e-mail e*Way. The e-mail addresses for each Event placed in the outgoing queue (the *ui_msg_detail* table) are appended to the end of each Event in a new segment named **ZEN**.

Obsolete Functions

The ability to create, delete, and modify the modules and sub-modules (also known as functions and actions) that define access permissions was removed since the ability to perform these functions is obsolete.

e*Index Database Enhancements

Overview

This section describes the differences in the e*Index database tables, columns, and distribution between releases 4.1.1 and 4.5.2. For more detailed information about the e*Index database and to view a physical data model of the database, see chapter 2 of the *e*Index Global Identifier Technical Reference*.

New Platform Support

For this release, e*Index supports not only Oracle databases, as in previous versions, but also supports Sybase and SQL Server database platforms. However, the migration from version 4.1.1 to 4.5.2 can only be performed on an Oracle database.

New Database Tables

There are several differences in database tables between versions 4.1.1 and 4.5.2 to accommodate new functionality and expanded data elements. For more detailed descriptions of each table, see "Learning About the e*Index Database" in chapter 2 of the *e*Index Global Identifier Technical Reference*.

Person Data Tables

The following tables have been added to the e*Index database to accommodate storing additional information for each person in the database.

- **ui_address**
The *ui_address* table stores information about the addresses associated with each member.
- **ui_address_history**
This table stores a history of each member's addresses, and is used to form an audit trail.
- **ui_alias_history**
The *ui_alias_history* table stores a history of a member's alias names. This information is used to form the audit trail for each member.
- **ui_aux_id**
This table stores the non-unique IDs assigned to each member, along with the ID type name.
- **ui_aux_id_history**
This table stores a history of each member's non-unique ID and ID types. This information is used to form the audit trail for each member.

- **ui_local_id_history**
The *ui_local_id_history* table stores a history of changes made to each member's local ID and system pairs. This information is used to form the audit trail for each member.
- **ui_person_history**
The *ui_person_history* table replaces the table *ui_history*. This table still stores the history information that is used to form an audit trail.
- **ui_phone**
The *ui_phone* table stores information about each member's telephone numbers.
- **ui_phone_history**
This table stores a history of telephone numbers for each member. This information is used to form an audit trail.

Case-insensitive Search Tables

Two new tables were added to the e*Index database to support case-insensitive searching from the e*Index GUI. The following tables were added for this release.

- **ui_person_x_name**
This table stores the name information from each record in *ui_person* in uppercase only, and enables case-insensitive name searching from the e*Index GUI.
- **ui_alias_x_name**
This table stores each alias name in *ui_alias* in uppercase only, and enables case-insensitive *extensive* searching (that is, when the control key EXTNSVSRCH is enabled).

Security Tables

Several new database tables were added for this release to accommodate the new security requirements. The following tables were added for this purpose.

- **stc_acc_def**
This table stores information about the access permissions that appear in the access list on the Access List window of e*Index Security.
- **stc_group**
This table stores information about the user groups defined in e*Index Security. This table does not store information about the user profiles or access permissions assigned to each user group.
- **stc_group_acc**
The *stc_group_acc* table stores information about the access permissions granted to each user group.

- **stc_module**
The *stc_module* table stores information about the primary functions that appear in the access list on the Access List window of e*Index Security.
- **stc_user**
This table stores information about the user profiles defined in e*Index Security. This table does not store information about the access permissions assigned to each user profile, or the user groups and regions to which each profile is assigned.
- **stc_user_acc**
The *stc_user_acc* table stores information about the access permissions granted to each user profile.
- **stc_user_region**
This table stores information about the regions to which each user profile is assigned. This table is only used if region-specific security is installed (see your *e*Index Security User's Guide* for more information).
- **stc_user_group**
This table stores information about the user groups to which each user profile is assigned.
- **ui_notify_user**
This table stores information about the event notifications to which each user profile is assigned. You can assign event notifications to user profiles on the Event Notify window in e*Index Security. When you remove notification for an event from a user profile, the corresponding row in this table is removed.

Country-specific Options Tables

Three new database tables were added to accommodate the new country-specific option requirements. The following tables were added for this purpose.

- **ui_misc_option**
This table provides the ability to make the GUI country-specific by reformatting certain fields depending on which country you select. This table also contains label information for the tabs that appear on the e*Index GUI windows.
- **ui_misc_opt_control**
The *ui_misc_opt_control* table stores information about the components of e*Index that are affected by the data stored in *ui_misc_option*.
- **ui_misc_opt_country**
The *ui_misc_opt_country* table stores information about the country codes used in *ui_misc_option*, describing which country corresponds with which code.

