OpenFox®

Configurator Administrator Manual

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Chapter 1 – Introduction and Overview

This guide introduces the OpenFox® Configurator module and describes how administrators should use it. Configurator is the front-end user interface that administrators may use to make real-time configuration changes to the OpenFox® Message Switching System.

1.1 – Who Is This Manual For?

This manual is intended for use by personnel who are involved in the support and maintenance of OpenFox® configurable resources. This includes anyone responsible for maintaining the configurations for message keys, stations (devices), users, code lists, vehicle codes, security roles, agencies, watch dog tables, computer configurations, and licenses. This manual assumes a level of familiarity with terms and concepts that may not be held by every OpenFox® Desktop end user.

1.2 – Minimum System Requirements

There are multiple software packages that must interoperate for Configurator to work properly. Each software application and its requirements are described below.

OpenFox® Message Switching System

OpenFox® Desktop must communicate with the OpenFox® Message Switching system. Without a running switch, Configurator and Desktop will have no method of communicating changes that are made to any configurations.

Java Runtime Environment

OpenFox® Desktop and all Modules are written in the Java™ programming language. Desktop runs within the Java Runtime Environment, a product of Sun® Microsystems (currently part of the Oracle Corporation). The Java Runtime Environment is available as a free download from Sun® and is available at the following URL, http://java.sun.com (or you can use http://java.com). Technical information regarding the Java programming language and the Java Runtime Environment is available from the http://java.sun.com website.

OpenFox® Desktop

OpenFox® Configurator is a Module of OpenFox® Desktop. As such, Configurator requires a valid and operational Desktop installation in order to execute, with a license that includes Configurator as a valid module. Configurator has been fully integrated with the Desktop environment and takes full advantage of all the Desktop features which are available to Desktop Modules. For more information regarding minimum system requirements for Desktop, please refer to the *OpenFox® Desktop Administrator Manual.*

Session Authority

In addition to the Desktop license requirement, the configuration for both the user and the station must have a security role which grants permission to access Configurator. Access to Configurator is granted through one of the following standard **Other Authority** levels:

- CONFIGURATOR: AGENCY ONLY
- CONFIGURATOR: FULL ACCESS
- CONFIGURATOR: STATION ONLY
- CONFIGURATOR: USER OF AGENCY
- CONFIGURATOR: USER ONLY

If either the user's or the station's configuration does not have a security role which grants one of the above authority levels, then access to the Configurator software will be denied, and the user will not see Configurator as an option in their module list.

1.3 – Configurator Communication

Configurator communicates with the message switch by exchanging fully-formed XML documents over the securely encrypted FoxTalk™ communications session. This is the same communications session that is used for all OpenFox® Desktop communications, and it is fully compliant with the latest FIPS 140-2 encryption standards.

While all Configurator communication messages flow through the OpenFox® Message Switch in the same manner as normal law enforcement transactions, not all messages are stored and audited. For example, search requests/results and record loads are not audited in the message switch, because these messages do not represent any change to the configuration database. However, all database modification messages (additions, modifications, deletions, etc.) are stored and audited on the message switch. These messages may be found through the normal switch TRACE and FIND commands, and they may also be found via the Archive Retrieval audit database. This allows system administrators to search the message traffic logs to discover which users made what modifications to the Configuration database.

All messages are also formatted in a human-readable XML format, so that system administrators can understand the audit messages that they find. When a user updates a database configuration record, the XML message will contain only the data which the user has modified, not an entire configuration record. Thus, not only can the system administrator find out which user changed a configuration record, but the administrator can also easily see the exact changes that were made to that record.

1.4 – Document Contents

Chapter 1. **Introduction and Overview:** This chapter describes the purpose of this document, as well as some background on the OpenFox® Configurator and its environment.

Chapter 2. **OpenFox® Configurator Module:** Describes the process to access the OpenFox® Configurator Module, as well as how to modify the user preferences to fully utilize the OpenFox® Configurator functions and capabilities.

Chapter 3. **Message Key Configuration:** Describes the on-line configuration procedures for the message keys used to validate, transform, and spawn transactions in to and out of the OpenFox® Message Switch.

Chapter 4. **Station Configuration:** Describes the on-line configuration procedures for the stations used to access OpenFox® Desktop and its associated modules.

Chapter 5. **User Configuration:** Describes the on-line configuration procedures for the user IDs used to access OpenFox® Desktop and its associated modules.

Chapter 6. **Code List Configuration:** Describes the on-line configuration procedures for the drop-down code lists used to validate pre-approved field data in The OpenFox® Message Switch as well as OpenFox® Desktop and its associated modules.

Chapter 7. **Vehicle Code Configuration:** Describes the on-line configuration procedures for the pre-approved vehicle make, vehicle model, and vehicle style field data in the OpenFox® Message Switch as well as OpenFox® Desktop and its associated modules.

Chapter 8. **Security Role Configuration:** Describes the on-line configuration procedures for the security roles that provide permissions for users and stations to limit or grant access to specific functionality within OpenFox® Desktop and its associated modules.

Chapter 9. **Agency Configuration:** Describes the on-line configuration procedures for the agency settings that will be associated with OpenFox® Desktop licenses and users.

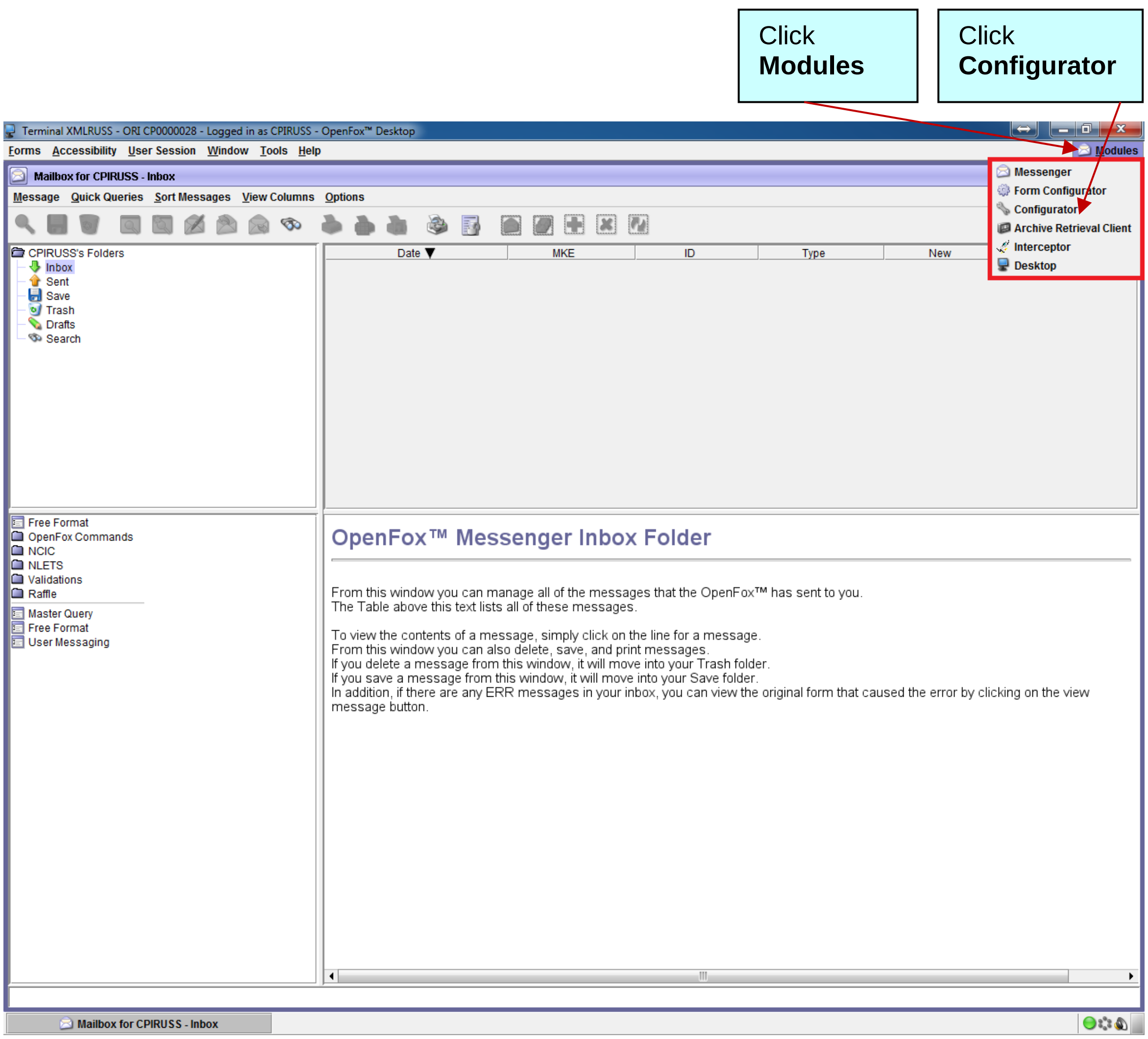
Chapter 10. **Watch Dog Configuration:** Describes the on-line configuration procedures for the Watch Dog tables that allow for “silent hits” to be generated and routed.

Chapter 11. **Computer Configuration:** Describes the on-line configuration procedures for various monitor and “special” stations for the OpenFox® Message Switch.

Chapter 12. **License Configuration:** Describes the on-line configuration procedures for standard maintenance of OpenFox® Desktop licenses.

Chapter 2 – OpenFox® Configurator Module

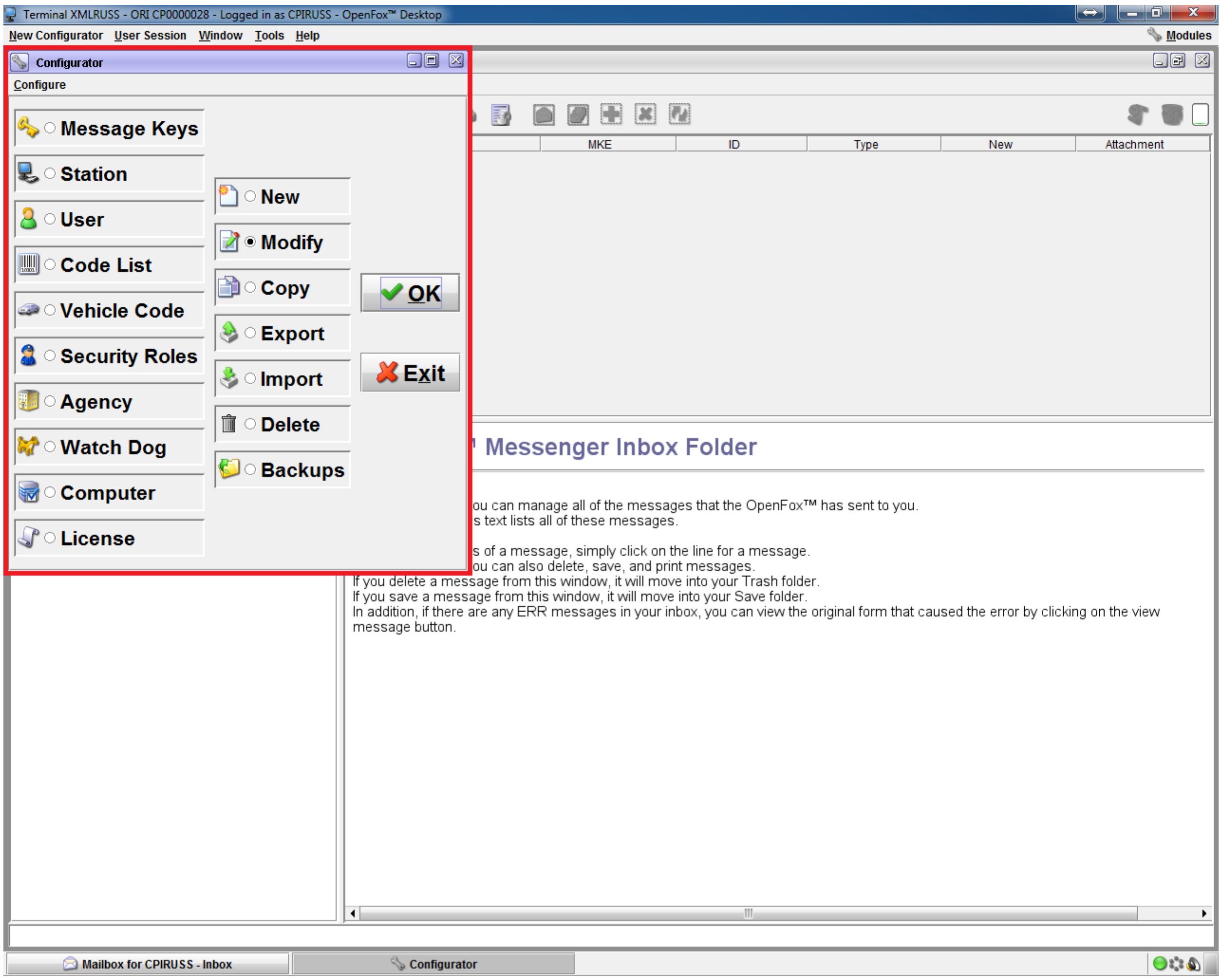
The OpenFox® Configurator is a full-featured point-and-click Graphical User Interface (GUI) that gives supervisory or administrative personnel the ability to add, modify, copy, export, import, and delete the OpenFox® message keys, stations, users, code lists, vehicle codes, security roles, agencies, watch dog tables, computer settings, and licenses. Adding, changing or deleting any of these facilities does not require re-booting the server hosting the OpenFox® Message Switch, restarting the OpenFox® Message Switch, or modifying any other software. The OpenFox® Configurator module resides as a module within OpenFox® Desktop, and is accessible from a PC that is connected to the OpenFox® Message Switch via a network connection. Once logged in to OpenFox® Desktop as a user who is authorized to access the OpenFox® Configurator module, with a PC that has an OpenFox® Desktop License that allows access to the OpenFox® Configurator module, the OpenFox® Configurator module is started by:



Module Drop-down

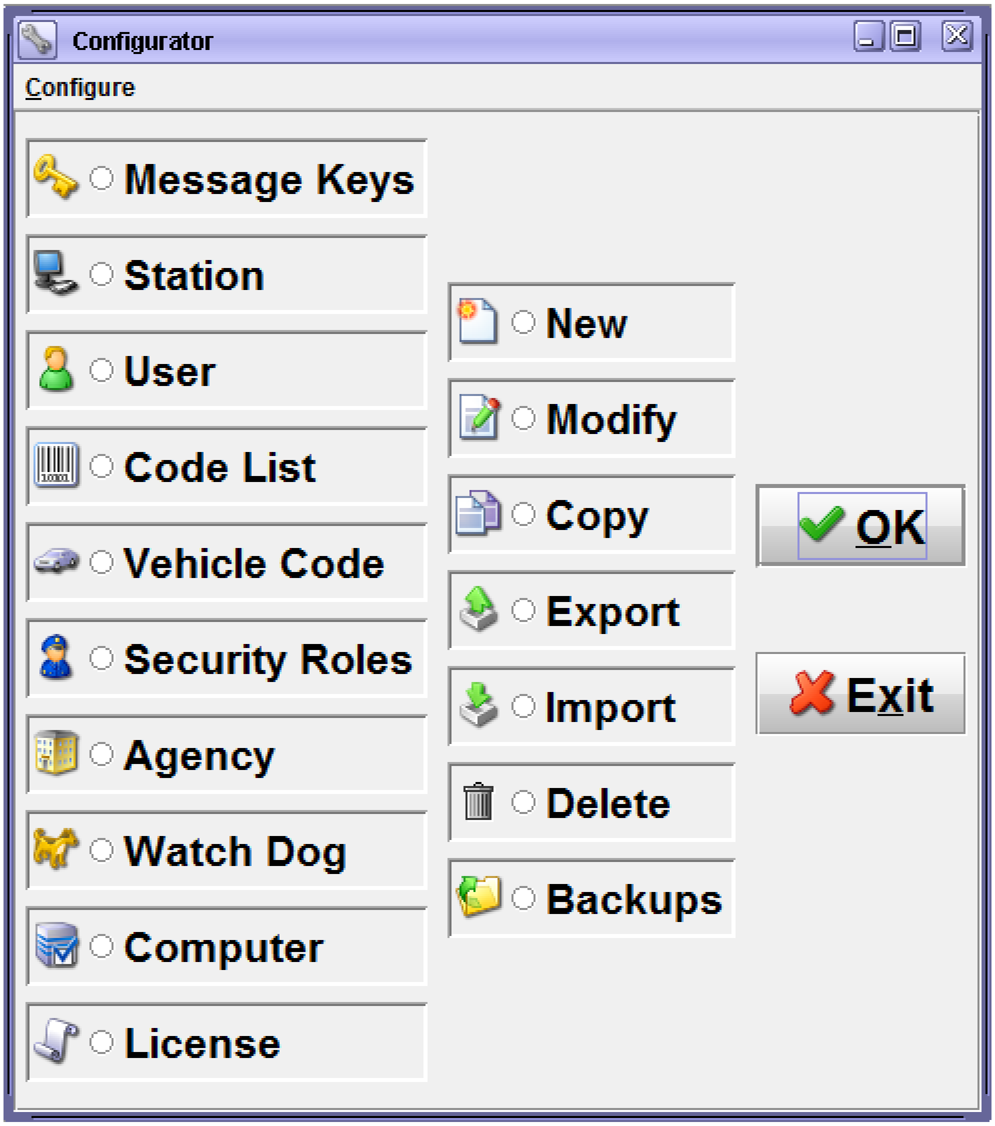
- Click on the Modules icon on the top-right of your OpenFox® Desktop window.
- Click on the Configurator icon in the Module drop-down box.

Your Configurator module will appear at the top-left of your OpenFox® Desktop window.



Opening Configurator

To perform a configurator action:



Configurator

- Select the record type from the left column.
- Select the configuration action from the center column.
- Click **OK**.
- The appropriate configuration dialog box will appear.

2.1 – Configurator Preferences

The OpenFox® Configurator has certain User Preferences that cause Configurator to behave differently when various actions are performed. These choices are things such as enabling the global configurator, whether to close a window when clicking **OK**, whether to display an acknowledgment when records are successfully updated in the database, and what to display in the Java Console.

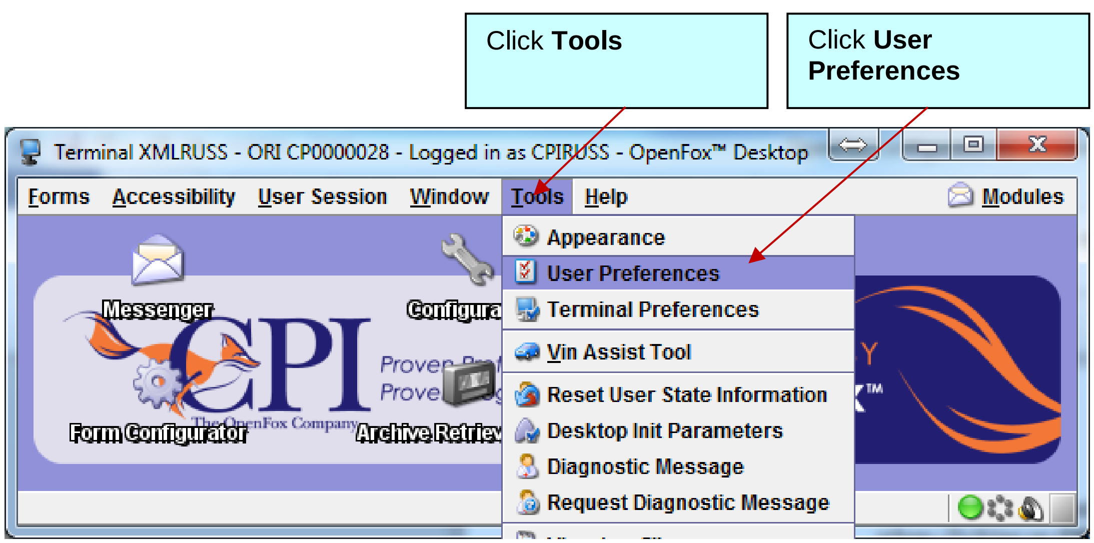
2.1.1 – Global Configurator

The OpenFox® Configurator allows administrators to perform actions to modify multiple targets (Stations, Users, etc.) at once. This is referred to as "Global Configuration". The Global Configuration is not enabled by default. The user must manually change their Configurator preferences to be able to access it.

NOTE: this feature is only available when in a screen for Message Key, Station, Users, Agency, or License modification. All other Modify screens only allow one configurable item to be changed at a time regardless of the Global Configurator settings.

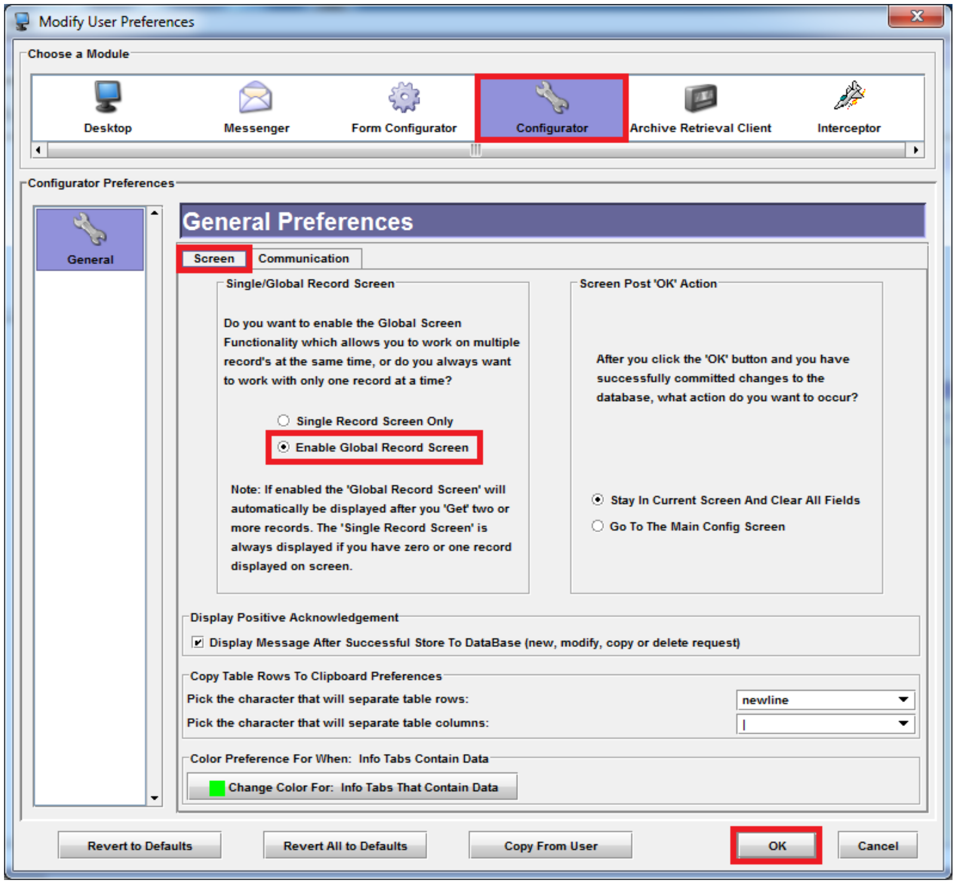
To enable Global Configuration:

- Log in to OpenFox® Desktop.



The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



Global Screen Options

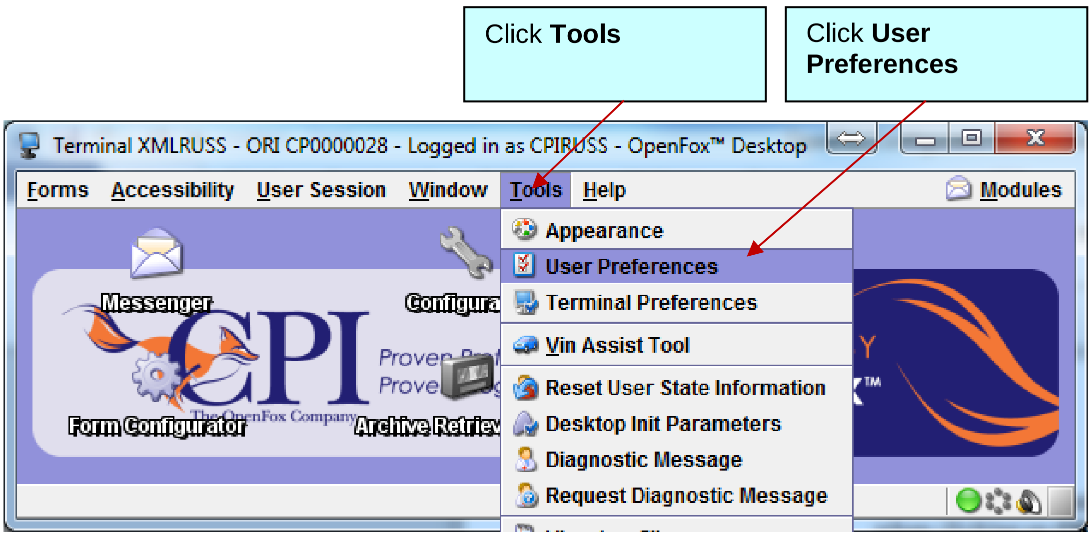
- Select **Configurator** in the list located at the top of the screen.
- Select the **Screen** tab.
- Select **Enable Global Record Screen**.
- Click **OK**.

