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# **User Operations Guide**

For LInX Release 5.0

October 2013

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### **Introduction and Overview**

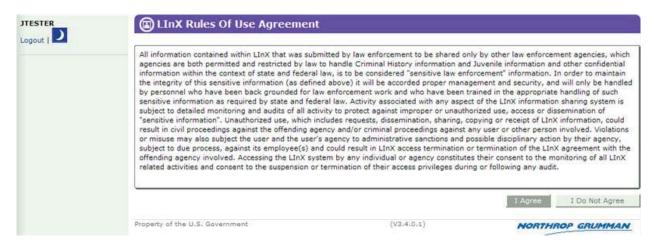
LInX - the Law Enforcement Information Exchange - is an advanced information sharing system and analytical data warehouse containing information from participating state and local law enforcement agencies located within the a regional LInX system. LInX is a joint initiative sponsored by the Naval Criminal Investigative Service (NCIS) of the U.S. Department of the Navy and various regional and local law enforcement agencies located throughout the nation.

#### RESTRICTIONS ON THE USE OF LINX DATA

The data from the LInX system is not considered and should not be used for original documentation for probable cause from any participating agency. Use of the data is controlled by the *LInX Rules of Operation* for each regional LInX system. Contact you system administrator for a copy.

## **Logging into LInX**

When a user initially attempts to log into LlnX, the *LlnX Rules of Use Agreement* is presented.



Selecting the **I Do Not Agree** button immediately returns the user to the login screen.

Selecting the I Agree button allows the user to continue to the next LInX screen.

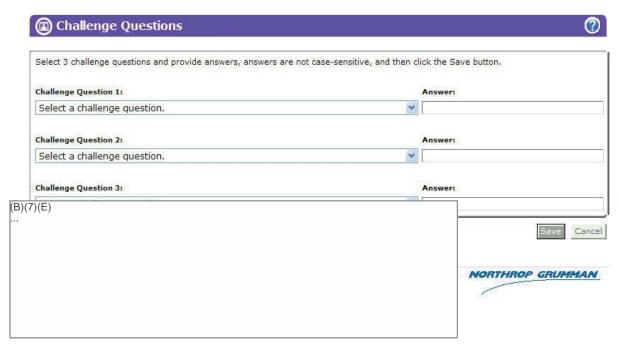
The LInX Rules of Use Agreement will periodically be reintroduced to the user after initial acceptance as a means of reacquainting the user with the rules and requiring the user to continue agreement.

### **Challenge Questions**

The next screen the user will encounter is the *Challenge Questions* screen. Users will be required to select challenge questions and provide answers to them upon initial login to the system, or after a password reset.

(B)(7)(E)	

The following image shows the *Change Challenge Questions* screen with an example of the 10 questions available for selection.



After all 3 Challenge Questions have been answered, click the **Save** button to save the responses.

B)(7)(E)	

Additional help with Challenge Questions can be found within the *Challenge Questions* functionality by clicking on the Online Help button [ located in the upper right-hand corner of the *Challenge Questions* screen under *My LInX*.

## LInX Home Page

#### **INFO CENTER**

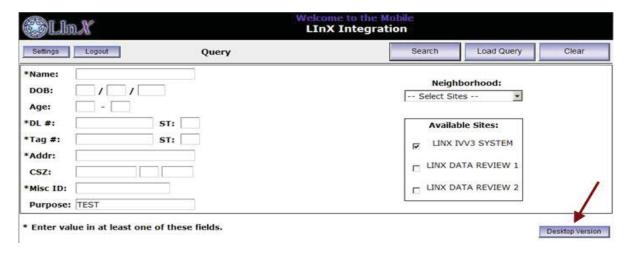
The *Info Center* screen contains links to a number of sub-screens that provide a way for users to find out the latest information regarding the LInX system. The main screen is also the default LInX Home page. The *Info Center* screen can be accessed by clicking either the *Info Center* or *Back to Home* links located in the navigation menu bar along the left side of the screen.

#### **Mobile Version:**

Once a user is logged in to LInX, a link to the Mobile Version of the application is provided at the top left of the screen (under the Userid). The user can toggle between the mobile version and the desktop version of the application using this link and the Desktop Version link found on the Mobile Search screen.



The Mobile Version link offers a more streamlined query/result capability for use with mobile terminals, and is available from all screens, except Link Analysis, Feedback, System/Security Administrator screens, or when a user is viewing the application in Night Mode.



#### **System Status:**

The System Status section contains information about the system, such as when the system will be down for maintenance and/or upgrades. Selecting the Back to Home menu option from the navigation menu will return the user to the main Info Center screen.

#### New In LInX:

The *New in LInX* section contains information about the system and/or Governance Board to inform users and administrators. Selecting the *Back to Home* menu option from the navigation menu will return the user to the main *Info Center* screen.

The New in LInX section also contains a link to a PDF of Success Stories that have been posted, as well as the LInX New Features PDF.

#### **Agency Information:**

The *Agency Information* section includes a number of links that provide specific information about the agencies associated with the user's Regional LlnX system. Selecting the *Back to Home* menu option from the navigation menu will return the user to the main *Info Center* screen from any of these sub-screens.

#### Agency Statistics

	The Agency Statistics screen	shows the user which	agencies have data
	in the system and when the da	ata was last updated.	(b)(7)(E)
ı	(b)(7)(E)		

#### Agency Contacts

The *Agency Contacts* screen displays agency address, agency head, agency records division, and agency LInX Point of Contact (POC) information. Each agency's Systems Administrator is responsible for keeping this information up-to-date.

#### LInX User Directory

The LInX User Directory screen allows users to query LInX to find user contact information for an individual, an agency, or the entire LInX regional system. This area is built as a convenience to encourage collaboration and de-confliction amongst users in the LInX regional community.

#### **Training:**

The *Training* section contains a number of links that provide additional resources for the user, including LInX User Guides and videos. Selecting the *Back to Home* menu option from the navigation menu will return the user to the main *Info Center* screen from any of these sub-screens.

Training			
•Tools			
·User Guid	e		
•Quick Tips			
On-line Re	efresher Tra	aining	

#### Tools

The *Tools* section contains links to download *Adobe Reader* and *Adobe SVG 3.x*, which is required in order to use the SVG version of Link Analysis.

#### User Guide

Clicking the *User Guide* link opens a PDF of the current LInX *User Operations Guide* in a separate browser window, which can be printed or saved by the user. The *User Guide* is a single location containing all the individual LInX Help topics that are available via the *Help* icon [



The PDF window may be left open, minimized, or closed separately from the LInX application window.

#### Quick Tips

Clicking the *Quick Tips* link will open a PDF of the *General Tips for Searching LInX* document in a separate browser window, which can be printed or saved by the user. This document provides general tips to assist the user in conducting various searches in LInX.

The PDF window may be left open, minimized, or closed separately from the LInX application window.

#### On-line Refresher Training

The Online Refresher Training area of the Info Center screen contains online resources, such as PDFs and videos, to provide the user with information about LInX background, LInX functionality, and suggestions on how to conduct the most efficient searches.

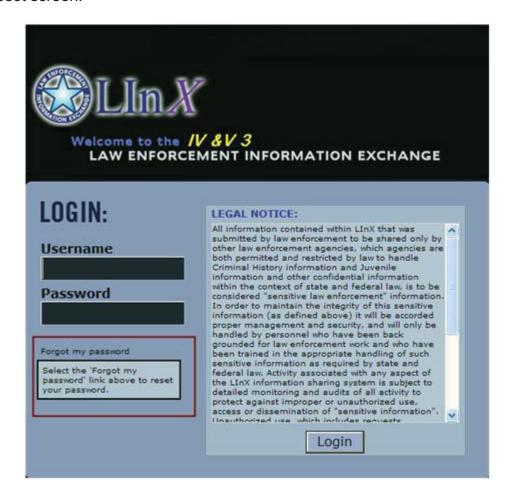
#### **MENU OPTIONS**

Availability of menu or button selections is based on user privileges. For example, if a user only has Tactical or Analytical search authority, the user will not see any of the Administration menu options (System Administration, Security Administration, Data Administration).

#### SELF-SERVICE PASSWORD RESET

This functionality allows a LInX user who has forgotten their password to initiate a self-service password reset without assistance from the System Administrator. This feature is only available to users who have previously saved the answers to their security questions AND the e-mail address associated with their LInX user account is valid.

After typing in an incorrect password, the login screen will be re-displayed with a "Forgot my password" link. Clicking the link will redirect the user to the *Self-Service Password Reset* screen.



After entering a valid LInX User ID and correctly answering the security questions, a new temporary password will be e-mailed to the e-mail address associated with the User ID. The temporary password is only valid for 24 hours. If the temporary password has not been used within the 24 hour period, the user must repeat the password reset process.



If the user account has been locked out by too many incorrect login attempts, or by answering any of the security questions incorrectly, the user must contact their System Administrator to reset their password.

If, for any reason, Self-Service Password Reset cannot be used, the user will receive a message to contact their System Administrator for a reset.



The user will be required to change their password upon logging into the LInX system with the temporary password.

#### PASSWORD EXPIRATION NOTICE

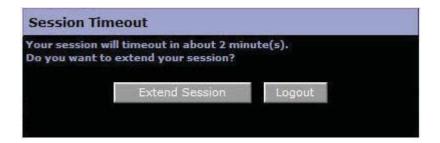
LInX user passwords are set to expire every 60 days. When there are 14 days left until the password is due to expire, a Password Expiration notice will appear on the screen during the login process. The user can continue the login process by selecting to skip the *Change Password Now* option. The password expiration message will be repeated at each subsequent login until the 14th day, when the user will be forced to change their password. If the option to change the password is chosen, the user will be taken directly to the *Change Password* screen.

If the user continues to use the system without changing the password, an alert message will appear on the LInX startup screen indicating how many days are left to make the change.

Welcome Back!
* Reminder: Your password will expire in 8 days.

#### **INACTIVITY**

The system will automatically log off a user after a period of inactivity on the system as determined by the security accreditation rules. Prior to being logged out, a Session Timeout alert message will appear, advising the user that the session will time-out in about 2 minutes, and asking the user if they would like to extend their session. If Extend Session is selected, the user will remain logged in for an additional 14 minute period.



If *Logout* is selected, or no selection is made within 2 minutes, the user will be logged out of the system and retuned to the Login screen. The user will be required to repeat the login process if this happens.

#### LOGGING OUT

The user can log out from any of the LInX menu or functional screens by selecting the *Logout* option located in the upper left-hand corner of the Navigation menu. After logging out, the user will automatically be taken back to the Login screen.

Exiting the system by closing the browser window instead of logging out will result in an automatic logout. The user will have to go through the login process to regain access to the system.

# **Basic System Navigation**

#### SCREEN SELECTION

Each screen in LInX provides a way to navigate to other screens within the system. A menu bar (sometimes called a navigation tool bar) along the left side of the screens

allows the user to select the specific LInX functions to be performed. The user's ID is displayed at the top of the menu.

Note: Slight variations in screen options may occur between different LInX regional systems. Functions that are available only in specific regions will be identified in this document.

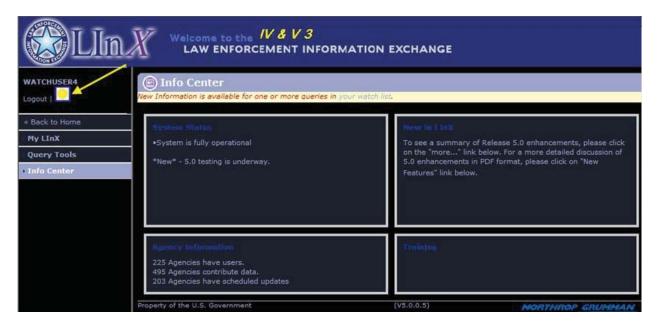


Some menu items will have sub-menus, allowing the user to select specific screens within the general function area. After a selection has been made, the functional area in which the user is operating will be highlighted and the screen that is in use will appear in bold:



#### **DAY NIGHT MODE**

This capability allows the user to toggle between Day Mode and Night Mode using the Sun/Moon icon located under the user name. A screen in Night Mode will have a darker background, and colored text and input fields so it does not impair a user's vision in a car at night. The following screen shows the main screen in Night Mode. Note that any screens that are only available in Day Mode will not be visible when the display is set to Night Mode. For example, Link Analysis, Mobile Version, Help screens, System Administration, Security Administration, Feedback, and View Reports are only available in Day Mode, and therefore, not visible in Night Mode, as shown in the screen below.



#### **ERROR MESSAGES**

Error messages will appear in pop-up windows when an error is made or a process has not been completed properly. By clicking the "**OK**" button, the message will be cleared from the screen so that the screen activity can continue.



#### NAVIGATION/PROCESS SELECTION BUTTONS

Navigation buttons on each page start the process selected and take the user to the next process page. The buttons are clearly labeled to indicate which process is being selected.



#### **SAME PAGE NAVIGATION**

Same-page navigation tools are used to move around and to select specific actions on a single screen. These tools are described below:

#### **Moving Between Fields:**

The user can "mouse" from field to field or use the Tab key to move between fields. Either technique can be used to enter data in a field or to move between fields.

Last Name:	First Name:
	<u>{</u>
L	

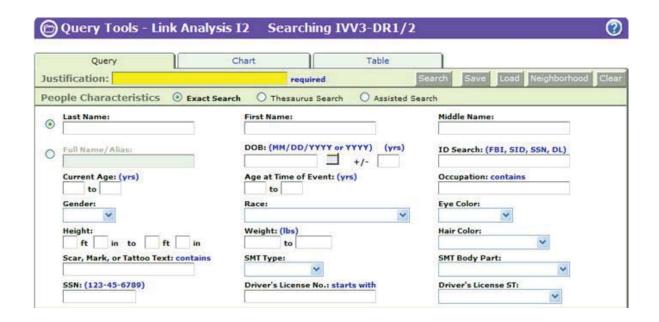
#### **Scroll Bars:**

Scroll bars are provided when the information shown on the screen cannot be seen all at once. The horizontal scroll bar enables the user to view items that are not visible to the right or left of the window. The vertical scroll bar enables the user to view items that are not visible on the top or bottom of the window. If there is hidden text, a slider bar will be visible. The hidden text can be viewed by selecting the slider and moving the cursor in the direction of the hidden text, or by selecting the up or down arrows on the slider bar.

This information should be reviewed carefully
for completeness and accuracy. Contact the
agency office for any updates. Permission to
use the information must be obtained before it
is disseminated in any form or used in any

#### Tabs:

The Link Analysis screens have folder tabs along the top of the screens that allow the user to move from one tab to another by using the mouse to click on the desired tab.



#### **Standard Data Entry Fields:**

Data can be entered directly in the field text boxes provided on the screens. Where specific formatting is required, the format will be shown next to the field (for example, date must be entered as "MM/DD/YYYY").



#### **Drop-Down Lists:**

Some fields provide a list of options that may be selected for data entry. To select an option, place the cursor over the arrow and press the mouse button. With the list displayed, select an item from the list by clicking the mouse button with the cursor held over that item; or type the first letter of the item in the field to bring up the item(s) beginning with that letter for selection. Selecting the desired option will close the list and display the selected item in the field. Longer lists include a vertical scroll bar that can be moved to display more options.



#### **Check Boxes:**

Check boxes are used when several options can be selected at one time. Check boxes operate as a toggle (on/off). To select an option, place the cursor over the check box for the desired option and click the mouse button. To deselect the option, the action can be repeated and the box will clear.



#### **Selection Buttons:**

Selection or "radio" buttons allow the user to choose a particular action by clicking on the button to indicate that action has been selected. To select an option, place the cursor over the radio button for the desired option and click the mouse button.



If the button is filled in, the action selected will be performed. By clicking on another button, the first selection will be cleared and the new selection will be selected.

#### **Arrows:**

Arrows allow the user to navigate up and down through Structured, Pawn, and Free Text, as well as Event Reports. If the first record or report is selected, only the down arrow will be available. If the last record or report is selected, only the up arrow will be available.





# Online Help Navigation and Printing

Online Help for the LInX application can be accessed from any LInX screen simply by clicking on the **Help** button [ ] located in the upper right-hand corner of the LInX screen.

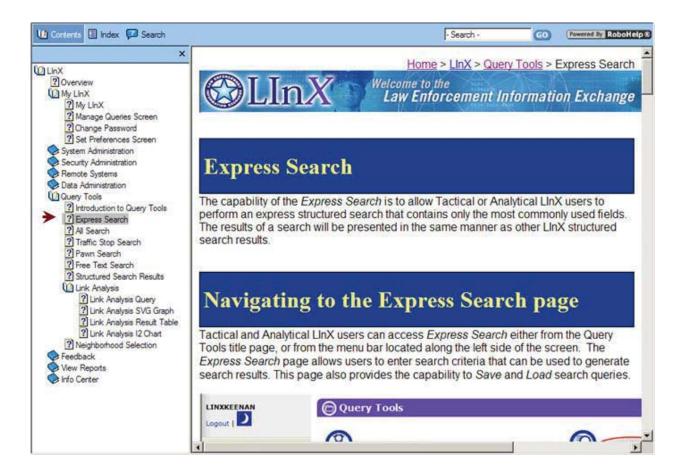
The *Online Help* screen opens in a separate window, and the help topic initially displayed in the viewer will be specific to the screen that launched the request. The user may scroll through the help file for information about the specific topic.

The *Online Help* window also contains a navigation menu to the left of the help topic, with links to other LInX help topics. Using the Help navigation menu, the user may select and display other Help topics without first navigating to the specific application screen associated with the selected topic.

Note that the link to the topic currently displayed is highlighted in the navigation menu.

Clicking on a topic name will highlight the topic in the navigation menu and bring up the applicable topic in the viewer.

The navigation section may be closed by clicking on the "X" in the upper right-hand corner of the <u>navigation menu</u>. This will enable the viewer to make use of the full *Online Help* window.



#### **SEARCHING ONLINE HELP FILES**

The Search bar located directly above the navigation menu and viewer provides a number of ways for a user to search through the *Online Help* files.

#### Contents

The *Contents* selection displays the Online Help Table of Contents (TOC) of available help topics. A user may access any topic in the TOC by clicking on the topic name.

#### Index

The *Index* selection displays an alphabetical list of keywords, phrases, or headings found in the various help files. The user may click directly on an entry in the list. If the entry is only used in one topic, that topic will be displayed in the viewer.

If the entry is used in multiple topics, when the user clicks on the entry, a pop-up list of all topics containing the entry will be displayed. The user may select the specific topic, which will then be displayed in the viewer.

#### Search

The *Search* selection provides a text box in which a user may enter one or more terms to search for. There is also a check-box option to highlight the search results, which is the default setting.

All topics that contain the search criteria will be returned. The user may click on one of the returned topics, which will display the topic in the viewer. If the "Highlight search results" box was checked, all matches to the search criteria within the topic will be highlighted.

**Note**: Commonly used words, such as "a", "the", "with", etc. are ignored in all searches.

Alternatively, a user may conduct a search from the search bar located above the viewer window, by entering a search term and clicking the **GO** button. A list of topics containing the search criteria will be displayed.

#### PRINTING ONLINE HELP FILES

An Online Help file may be printed by right-clicking anywhere within the help file, and selecting *Print* from the pop-up menu.

**Note**: Selecting *Print* from the browser's File menu will <u>only print the first page</u> of the help file.

# My LInX

The *My LInX* screen provides the user with access to various LInX user configuration options, including changing their LInX Password; updating Challenge Question answers, managing saved LInX search queries; setting and saving User Preferences; viewing LInX User Agreements; and viewing the status of, and setting up LInX Neighborhoods.

The *My LInX* screen can be accessed from the menu bar located along the left side of the screen. This menu option is available to all LInX users.

# Navigating to the My LInX Screen

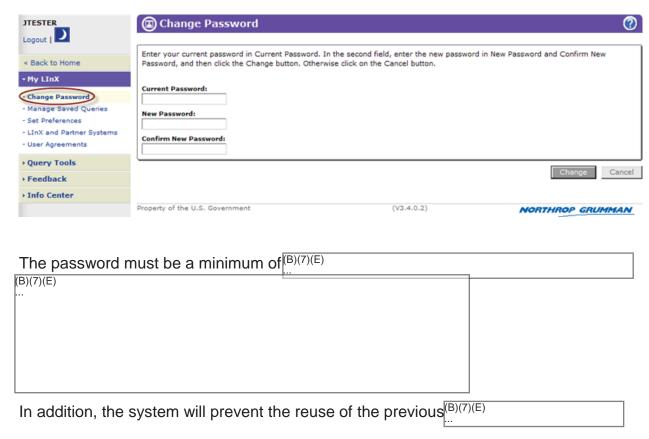
Tactical and Analytical LlnX users can access *My LlnX* from the menu bar located along the left side of the screen. The user will automatically be taken to the *My LlnX* screen. The options available from the *My LlnX* screen will be dependent on the user's privileges. The options include:

- Change Password
- Challenge Questions
- Manage Watch List
- Set Preferences
- Neighborhoods
- User Agreements



# Change Password Screen and Password Requirements

The *Change Password* option is available to all users, and allows the user to select a new password for access to the LInX system:



To change a password, the new password should be entered into the *New Password* field and reentered into the *Confirm New Password* field. To implement the new password, the **Change** button should be selected.



If the new password does not meet the password contents requirements, or if the password was not typed correctly in the *Confirm Password* field, an error message will result prompting correction of the error. When the password has been successfully changed, the user will be taken to the *Info Center* screen.

**Note**: LlnX user passwords expire every **60** days.

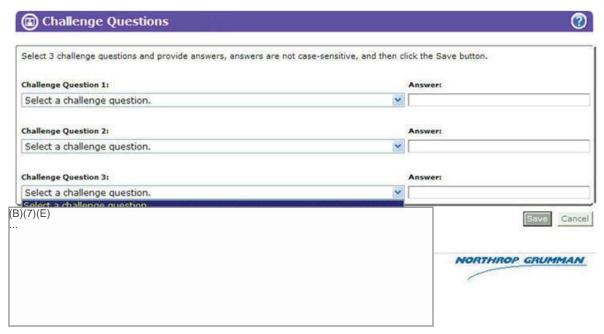
# **Challenge Questions**

When the user initially logs into LInX, the first screen that is presented is *Challenge Questions*. Users will be required to select challenge questions and provide answers to them upon initial login to the system, or after a password reset. This functionality provides the basis for additional capabilities, such as two-factor authentication at login or self-service resetting of forgotten passwords.

Three sets of 10 Challenge questions are presented, from which the user must

select 3 questions to answer. The following conditions apply:
(B)(7)(E)

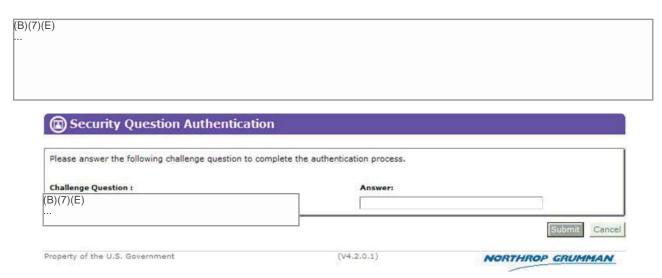
The following image shows the *Change Challenge Questions* screen with an example of the 10 questions available for selection.



After all 3 Challenge Questions have been answered, click the **Save** button to save the responses.

A user has the option to update answers to Challenge Questions by selecting Change Challenge Questions from My LInX. All the same rules for initially answering the Challenge Questions apply to updating the Challenge Questions.

#### **User Challenge**



#### **User Lockout**

The user will hav ttempts to answer the Challenge Question correctly before being locked out of the system. If the user is locked out, the user's Security Administrator will need to unlock the user's account.

Change Challenge Questions

# Manage Watch List

The *Manage Watch List* option under *My LInX* is only available to users with the Analytical and/or Tactical Search privilege, and whose accounts have not been disabled.

This capability allows users to view a list of their saved queries, watch selected saved queries, see queries that have been shared with them, get notifications when new information is available, and view the new information.

### **Saved Queries**

(b)(7)(E)

Queries may be saved directly from any of the following LInX screen:	Qu	ieries i	may b	e saved	directly	/ from	any	of the	follo	wing	LInX	screen
--	----	----------	-------	---------	----------	--------	-----	--------	-------	------	------	--------

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···		

Pages 38 through 43 redacted for the following reasons:

(b)(7)(E), Pages (38) - (43)

...

#### Shared Watches

Regional Administrators have the capability to assign watches they have created to other users from the local system so that those users may receive e-mail notifications when any new records matching the watch criteria are ingested into LInX.

**Note**: Saved queries that are not being watched can also be shared, but will not cause an e-mail notification to be generated.

### Share a Watched Query

To share a watched query from *Manage Watch List*, select the radio button next to the query name, and then click the **Share** button. A *Share Query* dialog screen is opened in a separate window.

**Note**: There may be a delay in the presentation of the separate *Share Query* window, depending on how many users are contained in the user list for the specific system/agency.

When the *Share Query* screen is first opened, the *System* and *Agency* fields are pre-populated with the user's own System/Agency, and a list of active users for the System/Agency are presented in the scroll box below.

Select the appropriate System/Agency for the user(s) with whom the query will be shared, and then click the check-box in front of each user. Clicking the **Apply** button will add the selected users to the *Shared With Users* field.

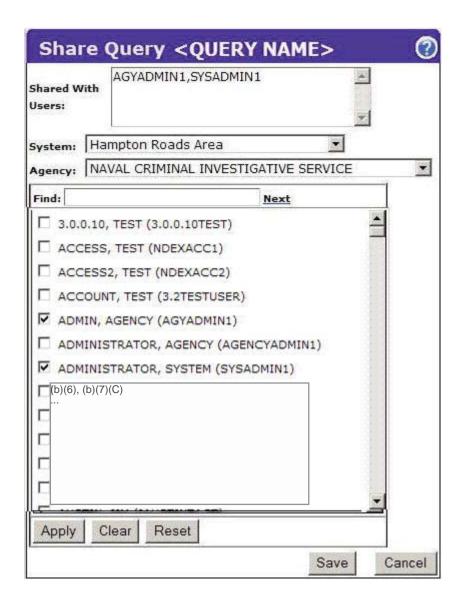
**Tip**: the *Find* field and **Next** link can be used to find the desired user in the user list without using the scroll bar.

If users from multiple systems/agencies are to be included in the distribution, click the **Apply** button <u>before</u> switching to the next system/agency; otherwise, the first selections will not take effect.

After all user names with whom the watched query is to be shared have been added to the *Shared With Users* field, click the **Save** button. A pop-up message states that the "*Query has been saved*". Click **OK** to close the pop-up message.

The *Manage Watch List* is re-displayed, and the shared watch now has a green check mark under the *Share* column.

Clicking **Cancel** instead of **Save** will close the *Share Query* window and return the user to the *Manage Watch List*, with no change to the query, and the radio button still selected.



Users will be able to see who shared a query with them by hovering the mouse over the green check mark in the *Share* column. Users may run the shared query; however, they cannot delete, configure, or re-share queries that have been shared with them.



#### Cancel a Shared Watch

The owner of a shared watch may cancel sharing by selecting the radio button next to the query name, and then clicking the **Share** button. A *Share Query* dialog screen is opened in a separate window.

Click the **Clear** button in the *Share Query* window to remove all user names in the *Shared With Users* field.

**Note**: If the **Clear** button has been selected in error, the **Reset** button may be used to restore the selected users from the last time the <u>shared</u> <u>query was saved</u>.

Click the **Save** button. A pop-up message states that the "Query has been saved". Click **OK** to close the pop-up message.

The *Manage Watch List* is re-displayed, and the query no longer has a green check mark in the *Share* column; however, it may still be saved/watched.

Clicking **Cancel** instead of **Save** will close the *Share Query* window and return the user to the *Manage Watch List*, with the query still being shared and the radio button selected.

### **Watch Notifications**

Users are notified when new information is received into LlnX for any query that is being watched; including shared watches.

### E-mail Notification

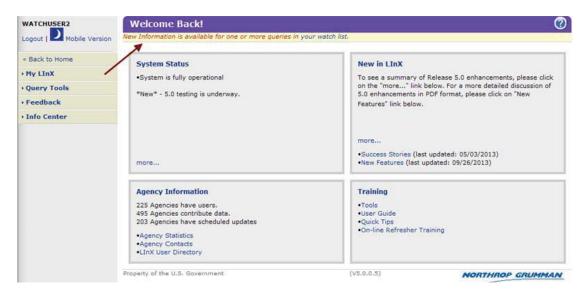
When new information is received into LInX for any query that is being watched, the user receives an e-mail from **LInX Watch List Notification** stating "One or more of your watched queries have new results available."

**NOTE**: A user must have a valid e-mail address in LlnX (System Administrators can check user profiles in *Find/Edit User* under the *System Administration* menu) in order to receive Watch Notifications.



### Login Notification

When new information is available for one or more queries in the watch list, a notification message stating "New Information is available on one or more queries in you watch list." is displayed under the *Home* page banner when the user logs in.



The words "your watch list" at the end of the notification message are linked, and when clicked on, will take the user directly to the Manage Watch List screen.

#### New Results Indicator

A red asterisk (\*) indicator on the *Manage Watch List* screen is displayed next to each watched/shared query that has new information available.



Clicking the link of the query name that has new information available automatically runs the query. When the user returns to *Manage Watch List*, the new information indicator (\*) has been reset, and is no longer displayed for the query that was just run. The query continues to be watched until expired, or canceled by the user/owner.

## **Set Preferences**

The Set Preferences options allow a user to customize the following settings:

### Startup Menu

When a user saves their startup screen option, the system will redirect to that screen after the user's login. The *Welcome* page is the default startup page. Other options available as a startup page are *Traffic Stop Search*, *Express Search*, and *All Search*.

The System Going Down and Password Expiring messages that are available on the Welcome page will appear in the startup screen, if applicable.

#### Search Results Increment

A user can set their search result increment for any structured searches. After a user has chosen and saved their option, the system will display any structured search results up to the preferred search result limit, and any subsequent search result sets.

### Default Tactical Display Mode

LInX users can set their Display Mode to either a *Day* or *Night* option. When a user saves their display mode option, the system will display any Tactical search-related page in that mode. The *Day* mode is the default display mode.

### Session Time-out Behavior

A user can activate the audible time-out alert by selecting the *Audible Alert* check-box. Note that a speaker is required, and the volume should not be muted.

By selecting the *Take Focus* check-box, the Session Time-out pop-up alert message will take the focus on the user's screen.

#### Default Link Analysis Tool

The user has the option of setting either Link Analysis I2 or SVG as their default Link Analysis tool. When the user selects the **Link Analysis** button to move structured (Traffic, Express, All Search) or Free Text search results

to Link Analysis, the selected results will be displayed in the default Link Analysis tool.

**Note**: This option is not available for Tactical-only users.

#### Search Results per Page

The user may set the number of search results to be displayed on a single page before moving to the next page. Options are 15, 50, or 100 results per page.

#### Area of Responsibility

(b)(7)(E)

#### Search Results Columns

The user may customize the columns that are displayed when structured results are returned by selecting each of the field headings to be shown in the results list.

### **Default Search Options**

The user has the ability to select and set default search options for Name format and Name search type, as well as Address and Free-Text Search types. The settings selected will be the default options when the user accesses any of the query pages, with the exception of *Traffic Stop Search*, which always conducts a Full Name/Alias - Exact search.

Note: The selected settings will apply to all analytical structured or free-text search queries, as applicable; however, the Name search format and the Search Types may be interactively changed on the individual search screens, as desired.

### Name Search Fields

The user can set the default Name Search <u>format</u> for Analytical structured queries (e.g., *Express Search*, *All Search*, *Link Analysis*) by selecting either the *Last/First/Middle* name format or the *Full Name/Alias* format.

### Name Search Type

The user can set the default <u>Name Search Type</u> for Analytical structured queries (e.g., *Express Search*, *All Search*, *Link Analysis*) by selecting *Exact*, *Assisted*, or *Thesaurus*.

The *Exact* search will limit the search results to those records that <u>exactly</u> match the name entered in the search field (including aliases).

The Assisted search expands the search results to include not only structured records that exactly match the name entered, but also those that contain similar matching names to the search criteria. Results will be returned for exact spelling and similar spelling matches.

The *Thesaurus* search expands the search results to include records containing names that are variations of, or commonly associated with one or more of the names specified in the search criteria. For example, when the *Exact Name* search format is used, additional records may be returned that contain the first name of 'Will', 'Willie', 'Bill', or 'Billy' when the first name search of *William* is entered. If the *Alias/Full Name* format is used, the previous examples can be found in any of the name fields (Last, First, Middle, or Alias).

### Address Search Type

The user can set the default <u>Address Search Type</u> for Analytical structured queries (e.g., *Express Search*, *All Search*, *Link Analysis*) by selecting <u>Exact</u> or Thesaurus.

### Free Text Search Type

The user can set the default <u>Free Text Search Type</u> for Analytical structured queries (e.g., *Express Search*, *All Search*, *Link Analysis*) by selecting <u>Exact</u> or Thesaurus.

**Note**: This option is not available for Tactical-only users.

### Link Analysis Incident Type

The default Incident Type for *Link Analysis* provides a LInX user with the ability to set up a filter and have it apply to all Link Analysis queries without having to re-specify the incident type criteria every time. The user can set the default Link Analysis Incident Type(s) by selecting one, multiple, or all Incident types to search.

The filter only affects initial queries, and subsequent walks of the results may bring back information from any incident type.

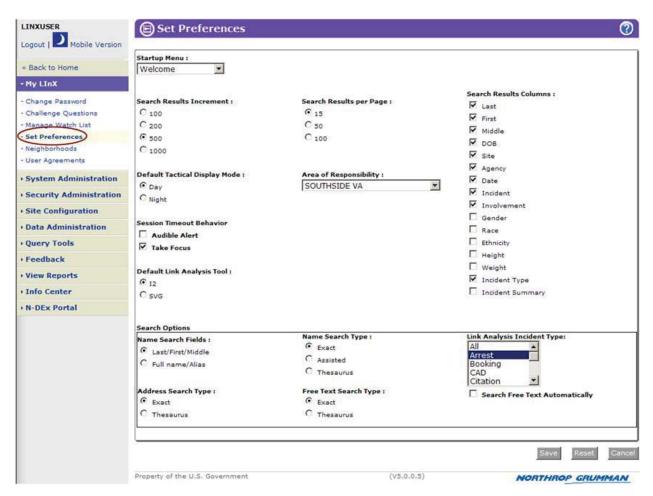
**Note**: This option is not available for Tactical-only users.

#### Search Free-Text Automatically

By selecting this feature, a *Free-Text Search* is automatically run in the background of any *All Search* query, based on the structured search criteria.

**Note**: This option is not available for Tactical-only users.

The following provides a sample screen for *Set Preferences* options.



After making the desired changes, click the **Save** button to set the new default options. The **Reset** button will reset all preferences to the system defaults. Clicking the **Cancel** button will return the user to the *My LlnX* menu page without saving any changes.



## Neighborhoods

The *Neighborhoods* screen allows a user to view the system(s) to which they have access for data searches. Systems available for access by the user are dependent upon the following conditions:

- Whether or not the user has accepted the Remote Access Agreement.
- If the Agency to which the user belongs has been denied availability to a particular system by the System Administrator.

## Navigating to Neighborhoods

Tactical and Analytical LlnX users can access *Neighborhoods* either from the *My LlnX* title page, or from the menu bar located along the left side of the screen.

The user may review the list of systems to which they have access by selecting *Neighborhoods* under *My LInX*.

The following image is a sample of the *Neighborhoods* screen. (E) Neighborhoods ? Logout | Mobile Version Status of LInX and Partner Systems : < Back to Home Mug Shots Structured **Event Report** Availability Id Type Printing Search Export Search Access Printing - My LInX LINXNCR LINX - Change Password DDEX LINX - Challenge Questions LINXHR LINX - Manage Watch List LINXGC LINX Set Preferences LINXSE LINX ( Neighborhoods ) LINXNC LINX LINXNW LINX • Query Tools LINXNM LINX Feedback LINXCA LINX · Info Center LINXHI LINX LINXNE LINX ICEPIC PARTNER AZEAST PARTNER Neighborhood is currently set to LINXNCR Click for "My Neighborhoods" You have ACCEPTED the Remote Access Agreement .

If the user has not accepted the Remote Access Agreement, only the user's "Home" system will be listed under *Status of LInX and Partner Systems* as being available for data access. Only the agencies within that system will be available for data searches by the user.

In addition, the statement at the bottom of the screen will read "You have **REJECTED** the Remote Access Agreement". Clicking on the Remote Access Agreement link will

open the contents of the agreement in a separate window, and provide the user with the choice to accept (I Agree) or reject (I Do Not Agree) the agreement. Once a selection is made, the Remote Access Agreement window will close automatically.

If the Remote Access Agreement had been previously rejected, accepting the agreement will cause the *Status of LInX and Partner Systems* listing to update to include other systems available to the user in addition to their "Home" system.

## Accessing My Neighborhoods

The *Click for "My Neighborhoods"* link opens the *Neighborhood Selection* menu in a separate window where the user has the ability to create, select, view, edit, and delete neighborhood contents, as well as set a default neighborhood against which all subsequent searches will be run, until a different neighborhood selection is made. Only the systems listed in the *Status of LInX and Partner Systems* pane will be displayed in the *Neighborhood Selection* menu.

Additional help for *Neighborhood Selection* can be found within the *Neighborhood Selection* functionality by clicking on the **Online Help** button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.

## Map Selection

An alternative to selecting agencies using the Neighborhood Selector is to use the *Map Selection* feature. Access to *Map Selection* can be accessed from any search page except *Traffic Stop Search*, by clicking on the *Change Map Region* link. Further discussion of this feature is covered under the *Query Tools Neighborhood Selection* topic.

## **User Agreements**

A number of Access/Usage Agreements have been incorporated into the LInX system for LInX usage, as well as for accessing specific data and/or LInX functionality.

## **Navigating to User Agreements**

Tactical and Analytical LInX users can access *User Agreements* either from the *My LInX* title page, or from the menu bar located along the left side of the screen.



The date and time a user accepts or rejects any of the LInX User Agreements is logged and saved in LInX. The user may review any of the requisite user agreements by selecting *User Agreements* under *My LInX*. The User Agreements screen displays a list of individual agreements that require the user's acceptance in order to utilize that segment of the LInX application. The screen also shows the state of each agreement (i.e., **Accepted**, requiring **Review**, or **Rejected**), and the date and time the specific agreement was accepted or rejected.

By clicking on the name of a specific User Agreement, the contents of that agreement is presented in a separate window, where the user may review the contents of the User Agreement, as well as update their status by accepting or declining the agreement.

### LInXUserManual

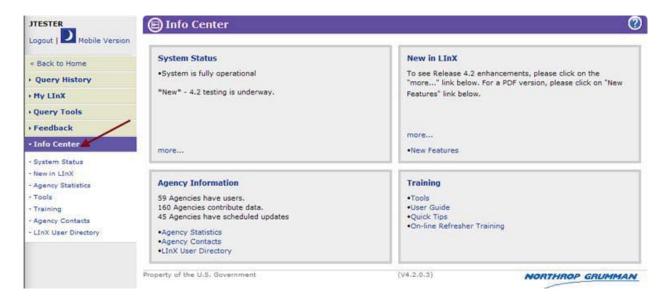
By selecting the **Close** button [X] in the upper right-hand corner of the pop-up window, the window is closed without any changes being made to the user's status for that User Agreement, and the user is returned to the *User Agreements* status screen.

The following is a list of the *User Agreements* and an explanation of their purpose:

- LInX Rules of Use terms of use regarding access to and usage of data stored in LInX
- Remote Access terms of use regarding access to data on remote LInX and Partner systems
- I2 Usage terms of use regarding the export of I2 Chart data transfer outside of LInX
- KML Export terms of use regarding the export of KML data transfer outside of LInX
- Printing from LInX terms of use regarding the saving and printing of mug shots and Event Reports from LInX

## **Info Center**

The *Info Center* screens provide a way for users to find out the latest information regarding the LInX system. This screen is also the default LInX Home Page. The Info Center screens can be accessed by clicking on the navigation menu option along the left side of the screen.



# **System Status**

The *System Status* area contains information about the system, such as when the system will be down for maintenance and/or upgrades.

### **System Status**

System is fully operational

#### Summary

IVV3 LInX is now available on the Internet!

Details

# New in LInX

The *New in LlnX* area contains information about the system and/or Governance Board issues.

The *New in LInX* section on the *Info Center* screen contains a summary statement of what is new, as well as links to access additional information.

Clicking on either the *New In LInX* heading or the more . . . link within the *New in LInX* section will take the user to a text page, divided into *Summary* and *Details*. The *Summary* contains the same information that is displayed in the *New in LInX* section of the *Info Center* screen. *Details* contains expanded information regarding the summary statement.



LInX upgraded to v3.0.1 (For detailed description, please click on "more" below.)

Details

Property of the U.S. Government

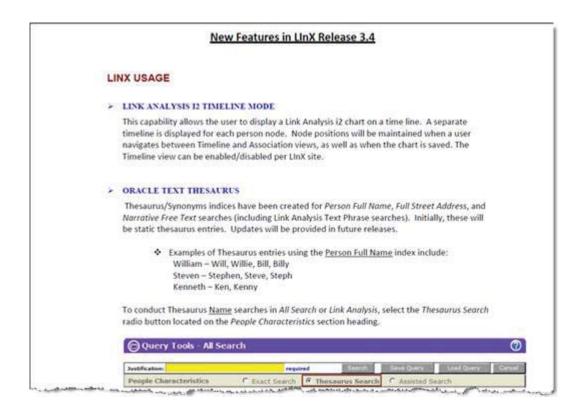
(V3.1.0.3)

NORTHROP GRUMMAN

Clicking the Back to Home link on the Navigation Menu along the left side of the screen returns the user to the Info Center home page.

In addition to the detailed text discussion found within *New in LInX*, there is also a link to New Features, which opens a PDF in a separate window. This PDF contains further information on the new features and enhancements contained in the most recent LInX application release.

**②** 



The New Features PDF can be printed or saved by the user.

## **Agency Statistics**

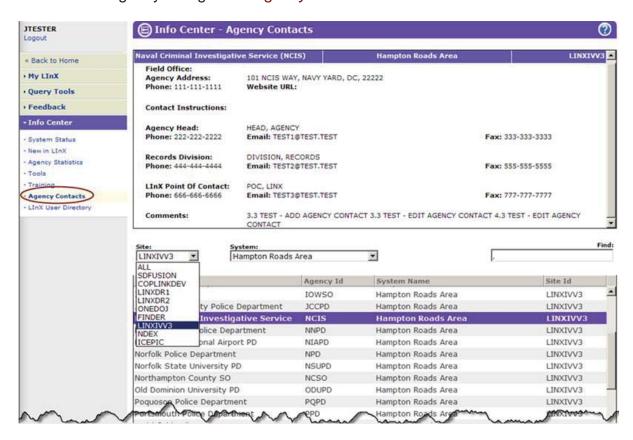
The *Agency Statistics* page shows the user which agencies have data in the system and when the data was last updated. Most agencies send updates every night.



## **Agency Contacts**

The *Agency Contacts* area displays agency address, agency head, agency records division, and agency LlnX contact information. Each agency systems administrator is responsible for updating this information.

**Note**: The Agency to which the user belongs will automatically be highlighted in the Agency listing when *Agency Contacts* is selected.



A user may look up agency contacts for Sites other than their own by clicking on the drop-down arrow of the *Site* field, found between the Information and Selection windows, and then clicking on the desired Site.

A user may look up agency contacts for Systems other than their own by clicking on the drop-down arrow of the *System* field, found between the Information and Selection windows, and then clicking on the desired System.

A user may use the *Find* text box to search for an Agency Name in the selected *Site/System*. In the *Find* text box, start typing the name of the agency. As letters are entered in the text box, all Agency Names that contain the sequence of letters entered

### LInXUserManual

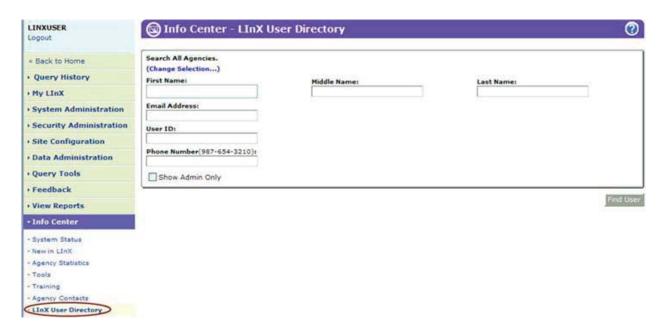
are highlighted in the Selection window; however, the Agency Contact Information window will not update. If the desired name is shown, clicking on it will select it and load the contact information in the Information window. If the **Enter**> key is pressed, the Selection window will highlight the first agency name that contains the entered criteria, and the Information window will re-display with the information for that agency.