Code Table Data Tables

The following tables have been added to the e*Index database to support the functions of the e*Index Administrator. Note that most of the code table data is now stored in *stc_common_header* and *stc_common_detail* instead of individual tables such as *ui_religion*, *ui_race*, *ui_language*, and so on.

- **stc_appl**
This table stores a description and code for the e*Index application. This table is linked to the *stc_common_header* and *stc_module* tables and indicates the application with which each item in *stc_common_header* and *stc_module* is associated. Currently the only item in this table is e*Index.
- **stc_common_detail**
This table holds information about the data elements you add to the Common Table maintenance functions of e*Index, including races, languages, driver's license issuers, and so on. The common header ID associated with each data element in this table specifies the table maintenance function with which the data element is associated.
- **stc_common_header**
This is the header table for each Common Table maintenance function. It stores a list of the types of data elements you can add using the Common Table maintenance functions of e*Index Administrator, such as Race, Language, Citizenship, and so on.
- **ui_aux_id_def**
This table stores the various non-unique ID types that you define in e*Index Administrator.

Configurable Query Tables

The following tables were added to the database to accommodate the configurable query feature of e*Index Administrator.

- **ui_cand_from_table**
This table stores the table(s) in the 'from' column of the SQL statements generated by the configurable queries. For example, if you created this SQL statement

```
select first_name, last_name from ui_person where u_id = '100'
```

this table would store the 'ui_person' portion of the statement.

- **ui_cand_select_column**
This table stores the columns in the 'select' portion of the SQL statements generated by the configurable queries. For example, in the above SQL statement, this table would store the 'first_name, last_name' portion of the statement.

- **ui_cand_where_column**
This table stores the columns called in the 'where' portion of the SQL statements generated by the configurable queries. For example, in the above SQL statement, this table would store the 'u_id' portion of the statement.
- **ui_cand_sql**
This table stores the descriptions and identification codes for the two types of configurable queries.
- **ui_cand_sql_column**
This table stores information about the available and selected columns for the configurable queries.
- **ui_cand_sql_table**
This table stores information about the available and selected tables in the configurable queries.
- **ui_cand_where_clause**
This table stores information about the WHERE clauses for the configurable queries, along with the criteria list description of each clause.

Outbound Event Tables

The following tables replace the *ui_out_queue* and *ui_key_table* to store Events to be picked up by the polling e*Way.

- **ui_msg_detail**
This table, along with the *ui_msg_header* table, has replaced the *ui_outqueue* table. It is used to store messages being sent from the e*Index database to external systems.
- **ui_msg_header**
The *ui_msg_header* table stores header information for the *ui_msg_detail* table.

Miscellaneous Tables

The following tables were added to the e*Index database. *ui_seq_no* centralizes sequence number storage and *ui_transaction* centralizes Event identification information.

- **ui_object_type**
This table is reserved for future functionality and is not used in this release.
- **ui_seq_no**
This table defines the sequential codes that are used in other tables in the e*Index database.

- **ui_transaction**
This table maintains a sequential transaction number for each event that is processed through e*Index. This table links all of the database tables that are used to store member information.

Display Configuration Tables

The following tables were added to support the configurability of fields displayed on the e*Index GUIs.

- **ui_table**
This table stores information about the tables that are displayed on the Display Configuration window in e*Index Data Dictionary. These tables contain the columns whose corresponding field labels can be modified on the e*Index GUI.
- **ui_table_column**
The *ui_table_column* is accessed by the Display Configuration function of e*Index Data Dictionary. This table stores information about how the field labels are configured.

Modified Database Tables

For this release of e*Index, the following changes were made to the e*Index database to increase the flexibility of the application. For detailed information about each table listed, refer to the physical data model in the *e*Index Global Identifier Technical Reference*. Many tables were modified to reference the table *ui_transaction* through the addition of the **transaction_no** column. The **county** field was also standardized to 20 characters in all tables containing the field.