2.1.2 – "OK" Action

The OpenFox® Configurator allows administrators to have a choice of action when clicking an **OK** button in the OpenFox® Configurator. The administrator can choose to clear the current screen and leave it open (remaining in the current screen), or closing the current window (returning to the previous screen).

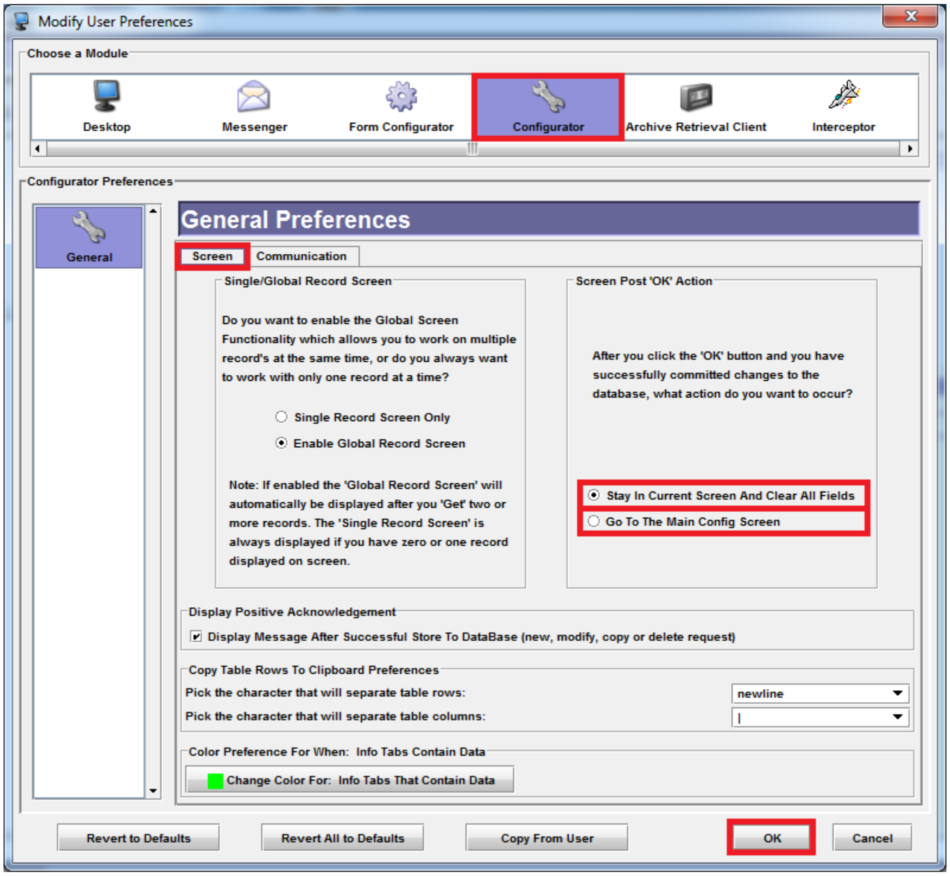
To enable Global Configuration:

- Log in to OpenFox® Desktop.



The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



OK Action Options

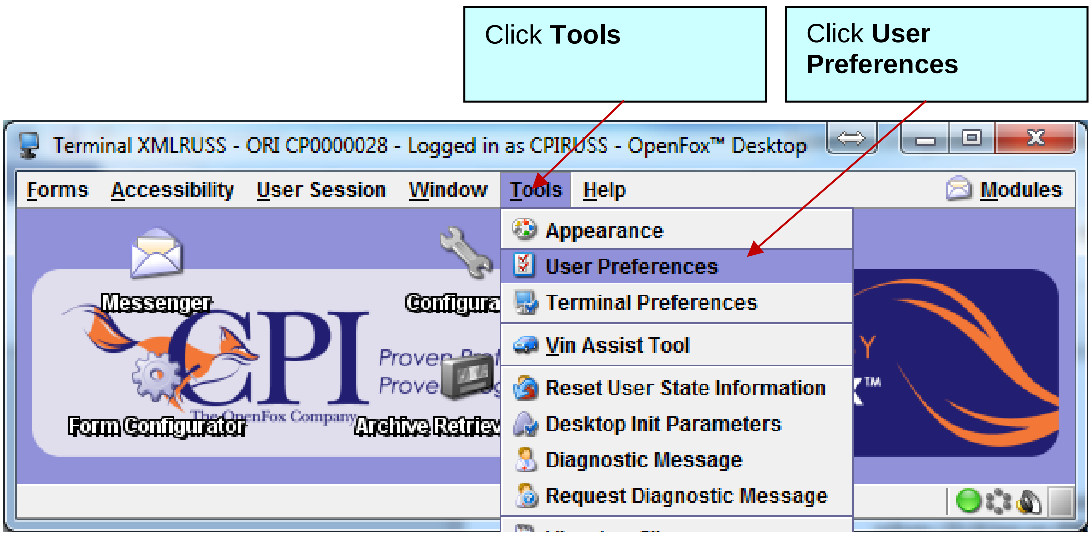
- Select **Configurator** in the list located at the top of the screen.
- Select the **Screen** tab.
- Select **Stay In Current Screen And Clear All Fields** or **Go To The Main Config Screen**.
- Click **OK**.

2.1.3 – Display Positive Acknowledgment

The OpenFox® Configurator allows administrators to have a choice of how the system behaves when submitting a record to the database. The administrator can choose to receive an acknowledgment, or not receive an acknowledgment, upon successfully adding a new record, modifying an existing record, copying a record, or deleting a record.

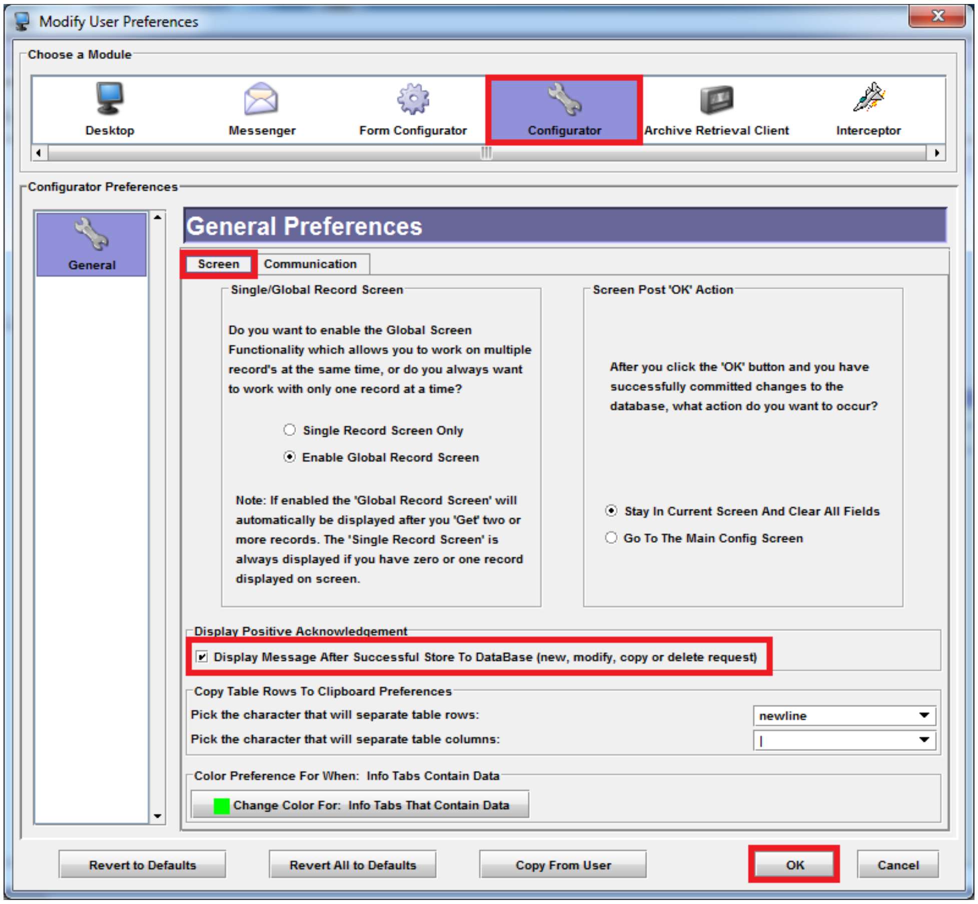
To enable Positive Acknowledgment:

- Log in to OpenFox® Desktop.



The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



Display Message Options

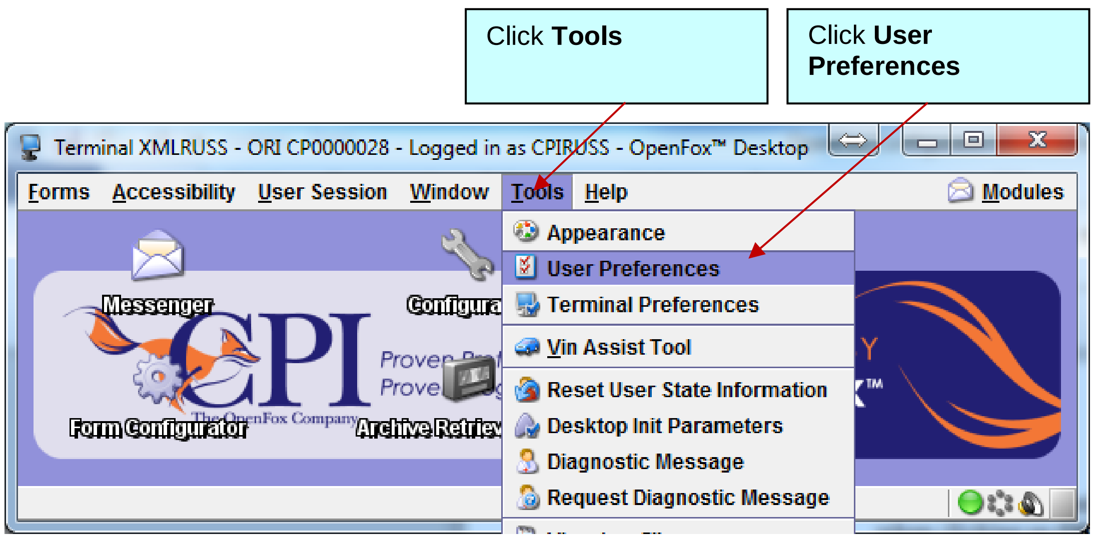
- Select **Configurator** in the list located at the top of the screen.
- Select the **Screen** tab.
- Select **Display Positive Acknowledgment**.
- Click **OK**.

2.1.4 – Copy Table Rows to Clipboard

The OpenFox® Configurator allows administrators to copy information directly from search windows into the local computer's clipboard. The administrator can choose which characters are used to separate data in rows as well as which characters are used to separate data in columns.

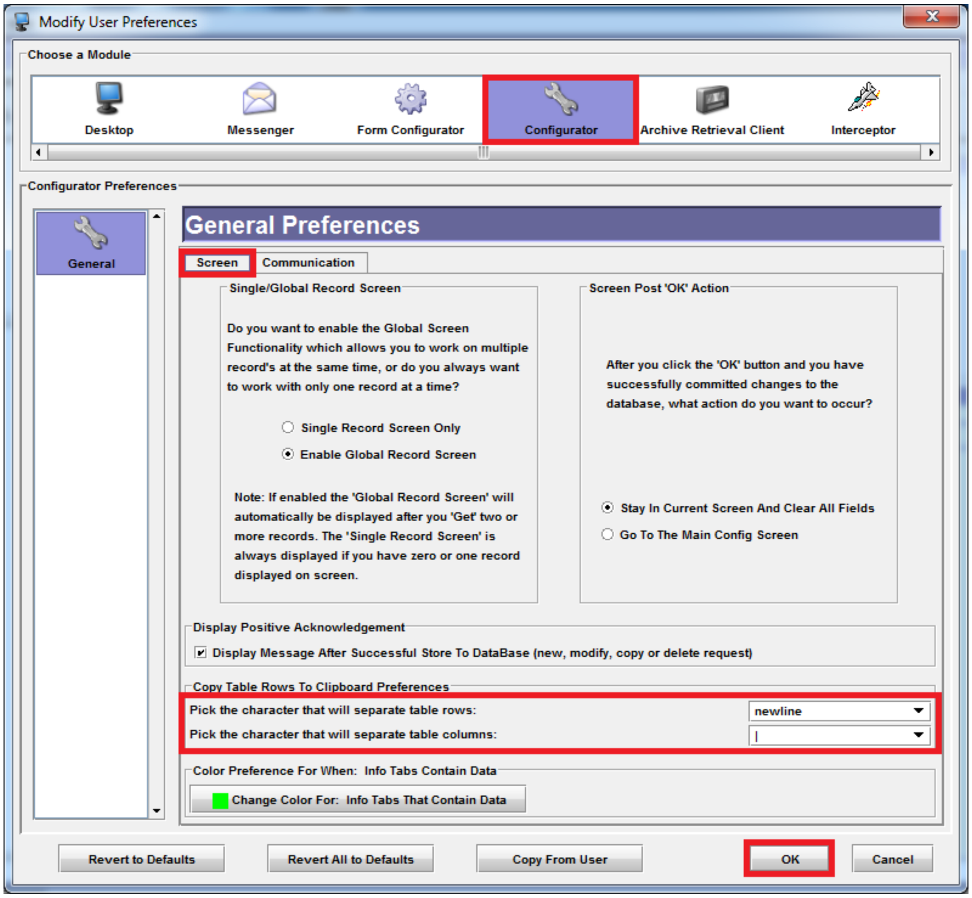
To enable Copy Table Rows To Clipboard:

- Log in to OpenFox® Desktop.



The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



Copy Table Rows Options

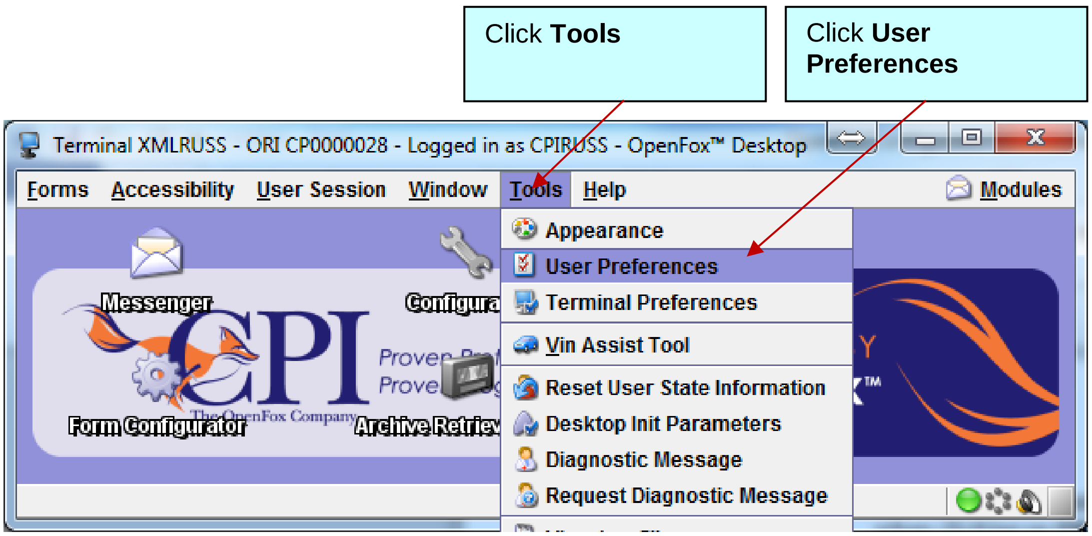
- Select **Configurator** in the list located at the top of the screen.
- Select the **Screen** tab.
- **Pick the character that will separate table rows**.
- **Pick the character that will separate table columns**.
- Click **OK**.

2.1.5 – Color Preference For When: Info Tabs Contain Data

The OpenFox® Configurator applies filters dynamically in search windows to provide an easier visual display of the desired data. The administrators can choose which color is used to highlight data that matches the filter as it is applied.

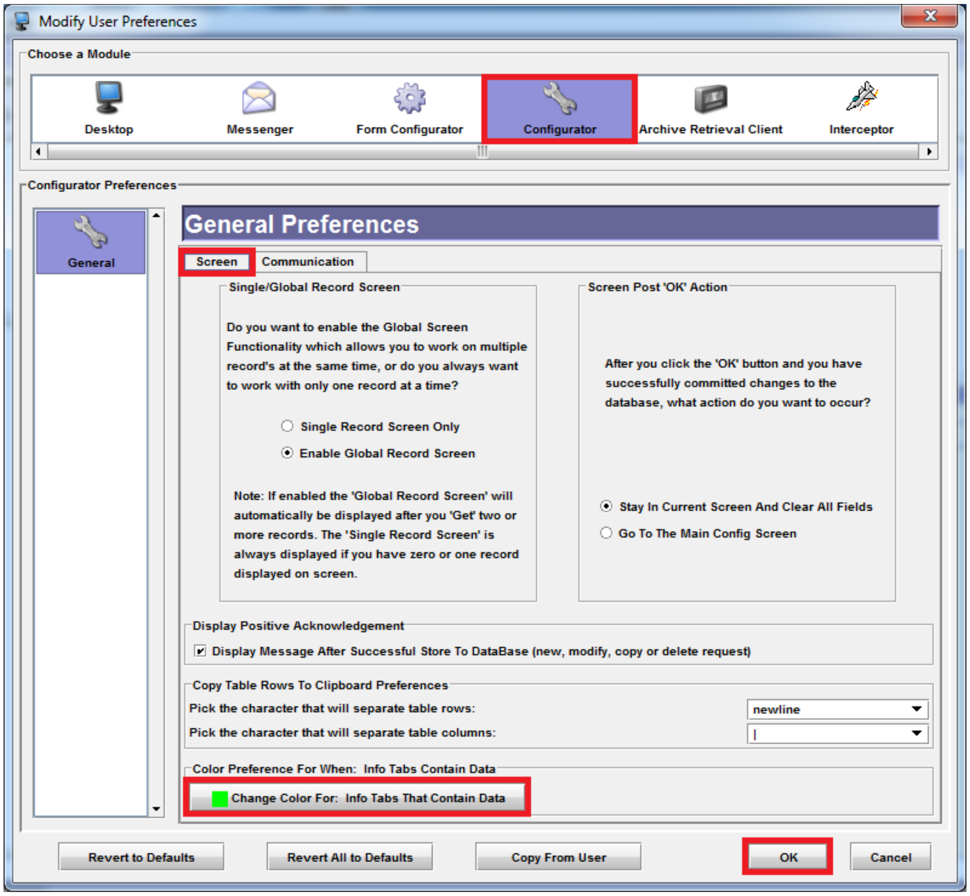
To select Color Preference:

- Log in to OpenFox® Desktop.



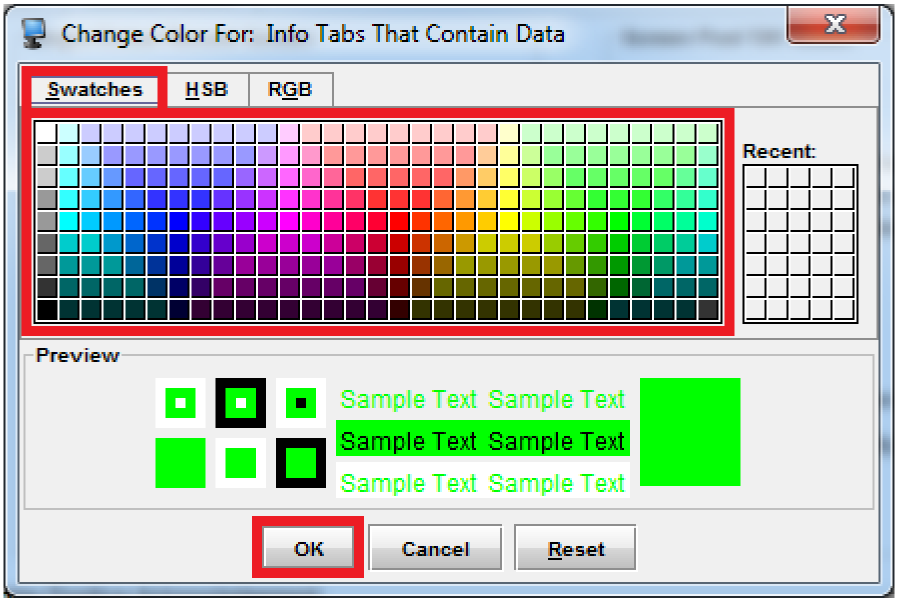
The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



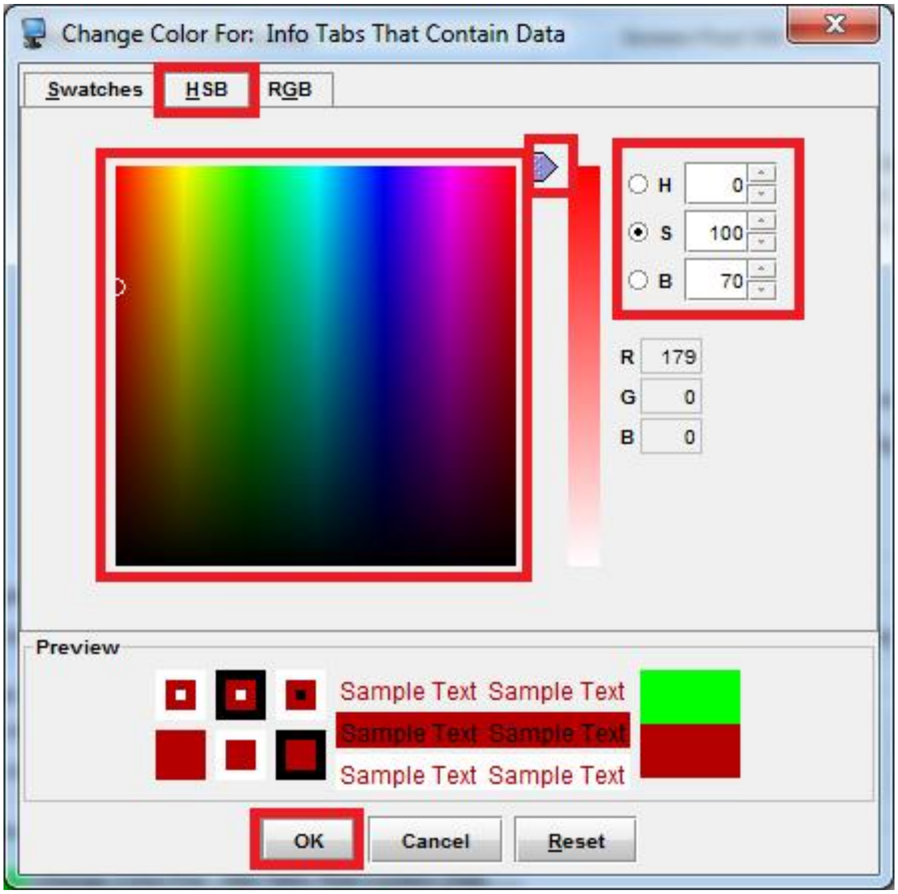
Change Color Button

- Select **Configurator** in the list located at the top of the screen.
- Select the **Screen** tab.
- Click **Change Color For: Info Tabs That Contain Data.**



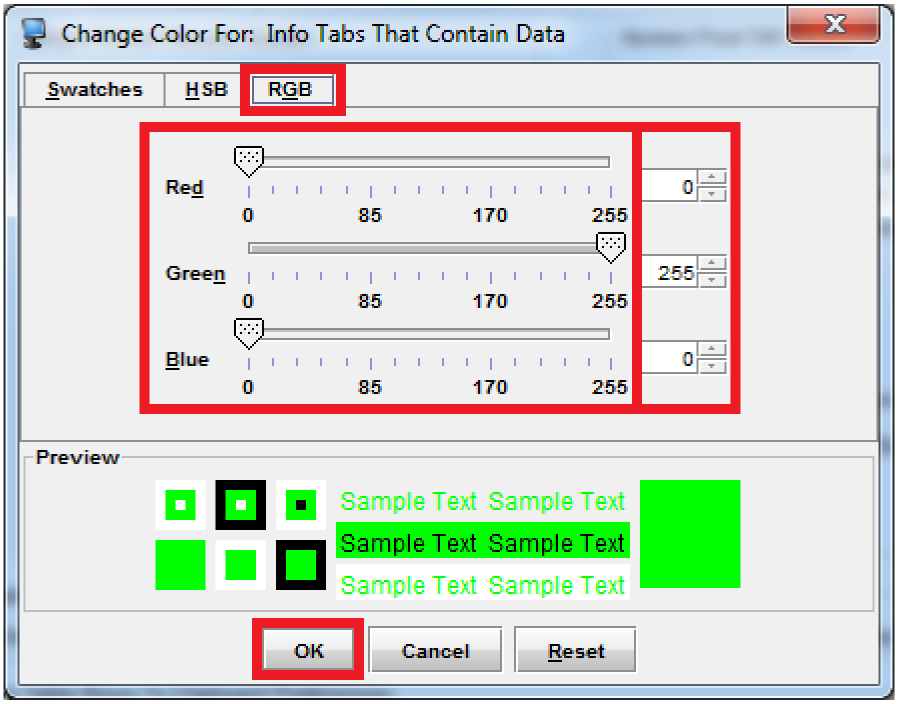
Swatches Tab

- On the **Swatches** tab, select from a pre-defined range of colors and click **OK**, or



HSB Tab

- On the **HSB** tab, select a basic Hue from the slider, and a Brightness/Saturation combination from the main color selection window and Click **OK**, or
- On the **HSB** tab, select **H** and enter a number between 0 and 359 for the Hue, select **S** and enter a number between 0 and 100 for the Saturation, and select **B** and enter a number between 0 and 100 for Brightness and Click **OK**, or



RGB Tab

- On the RGB tab, use the sliders to select the Red, Green, and Blue values, or enter the Red, Green, and Blue values on the right
- Click **OK**.