## LInX User Directory

The *LInX User Directory* allows users to query LInX and find user contact information for an individual, an agency, all agencies within a System, or the entire LInX regional system. This area is built as a convenience to encourage collaboration and deconfliction amongst users in the LInX regional community.

Any of the following fields can be used to search for a LlnX user in the system:

- User Agency [via the (Change Selection ...) link]
- First Name
- Middle Name
- Last Name
- E-mail Address
- User ID
- Phone Number
- Show Admin Only (check box)



The default is to search all systems/agencies. By selecting the (Change Selection ...) link, an *Agency Selection* menu is presented where the user can select the desired System(s) and/or Agency(ies) to be searched. To leave the *Agency Selection* menu without making any changes, select **Close** or **Cancel**. To save the selected System(s)/Agency(ies), select **OK**.

#### LInXUserManual

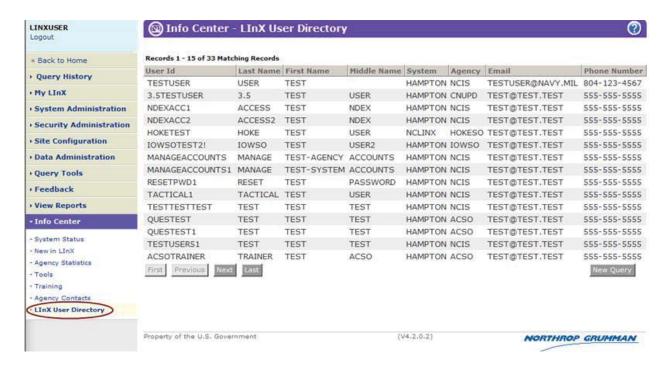
A check-box is available to only return those users identified as a LInX Administrator in their account.

To see all users in all systems/agencies, select **Find User** without entering any additional search criteria. If attempting to find a specific user, only one field is required to initiate a search.

Find User

A list of users that match the search criteria is displayed in a new screen, and includes the following information for each user listed:

- User ID
- Name (Last, First, Middle)
- System
- Agency
- E-mail Address
- Phone Number



If the list of users is longer than one page, a user may move through the pages by selecting the **First**, **Previous**, **Next**, or **Last** buttons at the bottom of the result list.

The **New Query** button returns the user to a blank query screen with the default System/Agencies selected to be searched.

# **Tools**

The *Tools* menu option includes a link to the Adobe SVG 3.x download that is required in order to use the Link Analysis SVG functions. Users can also download the Adobe Reader from the Tools screen.

### **Tools**

<u>Install Adobe SVG Viewer version 3.X</u> <u>Download Adobe Reader</u>

# **Online Refresher Training**

The *Online Refresher Training* area of the *Info Center* screen contains online resources, such as PDFs and videos, to provide the user with information about LInX background, LInX functionality, and suggestions on how to conduct the most efficient searches. These topics may be presented in audio/video or PDF format.

Clicking on the *Online Refresher Training* link within the *Training* section takes the user to a list of available online training resources that can be viewed or downloaded. Training materials may include PDF documents and videos.



### Videos:

Either clicking directly on the title link of the video, or clicking **View** will launch the video in a separate video viewing application window (e.g., Windows Media Player), and it will start playing once it has buffered.

Clicking **Download** will open a pop-up window asking the user if the file is to be opened or saved. Selecting **Open** will download the video to a temporary folder (which may take a short time, depending on the size of the video), then launch the video in a separate video viewing application window (e.g., Windows Media Player). Selecting **Save** will

open a pop-up window asking the user for the location of where the video is to be saved. Clicking **Cancel** will terminate the download process and close the pop-up window.

### **Documents**:

Either clicking directly on the title link of the document, or clicking **View** will open the PDF document in a separate browser window, which can be printed or saved by the user.

Clicking **Download** will open a pop-up window asking the user if the file is to be opened or saved.

Selecting **Open** will download the document to a temporary folder, then open the PDF document in a separate browser window, which can be printed or saved by the user. Selecting **Save** will open a pop-up window asking the user for the location of where the document is to be saved. Clicking **Cancel** will terminate the download process and close the pop-up window.

These topics may be presented as audio/video or PDF. Once downloaded, the audio/video file is opened in a separate Windows Media Player window.

## **Query Tools Screen**

To have access to LInX query screens, the user must have been assigned an Analytical role, Tactical role, or both Analytical and Tactical roles in LInX.

### **RESTRICTIONS ON THE USE OF LINX DATA**

The data from the LInX system is not considered and should not be used for original documentation for probable cause from any participating agency. Use of the data is controlled by the *LInX Rules of Operation* for each regional LInX system. Contact you system administrator for a copy.

### **PERSON-CENTRIC**

When the data from the various agencies has been "pushed" to the LInX data warehouse, it becomes available for searching purposes. **LInX is person-centric,** which means that search results will return information on the individual associated with the search criteria. For example, a search on a vehicle will return a list of persons that may be associated with an incident involving that vehicle. Search rules have been built into the system to provide likely matches for the user to review.

### **SEARCH PROCESS**

The search process is designed to produce these results:

- A search on Persons, Vehicles, Addresses, Property, Incidents and/or Phone numbers will bring back a list of matches.
- The default source for the results is <u>all</u> local agencies, meaning that the search includes all data in the data warehouse from all local system sources.
- By selecting one or more source agencies for the search process rather than all agencies, the results will be filtered to reflect only the data from the selected sources.

Some person names may appear more than once in the search results. This occurs because each incident/event in which a person has been involved will appear in the result list. In some instances, the person may be listed more than once even in a single event if that person was listed as having more than one role in the single event.

## Navigating to Analytical Screens

Navigation to the search functions of LInX can be done by clicking *Query Tools* on the menu bar located on the left side of any system processing screen. This will bring up the main *Query Tools* screen:



Only authorized users will be allowed to access the query screens. All other users will receive an error message if access is attempted. Access is provided as follows:

- Tactical: Traffic Stop Search, Express Search, All Search, Pawn Search
- Analytical: Express Search, All Search, Pawn Search, Free Text Search, Link Analysis
- Tactical and Analytical: Traffic Stop Search, Express Search, All Search, Pawn Search, Free Text Search, Link Analysis.

# Selecting Type of Analysis to be Performed

The type of analysis to be performed can be selected by choosing the following icons from the *Query Tools* menu:

**Traffic Stop Search of records -** search screen contains only those fields that are essential in a Traffic Stop situation.



**Express Search of records -** search screen contains only the most commonly used search fields.



**All Search of records -** search screen contains a wide variety of fields, allowing the user to refine and filter search criteria.



Pawn Search of records (available as a separate User's Guide) - search screen contains the fields necessary to search the pawned property database.



Free Text Search of records (available as a separate User's Guide) - search screen contains the fields necessary to search documents and narratives contained in LInX.



Link Analysis search of records (available as a separate User's Guide) - allows user to view and manipulate search results in a graphical representation using either Adobe SVG or Adobe I2 iXv.





## **Query History**

The *Query History* function enables a user to keep track of, and recall previous queries made during the current session.

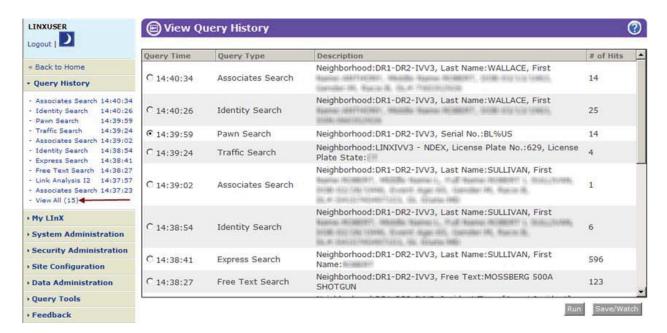
The *Query History* list, available in the Navigation menu located along the left side of the screen, can be toggled on and off by clicking on the *Query History* link. There must have been at least one query run during the current login session in order for *Query History* to produce a list.

Query History can be accessed from any page in LInX. By clicking on Query History, a drop-down list of the last 10 queries made during the current session is displayed in the Navigation menu, in descending order, beginning with the most recent search. The list also includes the type of query made (e.g., Express Search, Link Analysis, Possible Associates, Identity Search, etc.), and the time each query was made.



Some of the features of Query History include:

- Can be accessed from any page in LInX
- There must have been at least one query run during the current login session in order to produce a list
- The list of the last 10 queries executed can be expanded or collapsed by clicking on the Query History link in the Navigation menu
- Holding the cursor over a query entry in the list will display a pop-up box containing the query search criteria, including the neighborhood that was searched
- Clicking on a query entry from the list automatically reruns the query and takes the user to the results of that query
- If more than 10 queries have been run during the current session, the total number of queries is shown in parentheses next to the View All link at the bottom of the Query History list
- Clicking on View All opens a new window with a detailed listing, including a result count, of all queries run during the current session
- Queries can be saved and configured to be watched from the View Query History screen
- The contents of Query History will only be preserved for the current login session, and will be cleared when the user logs out of LlnX.



The *Query History* function is only preserved for the current session, and will be cleared after the user has logged out of LInX.

# Save and Watch Selected Queries

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Analytical and Tactical LInX users have the ability to save queries, watch saved queries for new information, and load saved queries.

## **Saved Queries**

(b)(7)(E)	
	(b)(6), (b)(7)(C)

Pages 79 through 80 redacted for the following reasons:

(b)(7)(E), Pages (79) - (80)

# Neighborhood Selection

This capability allows users to create areas of interest (Neighborhoods) against which to search, that can be comprised of a set of local and/or remote agencies.

There are two types of neighborhoods: <u>System Defined</u> and <u>User Defined</u>. <u>System Defined</u> Neighborhoods are those neighborhoods created by a Regional Administrator and designated for access by all users of that LlnX system. **Only a Regional Administrator can edit or delete a System Neighborhood**.

A <u>User Defined</u> neighborhood can be a new neighborhood created by a LInX user, or an existing neighborhood that has been customized and saved either under the same or a different name by a LInX user. A <u>User Defined</u> neighborhood is only available to the user that created it.

The search results from query screens will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies. When conducting analytical searches, the default setting is to search all agencies in the local system.

All Neighborhood windows are designed as MODAL windows; meaning that as each successive new Neighborhood window is opened, the new window retains the focus on the screen until it is closed; at which time, the user is returned to the previous window. No action can be taken in any other LInX application window until all Neighborhood windows have been closed.

# **Navigating to Neighborhood Selection**

The *Neighborhood Selection* window can be accessed from *Neighborhoods* under *My LlnX*, as well as from any search page (*Traffic Stop, Express Search, All Search, Pawn Search, Free-Text Search, or Link Analysis*).

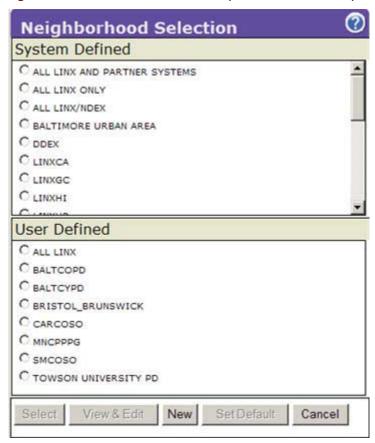
To access the *Neighborhood Selection* menu from any search screen, click the (Change Neighborhood...) link or the **Neighborhood** button on the applicable query page.

**Note**: *Traffic Stop Search* only provides a **Neighborhood** button to access the *Neighborhood Selection* window.

To access the *Neighborhood Selection* menu from *My LlnX*, select *My LlnX/Neighborhoods* from the main menu located along the left side of the screen, then

click on the <u>Click for "My Neighborhoods"</u> link located below the system availability listing.

In all cases, the *Neighborhood Selection* menu is presented in a separate window.



If no neighborhoods are listed, or no neighborhood has been identified as (*Default Neighborhood*), the local agencies of the current LInX system, plus whichever remote system(s) that may be included as default systems by the Regional Administrator, will be the default agency source criteria for all searches.

## Select a Neighborhood

To select an existing neighborhood against which to search, click the radio button next to the desired neighborhood name, then click the **Select** button at the bottom of the *Neighborhood Selection* window. This will cause the *Neighborhood Selection* window to close, and return the user to the window from which *Neighborhood Selection* was called.

The most recent agency selection criteria will persist for subsequent LInX searches that support neighborhood selection within the current login session.

Searching I-95 (Change Neighborhood...)

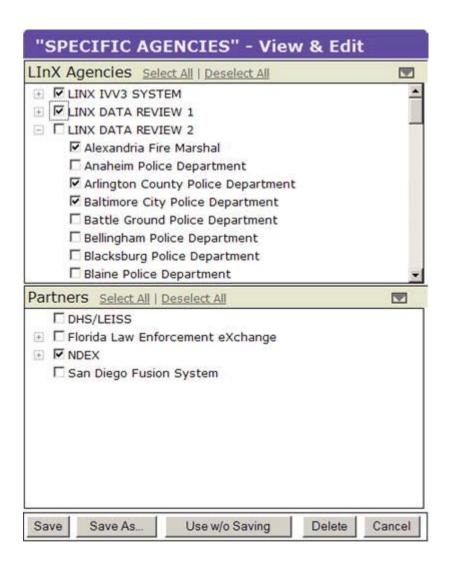
## View and Edit a Neighborhood

## View a Neighborhood

To view a neighborhood, select the desired neighborhood by clicking the radio button next to the neighborhood name, then click the **View & Edit** button at the bottom of the *Neighborhood Selection* window.

View & Edit

A separate *View & Edit* window is open for the selected neighborhood.



The *View & Edit* window contains the list of LInX agencies and Partner systems that currently comprise the selected neighborhood.

**Note**: System names that contain some, but not all of the agencies in the specified neighborhood are initially expanded when the *View & Edit* window is opened. A minus sign next to the system name denotes that the system has been expanded to show the list of agencies it contains. In the above example, <u>LINX DATA REVIEW 2</u> has been expanded to show that one or more agencies from that system are included in the selected neighborhood (denoted by a check-mark next to each applicable agency name). Scrolling through the list is necessary to see all selected agencies in the system.

All agencies contained in <u>LINX IVV3</u> and <u>LINX DATA REVIEW 1</u> are included in the selected neighborhood, as denoted by the check mark next to each system name. Each system can be expanded by clicking on the plus sign next to the system name to show the list of agencies contained within the respective system.

## Edit a Neighborhood

A LInX user has the capability to customize their <u>own</u> existing neighborhood(s) by adding or removing available agencies and/or Partner systems, then saving the edited neighborhood under the same or a different name.

To edit a neighborhood, click the radio button next to the desired neighborhood name, then click the **View & Edit** button at the bottom of the *Neighborhood Selection* window. A separate *View & Edit* window opens for the selected neighborhood.

The *LInX Agencies* pane, located at the top of the window, contains a list of all LInX systems/agencies available to the user. The *Partners* pane, located at the bottom of the window, contains a list of all Partner systems available to the user.

The user's "Home" system can be found at the top of the agency selection list of *LInX Agencies*, followed by all additional LInX systems, listed alphabetically.

To view the agencies already included in the neighborhood, expand each of the LInX systems. The agencies that have a check mark next to their name are already included in the neighborhood.

## Add/Exclude an Agency

To **select a LinX agency** or **Partner** to be added to the neighborhood, check the option box next to the agency name in the *LinX Agencies* section or the Partner name in the *Partners* pane.

<b>I</b> ✓ Ches	sterfield County Police Department (CCPD)
	DEx Law Enforcement National Data Exchange Department of Justice
	N-DEx State and Local Agencies

**Note**: The systems listed under *Partners* can be added or removed separately from the agencies listed under *LInX Agencies*.

To **exclude an agency** or **Partner** system from the selected neighborhood, deselect the option box next to the agency name in the *LInX Agencies* pane or the Partner name in the *Partners* pane.

☐ Chesterfield	County	Police	Department	(CCPD)
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□ N-DEx Law Enforcement National Data Exchange
☐ Department of Justice
□ N-DEx State and Local Agencies

#### Add/Exclude and Entire Site

To **include all agencies within a LInX site**, check the option box next to the site name in the *LInX Agencies* pane.

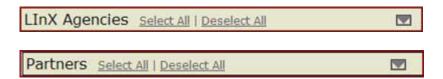
### □ LINXIVV3

To **exclude all agencies within a LInX site** from the selected neighborhood, deselect the option box next to the site name in the *LInX Agencies* pane.



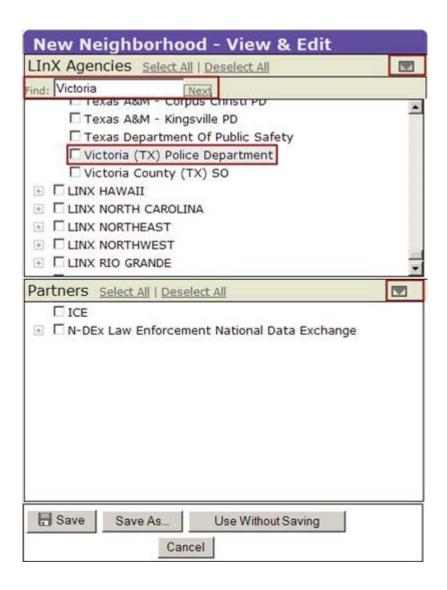
#### Select/Deselect All

When the New Neighborhood *View & Edit* window is initially displayed, all available agencies and Partners are deselected. To easily select all the agencies and/or Partners, click the **Select All** link located next to the *LInX Agencies* and/or Partners headings. To deselect all the agencies and/or Partners, click the **Deselect All** link located next to the *LInX Agencies* and/or *Partners* headings.



### Finding an Agency

To locate an agency in *Neighborhood Selection* when the user is unsure of the system to which the agency belongs, click the envelope to the right of the *LInX Agencies* or *Partners* headings to display a *Find:* text box. Enter some or all of the agency name, then click <u>Next</u>. The system containing the first occurrence of the name will be expanded and the agency highlighted. If the highlighted agency is not the agency being sought, continue to click the **Next** link until the correct agency is found.



### Save a Neighborhood

Once editing of the neighborhood is complete, the user may save the neighborhood using the existing neighborhood name by clicking the **Save** button located at the bottom of the *View & Edit* window, which will close the *View & Edit* window and return the user to the *Neighborhood Selection* window.

Alternatively, the user may save the edited neighborhood with a new name, thus keeping both versions of the neighborhood, by clicking the **Save As** button located at the bottom of the *View & Edit* window, which will launch the *Save As* dialog window. Enter the name under which the neighborhood is to be saved in the *New Name* text box, and click the **Save** button. Clicking the **Cancel** button will return the user to the *View & Edit* window without saving any changes.



If the neighborhood has been saved with a new name (and not designated as System Defined), the selection will automatically be created and added to the <u>User Defined</u> section of the *Neighborhood Selection* window.

The user may also choose to replace an existing neighborhood with the newly edited neighborhood by selecting a neighborhood name from the *Existing Neighborhoods* box within the *Save As* dialog window. When an existing neighborhood name is selected, the name is populated in the *New Name* text box. By clicking the **Save** button, a confirmation box is presented. Click **OK** to continue to save the neighborhood with the selected name, or click **Cancel**, which will return the user to the *Save As* window without saving any changes.



**Note**: If the user is a Regional Administrator, the neighborhood can be saved as a <u>System Defined</u> neighborhood by selecting the *Available to all LInX users* checkbox. The neighborhood can also be set as the system default neighborhood by selecting the *System default* check-box. Only Regional Administrators are authorized to create or modify <u>System Defined</u> neighborhoods; therefore, the *Available to all LInX users* check-box is not available in the **Save As** window if the user is not a Regional Administrator.

### **Use Without Saving**

The LInX user has the capability to edit a neighborhood and execute a search using the edited version of the neighborhood without actually saving the neighborhood.

After all changes have been made to the selected neighborhood, click the **Use Without Saving** button located at the bottom of the *View & Edit* window. A Custom (Temporary Neighborhood) selection will automatically be created and added to the <u>User Defined</u> section of the *Neighborhood Selection* window.



Click the radio button next to Custom (Temporary Neighborhood), then click the **Select** button at the bottom of the *Neighborhood Selection* window. This will cause the *Neighborhood Selection* window to close, and return the user to the window from which *Neighborhood Selection* was called. The **Searching Status** on any query screen will reflect that the **Custom** neighborhood will be searched.

Searching Custom (Change Neighborhood...)

The Custom (Temporary Neighborhood) will persist for subsequent analytical LInX searches that support neighborhood selection within the current login session.

## Create a New Neighborhood

To create a new neighborhood, click the **New** button at the bottom of the *Neighborhood Selection* window. The *New Neighborhood View & Edit* window is presented in a separate window. The *New Neighborhood View & Edit* window contains a list of all Sites, Agencies, and Partner systems available to the user with which to create a neighborhood.

The user's "Home" system can be found at the top of the *LInX Agencies* list, followed by all additional LInX systems, listed alphabetically. Each system is collapsed, but can be expanded to see what agencies are contained within each system (see note under **View a Neighborhood** for additional information).

**Note**: By default, all agencies and Partner systems in the *LInX Agencies* and *Partners* panes are unchecked. The methods used for selecting/deselecting Agencies, Sites, and/or Partner systems is identical to those used to edit a neighborhood (see above for descriptions).

At least one agency must be selected before attempting to save or use a neighborhood. If an agency is not selected, the following error message will be displayed:



Once all agencies to be included in the new neighborhood have been selected, click the **Save As** button, which will launch the *Save As* dialog window. Enter the name under which the neighborhood is to be saved in the *New Name* text box, and click the **Save** button. Clicking the **Cancel** button will return the user to the *View & Edit* window without saving any changes.

**Note**: If the new neighborhood is to be a <u>System Defined</u> neighborhood, then the Regional Administrator should also check the *Available to all LInX users* box before clicking the **Save** button. Only a Regional Administrator can create a System Defined Neighborhood.

After the new neighborhood has been saved, the selection will automatically be created and added to the <u>User Defined</u> or <u>System Defined</u> section of the <u>Neighborhood Selection</u> window, as applicable.

## Delete a Neighborhood

This capability allows a LInX user to delete any of their <u>own user-defined</u> neighborhoods. To delete a neighborhood, click the radio button for the desired neighborhood, then click the **View & Edit** button at the bottom of the *Neighborhood Selection* window. The *View & Edit* window for the selected neighborhood is opened in a separate window. When the **Delete** button at the bottom of the *View & Edit* window is selected, a pop-up confirmation window is presented. Clicking the **Cancel** button will close the confirmation window without deleting the neighborhood. Clicking the **OK** button will delete the selected neighborhood and return the user to the *Neighborhood Selection* window.



**Note**: Only a Regional Administrator can delete a <u>System Defined</u> neighborhood.

## Set Default Neighborhood

The default neighborhood for all queries is all local agencies of the current LInX system, plus whichever remote system(s) that may be included as default systems by the Regional Administrator.

The LInX user has the capability to set any <u>System Defined</u> or <u>User Defined</u> neighborhood as their default neighborhood by selecting the radio button for that neighborhood, then clicking the **Set Default** button. The designated neighborhood will remain set as the default neighborhood for all subsequent searches for the current and future sessions, until the user selects another neighborhood to search or sets another neighborhood as the default.



Note: Setting a default neighborhood is not the same as selecting a neighborhood to be searched. Any available neighborhood can be searched, even if it is not the default neighborhood.

## Map Selection

An alternative to selecting agencies using the *Neighborhood Selector* is to use the *Map Selection* feature, which provides an interactive map to specify a geographic area to search. *Map Selection* can be accessed from any search page except *Traffic Stop Search*, by clicking on the *Change Map Region* link. In all cases, the interactive map is opened in a separate window.



## Select a Map Region

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Clicking on the Change Map Region link launches the *Map Selection* window. Two modes are available to help select the granularity of a map area: "Select Mode" and "Drill-down Mode".

### Select Mode

The *Map Selection* window opens in <u>Select Mode</u>, and allows a user to select LInX regions and Federal systems by clicking the applicable "bulls-eye" icons on the map or by selecting the check-boxes below the map that are associated with those regions.

When "bulls-eyes" are highlighted, a check-mark is also placed in the corresponding region's check-box, and cleared when the "bulls-eye" is deselected.

**Note**: Available Federal systems can only be selected by using the applicable check-boxes.

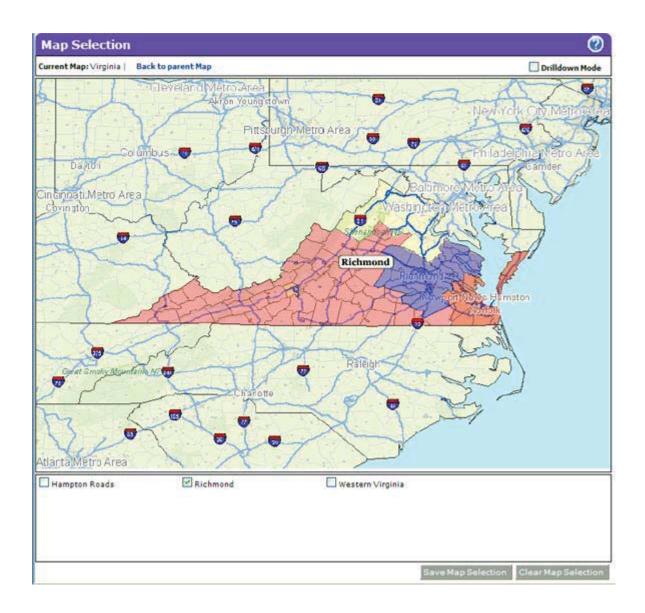
The most recent agency selection criteria will persist for subsequent analytical LInX searches that support neighborhood selection within the current login session.



#### Drill-down Mode

<u>Drill-down Mode</u> allows zooming in on a map region. To access <u>Drill-down Mode</u>, first select the <u>Drill-down Mode</u> check-box in the upper right corner of the map, and then select a LInX region by clicking on the corresponding "bulls-eye" on the map. A zoomed-in version of the map will display geographic groups of counties. Selections can be made by either clicking the color-coded areas on the map, or by selecting the check-boxes associated with those areas below the map. When color-coded areas are selected, a check-mark is also placed in the corresponding area's check-box, and cleared when the "bulls-eye" is deselected.

Clicking the Back to parent Map link at the top left of the map will return the user to the <u>Select Mode</u>.



### Save a Map Selection

After selecting all regions and/or areas to search, click the **Save Map Selection** button in the bottom right corner of the screen. This will close the *Map Selection* window and return the user to the query screen.

When a map selection is saved, the agencies comprised in that selection are included in a temporary *CUSTOM* neighborhood. The *CUSTOM* neighborhood can be accessed, edited, and saved from the *Neighborhood Selector* on any of the query screens, as well as from My LInX/Neighborhoods.

The status of the neighborhood to be searched will be updated on the query screen to show how many map regions will be searched.

## **Print Region Selection Maps**

Region Maps can be printed from either the <u>Select Mode</u> or <u>Drill-down Mode</u> by clicking on the **Print Map** button at the bottom of the *Map Selection* window. Clicking the link will open a separate PDF window containing the map in the selected mode.

The title of the map is displayed at the top of the page. The bottom of each page displays the following information:

- LInX version number
- Page number and total number of pages
- Date and Time the selected map was requested to be printed/saved.

To print the map, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the map. The PDF window can be closed after the map has been printed.

To save the map, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the map. The PDF window can be closed after the file has been saved.

# **Traffic Stop Search**

The capability of the *Traffic Stop Search* is to allow Tactical LInX users to perform a records search containing only fields that are essential in a traffic stop situation. The results of a search will be presented in the same manner as other LInX structured search results.

# Navigating to Traffic Stop Search

Tactical and Analytical LlnX users can access *Traffic Stop Search* either from the *Query Tools* title page, or from the menu bar located along the left side of the screen.



The default *Traffic Stop Search* page contains the basic search fields. The *Traffic Stop Search* page allows users to enter search criteria that can be used to generate search results.

### TRAFFIC STOP SEARCH FIELDS -- BASIC

The following fields are used as the search criteria for the basic *Traffic Stop Search*:

- Justification (highlighted in vellow if required)
- License Plate
- License Plate State

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- Full Name or Alias
- Driver's License No:
- DOB or Year of Birth



The user also has the option to expand the search criteria and include additional fields for submitting a more targeted search by clicking on the **+Additional Search Fields** link or by pressing the **F8** button on the keyboard. The additional search fields include the following:

### TRAFFIC STOP SEARCH FIELDS -- EXPANDED

- Make
- Model
- Model Year
- Color
- > VIN
- > SSN
- ID Search
- GENDER [drop-down list]
- RACE [drop-down list]
- Current Age or Current Age Range
- Street Address

- City
- State [drop-down list]
- Zip
- Phone Number



The **Clear** button, located at the bottom of the search screen, will clear all the fields in the query screen, with the exception of the *Justification* field, without having to leave the query screen.

# **Neighborhood Selection**

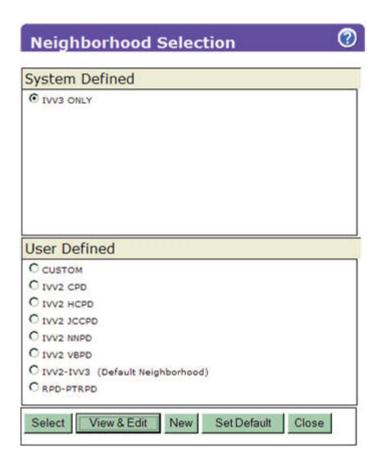
The default *Traffic Stop Search* setting is to search all local contributing agencies; meaning that the search includes all data in the data warehouse from all local sources. The **Neighborhood** button allows a user to access the *Neighborhood Selection* window and select one or more agencies, sites, and/or Partner systems against which to conduct a search. The results will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies.

Neighborhood

## **Selecting a Neighborhood:**

When the **Neighborhood** button is selected, the *Neighborhood Selection* screen will open in a separate window. Additional help for *Neighborhood Selection* can be found <u>within</u> the *Neighborhood Selection* functionality by clicking on the Online Help

button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.



### **Selection Status:**

The text appearing on the *Query Tools - Traffic Stop Search* banner provides the user with the selection status. If there are no neighborhoods listed, or no neighborhood has been identified as the "default" neighborhood, the local agencies of the current LInX system, plus whichever remote system(s) that may be included as a default by the Regional Administrator, will be the default agency source criteria for all searches.



When a different neighborhood selection is made, the selection status changes to reflect the name of the newly-selected neighborhood.

## **Justification**

This function allows Tactical and Analytical LInX users the ability to enter the reason a search is being conducted, and also provides the information to comply with Criminal Offender Record Information (CORI) for auditing purposes. This field is located at the top of each query screen. The field is <u>automatically highlighted in yellow</u>, and is

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required if one or more agencies in the selected neighborhood require a justification in order to search their data.

If the field is not highlighted in yellow, use of the field is optional.



Justification will remain persistent throughout the current session, for any LInX search, unless changed during the session.

### TRAFFIC STOP SEARCH TIPS

Tip: Less is better! Starting with just Last Name and First Name is usually the best approach, as it will result in the largest results set.

To refine the search, adding the DOB is often the best choice to add to the search criteria. However, matches will only improve if the additional identifiers match the contents of the original records in the database.

In the event a person's name is composed of four or more names, inserting the wildcard (%) after and/or before the Last Name may result in more pertinent records.

**Tip**: Consider reversing the names in a search. Some cultures actually use the Last Name as a First Name.

**Tip**: Use the Name/Alias search field when only one portion of a name is known or when searching for a "street name" or a single name alias (e.g., "Killer", "Peanut", "Catfish", etc.). This will search the Last, First, Middle, and Alias name fields.

**Tip**: Searches by Social Security Number may assist with the identification of persons who have changed their name (legally or otherwise).

**Note**: The ID field is not be considered when searching for NCIS data.

When the information to be used in the query has been entered, clicking on the **Search** button will begin the search process.

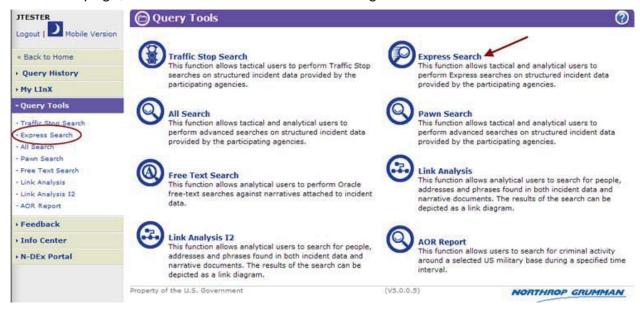
Search

# **Express Search**

The capability of the *Express Search* is to allow Tactical and Analytical LInX users to perform an express structured search that contains only the most commonly used fields. The results of a search will be presented in the same manner as other LInX structured search results.

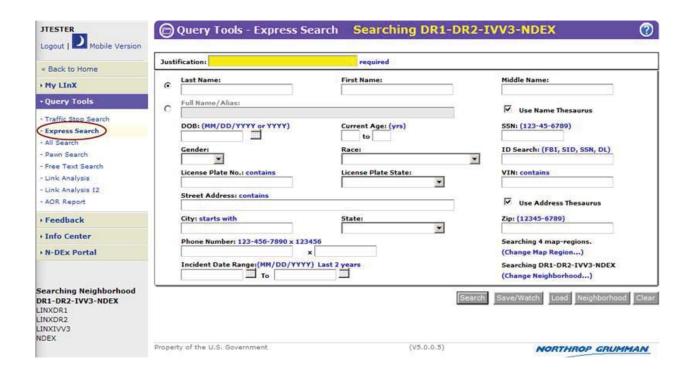
# **Navigating to Express Search**

Tactical and Analytical LInX users can access *Express Search* either from the *Query Tools* title page, or from the menu bar located along the left side of the screen.



The *Express Search* page allows users to enter search criteria that can be used to generate search results. This page also provides the capability to *Save* and *Load* search queries.

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# Performing an Express Search

The most common search criteria related to people, vehicles, addresses, incident characteristics, and/or phone numbers can be entered into the appropriate fields shown on the *Express Search* screen. When the *Express Search* screen is used to perform a query, the search process will look for names associated with incidents that meet <u>ALL</u> of the criteria entered in the various search characteristics categories.

**Note**: The *Express Search* screen contains the same search fields for both Tactical and Analytical searches. The only significant difference is the <u>result set;</u> specifically, the ability of Analytical users to view the contents of the *Narrative* tab for the results of the search. The *Narrative* tab is not available for Tactical-only users.

#### **EXPRESS SEARCH TIPS**

**Tip:** Less is better! **Starting with just Last Name and First Name is usually the best approach**, as it will result in the largest results set.

To refine the search, adding the DOB is often the best choice to add to the search criteria. However, **matches** will only improve if the additional identifiers match the contents of the original records in the database.

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

**Tip**: Consider reversing the names in a search. Some cultures actually use the Last Name as a First Name.

**Tip:** Use the *Full Name/Alias* search field when only one portion of a name is known or when searching for a "street name" or a single name alias (e.g., "Killer", "Peanut", "Catfish", etc.). This will search the Last, First, Middle, and Alias name fields.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: When a query requires a "wide-open" data search (e.g., White, Female, DOB), such as in a Cold Case investigation:

- 1. Set the Search Results Increment under *My LInX/Set Preferences* to 1000 to bring back the maximum result set
  - 2. If running the query from All Search, ensure Also Search Free Text is disabled
  - 3. Issue the search with just one attribute (e.g., DOB).

The return on both the initial results and subsequent "Get More" results will be faster.

When all available results have been retrieved/merged (*Get More/Merge Results*), filter on any additional attributes to narrow the results further, as needed (e.g., White, Female).

**Tip**: Searches by Social Security Number may assist with the identification of persons who have changed their name (legally or otherwise).

#### **EXPRESS SEARCH FIELDS**

The following fields are used as the search criteria for *Express Search*:

- Justification (highlighted in yellow if required)
- Last Name
- First Name
- Middle Name
- Full Name/Alias
- Name Thesaurus [check-box]
- DOB or Year of Birth
- Current Age or Current Age Range
- > SSN
- Gender [drop-down list]
- Race [drop-down list]
- ID Search (FBI, SID, SSN, DL)
- License Plate No.
- License Plate State: [drop-down list]
- > VIN
- Street Address [Person or Event]
- Address Thesaurus [check-box]
- City
- State [drop-down list]
- Zip
- Phone Number
- Incident Start Date (mm/dd/yyyy)
- Incident End Date (mm/dd/yyyy)
- Map Selection [(Change Map Region...) link]
- Neighborhood Selection [(Change Neighborhood...) link]

**Note**: The ID field is not to be considered when searching for NCIS data.

### **EXACT AND THESAURUS SEARCH OPTIONS**

There are two different levels of complexity available for users to conduct searches, depending on the field(s) being searched. The options available are:

**Exact Search**: limits the search results to those records that are an exact match to the search criteria. Results will only be returned if they meet all the criteria

entered in the various search characteristics categories. **Results will be returned for exact spelling or numerical matches**.

Exact Searches may be conducted for Name and/or Address queries.

An *Exact Search* will be conducted for <u>Name and/or Address</u> queries unless the respective *Thesaurus* check-boxes are checked.

<u>Thesaurus Search</u>: uses a static LInX thesaurus index to expand the search results to include structured records that contain terms that are grouped together according to similarity of meaning to the search term(s), in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling or numerical matches, and related terms.

Thesaurus Searches may be conducted for Name and/or Address queries.

Examples of Thesaurus entries using the <u>Person Full Name index</u> include:

William - Will, Willie, Bill, Billy Steven - Stephen, Steve, Steph Kenneth - Ken, Kenny

Examples of Thesaurus entries using the Full Street Address index include:

Street - St, Str, Strt Road - Rd Avenue - Av, Ave 1st - First

To conduct thesaurus <u>Name</u> searches, click the *Use Name Thesaurus* check-box to the right of the *Full Name/Alias* field to select the option.



To conduct thesaurus <u>Address</u> searches, click the *Use Address Thesaurus* checkbox to the right of the *Street Address* field to select the option.

Street Address: contains	- sopropy a summer and other sources
	✓ Use Address Thesaurus

The Use Name Thesaurus and Use Address Thesaurus options may be selected within the Express Search, All Search, Pawn, and Link Analysis query screens. The desired default search types can also be set by the user on the Set Preferences screen, under My LInX.

The following chart compares Exact Search and Thesaurus Search.

	Exact Search	Thesaurus Search
Full Name/Alias Field	LInX will identify structured records containing a full name/alias that exactly matches the user- entered search term(s).	LInX will identify structured records containing a full name/alias that match exactly the user-entered search term(s) or match entries found in a static LInX thesaurus index.
First Name, Middle Name, Last Name Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index.
Full Name/Alias Field Combined with Other Fields	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) and that also contain an exact match for the user-entered search term(s) in the other field(s).	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index, and that also contain an exact match for the user- entered search term(s) in the other field(s).
First Name, Middle Name, Last Name Fields Combined with Other Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) and that also contain an exact match for the user-entered search term(s) in the other field(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index and that also contain an exact match for the user- entered search term(s) in the other field(s).

## **USE OF WILDCARDS**

Exact Search can also be used with wildcards to expand or speed up the search while still limiting it to the search criteria entered by the user:

- A **wildcard** (%) can be used in an exact search to bring up additional records that reflect the criteria including the wildcard, such as "Doe, J%" for all individuals with the last name of "Doe" and a first name beginning with the letter "J".
- If the search involves alphanumerical values, such as a partial license plate, the location of the wildcard within the number sequence will determine the results that are returned (see following table).
- Wildcards can be used to speed up a search by inserting a wildcard after the search criteria, which has the effect of limiting the search results that begin with the criteria instead of containing the criteria anywhere within the record. Using the wildcard in this way may speed up the search if time is a concern and the possible number of candidate returns is large, such as Street or City names.
- Wildcards can also be used in Driver's License Numbers, Street Names, City Names, Street Numbers, and Social Security Numbers.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

The following chart provides examples of the results returned when using wildcards in *Exact Search* queries:

Exact Search Wildcard Placement Examples	Results
Names (People, Places)	
J% Doe	All individuals with first names starting with "J" and last name of "Doe" (and any aliases on records as the letter "J").
Cent% Street	Street Names starting with "Cent", such as Central, Center, or Centre.
Oak% Street (wildcard used to speed results)	Street Names of "Oak", limiting the search to Street Names of Oak, or starting with the word Oak, such as Oakdale.

Numbers and Alphanumeric Sequences		
%123	Sequences ending in "123" and sequences with "123" in the middle, or results of "123", if that is the entire record (such as "123 Main Street").	
123%	Sequences starting with "123".	
%12%3%	Sequences with known characters in this order.	
123 (no wildcards)	Returns results of "123" alone or "123" anywhere in the sequence, in any field that is noted with the word "contains".	

#### **SEARCHING PHONE NUMBERS**

Query on a phone number by entering search criteria in the phone number fields and then selecting the **Search** button:

- Main Phone Number (Area Code, Prefix/Suffix)
- Phone Extension

There are two fields that are associated with the phone number field (as shown below).



The single field for the main phone number allows for cut/paste operations from another document into LInX. Note that extensions are rarely captured in an RMS.

Phone Numbers may be entered in a variety of formats, and the number will be parsed into component fields automatically. The following formats are supported:

(123)123-1234 123-123-1234 123.123.1234 1231231234

#### **ENTRY RULES & ERROR MESSAGES**

There are several rules associated with the entry of phone number search criteria:

## 7 Digits Required When:

If a prefix/suffix is entered without using a wildcard (%), as shown in the following example, then the complete 7 digit phone number MUST be provided.



The following message will appear if you do not meet entry criteria.



### Wildcards Allowed:

<u>LinX DOES allow the use of the wildcard (%) character</u>, which is one of the most effective approaches for querying phone numbers. The wildcard (%) may be prepended, appended, or placed on both sides of a partial number, as shown in the example below.



Note that when one or more wildcards are used, dashes are automatically inserted to parse the Phone Number into component fields.

**Tip**: To get the maximum results for partial phone numbers, use the wildcard (%) on the left, right, or both sides of the partial number.

**Tip**: The area code is often omitted from RMS data. It is not required for a phone number search -- leave it out in order to get maximum results on a search for partial phone numbers.

#### SEARCH ONLY LAST 2 YEARS OF DATA

An initial query may be limited to search data for the most recent 2 years, by clicking on the Last 2 years hyperlink next to the Incident Date Range on the Query screen. Selecting this option will automatically pre-populate the Date Range fields, extending back 2 years from the current system date.

When the Date Range fields are pre-populated to search the last 2 years of data, clicking on the Clear hyperlink will remove the limitation, and allow searching of older data.





**Note**: if the Date Range is <u>manually</u> entered, the <u>Last 2 years link</u> will remain and the <u>Clear link</u> will not be displayed.

# **Neighborhood Selection**

The default *Express Search* setting is to search all local contributing agencies; meaning that the search includes all data in the data warehouse from all local sources. The (Change Neighborhood...) link allows a user to access the *Neighborhood Selection* window and select one or more agencies, sites, and/or Partner systems against which to conduct a search. The results will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies.

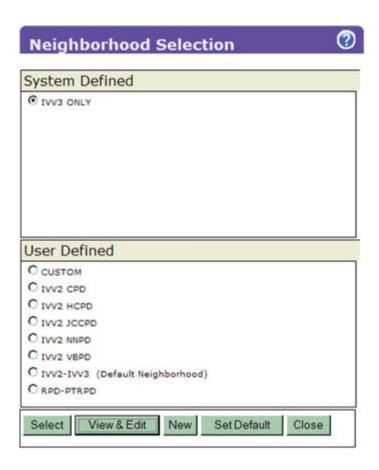
There is also a **Neighborhood** button located at the bottom of the query screen, which will open the *Neighborhood Selection* window without having to click the (Change Neighborhood) link. Either of these methods can be used to access the *Neighborhood Selection* screen.



### **Selecting a Neighborhood:**

When the (Change Neighborhood...) link or **Neighborhood** button is selected, the *Neighborhood Selection* screen will open in a separate window. Additional help for *Neighborhood Selection* can be found within the *Neighborhood Selection* 

functionality by clicking on the Online Help button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.



### **Selection Status:**

The text appearing above the (Change Neighborhood...) link on the query screen provides the user with the selection status. If there are no neighborhoods listed, or no neighborhood has been identified as the "default" neighborhood, the local agencies of the current LInX system, plus whichever remote system(s) that may be included as a default by the Regional Administrator, will be the default agency source criteria for all searches.