- **ui_alias**
These columns were added to the *ui_alias* table: **ui_alias_id**, **mname_phonetic_code**, and **transaction_no number(10)**. **middle_initial** was changed to **middle_name**. These columns were removed: **title**, **suffix**, **ssn**, **create_date**, **create_time**, and **ui_org**.
- **ui_assumed_match**
This table was reduced to only five columns: **assumed_match_id**, **u_id**, **weight**, **prev_transaction_no**, and **transaction_no**.
- **ui_audit**
This table was modified by the addition of the **ui_audit_id** column.
- **ui_comment**
This table was modified by the addition of the **ui_comment_id** column.
- **ui_duplic**
This table was reduced to only seven columns and the description column was broken out into two columns: **weight** and **description**. The

new *ui_duplic* table contains these columns: **ui_duplic_id**, **duplic_id**, **existing_id**, **weight**, **description**, **dummy_date**, **resolved**, and **transaction_no**.

- **ui_facility**
The length of many of the columns in this table was modified. A new column, **region_code**, was added to accommodate region-specific security. Refer to the physical data model in the *e*Index Global Identifier Technical Reference* for more information.
- **ui_local_id**
This table was restructured to include only the following columns: **ul_id**, **u_id**, **facility**, **local_id**, **status**, and **transaction_no**.
- **ui_login** and **ui_login_current**
The length of many of the columns in these tables was modified. Refer to the physical data model in the *e*Index Global Identifier Technical Reference* for more information.
- **ui_message**
The length and type of the **description** column was changed from **varchar2(500)** to **long**.
- **ui_mrg_trans**
This table was restructured to include only the following columns: **ui_mrg_trans_id**, **u_id**, **u_id_from**, **trans_no**, **trans_no_from**, **unmrg_trans_no**, and **unmrg_trans_no_from**.
- **ui_person** and **ui_person_history** (previously **ui_history**)
The **middle_initial** column was changed to **middle_name**, **spouse** was changed to **spouse_name**, **mother** was changed to **mother_name**, and **father** was changed to **father_name**. All address and telephone fields, as well as merge fields, were removed from these tables. The following columns were added to these tables: **person_cat**, **dob_time**, **addr3**, **addr4**, **driver_license**, **drivers_license_st**, **dod**, **death_certificate**, **nationality**, **pension_no**, **pension_exp_date**, **repatriation_no**, **district_of_residence**, **lga_code**, **military_branch**, **military_status**, **string1** through **string10**, and **date1** through **date5**.

Database Views

For this release, the following views were either added or updated.

- **ui_alias_view**
This is a new view to support case-insensitive searching for extensive searches.
- **ui_person_view**
This view replaces the old **ui_person_view**, which was modified to support case-insensitive searching.

- **ui_person_search_view**
This is a new view created to support case-insensitive searching from the backend.

Obsolete Database Tables

With the redesign of e*Index Security and e*Index Administrator, several database tables were removed and new tables were created in their place. The following tables were removed:

- **mod_acc**
- **mod_def**
- **mod_loc**
- **ui_user_dept**
- **ui_typ_table**
- **user_tbl**
- **ui_country** (now stored in *stc_common_detail*)
- **ui_dequeue_lock**
- **ui_ethnic** (now stored in *stc_common_detail*)
- **ui_event** (now stored in *stc_common_detail*)
- **ui_history** (replaced by *ui_person_history*)
- **ui_key_table** (replaced by *ui_msg_header*)
- **ui_language** (now stored in *stc_common_detail*)
- **ui_location**
- **ui_merge_alias**
- **ui_merge_duplic**
- **ui_merge_local_id**
- **ui_mstatus** (now stored in *stc_common_detail*)
- **ui_next_id** (now stored as the **seq_no** for the **ui_person** **table_name** in *ui_seq_no*)
- **ui_out_queue** (replaced by *ui_msg_detail*)
- **ui_patmode**
- **ui_patorder**
- **ui_race** (now stored in *stc_common_detail*)
- **ui_resolved**

- **ui_rev_center**
- **ui_sex** (now stored in *stc_common_detail*)
- **ui_state** (now stored in *stc_common_detail*)
- **ui_status** (now stored in *stc_common_detail*)
- **ui_suffix** (now stored in *stc_common_detail*)
- **ui_system** (now stored in *stc_common_detail*)
- **ui_title** (now stored in *stc_common_detail*)
- **ui_user_clinic**
- **ui_veteran** (now stored in *stc_common_detail*)
- **ui_vip** (now stored in *stc_common_detail*)

Database Indexes

Due to the structural changes to the e*Index database between versions 4.1.1 and 4.5.2, several changes were made to the indexes and several new indexes were added. To view information about the indexes for version 4.5.2, refer to the **create_ui_tables.sql** file located in `\server\UIinitial` in the installation path of the database installation files. The index commands begin with the line **"create index idx_ui_address1 on ui_address (u_id asc)"**.