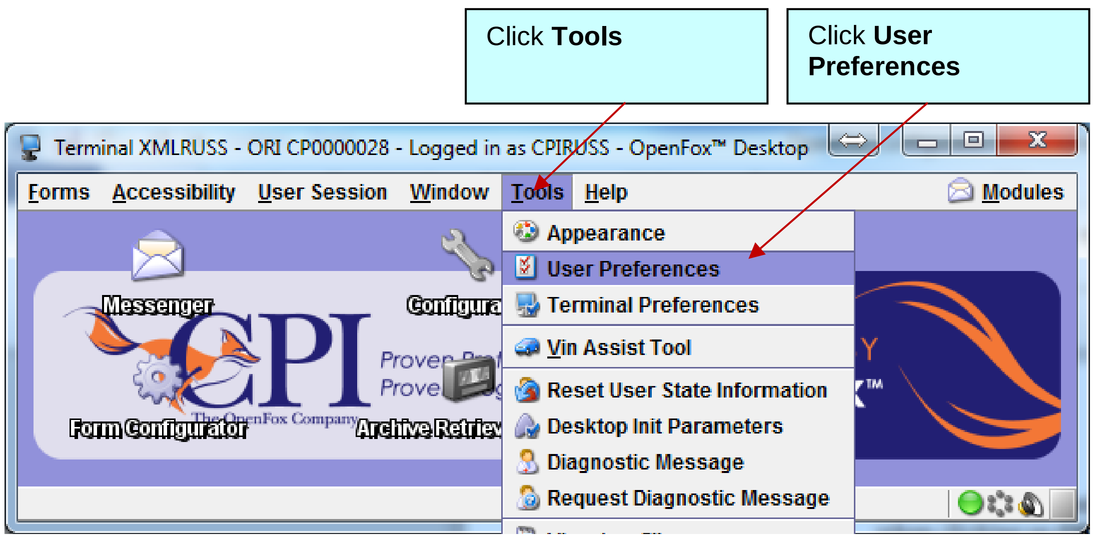
2.1.6 – Java Debugging

The OpenFox® Configurator allows administrators to select whether the Desktop environment will report debugging information to the Java Console. Enabling this option will report communications through the Java Console that assist in debugging issues that may occur at the terminal.

NOTE: The Java Console must be enabled for this feature to function properly.

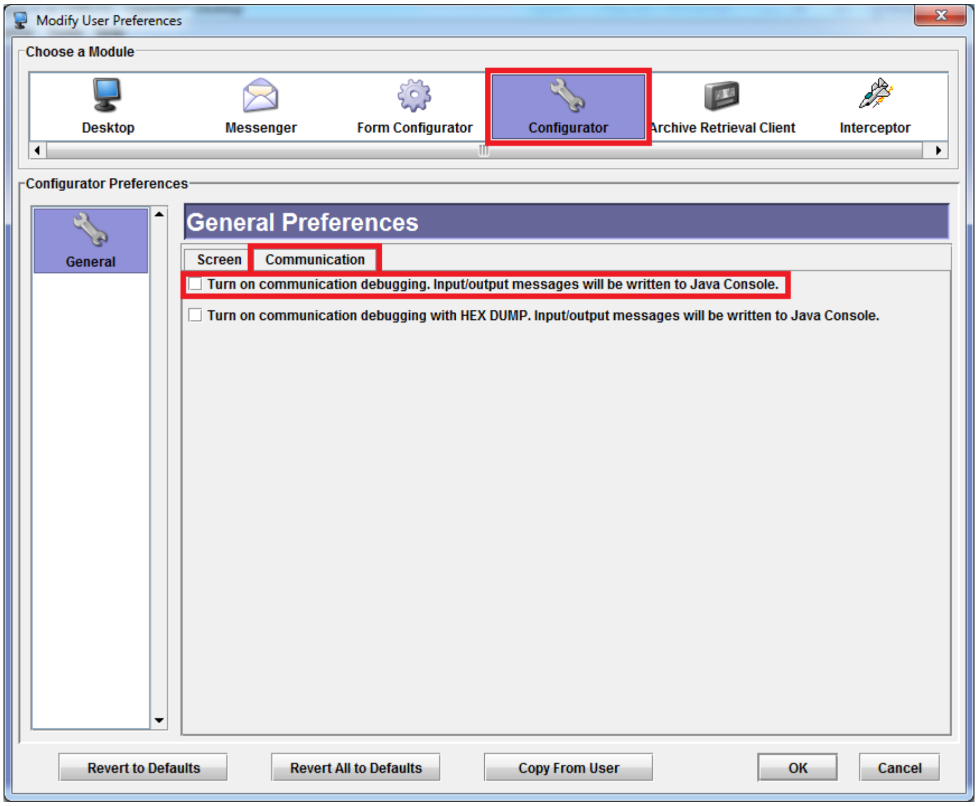
To enable Java Debugging:

- Log in to OpenFox® Desktop.



The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



Communication Tab: Java debugging

- Select **Configurator** in the list located at the top of the screen.
- Select the **Communication** tab.
- Select **Turn on communication debugging**.
- Click **OK**.

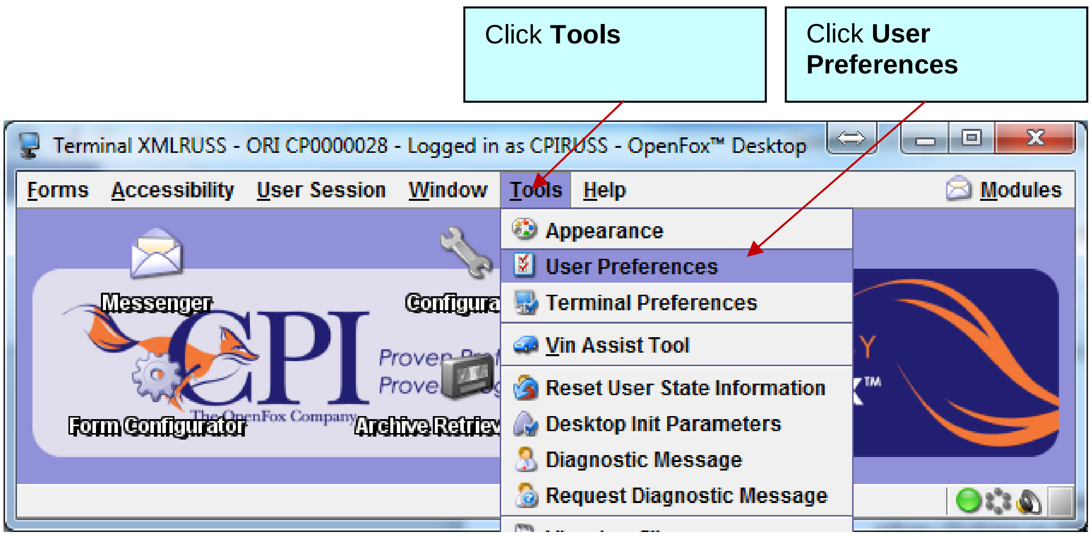
2.1.6 – Hex Dump Debugging

The OpenFox® Configurator allows administrators to select whether the Desktop environment will report debugging information to the Java Console with HEX DUMP information included. Enabling this option will report communications through the Java Console, and included in the string will be Hexadecimal strings that assist in troubleshooting issues that may occur at the terminal.

NOTE: The Java Console must be enabled for this feature to function properly.

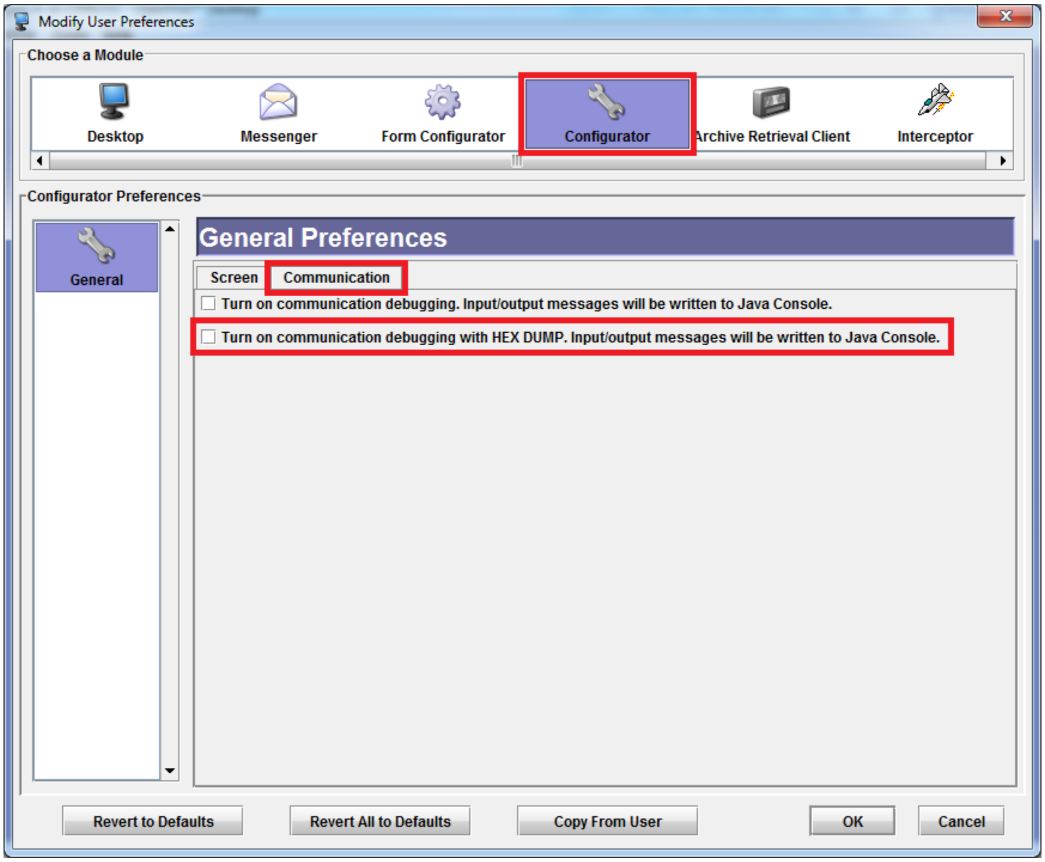
To enable Hex Dump Debugging:

- Log in to OpenFox® Desktop.



The Desktop Tools menu

- Click the **Tools** menu.
- Click **User Preferences**.



Communication Tab: HEX DUMP

- Select **Configurator** in the list located at the top of the screen.
- Select the **Communication** tab.
- Select **Turn on communication debugging with HEX DUMP**.
- Click **OK**.

Chapter 3 – Message Key Configuration

The primary use for the OpenFox® Message Switch is to send and receive law enforcement transactions. These transactions are defined through the Message Key configuration screens. Each Message Key has a single record entered into the database that defines how the switch will treat each incoming message that matches the Message Key, what it will do with the data it receives, and how it will format the resultant outgoing messages.

The OpenFox® Configurator Message Key screens are used to supply the information necessary to define Message Key records. The OpenFox® Configurator Message Key screens allow the administrator to create new Message Key records, modify existing Message Key records, copy existing Message Key records, export Message Key records, import Message Key records, or delete Message Key records, all with immediate effect and without any other software changes or system reboots.

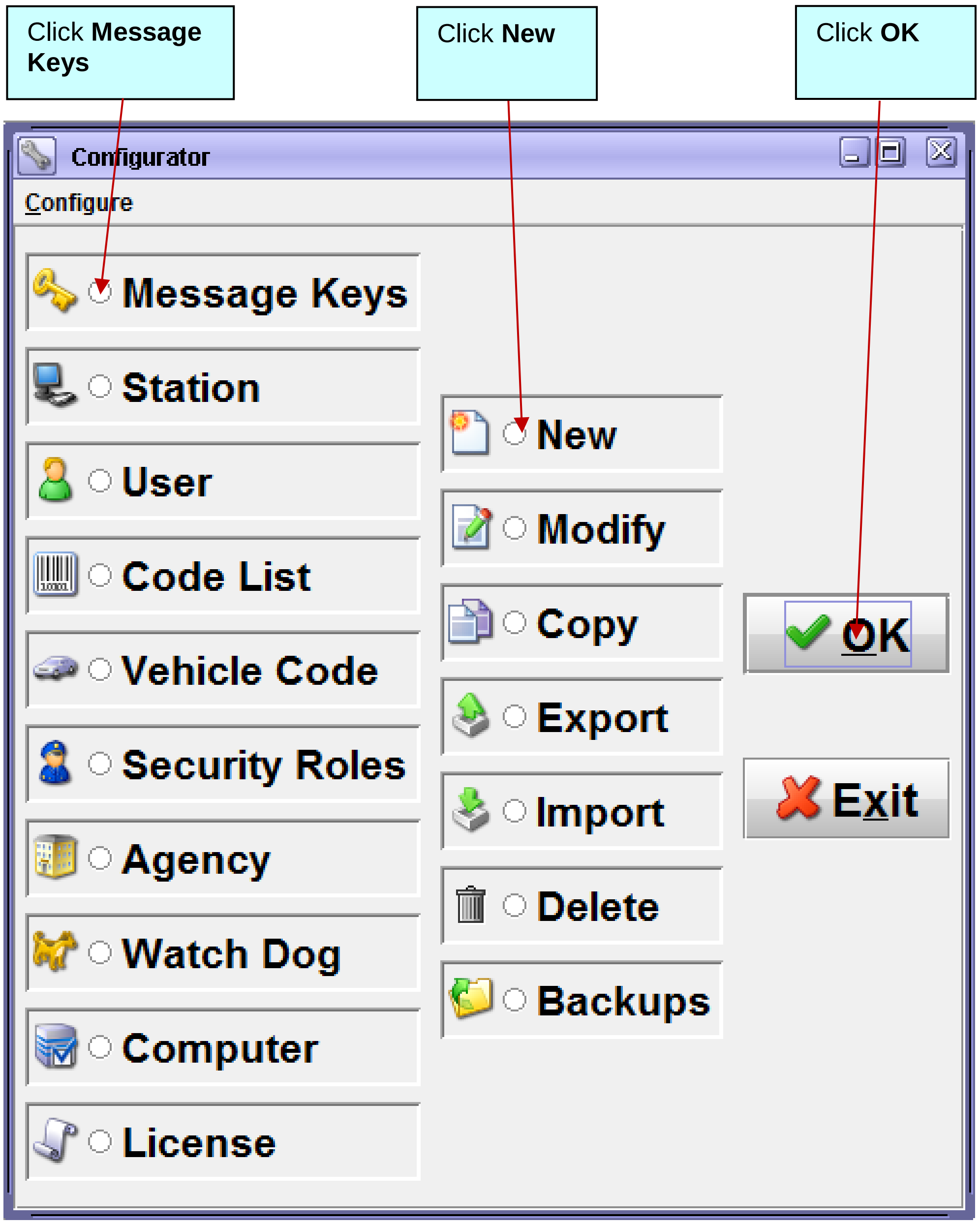
NOTE: Deleting a Message Key record will not erase the message key information from the system. The Message Key information will still be available in the database. The administrator will, however, be unable to create another Message Key with the same ID after the Message Key record is deleted, they will have to "undelete" the Message Key with the desired name or choose another Message Key name.

The OpenFox® Configurator Message Key screens, their text-fields, lists, options and buttons are as follows:

3.1 – Add New Message Key

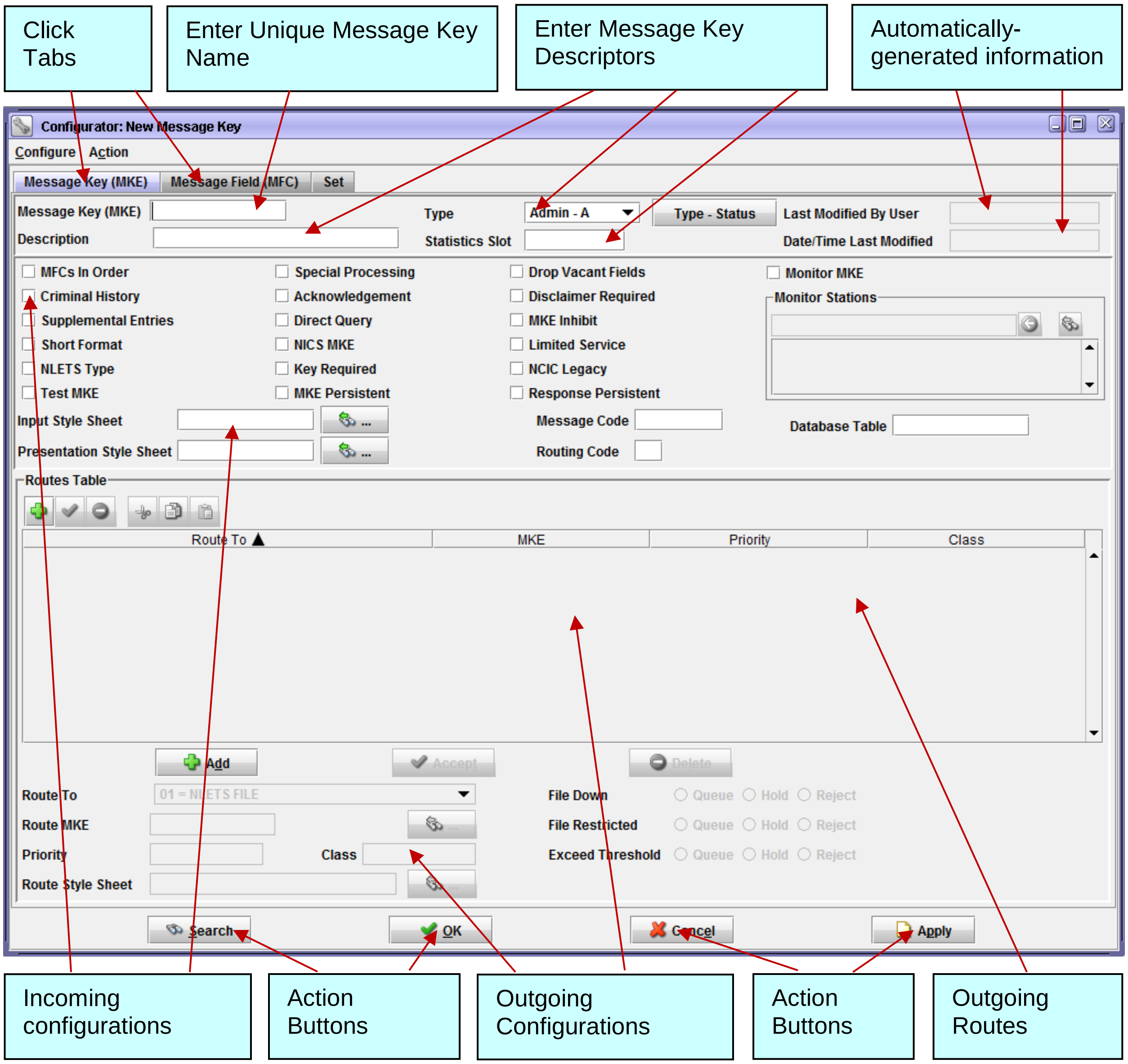
To configure a new Message Key:

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **New** from the middle column.
- Click **OK**.



New Message Key

3.1.1 – Message Key Tab

- Select the **Message Key (MKE)** tab at the top-left (selected by default).
- Enter a unique Message Key name in the text box following the **Message Key (MKE)** label.
- Select Message Key Type from the **Type** drop-down list.
- Do NOT click **Type - Status** unless setting up a status Message Key.
- Enter a description for the Message Key in the **Description** field. This is a free-text description only used for viewing. It has no bearing on transactional behavior, but helps in understanding configurations when troubleshooting.
- Enter a number in the **Statistics Slot** field. This number should match the appropriate slot number in the Statistical Report template located on the switch.
- Enter necessary inbound MKE configurations.
- Enter necessary outbound MKE configurations.
- Enter necessary inbound MFC configurations.
- Enter desired Sets information.
- Click **OK** to accept the changes and close the window, or
- Click **Cancel** to cancel the changes and close the window, or
- Click **Apply** to accept the changes and keep the window open.

3.1.1.1 – Message Key Tab Inbound Processing Fields

Message Key (MKE) - Enter a unique value for each message key. Alphanumeric characters, as well as the hyphen character, are allowed.

Type - Select the message key Type from the drop-down list provided. The MKE type changes basic behavior of how the switch interacts with the incoming transactions that match this MKE configuration.

Type - Status - Click Type - Status ONLY if a special status message key is being created.

Last Modified By User - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the message key record to the OpenFox®.

Description - Enter a description for the Message Key in the Description field. This is a free-text description only used for viewing. It has no bearing on transactional behavior, but helps in understanding configurations when troubleshooting.

Statistics Slot - Enter the numeric value that matches the appropriate slot number in the Statistical Report template located on the switch.

Date/Time Last Modified - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the message key record to the OpenFox®.

MFCs In Order - Indicates if this MKE is used to access a switch-based database.

Special Processing - Indicates to the Transaction Processor (TP) that this MKE requires special handling.

Drop Vacant Fields - Indicates to the Transaction Processor (TP) to remove vacant fields from the input stream, as indicated by an MFC that's present without any data, before performing any editing.

Monitor MKE - Select Monitor MKE then enter one or more stations in the Monitor Stations field, to indicate that when an incoming transaction matches this MKE, a copy should be sent to the station(s) listed.

Criminal History - Indicates that matching transactions should be flagged as a criminal history record.

Acknowledgment - Indicates that when a station that has the ACK bit turned on sends in a matching transaction, the sending station would receive an acknowledgment message indicating the successful processing of the originating message.

Disclaimer Required - Indicates that the user will receive an acknowledgment upon successful delivery of this MKE.

Supplemental Entries - Indicates that transactions that match this configuration should be processed according to the special rules associated with NCIC supplemental transactions.

Direct Query - Indicates that transactions that match this configuration should access all database data, even the data that doesn't use record indexes.

MKE Inhibit - Indicates that transactions that match this configuration should be rejected without any further processing.

Short Format - Indicates that transactions that match this configuration should be treated with special processing that is different for each specific build.

NICS MKE - Indicates that matching transactions should be flagged as a NCIC NICS record. This will also cause the system to generate the special NICS header necessary for valid NCIC output.

Limited Service - Indicates that when a matching transaction is received into the switch bound for a non-24-hour terminal that is offline, the originator should be notified of the destination's offline status.

NLETS Type - Indicates that the switch should expect destination fields in the originating message's header.

Key Required - Indicates that the Transaction Processor (TP) should use other configurations (stations and MKEs) linked to this configuration to attempt to send multiple outgoing messages based on the input transaction that matches this configuration.

NCIC Legacy - Indicates that the switch should use the NCIC legacy header when generating an output transaction to NCIC.

Test MKE - Indicates that the switch should use the NCIC test header when generating an output transaction to NCIC.

MKE Persistent - Indicates that the switch should retain these transactions in an output queue even if the queue threshold is exceeded.

Response Persistent - Indicates that the responses for transactions that match this configuration should be retained in the output queue even if the queue threshold is exceeded.

Input Style Sheet - Enter an existing style sheet name in the Input Style Sheet field, or click the Get Style Sheet search button, select a style sheet from the list provided, and click OK. The input style sheet is applied to incoming XML messages that match this configuration.

Message Code - Enter a value in the Message Code field for build-specific processing.

Database Table - Enter a value in the Database Table field to indicate which database table matching transactions will be utilizing.

Presentation Style Sheet - Enter an existing style sheet name in the Presentation Style Sheet field, or click the Get Style Sheet search button, select a style sheet from the list provided, and click OK. The presentation style sheet is applied to outgoing XML messages that are bound for end-user presentation that are generated from incoming XML transactions that match this configuration.

Routing Code - Enter a value in the Routing Code field for build-specific processing.

3.1.1.2 – Message Key Tab Outbound Route Fields

Add - Add new route into routes table. Users will need to click Apply or OK to save changes into the database.

Accept - Accept changes to outbound route. Users will still need to click Apply or OK to save changes into the database.

Delete - Remove selected route from routes table. Users will still need to click Apply or OK to save changes into the database.

Cut - Remove selected route from routes table and add it to the clipboard. Users will still need to click Apply or OK to save changes into the database.

Copy - Leave selected route unchanged, but add its contents to the clipboard.

Paste - Paste route from clipboard into current message key configuration. Users will need to click Apply or OK to save changes into the database.