Searching Default (Change Neighborhood...)

When a different neighborhood selection is made, the selection status changes to reflect the name of the newly-selected neighborhood:

Searching IVV2-IVV3 (Change Neighborhood...)

# **Map Selection**

The Map Selection functionality provides the user with the ability to search a specified geographic area. When the (Change Map Region ...) link is selected, the Map Selection screen opens in a separate window.

#### Selection Status:

The text appearing above the (Change Map Region ...) link on the query screen provides the user with the selection status, which corresponds to what is selected in the Neighborhood Selection. If no neighborhood is selected under the Neighborhood Selection menu, then the system default will be used, and no map regions will be specified.

Select Map Region
(Change Map Region...)
Searching IVV3-DR1/2
(Change Neighborhood...)

When a Map Region is selected, the Neighborhood selection status will change to CUSTOM. The neighborhood will automatically be modified to include the selected regions/agencies. The neighborhood can then be modified further through the *Neighborhood Selection* screen.

Mousing over the Change Map Region link will display a pop-up message containing the name(s) of the map region(s) selected.

Searching 3 map-regions. (Change Map Region...) Searching DR1-DR2-IVV3 (Change Neighborhood...)

Additional help for *Map Selection* can be found within the *Neighborhood Selection* functionality by clicking on the Online Help button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.

## **Justification**

This function allows Tactical and Analytical LInX users the ability to enter the reason a search is being conducted, and also provides the information to comply with Criminal Offender Record Information (CORI) for auditing purposes. This field is located at the top of each query screen. The field is automatically highlighted in yellow, and is

required if one or more agencies in the selected neighborhood require a justification in order to search their data.

If the field is not highlighted in yellow, use of the field is optional.

ĺ	Justification:	required
ı	Justincation:	requirea

Justification will remain persistent throughout the current session, for any LInX search, unless changed during the session.

# Save and Watch Selected Queries

(b)(7)(E)		

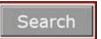
Pages 116 through 117 redacted for the following reasons:

(b)(7)(E), Pages (116) - (117)

...

# **Executing the Search**

When all the information to be used in the query has been entered, and the source of information selected, clicking on the **Search** button will begin the search process.



The **Clear** button, located at the bottom of the search screen, will clear all the fields in the query screen, with the exception of the *Justification* field, without having to leave the query screen.

### **Load Saved Queries**

(b)(7)(E)

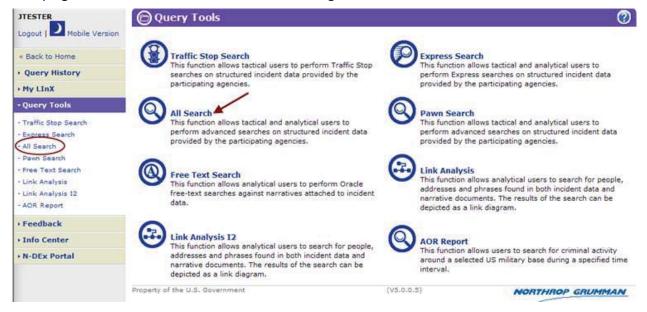
D)(1)(L)
<del></del>

## All Search

The capability of *All Search* is to allow Tactical or Analytical LInX users to perform complex structured data queries of People, Vehicles, Addresses, Incidents, and Phone Numbers, using a wide variety of search criteria with which to refine and filter searches. The results of a search will be presented in the same manner as other LInX structured search results.

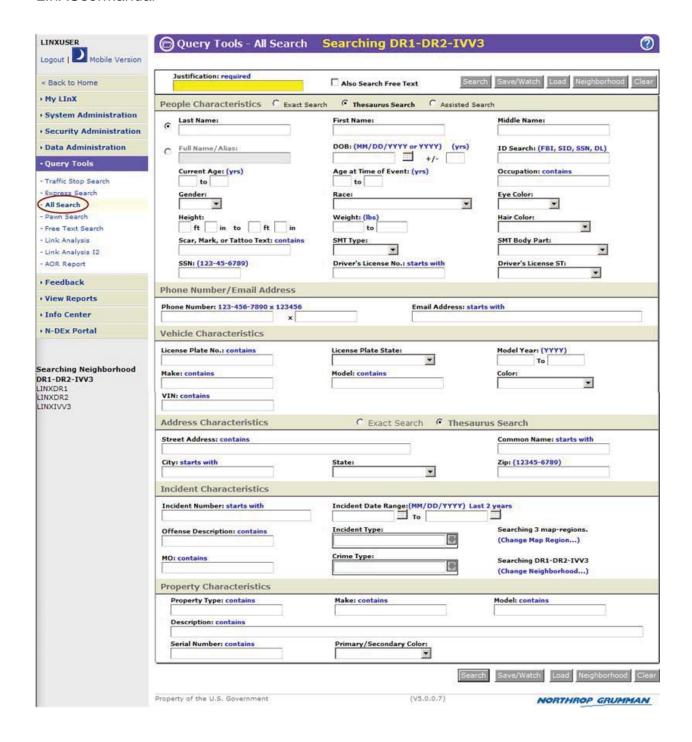
# Navigating to All Search

Tactical and Analytical LInX users can access *All Search* either from the *Query Tools* title page, or from the menu bar located along the left side of the screen.



The *All Search* page allows users to enter search criteria that can be used to generate search results. This page also provides the capability to *Save* and *Load* search queries.

#### LInXUserManual



# Performing an All Search

Search criteria related to people, vehicles, addresses, incident characteristics, phone numbers, and/or e-mail addresses can be entered into the appropriate fields shown on the *All Search* screen. When the *All Search* screen is used to perform a query, the

search process will look for names associated with incidents that meet <u>ALL</u> of the criteria entered in the various search characteristics categories.

**Note**: The *All Search* screen contains the same search fields for both Tactical and Analytical searches. The only significant difference is the <u>result set;</u> specifically, the ability of Analytical users to view the contents of the *Narrative* tab for the results of the search. The *Narrative* tab is not available for Tactical-only users.

#### **ALL SEARCH TIPS**

**Tip**: Less is better! **Starting with just Last Name and First Name is usually the best approach**, as it will result in the largest results set.

To refine the search, adding the DOB is often the best choice to add to the search criteria. However, matches will only improve if the additional identifiers match the contents of the original records in the database.

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

**Tip**: Consider reversing the names in a search. Some cultures actually use the Last Name as a First Name.

**Tip:** Use the Full Name/Alias search field when only one portion of a name is known or when searching for a "street name" or a single name alias (e.g., "Killer", "Peanut", "Catfish", etc.). This will search the Last, First, Middle, and Alias name fields.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: When a query requires a "wide-open" data search (e.g., White, Female, DOB), such as in a Cold Case investigation:

- 1. Set the Search Results Increment under My LInX/Set Preferences to 1000 to bring back the maximum result set
  - 2. If running the query from All Search, ensure Also Search Free Text is disabled
  - 3. Issue the search with just one attribute (e.g., DOB)

The return on both the initial results and subsequent "Get More" results will be faster.

When all available results have been retrieved/merged (Get More/Merge Results), filter on any additional attributes to narrow the results further, as needed (e.g., White, Female).

**Tip**: Searches by Social Security Number may assist with the identification of persons who have changed their name (legally or otherwise).

**Note**: The ID field is not to be considered when searching for NCIS data.

## **People Characteristics Search Fields**

The search criteria related to a person can be entered into the text fields shown under *People Characteristics*. The People Characteristics fields are:

- Justification (highlighted in yellow if required)
- Name Search Type [Exact/Thesaurus/Assisted]
- Last Name
- First Name
- Middle Name
- Full Name/Alias
- DOB/Year of Birth or DOB/Year of Birth Range
- ID Search (FBI, SID, SSN, DL)
- Current Age or Current Age Range
- Age at Time of Event or Age Range at Time of Event
- Occupation
- Gender [drop down list]
- Race [drop down list]
- Eye Color [drop down list]

- Height or Height Range
- Weight or Weight Range
- Hair Color [drop down list]
- Scar, Mark, Tattoo (SMT) Description
- SMT Type [drop down list]
- SMT Body Part [drop down list]
- Social Security Number
- Driver's License Number
- Driver's License State [drop down list]

**Note**: The *Occupation* field is configurable (on/off) by LInX site. The default setting for this field is 'ON'; i.e., the field is available for searching on the *All Search People Characteristics* query page, and for display in both the *Person Characteristics* tab of the search results and the *Event Report* view.

### **EXACT, ASSISTED, AND THESAURUS SEARCH OPTIONS**

There are two or three different levels of complexity available for users to conduct searches, depending on the field(s) being searched. The options available are:

<u>Exact Search</u>: limits the search results to those records that are an exact match to the search criteria. Results will only be returned if they meet all the criteria entered in the various search characteristics categories. **Results will be returned for exact spelling or numerical matches**.

Exact Searches may be conducted for Name and/or Address queries.

To conduct exact <u>Name</u> searches, select the *Exact Search* radio button located on the *People Characteristics* section heading.



Assisted Search: uses soundex and metaphone phonetic algorithms to expand the search results to include structured records that contain similar matching terms to the search criteria, in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling and similar spelling matches, or names that sound similar to the search criteria.

**Note**: This option is <u>only</u> available for *Name Searches*, using the following People Characteristics fields:

- Last Name (legal name or alias)
- First Name
- Middle Name
- Full Name / Alias

To conduct assisted searches, select the *Assisted Search* radio button located on the *People Characteristics* section heading.



<u>Thesaurus Search</u>: uses a static LInX thesaurus index to expand the search results to include structured records that contain terms that are grouped together according to similarity of meaning to the search term(s), in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling or numerical matches, and related terms.

Thesaurus Searches may be conducted for Name, Address, or Text queries.

Examples of Thesaurus entries using the <u>Person Full Name index</u> include:

William - Will, Willie, Bill, Billy Steven - Stephen, Steve, Steph Kenneth - Ken, Kenny

Examples of Thesaurus entries using the Full Street Address index include:

Street - St, Str, Strt Road - Rd Avenue - Av, Ave 1st - First

Thesaurus Searches may be conducted for Name and/or Address queries.

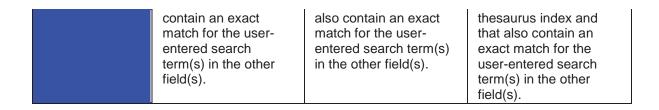
To conduct thesaurus searches, select the *Thesaurus Search* radio button located on the *People Characteristics* section heading.



The Use Name Thesaurus and Use Address Thesaurus options may be selected within the Express Search, All Search, Pawn, and Link Analysis query screens. The desired default search types can also be set by the user on the Set Preferences screen, under My LInX.

The following chart compares Exact Search, Assisted Search, and Thesaurus Search.

	Exact Search	Assisted Search	Thesaurus Search
Full Name/Alias Field	LInX will identify structured records containing a full name/alias that exactly matches the user-entered search term(s).	LInX will identify structured records containing a full name/alias that exactly match or similarly match the user-entered search term(s).	LInX will identify structured records containing a full name/alias that match exactly the user-entered search term(s) or match entries found in a static LInX thesaurus index.
First Name, Middle Name, Last Name Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s).	LInX will identify structured records containing component name fields that exactly match or similarly match the user-entered search term(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index.
Full Name/Alias Field Combined with Other Fields	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) and that also contain an exact match for the user- entered search term(s) in the other field(s).	LInX will identify structured records containing a full name/alias that exactly match or similarly match the user-entered search term(s) and that also contains an exact match for the user- entered search term(s) in the other field(s).	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index, and that also contain an exact match for the user-entered search term(s) in the other field(s).
First Name, Middle Name, Last Name Fields Combined with Other Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) and that also	LInX will identify structured records containing first name, middle name, last name fields that exactly match or similarly match the user-entered search term(s) and that	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX



#### **USE OF WILDCARDS**

*Exact Search* can also be used with **wildcards to expand or speed up the search** while still limiting it to the search criteria entered by the user:

- A **wildcard** (%) can be used in an exact search to bring up additional records that reflect the criteria including the wildcard, such as "Doe, J%" for all individuals with the last name of "Doe" and a first name beginning with the letter "J".
- If the search involves alphanumerical values, such as a partial license plate, the location of the wildcard within the number sequence will determine the results that are returned (see following table).
- Wildcards can be used to speed up a search by inserting a wildcard after the search criteria, which has the effect of limiting the search results that begin with the criteria instead of containing the criteria anywhere within the record. Using the wildcard in this way may speed up the search if time is a concern and the possible number of candidate returns is large, such as Street or City names.
- Wildcards can also be used in Driver's License Numbers, Street Names, City Names, Street Numbers, and Social Security Numbers.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

The following chart provides examples of the results returned when using wildcards in *Exact Search* queries:

Exact Search Wildcard Placement	Results
Examples	

Names (People, Places)	
J% Doe	All individuals with first names starting with "J" and last name of "Doe" (and any aliases on records as the letter "J").
Cent% Street	Street Names starting with "Cent", such as Central, Center, or Centre.
Oak% Street (wildcard used to speed results)	Street Names of "Oak", limiting the search to Street Names of Oak, or starting with the word Oak, such as Oakdale.
Numbers and Alphanumeric Sequences	
%123	Sequences ending in "123" and sequences with "123" in the middle, or results of "123", if that is the entire record (such as "123 Main Street").
123%	Sequences starting with "123".
%12%3%	Sequences with known characters in this order.
123 (no wildcards)	Returns results of "123" alone or "123" anywhere in the sequence, in any field that is noted with the word "contains".

## **Phone Characteristics Search Fields**

Query on a phone number by entering search criteria in the phone number fields and then selecting the **Search** button:

- Main Phone Number (Area Code, Prefix/Suffix)
- Phone Extension

There are two fields that are associated with the phone number field (as shown below).



The single field for the main phone number allows for cut/paste operations from another document into LlnX. Note that extensions are rarely captured in an RMS.

Phone Numbers may be entered in a variety of formats, and the number will be parsed into component fields automatically. The following formats are supported:

(123)123-1234 123-123-1234 123.123.1234 1231231234

#### **ENTRY RULES & ERROR MESSAGES**

There are several rules associated with the entry of phone number search criteria:

### 7 Digits Required When:

If a prefix/suffix is entered without using a wildcard (%), as shown in the following example, then the complete 7 digit phone number MUST be provided.



The following message will appear if you do not meet entry criteria.



### Wildcards Allowed:

<u>LinX DOES allow the use of the wildcard (%) character</u>, which is one of the most effective approaches for querying phone numbers. The wildcard (%) may be prepended, appended, or placed on both sides of a partial number, as shown in the example below.



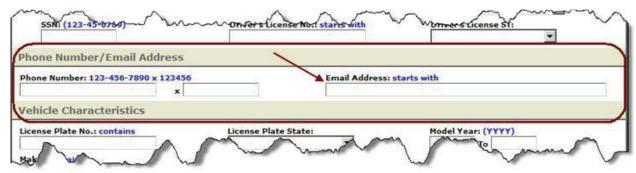
Note that when one or more wildcards are used, dashes are automatically inserted to parse the Phone Number into component fields.

**Tip**: To get the maximum results for partial phone numbers, use the wildcard (%) on the left, right, or both sides of the partial number.

**Tip**: The area code is often omitted from RMS data. It is not required for a phone number search -- leave it out in order to get maximum results on a search for partial phone numbers.

### E-mail Address Search Field

Queries for a person can be performed using a known e-mail address [to include personal e-mail, Facebook and/or Twitter accounts, etc.], if available.



The following information applies to e-mail searches:

- Wild-cards (%) can be used in the e-mail search field to search for all or part of an e-mail address. The wildcard may be prepended, appended, or placed on both sides of an e-mail address
- If a free-text search is run in the back-ground, the e-mail address will also be included in the free-text query
- E-mail addresses include personal e-mail accounts, Facebook, Twitter, etc. The e-mail type can be seen in the *Email Addresses* section of the *Person Summary*.

**Note**: E-mail addresses have not been populated for agencies with data already in LlnX/D-DEx. As new agencies join LlnX/D-DEx, or existing agencies are reworked (e.g., RMS upgrade or change), person e-mail addresses will be ingested into the new structured fields if they are available in the source data.

# Vehicle Characteristics Search Fields

The search criteria related to a vehicle can be entered into the text fields shown under *Vehicle Characteristics*. A query can be executed using one field; adding addition criteria will narrow the search results.

Queries can be performed on the license plate number or other vehicle characteristics:

- License Plate Number
- License Plate State [drop-down list]

- Model Year (of vehicle) or Model Year Range (YYYY)
- Make (of vehicle)
- Model (of vehicle)
- Color (of vehicle) [drop down list]
- > VIN

If the full license plate is not known, a search on a partial plate can be performed under *Vehicle Characteristics* by using a wildcard (%). This will return results with similar sequences depending where the wildcard is placed. A search can also be done on vehicle descriptions without plate information. While it is worth trying, data fields are frequently not fully populated in the participating agencies' records.

**Tips**: **For maximum results, use License Plate number only**, without any other search criteria. If there are too many results, add another search criterion, if possible.

When searching vehicle make and/or model, only use the first 2-3 letters in the car *Make* or *Model* field(s), plus a wildcard, to maximize results, since the number of data fields populated differs significantly from agency to agency (e.g., enter TO% for Toyota). *Model* and *Color* of vehicle are often not fully populated by an agency.

**Note**: Vehicles contained in LInX are **not** DMV records. Rather, they are vehicles associated with events such as Accidents, Incidents, Citations, etc.

## **Address Characteristics Search Fields**

The search criteria related to an address can be entered into the text fields shown under *Address Characteristics*. A query can be executed using one field; adding addition criteria will narrow the search results. The address search will return results for matches to both Person Addresses and Event Addresses.

The address characteristics fields are:

- Address Search Type [Exact Search or Thesaurus]
- Street Address (to include Street Number, Pre-Direction, Street Name, Street Type, Post-Direction, Building/Apartment)
- Common Name (alternative name used locally to identify a street, business, school or government building, or building name)
- City
- State [drop down list]
- Zip Code

#### **Exact Address Search**

The Exact Address Search works in the same manner as described above for Exact Name Search.

To conduct exact <u>Address</u> searches, select the *Exact Search* radio button located on the *Address Characteristics* section heading.

#### Thesaurus Address Search

The *Thesaurus Address Search* works in the same manner as described above for *Thesaurus Name Search*.

To conduct thesaurus <u>Address</u> searches, select the <u>Thesaurus Search</u> radio button located on the <u>Address Characteristics</u> section heading.

**Tip**: The entry of **address** data varies greatly from event type to event type. To maximize the number of search results that are potential matches, **enter as few fields as possible to initiate a search**; such as the Street Number and Street Name.

**Tip**: Use only Street Number and Street Name for the most complete result set - **without** the City or State. Street Type, City, and State are not well populated in many agency records management systems.

**Tip**: For **numbered streets**, try both the number and the number spelled out to obtain all potential matches (e.g., "11" and "eleven").

## **Incident Characteristics Search Fields**

Queries on Incident characteristics can be performed by entering search criteria in any of the following fields and then selecting the **Search** button:

- Incident Number
- Incident Start Date
- Incident End Date
- Offense Description
- Incident Type [pop-up list]
- Map Selection [(Change Map Region...) link]
- Neighborhood Selection [(Change Neighborhood...) link]
- MO (modus operandi); search by MO is not an effective search as this field is generally not populated

Crime Type (e.g., Homicide, Robbery) [pop-up list] - this field is not available at all LInX sites.

#### **LINX EVENT TYPES:**

- Arrest
- Booking
- CAD
- Citation (refers to both traffic and criminal citations in some Records Management Systems)
- Field Interview
- Incident
- Pawn
- Registry (Sexual Offender; Criminal Registries)
- Traffic (primarily refers to accidents but in some Records Management Systems it includes traffic citations)
- Warrant

Multiple Incident Types can be selected by clicking the down-arrow at the end of the *Incident Type* field to open the pop-up menu. After checking all desired Incident Types to search, click **OK** to save the selections and close the pop-up menu. Clicking **Clear** in the pop-up menu will deselect any previous selections. When the pop-up menu closes, the *Incident Type* field will be populated with a list of selected Incident Types to be searched.

The default setting for this field is All Incident Types. Therefore, if no Incident Types are selected, all Incident Types will be searched.

**Tip**: Find **similar incidents** reported during a specific time frame by entering an Offense Description and completing the Incident Start and End Date fields. However, terms for similar offenses may differ by agency. Try searching by various offense descriptions to obtain a more complete results set.

**Tip**: If the 200 results returned are insufficient for the search, do another query and use an Incident Start Date from the date of the last incident in the results list. This will expand the search past the original 200 results for up to an additional 200 results. Alternatively, increase the search result increment using *My LInX/Set Preferences* and re-execute the search.

#### **SEARCH ONLY LAST 2 YEARS OF DATA**

An initial query may be limited to search data for the most recent 2 years, by clicking on the Last 2 years hyperlink next to the Incident Date Range on the Query screen. Selecting this option will automatically pre-populate the Date Range fields, extending back 2 years from the current system date.

When the Date Range fields are pre-populated to search the last 2 years of data, clicking on the Clear hyperlink will remove the limitation, and allow searching of older data.





**Note**: if the Date Range is <u>manually</u> entered, the Last 2 years link will remain and the Clear link will not be displayed.

## **Neighborhood Selection**

The default *All Search* setting is to search all local contributing agencies; meaning that the search includes all data in the data warehouse from all local sources. The (Change Neighborhood...) link allows a user to access the *Neighborhood Selection* window and select one or more agencies, sites, and/or Partner systems against which to conduct a search. The results will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies.

There is also a **Neighborhood** button located at the top and bottom of the query screen, which will open the *Neighborhood Selection* window without having to click the (Change Neighborhood) link. Either of these methods can be used to access the *Neighborhood Selection* screen.

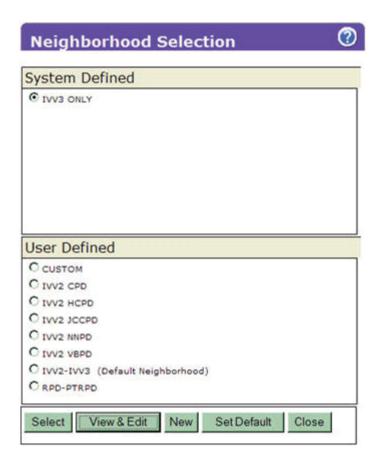


Searching I-95 (Change Neighborhood...)

### Selecting a Neighborhood:

When the (Change Neighborhood...) link is selected, the *Neighborhood Selection* screen will open in a separate window. Additional help for *Neighborhood Selection* can be found within the *Neighborhood Selection* functionality by clicking on the Online

Help button [ located in the upper right-hand corner of the Neighborhood Selection screen.



### **Selection Status:**

The text appearing above the (Change Neighborhood...) link on the query screen provides the user with the selection status. If there are no neighborhoods listed, or no neighborhood has been identified as the "default" neighborhood, the local agencies of the current LInX system, plus whichever remote system(s) that may be included as a default by the Regional Administrator, will be the default agency source criteria for all searches.

Searching Default (Change Neighborhood...)

When a different neighborhood selection is made, the selection status changes to reflect the name of the newly-selected neighborhood:

Searching IVV2-IVV3 (Change Neighborhood...)

# Map Selection

The Map Selection functionality provides the user with the ability to search a specified geographic area. When the (Change Map Region ...) link is selected, the Map Selection screen opens in a separate window.

#### **Selection Status:**

The text appearing above the (Change Map Region ...) link on the query screen provides the user with the selection status, which corresponds to what is selected in Neighborhood Selection. If no neighborhood is selected under the Neighborhood Selection menu, then the system default will be used, and no map regions will be specified.

```
Select Map Region
(Change Map Region...)
Searching IVV3-DR1/2
(Change Neighborhood...)
```

When a Map Region is selected, the Neighborhood selection status will change to CUSTOM. The neighborhood will automatically be modified to include the selected regions/agencies. The neighborhood can then be modified further through the *Neighborhood Selection* screen.

Mousing over the Change Map Region link will display a pop-up message containing the name(s) of the map region(s) selected.

```
Searching 2 map-regions.
(Change Map Region...)
Searching CUSTOM
(Change Neighborhood...)
```

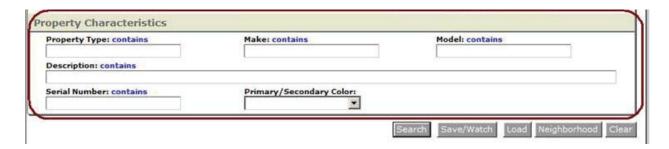
Additional help for *Map Selection* can be found within the *Neighborhood Selection* functionality by clicking on the Online Help button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.

## **Property Characteristics**

Queries on Property characteristics can be performed by entering search criteria in any of the following fields and then selecting the **Search** button:

#### LInXUserManual

- Property Type
- Make
- Model
- Description (free-text field)
- Serial Number
- Primary/Secondary Color [drop-down menu]



Any field can be used to initiate a search. For example, entering descriptive words or terms into the *Description* field will bring back records containing the same words or terms, such as, "camera" or "Rolex."

Users may also select the option to search free text in the background for the following property values: *Property Type*, *Make*, *Model*, and *Serial Number*.

### **Justification**

This function allows Tactical and Analytical LInX users the ability to enter the reason a search is being conducted, and also provides the information to comply with Criminal Offender Record Information (CORI) for auditing purposes. This field is located at the top of each query screen. The field is <u>automatically highlighted in yellow</u>, and is required if one or more agencies in the selected neighborhood require a justification in order to search their data.

If the field is not highlighted in yellow, use of the field is optional.



Justification will remain persistent throughout the current session, for any LlnX search, unless changed during the session.

## **Simultaneous Free Text Search**

Users can automatically generate a Fee Text search in the background, based on the structured search criteria entered on the *All Search* query screen. The Free Text search runs in parallel with the structured search.



When the automatic Free Text Search is selected, the system runs a free text query from the following fields on the *All Search* query screen:

- Last Name
- First Name
- Middle Name
- Full Name/Alias
- ID Search (FBI, SID, SSN, DL)
- Scar, Mark, or Tattoo Description
- > SSN
- Driver's License Number
- Phone Number
- E-mail Address
- License Plate Number
- License Plate State: [drop-down list]
- > VIN
- Street Address [Person or Event]
- City
- Offense Description
- Incident Start Date (mm/dd/yyyy)
- Incident End Date (mm/dd/yyyy)
- Property Type
- Make
- Model
- Serial Number

Links on the results screens allow the user to navigate between structured and free text search results.

There will not be a View Free Text Results link displayed on the structured search results screen if the structured search criteria do not produce associated free text results.

If an *All Search* query produces free text results, but no structured search results, a dialog box will be displayed asking if the user would like to view the free text results.

#### LInXUserManual

To return to the structured search results, click on the Return to Structured Results link located below the *Free Text Search* query screen. This link will not be available if the original search did not produce any structured results.

The user can set a default to automatically run Free Text Searches in the background by checking the Search Free Text Automatically check-box in My LInX/Set Preferences, and saving the selection. This default can be overridden at any time by deselecting the Also Search Free Text check-box on the All Search query screen.

## **Save and Watch Selected Queries**

Analytical and Tactical LInX users have the ability to save queries, watch saved queries for new information, and load saved queries.

(b)(7)(E)	
···	
	(L)(C) (L)(Z)(O)
	(b)(6), (b)(7)(C)

Pages 139 through 141 redacted for the following reasons:

(b)(7)(E), Pages (139) - (141)

...

# Reading the Query Results Screen View

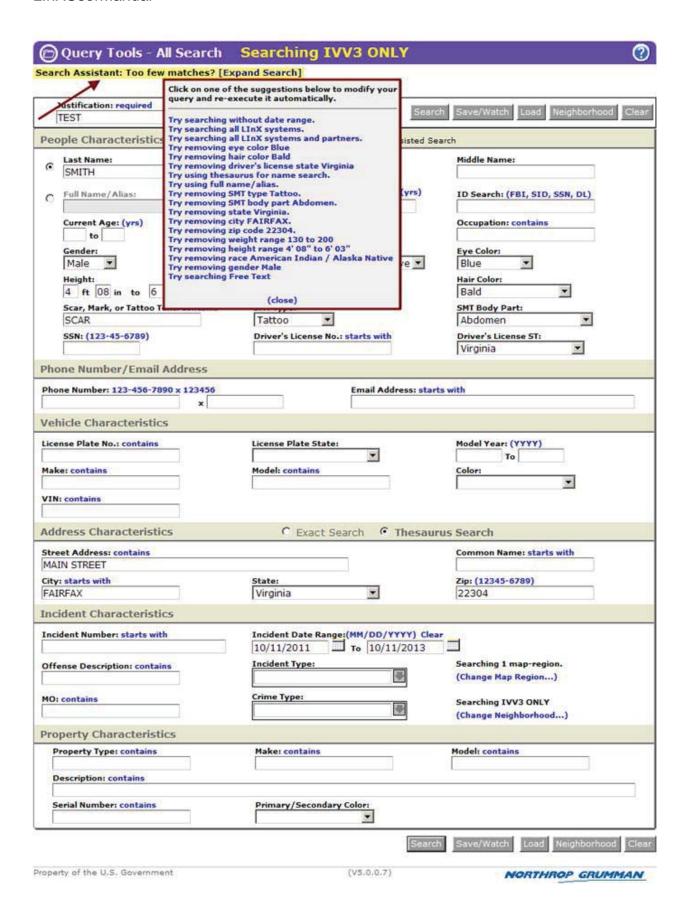
When the query results from a structured search (*Traffic Stop, Express Search, All Search*) are returned, the *People* tab will be displayed and populated with the available Person Characteristics from the first record in the result list.

#### **SEARCH ASSISTANT**

When an *Express Search* or *All Search* is run that returns few or no results, the *Search Assistant* suggests query revisions that may bring back more results.

When the results from an *Express Search* or *All Search* query are returned, the *Search Assistant* will briefly be highlighted in yellow. Click on the [Expand Search] link to open the list of suggestions. The system uses a pre-defined list of rules to help the user expand a query. When the user accepts a *Search Assistant* suggestion by clicking on the desired suggestion link, the expanded query is automatically executed.

The number of suggestions made is based on the number of search criteria entered that have an associated *Search Assistant* rule. The screen below shows suggestions for all the fields where *Search Assistant* rules apply.



When the user clicks on a suggestion link, thereby accepting the suggestion, the expanded query is automatically executed, and a new result list is returned.

**Note**: The *Search Assistant* is only available for *All Search* and *Express Search* queries.

#### **RESULT LIST**

The result list is displayed at the bottom half of the screen, below the record detail tabs (People, Vehicle, Address, Incident, Narrative, Photo, Warrant, and Phone), and represents the first 200 records that meet the search criteria. (If the user has set the default search increment to 100, 500, or 1000, the result list will contain up to that number of records).

#### Default Order

The result list appears in descending chronological order, with the most recent Incident Date at the top of the list. Indicators for aliases and photo availability will also appear to the left of any applicable records, if this information is available in the database.

#### Resorting the Result List

The user can rearrange the order of the result list by clicking on any of the column headings (e.g., Last Name, First Name, DOB, etc.). Clicking on a heading once will rearrange the result list in descending order, by the heading selected. Clicking on the heading again will reorder the result list in ascending order.

#### Warrant Records

All outstanding/active warrant records within the record search increment (i.e., 100, 200, etc.), will appear at the top of the result list, above any other records with a more recent Incident Date, and will be highlighted in red.

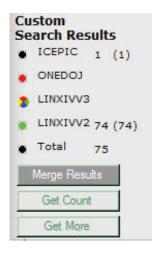
<u>Warning</u>: No action should be taken on a warrant without first confirming with the originating agency that the warrant is outstanding and still active.

**Tip:** If the 200 results returned are insufficient for the search, do another query and use an incident start date from the date of the last incident in the list. This will expand the search past the original 200 results for up to an additional 200 results.

Alternatively, increase the search result increment using *My LlnX/Set Preferences* and re-execute the query.

## **Results Management Status Description**

A Results Management Status is displayed beneath the menu bar on the left side of the screen. The Status contains the name of the neighborhood that was searched, the name of each system and/or Partner contained in the neighborhood, and the number of matching records retrieved from each (up to the specified search increment) within the designated time threshold - which begins when the first results are returned.



Search results from one or more remote systems or Partners will automatically be merged and displayed in the LInX search result set, if they are available within the results management time threshold.

If the search of a system has not been completed within the time threshold, a visual indicator will denote the status of that search. The visual indicator status legend is as follows:

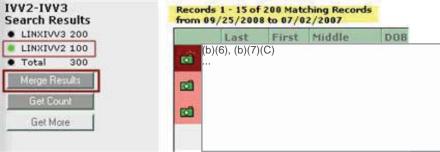
- **Black** The search of the system was successfully completed within the time threshold, and all results have been returned.
- Red An error occurred while attempting to search the system (search timed out).

- Green The search of the system was completed after the time threshold was exceeded. Results from the search are now available and ready to be merged into the current result list.
- Multi-colored "beach ball" Waiting for results, as the search of the system is still in progress.

Hovering the cursor over each visual indicator will display a pop-up containing the status description.

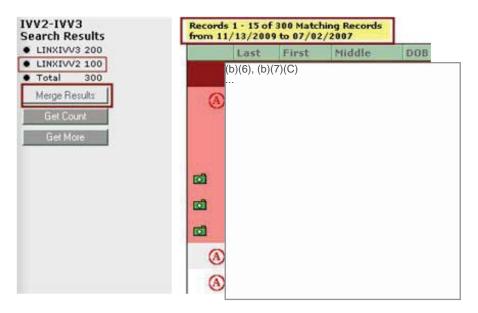
### Merge Results

When there are results available to be merged, denoted by a green indicator next to the system name, the additional records can be manually merged into the current results set by clicking on the **Merge Results** button, which is highlighted to show it is available.



Results before Merge

The visual indicator next to the system name will turn from green to black. The number of records and the date range for the records in the result set summary will update accordingly, to account for the inclusion of the additional records. The **Merge Results** button will no longer be highlighted.



#### **Merged Results**

**Note:** Unless the **Merge** button is used, all results will not be transferred/moved to the results list.

#### **Get Count**

If the number of records retrieved is greater than the search results increment selected under *Set Preferences* (e.g., 100, 200, 500, or 1000), the number of records shown equals the increment number. If there are additional records beyond the results increment, the **Get Count** button will become available. When the **Get Count** button is selected, the visual indicator for each system will change to the multi-colored "beach ball" while the counts are being calculated. Once the total record count is returned, the visual indicator will return to its previous state (black or green), and the total number of records from each system that match the search criteria will be displayed in parentheses.

**Note**: The user selects the size of the batch in *Set Preferences* under the "*My LInX*" menu option located along the left side of the screen.



#### **Get More**

When the results from a LInX system are returned, and there are still additional matching records available (as defined by the search result increment selected in Set Preferences), the **Get More** button can be used to obtain the next increment of records that match the search results (e.g., 200), from each system.

When the **Get More** button is selected, the visual indicator for each system having additional matching results will change to the multi-colored "beach ball" while the additional records are being retrieved. Once the additional records are available, the visual indicator will change to green, indicating the records are ready to be merged. Each request for more records retrieves an additional set of records (up to the set maximum number) from where the user left off, based on date.

Click on the **Merge Results** button to include the additional records into the current results list. The Summary above the results list will update to indicate the

total number of matching records now in the list, as well as the expanded Incident Date range.

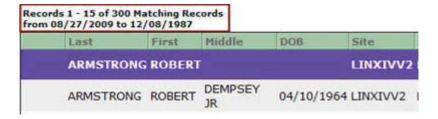
**Note**: If there are agencies feeding more than one LlnX Region (e.g., VASP, VAABC), the data from the local system will be used when these agencies are selected, preventing duplication of data.

### **Remove Date Range**

If the search was limited to the last 2 years (by clicking on the Last 2 years link on the *Query* screen), the date range limit can be removed, and the query automatically rerun, by clicking on the Remove date range <mm/dd/yyyy> to <mm/dd/yyyy> link, where mm/dd/yyyy represents the month/day/year of the Start Date and the End Date of the Date Range.

## **Result List Description**

In the center of the screen, just above the result list, is a summary of the records that have been retrieved. This summary includes the number of matching records (up to the specified search increment), which records of the total matching records are currently being displayed, and the Incident Date range of the total matching records.



As the user moves through the pages of the result list (using the **First**, **Previous**, **Next**, and **Last** buttons), the summary will update which records of the total result list are currently being displayed.



#### **Viewing Records in the Result List**

The default columns in the result list includes the following data, if it is available in the database:

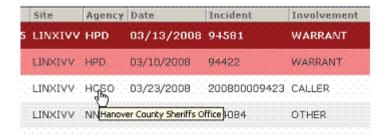
- Last Name
- First Name

- Middle Name
- DOB (Date of Birth)
- Site Name
- Agency Abbreviation
- Incident Date
- Incident ID Number
- Involvement (i.e., what role the person has in the incident)

Result records containing an alias will be marked with an alias icon [ ].

If a photo is available, a photo icon [ ] will appear at the beginning of the result row.

To view the full agency name for the listed abbreviation, the user may hover the cursor over the abbreviation for a moment. The LInX system will retrieve the full agency name associated with the abbreviation and display the name to the user in a mouse-over box. For example, the agency abbreviation HCSO stands for Hanover County Sheriff's Office.



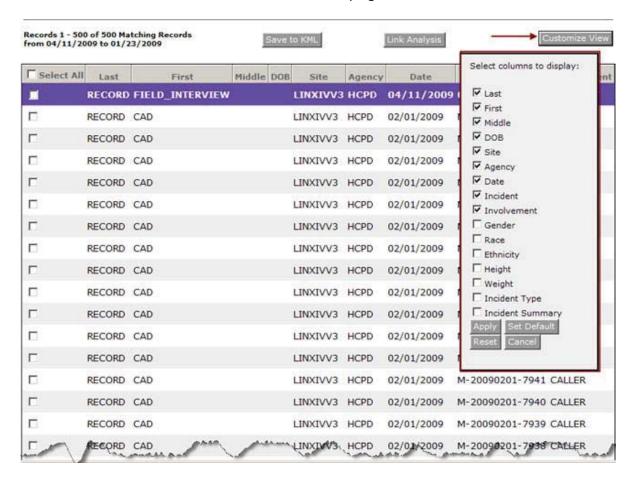
## **Results Management Filtering**

There are several features that enable the user to filter the structured search results.

#### **Customize View**

The **Customize View** button provides a pick list that allows a user to select which columns to display on *Traffic Stop*, *Express*, and *All Search* result screens. In addition to the currently displayed fields (Last/First/Middle Names, DOB, Site, Agency, Date, Incident Number, Involvement), the user can select the following fields to display from the pick list: Gender, Race, Ethnicity, Height, Weight, Incident Type, and Incident Summary. All columns can be sorted in ascending or descending order.

The user can specify and save a default Search Results Columns selection under My LInX/Set Preferences. This default can be overridden at any time by using the **Customize View** button on the search results page.



#### **Button Selection**

- Apply after checking the box next to a column heading to display a column, or un-checking a box next to a column heading to remove a column from the display, click the Apply button to re-display the result list with only the applicable columns.
- Set Default makes the latest column selections the user's default result list display. In addition, the settings in My LInX/Set Preferences will be updated to reflect the new default settings.
- Reset returns the result list column settings to the system default. In addition, the settings in My LInX/Set Preferences will be updated to reflect the system default settings.
- Cancel closes the pick list without making any changes to the displayed columns.

#### **Filter Results**

The *Filter Results* feature allows the user to filter the result list based on categories of Gender, Race, Ethnicity, Current Age Range, Height Range, Weight Range, Criminal Involvement, whether there are mug shots, and whether there are aliases. The *Filter Results* selection window is displayed on the structured search results screen, below the LInX Navigation menu.

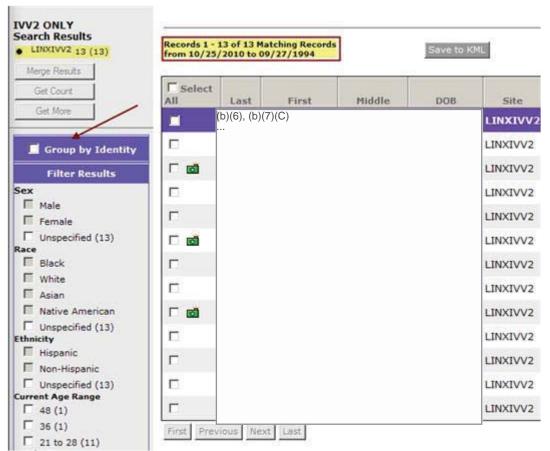
Filter Results
Gender
☐ Male (71)
Female (1)
Unspecified (7)
Race
☐ Black (5)
White (43)
☐ Asian
Native American
Unspecified (31)
Ethnicity
Hispanic (31)
Non-Hispanic (4)
Unspecified (44)
Current Age Range
☐ 46 to 63 (11)
T 20 to 42 (59)
Unspecified (9)
Height Range
5' 10" to 6' 2" (34)
5' 3" to 5' 9" (23)
Unspecified (22)
Weight Range
210 to 230 (26)
125 to 160 (27)
Unspecified (26)
Criminal Involvement
Criminal (36)
Other (43) Mug shot
COLD IN COLD I
☐ Yes (30)
No (49) Has an Alias
Yes (5)
. 110 (1.4)
Apply Clear

By checking the desired filtering criteria, and clicking the **Apply** button, the original result list will be re-displayed to only show those records that meet the selected criteria.

Clicking the **Clear** button will remove any filtering, and re-display the original result list.

## **Group by Identity**

The *Group by Identity* feature allows the user to group results by person. When selected, LInX will apply a person resolution algorithm to identify people who are reasonably likely to be the same person and collapse those people's records into a single row. The user will be able to expand and collapse grouped rows. The grouping algorithm is based on *First Name* + *Middle Name* + *Last Name* + *DOB*.



**Un-grouped Results** 

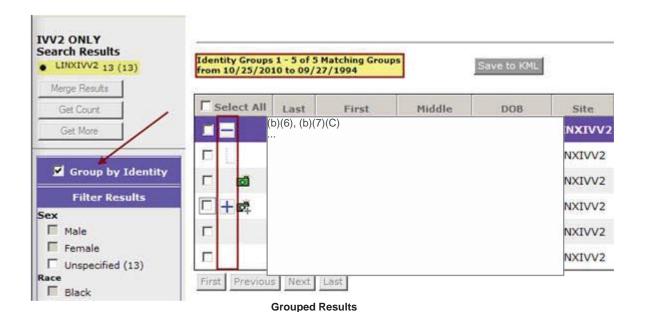
The user can expand and collapse grouped rows by clicking on the [+] or [-] symbol at the front of the each applicable row.

**Note**: A group may consist of one record (if there are no other records that reasonably match that person), or more than one record (denoted by [+] or [-] symbols in front of the person's name).

When results are grouped, the count of returned records from each system listed under *Search Results* will remain the same. However, the notation above the result list will change from a summary of the number of individual records that have been

retrieved to the number of groups, and the Incident Date range of the total matching groups.

**Tip**: Mousing over the check-box associated with a group will show the number of records in the group.



**Tip**: If any records within a group have an alias or image, the alias or image icon, as applicable, will display with a [+] on the top record of the group.

# **Viewing and Selecting Records**

The details of a record are presented in a series of tabs running across the top of the Query Tools results screen:

- People
- Vehicle
- Address
- Incident/Pawn
- Narrative (only available to Analytical users)
- Photo

- Warrant
- Phone

**Note**: When the event type of a selected event type is *Pawn*, the *Incident* tab label will automatically change from *Incident* to *Pawn*.

When a tab is selected, that tab is highlighted and the associated data for the selected record are displayed in the tab's fields. In addition to the tabs, the *Report View* icon

[ Report View...] and link are available for viewing the *Event Report* for the selected record (see below for description).

The Up and Down navigation arrows [ can be used to move from one record to another without scrolling through the search results. The arrows only apply to the current page of results (based on the Results per page selection).



The result list at the bottom of the screen does not change as a user moves across the tabs at the top of the screen, unless a new query is performed.

When the results of the query are initially presented, the Person Characteristics fields on the *People* tab will be populated with information for the record in the first row of the result list. The data displayed in the fields will reflect only that data contained in the data warehouse. If there is no relevant information in the warehouse, the field(s) will be blank.

To obtain detailed information on any other record in the result list, place the cursor on the desired row and click on it so that it is highlighted. The information in the Person Characteristics fields will be updated with the information for the new record selected.

**Tip: Too Many Results?** If the search brings back too many results to review, try adding criteria to refine the result list, such as limiting the search date.