Routines

The number of routines used in the database has been greatly reduced. To see information about the routines included in the 4.5.2 release, refer to the files located in `\server\UIinitial\Routines` in the installation path of the database installation files.

Reporting Changes

Due to the large number of changes in the database structure, the reports were rewritten between versions 4.1.1 and 4.5.2. Most of the Production reports are the same, but the Conversion reports have been removed. In addition, the assumed match reports that included address information were removed. You will need to re-customize the reports based on the customizations you made for version 4.1.1. In addition, you will need to update any reports you created for e*Index. Note that standard reports are only installed for Oracle implementations.

e*Index Schema Enhancements

Overview

Several changes were made to the Monk APIs and to the e*Index Schema for e*Gate. These modifications give e*Index greater flexibility and extensibility, and provide the ability to highly customize how records are processed through the backend.

New Monk APIs

The current version of e*Index contains several new Monk APIs to provide you with greater flexibility in processing Events through the e*Index e*Ways. Several of these APIs are used to replace the previous Monk API **alta-process-person**. For detailed information about the new APIs, including parameters, syntax, return values, and examples, refer to the *e*Index Global Identifier Technical Reference* for version 4.5.2.

This Monk API ...	performs this action ...
ui-address-search-close	Closes the address search cursor, and de-allocate the memory.
ui-address-search-next	Returns the next address record from the address search cursor, and increment the search cursor position. You must call ui-address-search-open before calling ui-address-search-next . The search cursor must not be at the end of its record set or an exception will be returned.
ui-address-search-open	Searches for existing address records based on an address list. If records are found, ui-address-search-open opens a cursor of weighted records returned from the search. This function returns the number of records in the result set.
ui-commit-transaction	Commit a transaction to the database and reset the transaction structure.
ui-deactivate-local-id	Deactivate an active local ID given the local ID number, the associated system, and a UID.
ui-delete-address	Deletes an existing address record from the database. A transaction must be started before calling ui-delete-address .
ui-delete-aux-id	Delete a non-unique ID given the ID type and the ID code. Before calling ui-delete-aux-id , you must call ui-start-transaction to designate which UID record is being modified.

This Monk API ...	performs this action ...
ui-delete-queue-msg	Remove a message from the outgoing queue once it has been successfully dequeued and sent.
ui-delete-unresolved-duplicates	Remove a record's existing potential duplicate entries from <i>ui_duplic</i> during a person update so potential duplicates can re-evaluated for that record.
ui-exists-aux-id	Searches for a specific non-unique ID type for a member given the member's UID, the ID type, and the identification code.
ui-get-assumed-match-enabled	Check if the ASSMTCH control is enabled in the e*Index Administrator. If ASSMTCH is enabled, all assumed matches made by the application are written to the <i>ui_assumed_match</i> table.
ui-get-all-local-id	Searches for local IDs in a specific system based on a member's UID. The status of the local IDs is ignored.
ui-get-aux-id	Retrieve a non-unique ID given the type of ID and the member's UID.
ui-get-db-date-time	Retrieve the date and time on the database server in the following format: YYYY/MM/DD hh:mm:ss.
ui-get-demographic-changed	Check to see if a demographic record was changed as a result of the previous actions against the database.
ui-get-dupchk-enabled	Check to see if the DUPCHK control key is enabled in the Data Dictionary. If DUPCHK is enabled, potential duplicates for a specific record are re-evaluated after that record is updated.
ui-get-id-system	Replaces <i>ui-get-id-facility</i> .
ui-get-local-id	Retrieve the member's local ID in a specific system given the system code and UID. This API has since been replaced by ui-search-local-id , but is still available for use.
ui-get-transaction-date-time	Retrieve the time that the transaction that is currently in progress began.
ui-get-uid	Find a person's UID using that person's system and local ID as search criteria.
ui-insert-address	Inserts a new address into the database. A transaction must be started before calling ui-insert-address .
ui-insert-alias	Insert alias information into the <i>ui_alias</i> table based on that person's UID.