Route To - Select from the list provided to indicate an outbound message should be generated to this interface.

Route MKE - Enter the value for the MKE to be sent in the outbound transaction to this destination.

Priority - Enter the numeric value for the priority of the outbound transaction to this destination.

Class - Enter the numeric value for the class of the outbound transaction to this destination.

Route Style Sheet - Enter an existing style sheet name in the Route Style Sheet field, or click the Get Style Sheet search button, select a style sheet from the list provided, and click OK. The Route Style Sheet is applied to outgoing XML messages that are generated from incoming XML transactions that match this configuration and are bound for non-human interfaces.

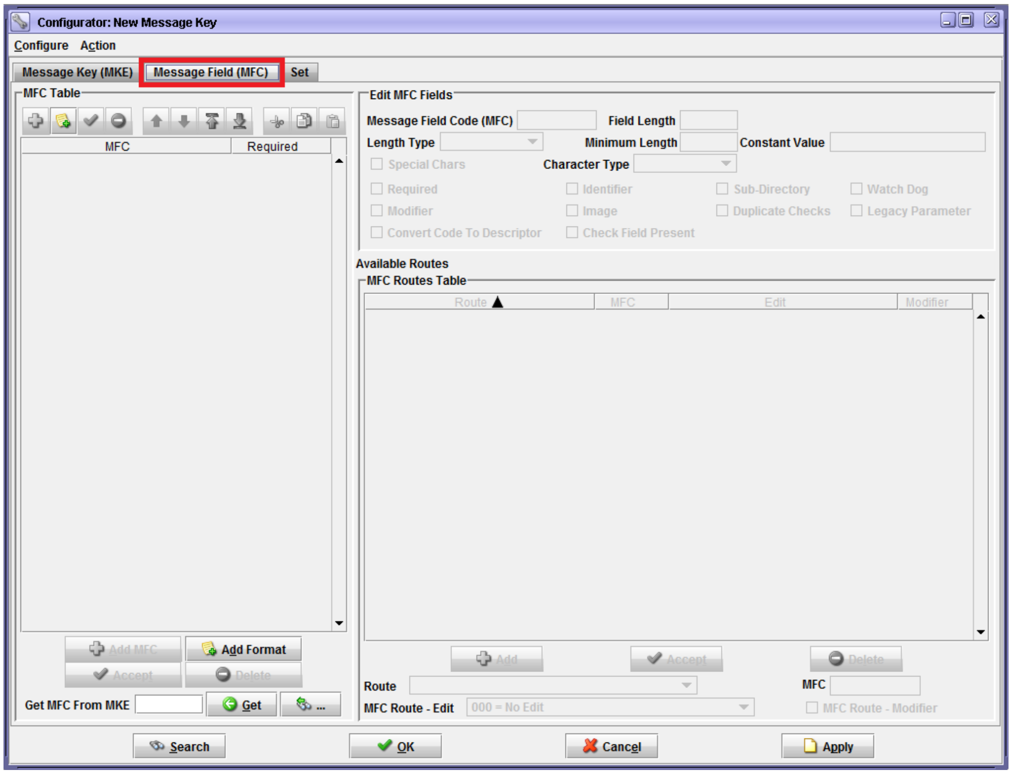
File Down - Select whether outgoing messages bound for this destination generated from input that matches this configuration should be queued normally (Queue), moved to a temporary queue (Hold), or rejected (Reject) if the matching outbound route is set to a “down” state in the switch.

File Restricted - Select whether outgoing messages bound for this destination generated from input that matches this configuration should be queued normally (Queue), moved to a temporary queue (Hold), or rejected (Reject) if the matching outbound route is set to a “restricted” state in the switch.

Exceed Threshold - select whether outgoing messages bound for this destination generated from input that matches this configuration should be queued normally (Queue), moved to a temporary queue (Hold), or rejected (Reject) if the matching outbound route’s queue has exceeded its configured queue threshold.

3.1.2 – Message Field (MFC) Tab

A transaction wouldn't be a transaction without the data fields that appear after the message key. The MFC tab is where each field within a message key is defined for both the input transaction for field validation as well as any resultant outgoing transactions, whether MFCs will be expected in either the incoming or outgoing transaction or whether only the field data without MFC labels will be sent, and much more.



Message Field (MFC) Tab

- Select the **Message Field (MFC)** tab at the top-left.
- Enter any field information necessary for this message key definition.
- Click **OK** to accept the changes and close the window, or
- Click **Cancel** to cancel the changes and close the window, or
- Click **Apply** to accept the changes and keep the window open.

3.1.2.1 – MFC Table Fields

Add MFC - Add new MFC directly below currently-selected position.

Add Format - Add new format directly below currently-selected position.

Accept - Accept current changes. OK or Apply must be clicked to save data into the database.

Delete - Delete selected row from MFC table. OK or Apply must be clicked to save data into the database.

Up - Move currently-selected item up one row in the MFC table.

Down - Move currently-selected item down one row in the MFC table.

Top - Move currently-selected item to the top of the current format.

Bottom - Move currently-selected item to the bottom of the current format.

Cut - Remove currently-selected item from MFC table and place it into the clipboard.

Copy - Leave currently-selected item as-is, but place its contents into the clipboard.

Paste - Paste the current clipboard contents into the MFC table below the current position.

MFC - Display of the current MFCs and Formats for the message key being configured.

Required - Display of each field's requirement status.

Get MFC from MKE - Enter a MKE then click Get or hit Enter, or click the Display List of MKEs button, select message key, then click OK. This will bring all currently-configured fields from the selected message key into the message key being configured.

3.1.2.2 – Edit MFC Fields

Message Field Code (MFC) - Enter a value for each message field code. These do NOT need to be unique. Alphanumeric characters, as well as the hyphen character, are allowed.

Field Length - Enter the maximum field length value.

Length Type - Select the field length type. Variable means a minimum length of 1. Fixed means a minimum length equal to the maximum field length value (entered in Field Length). Selecting Range will open the Minimum Length window, where a value from 1 to the maximum field length value is entered.

Minimum Length - This field is disabled until Range is selected in the Length Type field. Once enabled, enter the minimum length value, from 1 to the field length maximum entered in Field Length.

Constant Value - Enter a value that will constantly be inserted every time a transaction is generated with this field from this message key.

Special Chars - Indicates whether special characters, such as spaces or hyphens, will be allowed in this field.

Identifier - Indicates whether this field is used as a record identifier for NCIC Modify-type transactions.

Sub-Directory - Indicates whether this field should be indexed in the Archive database.

Watch Dog - Indicates whether input transactions that match this message keys configuration and contain this field should search the appropriate Watch Dog table for a matching value.

Modifier - Indicates whether MFCs should be absent when this field is present in the incoming transaction. A check in this field means that no MFC should be present.

Image - Indicates whether this field will contain encoded image data.

Duplicate Checks - Indicates whether this field is part of a data set for NCIC Modify-type transactions.

Legacy Parameter - Indicates when the Transaction Processor (TP) should copy all remaining characters of the input stream into the transaction and do not edit any further.

Convert Code To Descriptor - Indicates in response-type messages that this field should be displayed as an English-language phrase that is retrieved from a table.

Check Field Present - This field is typically used in response messages. Response keys are used to specify the format of database responses. If this field is selected, it indicates that this field must be present for the description to be displayed.

3.1.2.3 – Available Routes Fields

Add - Add new outgoing route for this MFC.

Accept - Accept changes made to currently-selected route.

Delete - Remove currently-selected route from outgoing routes table.

Route - Select from available outgoing routes. Only the routes that were added to the MKE screen will be available in this list.

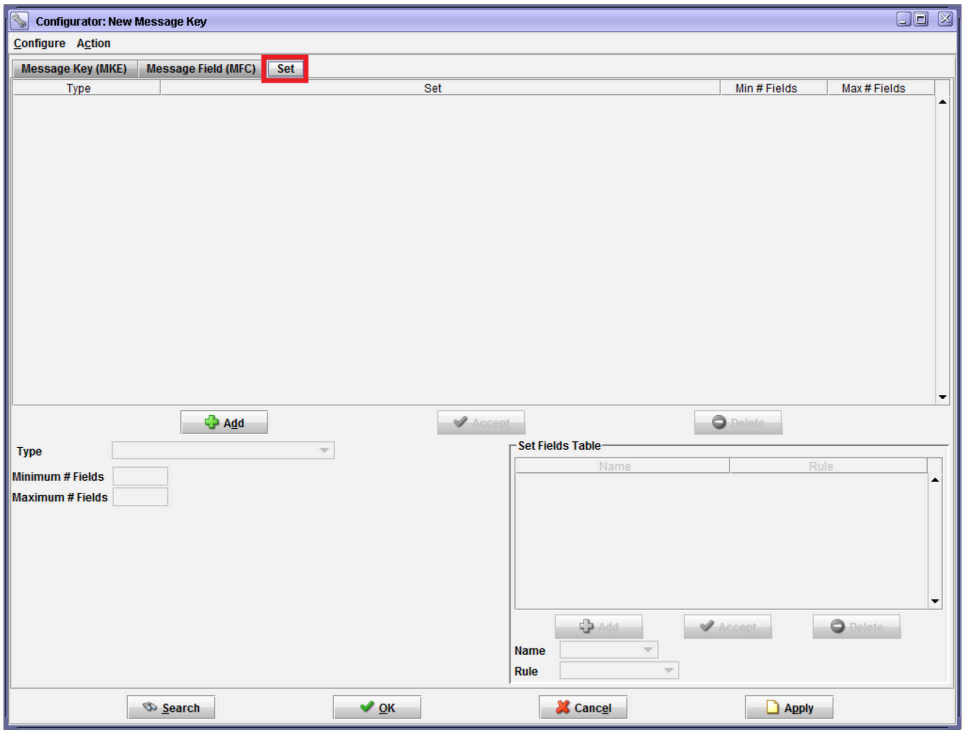
MFC - Enter the outgoing Message Field Code (MFC) value for this field. It does not have to be equal to the incoming MFC.

MFC Route - Edit - Select the edit to be applied to this field. The edit performs both incoming and outgoing actions (field validation, field transformation, etc.). Edits from 001 through 499 are generic across all builds. Any edit from 500 and higher are specific to each build. Edit 000 means that no edit checking or field transformation will be applied.

MFC Route - Modifier - Indicates that this field, when sent in the outgoing string, should not include an MFC, it should have a field separator directly before the data and directly after the data.

3.1.3 – Set Tab

Many transactions have fields that must be sent as a group, or have other requirements mandating special handling, such as "you must send at least one numeric identifier" on a standard NCIC Wanted Person Entry. Sets allow these special combinations to be configurable within the switch, allowing these interactions to be enforced for all users sending the matching transactions through the switch.



Set Tab

- Select the **Set** tab at the top-left.
- Enter any field information necessary for this message key definition.
- Click **OK** to accept the changes and close the window, or
- Click **Cancel** to cancel the changes and close the window, or
- Click **Apply** to accept the changes and keep the window open.

3.1.3.1 – Set Fields

Add (Set) - Add new Set.

Accept (Set) - Accept current changes. OK or Apply must be clicked to save data into the database.

Delete (Set) - Delete selected Set. OK or Apply must be clicked to save data into the database.

Type - Select the type of set, Conditional or Mandatory. Conditional is a condition that must optionally be met before the switch will enforce the rules (e.g. if the License Plate data must be entered as a set, but is an optional set). Mandatory is a condition that must be met no matter what other field data is entered in the transaction (e.g. a minimum of 2 and maximum of 2 NCIC identifiers for a modify transaction).

Minimum - Enter the minimum number of required fields for this set.

Maximum - Enter the maximum number of required fields for this set.

Add (MFC) - Add field to set.

Accept (MFC) - Accept field changes for this set.

Delete (MFC) - Delete MFC from this set.

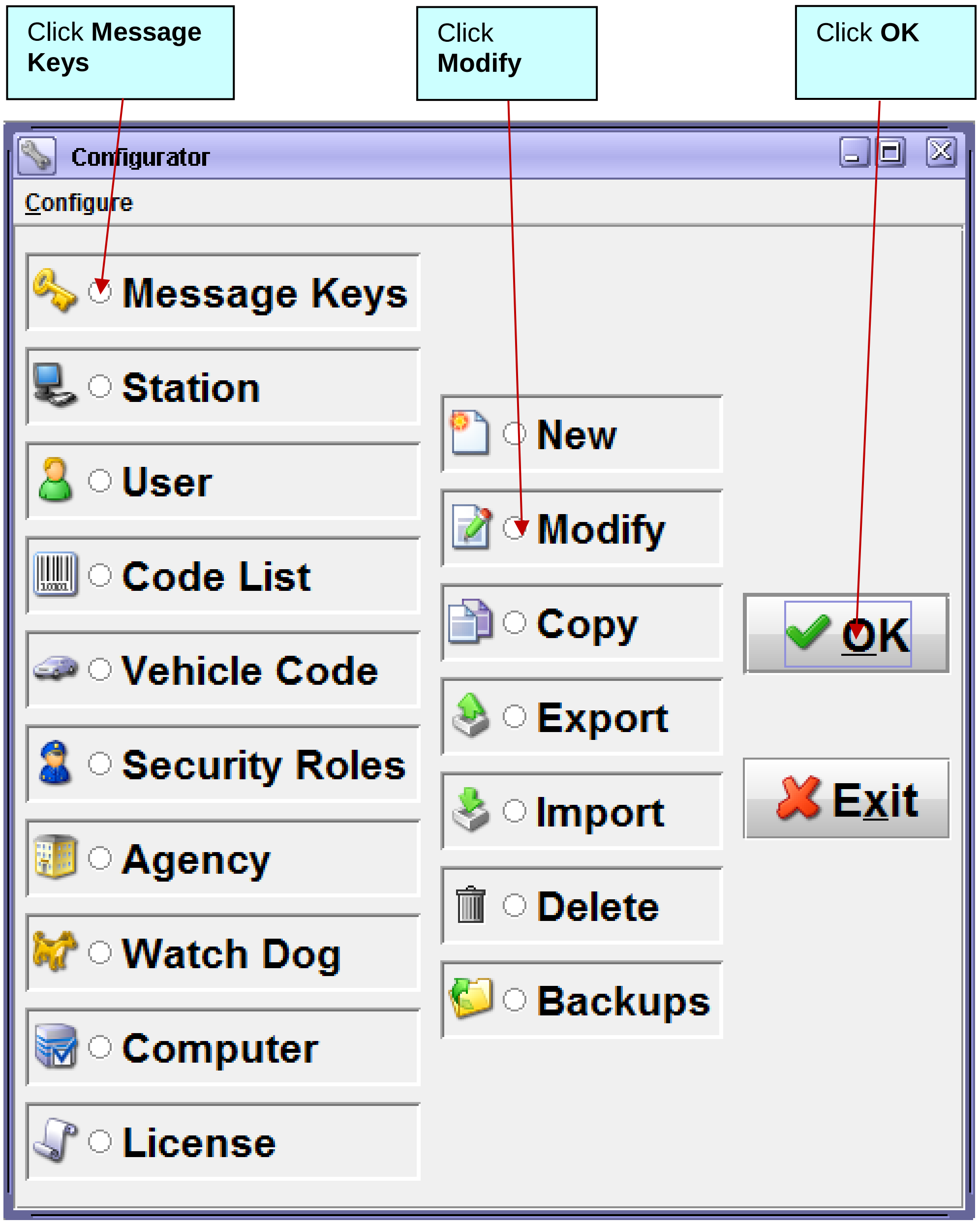
Name - Select existing MFC. This MFC must exist on the Message Field (MFC) tab.

Rule - Select whether this field should be set to Required or Optional for this set.

3.2 – Modify Message Keys

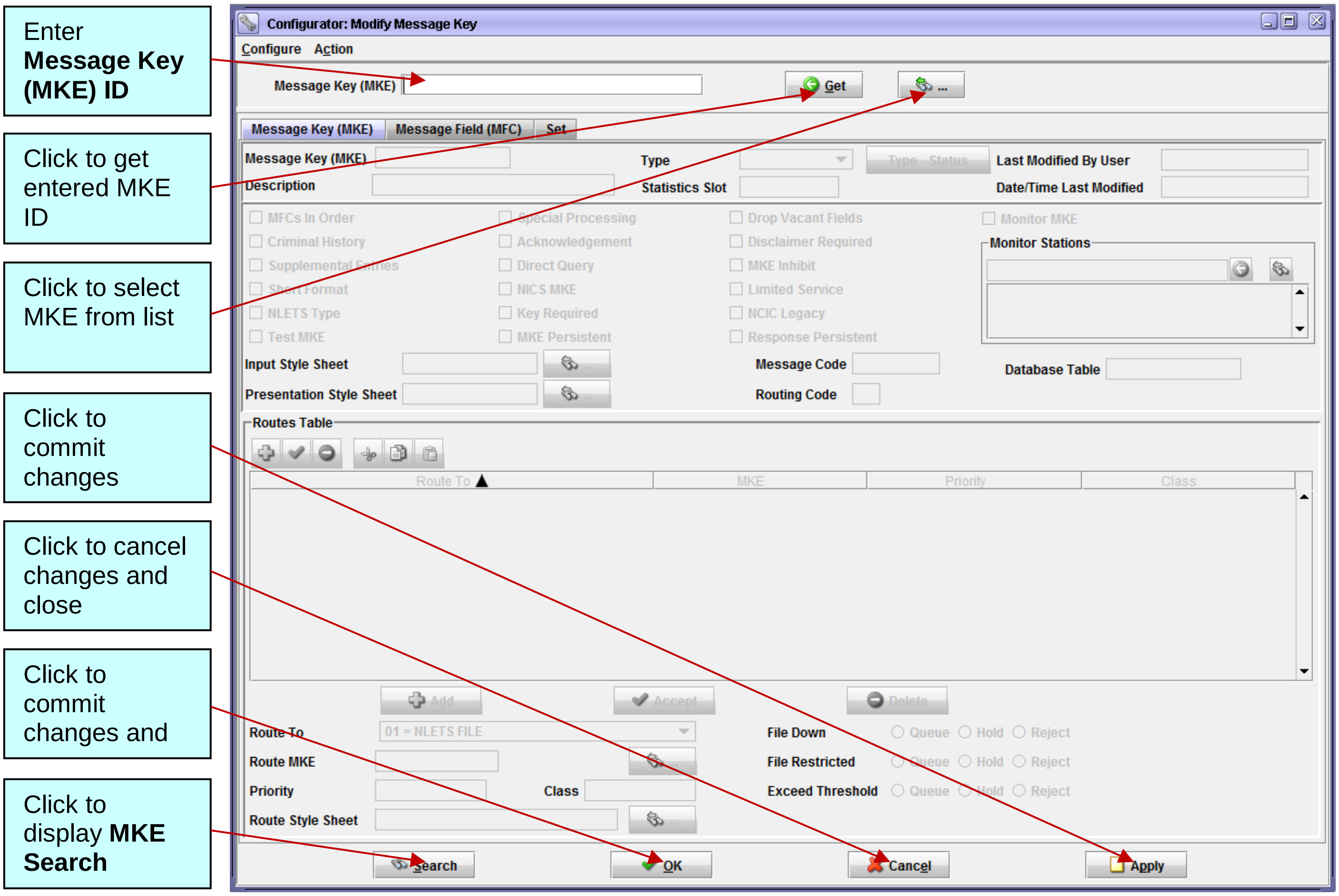
To modify an existing Message Key:

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



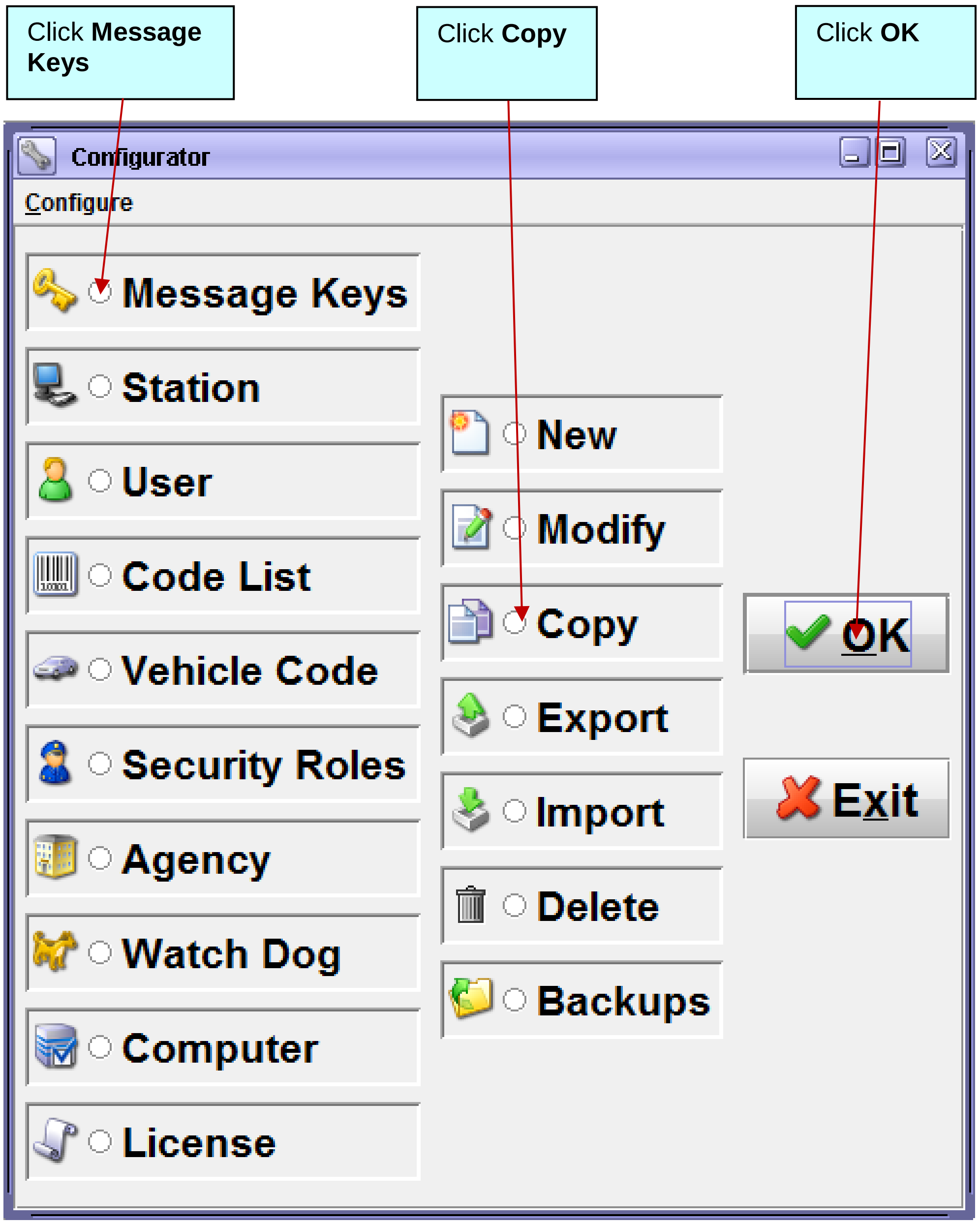
Modify Message Key

- Enter the Message Key (MKE) ID then click **Get** to retrieve the message key record. You may click the **Binocular** button to display the **Get Message Key Dialog Window**. This window will list all message key records contained in the system for you to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Modify the fields in the message key record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

3.3 – Copy Existing Message Keys

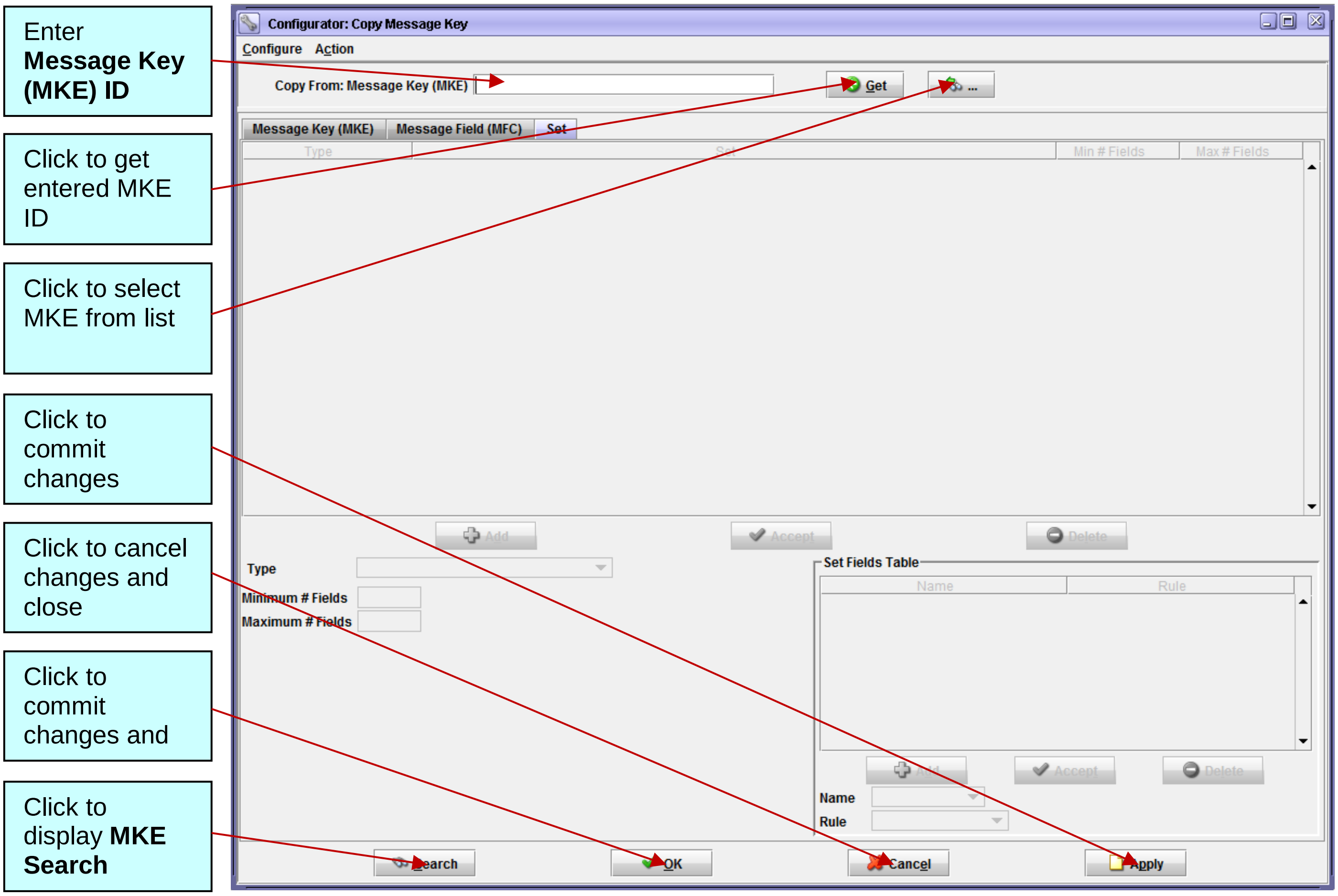
To copy an existing Message Key:

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



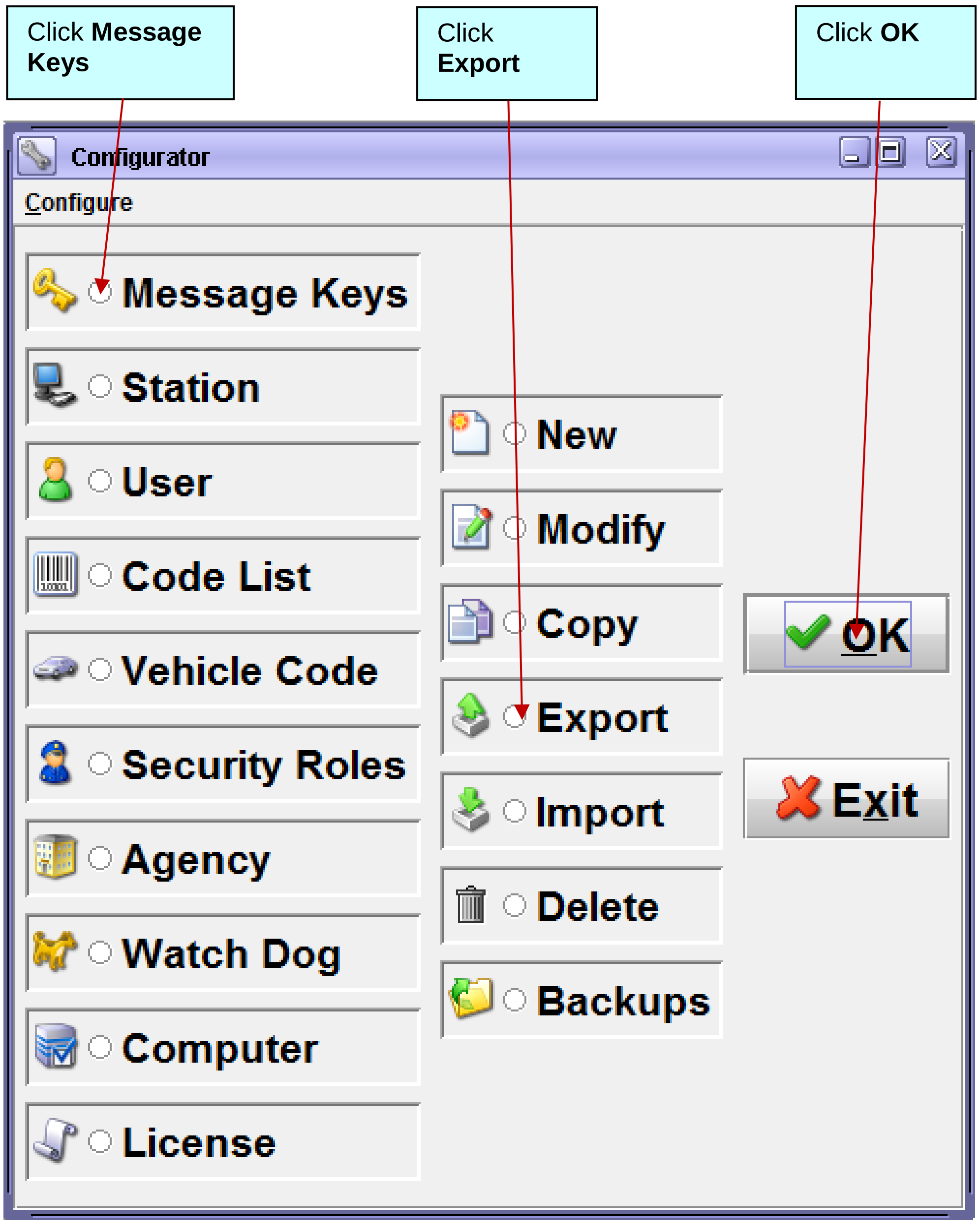
Copy Message Key

- Enter the Message Key (MKE) ID then click **Get** to retrieve the message key record. You may click the **Binocular** button to display the **Get Message Key Dialog Window**. This window will list all message key records contained in the system for you to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Enter a unique (i.e. "copy-to") **Message Key (MKE) ID**.
- Modify the fields in the message key record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

3.4 – Export Message Keys

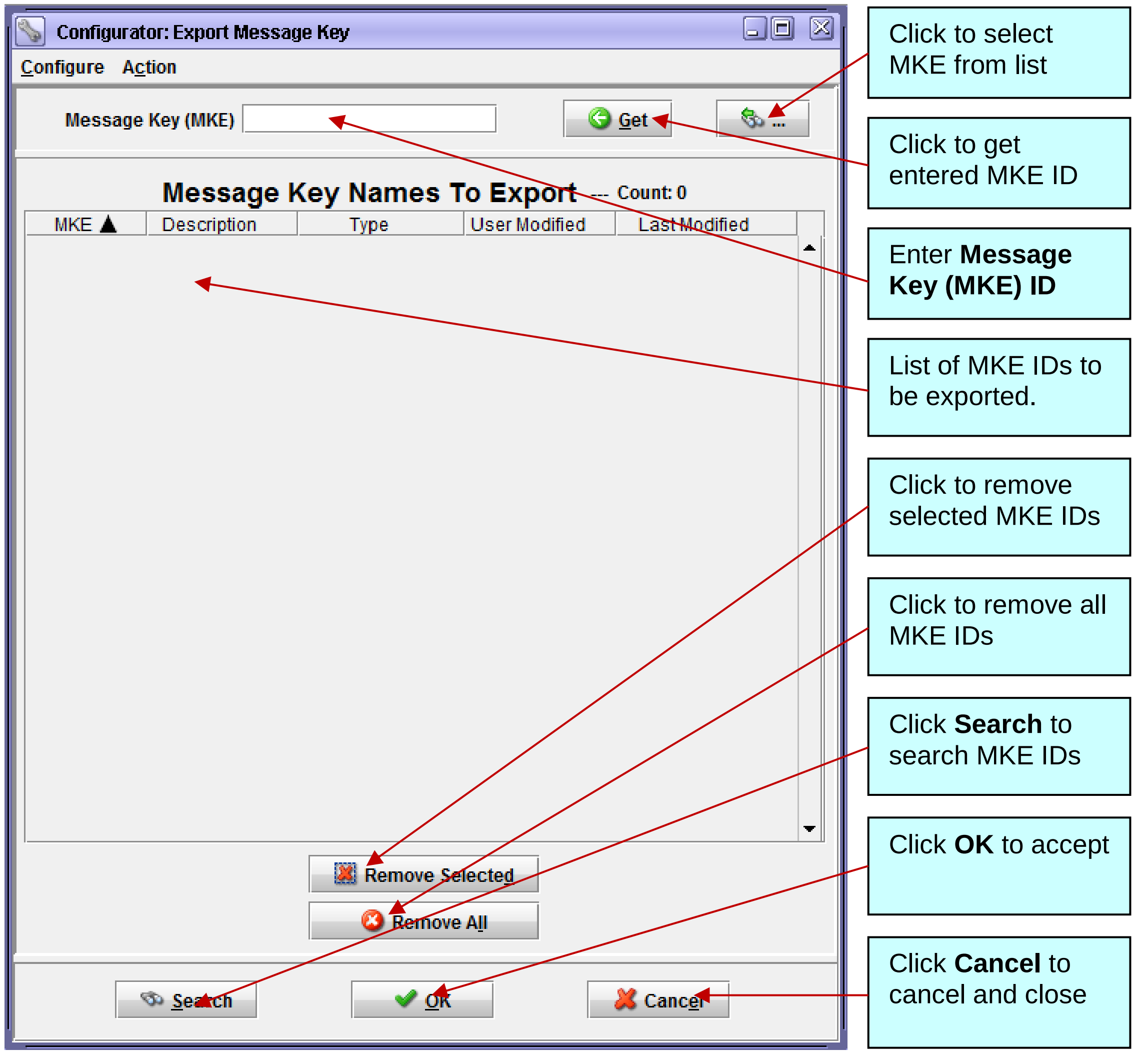
To export a Message Key:

- Open the Configurator Module



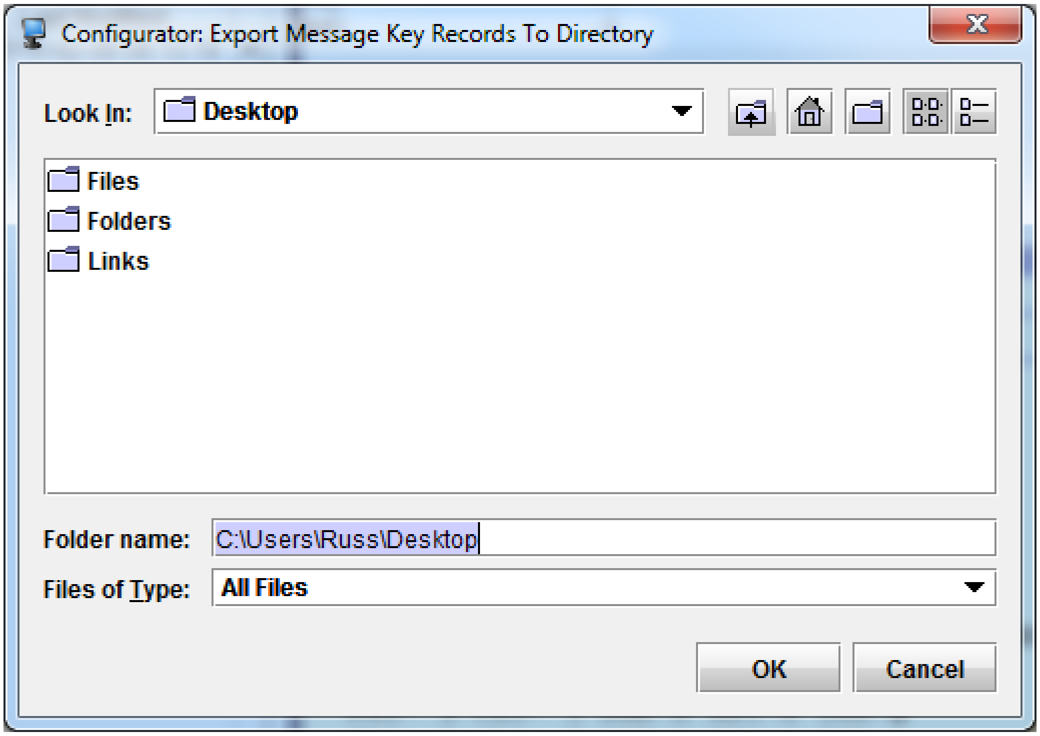
Configurator

- Select **Message Keys** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Message Key

- Select the message key records to export.
- Click **OK**.



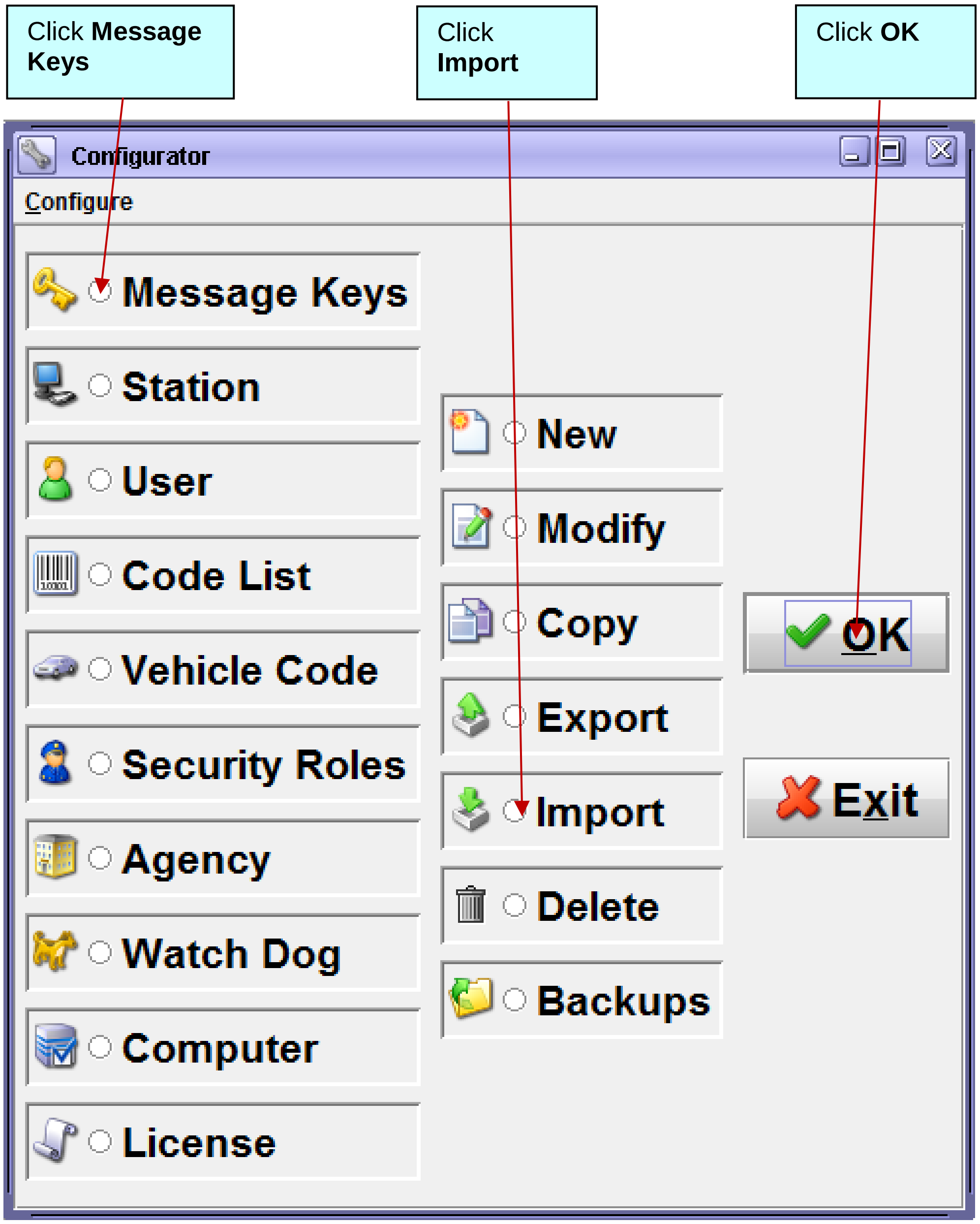
Export Message Key Records To Directory

- Select the directory on your local P.C. to export the message key records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

3.5 – Import Message Keys

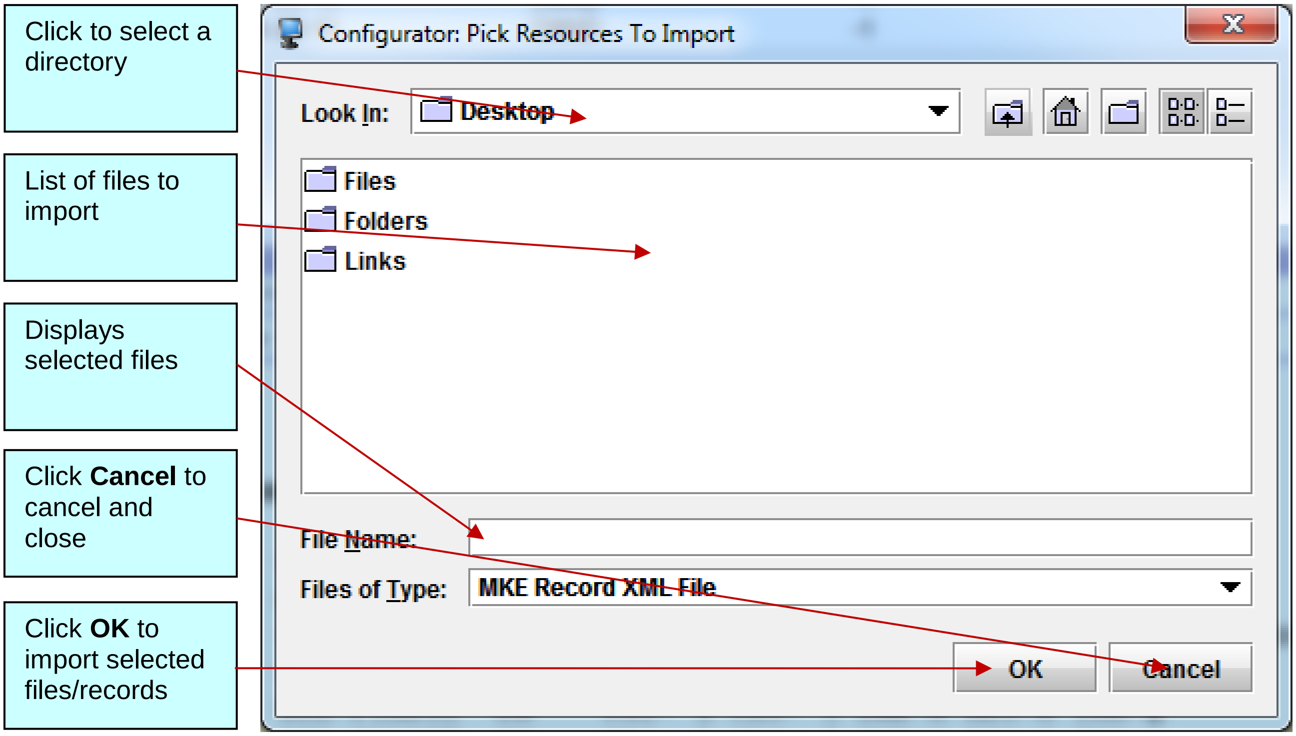
To import a Message Key:

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



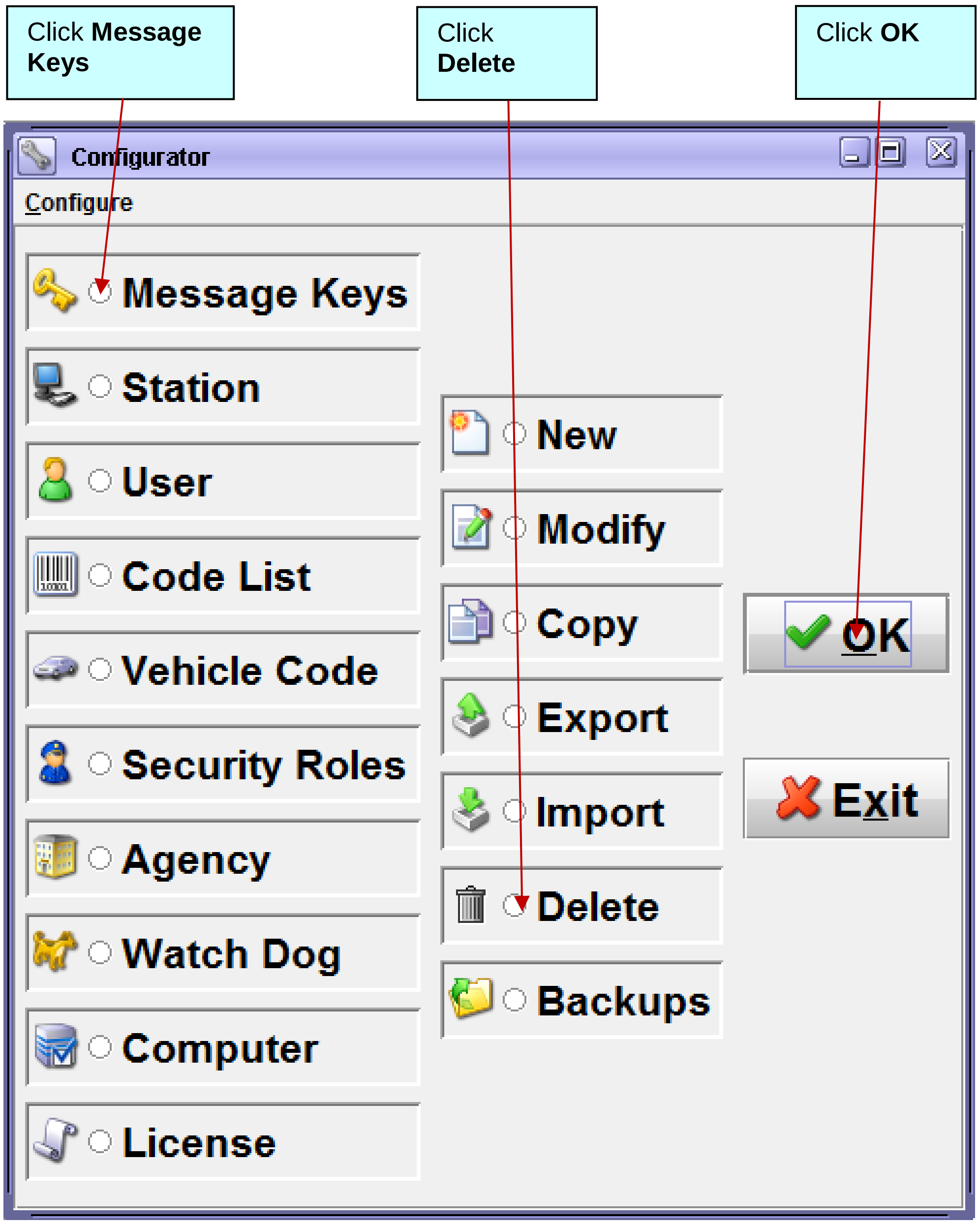
Pick Resources To Import

- Select the Message Key file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

3.6 – Delete Message Keys

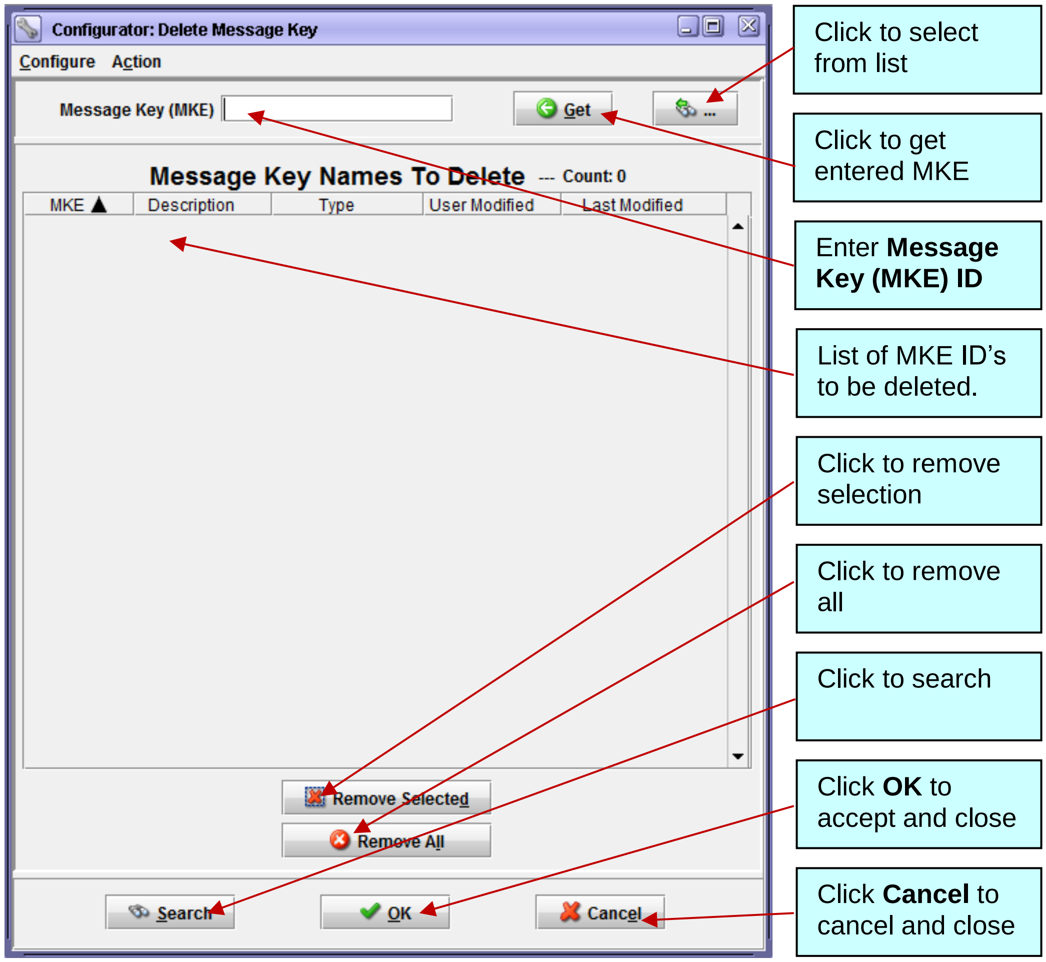
To delete a Message Key:

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



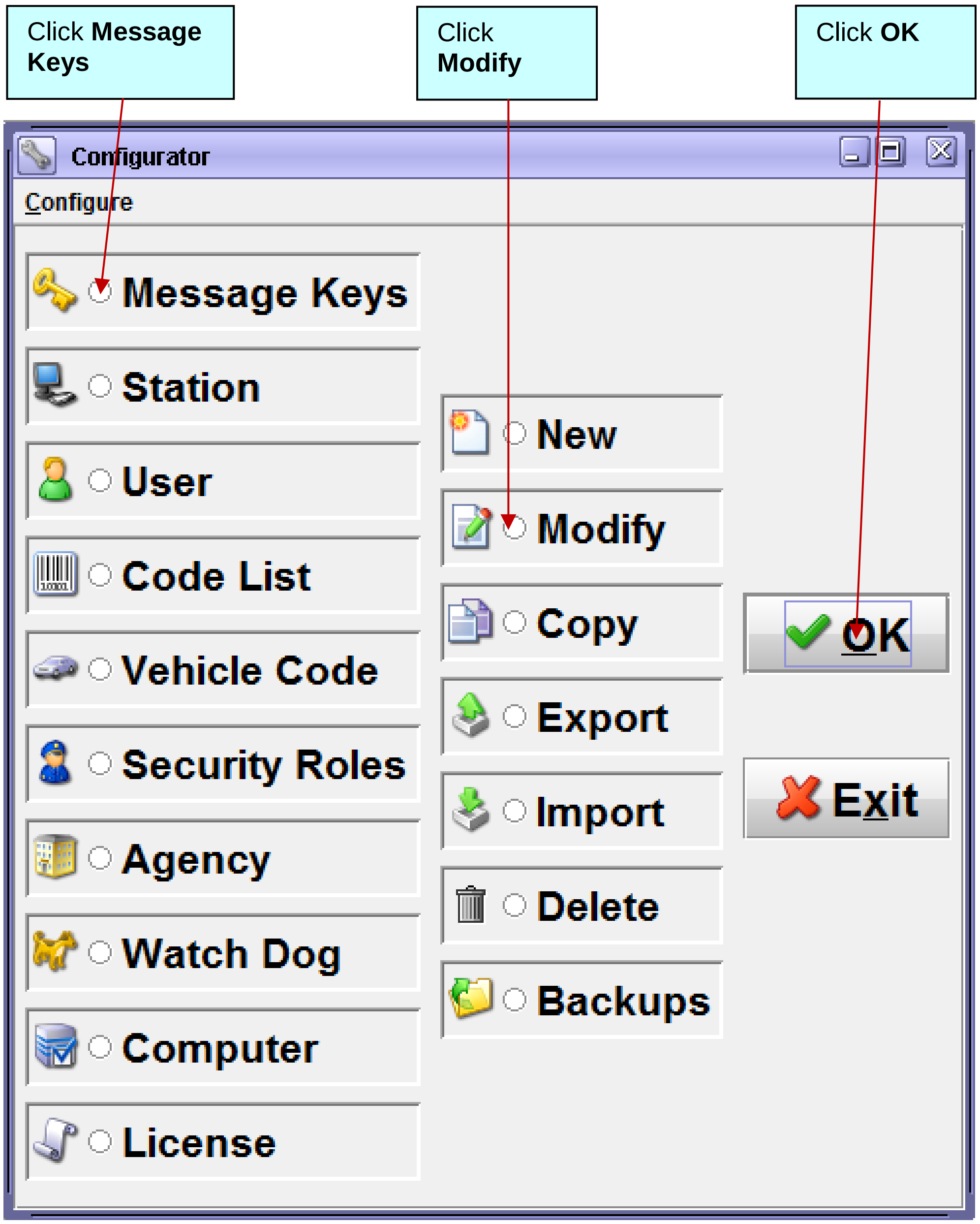
Delete Message Key

- Select the Message Key record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

3.7 – Global Modify Message Key

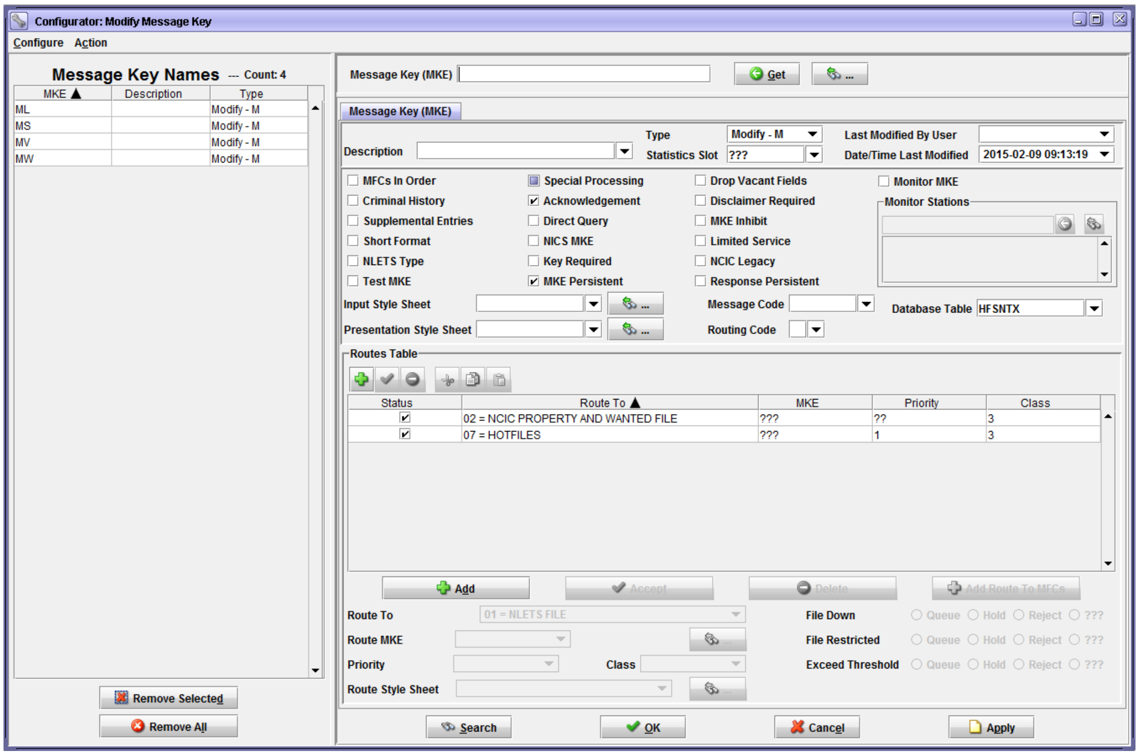
The OpenFox® Configurator is designed so that the message key modify screen will automatically switch to a global message key modify screen if the administrator selects two or more message key records. To access the global message key modify screen, the OpenFox® Station Configurator administrator must have their '**Enable Global Record Screen'** OpenFox® Configurator User Preference enabled.

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.
- From within the message key modify screen, select two or more message key records. For example, click the Binocular button located on the top of screen, just to the right of the **Get** button. This will display the **Get Message Key** window. By holding down the Shift key and/or Ctrl key and clicking on more than one Message Key IDs with the mouse, the user can select more than one message key record. After selecting two or more message key records, click **OK** to retrieve the message key records and load the message key records into the message key modify screen.



Global Modify Message Key

When in the global message key modify screen, any changes you make to any field on the screen will be applied to all message key records you have selected. The list of these message key records is displayed in the **Message Key Names** list on the left-hand-side of the screen. The global message key modify screen works just like the single-record message key modify screen with the following primary differences:

- A **Message Key Names** list appears on the left-hand-side of the screen. This list contains the names of all Message Key IDs that will be modified when you click the **OK** or **Apply** button.
- Lists contain all values that exist in any of the listed records.
- Check boxes can be selected with a white background, selected with a grey bacckground, or unselected.

Text Fields - In the global configuration screen, text boxes can contain a text value, which indicates that all IDs in the list have this same value entered for this field. Text boxes can contain no text, which indicates that all IDs in the list have no value entered for this field. Text boxes can also contain the value of three consecutive question marks ("???"), which indicates that at least two IDs in the list have values entered for this field, but these values are different from each other.

Text fields in the global configurator screen will now display as a drop-down list instead of a plain text field. Clicking the drop-down list will display all values for this field across all IDs in the list. For exampe, if you select two records, and the first ID has an agency of ISS_1, but the second ID has an agency of ISS_2, the Input Style Sheet combo box on the global configurator screen will display '???'. The drop down Input Style Sheet combo box list would then contain both ISS_1 and ISS_2 as valid selectable values.

Entering text directly into the field is still an option, as the drop-down list does not make the field non-editable.

In the global configuration screen, whether a value is selected from the drop-down list, or a value is entered directly into a text box, that new value will be applied to this field for all records in the **IDs List** if you click the **OK** or **Apply** button. If there are multiple values in the field data list, and no changes are made to this field (if the text shown is still "???"), no changes will be made to this field for any IDs.

Check Boxes – In the global configuration screen, check boxes can display as selected (checked) with a white background, which indicates all IDs in the list have this value selected. Check boxes can be unselected (unchecked), which indicates all IDs in the list have this value unselected. Check boxes can also be selected with a grey background, indicating that some IDs in the list have this value selected, while other IDs in the list have this value unselected.

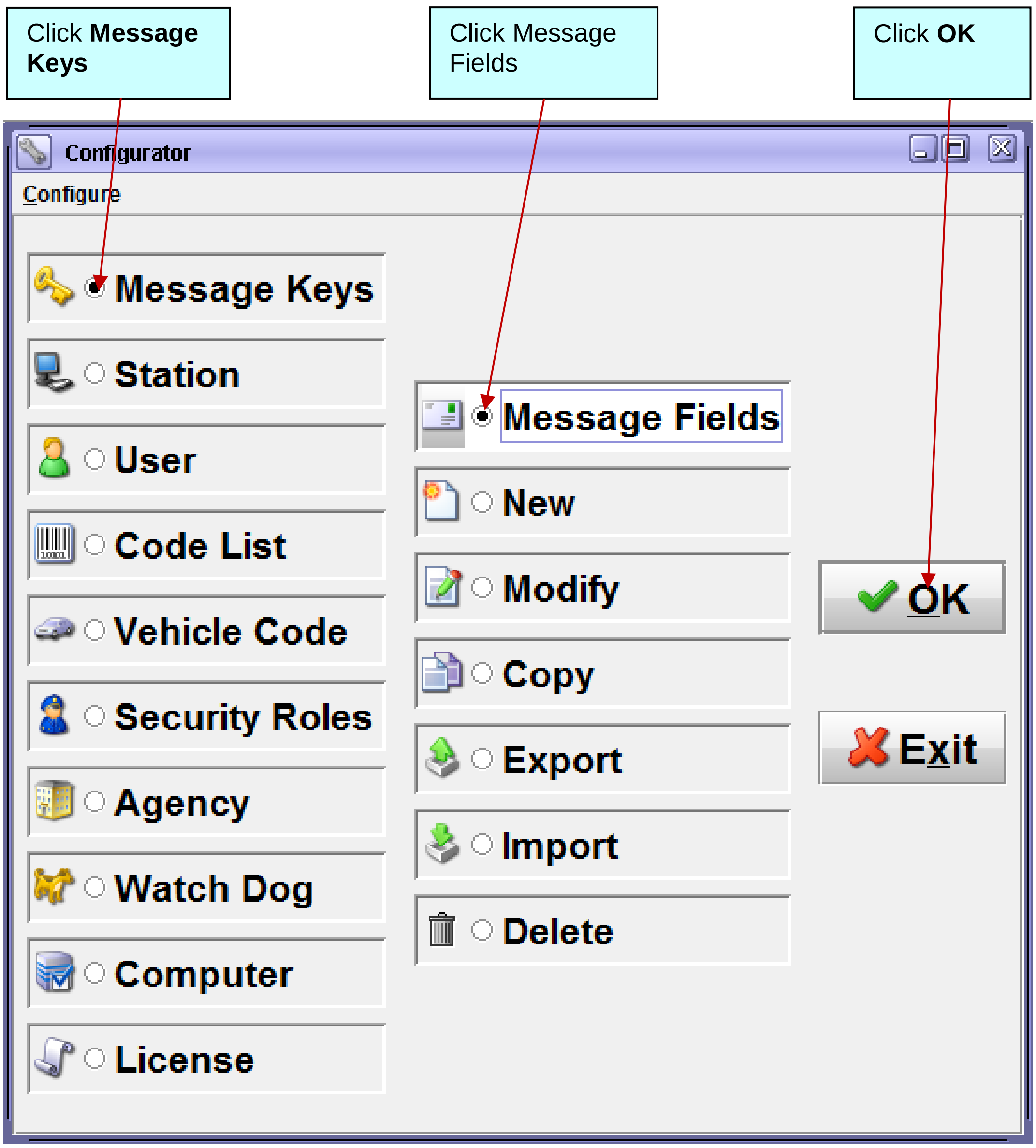
In the global configuration screen, whether a check box is selected or unselected, that new value will be applied to this field for all records in the **IDs List** if you click the **OK** or **Apply** button. If some records have this field selected, while others have this field unselected (if the check box is selected but has a grey background) and no changes are made to this field, no changes will be made to this field for any IDs.

Lists – In the global configuration screen, lists will show a combined list of all values applied to any ID. For example, if the first ID in the list has route 01, while the second ID in the list has route 01 and 02, both route 01 and 02 will be shown in the list. Removing only route 01 from the list will leave the first ID with no route, while the second ID will retain only route 02. Removing only route 02 from the list would leave both IDs with route 01, and neither ID would have route 02. These changes will not be applied until you click the **OK** or **Apply** button.

3.8 – Global Modify Message Fields

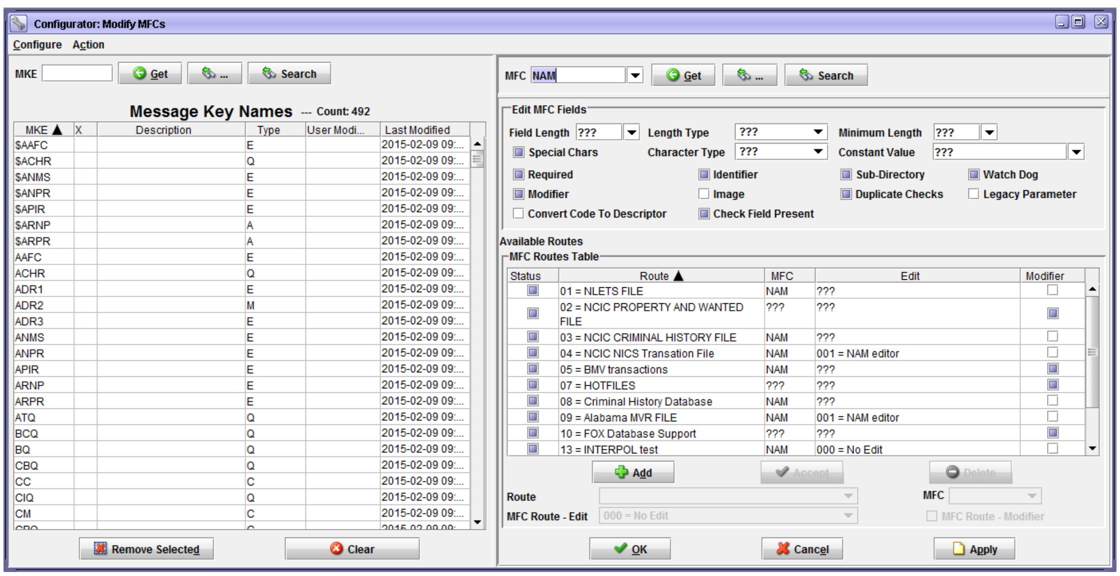
There are thousands of fields across hundreds of transactions within the message switch. Maintaining them each separately would be painstaking at best, and could require individuals whose sole purpose would be to maintain these items if they were to have to modify them one at a time. OpenFox® Configurator is designed to allow an administrator the ability to modify a single field's configuration and apply it to multiple message keys at the same time. To access the global message field modify screen, the OpenFox® Station Configurator administrator must have their '**Enable Global Record Screen'** OpenFox® Configurator User Preference enabled.

- Open the Configurator Module



Configurator

- Select **Message Keys** from the left column.
- Select **Message Fields** from the middle column.
- Click **OK**.
- From within the message field modify screen, on the right side in the MFC field, enter the name of the Message Field Code to be modified and hit Enter or click Get Message Field. A search can also be performed if the MFC is not known. The system will then load all MKEs that have this field configured. Remove any MKEs that should not have their matching fields modified, leaving only a list of MKEs on the left that have the matching MFC and should have the changes applied.
- Alternatively, from within the message field modify screen, select two or more message key records. For example, click the Binocular button located on the top of screen, just to the right of the **Get** button. This will display the **Get Message Key** window. By holding down the Shift key and/or Ctrl key and clicking on more than one Message Key IDs with the mouse, the user can select more than one message key record. After selecting two or more message key records, click **OK** to retrieve the message key records and load the message key records into the message field modify screen.



Modify MFCs

When in the global message field modify screen, any changes you make to any field on the screen will be applied to the matching MFC for all message key records you have selected. The list of these message key records is displayed in the **Message Key Names** list on the left-hand-side of the screen. The global message field modify screen works just like the global message key modify screen with the following primary differences:

- Changes are applied only to the MFC listed in the MFC field on the top of the Global Message Field Modify screen.

Text Fields - In the global configuration screen, text boxes can contain a text value, which indicates that all IDs in the list have this same value entered for this field. Text boxes can contain no text, which indicates that all IDs in the list have no value entered for this field. Text boxes can also contain the value of three consecutive question marks ("???"), which indicates that at least two IDs in the list have values entered for this field, but these values are different from each other.

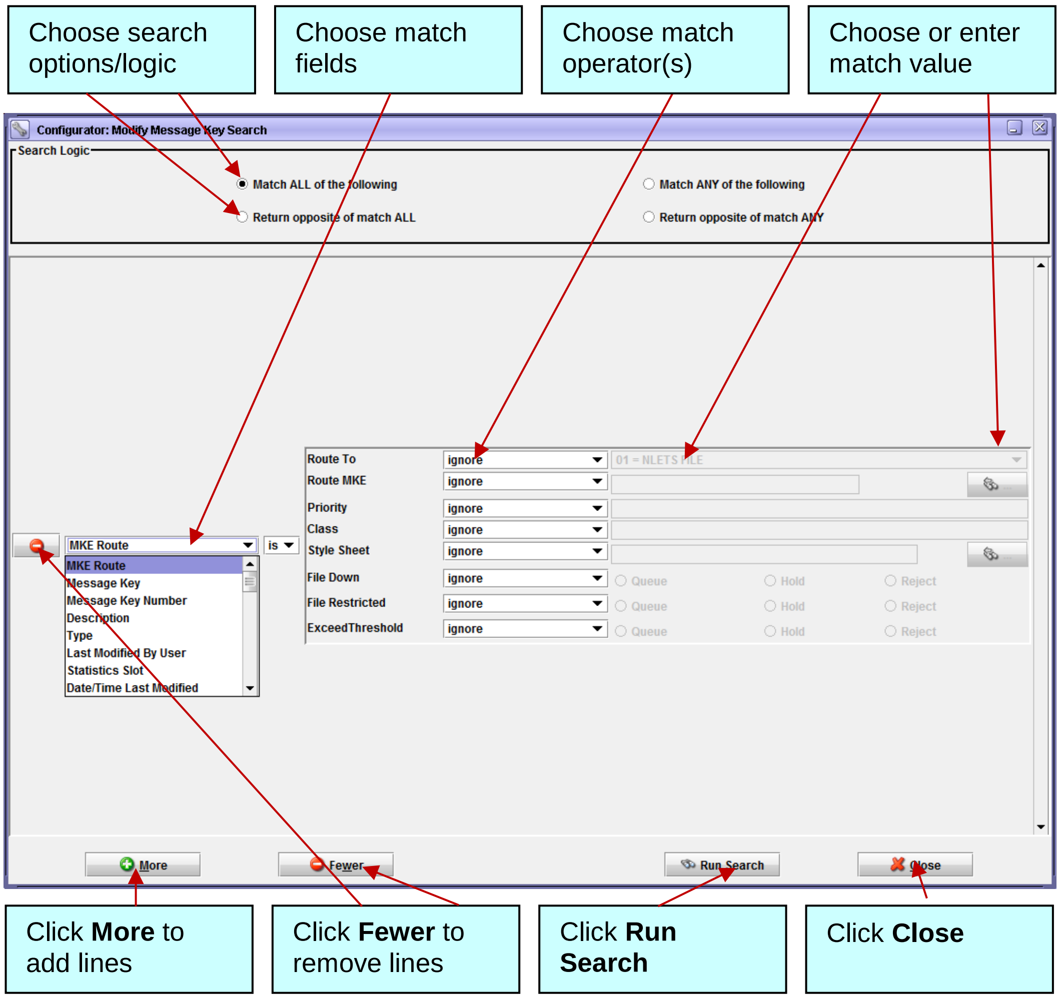
Text fields in the global configurator screen will now display as a drop-down list instead of a plain text field. Clicking the drop-down list will display all values for this field across all IDs in the list. For exampe, if you select two records, and the first ID has an agency of Length 1, but the second ID has an agency of Length 2, the Field Length combo box on the global configurator screen will display '???'. The drop down Field Length combo box list would then contain both Length 1 and Length 2 as valid selectable values.

Entering text directly into the field is still an option, as the drop-down list does not make the field non-editable.

In the global configuration screen, whether a value is selected from the drop-down list, or a value is entered directly into a text box, that new value will be applied to this field for all records in the **IDs List** if you click the **OK** or **Apply** button. If there are multiple values in the field data list, and no changes are made to this field (if the text shown is still "???"), no changes will be made to this field for any IDs.

3.9 – Search Message Key

All message key screens have a **Search** button located on the bottom-left. The full-featured message key search window is provided as an aid to help locate message key records. An example of this window is shown below. Any records found from the search will be used to populate the message key screen.



MKE Search

Search Options - If a previous search was performed, choose whether to clear the previous search results prior to performing the new search.

Search Logic - The logic to be used to perform the search.

> **Match ALL of the following** - Records will only be returned in the search results if they match ALL of the search field/operator/value combinations.
>
> **Match ANY of the following** - Records will be returned in the search results if they match AT LEAST ONE of the search field/operator/value combinations.
>
> **Return opposite of match ALL** - Returns all records not matched in the corresponding "ALL" search.
>
> **Return opposite of match ANY** - Returns all records not matched in the corresponding "ANY" search.

Match Field - Choose the field from the message key to search against. Examples of valid values are **MKE Route**, **Message Key**, **Description**, and **Type**.

Match Operator - Choose the type of comparison operation to be performed against the match field. Only certain operators are valid for each **Match Field**. Examples of valid Match Operators are **is**, **is not**, **contains**, **does not contain**, **less than**, and **greater than**.

Match Value - Enter or select the value to be searched upon.

More - Click **More** to add another row of comparison field/operator/value selections.

Fewer - Click **Fewer** to remove the bottom row of comparison field/operator/value selections, or the Delete button next to a search item to remove that specific search item from the list.