## People Tab

The following Person Characteristics fields appear on the *People* tab:

- Last Name
- First Name
- Middle Name

- Occupation
- Age
- Gender
- Height
- Weight
- Build
- DOB (Date of Birth)
- Race
- Ethnicity
- Skin Tone
- Eye Color
- Hair Color
- Hair Length
- SSN (Social Security Number)
- Driver's License Number
- Driver's License State
- State ID
- FBI Number
- Address [Home] (multiple addresses will appear in a drop-down list). Also contains a Search for [selected] address link. (see below for discussion).
- Phone Number (multiple numbers will appear in a drop-down list). Also contains a Search for [selected] phone number link (see below for discussion).
- Email Address (multiple addresses will appear in a drop-down list). Also contains a Search for [selected] email address link (see below for discussion].
- Scars, Marks, Tattoos [multiple SMTs will appear in a drop-down list]
- Photo, if available, with a photo icon [<sup>™</sup>] next to the applicable name in the result list.

**Tip:** Check the **Alias** field or drop-down menu of the *People* tab to find additional names associated with the record. Rows containing an alias will also be marked with an .

Quick search for [selected] address

The *Search for address* capability enables a LInX user to run a query for a selected address directly from the search results screen without having to return to the query screen.

A Search for address link is dynamically created next to the Address label above the *Address* field on the *People* tab, if the *Address* field is populated. There will be no search link if the *Address* field is not populated. If there are multiple addresses available for the selected person, the link will display as Search for selected address, and the drop-down list can be used to access other addresses to search.

Clicking the Search for [selected] address link will display a new result list of records that contain the address that was searched. While the search is being performed, a notation of "Searching Address" may be seen above the *Address* field, highlighted in yellow.

Rules for searching an address:

- For the <u>Local</u> site, the Street Name is required to perform the search
- For a <u>Remote</u> site, the following information is required: Street Address OR Street Name, and either a City <u>and</u> State, OR a Zip.

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Tip:** Use *Query History* as a reminder of the address(es) that were searched if multiple *Address Searches* were made.

### Quick search for [selected] phone number

The Search for phone number capability enables a LInX user to run a query for a selected phone number directly from the search results screen without having to return to the query screen.

A Search for phone number link is dynamically created next to the Phone Number label above the *Phone Number* field on the *People* tab, if the *Phone Number* field is populated. There will be no search link if the *Phone Number* field is not populated. If there are multiple phone numbers available for the selected person, the link will display as Search for selected phone number, and the drop-down list can be used to access other phone numbers to search.

Clicking the Search for [selected] phone number link will display a new result list of records that contain the phone number that was searched. While the search is being performed, a notation of "Searching Phone" may be seen above the *Phone Number* field, highlighted in yellow.

Rules for searching a phone number:

- For the Local site, the prefix and suffix are both required
- For a <u>Remote</u> site, area code, prefix, and suffix are all required

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Tip:** Use *Query History* as a reminder of the phone number(s) that were searched if multiple *Phone Searches* were made.

## Quick search for [selected] email address

The Search for email address capability enables a LInX user to run a query for a selected email address directly from the search results screen without having to return to the query screen.

A Search for email address link is dynamically created next to the Email Address label above the *Email Address* field on the *People* tab, if the *Email Address* field is populated. There will be no search link if the *Email Address* field is not populated. If there are multiple email addresses available for the selected person, the link will display as Search for selected email address, and the drop-down list can be used to access other email addresses to search.

Clicking the Search for [selected] email address link will display a new result list of records that contain the email address that was searched. While the search is being performed, a notation of "Searching Email Address" may be seen above the *Email Address* field, highlighted in yellow.

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Note**: E-mail addresses have not been populated for agencies with data already in LlnX/D-DEx. As new agencies join LlnX/D-DEx, or existing agencies are reworked (e.g., RMS upgrade or change), person e-mail addresses will be ingested into the new structured fields if they are available in the source data.

**Tip:** Use *Query History* as a reminder of the email address(es) that were searched if multiple *Email Searches* were made.

## **Person Identity Search**

The *Person Identity* capability enables a LInX user to run a query for a selected person directly from the search results screen without having to return to the query screen.

Clicking the **Identity Search** button will display a new result list of people with the same name and DOB as the selected person. While the search is being performed, a notation of "Searching Identity", highlighted in yellow, may be displayed.

The identity search algorithm is based on the following criteria:

- First Name + Last Name + DOB (using Thesaurus) <u>OR</u>
- 1st Character of First Name + 1st 3 Characters of Last Name + DOB + Sex OR
- Race OR
- SSN OR
- FBI Number.

If there is not enough information for the selected person to be uniquely identified, a pop-up window will be displayed stating, "Insufficient data available!".

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Tip:** Use *Query History* as a reminder of the name(s) that were searched if multiple *Identity Searches* were made.

### **Possible Associates**

The *Possible Associates* capability allows a user to search for and view all persons associated with the selected person in a search result list. The user may recursively select possible associates of possible associates.

Clicking the **Possible Associates** button will display a new result list of all people who were involved in any incident involving a person with the same name and identifiers as the selected person.

While the search is being performed, a notation of "Searching Possible Associates", highlighted in yellow, may be displayed.

If there is either not enough information for the selected person to identify incidents involving the selected person, or there are no other records that involve the selected person, a pop-up window will be displayed stating "No possible associates found!".

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Tip:** Use *Query History* as a reminder of the name(s) that were searched if multiple *Possible Associates* searches were made.

#### Vehicle Tab

Because LInX is person-centric, when a Vehicle search is conducted, the search results are returned as a list of names of individuals involved in events rather than an actual list of vehicles. This tab represents any/all vehicles involved with the event to which the selected person is associated.

The following Vehicle Characteristics fields appear on the Vehicle tab:

- License Plate Number
- License State
- Year (Manufacture year of vehicle)
- Vehicle Make
- Vehicle Model
- Color of Vehicle
- > VIN



## Quick search for vehicle

The Search for vehicle capability enables a LInX user to run a query for a selected License Plate or VIN directly from the search results screen without having to return to the query screen.

A dynamic link is created for any License Plate and/or VIN, if this data is available. If there are vehicle characteristics that do not include License Plate and/or VIN (e.g, License Year, Make, Model, etc.), no dynamic links will be created for the vehicle in the *Vehicle* tab.

Clicking a License Plate or VIN link will display a new result list of records that contain the License Plate and/or VIN that was searched. If a vehicle record contains both a License Plate and a VIN, the search will look for records that contain both License Plate and VIN, not just the value that was selected.

While all License Plates and VINs will be hyperlinked, values such as NONE, UNKNOWN, UNK, NO TAG, N/A, etc. will produce a pop-up window stating, "Insufficient data available!" when selected.

To return to the original search results, click on the Return to Original Search Results link located at the bottom of <u>any</u> tab.

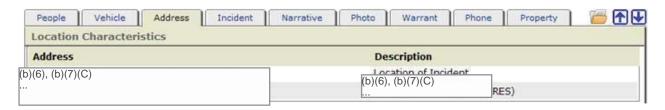
**Tip:** Use *Query History* as a reminder of the vehicles that were searched if multiple *Vehicle Searches* were made.

### **Address Tab**

Because LInX is person-centric, when an Address search is conducted, the search results are returned as a list of names of individuals involved in events rather than an actual list of locations. This tab represents <u>all</u> addresses (Incident and Person) associated with the event.

The following Location Characteristics fields appear on the *Address* tab:

- Street Address (to include Street Number, Pre-Direction, Street Name, Street Type, Post-Direction, Building/Apartment, City, State, Zip)
- Description (Location of Incident, and/or Name and Address Type for Person addresses)



When available, the Incident address will be listed first, followed by any/all Person addresses. The Person addresses will display the name of the person associated with the address, and the address type (e.g., RES, WORK, etc.) under the *Description* heading.

## Quick search for address

The Search for address capability enables a LInX user to run a query for a selected address directly from the search results screen without having to return to the query screen.

A dynamic link is created for any available Address. Clicking an Address link will display a new result list of records that contain the selected address. The selected address may either be an Event address or Person address.

While the search is being performed, a notation of "Searching Address" may be seen above the *Address* heading, highlighted in yellow.

Applicable rules for searching an address:

- For the <u>Local</u> site, the Street Name is required to perform the search
- For a <u>Remote</u> site, the following information is required:
   Street Address OR Street Name, and either a City <u>and</u> State, OR a Zip.

While all Addresses will be hyperlinked, values that do not meet the minimum search criteria identified above will produce a pop-up window stating, "Insufficient data available!" when selected.

To return to the original search results, click on the Return to Original Search Results link located at the bottom of any tab.

When an address search is conducted, the result list consists of names of all persons found in the LlnX data warehouse and specific incident numbers that are associated with the address search criteria. For each Incident Number, this means that either the event occurred at this address or at least one of the persons involved in the incident is associated with this address.

### Incident/Pawn Tab

Because LInX is person-centric, when an Incident Number search is conducted, the search results are returned as a list of names of individuals involved in events rather than an actual list of Incidents.

The label for this tab will dynamically change from *Incident* to *Pawn*, if the selected record is a Pawn event. The label will return to Incident for all other event types.

The following <u>Incident</u> Characteristics fields appear on the *Incident* tab:

- Agency
- Incident Number
- Incident Type
- Date Reported
- Incident Date
- Incident Time
- Incident Location (to include Street Number, Pre-Direction, Street Name, Street Type, Post-Direction, Building/Apartment, City, State, Zip)
- Location Latitude
- Location Longitude
- MO (rarely populated)
- Summary (to include Offense Descriptions, if available)

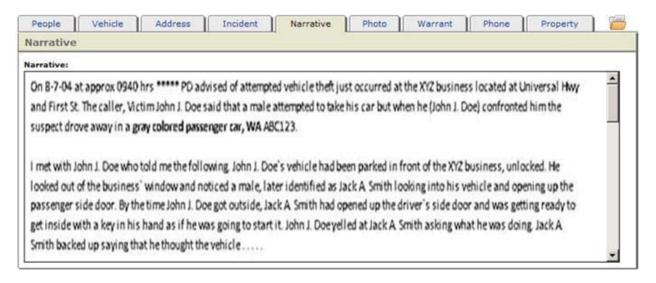
The following Pawn Ticket Characteristics fields appear on the Pawn tab:

- Agency
- Pawn Ticket Number
- Incident Type
- Date Reported
- Pawn Date
- Pawn Time

- Pawn Shop
- Pawn Shop Address

### **Narrative Tab**

The *Narrative* tab appears along with the other tabs when the search results have been returned. The *Narrative* tab is unique to <u>Analytical</u> user searches, and is not available in the search results for Tactical-only users. Selecting this tab provides the narrative portion of the Incident Report, including Supplements, if available in the database. A scroll bar is provided so the entire report can be viewed.



#### **Photo Tab**

The *Photo* tab appears when the results list is returned. The *Photo* tab only displays photos from a single agency associated with the selected record, not photos from all agencies that may have records for the same person. Some agencies have all of their photos linked to a Master Name Index; thus all photos from that agency will be displayed. In other cases, the photos from each agency may be linked to a single incident; thus the photos for an individual may vary for each Incident in which the person is associated.

Records that include associated photos will have a photo icon [ ] displayed next to the applicable name in the result list.

If no photo is associated with a record, the *Photo* tab will display the following message for that record:



## **Printing Photos**

Photos can be printed in LInX from the *Photo* tab <u>if the Site to which the record</u> <u>belongs allows printing</u>. To print photos, highlight the desired record in the result list, click the *Photo* tab at the top of the search results page, and click the **Print** button in the lower right-hand corner. If the Site does not allow printing, the **Print** button will not be displayed.

If the *Printing from LInX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a popup window is displayed stating "*You need to accept the Printing From LInX agreement*." Click **OK** to close the window.

Once the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing all the photos (one photo per page) associated with the event. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved photos are to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing photos from LInX
- LInX version number
- Page number and total number of pages
- Date and Time the photos were requested to be printed/saved

To print the photos, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the photos. The PDF window can be closed after all photos have been printed.

To save the photos, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the photos. The PDF window can be closed after the file has been saved.

Printed or saved output is for temporary use only; it must be destroyed within 72 hours of being obtained.

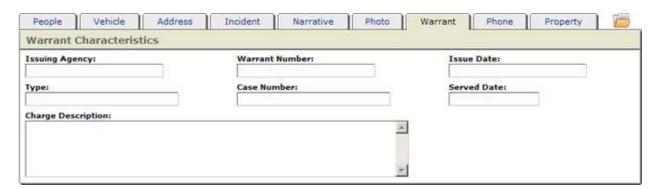
### **Warrant Tab**

The Warrant tab appears when the results list is returned. Both active and inactive warrants will be displayed. Outstanding warrant information will be highlighted in red and will always appear at the top of the result list.

Warning: No action should be taken on a warrant without first confirming with the originating agency that the warrant is still active and outstanding.

The following Warrant Characteristics fields appear on the *Warrant* tab:

- Issuing Agency
- Warrant Number
- Issue Date
- Type
- Case Number
- Served Date
- Charge Description (text box)



### **Phone Tab**

Because LInX is person-centric, when a Phone search is conducted, the search results are returned as a list of names of individuals involved in events rather than an actual list of phone numbers. At least one of the persons involved in each separate Incident had a phone number associated with the search criteria.

The display of returned results will be positioned on the *Phone* tab and will display all phone numbers associated with the incident. If a phone number was entered as part of the search criteria, at least one of the phone numbers listed will match the requested phone number.

The following Phone Number fields appear on the *Phone* tab:

- Phone Number
- Extension
- Phone Type (Residence/Home/Business/Work)
- Person



## Quick search for phone number

The Search for phone number capability enables a LInX user to run a query for a selected phone number directly from the search results screen without having to return to the query screen.

A dynamic link is created for any available Phone Number. Clicking a Phone Number link will display a new result list of records that contain the selected phone number. The selected phone number may be a home, work, mobile, fax, or pager number. While the search is being performed, a notation of "Searching Phone Number" may be seen above the Phone Number heading, highlighted in yellow.

Rules for searching a phone number:

- For the <u>Local</u> site, the prefix and suffix are both required
- For a <u>Remote</u> site, area code, prefix, and suffix are all required

While all Phone Numbers will be hyperlinked, values that do not meet the minimum search criteria identified above will produce a pop-up window stating, "Insufficient data available!" when selected.

To return to the original search results, click on the Return to Original Search Results link located at the bottom of <u>any</u> tab.

If there are no Phone Numbers associated with the selected event, the following message will appear:



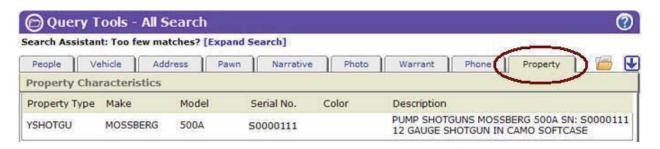
## **Property Tab**

Because LInX is person-centric, when a Property search is conducted, the search results are returned as a list of names of individuals involved in events that had associated property that matched the search criteria, rather than an actual list of property.

The display of returned results will be positioned on the *Property* tab and will display all property associated with the incident.

The following Property fields appear on the *Property* tab:

- Property Type
- Make
- Model
- Serial No.
- Color
- Property Description



### **View Free Text Results**

If the *Also Search Free Text* check-box was selected when an *All Search* query was run, a free text query based on the structured search criteria will also be run in the background (see the *All Search* help topic for additional information). A visual indicator and status message is displayed in the middle of the structured search results screen, between the result tabs and the result list of records, denoting the status of the background *Free Text Search*:

- Multi-colored "beach ball" Searching Free Text: waiting for results, as the background Free Text Search is still in progress.
- Green View Free Text Results (#) link: The results of the background Free Text Search are available for viewing. The number in parentheses indicates how many Free Text Search results were found.



Clicking the View Free Text Results link will take the user to the *Free Text Search* screen to view the corresponding free text results. The *Text Search Phrase* field contains the search criteria from the structured search that was used to generate the free text results.

**Note**: The View Free Text Results link can be accessed from any of the structured search result tabs.

All functionality of the *Free Text Search* capability is available with the results from the structured search, including modifying the search criteria and resubmitting the *Free Text Search* query.

If View Free Text Results has been selected from the results of an *All Search* structured query, the *Free Text Search* screen will include a Return to Structured Results link, located in the middle of the screen, below the Query section, to return the user to the original structured search results.

If there are no structured results found, but free text results are available, a pop-up dialog will be displayed to the user from the search screen, providing the option to view the free text results.



Clicking the **OK** button will take the user to the *Free Text Search* results screen; while clicking the **Cancel** button will close the pop-up dialog box and return the user to the *All Search* query screen to modify the search criteria.

If there were no structured search results returned as part of the original search, the link from the *Free Text Search* screen will say, Revise Structured Query. Clicking on this link will return the user to the *All Search* query screen.

# Report View

After a record is selected, the user may generate an *Event Report* by clicking the Report

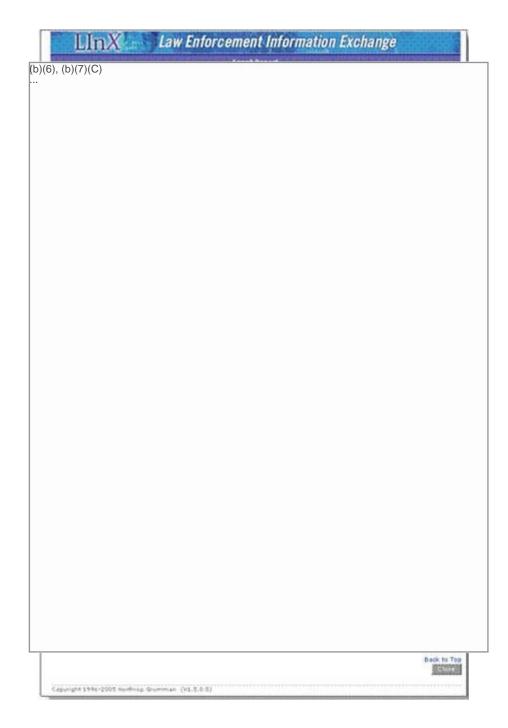
View link to the right of the tabs; or by clicking the *Report View* icon [ ] found in front of each row of the result list.



The *Event Report* contains the following data, if available in LlnX, displayed in a report format.

- Event (Incident) characteristics
- Warrant characteristics, if applicable
- Person characteristics for each person associated with the Event, including any images, if available (additional images may be viewed by selecting the <u>More images</u> link)
- Characteristics for each Vehicle associated with the event
- Telephone number characteristics for each telephone number associated with the event
- Property Characteristics for each item piece of property associated with the selected event (any event type)
- Associated Narrative description(s) of the event (only available to Analytical users)
- Agency Contact Information

An example of an Event Report.



Links are provided beneath the Event characteristics section of the report which allows the user to navigate easily to the following report sections:

- Warrant
- People
- Vehicles
- Phones
- Property (from any event type)

- Narrative
- Agency Contact



Each section of the *Event Report* contains a <u>Back to Top</u> link in the lower right-hand corner. Selecting this link will navigate the user back to the top of the report.

To return to the search result list, select the **Close** button located at the bottom of the *Event Report* dialog box.

## **Printing the Event Report**

To print an *Event Report* from LInX, highlight the desired record in the result list, click the *Report View...* link at the top of the structured search results page or the *Report View* icon at the front of the selected record, and click the **Print** button in the lower right-hand corner of the *Event Report* window. If the *Printing from LInX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "You need to accept the *Printing From LInX agreement*." Click **OK** to close the window.

**Note**: The **Print** button is not available on Event Reports from a Site that does not have printing enabled.

Once the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing the selected *Event Report*. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved report is to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing the Event Report from LInX
- LInX version number

- Page number and total number of pages
- Date and Time the Event Report was requested to be printed/saved

To print the *Event Report*, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the report. The PDF window can be closed after the report has been printed.

To save the *Event Report*, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the report. The PDF window can be closed after the file has been saved.

Printed or saved output is for temporary use only; it must be destroyed within 72 hours of being obtained.

# **Navigation and Getting More Results**

At the bottom of each page of result records, there are several buttons which allow the user to navigate the current result list of records returned, as well as getting the next (or previous) result set, as depicted below.

In addition, there is a *Results per page* drop-down box, that allows the user to select how many results should be shown on a page before having to move to the next page. One of the options is to show all returned results on one page. If *All* is selected, the **First**, **Previous**, **Next**, and **Last** navigation buttons will be gray-out and not available.



The user can specify and save a default *Results per Page* selection of 15, 50, or 100; (*All* is not available as a default), under *My LlnX/Set Preferences*. This default can be overridden at any time by using the drop-down box shown on a query result page.

# Map View and KML Features

## Map View

A Mapping capability is provided, which uses geo-coding on the addresses in the database to allow mapping of event and person addresses. Mappable results are available from *Traffic*, *Express*, and *All Search* queries. To view the mapped data, perform a query then select the "**Map View**" button at the top of the Results List.

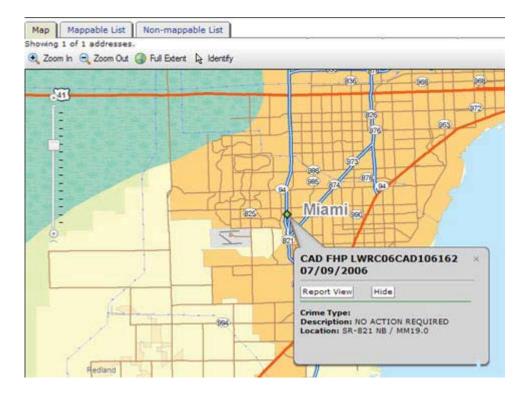


**Note**: The *Map View* capability is not available on all LInX systems.

The screen is re-displayed with an interactive map positioned over the geographic area covered by the local system. The map may be zoomed in or out, or moved in any direction. Across the top of the map are 3 tabs and a summary of how many addresses are shown on the map.

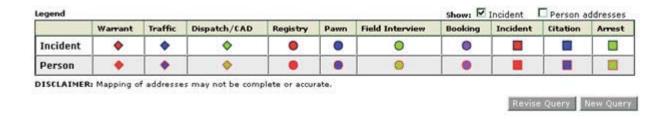


The *Map* tab displays the mapped results. It may be necessary to zoom in to see the data points. Clicking on a data point presents a pop-up with the information about the location.

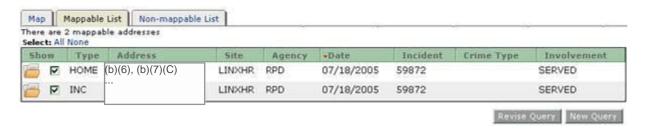


Note that each incident type has a unique color/shape icon associated with it, which are identified in the legend below the map.

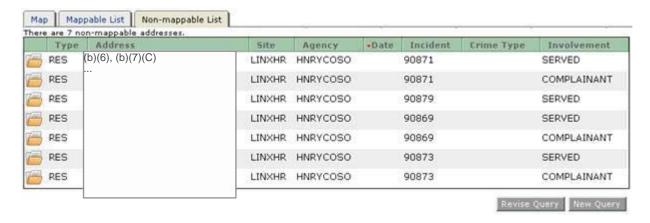
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The *Mappable List* tab contains a list of the currently mapped addresses and indicates whether the address is an incident (INC) or person (HOME) address. The default list is displayed with all mappable addresses marked to be shown on the map, denoted by a check mark in the *Show* column. Addresses may be hidden (not displayed on the map) by deselecting (un-checking) the box next to the addresses.

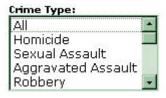


The *Non-mappable List* tab contains a list of the addresses from the result list that could not be mapped. (In general, an address cannot be mapped if it cannot be assigned a unique set of geographical coordinates, e.g., "500 Block of East HWY" or "I95 NB Exit ramp").



Part of the Mapping capability is the **Crime Type** select list, <u>only available on the All Search</u> <u>query screen</u>. This filters the search criteria, allowing only the selected Crime Type(s) to be mapped. For instance, all Sexual Assaults in a jurisdiction within a specific time period can be mapped.

To select all categories, click on "All" in the **Crime Type** list. To select one Crime Type, click on the desired category. If two or more categories are to be mapped at the same time, hold down the **<Ctrl>** key and select each Crime Type desired.



## KML (Keyhole Markup Language)

The Save to KML (Keyhole Markup Language) feature is available to Analytical users only, and is subject to configurable site policies. The KML Export Agreement must be accepted by the user in order to access this feature.

One or more results may be selected from any structured search (Traffic Stop, Express, All Search) query, and exported to KML. The "Save to KML" button located in the middle of the screen, above the results list, allows a user to export information, including address data, associated with the current search results.



The addresses are exported as a compressed KML file. The KML file contains incident and person information associated with each address, as appropriate. A user can choose to save the file or open it in any earth-viewer application that supports the KML format (e.g., Google Earth). By using a KML-compatible application, the LInX-generated KML file can be opened and the mappable LInX results can be viewed.

**Note**: LInX does not provide any third-party earth viewing applications; only the ability to export the data to such applications.

Warning: KML data derived from LInX shall only be utilized for official law enforcement agency purposes. Any pertinent information obtained from this file must be verified with the contributing agency. It is possible that the contents of this file have been changed since its generation.

Access to the KML feature is only available on LInX systems that receive authorization from the applicable Regional Board of Governance; therefore, this feature may not be available at all LInX sites.

# **Move Results to Link Analysis**

Analytical LInX users may select one or more results from any structured search (Traffic Stop, Express, All Search), or Free Text Search, and view the selected results in the user's default Link Analysis tool (I2 or SVG - selected in My LInX/Set Preferences). Link Analysis I2 is the system default if no user preference has been chosen.

Query Tools - Free Text Search Searching LINXIVV3 Logout | Justification: TEST « Back to Home **Text Search Phrase** Query History REMINGTON RIFLE My LInX Thesaurus Search · System Administration [-] LInX Advanced Options: [-] Search Tips: · Security Administration Use 'OR', 'AND', and 'AND NOT' to search for multiple terms. 'AND' is implied by default. E.g., a search for 'murder gun' is the same as search for 'murder and gun'. Searching LINXIVV3 Remote Systems (Change Neighborhood...) - Use double-quotes ( "" ) to search for phrases like "black mask". · Data Administration The Thesaurus Search option expands query terms to include synonyms, such as 'murder' for 'homicide'. Incident Date Range: I Tor From: Use Within X words to find terms that are close to each other in a document. E.g., "Red Van" within 3 words only matches documents where Red and Van are within 5 words of each other. Note: this option is not compatible with Thesaurus Search Traffic Stop Search Within 2 words - Express Search - All Search Search Neighborhood C Payn Search - Free Text Search - Link Analysis 12 Results 1 - 15 of about 150 found. Select All ok Analysis Sort By: Incident Date · Feedback Site: LINKIVV3 Narrative Date: 01/20/2008 ent (b)(6) · View Reports 270 Winchester, s/n H211109; the final rifle being a Remington bolt acti (b) (7) (C) m B6245555 Agency: CCPD · Info Center View Documen (b)(6) Site: LINXIVV3 Narrative Date: 01/01/2008 else on scene. Officers recovered a Remington .22 caliber rifle. Rifle pts (b)(7)(C)Agency: RPD View Documer (b)(6) Site: LINXIVV3 Narrative Date: 11/29/2007 LINXIVV3 ENTERED INTO VCIN/NCIC:NIC/G661696185 - REMINGTON 270 RI(D)(7)(C)6735707 NIC/G77 1701358 Search Results LINXIVV3 150 (150) Site: LINXIVV3 nent: (b)(6) Merge Results his 2007 and stale his Remington 7400 Sportsman rifle wit Agency: CCPO (b)(7)(C) Get More View Document (D)(6) Site: LINXIVV3 Narrative Date: 11/20/2007 earching Neighborhood Agency: CCPD (b)(7)(C) number and serial number for the rifle. The rifle is a Remington Arms Co LINXIVX3

**Note**: This feature is not available for Tactical-only users.

The following information applies to data moved to Link Analysis:

The original search criteria are copied to the Link Analysis Query tab

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- **ALL** results from the structured or Free-Text search results are moved to Link Analysis; however, only the selected records will be displayed in the Link Analysis chart
- All results can be seen in the Link Analysis *Table* tab. Only the items that were specifically selected will have a check mark in the Show column
- Additional nodes from the total results moved to Link Analysis can be hidden and/or shown on the chart using the Show column under the Table tab
- Any results moved to Link Analysis can be walked or otherwise manipulated, revised and re-queried in Link Analysis

# Save and Watch Selected Queries

Analytical and Tactical LInX users have the ability to save queries, watch saved queries for new information, and load saved queries.

## **Saved Queries**

(b)(7)(E) 	
	(b)(6), (b)(7)(C)

Pages 178 through 181 redacted for the following reasons:

(b)(7)(E), Pages (178) - (181)

...

highlighted, the 'Use selected result(s)' option is deactivated (grayed out)

• Each entity listed in the consolidated *Person Summary* can be clicked to display the *Report View* for the incident from which the information was derived

**NOTE**: If there is not enough information available to generate a Person Summary for the selected person, the Person Summary button will not be available (grayed out).

To return to the original search results, click on the **Return to Results** button on the *Person Summary* banner.

# **Initiating a New Query**

A new query can be initiated by selecting either the **Revise Query** button or **New Query** button at the bottom of the result list, or by selecting a Query Tools sub-menu item from the menu bar located along the left side of the screen.



By selecting the **Revise Query** button, the user is returned to the query screen still populated with the search criteria used in the last search. This enables the user to add, modify, or delete criteria, and initiate a new search.

The **New Query** button returns the user to a blank query screen with the default neighborhood to be searched.

Selecting a Query Tools sub-menu item presents a blank query screen with the default neighborhood to be searched for the applicable selection (*All Search*, *Express*, *Pawn*, etc.).

## Free Text Search

To have access to the *Free Text Search* screen, the user must have been assigned an Analytical role in LInX.

## RESTRICTIONS ON THE USE OF LINX DATA

The data from the LInX system is not considered and should not be used for original documentation for probable cause from any participating agency. Use of the data is controlled by the *LInX Rules of Operation* for each regional LInX system. Contact you system administrator for a copy.

### **SEARCH PROCESS**

The search process is designed to produce these results:

- A search of text terms will bring back a list of matches from narratives in the warehouse.
- The default source for the results is all agencies, meaning that the search includes all data in the data warehouse from all sources.
- By selecting one or more source agencies (using Neighborhood Selection) for the search process rather than all agencies, the results will be filtered to reflect only the data from the selected sources.

# Navigating to Free Text Search

Analytical LInX users can access the *Free Text Search* screen either from the *Query Tools* title page, or from the menu bar located along the left side of the screen. The *Free Text Search* screen allows the Analytical user to search investigative record documents that have been placed in the LInX data warehouse as whole documents. Sometimes called unstructured documents because they are incorporated whole into the data warehouse, these documents can be text files, word processing documents, or PDF files; but they cannot be scanned documents.

### LInXUserManual



The *Free Text Search* page allows users to enter search criteria that can be used to generate search results. This page also provides the capability to *Save* and *Load* search queries.

## Performing a Free Text Search

The criteria to be used for a *Free Text Search* should be entered into the text field on the screen. Clicking on the **Search** button will initiate the query.

The search can be further refined by providing a date range and/or specifying within how many words of each other the words of a phrase should appear in a document in order to meet the search criteria.

The following fields are used as the search criteria for *Free Text Search*:

- Justification (highlighted in yellow if required)
- Text Search Phrase
- Thesaurus Search [check-box]
- Map Selection
- Neighborhood Selection
- Incident Date Range From: (mm/dd/yyyy)
- Incident Date Range To: (mm/dd/yyyy)
- Within "#" words (proximity of words in search phrase to each other)

Examples of information that can be entered into the *Text Search Phrase* field and searched include:

- Names
- Addresses (placing the Boolean operator "AND" between the number and street name will improve the results)
- Weapons
- Phone Numbers
- Organizations
- Phrases (such as "bomb threat")



## **EXACT AND THESAURUS SEARCH OPTIONS**

There are two different levels of complexity available for users to conduct free-text searches. The options available are:

**Exact Search**: limits the search results to those records that are an exact match to the search criteria. Results will only be returned if they meet all the criteria entered in the various search characteristics categories. **Results will be returned for exact spelling or numerical matches**.

Exact Searches may be conducted for Name, Address, or Text queries.

An *Exact Search* will be conducted unless the *Thesaurus Search* check-box is checked.

<u>Thesaurus Search</u>: uses a static LlnX thesaurus index to expand the search results to include structured records that contain **terms that are grouped** 

together according to similarity of meaning to the search term(s), in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling or numerical matches, and related terms.

Thesaurus Searches may be conducted for Name, Address, or Text queries.

Examples of Thesaurus entries using the <u>Person Full Name index</u> include:

William - Will, Willie, Bill, Billy Steven - Stephen, Steve, Steph Kenneth - Ken, Kenny

Examples of Thesaurus entries using the Full Street Address index include:

Street - St, Str, Strt Road - Rd Avenue - Av, Ave 1st - First

Examples of Thesaurus entries using the <u>Narrative index</u> include:

Murder - Homicide, Manslaughter Cocaine - candycaine, coke

## **Thesaurus Lookup**

The *Thesaurus Lookup* feature enables a user to enter a term, and find associated synonyms for that term in the LlnX thesaurus.



To use the *Thesaurus Lookup*, click on the *Thesaurus Lookup* link. This opens a lookup window. Enter the term in the text box, and click on the **Look Up** button. If there are synonyms for the term entered, they will be displayed in the scroll box beneath the text box. Click the **Close** button to close the lookup window.

If no synonyms are found for the term entered, or there are additional synonyms for the term that are not included in the Lookup table, clicking on the Submit Feedback link will take the user to the *Thesaurus Feedback* screen, where suggestions for new terms and/or synonyms for existing terms in the LInX Thesaurus can be submitted for consideration.

To conduct thesaurus searches, click the *Thesaurus Search* check-box below the *Text Search Phrase* field to select the option.



**Note**: The word proximity range (*Within "#" words*) is not available (grayed out) when the *Thesaurus Search* option is being used.

The *Exact* and *Thesaurus* search options may be selected within the *Free-Text Search* query screen. The desired default search type can also be set by the user on the *Set Preferences* screen, under *My LInX*.

### **USING BOOLEAN OPERATORS**

The order in which search criteria are entered does not affect the search results. However, criteria can be refined by using the logical search operators of "AND," "OR," and "AND NOT" as well as parentheses (Boolean search):

Boolean Operator	Result
AND	Results containing both search terms will be returned. The AND operator is <b>automatically implied</b> if multiple words are entered without other operators.
OR	Results containing either of the search terms will be returned.
AND NOT	Eliminates results containing the term after "NOT" (such as "cat AND NOT dog").
( )	Allows search of terms nesting in parentheses, such as "cat AND (dog OR bird)". Will return results that contain dog and/or bird, as long as the document contains cat as well.

## FREE TEXT SEARCH TIPS

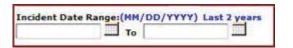
- ➤ **Tip**: Terms can be grouped by using parenthesis for more control. For example, to search narratives that contain either MURDER AND GUN or MURDER AND KNIFE, enter: MURDER AND (GUN OR KNIFE).
- Tip: Many words will automatically match plural and other forms of words: e.g., SCHOOLED will match SCHOOL, SCHOOLS, and SCHOOLED.
- ➤ **Tip**: When certain search terms are entered, a concept match is done automatically. e.g., MURDER will match MURDER, HOMICIDE, and KILL.
- ➤ **Tip**: The wild card "%" can be used to match zero or more characters and the wildcard "\_" can be used to match exactly one character; e.g., GU% will match GUN, GUM, GUS, GUSTERSON etc., while GU\_ will only match GUN, GUM, GUS, etc.
- ➤ **Tip**: Note that commonly used words such as "AN", "A", "THE" are ignored in all searches.
- ➤ **Tip**: For agency selection, click "(Change Neighborhood...)" or the **Neighborhood** button to select the agencies/sites/Partner system(s) to be searched. All, some, or any one agency's data can be searched. Only agencies that provide narrative data will be in the pick list (see *Neighborhood Selection* section, below).

**Tip**: A range of dates can be entered to limit the search. The date format must be in MM/DD/YYYY format. The calendar control may also be used to enter dates.

#### SEARCH ONLY LAST 2 YEARS OF DATA

An initial query may be limited to search data for the most recent 2 years, by clicking on the Last 2 years hyperlink next to the Incident Date Range on the Query screen. Selecting this option will automatically pre-populate the Date Range fields, extending back 2 years from the current system date.

When the Date Range fields are pre-populated to search the last 2 years of data, clicking on the Clear hyperlink will remove the limitation, and allow searching of older data.





**Note**: if the Date Range is <u>manually</u> entered, the <u>Last 2 years link</u> will remain and the <u>Clear link</u> will not be displayed.

## **Neighborhood Selection**

The default *Free Text Search* setting is to search all local contributing agencies; meaning that the search includes all data in the data warehouse from all local sources. The (Change Neighborhood...) link, located below the [ - ] LInX Advanced Options: heading in the *Free Text Search* query screen, allows a user to access the *Neighborhood Selection* window and select one or more agencies, sites, and/or Partner systems against which to conduct a search. The results will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies.

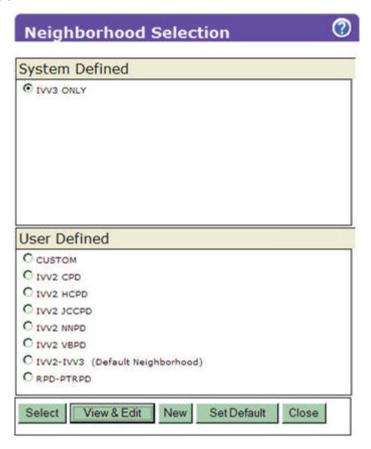
There is also a **Neighborhood** button located at the bottom of the query screen, which will open the *Neighborhood Selection* window without having to click the (Change Neighborhood) link. Either of these methods can be used to access the *Neighborhood Selection* screen.



## **Selecting a Neighborhood:**

When the (Change Neighborhood...) link is selected, the *Neighborhood Selection* screen will open in a separate window. Additional help for *Neighborhood Selection* can be found within the *Neighborhood Selection* functionality by clicking on the

Online Help button [ located in the upper right-hand corner of the *Neighborhood Selection* screen.



## **Selection Status:**

The text appearing above the (Change Neighborhood...) link provides the user with the selection status. If there are no neighborhoods listed, or no neighborhood has been identified as the "default" neighborhood, the local agencies of the current LlnX system, plus whichever remote system(s) that may be included as a default by the Regional Administrator, will be the default agency source criteria for all searches.

```
Searching Default
(Change Neighborhood...)
```

When a different neighborhood selection is made, the selection status changes to reflect the name of the newly-selected neighborhood:

```
Searching IVV2-IVV3
(Change Neighborhood...)
```

# **Map Selection**

The Map Selection functionality provides the user with the ability to search a specified geographic area. When the (Change Map Region ...) link is selected, the Map Selection screen opens in a separate window.

## **Selection Status:**

The text appearing above the (Change Map Region ...) link on the query screen provides the user with the selection status, which corresponds to what is selected in the Neighborhood Selection. If no neighborhood is selected under the Neighborhood Selection menu, then the system default will be used, and no map regions will be specified.

```
Select Map Region
(Change Map Region...)
Searching IVV3-DR1/2
(Change Neighborhood...)
```

When a Map Region is selected, the Neighborhood selection status will change to CUSTOM. The neighborhood will automatically be modified to include the selected regions/agencies. The neighborhood can then be modified further through the *Neighborhood Selection* screen.

Mousing over the Change Map Region link will display a pop-up message containing the name(s) of the map region(s) selected.

Searching 3 map-regions. (Change Map Region...) Searching DR1-DR2-IVV3 (Change Neighborhood...)

Additional help for *Map Selection* can be found within the *Neighborhood Selection* functionality by clicking on the Online Help button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.

# **Justification**

#### LInXUserManual

This function allows Tactical and Analytical LInX users the ability to enter the reason a search is being conducted, and also provides the information to comply with Criminal Offender Record Information (CORI) for auditing purposes. This field is located at the top of each query screen. The field is <u>automatically highlighted in yellow</u>, and is required if one or more agencies in the selected neighborhood require a justification in order to search their data.

If the field is not highlighted in yellow, use of the field is optional.

Justification:	required

Justification will remain persistent throughout the current session, for any LlnX search, unless changed during the session.

### **Executing the Search**

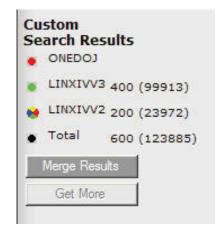
When all the information to be used in the query has been entered, and the source of information selected, clicking on the **Search** button will begin the search process.

Search

The **Clear** button, located at the bottom of the search screen, will clear all the fields in the query screen, with the exception of the *Justification* field, without having to leave the query screen.

# **Results Management Status Description**

A Results Management Status is displayed beneath the menu bar on the left side of the screen. The Status contains the name of the neighborhood that was searched, the name of each system and/or Partner contained in the neighborhood, the number of matching records retrieved from each (up to the specified search increment) within the designated time threshold - which begins when the first results are returned - and the total number of records containing the search criteria, in parentheses.



Search results from one or more remote systems or Partners will automatically be merged and displayed in the LInX search result set, if they are available within the results management time threshold.

If the search of a system has not been completed within the time threshold, a visual indicator will denote the status of that search. The visual indicator status legend is as follows:

- **Black** The search of the system was successfully completed within the time threshold, and all results have been returned.
- Red An error occurred while attempting to search the system (search timed out).
- Green The search of the system was completed after the time threshold was exceeded. Results from the search are now available and ready to be merged into the current result list.
- Multi-colored "beach ball" Waiting for results, as the search of the system is still in progress.

Hovering the cursor over each visual indicator will display a pop-up containing the status description.

### **Merge Results**

When there are results available to be merged, denoted by a green indicator next to the system name, the additional records can be manually merged into the current results set by clicking on the **Merge Results** button, which is highlighted to show it is available.



**Results before Merge** 

The visual indicator next to the system name will turn from green to black, and the number of records in the result set summary will update accordingly, to account for the inclusion of the additional records. The **Merge Results** button will no longer be highlighted.



**Note:** Unless the **Merge** button is used, all results will not be transferred/moved to the results list.

#### **Get More**

When the results from a LInX system are returned, and there are still additional matching records available (as defined by the search result increment selected in *Set Preferences*), the **Get More** button can be used to obtain the next increment of records that match the search results (e.g., 200) from each system.

When the **Get More** button is selected, the visual indicator for each system having additional matching results will change to the multi-colored "beach ball" while the additional records are being retrieved. Once the additional records are available, the visual indicator will change to green, indicating the records are ready to be merged. Each request for more records retrieves an additional set of records (up to the set maximum number) from where the user left off, based on date.

Click on the **Merge Results** button to include the additional records into the current results list. The Summary above the results list will update to indicate the total number of matching records now in the list.

**Note**: If there are agencies feeding more than one LInX Region (e.g., VSP, VAABC, etc.), the local data will be used when these agencies are selected, preventing duplication of data.

# **Navigation and Getting More Results**

At the bottom of each page of result records, there are several buttons which allow the user to navigate the current result list of records returned, as well as getting the next (or previous) result set, as depicted below.

In addition, there is a *Results per page* drop-down box, that allows the user to select how many results should be shown on a page before having to move to the next page. One of the options is to show all returned results on one page. If *All* is selected, the navigation buttons will be gray-out and not available.



The use may also set a default results per page by selecting and saving the desired option under *My LInX/Set Preferences*. This default can be overridden at any time by using the drop-down box shown above.

### Free-Text Search Results Screen View

When the query has been executed, the *Free Text Search* query screen will reappear with a list of documents that meet the search criteria. The result list will identify the Site Name, Incident Date, Document Number, Agency ID, and a short snippet of the document containing the search criteria.

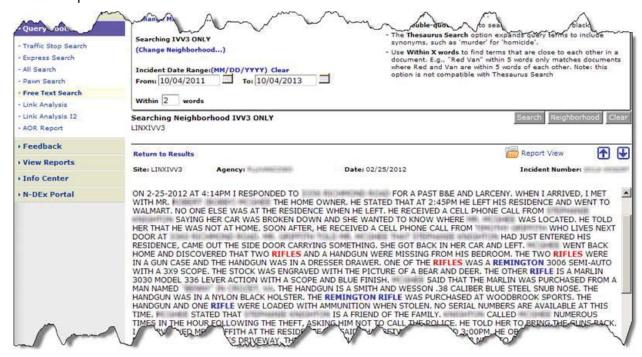


# Free Text Document Selection Result Screen

The full document can be viewed by clicking on the *Document Number* link in the result list.