This Monk API ...	performs this action ...
ui-insert-assumed-match	Insert an assumed match record by assuming the first record in the search cursor (the one with the highest matching weight) is the assumed match of the incoming record. You can only call this function after ui-search-open .
ui-insert-aux-id	Insert a non-unique ID and specific ID type. Before calling ui-delete-aux-id , you must call ui-start-transaction to designate which UID record is being modified.
ui-insert-person	Insert a new person record into the database using a demographic list. You must call ui-start-transaction before inserting a person record.
ui-local-id-merge	Merges two member profiles based on local IDs in a specific system.
ui-local-id-status	Returns the status of a local ID record.
ui-lookup	Replaces the lookup function from version 4.1.1.
ui-lookup-address-id	Searches for the address ID of an existing address record based on the corresponding UID and address type.
ui-lookup-local-id	Looks up a local ID associated with the specified system based on a member's local ID in another system. This API searches by local ID status.
ui-poll-startup	Invoke setup and specify instance-specific function loads.
ui-poll-pos-ack	Send a negative acknowledgment to the polling e*Way to indicate that an Event was received successfully.
ui-poll-neg-ack	Send a positive acknowledgment to the polling e*Way to indicate that an Event was not received successfully.
ui-process-address	Perform an address update or insert, depending on whether an address record already exists for the given address type and UID.
ui-process-person	Process messages coming into the database. This function is actually composed of several Monk APIs. You can customize this function to process records in the manner that best suits your processing requirements.
ui-process-phone	Perform a telephone number update or insert, depending on whether a telephone record already exists for the given address type and UID.
ui-rollback-transaction	Roll back the transaction in the database and reset the transaction structure.

This Monk API ...	performs this action ...
ui-search-close	Close the search cursor, and de-allocate the memory.
ui-search-get-exact-match-score	Return the weight of an exact match to a new record if one exists in the database. This function checks to see if 1EXACTMTCH is enabled before returning the weight. Before calling ui-search-get-exact-match-score , you need to call ui-search-open .
ui-search-get-exact-match-uid	Return the UID of the record that is an exact match of a new record if an exact match exists in the database. Before calling ui-search-get-exact-match-uid , you need to call ui-search-open .
ui-search-insert-duplicate	Allow the records in the search cursor to be added to the <i>ui_duplic</i> table.
ui-search-local-id	Searches for local IDs in a specific system based on a member's UID and the status of the local IDs.
ui-search-open	Open a cursor of weighted records returned from a search that is based on the demo-info query list. This function returns the number of records in the result set.
ui-set-queue-id	Change the status of a queued message if the dequeued message is not sent successfully (as determined by a nack event in the polling e*Way).
ui-start-transaction	Start a transaction for a specific UID (if the UID is left blank, then the next available UID is assigned). A transaction is only initiated if a database insert, update, or delete is performed.
ui-update-address	Updates an existing address in the database. A transaction must be started before calling ui-update-address .
ui-update-aux-id	Update a non-unique ID given the ID type and the ID. Before calling ui-update-aux-id , you must call ui-start-transaction to designate which UID record is being modified.
ui-update-person	Update a record using a demographic list. You must call ui-start-transaction before updating a person record.

Modified Monk APIs

The following table lists the Monk APIs that were modified between versions 4.1.1 and 4.5.2, and provides a brief description of the changes. For a

complete description of these APIs, see Chapter 4 of the *e*Index Global Identifier Technical Reference*.

This Monk API ...	was modified in this way ...
ui-merge	The syntax has changed to (ui-merge connection-handle source-uid dest-uid system source dept terminal-id user-id)
ui-lookup	This API has been replaced by ui-lookup-local-id, but is still available for use.

Obsolete Monk APIs

Several Monk APIs for e*Index were removed between versions 4.1.1 and 4.5.2. The following Monk APIs are obsolete and no longer used.

- alta-conversion
- alta-init
- alta-process-person
- alta-release
- get-uid
- lookup (replaced by ui-lookup)
- ui-alias-insert
- ui-alta-disable-extensive-search
- ui-alta-enable-extensive-search
- ui-date
- ui-db-date
- ui-db-time
- ui-demographic-changed
- ui-enqueue
- ui-get-id-facility (replaced by ui-get-id-system)
- ui-get-queue
- ui-releaseq
- ui-time

Schema Changes

Several changes were made to the e*Index sample Schema to accommodate the new tables and columns in the e*Index database. It is now optional to install a new Schema when you install the e*Index files for e*Gate. If you do not want to overwrite an existing Schema, you can simply install the binary, library, and certain Monk files for the Schema in the default directory of the registry. When you do install the sample Schema, the files are distributed differently for this version than for previous versions. See chapter 2,

"Installing the e*Gate Schema Files," in the *e*Index Global Identifier Installation Guide* for more information about these changes and to view a diagram of the Schema file directory structure.

ui-fns.monk

Two new functions were added to the Monk functions file **ui-fns.monk**. These functions allow you to scroll through the records returned by the new local ID APIs (described earlier). For a complete description of these functions, see Chapter 4 of the *e*Index Global Identifier Technical Reference*.