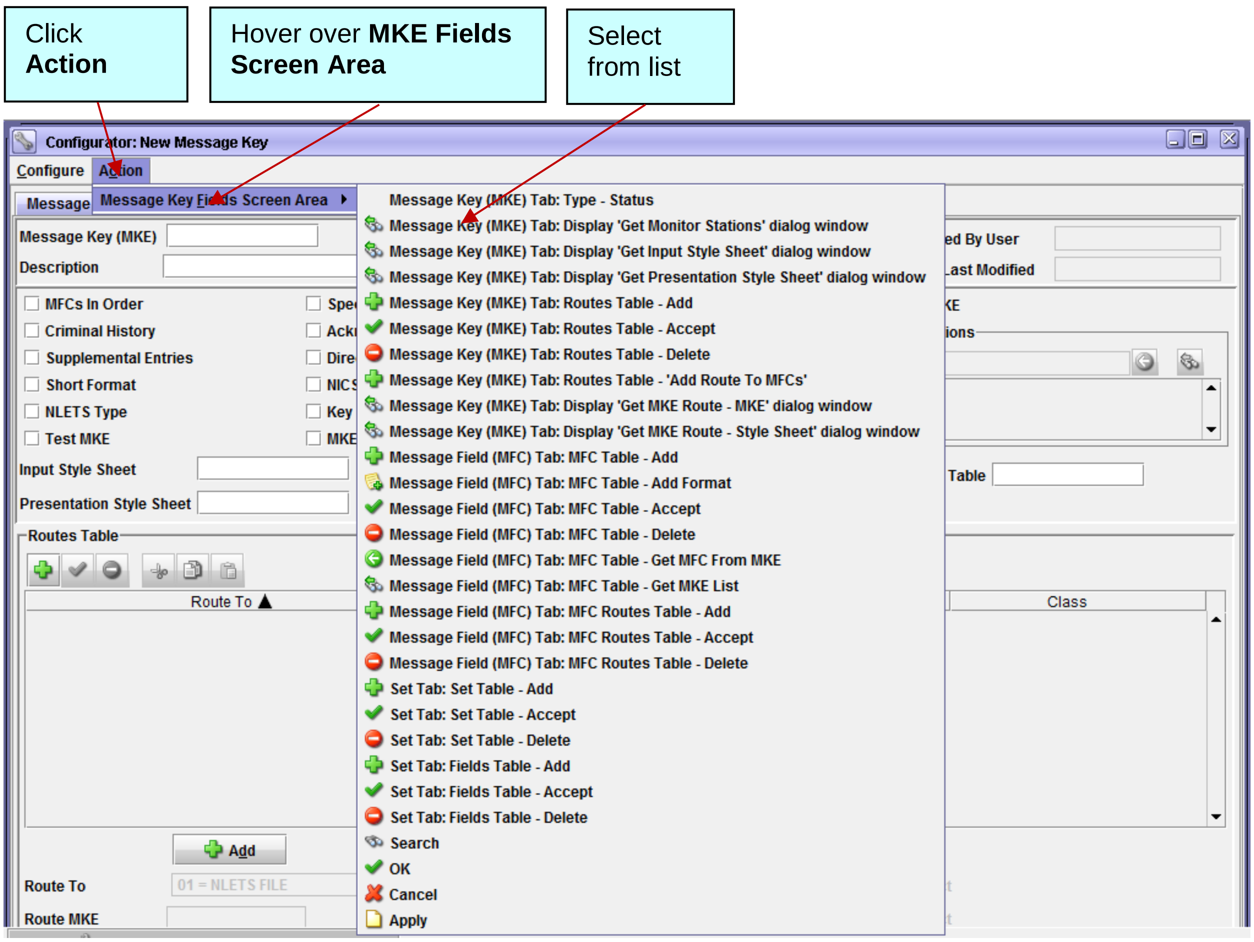
Run Search - Click **Run Search** to obtain a list of Message Key IDs based on the current comparison field/operator/value selections listed in the search window.

Close - Click **Close** to cancel the current search and close the search window.

3.9 – Message Key Menu Access

To use the Message Key Action menu:

- Open the Configurator Module.
- Open any Message Key screen containing an **Action** menu item.



MKE Menu Access

- Click the **Action** menu.
- Hover over **Message Key Fields Screen Area**.
- Select from list provided.

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Chapter 4 – Station Configuration

A device that connects to the OpenFox® Message Switch to send and/or receive message traffic is referred to as a “station”. Each station has a single record entered into the database that defines how it connects to the OpenFox® Message Switch, what it is allowed to do, when it is allowed to log on, how it will interact with the OpenFox® Message Switch, and other information that administrators use to help them maintain their stations.

The OpenFox® Configurator Station screens are used to supply the information necessary to define Station records. The OpenFox® Configurator Station screens allow the administrator to create new Station records, modify existing Station records, copy existing Station records, export Station records, import Station records, or delete Station records, all with immediate effect and without any other software changes or system reboots.

NOTE: While changes to the station record are immediate, any changes to the station will not affect their current session if the station is logged in when the changes are applied to their station record. The user will have to close any open session with this station and open a new session with this station for these changes to take effect. An administrator can force a station’s session to reset by setting the station down and resetting the station. For more information on OpenFox® commands, see the *OpenFox® Systems Guide*.

NOTE: Deleting a Station record will not erase the station information from the system. The Station information will still be available in the database. The user will, however, be unable to log in to a session from this Station ID after the Station record is deleted.

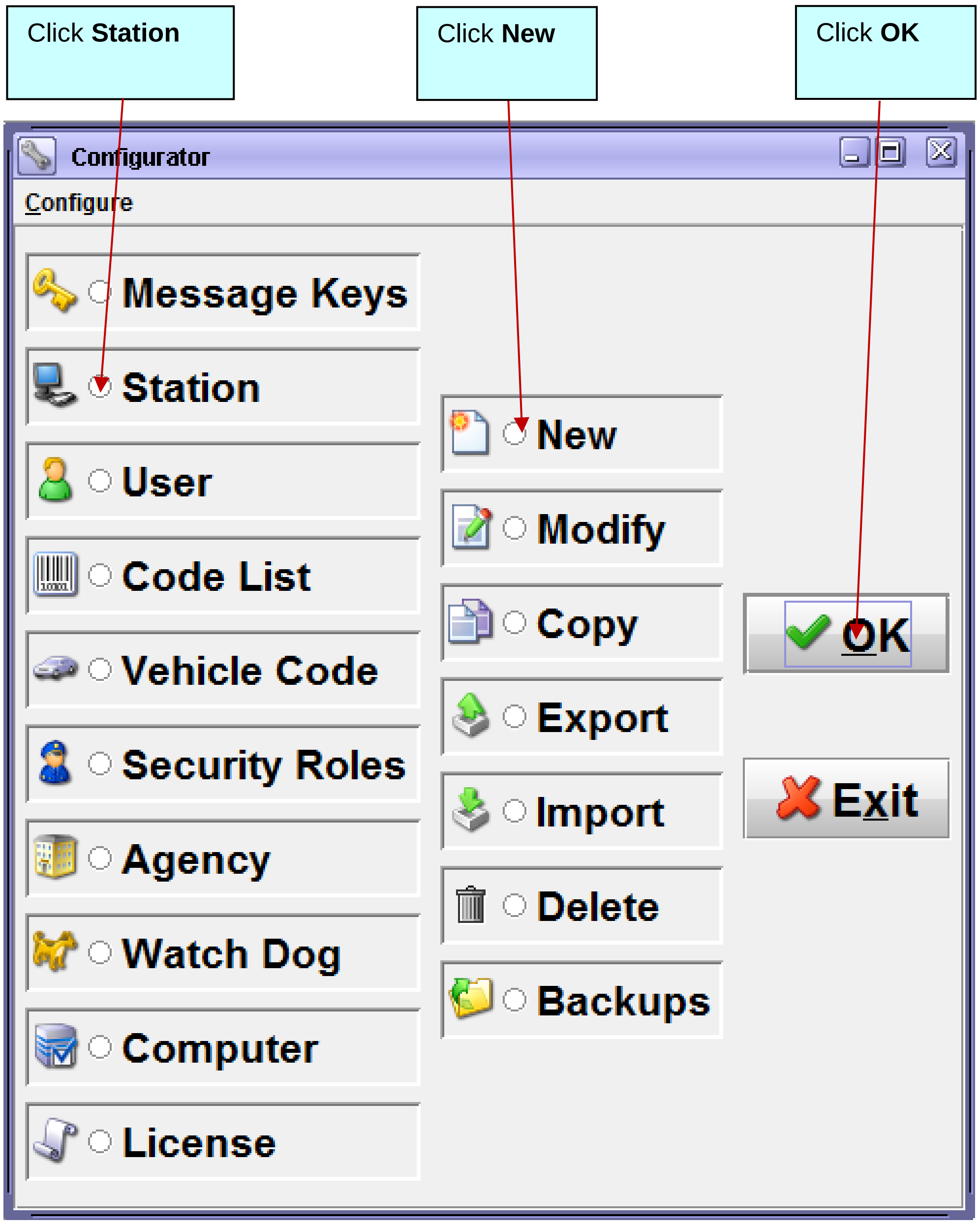
The OpenFox® Configurator Station screens, their text-fields, lists, options and buttons are as follows:

This chapter includes information on performing message switch administration over devices running OpenFox® Desktop. This chapter is intended for use by the governing agency administrative and support staff. Many of the functions described in this chapter are not available to end users or to information technology support personnel. If you have any questions or believe that you should have access to these functions, please contact your governing agency.

4.1 – Add New Station

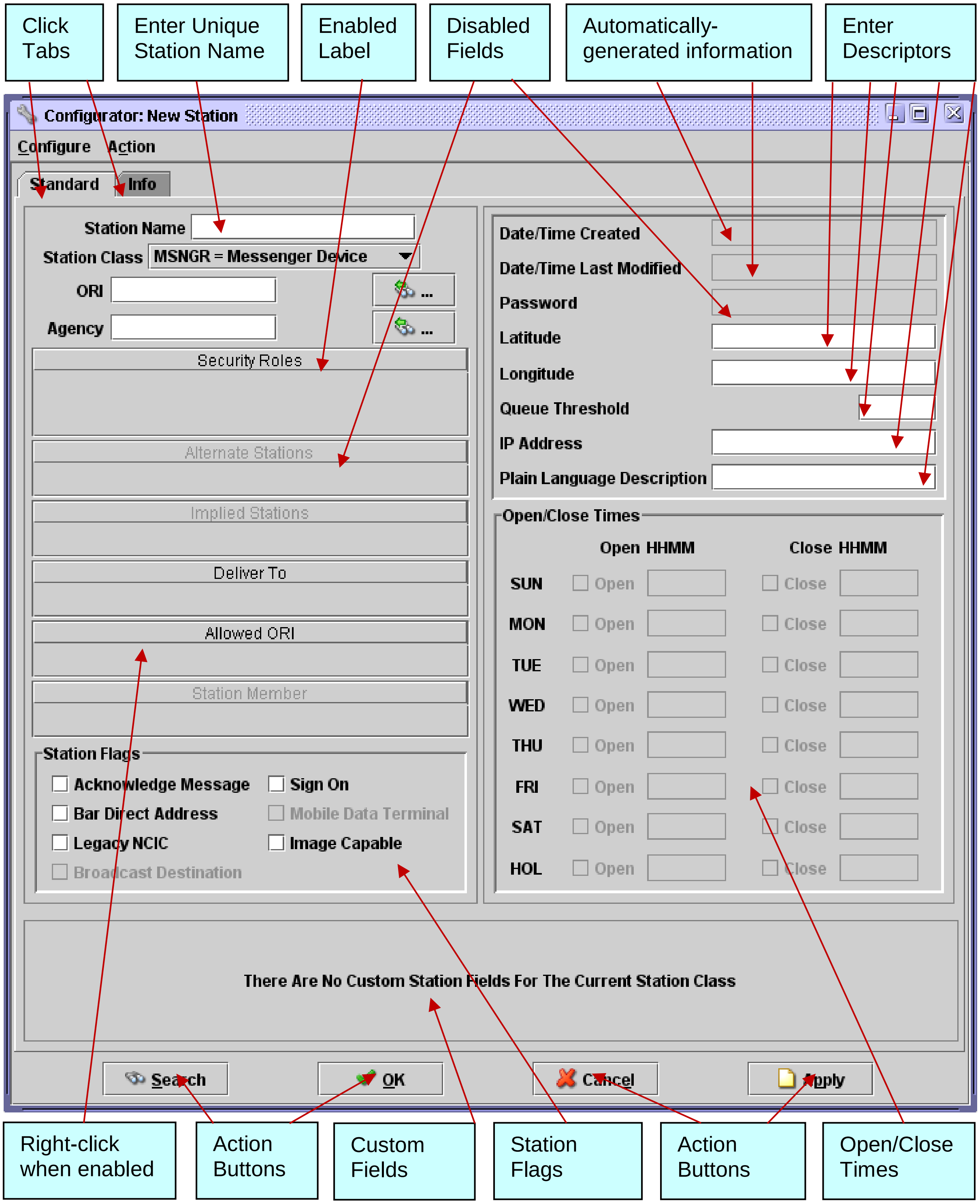
To configure a new Station:

- Open the Configurator Module



Configurator

- Select **Station** from the left column.
- Select **New** from the middle column.
- Click **OK**.



Click Tabs
Enter Unique Station Name
Enabled Label
Disabled Fields
Automatically-generated information
Enter Descriptors
Configurator: New Station
Configure
Action
Standard
Info
Station Name
Station Class
MSNGR = Messenger Device
ORI
Agency
Security Roles
Alternate Stations
Implied Stations
Deliver To
Allowed ORI
Station Member
Station Flags
Acknowledge Message
Sign On
Bar Direct Address
Mobile Data Terminal
Legacy NCIC
Image Capable
Broadcast Destination
Date/Time Created
Date/Time Last Modified
Password
Latitude
Longitude
Queue Threshold
IP Address
Plain Language Description
Open/Close Times
Open HHMM
Close HHMM
SUN
MON
TUE
WED
THU
FRI
SAT
HOL
Open
Close
There Are No Custom Station Fields For The Current Station Class
Search
OK
Cancel
Apply
Right-click when enabled
Action Buttons
Custom Fields
Station Flags
Action Buttons
Open/Close Times

New Station

4.1.1 – Standard Tab

- Select the **Standard** tab at the top-left (selected by default).
- Enter a unique Station name in the text box following the **Station Name** label.
- Select Station Class from the **Station Class** drop-down list. As the selected station class changes, fields in the station configuration will become enabled and/or disabled, custom fields at the bottom of the station configuration will appear or disappear, and the entire contents of the **Info** tab will change as defined by the station class configuration.
- Enter the ORI in the **ORI** field (or click the button to search available ORIs). The ORI must already exist within the system.
- Enter the Agency in the **Agency** field (or click the button to search available Agencies). The Agency must already exist within the system.
- Add **Security Roles**, **Alternate Stations**, **Implied Stations**, **Deliver To** Stations, **Allowed ORI** Stations, and/or **Station Member**(s) as necessary. Grey labels for any of these fields means that this station class is not allowed to select anything for this value (it is disabled for this station class). Black labels for any of these fields means that this station class is allowed to select items for this value (it is enabled for this station class). To select a possible value, right-click the enabled box, then left-click the appropriate choice from the pop-up menu, and select the appropriate value from the subsequent window provided.
- Select Station Flags as necessary. Grey labels for any of these fields means that this station class is not allowed to select anything for this value (it is disabled for this station class). Black labels for any of these fields means that this station class is allowed to select items for this value (it is enabled for this station class). To select a possible value, left-click the enabled check box that is empty. To de-select a possible value, left-click the enabled check box that shows a check mark.
- Enter any descriptors necessary for this station class. **Date/Time Created** and **Date/Time Last Modified** are automatically generated by the system and are not interactive fields. Password, Latitude, Longitude, Queue Threshold, IP Address, and Plain Language Description are all interactive fields and are intended to be entered by the administrator as necessary for each station.

- Select the Open/Close Time as necessary for each station. Grey labels for these fields means that this station class is not allowed to select anything for this value (it is disabled for this station class). Black labels for these fields means that this station class is allowed to select items for this value (it is enabled for this station class). To enter a value, left-click the enabled check box that is empty, then enter the 24-hour-format time in the enabled text box. To remove a value, left-click the enabled check box that shows a check mark (it is not necessary to empty the time value from the field prior to de-selecting the check box).
- Enter any necessary custom fields, if provided, for this station.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

4.1.1.1 – Standard Tab Fields

Station Name - Enter a unique value for each station. Alphanumeric characters, as well as the underscore character, are allowed.

Station Class - Select the Station Class from the drop-down list provided. The Station Class determines which fields are enabled in the station configuration screen's station tab.

ORI - Enter the ORI that the station will use as its default. This field is optional, but if the user does not send the ORI field as part of the message to the OpenFox® and this field is blank, the user will receive an error. This field only defines the default ORI for when transactions arrive at the OpenFox® from this station with no ORI in the message header.

Agency - Enter the Agency to which this station belongs. For any station that uses OpenFox® Desktop to connect to the OpenFox®, this is a required field. The OpenFox® Desktop license key that this station uses to connect to the OpenFox® Message Switch must be assigned to the same Agency that this station is assigned.

Security Roles - Right-click to add or remove security roles from this field. If no security role is selected, then there is no limitation at the station level as to what a user can do within the OpenFox® system.

Alternate Stations - Right-click to add or remove stations from this field. If the station currently being configured is not connected to the OpenFox® when messages are queued to it, and the stations defined in the **Deliver To** are also not connected to the OpenFox®, the **Alternate Stations** will receive the traffic (if defined) instead.

Implied Stations - Right-click to add or remove stations from this field. If traffic is received from the station currently being configured, it will route all traffic directly to the **Implied Stations** (if defined).

Deliver To - Right-click to add or remove stations from this field. For all messages being sent to the station currently being configured, the OpenFox® will route all traffic to the **Deliver To** station(s).

Allowed ORI - Right-click to add or remove stations from this field. Values listed here define the ORIs for which this station is authorized to send traffic. *NOTE: This field has no bearing on what value is defaulted if a message comes in with no ORI.* For default ORI values for this station, see the **ORI** field above the **Agency** field on the station form.

Station Member - Right-click this field to add or remove list member stations. Values listed here define the list distribution members which belong to this station.

4.1.1.2 – Station Flags

Acknowledge Message - Select to indicate that you want this station to receive Message Acknowledgements (when sending MKEs that are configured to respond with ACK). Leaving this field blank indicates that, regardless of MKE configuration, this station should never receive an ACK.

Bar Direct Address - Select to indicate that this station is not allowed to receive directly-addressed messages (such as an Administrative Message, or AM). Leaving this field blank indicates that this station is allowed to receive directly-addressed messages.

Legacy NCIC - Select to indicate that this station does NOT send messages in NCIC-2000 format. Leaving this field blank indicates that this station sends messages in NCIC-2000 format.

Broadcast Destination - Select to indicate that this station is allowed to receive broadcast messages. Leaving this field blank indicates that this station is NOT allowed to receive broadcast messages.

Sign On - Select to indicate that, as a user signs on from this station, they MUST send a logon transaction as their first message. Leaving this field blank indicates that this station does not require a logon transaction prior to sending other traffic.

Mobile Data Terminal - Select to indicate that this station is a Mobile Data Terminal and will require special processing. Leaving this field blank indicates that this station does not require any special mobile data terminal processing.

Image Capable - Select to indicate that this device is authorized to receive images. Leaving this field blank indicates that this station is not authorized to receive images, and that any messages containing an image that are requested will still be sent to this station, but the image will be removed, and a message indicating the image-removal action will be inserted in its place.

4.1.1.3 – Station Descriptors

Date/Time Created - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of the original station record to the OpenFox®.

Date/Time Last Modified - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the station record to the OpenFox®.

Password - This field indicates the password required to log in from this station. This field is masked (asterisks will be shown instead of plain text). Entry of data into this field is optional.

Latitude - This field should contain the latitude of where the station is located. The valid range is -90.000000 to 90.000000, entered in decimal degrees with up to six numbers after the decimal. Entry of data into this field is optional.

Longitude - This field should contain the longitude of where the station is located. The valid range is -180.000000 to 180.000000, entered in decimal degrees with up to six numbers after the decimal. Entry of data into this field is optional.

Queue Threshold - This field indicates how many messages are permitted to queue to this device before the auto-purge process begins. Auto-purge will only remove non-persistent messages from the queue. For example, if a station's queue threshold is set to ten, and ten persistent messages sit in its queue, then an eleventh message queues for delivery, if the eleventh message is also persistent, the station will maintain eleven messages in its queue, even though its queue threshold is set to ten. If set to zero (0), the queue threshold is unlimited for this station. Entry of data into this field is optional, but a blank field is assumed to be a value of zero.

IP Address - This field indicates the IP address of the station. The format for this data is ###.###.###.###, where each ### is a standard IP octet that ranges from 0 to 255. Entry of data into this field is optional. If entered, the station being configured MUST connect from the IP address entered in this field.

Plain Language Description - This field contains plain text describing the station. Entry of data into this field is optional.

4.1.1.4 – Open/Close Times

Days of the Week - Each row indicates a separate day of the week, except the last row.

- **SUN** – Sunday
- **MON** – Monday
- **TUE** – Tuesday
- **WED** – Wednesday
- **THU** – Thursday
- **FRI** – Friday
- **SAT** – Saturday
- **HOL** – Holidays

Open Time - Select **Open Time** for each day that a specific open time is desired. **Open Time** is the time, on the specified day of the week that a user is allowed to log on. The user cannot log in before this time on this day. After selecting the appropriate check box, enter the time, in HHMM format, that you want to be the earliest that a user can log on for the specified day of the week. Leaving this field blank means that there is no limit as to the earliest time a user can log on to the OpenFox® on the specified day of the week.

Close Time - Select **Close Time** for each day that a specific close time is desired. **Close Time** is the time, on the specified day of the week that a user is no longer allowed to log on. The user cannot log in after this time on this day. After selecting the appropriate check box, enter the time, in HHMM format, that you want to be the latest that a user can log on for the specified day of the week. If the user is logged in when this time passes, the user will be automatically logged off the OpenFox®. Leaving this field blank means that there is no limit as to the latest time a user can be logged on to the OpenFox® on the specified day of the week.

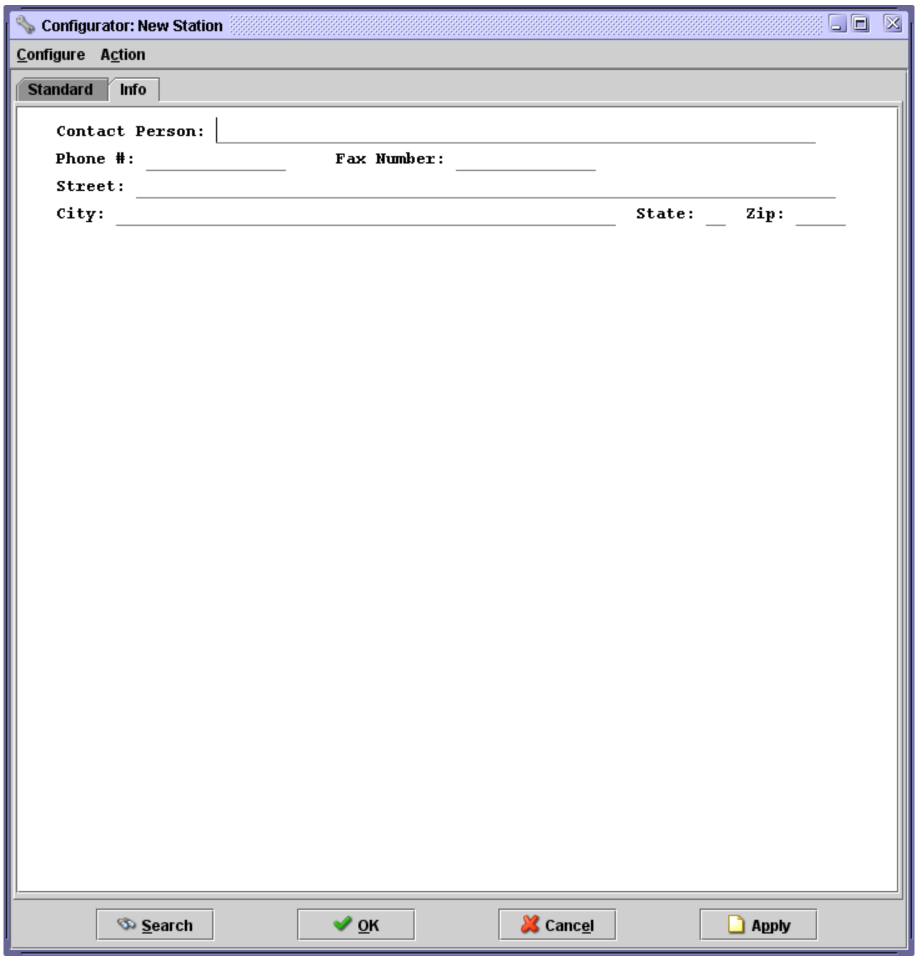
Multiple-day Time Span - If an Open Time occurs late one day (e.g., Monday @ 23:00), and the Close Time is not until the next day (e.g. Tuesday @ 08:00), the system will NOT automatically log the user off Monday at 23:59, or on Tuesday at 00:00. The configuration will allow users to remain safely logged in with no automatic system logoffs (due to Close Times) from the open time until the next close time.

4.1.1.5 – Custom Fields

Each customer can have specific needs that require custom data fields to be defined for certain station classes. These fields are defined per station class. These fields are different per station class, and per customer build. It is optional to create custom fields for stations, and is generally only done when specific requirements must be met for a customer.

4.1.2 – Info Tab

Each customer can have specific needs that require custom information fields to be defined within the info tab. These fields are defined within the station class configurations, and are different per station class. The installation administrator can choose which fields to have added to the Info tab. It is optional to create custom fields for stations, and is generally only done when specific requirements must be met for a customer. For more information on customizing the Info tab fields, contact your CPI account manager.