An example of a Free Text document is shown below:



Exact matches appear in **blue** text. Like terms appear in **red** type.

The Up and Down navigation arrows [ can be used to move from one document view to another without returning to the search results. Selecting the <u>Return</u> to Results link returns the user to the original results list.

To begin a new *Free Text Search* at any time, the search criteria can be entered into the text field at the top of the screen and the **Search** button selected to initiate another search process.

If the user is reading the document for a specified time (set by the System Administrator), the system will assume that there is no system activity and the user will automatically be logged off.

#### **Return to Structured Results:**

If View Free Text Results has been selected from the results of an *All Search* structured query (see the *All Search* help topic for additional details), the Free Text Search screen will include a Return to Structured Results link, located in the middle of the screen, below the query section, to return the user to the original structured search results.

Searching Neighborhood IVV3 ONLY
LINXIVV3

Return to Structured Results

Search Neighborhood Clear

**Note**: The search criteria that was used in the original *All Search* structured query is also displayed in the *Text Search Phrase* field of the Free Text Search query screen.

### Viewing the Event Report

The user may also generate an Event Report for any document returned by clicking the

Report View icon [ ] found in front of each row of the result list; or from the same icon found next to the Incident Number after the *Incident Number* link on the result list has been selected.

The *Event Report* is displayed in a separate window, and contains Incident, Warrant, Person, Vehicle, Phone, and Narrative information, as applicable, associated with the selected event. The *Narrative* section, located at the bottom of the *Event Report*, contains the contents of the document.

In all cases, exact matches will appear in **blue** text. Like terms (e.g., "kill" for search on "murder"), will appear in **red** type if the *Thesaurus Search* option was used.

### **Printing the Event Report**

To print an *Event Report* from LlnX, open the desired report, and click the **Print** button in the lower right-hand corner of the *Event Report* window. If the *Printing from LlnX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "You need to accept the Printing From LlnX agreement." Click **OK** to close the window.

Once the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing the selected *Event Report*. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved report is to be destroyed
- A statement that the printout is for temporary use only.

The bottom of each page displays the following information:

 Disclaimer describing the Rules of Use for saving and/or printing the Event Report from LInX

- LInX version number
- Page number and total number of pages
- Date and Time the Event Report was requested to be printed/saved.

To print the *Event Report*, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the report. The PDF window can be closed after the report has been printed.

To save the *Event Report*, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the report. The PDF window can be closed after the file has been saved.

Printed or saved output is for temporary use only; it must be destroyed within 72 hours of being obtained.

### **Printing Photos**

The photos included with an *Event Report* can be printed in LInX. If there is only one photo associated with a person, it can only be printed when the *Event Report* is printed. If there are additional photos associated with a person, click on the <u>More Images</u> link under the image. This will open the photos in a separate window.

To print photos, click the **Print** button in the lower right-hand corner. If the *Printing from LInX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "*You need to accept the Printing From LInX agreement*." Click **OK** to close the window.

Once the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing all the photos (one photo per page) associated with the event. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved photos are to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing photos from LInX
- LInX version number
- Page number and total number of pages

Date and Time the photos were requested to be printed/saved.

To print the photos, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the photos. The PDF window can be closed after all photos have been printed.

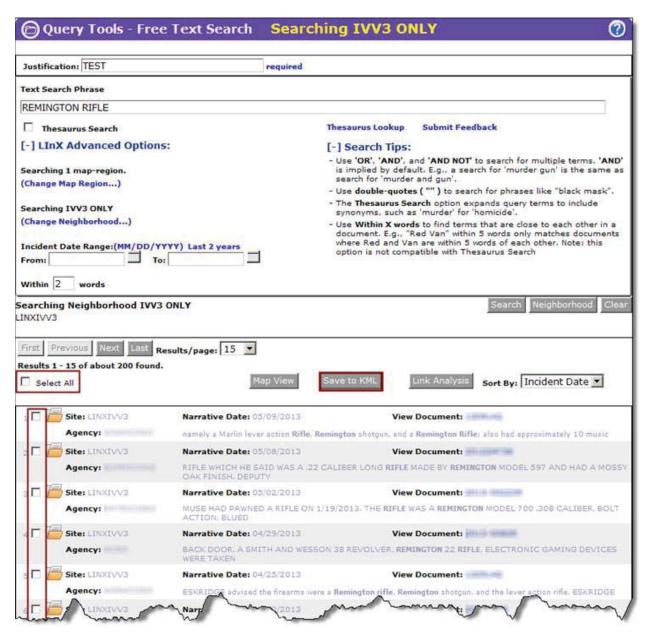
To save the photos, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the photos. The PDF window can be closed after the file has been saved.

Printed or saved output is for temporary use only; it must be destroyed within 72 hours of being obtained.

# Save to KML

The Save to KML (Keyhole Markup Language) feature is available to Analytical users only, and is subject to configurable site policies. The KML Export Agreement must be accepted by the user in order to access this feature.

One or more results may be selected from a Free Text Search query, and exported to KML. The "Save to KML" button located in the middle of the screen, above the results list, allows a user to export information, including address data, associated with the current search results.



The addresses are exported as a compressed KML file. The KML file contains incident and person information associated with each address, as appropriate. A user can choose to save the file or open it in any earth-viewer application that supports the KML format (e.g., Google Earth). By using a KML-compatible application, the LInX-generated KML file can be opened and the mappable LInX results can be viewed.

**Note**: LInX does not provide any third-party earth viewing applications; only the ability to export the data to such applications.

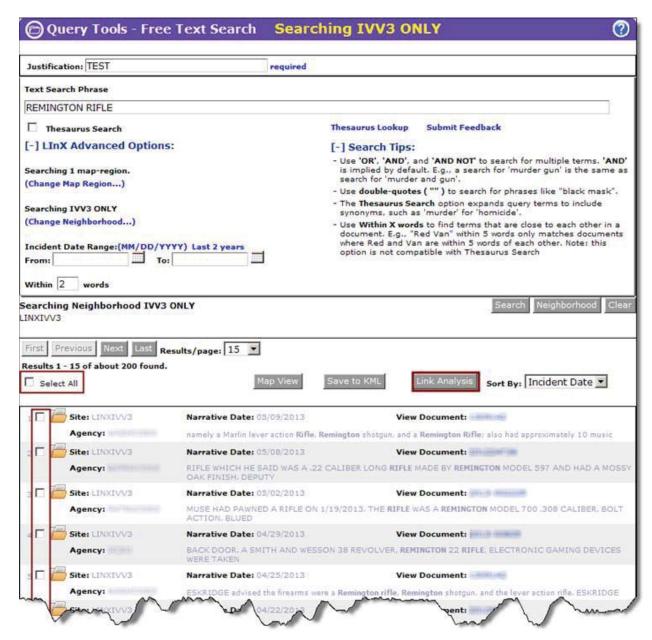
Warning: KML data derived from LInX shall only be utilized for official law enforcement agency purposes. Any pertinent information obtained from this file must be verified with the contributing agency. It is possible that the contents of this file have been changed since its generation.

Access to the KML feature is only available on LInX systems that receive authorization from the applicable Regional Board of Governance; therefore, this feature may not be available at all LInX sites.

# **Move to Link Analysis**

Analytical LInX users may select one or more results from any structured search (Traffic Stop, Express, All Search), or Free Text Search, and view the selected results in the user's default Link Analysis tool (I2 or SVG - selected in *My LInX/Set Preferences*). Link Analysis I2 is the system default if no user preference has been chosen.

Tactical-only user do not have access to this feature.



The original search criteria are copied to the Link Analysis Query tab, and the Person and Incident results are then displayed in the Link Analysis *Chart* and node *Table* tabs.

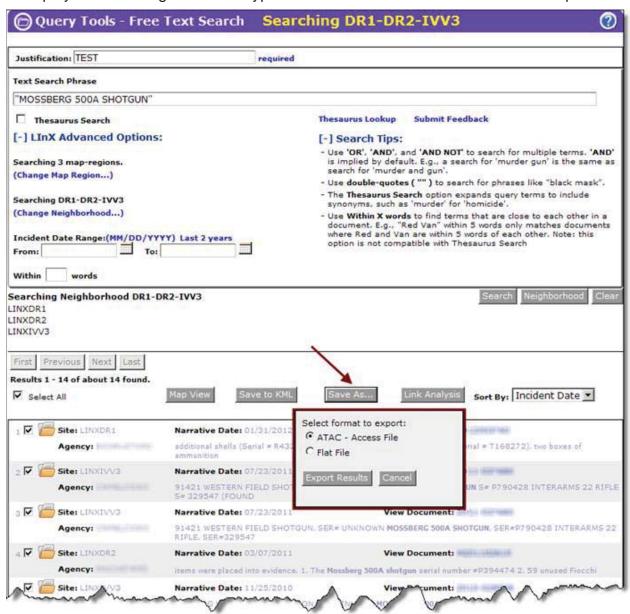
Any results moved to Link Analysis can be walked or otherwise manipulated, revised and re-queried in Link Analysis.

### **Export Free Text Search Results**

Analytical LInX users may select one or more *Free Text Search* results and export those results to a flat file (e.g., *Notepad*), or to an *ATAC* (Anti-Terrorism Advisory

Council) database (*Microsoft Access®*) file. Tactical-only users do not have access to this feature.

After selecting the desired records from the results list to export, click on the **Save As** button located in the middle of the screen, above the results list. A pop-up selection box is displayed containing the format types to which the selected results can be exported.



Click the radio button next to the desired export format, then click the **Export Results** button.

#### **ATAC - Access file**

Selecting ATAC - Access File will open a File Download dialog box with the option to **Open**, **Save**, or **Cancel** the action. Clicking the **Open** button will briefly display

another dialog box showing the data being transferred to the database. Once loaded, the dialog box will close, and an *Access®* database screen will be displayed with the tables that contain the data that was exported.

Selecting the **Save** button from the dialog box will open a Save As window. Enter the name under which the file is to be saved in the *File Name* text box, select the location where the file will be stored, and click the **Save** button. The file will be saved as a *Microsoft Office Access Database* file. Clicking the **Cancel** button will return the user to the *Free Text Search* results screen without saving any results.

#### Flat File

Selecting *Flat File* will open a *File Download* dialog box with the option to **Open**, **Save**, or **Cancel** the action. Clicking the **Open** button opens a Notepad window containing the data that was exported. The first line of the flat file contains the column headings for a pre-determined, limited set of fields that have been exported.

Selecting the **Save** button from the dialog box will open a Save As window. Enter the name under which the file is to be saved in the *File Name* text box, select the location where the file will be stored, and click the **Save** button. The file will be saved as a *Text Document*. Clicking the **Cancel** button will return the user to the *Free Text Search* results screen without saving any results.

Clicking the **Cancel** button from any of the pop-up dialog boxes will return the user to the *Free Text Search* results screen window without exporting any data.

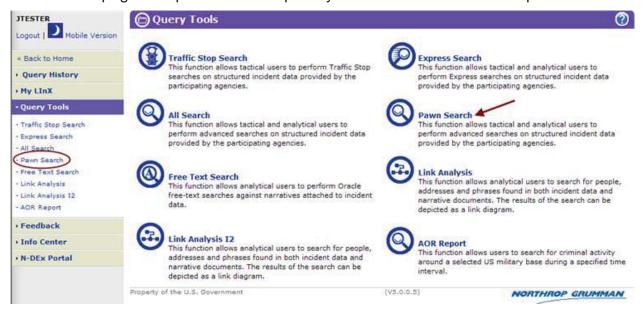
### Pawn Search

Searches can be performed on pawn information submitted to the LInX data warehouse. This functionality is available to both Tactical and Analytical users, based on their user rights.

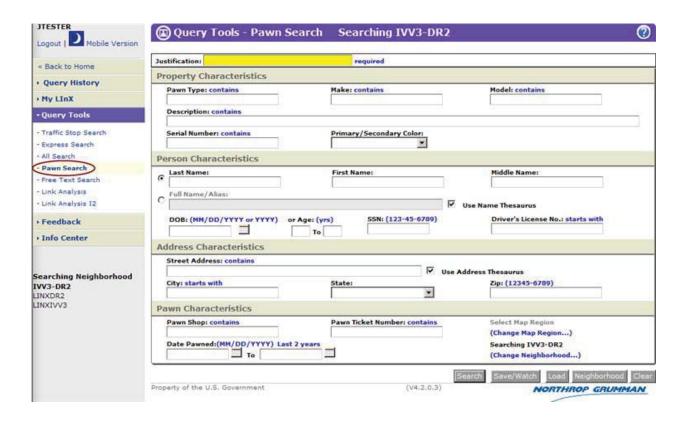
The search results will only display pawn data that has been submitted to LInX by participating law enforcement agencies.

### **Navigating to the Pawn Search Page**

Tactical and Analytical LInX users can access *Pawn Search* either from the Query Tools title page, or from the menu bar located along the left side of the screen. The *Pawn Search* page allows users to enter search criteria that can be used to generate search results. This page also provides the capability to *Save* and *Load* search queries.



The *Pawn Search* page allows users to enter search criteria that can be used to generate search results. This page also provides the capability to *Save* and *Load* search queries.



# Performing a Pawn Search

A search can be performed by entering search criteria in any of the *Property*, *Person*, *Address*, or *Pawn Characteristics* fields; only one field is required to begin a search.

- Justification (highlighted in yellow if required)
- Property Type
- Make
- Model
- Description (free text field)
- Serial Number
- Primary/Secondary Color [drop-down menu]
- Last Name (of person who pawned the property)
- First Name
- Middle Name
- Full Name/Alias
- Name Thesaurus [check-box]
- DOB or Year of Birth
- Current Age or Current Age Range

- > SSN
- Driver's License Number
- Street Address [Pawn Shop or Pawner]
- Address Thesaurus [check-box]
- City
- State [drop-down list]
- Zip
- Pawn Shop
- Pawn Ticket Number
- Date Pawned or Date Pawned Range
- Map Selection [(Change Map Region...) link]
- Neighborhood Selection [(Change Neighborhood...) link]

Any field can be used to initiate a search. For example, entering descriptive words or terms into the Description field will bring back records containing the same words or terms, such as "camera" or "Rolex."

#### **PAWN SEARCH TIPS**

- **Tip**: Search for "New in Box" or "NIB" in the *Description* field to identify unused products that have been pawned and the identities of the person(s) pawning those items.
- Tip: It is <u>not recommended</u> that the *Pawn Type* field be utilized to conduct searches for pawned items, as that field may be populated with a code number for the Pawn type rather than an actual pawn type. Use the *Description* field to enter the description of the pawned property being queried upon.
- **Tip**: Searching on a person will bring up all the pawn records related to that name, and can help identify individuals who pawn goods frequently. Then conduct a structured person search (*All Search*, *Express Search*) to see any past history of other activity.
- **Tip**: Compare the addresses of individuals pawning goods with the area of the pawn activity. Items stolen are frequently pawned in a neighboring jurisdiction to the pawner's address.

#### **EXACT AND THESAURUS SEARCH OPTIONS**

There are two different levels of complexity available for users to conduct searches, depending on the field(s) being searched. The options available are:

**Exact Search**: limits the search results to those records that are an exact match to the search criteria. Results will only be returned if they meet all the criteria entered in the various search characteristics categories. **Results will be returned for exact spelling or numerical matches**.

Exact Searches may be conducted for Name and/or Address queries.

An *Exact Search* will be conducted for <u>Name and/or Address</u> queries unless the respective *Thesaurus* check-boxes are checked.

<u>Thesaurus Search</u>: uses a static LInX thesaurus index to expand the search results to include structured records that contain terms that are grouped together according to similarity of meaning to the search term(s), in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling or numerical matches, and related terms.

Thesaurus Searches may be conducted for Name and/or Address queries.

Examples of Thesaurus entries using the Person Full Name index include:

William - Will, Willie, Bill, Billy Steven - Stephen, Steve, Steph Kenneth - Ken, Kenny

Examples of Thesaurus entries using the Full Street Address index include:

Street - St, Str, Strt Road - Rd Avenue - Av, Ave 1st - First

To conduct thesaurus <u>Name</u> searches, click the *Use Name Thesaurus* check-box to the right of the *Full Name/Alias* field to select the option.

C	Full Name / Alias:	V	Use Name Thesaurus
	To conduct thesaurus <u>Address</u> searches, click the <i>Use Adbox</i> to the right of the <i>Street Address</i> field to select the opt		s <i>Thesauru</i> s check

✓ Use Address Thesaurus

Street Address: contains

The *Use Name Thesaurus* and *Use Address Thesaurus options* may be selected within the *Express Search*, *All Search*, *Pawn*, and *Link Analysis* query screens. The desired default search types can also be set by the user on the *Set Preferences* screen, under *My LInX*.

The following chart compares Exact Search and Thesaurus Search.

	Exact Search	Thesaurus Search
Full Name/Alias Field	LInX will identify structured records containing a full name/alias that exactly matches the user-entered search term(s).	LInX will identify structured records containing a full name/alias that match exactly the user-entered search term(s) or match entries found in a static LInX thesaurus index.
First Name, Middle Name, Last Name Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index.
Full Name/Alias Field Combined with Other Fields	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) and that also contain an exact match for the user-entered search term(s) in the other field(s).	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index, and that also contain an exact match for the user-entered search term(s) in the other field(s).
First Name, Middle Name, Last Name Fields Combined with Other Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) and that also contain an exact match for the user- entered search term(s) in the other field(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index and that also contain an exact match for the user- entered search term(s) in the other field(s).

#### **USE OF WILDCARDS**

Exact Search can also be used with wildcards to expand or speed up the search while still limiting it to the search criteria entered by the user:

- A wildcard (%) can be used in an exact search to bring up additional records that reflect the criteria including the wildcard, such as "Doe, J%" for all individuals with the last name of "Doe" and a first name beginning with the letter "J".
- If the search involves alphanumerical values, such as a partial license plate, the location of the wildcard within the number sequence will determine the results that are returned (see following table).
- Wildcards can be used to speed up a search by inserting a wildcard after the search criteria, which has the effect of limiting the search results that begin with the criteria instead of containing the criteria anywhere within the record. Using the wildcard in this way may speed up the search if time is a concern and the possible number of candidate returns is large, such as Street or City names.
- Wildcards can also be used in Driver's License Numbers, Street Names, City Names, Street Numbers, and Social Security Numbers.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

The following chart provides examples of the results returned when using wildcards in *Exact Search* queries:

Exact Search Wildcard Placement Examples	Results
Names (People, Places)	

J% Doe	All individuals with first names starting with "J" and last name of "Doe" (and any aliases on records as the letter "J").
Cent% Street	Street Names starting with "Cent", such as Central, Center, or Centre.
Oak% Street (wildcard used to speed results)	Street Names of "Oak", limiting the search to Street Names of Oak, or starting with the word Oak, such as Oakdale.
Numbers and Alphanumeric Sec	quences
%123	Sequences ending in "123" and sequences with "123" in the middle, or results of "123", if that is the entire record (such as "123 Main Street").
123%	Sequences starting with "123".
%12%3%	Sequences with known characters in this order.
123 (no wildcards)	Returns results of "123" alone or "123" anywhere in the sequence, in any field that is noted with the word "contains".

### **SEARCH ONLY LAST 2 YEARS OF DATA**

An initial query may be limited to search data for the most recent 2 years, by clicking on the Last 2 years hyperlink next to the Incident Date Range on the Query screen. Selecting this option will automatically pre-populate the Date Range fields, extending back 2 years from the current system date.

When the Date Range fields are pre-populated to search the last 2 years of data, clicking on the Clear hyperlink will remove the limitation, and allow searching of older data.



**Note**: if the Date Range is <u>manually</u> entered, the Last 2 years link will remain and the Clear link will not be displayed.

# **Neighborhood Selection**

The default *Pawn Search* setting is to search all local contributing agencies; meaning that the search includes all data in the data warehouse from all local sources. The (Change Neighborhood...) link allows a user to access the *Neighborhood Selection* window and select one or more agencies, sites, and/or Partner systems against which to conduct a search. The results will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies.

There is also a **Neighborhood** button located at the bottom of the query screen, which will open the *Neighborhood Selection* window without having to click the (Change Neighborhood) link. Either of these methods can be used to access the *Neighborhood Selection* screen.

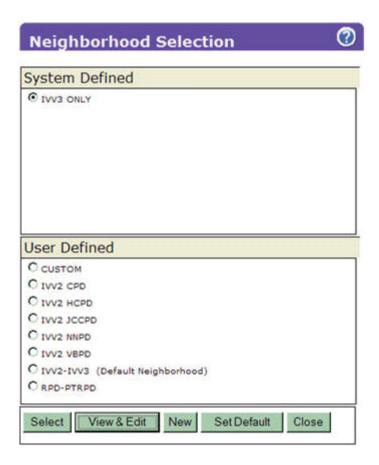


Searching I-95 (Change Neighborhood...)

### **Selecting a Neighborhood:**

When the (Change Neighborhood...) link is selected, the *Neighborhood Selection* screen will open in a separate window. Additional help for *Neighborhood Selection* can be found within the *Neighborhood Selection* functionality by clicking on the

Online Help button [ located in the upper right-hand corner of the *Neighborhood Selection* screen.



### **Selection Status:**

The text appearing above the (Change Neighborhood...) link on the query screen provides the user with the selection status. If there are no neighborhoods listed, or no neighborhood has been identified as the "default" neighborhood, the local agencies of the current LInX system, plus whichever remote system(s) that may be included as a default by the Regional Administrator, will be the default agency source criteria for all searches.

Searching Default (Change Neighborhood...)

When a different neighborhood selection is made, the selection status changes to reflect the name of the newly-selected neighborhood:

Searching IVV2-IVV3 (Change Neighborhood...)

# **Map Selection**

The Map Selection functionality provides the user with the ability to search a specified geographic area. When the (Change Map Region ...) link is selected, the Map Selection screen opens in a separate window.

#### **Selection Status:**

The text appearing above the (Change Map Region ...) link on the query screen provides the user with the selection status, which corresponds to what is selected in the Neighborhood Selection. If no neighborhood is selected under the Neighborhood Selection menu, then the system default will be used, and no map regions will be specified.

```
Select Map Region
(Change Map Region...)
Searching IVV3-DR1/2
(Change Neighborhood...)
```

When a Map Region is selected, the Neighborhood selection status will change to CUSTOM. The neighborhood will automatically be modified to include the selected regions/agencies. The neighborhood can then be modified further through the *Neighborhood Selection* screen.

Mousing over the Change Map Region link will display a pop-up message containing the name(s) of the map region(s) selected.

```
Searching 3 map-regions.
(Change Map Region...)
Searching DR1-DR2-IVV3
(Change Neighborhood...)
```

Additional help for *Map Selection* can be found within the *Neighborhood Selection* functionality by clicking on the Online Help button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.

### **Justification**

This function allows Tactical and Analytical LInX users the ability to enter the reason a search is being conducted, and also provides the information to comply with Criminal Offender Record Information (CORI) for auditing purposes. This field is located at the top of each query screen. The field is automatically highlighted in yellow, and is

required if one or more agencies in the selected neighborhood require a justification in order to search their data.

If the field is not highlighted in yellow, use of the field is optional.

Justification:	required
Justineadoni	required

Justification will remain persistent throughout the current session, for any LInX search, unless changed during the session.

# Save and Watch Selected Queries

Analytical and Tactical LInX users have the ability to save queries, watch saved queries for new information, and load saved queries.

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# **Executing the Search**

When all the information to be used in the query has been entered, and the source of information selected, clicking on the **Search** button will begin the search process.

Search

The **Clear** button, located at the bottom of the search screen, will clear all the fields in the query screen, with the exception of the *Justification* field, without having to leave the query screen.

#### **Load Saved Queries**

Users may load any of their saved queries directly from the *Query* screen by clicking the **Load** button, which will open a *Query Selection* menu in a separate window.



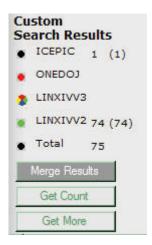
To load a query, ensure that the radio button for the desired query is selected, and then click the **Load** button. A pop-up message stating "Requested query loaded" is displayed. Click the **OK** button to close the pop-up message.

The query screen is re-displayed and populated with the search criteria from the selected saved query. Click the **Search** button to run the query.

Clicking the **Cancel** button from the *Query Selection* window will close the window and return the user to the *Query* screen without loading any data.

# **Results Management Status Description**

A Results Management Status is displayed beneath the menu bar on the left side of the screen. The Status contains the name of the neighborhood that was searched, the name of each system and/or Partner contained in the neighborhood, and the number of matching records retrieved from each (up to the specified search increment) within the designated time threshold - which begins when the first results are returned.



Search results from one or more remote systems or Partners will automatically be merged and displayed in the LInX search result set, if they are available within the results management time threshold.

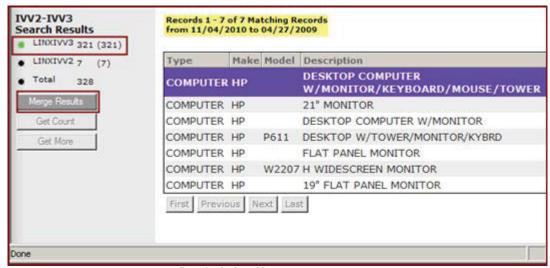
If the search of a system has not been completed within the time threshold, a visual indicator will denote the status of that search. The visual indicator status legend is as follows:

- Black The search of the system was successfully completed within the time threshold, and all results have been returned.
- Red An error occurred while attempting to search the system (search timed out).
- Green The search of the system was completed after the time threshold was exceeded. Results from the search are now available and ready to be merged into the current result list.
- Multi-colored "beach ball" Waiting for results, as the search of the system is still in progress.

Hovering the cursor over each visual indicator will display a pop-up containing the status description.

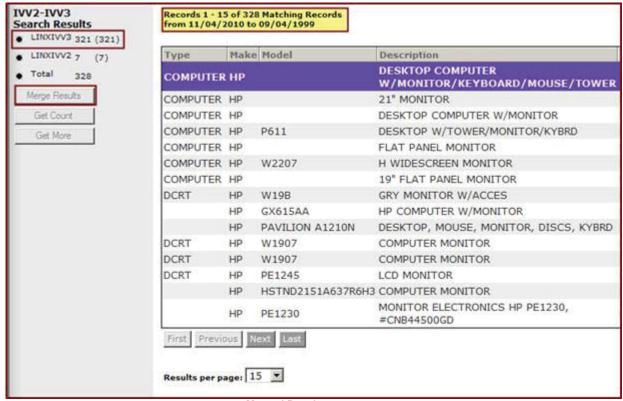
### **Merge Results**

When there are results available to be merged, denoted by a green indicator next to the system name, the additional records can be manually merged into the current results set by clicking on the **Merge Results** button, which is highlighted to show it is available.



Results before Merge

The visual indicator next to the system name will turn from green to black. The number of records and the date range for the records in the result set summary will update accordingly, to account for the inclusion of the additional records. The **Merge Results** button will no longer be highlighted.



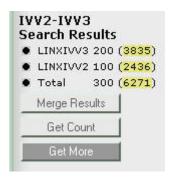
Merged Results

**Note:** Unless the **Merge** button is used, all results will not be transferred/moved to the results list.

#### **Get Count**

If the number of records retrieved is greater than the search results increment selected under *Set Preferences* (e.g., 100, 200, 500, or 1000), the number of records shown equals the increment number. If there are additional records beyond the results increment, the **Get Count** button will become available. When the **Get Count** button is selected, the visual indicator for each system will change to the multi-colored "beach ball" while the counts are being calculated. Once the total record count is returned, the visual indicator will return to its previous state (black or green), and the total number of records from each system that match the search criteria will be displayed in parentheses.

**Note**: The user selects the size of the batch in *Set Preferences* under the "*My LInX*" menu option located along the left side of the screen.



### **Get More**

When the results from a LInX system are returned, and there are still additional matching records available (as defined by the search result increment selected in *Set Preferences*), the **Get More** button can be used to obtain the next increment of records that match the search results (e.g., 200), from each system.

When the **Get More** button is selected, the visual indicator for each system having additional matching results will change to the multi-colored "beach ball" while the additional records are being retrieved. Once the additional records are available, the visual indicator will change to green, indicating the records are ready to be merged. Each request for more records retrieves an additional set of records (up to the set maximum number) from where the user left off, based on date.

Click on the **Merge Results** button to include the additional records into the current results list. The Summary above the results list will update to indicate the

total number of matching records now in the list, as well as the expanded Incident Date range.

**Note**: If there are agencies feeding more than one LInX Region (e.g., VSP, VAABC), the data from the local system will be used when these agencies are selected, preventing duplication of data.

### **Remove Date Range**

If the search was limited to the last 2 years (by clicking on the Last 2 years link on the *Query* screen), the date range limit can be removed, and the query automatically rerun, by clicking on the Remove date range <mm/dd/yyyy> to <mm/dd/yyyy> link, where mm/dd/yyyy represents the month/day/year of the Start Date and the End Date of the Date Range.

# **Reading the Search Results**

Pawn data contained in the data warehouse that meets the search criteria will be returned as a result list. The result list is displayed at the bottom half of the screen, below the *Pawn Characteristics* tab, and represents the first 200 records that meet the search criteria. (If the user has set the default search increment to 100, 500, or 1000, the result list will contain that number of records).

Information related to the first row of the result list is automatically displayed in the *Pawn Characteristics* fields at the top of the screen. Unlike other result lists that are person-centric, this list is based on the pawned property items.

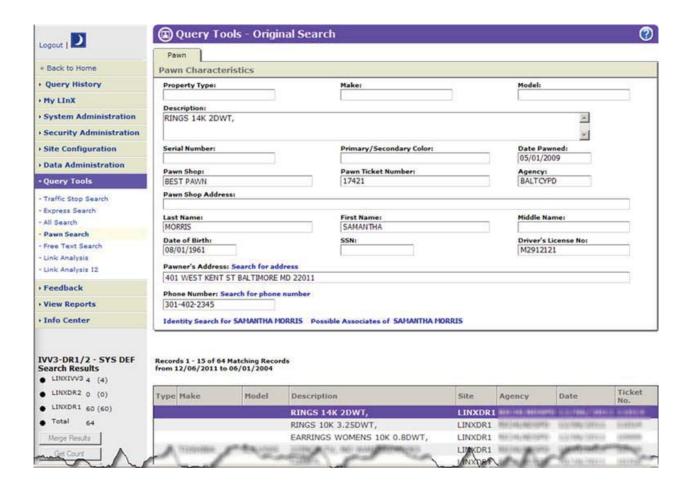
#### Default Order

The result list appears in descending chronological order, with the most recent Incident Date at the top of the list.

#### Resorting the Result List

The user can rearrange the order of the result list by clicking on any of the column headings (e.g., Type, Make, Model, etc.).

Hovering the mouse over the Agency ID in the result list will display a pop-up containing the full agency name.



By clicking on other rows in the result list, the information displayed in the *Pawn Characteristics* fields at the top of the screen will be replaced with information related to the new record selected.

#### Quick search for [selected] address

The Search for address capability enables a LInX user to run a query for a selected pawner's address directly from the search results screen without having to return to the query screen. Pawn Shop addresses will not be searched.

A Search for address link is dynamically created next to the *Pawner's Address* label above the Address field on the *Pawn* tab, if the *Pawner's Address* field is populated. There will be no search link if the *Pawner's Address* field is not populated. If there are multiple addresses available for the selected pawner, the link will display as Search for selected address, and the drop-down list can be used to access other addresses to search.

Clicking the Search for [selected] address link will display a new result list of records that contain the address that was searched. While the search is being

performed, a notation of "Searching Address" may be seen above the *Pawner's Address* field, highlighted in yellow.

Rules for searching an address:

- For the <u>Local</u> site, the Street Name is required to perform the search
- For a <u>Remote</u> site, the following information is required: Street Address OR Street Name, and either a City <u>and</u> State, OR a Zip.

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *Pawn* tab.

**Tip:** Use *Query History* as a reminder of the address(es) that were searched if multiple *Address Searches* were made.

#### Quick search for [selected] phone number

The Search for phone number capability enables a LInX user to run a query for a selected phone number directly from the search results screen without having to return to the query screen.

A Search for phone number link is dynamically created next to the *Phone Number* label above the Phone Number field on the *Pawn* tab, if the *Phone Number* field is populated. There will be no search link if the *Phone Number* field is not populated. If there are multiple phone numbers available for the selected person, the link will display as Search for selected phone number, and the drop-down list can be used to access other phone numbers to search.

Clicking the Search for [selected] phone number link will display a new result list of records that contain the phone number that was searched. While the search is being performed, a notation of "Searching Phone Number" may be seen above the *Phone Number* field, highlighted in yellow.

Rules for searching a phone number:

- For the Local site, the prefix and suffix are both required
- For a <u>Remote</u> site, area code, prefix, and suffix are all required

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Tip:** Use *Query History* as a reminder of the phone number(s) that were searched if multiple *Phone Searches* were made.

### **Person Identity Search**

The *Person Identity* capability enables a LInX user to run a query for a selected person directly from the search results screen without having to return to the query screen.

An Identity Search link containing the person's name is dynamically created at the bottom of the *Pawn* tab of the selected pawner. Clicking the link will display a new result list of people with the same name and DOB as the selected pawner. While the search is being performed, a notation of "Searching Identity" may be seen at the bottom of the *Pawn* tab, highlighted in yellow.

The identity search algorithm is based on the following criteria:

- First Name + Last Name + DOB (using Thesaurus) OR
- 1st Character of First Name + 1st 3 Characters of Last Name + DOB + Sex OR
- SSN OR
- FBI Number.

If there is not enough information for the selected person to be uniquely identified, a pop-up window will be displayed stating, "Insufficient data available!".

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *Pawn* tab.

**Tip:** Use *Query History* as a reminder of the name(s) that were searched if multiple *Identity Searches* were made.

#### **Possible Associates**

The *Possible Associates* capability allows a user to search for and view all persons associated with the selected person in a search result list. The user may recursively select possible associates of possible associates.

A Possible Associates link containing the person's name is dynamically created at the bottom of the *Pawn* tab of the selected pawner. Clicking the link will display a new result list of all people who were involved in any incident involving a person with the same name and identifiers as the selected person.

While the search is being performed, a notation of "Searching Possible Associates" may be seen at the bottom of the *Pawn* tab, highlighted in yellow.

If there is either not enough information for the selected person to identify incidents involving the selected person, or there are no other records that involve the selected person, a pop-up window will be displayed stating "No possible associates found!".

To return to the original search results, click on the Return to Original Search Results link at the bottom of the *People* tab.

**Tip:** Use *Query History* as a reminder of the name(s) that were searched if multiple *Possible Associates* searches were made.

### **Navigation and Getting More Results**

At the bottom of each page of result records, there are several buttons which allow the user to navigate the current result list of records returned, as well as getting the next (or previous) result set, as depicted below:

In addition, there is a *Results per page* drop-down box, that allows the user to select how many results should be shown on a page before having to move to the next page. One of the options is to show all returned results on one page. If *All* is selected, the navigation buttons will be gray-out and not available.



The use may also set a default results per page by selecting and saving the desired option under *My LInX/Set Preferences*. This default can be overridden at any time by using the drop-down box shown above.

#### **SAVE/WATCH A QUERY**

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#### **INITIATING A NEW QUERY**

A new query can be initiated by selecting the **New Query** button at the bottom of the result list, which will present a blank *Pawn Search* screen. If the **Revise Query** button is selected, the *Pawn Search* screen will reappear with the search criteria that was used for the last search, which can then be modified to create a new search.



### Link Analysis Search

To have access to Link Analysis analytical screens, the user must have been assigned an Analytical role in LlnX.

#### RESTRICTIONS ON THE USE OF LINX DATA

The data from the LInX system is not considered and should not be used for original documentation for probable cause from any participating agency. Use of the data is controlled by the *LInX Rules of Operation* for each regional LInX system. Contact you system administrator for a copy.

#### **PERSON-CENTRIC**

When the data from the various agencies has been "pushed" to the LInX data warehouse, it becomes available for searching purposes. **LInX is person-centric,** which means that search results will return information on the individual associated with the search criteria. For example, a search on a vehicle will return a list of persons that may be associated with an incident involving that vehicle. Search rules have been built into the system to provide likely matches for the user to review.

#### **SEARCH PROCESS**

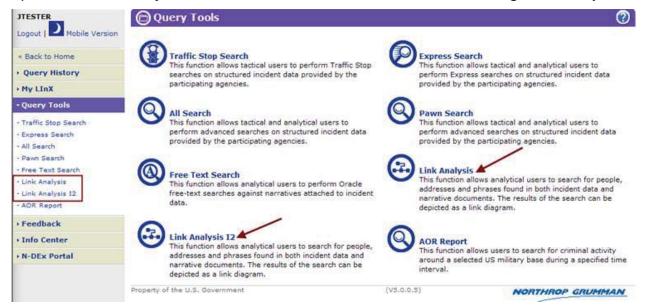
The search process is designed to produce these results:

- A search on Persons, Vehicles, Addresses, Incidents and/or Phone numbers will bring back a list of matches.
- The default source for the results is all agencies in the current system, unless a specific neighborhood is selected (see *Neighborhood Selection* section below); meaning that the search includes all data in the data warehouse from all sources.
- By selecting one or more source agencies for the search process rather than all agencies, the results will be filtered to reflect only the data from the selected sources.
- Some person names may appear more than once in the search results. This occurs because each event in which a person has been involved will appear in the result list. In some instances, the person

may be listed more than once, even in a single event, if that person was listed as having more than one role in the single event.

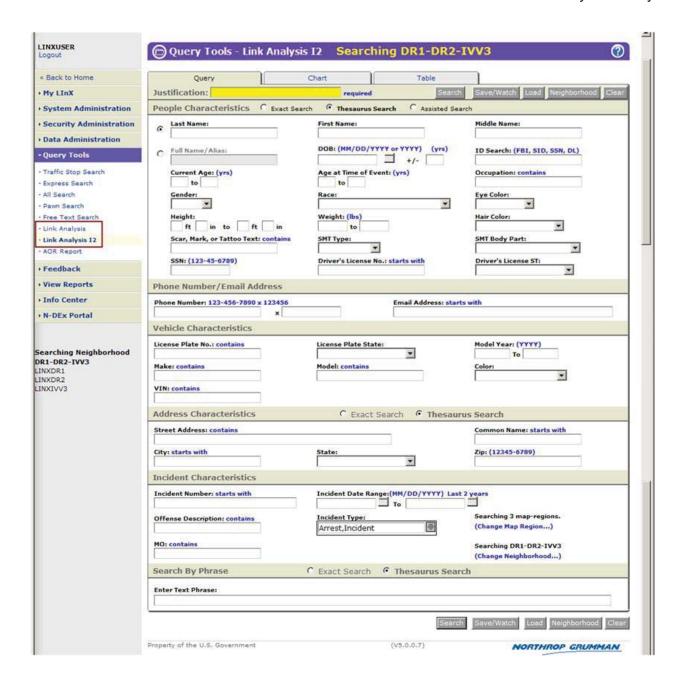
## Navigating to Link Analysis Search

Analytical LInX users can access Link Analysis (SVG or I2) either from the Query Tools title page, or from the menu located along the left side of the screen. Link Analysis opens with the *Query* tab view, which is used to enter the criteria to begin the analysis.



The Link Analysis query screen allows users to search both structured and free-text data in the LInX database for people, addresses, incidents and phrases. Phrase-based queries will search the LInX document warehouse. This page also provides the capability to *Save* and *Load* search queries.

**Note**: The same Query screen is used for both the SVG and I2 versions of Link Analysis, with the only difference being the title of the middle tab (Graph = SVG; Chart = I2).



### Performing a Link Analysis Search

The Link Analysis process begins with a query to search for data that will be included in the analysis. People, Vehicle, Address, Incident, and Phone search criteria can be entered into the fields shown on the screen, as well as phrases.

After entering the criteria to be used in the analysis, the agency database to be used in the search can be specified using the (Change Neighborhood...) link. The Neighborhood Selection menu is set to default to all available agencies.

Note: See Neighborhood Selection below.

#### LINK ANALYSIS SEARCH TIPS

Tip: Less is better! Starting with just Last Name and First Name is usually the best approach, as it will result in the largest results set.

To refine the search, adding the DOB is often the best choice to add to the search criteria. However, matches will only improve if the additional identifiers match the contents of the original records in the database.

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

**Tip**: Consider reversing the names in a search. Some cultures actually use the Last Name as a First Name.

**Tip:** Use the Name/Alias search field when only one portion of a name is known or when searching for a "street name" or a single name alias (e.g., "Killer", "Peanut", "Catfish", etc.). This will search the Last, First, Middle, and Alias name fields.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: Searches by Social Security Number may assist with the identification of persons who have changed their name (legally or otherwise).

**Note**: The ID field is not to be considered when searching for NCIS data.

### **People Characteristics Search Fields**

The search criteria related to a person can be entered into the text fields shown under *People Characteristics*. The People Characteristics fields are:

- Justification (highlighted in yellow if required)
- Name Search Type [Exact/Thesaurus/Assisted]
- Name Type [Last/First/Middle or Full Name/Alias]
- DOB/Year of Birth or DOB/Year of Birth Range
- ID Search (FBI, SID, SSN, DL)

- Current Age or Current Age Range
- Age at Time of Event or Age Range at Time of Event
- Occupation
- Gender [drop down list]
- Race [drop down list]
- Eye Color [drop down list]
- Height or Height Range
- Weight or Weight Range
- Hair Color [drop down list]
- Scar, Mark, Tattoo (SMT) Description
- SMT Type [drop down list]
- SMT Body Part [drop down list]
- Social Security Number
- Driver's License Number
- Driver's License State [drop down list]

**Note**: The *Occupation* field is configurable (on/off) by LInX site. The default setting for this field is 'ON'; i.e., the field is available for searching on the *Link Analysis People Characteristics* query page, and for display in the *Event Report* view of the search results.

#### **EXACT, ASSISTED, AND THESAURUS SEARCH OPTIONS**

There are two or three different levels of complexity available for users to conduct <u>Name</u> searches, depending on the field(s) being searched. The options available are:

**Exact Search**: limits the search results to those records that are an exact match to the search criteria. Results will only be returned if they meet all the criteria entered in the various search characteristics categories. **Results will be returned for exact spelling or numerical matches**.

Exact Searches may be conducted for Name, Address, or Text gueries.

To conduct exact <u>Name</u> searches, select the *Exact Search* radio button located on the *People Characteristics* section heading.



<u>Assisted Search</u>: uses soundex and metaphone phonetic algorithms to expand the search results to include structured records that contain **similar matching terms to the search criteria**, in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling and similar spelling matches, or names that <u>sound</u> similar to the search criteria.

**Note**: This option is <u>only</u> available for *Name Searches*, using the following People Characteristics fields:

- Last Name (legal name or alias)
- First Name
- Middle Name
- Full Name / Alias

To conduct assisted searches, select the *Assisted Search* radio button located on the *People Characteristics* section heading.



<u>Thesaurus Search</u>: uses a static LInX thesaurus index to expand the search results to include structured records that contain terms that are grouped together according to similarity of meaning to the search term(s), in addition to those records that contain exact matching terms to the search criteria. Results will be returned for exact spelling or numerical matches, and related terms.

Thesaurus Searches may be conducted for Name, Address, or Text queries.

Examples of Thesaurus entries using the Person Full Name index include:

William - Will, Willie, Bill, Billy Steven - Stephen, Steve, Steph Kenneth - Ken, Kenny

Examples of Thesaurus entries using the Full Street Address index include:

Street - St, Str, Strt Road - Rd Avenue - Av, Ave 1st - First Examples of Thesaurus entries using the Narrative index include:

Murder - Homicide, Manslaughter Cocaine - candycaine, coke

To conduct thesaurus searches, select the *Thesaurus Search* radio button located on the *People Characteristics* section heading.



The Exact, Assisted, and Thesaurus search options may be selected within the Express Search, All Search, and Link Analysis query screens. The desired default search types can also be set by the user on the Set Preferences screen, under My LInX.

The following chart compares Exact Search, Assisted Search, and Thesaurus Search.