This Monk function ...	performs this action ...
ui-get-next-element	Returns the next element in a vector.
ui-has-next-element	Checks if there is a next element in a vector, and returns #t if a next element is found.

ui-stdver-eway-funcs.monk

- The obsolete call to `alta-init` was removed from the **ui-stdver-conn-estab** function. Calls to **ui-get-error-string** and **db-get-error-str** were added to this function for better error handling.
- The obsolete define statements for **out-queue-input-delm**, **out-queue-input-struct**, **out-queue-output-delm**, and **out-queue-output-struct** have been removed.

ui-poll was also modified slightly. For more information about the polling functions, see "Standard Monk API Descriptions" in chapter 4 of the *e*Index Global Identifier Technical Reference*.

ui-custom.monk

- The existing statements that create the Monk lists (which are used as parameters in the Monk APIs) have been modified to include additional data elements. These modifications support the new sample Event Type Definition included with the sample Schema. The existing statements include **get-demographics**, **get-transact**, and **get-alias**.
- Two new statements, **get-address** and **get-phone**, were added to create the address and telephone lists that are used as parameters for the new Monk APIs.

- Minor changes were made to the **get-transact** function in **ui-custom.monk** to retrieve both the date and time of event. These lines in the previous versions of the file:

```
(if (not-empty-string? ~<msg>.EVNT.EVN.date_of_event)
  (string-append ~<msg>.EVNT.EVN.date_of_event " "
~<msg>.EVNT.EVN.time_of_event)
```

were replaced with these new lines in the current version of the file:

```
(if (not-empty-string? ~<msg>.EVNT.EVN.date_of_event)
  (if (not-empty-string? ~<msg>.EVNT.EVN.time_of_event)
    (string-append ~<msg>.EVNT.EVN.date_of_event " "
~<msg>.EVNT.EVN.time_of_event)
  (abort "Invalid time of event")
)
" " ; use system date/time
)
```

To find out more about these changes, review the **ui-custom.monk** file.

Event Type Definition File

The old event type definition file, **A0X_ui.ssc**, has been removed, and a new event type definition file, **eiEvent.ssc**, has been added. This file is very different from the old event type definition file, and has been extended to accommodate the many new data elements that e*Index can now accept from an incoming Event.

uidb.dsc

The file **uidb.dsc** has been modified to handle the new event type definition file, **eiEvent.ssc**, and to call the new Monk APIs instead of the obsolete API **alta-process-person**. It was also modified to include the new Monk lists created in **ui-custom.monk**. SeeBeyond recommends reviewing the new **uidb.dsc** file to determine the differences between your current Collaboration Script and the default 4.5.2 script. This will help you analyze and design the required customizations you need to make to the 4.5.2 script in order to process records in a manner similar to the 4.1.1 environment.

Notes on the Database Migration

Overview

There are a few important issues to remember when performing the database migration from version 4.1.1 to 4.5.2. For more information about data migration issues and considerations, see chapter 2 of the *e*Index 4.1.1 to 4.5.2 Upgrade Guide*.

Potential Duplicates

The *ui_duplic* table is not migrated to the 4.5.2 database. All potential duplicate records should be either resolved or merged prior to performing the migration in order to maintain the integrity of your production data. If any rows remain in the *ui_duplic* table at the time of migration, **the migration will not be affected.**

Vality Rule Set Files

It is assumed that you will use the same or similar weighting logic, as defined in the **UI** rule set files, for the 4.5.2 environment as was used for the 4.1.1 environment. Any alterations in the weighting logic may cause weighting discrepancies between the data migrated from the 4.1.1 environment and new data processed through the 4.5.2 environment.

Custom Database Components

If you have customized your e*Index database by creating any of the following items, it is important to note that any non-standard components are not migrated. If you want to maintain the functionality of these items, you need to add them to the new e*Index 4.5.2 database manually.

- New database tables
- New columns added to existing tables
- New stored procedures
- New triggers
- New views