	Exact Search	Assisted Search	Thesaurus Search
Full Name/Alias Field	LInX will identify structured records containing a full name/alias that exactly matches the user-entered search term(s).	LInX will identify structured records containing a full name/alias that exactly match or similarly match the user-entered search term(s).	LInX will identify structured records containing a full name/alias that match exactly the user-entered search term(s) or match entries found in a static LInX thesaurus index.
First Name, Middle Name, Last Name Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s).	LInX will identify structured records containing component name fields that exactly match or similarly match the user-entered search term(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index.
Full Name/Alias Field Combined with Other Fields	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) and that also contain an exact match for the user-entered search term(s) in the other field(s).	LInX will identify structured records containing a full name/alias that exactly match or similarly match the user-entered search term(s) and that also contains an exact match for the user-entered search term(s) in the other field(s).	LInX will identify structured records containing a full name/alias that exactly match the user-entered search term(s) or match entries found in a static LInX thesaurus index, and that also contain an exact match for the user-entered search term(s) in the other

			field(s).
First Name, Middle Name, Last Name Fields Combined with Other Fields	LInX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) and that also contain an exact match for the user-entered search term(s) in the other field(s).	LInX will identify structured records containing first name, middle name, last name fields that exactly match or similarly match the user-entered search term(s) and that also contain an exact match for the user-entered search term(s) in the other field(s).	LinX will identify structured records containing first name, middle name, last name fields that exactly match the user-entered search term(s) or match entries found in a static LinX thesaurus index and that also contain an exact match for the user-entered search term(s) in the other field(s).

#### **USE OF WILDCARDS**

Exact Search can also be used with wildcards to expand or speed up the search while still limiting it to the search criteria entered by the user:

- A **wildcard** (%) can be used in an exact search to bring up additional records that reflect the criteria including the wildcard, such as "Doe, J%" for all individuals with the last name of "Doe" and a first name beginning with the letter "J".
- If the search involves alphanumerical values, such as a partial license plate, the location of the wildcard within the number sequence will determine the results that are returned (see following table).
- Wildcards can be used to speed up a search by inserting a wildcard after the search criteria, which has the effect of limiting the search results that begin with the criteria instead of containing the criteria anywhere within the record. Using the wildcard in this way may speed up the search if time is a concern and the possible number of candidate returns is large, such as Street or City names.
- Wildcards can also be used in Driver's License Numbers, Street Names, City Names, Street Numbers, and Social Security Numbers.

**Tip**: Because of various spellings of names, a wildcard (%) can be used if the correct spelling of a person's name is unknown (e.g., Gonzale% to retrieve Gonzales and Gonzalez).

**Tip**: Use wildcards (%) for name queries where the person may have **more than three names**. The wildcard can be placed before, and/or after the Last Name. It may be valuable to conduct separate searches of both the Middle and Last Name fields.

The following chart provides examples of the results returned when using wildcards in *Exact Search* queries:

Exact Search Wildcard Placement Examples	Results
Names (People, Places)	
J% Doe	All individuals with first names starting with "J" and last name of "Doe" (and any aliases on records as the letter "J").
Cent% Street	Street Names starting with "Cent", such as Central, Center, or Centre.
Oak% Street (wildcard used to speed results)	Street Names of "Oak", limiting the search to Street Names of Oak, or starting with the word Oak, such as Oakdale.
Numbers and Alphanumeric Se	quences
%123	Sequences ending in "123" and sequences with "123" in the middle, or results of "123", if that is the entire record (such as "123 Main Street").
123%	Sequences starting with "123".
%12%3%	Sequences with known characters in this order.
123 (no wildcards)	Returns results of "123" alone or "123" anywhere in the sequence, in any field that is noted with the word "contains".

### **Phone Characteristics Search Fields**

Query on a phone number by entering search criteria in the phone number fields and then selecting the **Search** button:

- Main Phone Number (Area Code, Prefix/Suffix)
- Phone Extension

There are two fields that are associated with the phone number field (as shown below).



The single field for the main phone number allows for cut/paste operations from another document into LlnX. Note that extensions are rarely captured in an RMS.

Phone Numbers may be entered in a variety of formats, and the number will be parsed into component fields automatically. The following formats are supported:

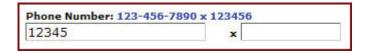
(123)123-1234 123-123-1234 123.123.1234 1231231234

#### **ENTRY RULES & ERROR MESSAGES**

There are several rules associated with the entry of phone number search criteria:

#### 7 Digits Required When:

If a prefix/suffix is entered without using a wildcard (%), as shown in the following example, then the complete 7 digit phone number MUST be provided.



The following message will appear if you do not meet entry criteria.



#### Wildcards Allowed:

<u>Linx DOES allow the use of the wildcard (%) character</u>, which is one of the most effective approaches for querying phone numbers. The wildcard (%) may be prepended, appended, or placed on both sides of a partial number, as shown in the example below.



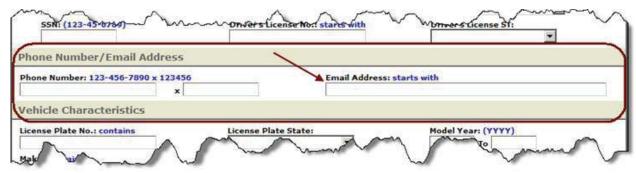
Note that when one or more wildcards are used, dashes are automatically inserted to parse the Phone Number into component fields.

**Tip**: To get the maximum results for partial phone numbers, use the wildcard (%) on the left, right, or both sides of the partial number.

**Tip**: The area code is often omitted from RMS data. It is not required for a phone number search -- leave it out in order to get maximum results on a search for partial phone numbers.

### E-mail Address Search Field

Queries for a person can be performed using a known e-mail address [to include personal e-mail, Facebook and/or Twitter accounts, etc.], if available.



The following information applies to e-mail searches:

- Wild-cards (%) can be used in the e-mail search field to search for all or part of an e-mail address. The wildcard may be prepended, appended, or placed on both sides of an e-mail address
- If a free-text search is run in the back-ground, the e-mail address will also be included in the free-text query
- E-mail addresses include personal e-mail accounts, Facebook, Twitter, etc. The e-mail type can be seen in the *Email Addresses* section of the *Person Summary*.

**Note**: E-mail addresses have not been populated for agencies with data already in LlnX/D-DEx. As new agencies join LlnX/D-DEx, or existing agencies are reworked (e.g., RMS upgrade or change), person e-mail addresses will be ingested into the new structured fields if they are available in the source data.

### **Vehicle Characteristics Search Fields**

The search criteria related to a vehicle can be entered into the text fields shown under *Vehicle Characteristics*. A query can be executed using one field; adding addition criteria will narrow the search results.

Queries on vehicles can be performed by entering search criteria in one or more of the following fields and then selecting the **Search** button:

- License Plate Number
- License Plate State
- Year (of vehicle), in format xxxx (such as 2004)
- Make (of vehicle)
- Model (of vehicle)
- Color (of vehicle) [drop down list]
- > VIN

If the full license plate is not known, a search on a partial plate can be performed under *Vehicle Characteristics* by using a wildcard (%). This will return results with similar sequences depending where the wildcard is placed. A search can also be done on vehicle descriptions without plate information. While it is worth trying, data fields are frequently not fully populated in the participating agencies' records.

**Tips**: **For maximum results, use License Plate number only**, without any other search criteria. If there are too many results, add another search criterion, if possible.

When searching vehicle make and/or model, only use the first 2-3 letters in the car *Make* or *Model* field(s), plus a wildcard, to maximize results, since the number of data fields populated differs significantly from agency to agency (e.g., enter **TO**% for Toyota). *Model* and *Color* of vehicle are often not fully populated by an agency.

**Note**: Vehicles contained in LInX are **not** DMV records. Rather, they are vehicles associated with events such as Accidents, Incidents, Citations, etc.

### Address Characteristics Search Fields

The search criteria related to an address can be entered into the text fields shown under *Address Characteristics*. A query can be executed using one field; adding addition criteria will narrow the search results. The address search will return results for matches to both Person Addresses and Event Addresses.

The address characteristics fields are:

- Address Search Type [Exact Search or Thesaurus]
- Street Address (to include Street Number, Pre-Direction, Street Name, Street Type, Post-Direction, Building/Apartment)
- Common Name (alternative name used locally to identify a street, business, school or government building, or building name)
- City
- State [drop down list]
- Zip Code

#### **Exact Address Search**

The Exact Address Search works in the same manner as described above for Exact Name Search.

To conduct exact <u>Address</u> searches, select the *Exact Search* radio button located on the *Address Characteristics* section heading.

#### **Thesaurus Address Search**

The *Thesaurus Address Search* works in the same manner as described above for *Thesaurus Name Search*.

To conduct thesaurus <u>Address</u> searches, select the *Thesaurus Search* radio button located on the *Address Characteristics* section heading.

**Tip**: The entry of **address** data varies greatly from event to event. To maximize the number of search results that are potential matches, **enter as few fields as possible to initiate a search**; such as the Street Number and Street Name.

**Tip**: Use only Street Number and Street Name for the most complete result set **without** the City or State. Street Type, City, and State are not well populated in many agency records management systems.

**Tip**: For **numbered streets**, try both the number and the number spelled out to obtain all potential matches (e.g., "11" and "eleven").

### **Incident Characteristics Search Fields**

Queries on incidents can be performed by entering search criteria in one or more of the following fields and then selecting the **Search** button:

- Incident Number
- Incident Start Date
- Incident End Date
- Offense Description
- Incident Type [pop-up selection menu]
- Map Selection [(Change Map Region...) link]
- Neighborhood Selection [(Change Neighborhood...) link]
- MO (modus operandi); search by MO is not an effective search as this field is generally not populated

#### **LINX EVENT TYPES:**

- Arrest
- Booking
- CAD
- Citation (refers to both traffic and criminal citations in some Records Management Systems)
- Field Interview
- Incident
- Pawn
- Registry (Sexual Offender; Criminal Registries)
- Traffic (primarily refers to accidents but in some Records Management Systems it includes traffic citations)
- Warrant

Multiple Incident Types can be selected by clicking the down-arrow at the end of the *Incident Type* field to open the pop-up menu. After checking all desired Incident Types to search, click **OK** to save the selections and close the pop-up menu. Clicking **Clear** in the pop-up menu will deselect any previous selections. When the pop-up menu closes, the *Incident Type* field will be populated with a list of selected Incident Types to be searched.

The default setting for this field is set in *My LInX/Set Preferences* (see the *Default Incident Type Selection* section below). If no default Incident Type selection has been made, then all Incident Types will be searched.

**Tip**: Find **similar incidents** reported during a specific time frame by entering an Offense Description and completing the Incident Start and End Date fields. However, terms for similar offenses may differ by agency. Try searching by various offense descriptions to obtain a more complete results set.

#### **SEARCH ONLY LAST 2 YEARS OF DATA**

An initial query may be limited to search data for the most recent 2 years, by clicking on the Last 2 years hyperlink next to the Incident Date Range on the Query screen. Selecting this option will automatically pre-populate the Date Range fields, extending back 2 years from the current system date.

When the Date Range fields are pre-populated to search the last 2 years of data, clicking on the Clear hyperlink will remove the limitation, and allow searching of older data.





**Note**: if the Date Range is <u>manually</u> entered, the Last 2 years link will remain and the Clear link will not be displayed.

### Search By Phrase

If phrases are used as search criteria, this information should be entered into the *Enter Text Phrase* field near the bottom of the screen. Boolean search operators (such as *AND*, *OR*, *NOT*) can be used in the phrase field. A search on phrases brings back results from unstructured data contained in documents.

#### **Exact Text Search**

The *Exact Text Search* works in the same manner as described above for *Exact Name Search*.

To conduct exact <u>Text</u> searches, select the *Exact Search* radio button located on the *Search By Phrase* section heading.

#### **Thesaurus Address Search**

The *Thesaurus Text Search* works in the same manner as described above for *Thesaurus Name Search*.

To conduct thesaurus <u>Text</u> searches, select the *Thesaurus Search* radio button located on the *Search By Phrase* section heading.

#### **USING BOOLEAN OPERATORS**

The order in which search criteria are entered does not affect the search results. However, criteria can be refined by using the logical search operators of *"AND"*, *"OR"*, and *"AND NOT"* as well as parentheses (Boolean search):

Boolean Operator	Result
AND	Results containing both search terms will be returned. The AND operator is <b>automatically implied</b> if multiple words are entered without other operators.
OR	Results containing either of the search terms will be returned.
AND NOT	Eliminates results containing the term after "NOT" (such as "cat AND NOT dog").
( )	Allows search of terms nesting in parentheses, such as "cat AND (dog OR bird)". Will return results that contain dog and/or bird, as log as the document contains cat as well.

#### FREE TEXT SEARCH TIPS

- **Tip**: Terms can be grouped using parentheses for more control. For example, to search for narratives that contain <u>either MURDER AND GUN or MURDER AND KNIFE use: MURDER AND (GUN OR KNIFE).</u>
- ➤ **Tip:** Many words will automatically match plural and other forms of words; e.g., SCHOOLED will match SCHOOL, SCHOOLS, and SCHOOLED.
- ➤ **Tip**: When certain search terms are entered, a concept match is done automatically; e.g., MURDER will match MURDER, HOMICIDE, and KILL.
- ➤ **Tip**: The wild card "%" can be used to match zero or more characters and the wildcard "\_" can be used to match exactly one character; e.g., GU% will match GUN, GUM, GUS, GUSTERSON, etc., while GU\_ will only match GUN, GUM, GUS, etc.
- **Tip**: Note that commonly used words such as "AN", "A", "THE" are ignored in all searches.
- ➤ **Tip**: For agency selection, click "(Change Neighborhood...)" to select the agencies/sites/Partner system(s) to be searched. All, some, or any one agency's data can be searched. Only agencies

that provide narrative data will be available for selection (see *Neighborhood Selection* section, below).

### **Neighborhood Selection**

The default *Link Analysis Search* setting is to search all local contributing agencies; meaning that the search includes all data in the data warehouse from all local sources. The (Change Neighborhood...) link allows a user to access the *Neighborhood Selection* window and select one or more agencies, sites, and/or Partner systems against which to conduct a search. The results will be filtered to reflect only the data from the selected source(s) when the user limits the search to one or more source agencies, rather than all agencies.

There is also a **Neighborhood** button located at the top and bottom of the query screen, which will open the *Neighborhood Selection* window without having to click the (Change Neighborhood) link. Either of these methods can be used to access the *Neighborhood Selection* screen.

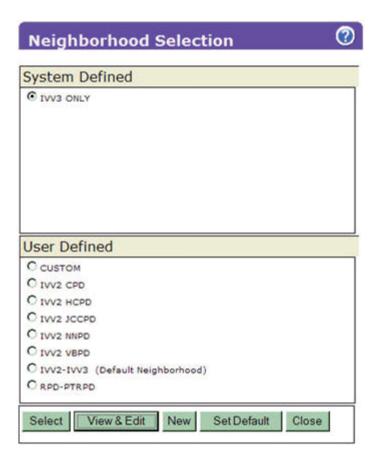
Neighborhood

Searching I-95 (Change Neighborhood...)

#### **Selecting a Neighborhood:**

When the (Change Neighborhood...) link is selected, the *Neighborhood Selection* screen will open in a separate window. Additional help for *Neighborhood Selection* can be found within the *Neighborhood Selection* functionality by clicking on the

Online Help button located in the upper right-hand corner of the *Neighborhood Selection* screen.



#### **Selection Status:**

The text appearing above the (Change Neighborhood...) link on the query screen provides the user with the selection status. If there are no neighborhoods listed, or no neighborhood has been identified as the "default" neighborhood, the local agencies of the current LInX system, plus whichever remote system(s) that may be included as a default by the Regional Administrator, will be the default agency source criteria for all searches.

Searching Default (Change Neighborhood...)

When a different neighborhood selection is made, the selection status changes to reflect the name of the newly-selected neighborhood:

Searching IVV2-IVV3 (Change Neighborhood...)

# **Map Selection**

The Map Selection functionality provides the user with the ability to search a specified geographic area. When the (Change Map Region ...) link is selected, the Map Selection screen opens in a separate window.

#### **Selection Status:**

The text appearing above the (Change Map Region ...) link on the query screen provides the user with the selection status, which corresponds to what is selected in the Neighborhood Selection. If no neighborhood is selected under the Neighborhood Selection menu, then the system default will be used, and no map regions will be specified.

```
Select Map Region
(Change Map Region...)
Searching IVV3-DR1/2
(Change Neighborhood...)
```

When a Map Region is selected, the Neighborhood selection status will change to CUSTOM. The neighborhood will automatically be modified to include the selected regions/agencies. The neighborhood can then be modified further through the *Neighborhood Selection* screen.

Mousing over the Change Map Region link will display a pop-up message containing the name(s) of the map region(s) selected.

```
Searching 3 map-regions.
(Change Map Region...)
Searching DR1-DR2-IVV3
(Change Neighborhood...)
```

Additional help for *Map Selection* can be found within the *Neighborhood Selection* functionality by clicking on the Online Help button [ ] located in the upper right-hand corner of the *Neighborhood Selection* screen.

# **Default Incident Type Selection**

The default Incident Type selection(s) for Link Analysis searches provides a LInX user with the ability to set up a filter and have it apply to all initial Link Analysis queries without having to re-specify the incident type criteria each time. The user can specify

and save a default Incident Type selection of one, multiple, or all Incident Types to search in Link Analysis under *My LInX/Set Preferences*.

The following information applies to the Link Analysis default Incident Type selection:

- The user can set the default by selecting one, multiple, or all Incident types to search, and save the filter as a preference under My LInX/Set Preferences
- The process for selecting Incident Types is the same as the Incident Type Multi-select feature
- If no default is selected, and no incident types have been specified, all incident types will be searched
- The default filter is used when initiating a Link Analysis search. Any subsequent walks of the results may bring back information from any Incident Type
- The default Incident Type selection can be modified and overridden in the Query tab for any Link Analysis search
- Saved queries will retain the incident type filter with which they were saved
- The <u>Query screen</u> Clear button will reset the Incident Type selection to the default setting.

**Note**: This option is not available for Tactical-only users.

### Free-Text Document Selection Result Screen

A document can be retrieved from the returned results by right clicking on the folder icon and selecting *View Report* to bring up a separate *Event Report* window, which contains the document under the Narrative section at the bottom of the *Event Report*. The search terms will appear in blue type.

To begin a new phrase search at any time, the search criteria can be entered into the text field on the Link Analysis Query screen and the **Search** button selected to initiate another search process.

If the user is reading the document for a specified time (set by the System Administrator), the system will assume there is no system activity and the user will automatically be logged off.

### **Justification**

This function allows Tactical and Analytical LInX users the ability to enter the reason a search is being conducted, and also provides the information to comply with Criminal Offender Record Information (CORI) for auditing purposes. This field is located at the top of each query screen. The field is <u>automatically highlighted in yellow</u>, and is required if one or more agencies in the selected neighborhood require a justification in order to search their data.

If the field is not highlighted in yellow, use of the field is optional.

Justification:	CROSSIN AND I
Justification:	required

Justification will remain persistent throughout the current session, for any LlnX search, unless changed during the session.

### Save and Watch Selected Queries

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Link Analysis LInX users have the ability to save queries, watch saved queries for new information, and load saved queries.

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# **Executing the Search**

When all the information to be used in the query has been entered, and the source of information selected, clicking on the **Search** button will begin the search process.



The **Clear** button, located at the top and bottom of the search screen, will clear all the fields in the query screen, with the exception of the *Justification* field, without having to leave the query screen. In addition, the Incident Type selection(s) will be reset to the default settings, if they have been modified.

#### **Load Saved Queries**

Users may load any of their saved queries directly from the *Query* screen by clicking the **Load** button, which will open a *Query Selection* menu in a separate window.



To load a query, ensure that the radio button for the desired query is selected, and then click the **Load** button. A pop-up message stating "Requested query loaded" is displayed. Click the **OK** button to close the pop-up message.

The query screen is re-displayed and populated with the search criteria from the selected saved query. Click the **Search** button to run the query.

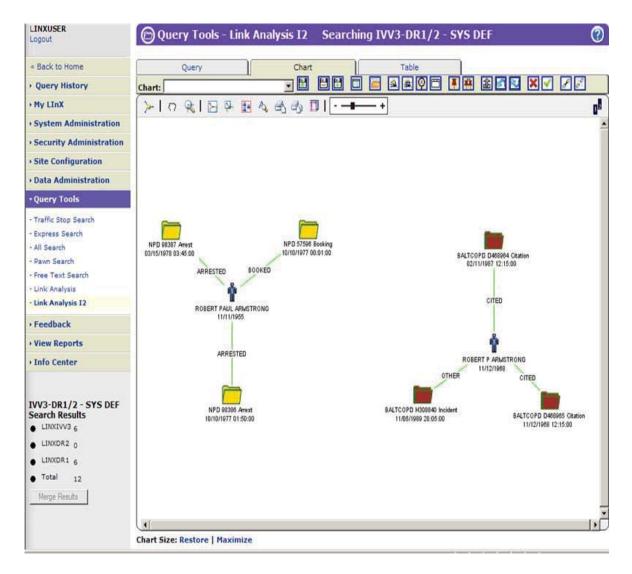
Clicking the **Cancel** button from the *Query Selection* window will close the window and return the user to the *Query* screen without loading any data.

### **Understanding the Link Analysis I2 Chart**

When a search has been initiated or a saved case requested, the screen will refresh and display the *Chart* tab containing a graphical display of the analysis results. The search criteria will appear along with any linked data found in the database. The analysis brings back structured data from agency records management systems, as well as unstructured data or documents that contain the analysis criteria. The following applies to the Link Analysis i2 Chart when one or more Remote Systems are selected:

- After performing a Link Analysis search, all results (local and remote) returned within the designated threshold which begins when the first results are returned will be available to the user. When any additional results that were not available within the designated time threshold become available, the Merge Results button will be activated, and the status indicator will tun green (see Results Management Status Description section below).
- 2. When the agency type is not known to LlnX, line color for the remote system results will default to black.

An example of a Link Analysis I2 Chart with structured data is shown below:



The results from the analysis appear on the chart as icons representing:



If a mug shot is available for an individual, the mug shot will appear in place of the *people* icon.

### **Results Management Status Description**

A Results Management Status is displayed beneath the menu bar on the left side of the screen. The Status contains the name of the neighborhood that was searched, the name of each system and/or Partner contained in the neighborhood, and the number of matching <u>nodes</u> retrieved from each system within the designated time threshold, which begins when the first results are returned.



Search results from one or more remote systems or Partners will automatically be merged and displayed in the LInX search result set, if they are available within the results management time threshold.

If the search of a system has not been completed within the time threshold, a visual indicator will denote the status of that search. The visual indicator status legend is as follows:

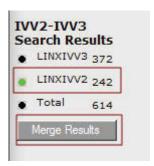
- Black The search of the system was successfully completed within the time threshold, and all results have been returned.
- Red An error occurred while attempting to search the system (e.g., search timed out).
- Green The search of the system was completed after the time threshold was exceeded. Results from the search are now available and ready to be merged into the current result list.
- Multi-colored "beach ball" Waiting for results, as the search of the system is still in progress.

Hovering the cursor over each visual indicator will display a pop-up containing the status description.

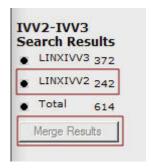
**Note**: When data is "walked" or "unwalked", the Results Management Status will update automatically to account for the addition or deletion of nodes on the chart.

#### **Merge Results**

When there are results available to be merged, denoted by a green indicator next to the system name, the additional records can be manually merged into the current results set by clicking on the **Merge Results** button, which is highlighted to show it is available.



After the **Merge Results** button has been selected, the visual indicator next to the system name will turn from green to black, and the number of <u>nodes</u> in the result set will update accordingly, to account for the inclusion of the additional records. The **Merge Results** button will no longer be highlighted.



**Note:** Unless the **Merge** button is used, all results will not be transferred/moved to the results list.

# Using the Cursor to Show Icon Summary Information

Each icon is identified by a label containing a name and description or number identifier. By placing the cursor over the icon, additional information will appear.



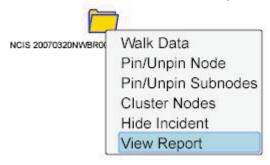
Incident : BPD (b)(6), (b)(7)(C)
IncidentDate : porzzzzoor
Site : LINXDEV
System : NMLEAP
Agency : BPD
AgencyName : Bernalillo PD

The lines connecting icons show additional information on the nature of the connection. For example, the line between a person icon and an incident report shows the role of the person in the report:



Documents (unstructured data) will appear separately as event folders on

the chart. Link Analysis searches through the documents and brings back any document containing the search criteria, which may or may not be related to the structured or incident report information. To access the document, right-click on the folder icon, then select *View Report* from the pop-up menu.

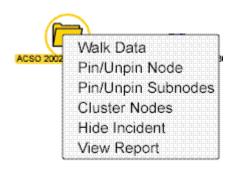


An Event Report opens in a separate window. The unstructured data can be viewed in the *Narrative* section of the Event Report by scrolling down to the bottom of the Event Report window.

# **Chart Function Buttons and Right-Click Menus**

#### **RIGHT CLICK MENUS**

Some functions can be accessed by right-clicking icons and selecting a function from the shortcut menu, which will display the functions that are appropriate for the particular icon:



**Tip:** Chart functions can be performed by selecting function "buttons" or by right-clicking on an entity on the chart to activate shortcut menus. **Right-clicking** on the white space of the chart will also bring up a shortcut menu reflecting general graph functions, such as zooming options.

#### **CHART FUNCTION BUTTONS**

The appearance of the chart can be changed and the analysis can be expanded by using the chart function buttons located along the top of the chart:



**Right-clicking on the white space of the chart** will also bring up a shortcut menu reflecting general chart functions, such as zoom in or out:



#### **POSITIONING THE CHART AND ENTITIES**

There are a number of ways to position either the entire chart, or specific entities on the chart. By selecting the appropriate chart function button, the chart's position and/or appearance can be changed to alter the size of the chart, center results, and move entities around the screen.

• If the initial display of the query results are stacked in the upper left-hand corner of the chart, the **Reorganize Chart** button [A] can be used to redistribute the entities on the chart into an optimum viewing layout.

- One or more entities can be selected and moved around the chart without selecting the entire chart. Select an entity and hold the left mouse button down to move the entity to another location on the chart.
- To move two or more entities at the same time, select one entity, then while holding down either the <*Ctrl>* button or <*Shift>* button on the keyboard, select additional entities. Each additional selected entity will be highlighted while the <*Ctrl>* button or <*Shift>* button is depressed. All selected entities can then be simultaneously moved to another location on the chart. Alternately, multiple entities can be selected by holding down the left mouse button and drawing a box around the desired entities. When the mouse button is released, the entities will be highlighted, and can then be simultaneously moved to another location on the chart.
- The **Panning Tool** [ can be used to move the entire chart. This is a toggle button; i.e., selecting the button to highlight it will activate the tool. Selecting the button again will un-highlight and deactivate it.
- The **Select All** button has the same effect as the *Panning Tool*, but is not a toggle. Click the **Select All** button to highlight all entities on the chart; then click on any highlighted entity and move it, causing all entities on the chart to move at once.
- Double-clicking anywhere in the chart will center the chart to the point that was clicked.
- The **Fit to Window** button [ can be used to zoom the entire chart to fit the iXv Viewer window. The degree to which the chart is zoomed (in or out) and centered, is dependent upon the number of entities that must be made visible in the Viewer window; i.e., the more entities that must be made visible in the chart, the farther out the chart will be zoomed.
- The **Fit Selection to Window** button [ can be used to zoom just the selected item(s) to the iXv Viewer window. The degree to which the chart is zoomed (in or out) and centered, is dependent upon the position of all the entities that must be made visible in the Viewer window; i.e., the closer the selected entities are located to each other, the farther in the chart will be zoomed.

#### **ZOOMING FEATURES**

There are a number of ways the search results on the chart can be zoomed in and out or reset.

- The *Zoom Slider* [ + ] can be used to either increase or decrease the size of the entities on the chart. When the chart is first loaded, it is displayed at 90%.
- The chart can also be zoomed in or out by right-clicking in any white space on the chart and selecting *Zoom In* or *Zoom Out* from the shortcut menu. The chart will be zoomed in or out in increments of 50%. Select *Reset Zoom* to return to the default of 90%.

Center Canvas
Zoom In
Zoom Out
Reset Zoom
Undo Walk Data
Redo Walk Data

- The **Reset Chart** button [ ] can be used to return the chart to its original size when it was first loaded. Note: this button only affects the magnification of the objects on the chart. Any entities that have been manually rearranged on the chart will not be returned to their original location.
- The **Zoom to Area** button [ ] can be used to select a specific area of the chart to be zoomed. This is done by clicking on the **Zoom to Area** button to activate it; then using the mouse cursor, which is now in the shape of a cross, to trace out an area on the chart to be zoomed. The selected area will be zoomed and centered in the iXv Viewer window. The process must be repeated each time an area is to be zoomed.

#### **KEY ENTITY EMPHASIS**

Key entities and their labels and images can be emphasized and remain distinguished, even when a chart is zoomed out considerably, by selecting the

**Key Entity Emphasis** button [ ]. By default, the key entities emphasized are those connected to many other entities. A maximum of ten key entities are emphasized when the **Key Entity Emphasis** button is selected. This function works best if the chart is zoomed to less than 100%. The key entities will not be emphasized if the chart is zoomed to more than 100%.

#### **TIMELINE BAR**

The **Time Bar** button [ ] provides the user with the capability to order and display the search results chronologically based on dates and times of the events, from left to right across the chart.

Each Person entity is displayed on a separate timeline. Non-timed entities (e.g., Address, Vehicle, etc.), are faded in the background, so the user can focus on the Events. A time bar containing dates and times will appear across the top of the

chart. The **Panning Tool** [ can be used to move the chart back and forth along the time line.

The following function buttons are disabled in Timeline Mode, and are not displayed on the Timeline toolbar:

- Walk/Undo/Redo Data
- Reorganize Chart/Select
- Hide/Show Node(s)
- Pin/Unpin Node/Subnodes

- Group/Ungroup Nodes
- Clear Chart
- Reset Chart

The chart can be returned to the associated chart mode by deselecting (unhighlighting) the **Time Bar** button.

Below is an example of guery results in *Timeline Mode*: Query Tools - Link Analysis 12 Query **9** Chart: Q | 图 5 % m 2001 20th July UNKHIP HCPD HCPD HCPD 000204089 Incident (b)(6), (b)(7)(C) (b)(7)(G), (b)(7)(C) HCPD (b)(6), (b)(6) (b)(7)(C) (b)(7)(C) (b)(6), (b)(7)(C)

#### **FIND CAPABILITY**

Chart Size: Restore | Maximize

The **Find** button [ allows the user to find items of interest by searching for text that is visible on the chart, (i.e., labels). The chart is zoomed in to the largest percentage that will display all instances of the requested text, to a maximum percentage of 300%; and the label(s) containing the desired text is centered on the chart.

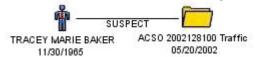
### **Pinning Chart Results**

One or more entities (nodes) can be "pinned" in place on the chart so they do not move, even if other entities on the chart are moved. This allows the user to hold some data in place while other data is moved around it. Two "pinning" functions are provided in Link Analysis I2:

#### **Pin/Unpin Nodes**

Any entity can be pinned in place so that it does not move, even if other entities on the chart are moved. To pin an individual entity, first select (highlight) the entity to

be pinned, then click on the **Pin/Unpin Node** button [...]. A pin will be placed in the center of the selected entity.



Alternatively, an entity can be pinned by right-clicking on the entity and selecting *Pin/Unpin Node* from the shortcut menu.

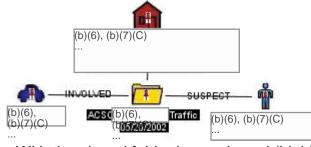
To unpin a node, select the pinned icon, then click the **Pin/Unpin Node** button again to remove the pin.

Alternatively, an icon can be unpinned by right-clicking on the icon and selecting *Pin/Unpin Node* from the shortcut menu.

### Pin/Unpin Sub-nodes

This function allows the user to simultaneously pin an Event entity (folder icon) and any sub-nodes to which it is directly linked. To do this, first select (highlight)

the Event entity to be pinned, then click the **Pin/Unpin Sub-nodes** button [ A pin will be placed in the center of the selected Event entity, as well as all other entities directly linked to that Event.



Alternatively, sub-nodes can be pinned by right-clicking on the folder icon and selecting *Pin/Unpin Sub-Nodes* from the shortcut menu.

With the pinned folder icon selected (highlighted), clicking on the **Pin/Unpin Sub-nodes** button again will remove the pins from the Event entity as well as all entities linked to that Event. This function can also be accessed by right-clicking on the pinned folder icon and selecting *Pin/Unpin Sub-nodes* from the shortcut menu.

An individual sub-node can be unpinned while leaving the remaining sub-nodes pinned by following the *Pin/Unpin Node* directions above.

Note: Nodes pinned in <u>Association Mode</u> will **not** be pinned in <u>Timeline Mode</u>.

### **Walking Chart Results**

Event entities (folder icons) can be "walked", or expanded to display additional entity types associated with the Event, such as People, Vehicles, Weapons, Addresses, and Phones.

Any entity can be walked, although all nodes do not have additional associations. To walk a node, select (highlight) the node to be walked, then click on the **Walk Data** 

button [iii] on the tool bar. This function can also be accessed by right-clicking on the node to be walked, and selecting *Walk Data* from the shortcut menu. The additional associated nodes will be displayed on the chart, if available, and added to the node Table. Any number of nodes can be walked.

To undo the most recent walk operation, either select the **Undo Walk Data** button [ on the tool bar, or right-click in any white space on the chart, and select *Undo Walk Data* from the shortcut menu. The most recent nodes displayed as a result of a *Walk Data* operation will be removed from the chart and the node Table.

This option is only effective when there is at least one set of walked data present. Multiple walked data operations can be undone, in reverse sequence, starting with the most recent data walked and moving as far back as the first *Walk Data* operation of the current result chart.

To redo the most recent Walk Data operation, either select the **Redo Walk Data** button

[ on the tool bar, or right-click in any white space on the chart, and select *Redo Walk Data* from the shortcut menu. The most recent nodes removed from the chart as a result of an *Undo Walk Data* operation will be re-displayed on the chart and in the node Table.

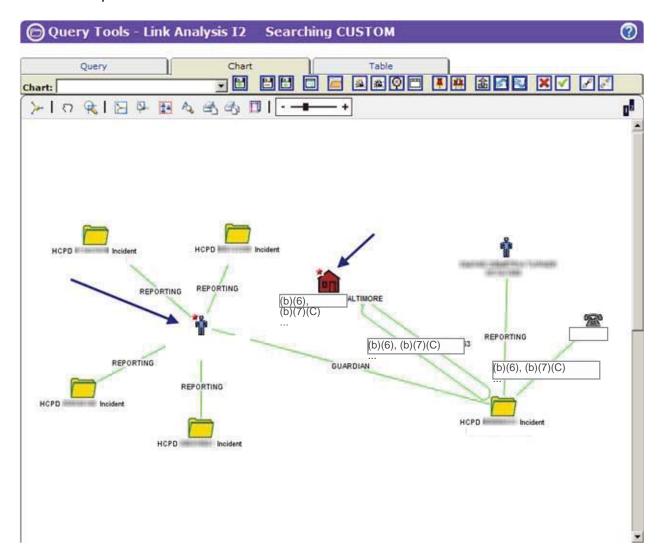
This option is only effective when there has been at least one *Undo Walk Data* operation performed. Multiple walked data operations can be re-walked, progressing forward from the last *Undo Walk Data* operation performed through each successive *Undo Walk Data* of the current result chart.

### **Group/Ungroup Nodes**

Two or more identical node types/entities (people, phones, vehicles, addresses, weapons), can be grouped together as one node on the i2 iXv chart.

To group 2 or more nodes together, select (highlight) the first node to be grouped, then while holding down either the *Ctrl>* button or *Shift>* button on the keyboard, select additional like entities. Each additional selected entity will be highlighted while the *Ctrl>* button or *Shift>* button is depressed.

When all desired nodes have been selected, either select the **Group Nodes** button [ on the i2 tool bar, or right-click on any of the highlighted nodes to be grouped, and select *Group Nodes* from the shortcut menu.



Rules for grouping/ungrouping nodes in I2:

- Incident/event (folder) nodes cannot be grouped together
- Grouped nodes must be of the same type (e.g., a person node may not be grouped with a vehicle node)
- > The last node selected to be grouped will be the node stacked "on top"
- A grouped node will display a red star to the top left of the node to indicate that nodes have been grouped
- Nodes that the system has grouped based on identification may not be ungrouped by a user

To ungroup nodes that have been manually grouped using the *Group Nodes* function, highlight a node that has been grouped, then either select the **Ungroup Nodes** button on the i2 tool bar, or right-click on a grouped node and select *Ungroup Nodes* from the shortcut menu.

### **Printing Chart Results**

The following i2 enhancements are available for printing an i2 chart, if the configuration option has been turned on:

#### Page Setup

Clicking the **Page Setup** button [ located on the i2 Tool Bar displays a dialog window that allows the user to select the printer, as well as set the page size, source, orientation, and margins.

**Note**: the selected settings are only applicable to the current chart. Once the user leaves the *Chart* tab, the settings are returned to their default values.

### **Print Chart on a Single Page**

Clicking on the **Print on Single Page** button [ located on the i2 Tool Bar will display a Print dialog window. When the user chooses to print, the current chart will be scaled to fit on a single printed page.

#### **Print Chart at 100% Scale**

Clicking on the **Print at 100% Scale** button [ ] located on the i2 Tool Bar will display a Print dialog window. When the user chooses to print, a calculation will be made to determine how many pages are needed to print the current chart at 100% scale.

### **Hiding Chart Results**

Any entity can be hidden from view on the chart by first selecting (highlighting) the entity to be hidden, then clicking the **Hide Node(s)** button [ ] on the tool bar.

This function can also be accessed either by right-clicking the node to be hidden, and selecting *Hide* from the shortcut menu, or deselecting the *Show* box for the specific node from the Node Table, then returning to the *Chart* tab.

Any hidden node can be re-displayed on the chart by using the **Show Node(s)** button

[ on the tool bar, or by re-selecting the *Show* box for the specific node from the Node Table, then returning to the *Chart* tab.

### **Viewing the Event Report**

The *Event Report* for an event can be viewed by selecting the **View Event Report** button [ on the tool bar.

The *Event Report* is displayed in a separate window, and contains Incident, Warrant, Person, Vehicle, Phone, and Narrative information, as applicable, associated with the selected event.

This function can also be accessed by right-clicking an Event node (folder icon) and selecting *View Report* from the shortcut menu.

#### **Printing the Event Report**

To print an *Event Report* from LInX, open the desired report, and click the **Print** button in the lower right-hand corner of the *Event Report* window. If the *Printing from LInX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "You need to accept the Printing From LInX agreement." Click **OK** to close the window.

If the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing the selected *Event Report*. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved report is to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing the Event Report from LInX
- LInX version number
- Page number and total number of pages
- Date and Time the Event Report was requested to be printed/saved

To print the *Event Report*, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the report. The PDF window can be closed after the report has been printed.

To save the *Event Report*, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the report. The PDF window can be closed after the file has been saved.

#### **Printing Photos**

The photos included with an *Event Report* can be printed in LInX. If there is only one photo associated with a person, it can only be printed when the *Event Report* is printed. If there are additional photos associated with a person, click on the <u>More Images</u> link under the image. This will open the photos in a separate window.

To print photos, click the **Print** button in the lower right-hand corner. If the *Printing from LInX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "You need to accept the Printing From LInX agreement." Click **OK** to close the window.

If the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing all the photos (one photo per page) associated with the event. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved photos are to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing photos from LInX
- LInX version number
- Page number and total number of pages
- Date and Time the photos were requested to be printed/saved

To print the photos, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the photos. The PDF window can be closed after all photos have been printed.

To save the photos, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the photos. The PDF window can be closed after the file has been saved.

### **Saving Chart Results**

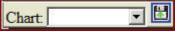
Current chart results can be saved for future access. A chart saved in Link Analysis I2 can be reloaded in either Link Analysis I2 <u>Association Mode</u> or <u>Timeline Mode</u>, or Link Analysis SVG.

To save the current chart results, select the **Save Current Chart** button [ ] from the tool bar.

**Note**: Scripted windows must be enabled for the pop-up window to display. At the User Prompt, enter the name under which the chart will be saved, the select **OK**.



To access a previously saved chart, select the desired chart from the *Chart:* pull-down, then click on the **Load a Saved Chart** button on the tool bar.



A message window stating that the selected chart has been loaded will appear. Press the **OK** button to close the message window.



The currently saved chart can also be deleted by selecting the **Delete Current Saved**Chart button [ ] from the tool bar.

A message window will appear asking the user if the named chart is to be deleted. Selecting **Cancel** will generate another message window stating that the named chart is not deleted. Press **OK** to close the message window.



Selecting **OK** will generate another message window stating that the named chart has been deleted. Press **OK** to close the message window. The chart screen will refresh with a blank screen.

Note: LInX does not provide any third-party chart reader applications; only the ability to export the data to such applications.

# **Understanding the Link Analysis SVG Graph**

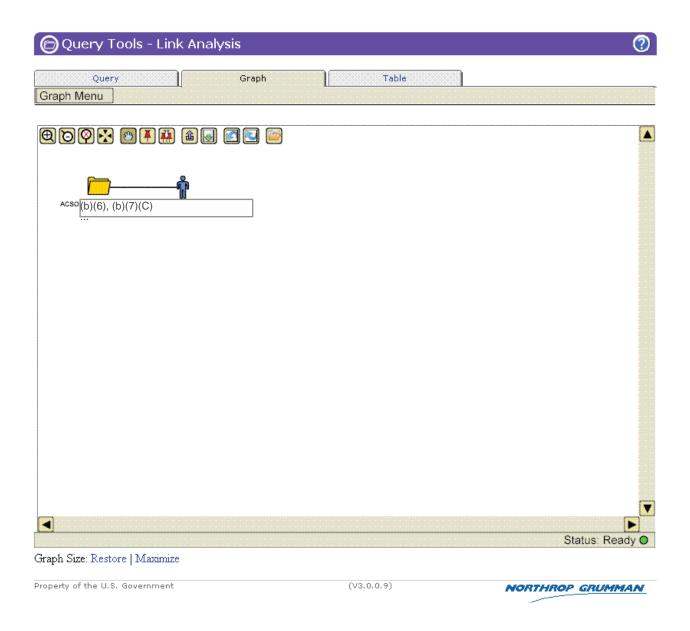
When a search has been initiated or a saved case requested, the screen will refresh and display the *Graph* tab containing a graphical display of the analysis results. The search criteria will appear along with any linked data found in the database.

The analysis brings back structured data from agency records management systems, as well as unstructured data or documents that contain the analysis criteria.

The following applies to the Link Analysis SVG Graph when one or more Remote Systems are selected:

- 1. After performing a Link Analysis search, all results (local and remote) returned within the designated threshold which begins when the first results are returned will be available to the user. When any additional results that were not available within the designated time threshold become available, the **Merge Results** button will be activated, and the status indicator will tun green (see *Results Management Status Description* section below).
- 2. When the agency type is not known to LlnX, line color for the remote system results will default to black.

An example of a Link Analysis SVG Graph with structured data is shown below:



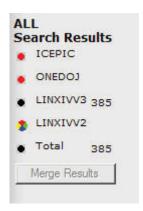
The results from the analysis appear on the graph as icons representing:



If a mug shot is available for an individual, the mug shot will appear in place of the people icon.

### **Results Management Status Description**

A Results Management Status is displayed beneath the menu bar on the left side of the screen. The Status contains the name of the neighborhood that was searched, the name of each system and/or Partner contained in the neighborhood, and the number of matching <u>nodes</u> retrieved from each system within the designated time threshold, which begins when the first results are returned.



Search results from one or more remote systems or Partners will automatically be merged and displayed in the LInX search result set, if they are available within the results management time threshold.

If the search of a system has not been completed within the time threshold, a visual indicator will denote the status of that search. The visual indicator status legend is as follows:

- **Black** The search of the system was successfully completed within the time threshold, and all results have been returned.
- Red An error occurred while attempting to search the system (e.g., search timed out).
- ▶ Green The search of the system was completed after the time threshold was exceeded. Results from the search are now available and ready to be merged into the current result list.

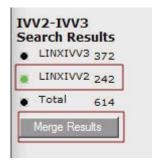
Multi-colored "beach ball" - Waiting for results, as the search of the system is still in progress.

Hovering the mouse over each visual indicator will display a pop-up containing the status description.

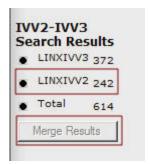
**Note**: When data is "walked" or "unwalked", the Results Management Status will update automatically to account for the addition or deletion of nodes on the chart.

#### **Merge Results**

When there are results available to be merged, denoted by a green indicator next to the system name, the additional records can be manually merged into the current results set by clicking on the **Merge Results** button, which is highlighted to show it is available.



After the **Merge Results** button has been selected, the visual indicator next to the system name will turn from green to black, and the number of <u>nodes</u> in the result set will update accordingly, to account for the inclusion of the additional records. The **Merge Results** button will no longer be highlighted.



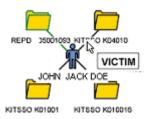
**Note:** Unless the **Merge** button is used, all results will not be transferred/moved to the results list.

# Using the Cursor to Show Icon Summary Information

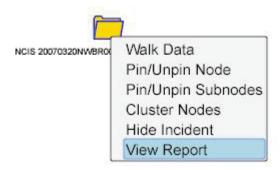
Each icon is identified by a label containing a name and description or number identifier. By placing the cursor over the icon, additional information will appear:



Placing the cursor over the lines connecting the icons will show additional information on the nature of the connection. For example, the line between a person icon and an event report will show the role the person plays in the report:



Documents (unstructured data) will appear separately as event folders on the graph. Link Analysis searches through the documents and brings back any document containing the search criteria, which may or may not be related to the structured or event report information. To access the document, right-click on the folder icon, then select *View Report* from the pop-up menu.

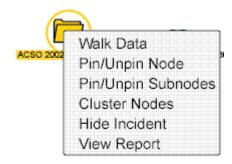


An Event Report opens in a separate window. The unstructured data can be viewed in the *Narrative* section of the Event Report by scrolling down to the bottom of the Event Report window.

# **Graph Function Buttons and Right Click Menus**

#### RIGHT CLICK MENUS

Some functions can be accessed by right-clicking on the icons and selecting a function from the shortcut menu, which will display the functions that are appropriate for the particular icon:



**Tip:** Graph functions can be performed by selecting function "buttons" or by **right-clicking** on an entity on the graph to activate shortcut menus.

**Right-clicking** on the white space of the graph will also bring up a shortcut menu reflecting general graph functions, such as zooming options.

#### **GRAPH FUNCTION BUTTONS**

The appearance of the graph can be changed and the analysis can be expanded by using the graph function buttons located at the top left part of the graph:



With the exception of the "zoom" buttons, when buttons are in use, they will be shaded to indicate the function is still active. Clicking the button again will release the function.

**Right-clicking on the white space of the graph** will also bring up a shortcut menu reflecting general graph functions, such as zoom in or out:

Center Canvas
Zoom In
Zoom Out
Reset Zoom
Undo Walk Data
Redo Walk Data

### Changing the Graph's Appearance

By selecting the appropriate graph function button, the graph's appearance can be changed by altering the size of the graph, centering results, and moving icons around the screen.

#### **Changing Overall Chart Size:**

Selecting the Zoom In button will increase the size of the graph on the screen.



Selecting the *Zoom Out* will cause the graph to decrease in size.



#### **Return Graph Size:**

The Zoom Reset button can be selected to return the graph to the original appearance after changing the size or after centering icons. It will not return the original graph if icons have been "dragged" and moved.



### **Centering the Icons:**

The Center at Point button will bring graph results to the center of the graph. The button should be selected and the cursor placed on the key icon to be centered; all linked icons will be moved as well. Clicking on the button again will de-activate it.

#### **Moving Icons:**

To move icons, the "Drag" button should be selected and the cursor placed over an icon to move it to another location on the graph. This button will automatically be turned on when the graph first appears. Clicking on the button again will de-activate it.



### **Pinning Graph Results**

One or more nodes can be "pinned" in place on the graph so they do not move, even if other nodes on the graph are moved. This allows the user to hold some data in place while other data is moved around it. Two "pinning" functions are provided in Link Analysis SVG:

#### **Pin/Unpin Nodes**

Any node can be pinned in place so that it does not move, even if other nodes on the graph are moved. To pin an individual node, first click on the **Pin/Unpin to** 

**Location** button [ ] to activate it, then click the node to be pinned. A pin will be placed in the center above the selected node.



Clicking on the node again will remove the pin. This function can also be accessed by right-clicking the node and selecting *Pin/Unpin Node* from the shortcut menu.

To unpin a node, with the **Pin/Unpin to Location** button highlighted, left-click on the pinned node again to remove the pin.

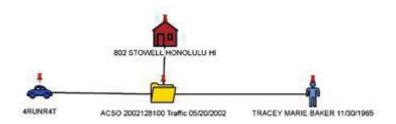
Alternatively, an icon can be unpinned by right-clicking on the icon and selecting *Pin/Unpin Node* from the shortcut menu.

The **Pin/Unpin to Location** button must be un-highlighted to deactivate the function.

#### Pin/Unpin Sub-nodes

This function allows the user to simultaneously pin an Event node (folder icon) and any sub-nodes to which it is directly linked. To do this, first click on the **Pin/Unpin** 

**All to Location** button [ ] to activate it, then click the Event node to be pinned. A pin will be placed in the center above the selected Event node, as well as all other nodes directly linked to that Event.



Clicking on the Event node again will remove the pins from the primary node and all sub-nodes. This function can also be accessed by right-clicking the Event node and selecting *Pin/Unpin Sub-nodes* from the shortcut menu.

To unpin the Event node and all sub-nodes, with the **Pin/Unpin All to Location** button highlighted, left-click on the pinned event node again to remove the pins.

Alternatively, a pinned event node and connected sub-nodes can be unpinned by right-clicking on the icon and selecting *Pin/Unpin Sub-Nodes* from the shortcut menu.

The **Pin/Unpin All to Location** button must be un-highlighted to deactivate the function.

An individual sub-node can be unpinned while leaving the remaining sub-nodes pinned by following the *Pin/Unpin Node* directions above.

### **Walking Chart Results**

Event nodes (folder icons) can be "walked", or expanded to display additional node types associated with the Event, such as People, Vehicles, Weapons, Addresses, and Phones.

Any node can be walked, although all nodes do not have additional associations. To walk a node, select (highlight) the node to be walked, then click on the **Walk Data** 

button [ on the tool bar. This function can also be accessed by right-clicking on the node to be walked, and selecting *Walk Data* from the shortcut menu. The additional

associated nodes will be displayed on the graph, if available, and added to the node Table. Any number of nodes can be walked.

To undo the most recent walk operation, either select the **Undo Walk Data** button [ on the tool bar, or right-click in any white space on the graph, and select *Undo Walk* Data from the shortcut menu. The most recent nodes displayed as a result of a Walk Data operation will be removed from the graph and in the node Table.

This option is only effective when there is at least one set of walked data present. Multiple walked data can be undone, in reverse sequence, starting with the most recent data walked and moving as far back as the first Walk Data operation of the current result graph.

To redo the most recent Walk Data operation, either select the **Redo Walk Data** button on the tool bar, or right-click in any white space on the graph, and select Redo Walk Data from the shortcut menu. The most recent nodes removed from the graph as a result of an *Undo Walk Data* operation will be re-displayed on the graph and in the node Table.

This option is only effective when there has been at least one *Undo Walk Data* operation performed. Multiple walked data can be re-walked, progressing forward from the last *Undo Walk Data* operation performed through each successive *Undo Walk Data* of the current result graph.

### **Hiding Chart Results**

Any node can be hidden from view on the graph either by right-clicking the node to be hidden, and selecting *Hide <node type>* from the shortcut menu (where <node type> is the type of the node to be hidden); or deselecting the Show box for the specific node from the node *Table*, then returning to the *Graph* tab.

Any hidden node can be re-displayed on the chart by re-selecting the Show box for the specific node from the node *Table*, then returning to the *Graph* tab.

# Viewing the Event Report

The Event Report for an event can be viewed by selecting the View Report button [ on the tool bar.



The *Event Report* is displayed in a separate window, and contains Incident, Warrant, Person, Vehicle, Phone, and Narrative information, as applicable, associated with the selected event.

This function can also be accessed by right-clicking an Event node (folder icon) and selecting *View Report* from the shortcut menu.

#### **Printing the Event Report**

To print an *Event Report* from LlnX, open the desired report, and click the **Print** button in the lower right-hand corner of the *Event Report* window. If the *Printing from LlnX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "You need to accept the Printing From LlnX agreement." Click **OK** to close the window.

Once the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing the selected *Event Report*. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved report is to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing the Event Report from LInX
- LInX version number
- Page number and total number of pages
- Date and Time the Event Report was requested to be printed/saved

To print the *Event Report*, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the report. The PDF window can be closed after the report has been printed.

To save the *Event Report*, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the report. The PDF window can be closed after the file has been saved.

Printed or saved output is for temporary use only; it must be destroyed within 72 hours of being obtained.

#### **Printing Photos**

The photos included with an *Event Report* can be printed in LInX. If there is only one photo associated with a person, it can only be printed when the *Event Report* is printed. If there are additional photos associated with a person, click on the <u>More Images</u> link under the image. This will open the photos in a separate window.

To print photos, click the **Print** button in the lower right-hand corner. If the *Printing from LInX* user agreement has not been accepted, the user agreement will be presented to the user. If the user selects I Do Not Agree, a pop-up window is displayed stating "*You need to accept the Printing From LInX agreement*." Click **OK** to close the window.

If the *Printing from LInX* user agreement has been accepted, a separate PDF window opens, containing all the photos (one photo per page) associated with the event. The banner at the top of each page displays the following information:

- Name of the LInX user requesting the printout
- The LInX User ID of the user requesting the printout
- The Site, System, and Agency to which the user belongs
- The date and time the printed/saved photos are to be destroyed
- A statement that the printout is for temporary use only

The bottom of each page displays the following information:

- Disclaimer describing the Rules of Use for saving and/or printing photos from LInX
- LInX version number
- Page number and total number of pages
- Date and Time the photos were requested to be printed/saved

To print the photos, click on the printer icon [ ] at the top of the PDF window to open a *Print* window, and click **OK** to print the photos. The PDF window can be closed after all photos have been printed.

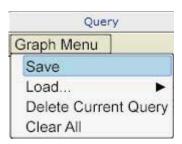
To save the photos, click on the disk icon [ ] at the top of the PDF window to open a *Save a Copy* window, enter a file name, and click **Save** to save the photos. The PDF window can be closed after the file has been saved.

Printed or saved output is for temporary use only; it must be destroyed within 72 hours of being obtained.

### **Saving Chart Results**

Current graph results can be saved for future access. A graph saved in Link Analysis SVG can be reused in either Link Analysis SVG or Link Analysis I2.

To save the current graph results, select *Save* from the *Graph Menu*, located below the *Query* tab label.



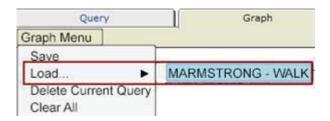
In the *Enter Case Name* text box, enter the name under which the graph will be saved, then select **OK**.



**Note**: The default name, consisting of the date and time, may be used, or a more descriptive name may be entered.

To access a previously saved graph, select *Load* from the *Graph Menu*, located below the *Query* tab label, and highlight the desired graph from the list.

#### LInXUserManual



The window will be re-displayed with the results of selected graph.

The currently saved graph can also be deleted by selecting *Delete Current Query* from the *Graph Menu*, located below the *Query* tab label.

A message window will appear asking the user if the named chart is to be deleted. Selecting **Cancel** will generate another message window stating that the named chart is not deleted. Press **OK** to close the message window.

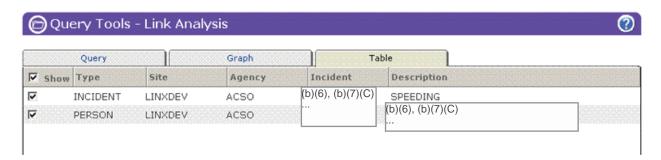


Selecting **OK** will generate another message window stating that the named chart has been deleted. Press **OK** to close the message window. The chart screen will refresh with a blank screen.

# Reviewing the Link Analysis Results Table

To have access to Link Analysis analytical screens, the user must have been assigned an analytical role in LInX.

The results shown on the graph/chart are also listed in the node *Table* tab with additional identifying information:



**Note**: The same node table is used for both the SVG and I2 versions of Link Analysis.

The results can be re-sorted by clicking on any column heading. For example, sorting on the *Description* column will group similar cases together so they can be viewed easily.

### Selecting Data to be Excluded

The results list and its associated graph/chart can be refined to include only the information considered relevant for the analysis. From the *Table* tab, results can be "de-selected" from the graph/chart by clicking on the option box under the "Show" column. The box will change in appearance to indicate that the item will no longer be shown:



By clicking on the *Graph/Chart* tab, the graphical display will appear without the item(s) that have been deselected. The "deselected" results can be added back into the graphical display by going back to the *Table* tab and clicking the box(es) again.

This same function can be performed by right-clicking the icon to be hidden and selecting the *Hide* or *Hide* <*node*> option on the shortcut menu, as applicable (where <*node*> represents the node type).

### **Getting Assistance**

Analytical users should contact their System Administrator or Agency Administrator when they are having problems accessing or using LInX. Only System Administrators are authorized to contact the LInX Help Desk.

# Area of Responsibility (AOR) Report

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The AOR Report functionality is configurable by site, and may not be available on all LInX sites.

# Navigating to AOR Report

(D)(7)(E)		

# **Creating an AOR Report**

(b)(7)(E)		

The following search criteria can be used to generate an AOR Report.

Pages 290 through 292 redacted for the following reasons:

(b)(7)(E), Pages (290) - (292)

...

(b)(7)(E)	

# **Getting Assistance**

Tactical and Analytical users should contact their System Administrator or Agency Administrator when they are having problems accessing or using LInX. Only System Administrators are authorized to contact the LInX Help Desk.

### **Give Feedback**

The *Give Us Feedback* screens provide a way for users to report problems, make suggestions, and report success stories about their use of LlnX.

### Navigating to the Feedback Screens

LInX users can access the *Feedback* screens by selecting *Feedback* from the menu bar located along the left side of the screen, where the following options are available:

- Report a Problem
- Make a Suggestion
- Tell a Success Story
- Thesaurus Feedback

In addition, there are five report options that are available to System Administrators:

- Review Problems
- Review Suggestions
- Review Success Stories
- Review Thesaurus Input
- View Submission Report

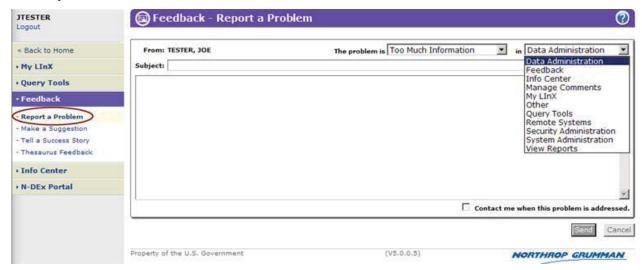
#### LInXUserManual



All options are described in detail in the applicable sections.

# Report a Problem

The *Report a Problem* screen allows users to report problems on-line while using the LInX system:

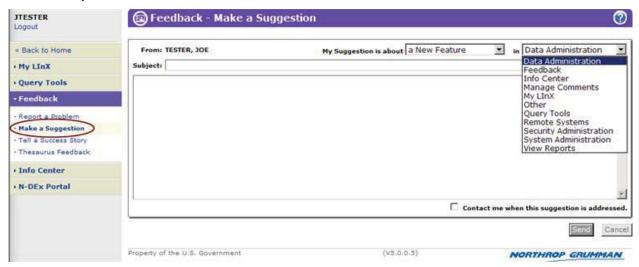


The user's name will automatically appear on the "From" line. To submit the problem, the user should:

- ➤ Enter the topic of the problem in the "Subject" field
- Use the drop-down menu to categorize the nature of the problem
- ➤ Use the drop-down menu to identify the LInX area affected by the problem
- > Enter a description of the problem in the text box
- Check the "Contact" box below the text box to be contacted when the problem is addressed
- Click the "Send" button to submit the problem report to the System Administrator.

# Make a Suggestion

The *Make a Suggestion* screen allows the user to make suggestions on-line while using the LInX system:

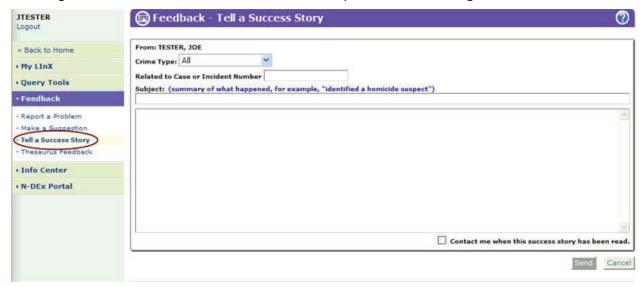


The user's name will automatically appear on the "From" line. To submit the suggestion, the user should:

- > Enter the topic of the suggestion into the "Subject" field
- ➤ Use the drop-down menu to categorize the nature of the suggestion
- ➤ Use the drop-down menu to identify the LInX area affected by the suggestion
- Enter the suggestion in the text box
- Check the "Contact" box below the text box to be contacted when the suggestion is addressed
- Click the "Send" button to submit the suggestion to the System Administrator.

### Tell a Success Story

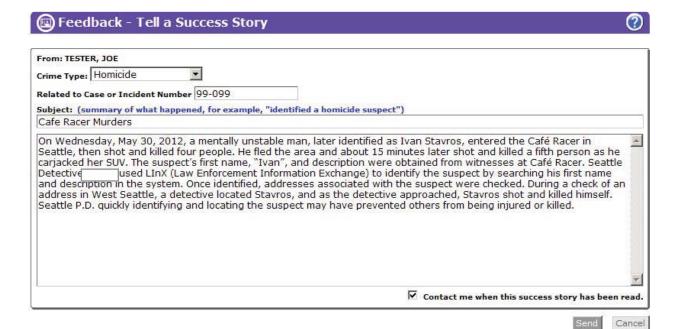
The *Tell a Success Story* screen can be used to provide information on successful investigations in which LInX has been used as part of the investigative effort:



The user's name will automatically appear on the "*From*" line. To submit the success story, the user should:

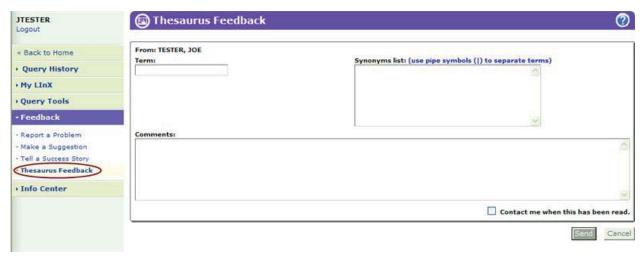
- > Enter the topic of the story into the "Subject" field
- ➤ Use the drop-down menu to categorize the *Crime Type*, if applicable
- > Enter the related Case or Incident Number
- Enter the story description in the text box
- Check the "Contact" box below the text box to be contacted when the story has been read
- ➤ Click the "Send" button to submit the suggestion to the System Administrator.

Here is an example of a Success Story entry ready for submission:



### Thesaurus Feedback

The *Thesaurus Feedback* screen enables users to suggest updates to the thesaurus while using the LInX system. Updates can include new terms or modifications to existing terms in the thesaurus. The *Thesaurus Feedback* screen can be accessed from either the *Feedback* menu or from *Free-Text Search*.



The user's name will automatically appear on the "From" line. To submit the suggestion, the user should:

- Enter the applicable term in the Term field
- ➤ Enter any relevant synonyms, each separated by the pipe symbol (|), for the referenced term in the *Synonyms List* field
- ➤ Enter any comments related to the referenced term in the *Comments* text box
- ➤ Check the "Contact" box below the text box to be contacted when the thesaurus feedback is addressed
- ➤ Click the "**Send**" button to submit the thesaurus feedback to the System Administrator.

**Note**: Suggestions are not added to the thesaurus automatically. All thesaurus suggestions will be reviewed, and only approved terms will be added to the thesaurus.

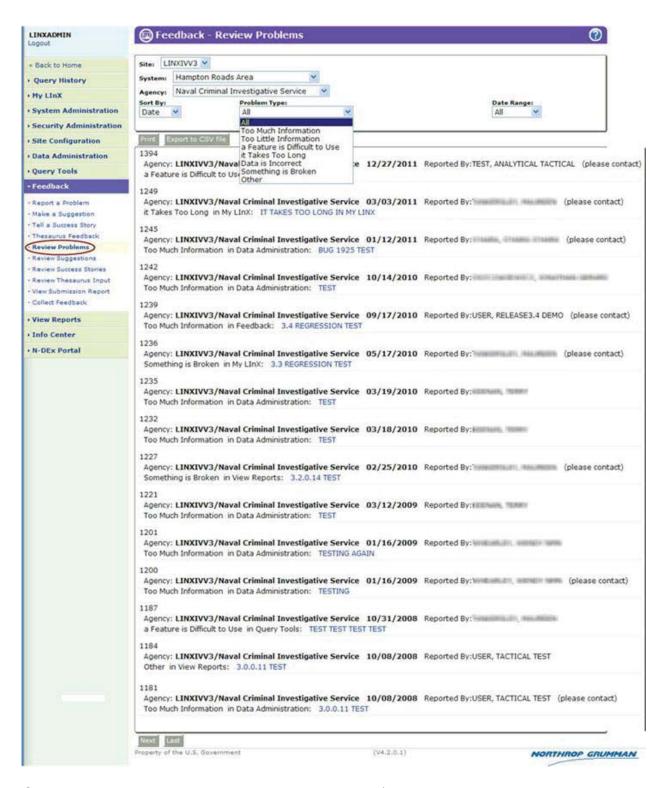
# **Review Problems**

The capability of *Review Problems* is to allow the LInX user who has the appropriate privilege to view LInX problems submitted by his/her agency. The results are similar to those available to the LInX Administrator, except the LInX user will not be allowed to mark any of the problems as processed.

Clicking on *Review Problems* in the Navigation menu along the left side of the screen will automatically bring up a *Review Problems* screen for the Site, System, and Agency of the user requesting the information.

The *Review Problems* results can be filtered and regenerated using the following fields (some fields require appropriate privileges):

- > Site [drop-down list] defaulted to user's home site
- > System [drop-down list] defaulted to user's home system
- Agency [drop-down list] defaulted to user's home agency
- Sort by Date or Agency [drop-down list]
- Problem Type [drop-down list]
- Date Range [drop-down list]



Once generated, the results can then be displayed/saved as a PDF or comma separated file (i.e. CSV).

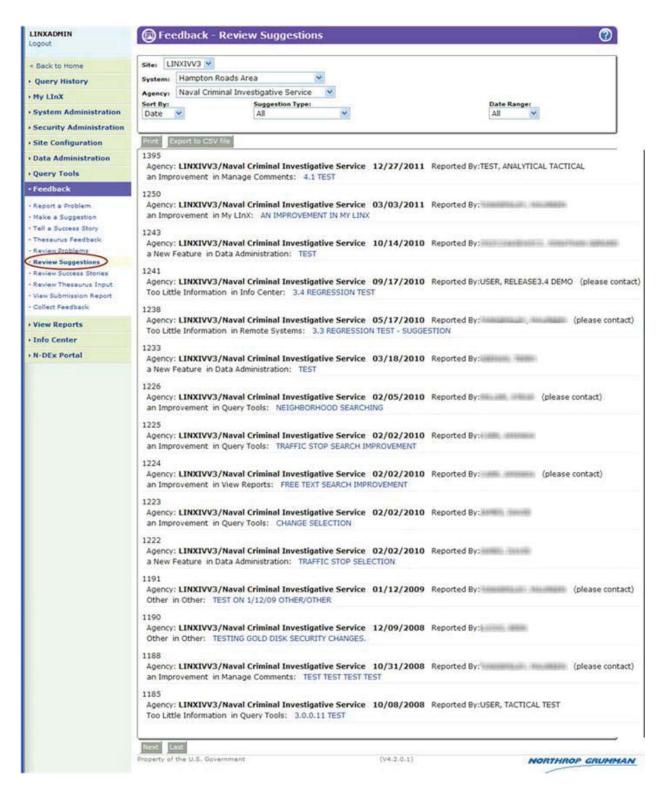
# **Review Suggestions**

The capability of *Review Suggestions* is to allow the LInX user who has the appropriate privilege to view LInX suggestions submitted by his/her agency. The results are similar to those available to the LInX Administrator, except the LInX user will not be allowed to mark any of the suggestions as processed.

Clicking on *Review Suggestions* in the Navigation menu along the left side of the screen will automatically bring up a *Review Suggestions* screen for the Site, System, and Agency of the user requesting the information.

The *Review Suggestions* results can be filtered and regenerated using the following fields (some fields require appropriate privileges):

- > Site [drop-down list] defaulted to user's home site
- > System [drop-down list] defaulted to user's home system
- Agency [drop-down list] defaulted to user's home agency
- Sort by Date or Agency [drop-down list]
- Suggestion Type [drop-down list]
- Date Range [drop-down list]



Once generated, the results can then be displayed/saved as a PDF or comma separated file (i.e. CSV).

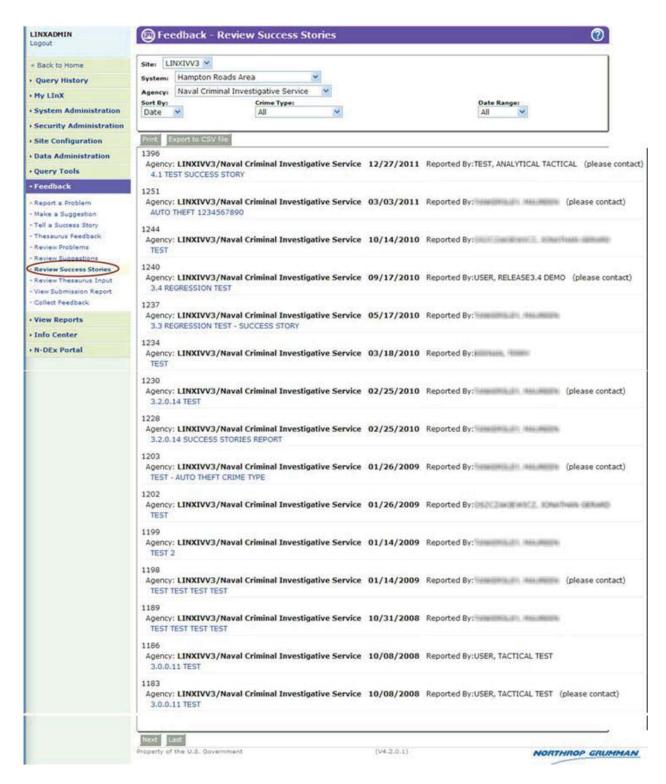
# **Review Success Stories**

The capability of *Review Success Stories* is to allow the LInX user who has the appropriate privilege to view LInX success stories submitted by his/her agency, and to identify with which Crime Type the successes stories are associated. This will provide other users with more information to help them understand the type of case/crime to which the success story relates.

Clicking on *Review Success Stories* in the Navigation menu along the left side of the screen will automatically bring up a *Review Success Stories* screen for the Site, System, and Agency of the user requesting the information.

The *Review Success Stories* results can be filtered and regenerated using the following fields (some fields require appropriate privileges):

- > Site [drop-down list] defaulted to user's home site
- > System [drop-down list] defaulted to user's home system
- Agency [drop-down list] defaulted to user's home agency
- Sort by Date or Agency [drop-down list]
- Crime Type [drop-down list]
- ➤ Date Range [drop-down list]



Once generated, the results can then be displayed/saved as a PDF or comma separated file (i.e. CSV).

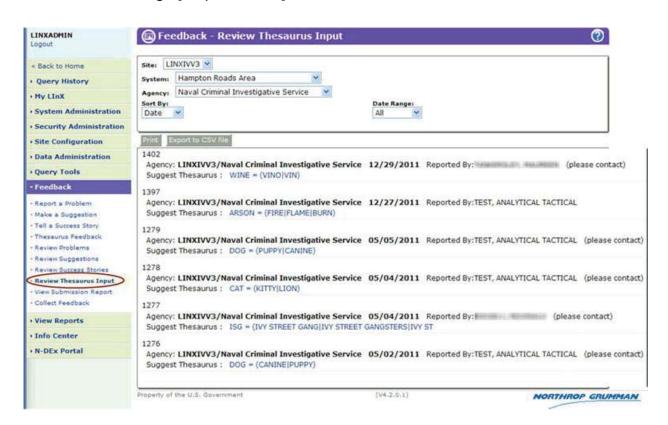
# **Review Thesaurus Input**

The capability of *Review Thesaurus Input* is to allow the LInX user who has the appropriate privilege to view feedback regarding the LInX thesaurus submitted by his/her agency. The results are similar to those available to the LInX Administrator, except the LInX user will not be allowed to mark any of the feedback as processed.

Clicking on *Review Thesaurus Input* in the Navigation menu along the left side of the screen will automatically bring up a *Review Thesaurus Input* screen for the Site, System, and Agency of the user requesting the report.

The *Review Thesaurus Input* results can be filtered and regenerated using the following fields (some fields require appropriate privileges):

- > Site [drop-down list] defaulted to user's home site
- System [drop-down list] defaulted to user's home system
- Agency [drop-down list] defaulted to user's home agency
- Sort by Date or Agency [drop-down list]
- Date Range [drop-down list]



Once generated, the results can then be displayed/saved as a PDF or comma separated file (i.e. CSV).

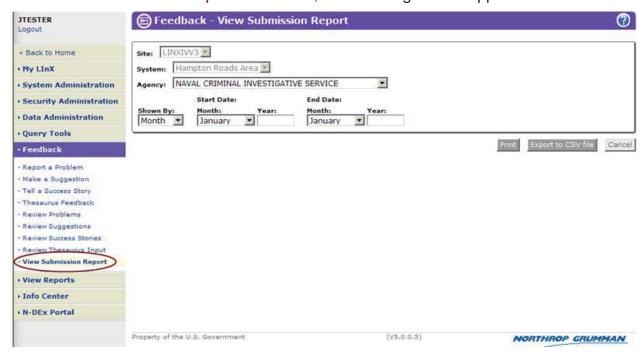
# **View Submission Report**

The functionality of the *View Submission Report* is to provide the LInX user who has the appropriate administrator privilege the option to view the *Feedback Submission Report* for his/her agency. The system will provide the user with information about the type and number how many feedback submissions have been submitted by his/her agency in a specified period.

The *View Submission Report* query allows an agency to generate a summary report of the type and number of feedback submissions by his/her agency in a specified period.

Authorized users can access the *View Submission Report* screen either from the *Feedback* title page, or from the menu bar located along the left side of the screen.

When *View Submission Report* is selected, the following screen appears:



#### **ENTERING A VIEW SUBMISSION REPORT QUERY**

The *View Submission Report* query allows an agency to generate a summary report of the type and number of feedback submissions by his/her agency in a specified period.

The *View Submission Report* results can be filtered using the following fields (some fields require appropriate privileges):

- Site [drop-down list] defaulted to user's home site
- System [drop-down list] defaulted to user's home system
- > Agency [drop-down list] defaulted to user's home agency
- ➤ Duration [drop-down list] (Month, Quarter, Year)

- Start Date (Month/Year, Quarter/Year, Year/Year)
- ➤ End Date (Month/Year, Quarter/Year, Year/Year)

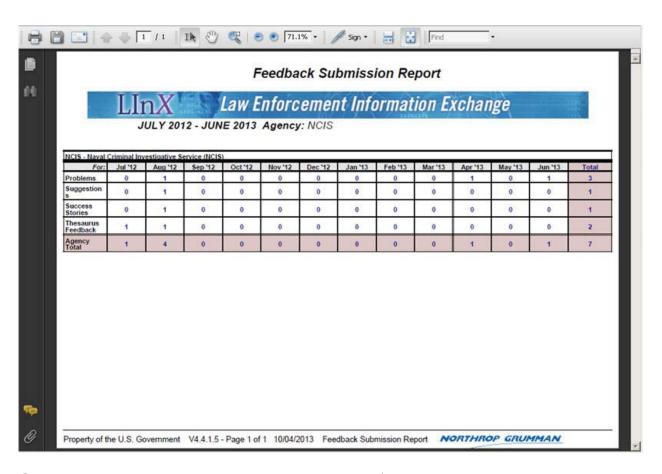
The report can be grouped by calendar month, quarter or year. The maximum columns in the report will be limited to 12 columns to cover the number of calendar months in a year. The months can spread over 2 years with 12 month in between. The quarters can be 12 quarters spread over 4 years. The years can be spread over 12 years. The defaulted date range is the last twelve months from the current month.

The query page allows the user to generate this report for one/more Agencies and Systems on a monthly, quarterly, or yearly basis as depicted below.

The report will have the following data associated with all Systems and all Agencies:

- Number of Problems submitted
- Number of Suggestions submitted
- Number of Success Stories submitted
- Number of Thesaurus Feedback suggestions submitted
- Agency total, by duration increment and overall total.

Note that when there is only one agency, there is no system total. When there is only one system, there is no systems total. If there is more than one agency, the agency names will be displayed in the system total. When there is more than one system, the system names will be displayed in the systems total.



Once generated, this report can then be displayed/saved as a PDF or comma separated file (i.e. CSV).

### **System Administration Screen**

The *System Administration* screens allow for the management of user and administrator accounts and can only be accessed by designated administrative users. By using these screens, administrators can find an existing user, add new users, edit user information, establish or change user privileges and disable a user account. System Administrators can also manage user administration, security administration and data administration accounts, but only for administrators at the same administrative level or below.

# Navigating to the System Administration Screen

Authorized Administrators can access the System Administration screens by selecting System Administration from the menu bar located along the left side of the screen. The administrator will be taken to the System Administration menu screen where the following options are available:

- Create User
- Find/Edit User
- System Admin Audit Report
- Edit Agency Contacts
- User Training Audit Report
- Record User Training

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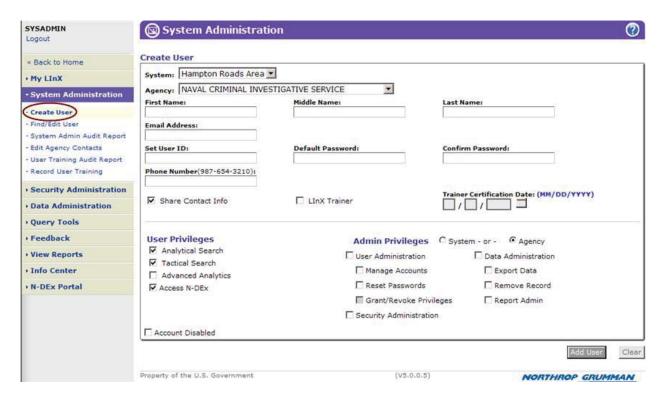
All options are described in detail in the applicable sections.

# **Create User**

#### CREATE A SYSTEM USER OR ADMINISTRATOR ACCOUNT

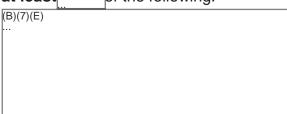
The *Create User* screen contains the fields necessary to add a new user or administrator account to the system:

- User System drop down list [drop down list will appear only if the administrator has authority over more than one system]
- User Agency drop down list [drop down list will appear only if the administrator has authority over more than one agency]
- First Name
- Middle Name
- Last Name
- E-mail Address
- Set User ID (required field)
- Default Password (required field)
- Confirm Password (required field)
- Phone Number (of user) (required field)
- Share Contact Info [check to include in LInX User Directory]
- LInX Trainer [check if new user is a LInX Trainer]
- Trainer Certification Date [MM/DD/YYYY]



User IDs must be unique for the LInX system and cannot be duplicated or reused. It is recommended to use a (B)(7)(E) characters for the User ID.

A default password must be established for the new user. The password must conform to the standard password requirements, with a minimum of (B)(7)(E) consisting of **at least** (B)(7)(E) of the following:



**Note:** Upon creation of a user account, LInX provides an option for the user's contact information to be shown in the LInX User Directory which is available to all LInX users. The LInX User Directory will list the user's userid, name and agency, as well as the user's contact information including the user's telephone number and email address.

This option defaults to <u>sharing</u> of the user's contact information in the directory.

Share Contact Info

If the contact information is NOT to be shared, un-check the option box.

☐ Share Contact Info

#### **LInX Trainer**

A check-box is available to identify a user as a *LInX Trainer*. Checking this box will cause the *Trainer Certification Date* field to become available for data entry (otherwise, the field is grayed out). The date of the user's last certification should be entered in this field.

Deselecting the *LInX Trainer* check-box will gray out the *Trainer Certification Date* field, making it unavailable for data entry.

### **User Privileges**

Under User Privileges, check-boxes are available to grant user authority for either or both Analytical and Tactical search capabilities, as well as access to N-DEx data. For Analytical searches, in addition to the data listed below, any narrative related to an incident is also provided. The primary difference between these options involves the results returned. Under the Tactical search, data is available for:

- Person attributes
- Vehicle information
- Incident information
- Photos
- Warrant information
- Phones
- Property Information

**Note**: The *Account Disabled* box is not actually a user privilege, but is used to disable or enable the account. See Disabling an Account, below.

### **Admin Privileges**

Options under Admin Privileges are:

- User Administration (comprising a sub-group of privileges including Manage Accounts, Reset Passwords, and Grant/Revoke Privileges)
- Security Administration
- Data Administration (comprising a sub-group of privileges including Export Data, Remove Record, and Report Admin).

Under Admin Privileges, radio buttons are available to grant administrative authority at the System or Agency level. LInX will default this selection to the permissions equivalent to the current login account (user creating the account).

**Note**: Typically, this will be defaulted to Agency.

Under the administration groupings (User, Security and Data), check-boxes are available to provide the user with the authority to add, modify,enable/disable or delete LInX user accounts; reset user account passwords; grant or revoke user account privileges; export data; and remove records.

#### **User Administration**

Provides user with the authority to assign user administration privileges, subject to agency-level and system-level restrictions. The three privileges grouped under the User Administration privileges are:

#### § Manage Accounts

Provides the user with the authority to create and maintain user accounts (add, modify, enable, disable, delete accounts).

#### § Reset Passwords

Provides the user with the authority to reset LInX user account passwords (e.g., following an account lock-out).

#### § Grant/Revoke Privileges

Provides the user with the authority to grant or revoke privileges to LInX user accounts.

#### **Security Administration**

Provides the user with the authority to review system audit logs and access logs. The Security Administration privilege is subject to agency-level and system-level restrictions.

#### **Data Administration**

A grouping of LInX account privileges that provide the user with the authority to export LInX data to remote third-party systems, remove and unblock records, and generate Agency Reports. The Data Administration privilege is subject to agency-level and system-level restrictions. If a LInX user account is granted all three data administration privileges, the user is referred to as a System Data Administrator or

an Agency Data Administrator. The three privileges grouped under the Data Administration Privilege are:

#### § Export Data

Provides the user with the authority to configure and manage remote, thirdparty system data feeds.

#### § Remove Record

Provides the user with the authority to remove an event record from the LInX data warehouse, and preventing it from being re-ingested into the LInX data warehouse; and to unblock a removed event record, allowing it to be reingested into the LInX data warehouse.

#### § Report Admin

Provides the user with the authority to view reports detailing the data that has been contributed by a given agency. The report details number of incidents and narratives submitted by a given agency, types of incident information provided, and dates of latest incident report, last contribution and the defined contribution schedule.

When the required new user information fields have been completed, the **Add User** button should be selected.

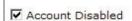


If the information requirements have not been met, if the User ID has already been assigned, or if the default password is already in use and unchanged, an error message will appear on the screen.

### **Disabling an Account**

An account can be temporarily disabled as part of the *Add User* process. Checking the *Account Disabled* check-box will prevent access by the user or administrator until further action is taken by the System Administrator to change the status of the account.

If the new account is to be disabled upon creation, select the *Account Disabled* checkbox before clicking the **Add User** button.



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The account can be re-enabled at any time by deselecting the *Account Disabled* box and updating the account.

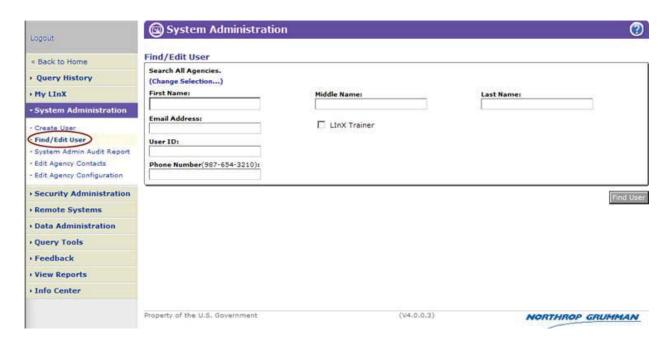
Account Disabled

# Find/Edit User

The *Find/Edit User* screen can be used to find an existing user in LInX so that their account can be viewed, updated, or disabled. Information on the user should be entered into the appropriate fields and the **Find User** button selected to perform the search.

Any of the following fields can be used to search for a LInX user in the system:

- User Agency [via the (Change Selection ...) link]
- First Name
- Middle Name
- Last Name
- E-mail Address
- LInX Trainer
- User ID
- Phone Number



The default is to search all systems/agencies. By selecting the (Change Selection ...) link, an *Agency Selection* menu is presented where the user can select the desired System(s) and/or Agency(ies) to be searched. To leave the *Agency Selection* menu without making any changes, select **Close** or **Cancel**. To save the selected System(s)/Agency(ies), select **OK**.

A check-box is available to identify a user as a *LInX Trainer*. Checking this box will only return those users identified as a LInX Trainer in their account.

To see all users in all systems/agencies, select **Find User** without entering any additional search criteria. If attempting to find a specific user, only one field is required to initiate a search.

### Find User

The search results will appear as a new screen view with a results list at the bottom of the screen. Selecting a row from the results list by placing the cursor on the row and clicking it will cause the fields at the top of the screen to be populated with the information related to the selected user:

- System [drop down list, if appropriate]
- Agency [drop down list]
- First, Middle, and Last Name
- E-mail Address
- User ID
- Default Password [blank]
- Confirm Password [blank]
- Phone Number
- Created Date (of account)
- Last Login Date
- Last Updated Date
- Share Contact Info status
- LInX Trainer status
- Trainer Certification Date

**Note:** When editing user account information, LInX provides an option for the user's contact information to be shown in the LInX User Directory which is available to all LInX users. The LInX User Directory will list the user's name and agency, as well as the user's contact information, including the user's telephone number and email address. The *Share Contact Info* option controls the sharing of the user's contact information in the directory.

Selecting the check-box option will share contact information in the LInX User Directory listing.

Share Contact Info

If the contact information is NOT to be shared, un-check the option box.



#### **LInX Trainer**

A check-box is available to identify a user as a *LInX Trainer*. Checking this box will cause the *Trainer Certification Date* field to become available for data entry (otherwise, the field is grayed out). The date of the user's last certification should be entered in this field.

### **Update or Delete A System User or Administrator**

A user account can be updated or deleted after performing a search on existing users and selecting the desired record. The updated information should be entered in the appropriate fields and the **Update User** button selected.

Update User

A message window will appear indicating that the user account has been updated. Click the **OK** button to close the window.



To delete a user, the record should be selected from the results list and the user information verified to make sure it is the correct user. After the **Delete User** button has been selected to cancel the account, a message window will appear indicating that the user has been deleted.

Delete User

When an account has been deleted it is not actually eliminated from the system but the user privileges and passwords are deleted to prevent user access. The User name and

#### LInXUserManual

ID are maintained for audit purposes. When an account has been deleted, it cannot be recreated without going through LInX Project Management.

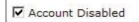
Pressing the **Reset** button will cancel any changes that have been entered and the screen will reappear with the original search result user information.



### **Disabling an Account**

An account can be temporarily disabled as part of the *Update User* process following a search on user records and the selection of the user account to be disabled. Checking the *Account Disabled* check-box will prevent access by the user or administrator until further action is taken by the System Administrator to change the status of the account.

Select the *Account Disabled* check-box and click the **Update User** button. A message window will appear indicating that the user account has been successfully updated. Click the **OK** button to close the window.



The account can be re-enabled at any time by deselecting the *Account Disabled* box and updating the account.

Account Disabled

An account can be disabled for various reasons, such as setting up a new account prior to actual use by an employee, or disabling an account for an employee who will be absent for an extended period of time.

The Account Disabled check-box will automatically be checked if the system has disabled the account after six unsuccessful attempts to login. After determining that the user should be granted access, the System Administrator can use the Find/Edit User screen to search for the desired user account, and deselect the Account Disabled check-box.

# **Edit Agency Contacts**

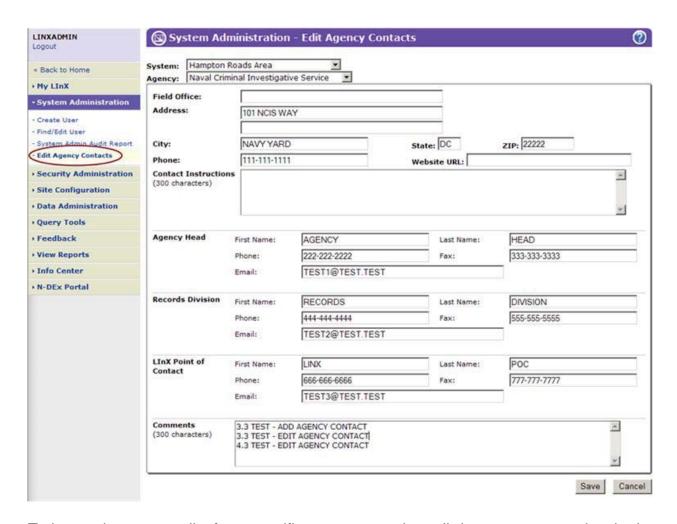
To facilitate communication between participating LInX agencies, a listing of agency contacts is available for viewing by all LInX users. The capability to edit agency contacts is limited to agency-level and system-level restrictions and agency administrators are responsible for maintaining the information regarding agency contacts. To facilitate the maintenance of this information, a user with *Manage Accounts* privilege may enter or update an agency's contact information. In addition to the address and main telephone number for the Agency, information fields including the name, desk telephone, fax, and e-mail attributes are available for the following points of contact:

- Agency Head
- Agency Records Division
- Agency LInX Point of Contact

There is also a free-text *Comments* field for additional Agency information.

The following provides a sample screen populated with representative information for each agency contact.

#### LInXUserManual



To locate the contacts list for a specific agency, use the pull-down menus to select both a System and Agency. A contacts listing exists for each agency on the site. After selecting the desired agency, the information for each point of contact should be entered in the appropriate fields. In addition there is a *Comments* field that is subject to a 300 character limit. This field may be used to communicate the operating hours of agency offices, alternate points of contact, and special instructions for contacting the agency.

After entering the desired information in the appropriate fields, use the **Save** button to update the contact information.



A message window will appear indicating that the Agency Contact account has been updated.



Pressing the **Cancel** button will cancel the changes that have been entered and the screen will reappear with the original agency contact information.



# **System Administration Audit Report**

A LInX System Administrator has the capability to generate audit reports of LInX user accounts for a specific agency.

When the *System Administration Audit Report* is initially selected, the report displayed will be for the agency to which the user belongs. However, a simple query interface allows the user to specify a System, Agency, a combination of different account statuses, and/or User Roles to include in a subsequent report result.

This report can be generated based on the following search criteria:

- User System (if allowed by user rights)
- User Agency
- User Account types to include/exclude in the report (Enabled, Disabled, Deleted)
- User Roles to include/exclude in the report (All, Trainers, System Administrators, Security Administrators)

Each of these fields can be used by itself or in any combination to make queries. After any modifications to the search criteria are made, click on the **Search** button to regenerate the results.

The report shows the following attributes for each user's account:

- User ID (hyper-linked to the Find/Edit User screen)
- User Name (Last, First)
- User E-mail Address (hyper-linked to Administrator's default e-mail application)
- User Agency
- Last Login
- Account Status [Date Created, Date Disabled, Date Deleted, as applicable]
- Privileges [System, Security, Data, Password, Report, N-DEx]
- Trainer Certification Status and Certification Date (if applicable)
- Rules of Use Agreement Status and Date
- Remote Access Agreement Status and Date
- I2 Usage Agreement Status and Date
- KML Export Agreement Status and Date
- Printing From LInX Agreement Status and Date
- Saving Data Agreement Status and Date (Advanced Analytics users only)

The results can be re-sorted by clicking on any column heading. For example, sorting on the *Remote Access Status* column will reorder the report by grouping all users with the same Remote Access Status together.

The following provides a sample result screen of a *System Administration Audit Report*.



### **Navigate Directly to Find/Edit User Screen**

Each User ID is hyperlinked to allow an Administrator to navigate directly to the *Find/Edit User* screen to review/edit information for the selected user. When all actions have been completed (and saved, if required), the Administrator may return to the *System Admin Audit Report* by clicking on the Return to Admin Audit Report link at the bottom of the *Find/Edit User* screen.

### **Printing and Saving a Report**

The report results can be printed or saved as either a PDF or CSV file.

By selecting the **Print** button above the results table, a PDF of the report is generated and opened in a separate window. From the PDF, the report can be printed and/or saved.

The user also has the option of opening or saving the report in an Excel spreadsheet format. When the **Export to CSV file** button located above the results table is selected, a pop-up window is presented, asking if the user wants to open or save the file.

If the **Open** button is selected, the report is opened as an Excel spreadsheet. From here, the report can be printed and/or saved.

If the **Save** button is selected, the standard *Save As* pop-up window will open, asking for a File Name for the report and a save location.

### **Generating E-mails to Users**

Each user's *E-mail Address* is hyperlinked in the *System Admin Audit Report* results screen and the PDF, allowing System Administrators the ability to click on the user's e-

mail address and invoke the client e-mail application to compose individual e-mails to users.

If the System Administrator exports the *System Admin Audit Report* to a CSV file, all the e-mail addresses may be copied as a group and pasted into a single e-mail message.

# **User Training Audit Report**

The *User Training Audit Report* provides System and Security Administrators, as well as LInX Trainers, with the ability to audit the training activities of LInX users. The *User Training Audit Report* will display the number of times and last date each user in the specified agency attended training or accessed an online training module. The administrator will be able to choose a date range for the training, a last login date to filter users who are not actively using LInX, and a list of training modules to include in the report. Privileged administrators will have the ability to select alternate agencies to audit.

When the *User Training Audit Report* is initially selected, the report displayed will be for the agency to which the user belongs, and the date range is pre-populated, extending back one year from the current system date. However, the report results can be modified by specifying a System and/or Agency (depending on the user's privileges), changing the Training Date Range, and entering a Last Login Date.

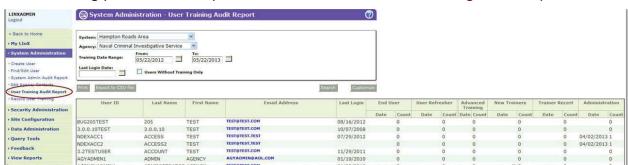
The following notes apply to the *User Training Audit Report*:

- 1. All active users for the system/agency will be displayed unless filtered by entering a *Last Login Date* or checking the *Users Without Training Only* checkbox.
- 2. The *Training Date Range* only applies to the <u>counts</u> and <u>training</u> date for each course taken.
- 3. A maximum of 10 courses can be displayed in the report results. To change the courses displayed in the report, click on the **Customize** button, use the checkboxes to select/deselect the courses to be included/excluded, and then click the **Apply** button.
- 4. The *Users Without Training Only* checkbox <u>only</u> applies to the selected courses shown in the report results (selected by using the **Customize** option).

User training is recorded in 2 ways:

- 1. Each time a user views or downloads an online training module from the LInX web site, the system will record the date and user who accessed the training module.
- 2. Additional training is submitted through the use of the *Record User Training* module.

The training report will summarize the number of times a user has accessed a training module, and the last time a training module was accessed.



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The following provides a sample result screen of the *User Training Audit Report*.

The report shows the following attributes for each user's training:

- System (if allowed by user rights)
- Agency

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Training Date Range

TOR AGENCY

- Last Login Date (if specified)
- If the results are only for users without training
- User ID
- Last Name
- First Name
- EMail Address
- Last Login Date
- The latest Date and Number of Times a user has accessed each Course Name in the specified training date range.

The results can be re-sorted by clicking on any column heading. For example, sorting on the *Last Name* column will reorder the report by grouping all users with the same last name together.

#### **Printing and Saving a Report**

The report results can be printed or saved as either a PDF or CSV file.

By selecting the **Print** button above the results table, a PDF of the report is generated and opened in a separate window. From the PDF, the report can be printed and/or saved.

The user also has the option of opening or saving the report in an Excel spreadsheet format. When the **Export to CSV file** button located above the results table is selected, a pop-up window is presented, asking if the user wants to open or save the file.

If the **Open** button is selected, the report is opened as an Excel spreadsheet. From here, the report can be printed and/or saved.

If the **Save** button is selected, the standard *Save As* pop-up window will open, asking for a File Name for the report and a save location.

### **Generating E-mails to Users**

Each user's *E-mail Address* is hyperlinked in the *User Training Audit Report* results screen and the PDF, allowing the ability to click on the user's e-mail address and invoke the client e-mail application to compose individual e-mails to users.

If the *User Training Audit Report* is exported to a CSV file, all the e-mail addresses may be copied as a group and pasted into a single e-mail message.

# **Record User Training**

The *Record User Training* functionality provides System and Security Administrators, as well as LInX Trainers, with the ability to record training for LInX users who have attended training classes. The recorded training is used to create the *User Training Audit Report*.

The system will keep track of what online training modules a user has viewed or downloaded. Each time a user views or downloads an online training module from the LInX web site, the system will record the date and user who accessed the training module. This information is also used to create the *User Training Audit Report*.



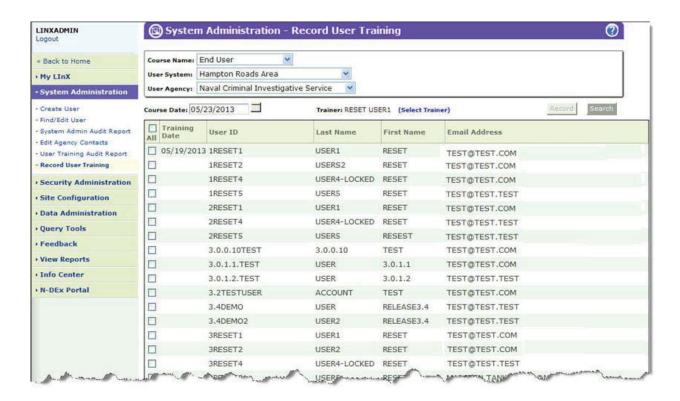
A listing of users is generated by selecting the Course Name, User System, and User Agency. A result list will be returned with all eligible users in the specified system and agency.

**Note**: Only privileged users will be able to select system and agency; agency-level administrators and trainers will be able to record training only for their own users.

To update records, verify the Course Name, enter the Course Date and Trainer name (selectable from the Select Trainer link), and check the applicable boxes for the users who took the training. After all information has been entered, click the **Record** button to submit the information and update the records.

The following provides a sample result screen for recording user training.

#### LInXUserManual



### **Security Administration Functions**

This functionality is intended for administrators who have the authority to review agency and user activity in the LInX system. The determination of which users will have access to security administration functions is controlled by each individual agency.

Access to the security administration logs is determined as part of the establishment of user privileges. The type of access is also confined to the System or Agency levels, depending on the type of system-wide privileges granted to an administrator.

### **Security Administration Logs**

Two specific types of transaction logs are provided for Security Administration purposes:

- Security Audit Logs
- Security Access Logs

Audit logs allow security managers to monitor use of the system and to investigate any activity to determine if it is in compliance with legal and administrative requirements governing LInX. Audit logs will describe what type of action has occurred within the system, which user and user system or agency was involved, and the date and time of the action. The logs identify the kind of action that was taken, including the specific search criteria, but does not store the results of the action. The types of actions that generate audit records include failed login, successful login, logout, added user, updated user, deleted user, and any level of system query or analysis.

Access logs allow an agency to see which users have looked at the agency's records in the LInX data warehouse. The access time, the record accessed, and the level of access are also included in the access log.

### **Security Administration Reports**

Four specific types of reports are provided for Security Administration purposes:

- LInX Usage Report
- User Usage Report
- Agency Usage Report

### Deconfliction Report

These reports can be used to identify aggregate query activity on a per agency basis.

# Navigating to the Security Administration Screen

Authorized Administrators can access the *Security Administration* screens by selecting *Security Administration* from the menu bar located along the left side of the screen. The administrator will be taken to the *Security Administration* menu screen where the following options are available:

- Security Audit Log
- Security Access Log
- LInX Usage Report
- User Usage Report
- Agency Usage Report
- Deconfliction Report



All options are described in detail in the applicable sections.

# Security Audit Log Screen

This functionality is intended for administrators who have the authority to review agency and user activity in the LInX system. The determination of which users will have access to security administration functions is controlled by each individual agency.

Authorized users can access the *Security Audit Log* either from the *Security Administration* title page, or from the menu bar located along the left side of the screen.

When Security Audit Log is selected, the following screen appears:



#### **ENTERING A SECURITY AUDIT LOG QUERY**

A query of the audit log can be based on the following search criteria:

- User System/Agency (from Agency Selection Menu)
- User First Name
- User Last Name
- User ID (if the Audit Log is to be filtered for a single user)
- Start Date (start date for the selected log entries)
- End Date (end date for the selected log entries)
- Justification (if used)

A *Start Date* and *End Date* are required to generate any *Security Audit Log* report. By entering the search criteria in the fields on the screen, reports can be obtained by System, Agency, or User for the specified time frame.

When a search is performed using the *Justification* field, what is entered in the *Justification* field is the justification being searched for, not the justification for conducting the search no justification is required to query the Access Log).

For example, the justification can be a Case Number, and all records accessed regarding that Case Number (if used as the justification) will be returned.

When the search criteria have been entered, the **Search** button should be selected to begin the query.

#### SECURITY AUDIT LOG RESULTS

The Security Audit Log query results will appear when the screen refreshes, and each logged transaction will be listed in chronological order. Query results can be sorted by clicking on any field heading in the results list.

- Site ID
- System
- Agency
- User ID
- First Name
- Last Name
- IP Address (User's IP Address)
- Audit Code (type of activity, such as "Change Password")
- Justification Code (if applicable)
- Description of the activity
- Transaction Date/Time

An example of *Security Audit Log* results is shown below:



The **Print** button creates a PDF view of the *Security Audit Log* results in a separate window.



The PDF view contains the same columns of information as the original view.

The PDF can be saved as a file and/or printed in accordance with agency policies and the LInX Rules of Operations.

The PDF window can be closed after viewing, saving, and/or printing.

To perform a new *Security Audit Log* query, the **New Query** button at the bottom of the Audit Log results screen can be selected to return the user to the *Security Audit Log* screen.

New Query

# Security Access Log Screen

This functionality is intended for administrators who have the authority to review agency and user activity in the LInX system. The determination of which users will have access to security administration functions is controlled by each individual agency.

Authorized users can access the *Security Access Log* either from the *Security Administration* title page, or from the menu bar located along the left side of the screen.

When Security Access Log is selected, the following screen appears:



#### **ENTERING A SECURITY ACCESS LOG QUERY**

The Security Access Log query allows an Agency's LInX Security Administrator to see which users have been accessing the agency's data and/or what data in the LInX warehouse has been accessed. The search can be filtered by User criteria, Event criteria, or a combination of User and Event criteria. A date range is required for all searches. A query of the access log can be based on the following search criteria:

- Search Criteria Type (User, Event, or User & Event)
- User System
- User Agency
- User ID (if the Access Log is to be filtered for a single user)
- Event System
- Event Agency

- Event ID (if the Access Log is to filtered for a single event)
- Start Date (start date for the selected log entries)
- End Date (end date for the selected log entries)
- Justification (if used)

**Note**: The contents available to the user in the System/Agency fields are based on the user's privileges.

The fields available to search are based on the *Search Criteria Type* selected. If the *User & Event* option is selected, all search fields are available.

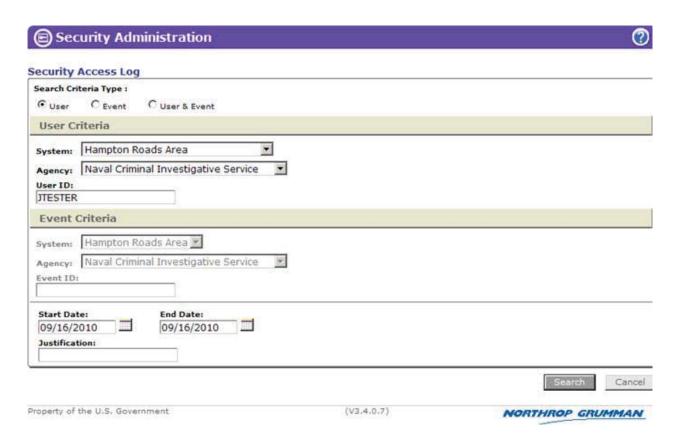
A Start Date and End Date are required to generate any Security Access Log report. The Start Date and End Date are pre-populated with the current system date, but can be changed to accommodate any date range.

When a search is performed using the *Justification* field, what is entered in the *Justification* field is the justification being searched for, not the justification for conducting the search no justification is required to query the Access Log).

For example, the justification can be a Case Number, and all records accessed regarding that Case Number (if used as the justification) will be returned.

#### User ID Search

To search the *Security Access Log* for a specific User ID, select the **User** radio button under *Search Criteria Type*, select the **System** and **Agency** to which the user belongs, and enter the **User ID** of the user being search for under the *User Criteria* section.

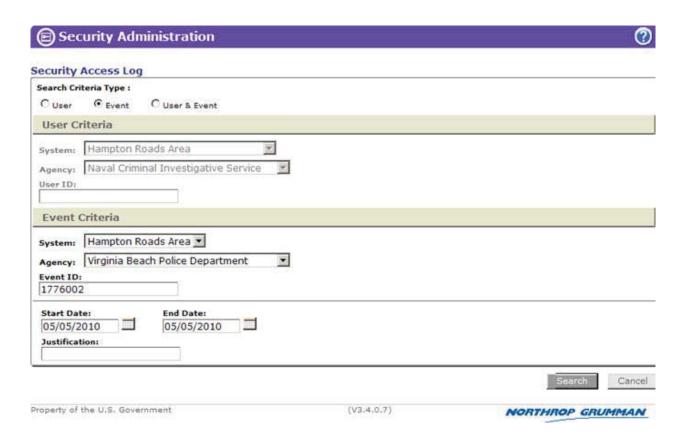


 To search the Security Access Log for all users from a specific System/Agency, leave the User ID field blank.

**Note**: The *Event Criteria* fields will be grayed out (not accessible) if only a *User Search* is being performed.

#### **Event ID Search**

To search the Security Access Log for a specific Event ID, select the Event radio button under Search Criteria Type, select the System and Agency to which the event belongs, and enter the Event ID under the Event Criteria section.



 To search the Security Access Log for all accessed events from a specific System/Agency, leave the Event ID field blank.

**Note**: The *User Criteria* fields will be grayed out (not accessible) if only an Event Search is being performed.

#### **User ID and Event ID Search**

To search the **Security Access Log** for both a specific **User ID** and a specific **Event ID**, select the **User & Event** radio button under **Search Criteria Type**, select the **User's System** and **Agency**, and enter the **User ID** of the user being searched for under the **User Criteria** section. Also, select the **Event's System** and **Agency**, and enter the **Event ID** under the **Event Criteria** section.

- To search the Security Access Log for all users from a specific System/Agency who accessed a particular event, leave the User ID field blank, and complete all other fields.
- To search the Security Access Log for all events accessed by an individual user from a specific System/Agency, leave the Event ID field blank, and complete all other fields.

 To search the Security Access Log for all users from a specific System/Agency who accessed any events from a specific System/Agency, leave the User ID and Event ID fields blank, and complete all other fields.

#### **SECURITY ACCESS LOG RESULTS**

The Security Access Log query results will appear when the screen refreshes. The top half of the window contains the User, Event, and Access details associated with the selected entry in the result list (bottom half of the window). The results screen appearance is the same regardless of the Search Criteria Type selected. The Details section includes the following information:

- User Site
- User System
- User Agency
- User ID
- Event Site
- Event System
- Event Agency
- Event ID
- Event Type
- Access Date/Time
- Access Type (Full/Partial)
- IP Address
- Justification Code, if applicable



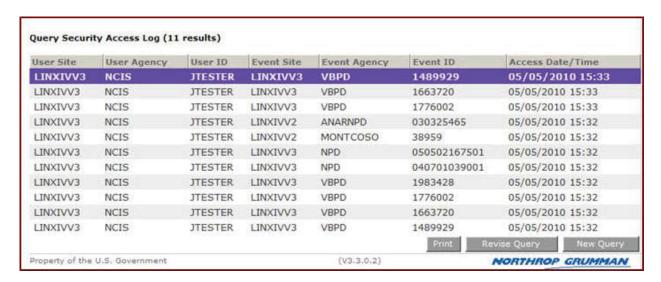
#### LInXUserManual

The result list of entries that match the search criteria are displayed in the lower half of the screen. Each logged transaction is listed in chronological order. Query results can be sorted by clicking on any of the following Field Headings in the results list.

- User Site
- User Agency
- User ID
- Event Site
- Event Agency
- Event ID
- Access Date/Time

If the User ID is difficult to identify (e.g., it may represent a user from a linked system rather than a LInX agency), the System Administrator should contact the regional NCIS representative or LInX Project Management.

An example of Security Access Log results is shown below:



The **Print** button creates a PDF view of the *Security Access Log* results in a separate window.



The PDF view contains additional columns of information:

- User System
- IP Address
- Event System

- Access Type
- Justification Code

The PDF can be saved as a file and/or printed in accordance with agency policies and the LInX Rules of Operations.

The PDF window can be closed after viewing, saving, and/or printing.

By selecting the **Revise Query** button at the bottom of the **Security Access Log** results screen, the user is returned to the query screen still populated with the search criteria used in the previous search. This enables the user to add, modify, or delete criteria, and initiate a new search.

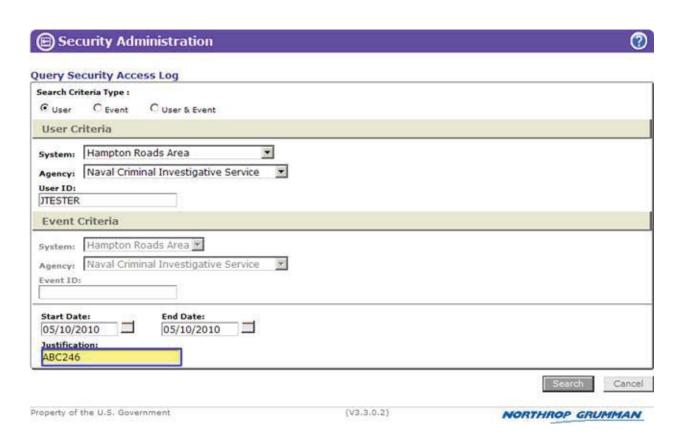
To perform a new Security Access Log query, the **New Query** button at the bottom of the Access Log results screen can be selected to return the user to the Security Access Log screen.

#### **ACCESS LOG SEARCH TIPS**

While the appearance of the results screen is the same regardless of the *Search Criteria Type* selected, what records are displayed in the results list can vary, especially if the search involves records from remote systems.

- Tip: User searches: Can only conduct searches for local system users. However, all events [both local and remote] accessed by the local user(s) will be displayed.
- ➤ **Tip**: Event record searches: Can only conduct searches for local system event records. However, all users [both local and remote] that accessed the local event record(s) will be displayed.

Examples of a *Security Access Log* search and PDF results using the *Justification* field are as follows:



#### Security Access Log Law Enforcement Information Exchange User Site User ID IP Address Event Site Event LINXIVV3 **HAMPTO** NCIS **JTESTER** 167.225.107 LINXIVV2 NCR **FFXCOP** 2007075220 FULL ABC246 05/10/2010 167.225.107 HAMPTO **JTESTER** HAMPTO **VBPD** 2007075220 PARTIAL ABC246 05/10/2010 LINXIVV3 LINXIVV3 LINXIVV3 HAMPTO **JTESTER** 167.225.107 LINXIVV3 **HAMPTO VBPD** 2007075220 PARTIAL ABC246 05/10/2010 13:51 LINXIVV3 **HAMPTO JTESTER HAMPTO VBPD** 2007075220 FULL ABC246 05/10/2010 13:51 167.225.107 HAMPTO NCR HOCOP 0901009 FULL ABC246 05/10/2010 LINXIVV3 NCIS **JTESTER** LINXIVV2 HAMPTO 090015829 05/10/2010 LINXIVV3 NCIS **JTESTER** 167.225.107 LINXIVV2 NCR HOCOP PARTIAL ABC246 13:50 05/10/2010 HAMPTO **JTESTER** LINXIVV2 HOCOP 090015829 PARTIAL ABC246 LINXIVV3 HAMPTO **JTESTER** 167.225.107 LINXIVV3 RICHMON RPD 174171 PARTIAL ABC246 05/10/2010 05/10/2010 LINXIVV3 HAMPTO **JTESTER** 167.225.107 LINXIVV3 RICHMON RPD 98528 PARTIAL ABC246 LINXIVV3 **HAMPTO JTESTER** 167.225.107 LINXIVV3 RPD 172536 PARTIAL ABC246 05/10/2010 13:50 05/10/2010 13:50 LINXIVV3 **HAMPTO JTESTER** 167.225.107 LINXIVV3 RICHMON 48016 PARTIAL ABC246 05/10/2010 PARTIAL LINXIVV3 HAMPTO NCIS JTESTER 167.225.107 LINXIVV3 RICHMON RPD 96322 ABC246 Property of the U.S. Government V3.3.0.2 - Page 1 of 2 Security Access Log NORTHROP GRUMMAN

Note that the event records associated with *Justification ABC246* are from both <u>LINXIVV3</u> (local) and <u>LINXIVV2</u> (remote) systems.

# LInX Usage Report

This functionality is intended for administrators who have the authority to review agency and user activity in the LInX system. The determination of which users will have access to security administration functions is controlled by each individual agency.

This report provides LInX administrators with important data to help the Security Administrator better understand how the system is being used.

Authorized users can access the *LInX Usage Report* either from the *Security Administration* title page, or from the menu bar located along the left side of the screen.

When *LInX Usage Report* is selected, the following screen appears:



#### **ENTERING A LINX USAGE REPORT QUERY**

The *LInX Usage Report* query allows an administrator to see which users have been accessing that agency's data in the LInX warehouse.

This report can be generated based on the following search criteria:

- User Agency
- Duration (Month, Quarter, Year)
- Start Date (Month/Year, Quarter/Year, Year/Year)
- End Date (Month/Year, Quarter/Year, Year/Year)

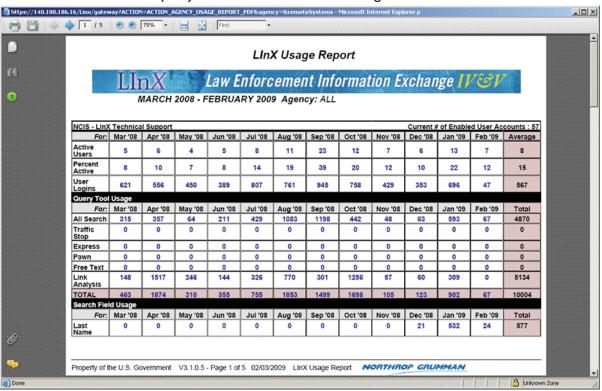
The query page allows the user to generate this report for one/more Agencies and Systems on a monthly, quarterly, or yearly basis as depicted below.

The report can be grouped by calendar month, quarter or year. The maximum columns in the report will be limited to 12 columns to cover the number of calendar months in a year. The months can spread over 2 years with 12 months in between. The quarters

can be 12 quarters spread over 4 years. The years can be spread over 12 years. The defaulted date range is the last twelve months from the current month.

The report will have the following data associated with all Systems and all Agencies:

- Number of active users
- Percentage of the active users compared to the users in the system
- Number of log-ins
- Number of queries broken down by the most frequently used query tools
- Number of queries broken down by the most frequently used search fields
- Totals for query tool and search field usage



The top rows (*Active Users, Percent Active, and User Logins*), are created dynamically, so historical data will appear in the report. Historical data will not appear in the report for the *Query Tool Usage* and *Search Field Usage* sections of the report.

### **Agency Usage Report**

This functionality is intended for administrators who have the authority to review agency and user activity in the LInX system. The determination of which users will have access to security administration functions is controlled by each individual agency.

The *Agency Usage Report* allows the Security Administrator to generate a usage report showing the count of queries per hour/day for one or more agencies. The report will show user usage information at the agency level for each specified agency.

Authorized users can access the *Agency Usage Report* either from the *Security Administration* title page, or from the menu bar located along the left side of the screen.

When *Agency Usage Report* is selected, the following screen appears:



#### **ENTERING A USER USAGE REPORT QUERY**

The *Agency Usage Report* provides the LInX Administrator with the usage report for a selected agency. The report will display detailed usage information regarding the number of queries made based on hour of day, day of week, and calendar month(s) for each user in the agency.

A user with appropriate privilege on the regular site (i.e., not Admin site) can also generate this report only for his/her own agency. Note also that the Super User Admin can view remote users in the summary report, if that information is available.

This report can be generated based on the following search criteria:

- User System/Agency (from Agency Selection Menu)
- Duration (Month, Quarter, Year)
- Start Date (Month/Year, Quarter/Year, Year/Year)
- End Date (Month/Year, Quarter/Year, Year/Year)

Each of these fields can be used by itself or in any combination to make queries. By entering the search criteria in the fields on the screen, reports can be obtained by System, Agency.

The report can be grouped by calendar month, quarter or year. The maximum columns in the report will be limited to 12 columns to cover the number of calendar months in a year. The months can spread over 2 years with 12 months in between. The quarters can be 12 quarters spread over 4 years. The years can be spread over 12 years. The defaulted date range is the last twelve months from the current month.

The report will have the following data associated with the selected System and Agency:

- System
- Agency
- Hours of the day
- Days of the Week
- Number of queries made, broken down by the total number of increment columns (Month/Quarter/Year)
- Average number of queries (total queries divided by total number of increment columns (Month/Quarter/Year)
- Totals for each time increment column
- Total Average (increment totals divided by total number of increment columns (Month/Quarter/Year)

The query page allows the user to generate this report by agency and system on a monthly, quarterly, or yearly basis as depicted below.

The following sample report is generated for a specific agency of the Hampton system for First Quarter 2009 to First Quarter 2010.

### Agency Usage Report

### LlnX Law Enforcement Information Exchange

FIRST QUARTER 2009 - FIRST QUARTER 2010 Agency: NCIS

System: HAMPTON Agency: Naval Criminal Investigative Service

Hours of the day						
For:	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Average
00-01	0	1	0	1	3	1
01-02	0	0	0	0	0	0
02-03	0	0	0	0	0	0
03-04	0	0	0	0	0	0
04-05	0	0	0	0	0	0
05-06	1	0	0	0	0	0
06-07	44	3	8	3	19	15
07-08	72	13	27	5	64	36
08-09	79	66	3	61	144	70
09-10	219	135	43	284	920	320
10-11	668	316	39	396	1000	483
11-12	552	117	83	341	515	321
12-13	520	123	21	270	302	247
13-14	613	157	53	357	623	360
14-15	566	190	139	522	427	368
15-16	453	120	96	393	474	307
16-17	539	252	58	318	342	301
17-18	752	126	4	198	433	302
18-19	188	24	8	58	191	93

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### LInXUserManual

For:	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Average
19-20	55	0	0	11	99	33
20-21	8	0	2	0	14	4
21-22	9	8	6	1	49	14
22-23	20	7	1	1	64	18
23-24	5	0	0	6	49	12
Day of the Week						
For:	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Average
Mon	1390	284	184	689	1009	711
Tue	849	286	73	844	928	596
Wed	1066	457	198	739	937	679
Thu	993	505	54	534	784	574
Fri	1004	124	82	374	1861	689
Sat	37	2	0	0	152	38
Sun	24	0	0	46	61	26
Total	5363	1658	591	3226	5732	3314

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# **User Usage Report**

This functionality is intended for administrators who have the authority to review agency and user activity in the LInX system. The determination of which users will have access to security administration functions is controlled by each individual agency.

The *User Usage Report* allows the Security Administrator to generate a report showing the count of queries per hour/day for one or all users in a single agency. The report will show user usage information at the user level for each matching user with a roll-up at the end. The Security Administrator can filter the report to include/exclude information for Enabled. Disabled, and/or Deleted user accounts.

Authorized users can access the *User Usage Report* either from the *Security Administration* title page, or from the menu bar located along the left side of the screen.

When *User Usage Report* is selected, the following screen appears:



#### **ENTERING A USER USAGE REPORT QUERY**

The *User Usage Report* provides the LInX Administrator with the usage report by user for a selected agency. The report will display detailed usage information regarding the number of queries made based on hour of day, day of week, and calendar month(s) for a specific user or all users in the agency.

This report can be generated based on the following search criteria:

- User System (if allowed by user rights)
- User Agency
- User's First Name (if the report is to be filtered for a single user)

- User's Middle Name (if the report is to be filtered for a single user)
- User's Last Name (if the report is to be filtered for a single user)
- User ID (if the access log is to be filtered for a single user)
- User Account types to include/exclude in the report (Enabled, Disabled, Deleted)
- Start Date (Month/Year, Quarter/Year, Year/Year)
- End Date (Month/Year, Quarter/Year, Year/Year)

If no user is selected, all users in the selected agency are included.

Each of these fields can be used by itself or in any combination to make queries. By entering the search criteria in the fields on the screen, reports can be obtained by System, Agency, and User.

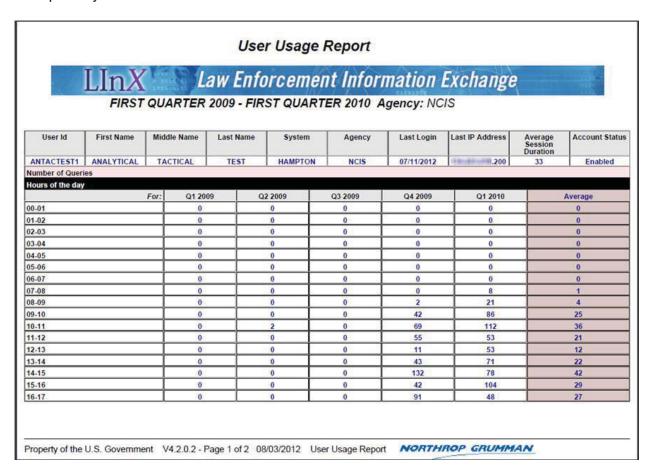
The report can be grouped by calendar month, quarter or year. The maximum columns in the report will be limited to 12 columns to cover the number of calendar months in a year. The months can spread over 2 years with 12s month in between. The quarters can be 12 quarters spread over 4 years. The years can be spread over 12 years. The defaulted date range is the last twelve months from the current month.

The report will have the following data associated with the selected System and Agency:

- User ID
- First Name
- Middle Name
- Last Name
- System
- Agency
- Last Login (date)
- Last IP Address
- Average Session Duration
- Account Status
- Hours of the day
- Days of the Week
- Number of queries made, broken down by the total number of increment columns (Month/Quarter/Year)
- Average number of queries (total queries divided by total number of increment columns (Month/Quarter/Year)
- Totals for each time increment column
- Total Average (increment totals divided by total number of increment columns (Month/Quarter/Year).

The query page allows the user to generate this report by agency and system on a monthly, quarterly, or yearly basis as depicted below.

The following sample report is generated for a specific user in the NCIS agency of the Hampton system for First Quarter 2009 to First Quarter 2010.



### LInXUserManual

Fo	; Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Average
17-18	0	0	0	70	80	30
18-19	0	0	0	9	22	6
19-20	0	0	0	6	11	3
20-21	0	0	0	0	0	0
21-22	0	0	0	0	0	0
22-23	0	0	0	0	0	0
23-24	0	0	0	0	0	0
Day of the Week		Vii				
Fo	: Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Average
Mon	0	2	0	13	132	29
Tue	0	0	0	203	111	62
Wed	0	0	0	197	105	60
Thu	0	0	0	116	31	29
Fri	0	0	0	43	209	50
Sat	0	0	0	0	147	29
Sun	0	0	0	0	12	2
Total	0	2	0	572	747	264

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# **Deconfliction Report**

Upon request by a user, a Security Administrator will be able to run queries to determine whether users from other agencies are researching similar cases.

Authorized users can access the *Deconfliction Report* either from the *Security Administration* title page, or from the menu bar located along the left side of the screen.

When *Deconfliction Report* is selected, the following screen appears:

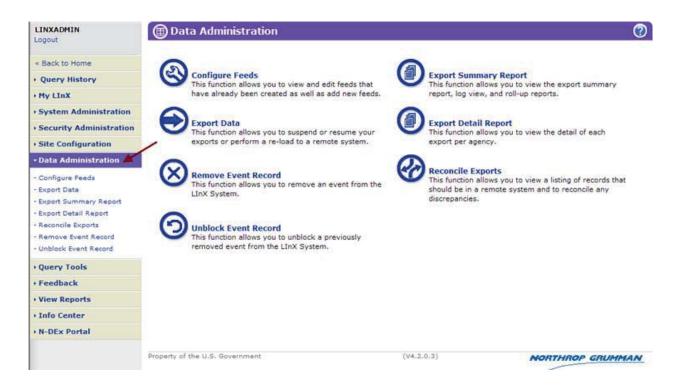
The Search Date Range is defaulted to the last 3 months from the current date, however, the date range can be modified.

Security Administrators will be provided with LInX Agency contact information for agencies who have users that have searched on similar criteria (Security Administrators are not able to see user information from other agencies, just the LInX agency contact information). For example, the Security Administrator could query for all users that have searched for "John Smith" between 09/01/2010 and 09/10/2010. This feature can be used to enhance collaboration across agencies.

### **Data Administration Functions**

The *Data Administration* menu provides the authorized user with a grouping of LInX options for managing data feeds to remote third-party systems, exporting LInX data to remote third-party systems, removing and unblocking removed event records, and generating various export reports.

The three privileges grouped under the Data Administration Privilege section of a user's account are: Export Data, Remove Record, and Report Admin. The Data Administration privilege is subject to agency-level and system-level restrictions.



#### **CONFIGURE FEEDS**

THIS SECTION IS INTENTIONALLY LEFT BLANK AND INTENDED TO SERVE AS A PLACEHOLDER FOR A FUTURE RELEASE. DATA ADMINISTRATION FUNCTIONALITY WILL BE IMPLEMENTED WHEN THE APPROPRIATE MEMORANDA OF UNDERSTANDING HAVE BEEN SIGNED WITH ORGANIZATIONAL ENTITIES EXTERNAL TO THE LINX SYSTEM THAT WISH TO PARTICIPATE IN THE SHARING OF LAW ENFORCEMENT INFORMATION.

#### **EXPORT DATA**

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#### **REMOVE AN EVENT RECORD**

LInX is designed to "mirror" data that resides in an Agency's Records Management System (RMS). Due to the timing of data feed updates from individual agencies, there may be times when it is necessary to immediately remove a record from the LInX data warehouse until the periodic data upload is completed and synchronizes LInX with the Agency RMS.

To facilitate the process of expunging records from the LInX data warehouse, the system allows an agency-level user with the Remove Record privilege to remove an event record from the LInX data warehouse. When an event record is removed, the system will block the subsequent re-ingestion of the removed event into the LInX data warehouse.

#### Removing an Event Record

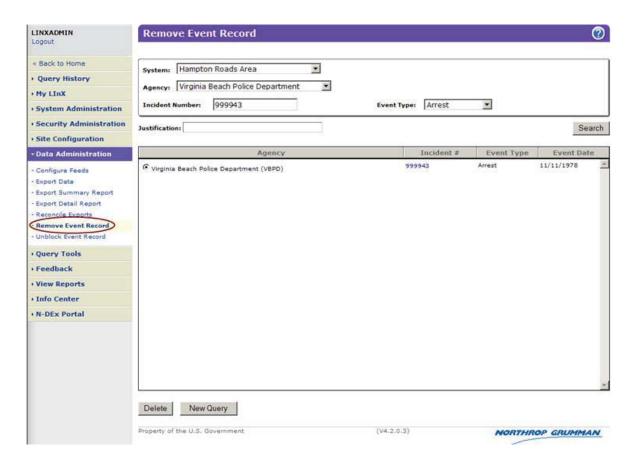
To remove an event record, the user must provide the System and Agency (selected from the pull-down menus), as well as the Incident Number and the specific Event Type (selected from the pull-down menu).



After entering the desired information in the appropriate fields, use the **Search** button to locate the event record specified.

### Search

As shown below, the LInX system will provide a listing of the event(s) meeting the search criteria and will display the Agency, Incident Number, Event Type, and the Event Date.

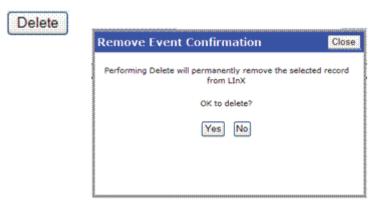


The Incident Number is hyperlinked. Clicking on the Incident Number link will open an Event Report for the selected record in a separate window.

After confirming that this information identifies the record to be removed, by verifying each field, use the **Delete** button to mark the record for deletion or the **New Query** button to clear the query values and submit new query criteria.



If the **Delete** button is selected, a pop-up *Remove Event Confirmation* dialog window will be displayed, asking for confirmation of the deletion, as shown below.



Selecting **No** or **Close** will cancel the removal of the event record. Selecting **Yes** will remove the event record from LInX and effectively "block" the event from being re-ingested into the data warehouse until the event record is unblocked. A pop-up message will be received confirming that the event record has been successfully removed.



#### **UNBLOCK AN EVENT RECORD**

The system allows an agency-level user to unblock an event record and allow the reingestion of the previously blocked record into the LInX data warehouse. When an event record has been previously removed, the system will block the re-ingestion into the LInX data warehouse until the event record is explicitly unblocked.

To unblock an event record, the user must provide the System and Agency (selected from the pull-down menus), as well as the Incident Number and the specific Event Type (selected from the pull-down menu).

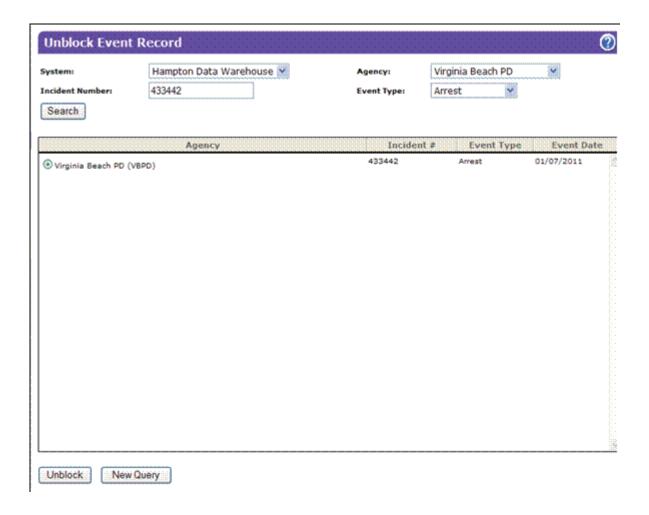
#### LInXUserManual



After entering the desired information in the appropriate fields, use the **Search** button to locate the event record specified.



As shown in the sample screen below, the LInX system will provide a listing of the event(s) meeting the search criteria and will display the Agency, Incident Number, Event Type, and the Event Date.



The Incident Number is hyperlinked. Clicking on the Incident Number link will open an Event Report in a separate window for the selected record.

After confirming that this information identifies the record to be unblocked, by verifying each field, use the **Unblock** button to mark the record to be added to the LInX data warehouse or the **New Query** button to clear the query values and submit new query criteria.



If the **Unblock** button is selected, a pop-up message will be received requesting confirmation that the event record is to be unblocked.



Selecting **No** or **Close** will cancel the unblocking of the event record. Selecting **Yes** will unblock the event record from LlnX and allow the event record from the Agency RMS to be re-ingested into the data warehouse during the next periodic data upload, and synchronizes LlnX with the Agency RMS.

After selecting **Yes**, a pop-up message will be received confirming that the event record has been successfully unblocked.



#### **EXPORT SUMMARY REPORT**

THIS SECTION IS INTENTIONALLY LEFT BLANK AND INTENDED TO SERVE AS A PLACEHOLDER FOR A FUTURE RELEASE. DATA ADMINISTRATION FUNCTIONALITY WILL BE IMPLEMENTED WHEN THE APPROPRIATE MEMORANDA OF UNDERSTANDING HAVE BEEN SIGNED WITH ORGANIZATIONAL ENTITIES EXTERNAL TO THE LINX SYSTEM THAT WISH TO PARTICIPATE IN THE SHARING OF LAW ENFORCEMENT INFORMATION.

#### **EXPORT DETAIL REPORT**

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#### **RECONCILE EXPORTS**

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# **Getting Assistance**

Tactical and Analytical users should contact their System Administrator or Agency Administrator when they are having problems accessing or using LInX. Only System Administrators are authorized to contact the LInX Help Desk.