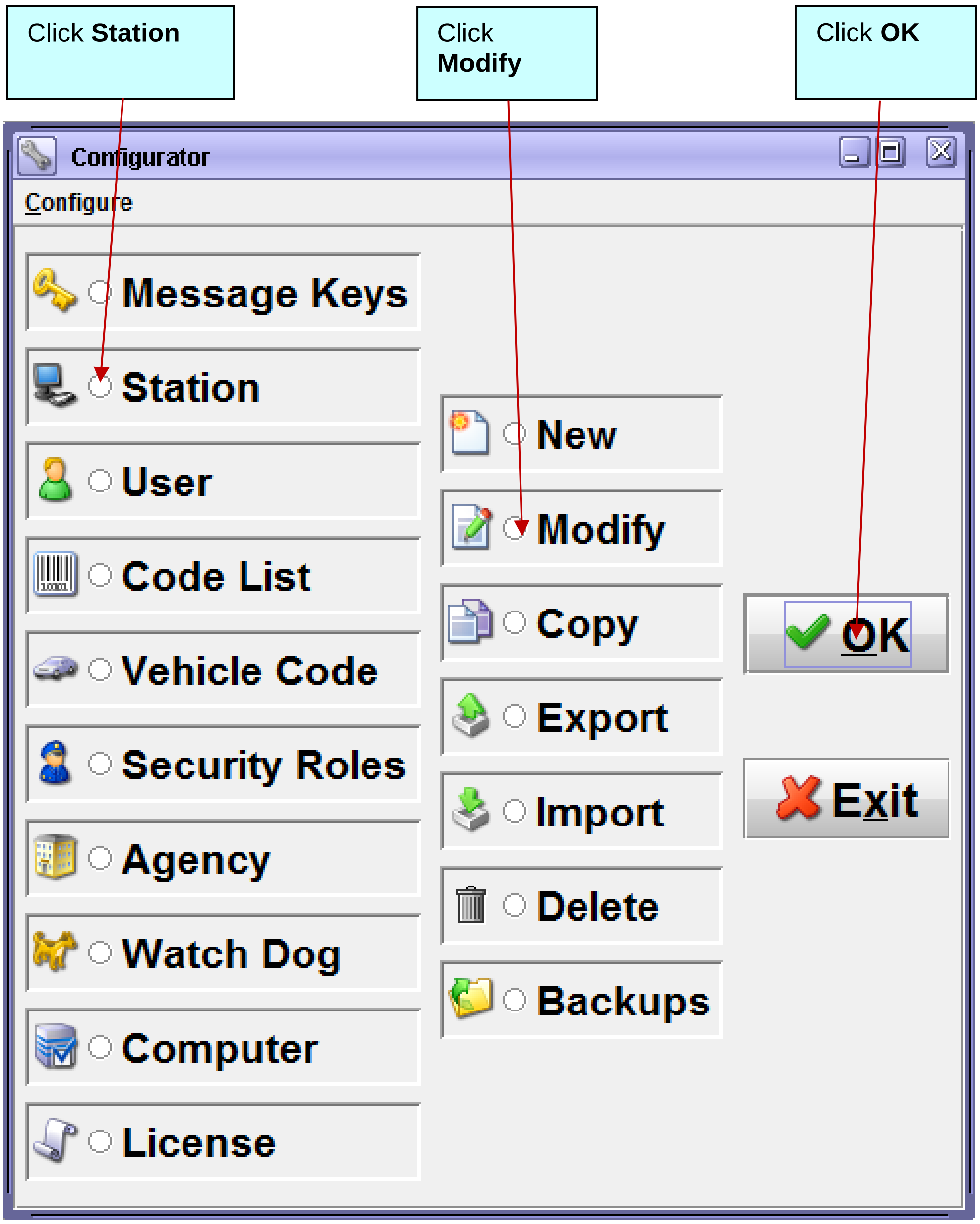
New Station Info Tab

- Select the **Info** tab at the top-left.
- Enter any information desired for this station.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

4.2 – Modify Existing Stations

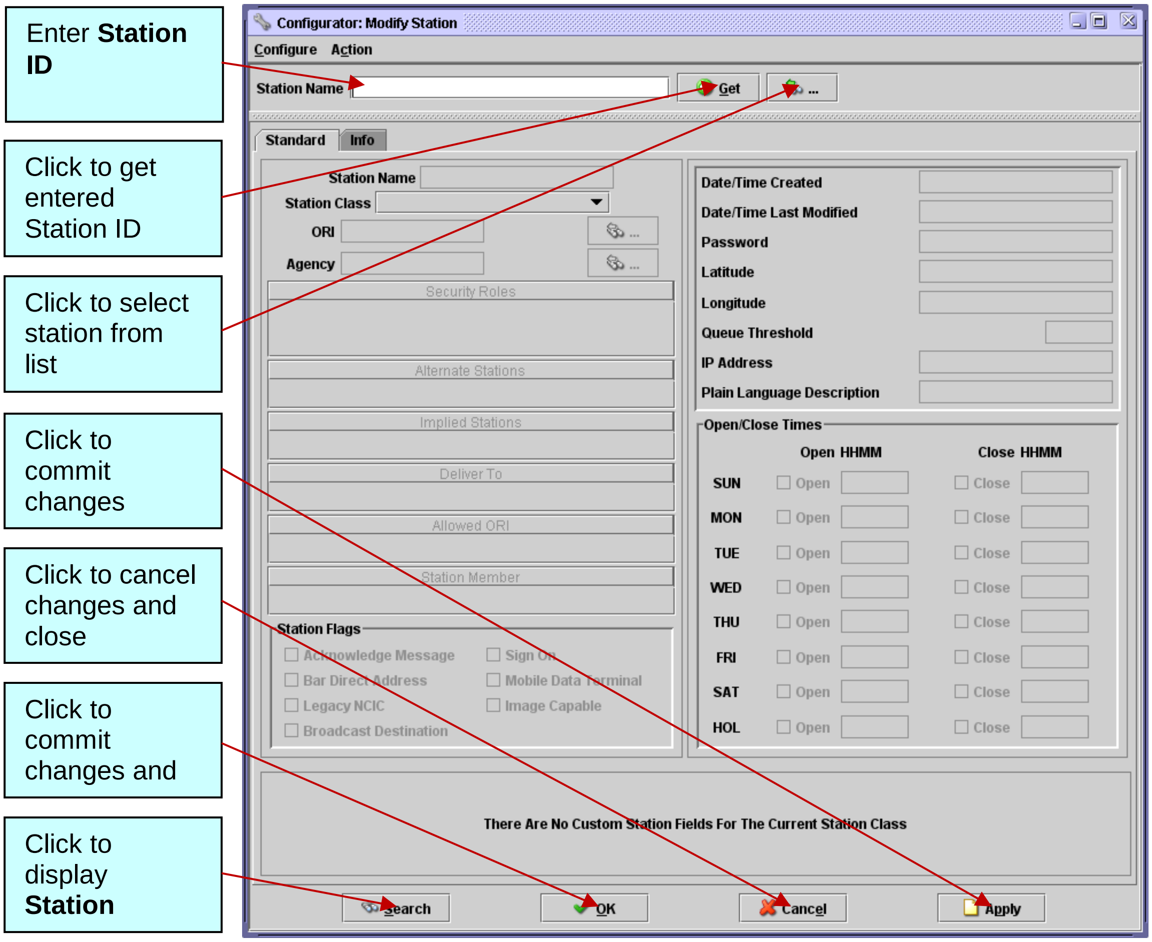
To modify an existing Station:

- Open the Configurator Module



Configurator

- Select **Station** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



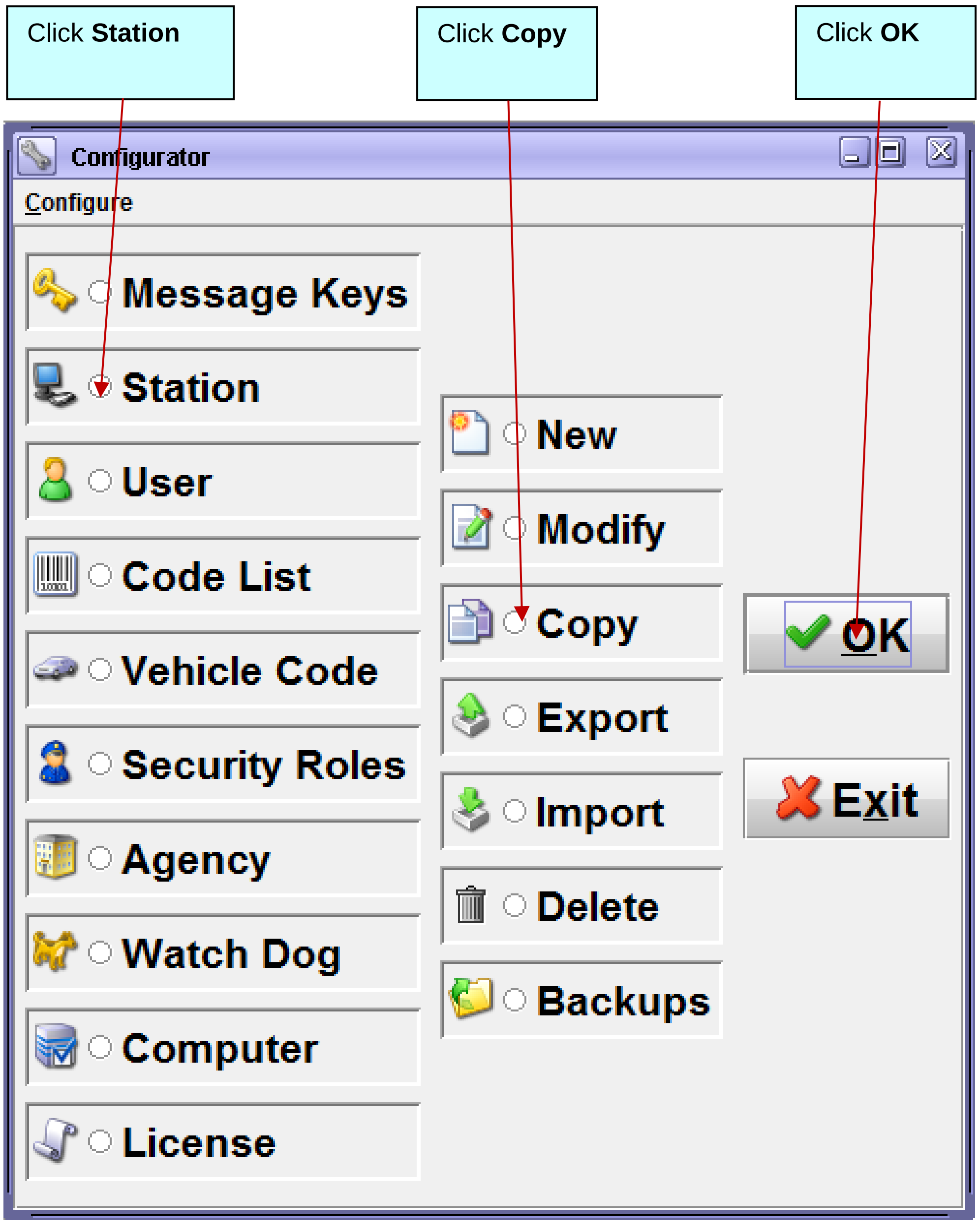
Modify Station

- Enter the Station ID, then click **Get** to retrieve the station record. You may click the **Search** button to display the **Get Station** window. This window will allow the user to perform a detailed search to locate station records contained in the system to choose from. To use the quick search feature, click the **Binocular** button to the right of the **Get** button.
- Modify the fields in the station record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

4.3 – Copy Existing Station

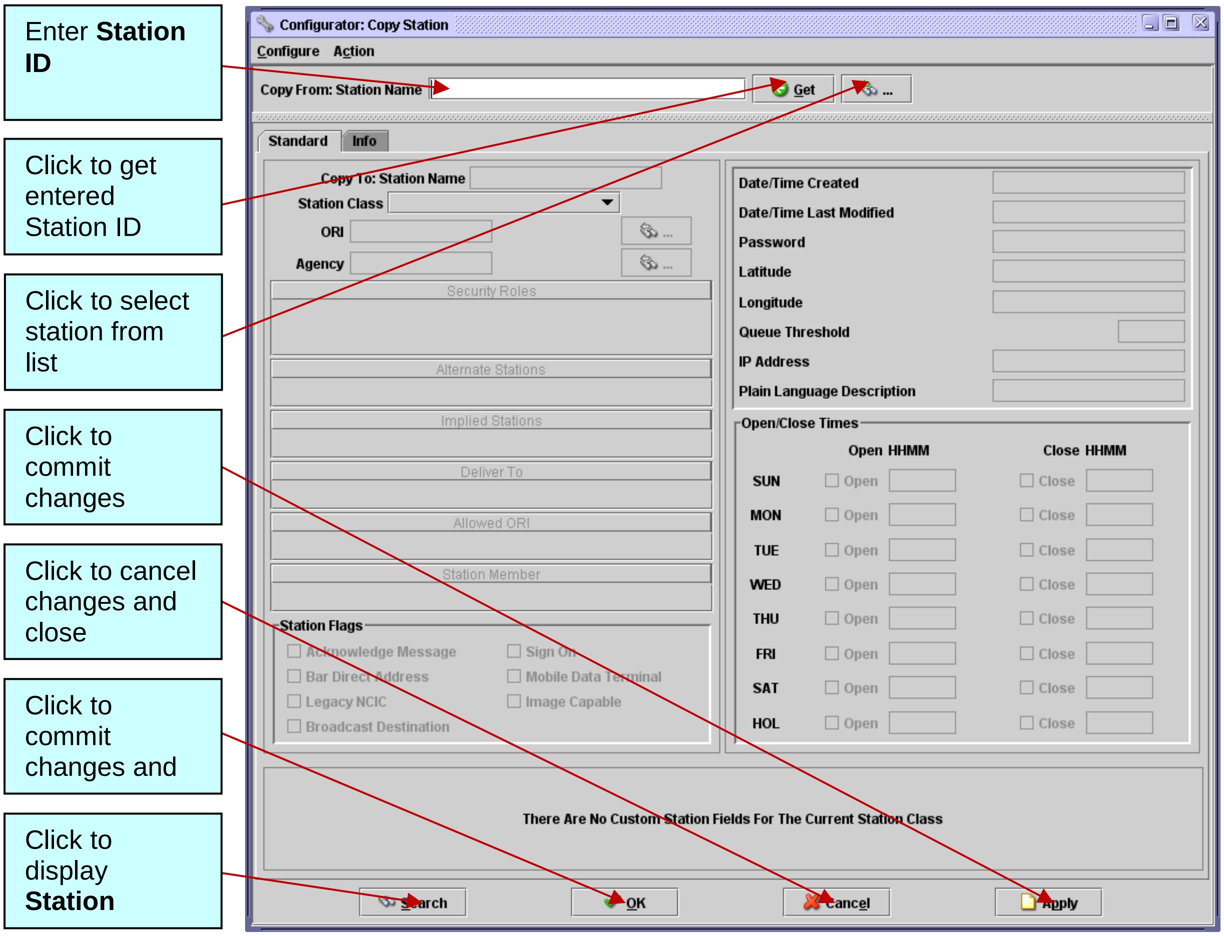
To copy an existing Station:

- Open the Configurator Module



Configurator

- Select **Station** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



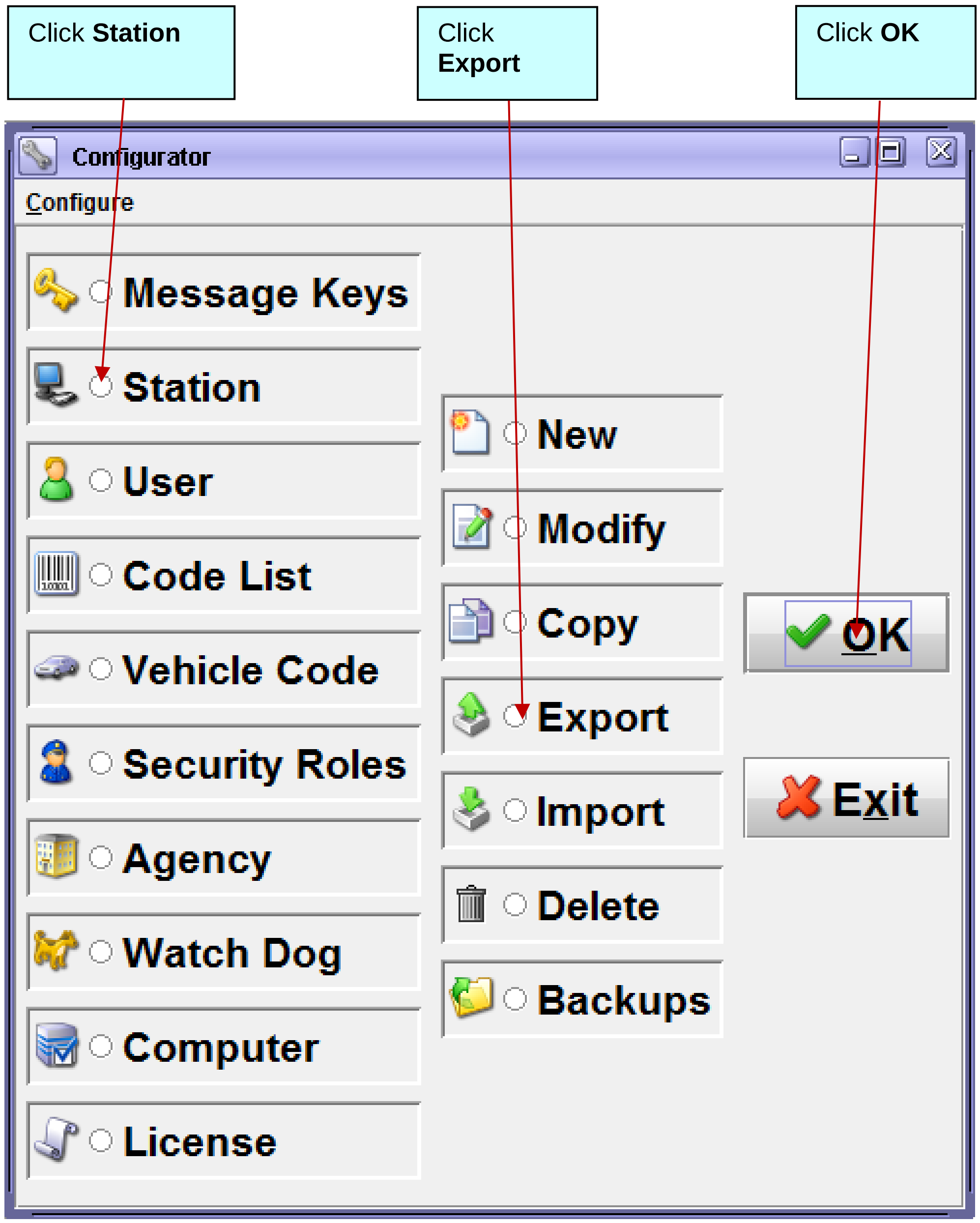
Copy Station

- Enter the Station ID then click **Get** to retrieve the station record. You may click the **Binocular** button to display the **Get Station Dialog Window**. This window will list all station records contained in the system for you to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Enter a unique (i.e. “copy-to”) **Station ID**.
- Modify the fields in the station record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

4.4 – Export Station

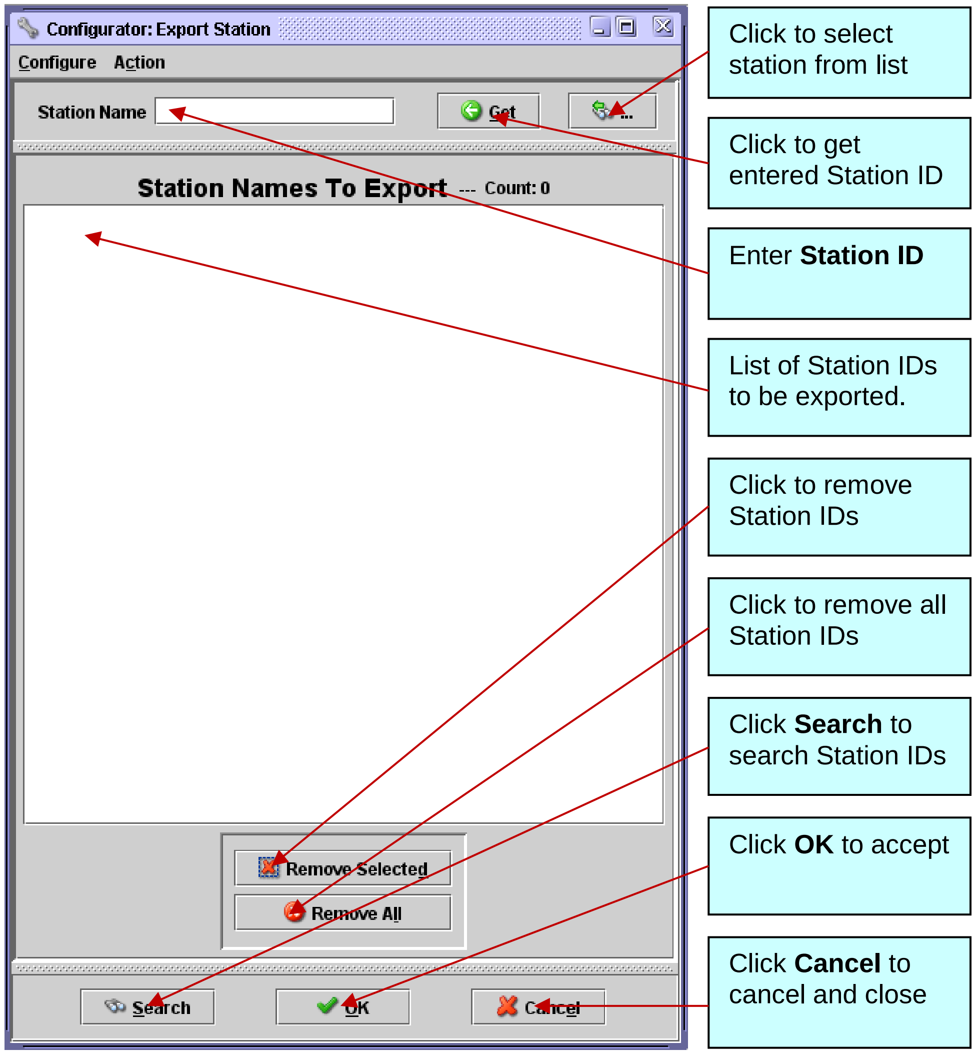
To export a Station:

- Open the Configurator Module



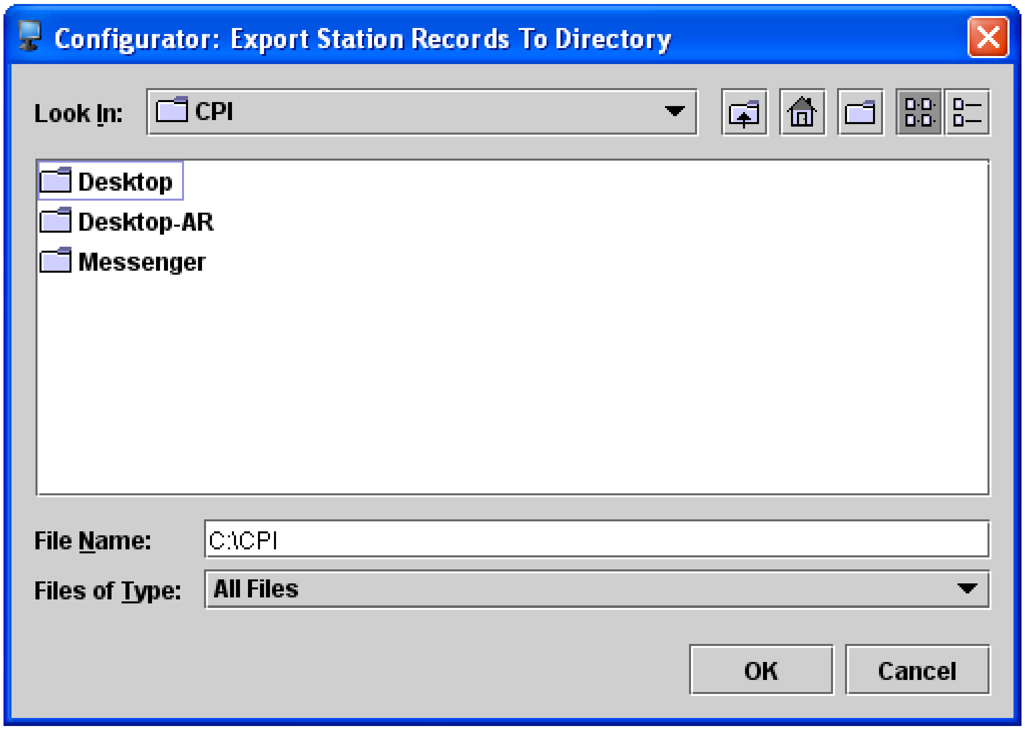
Configurator

- Select **Station** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Station

- Select the station records to export..
- Click **OK**.



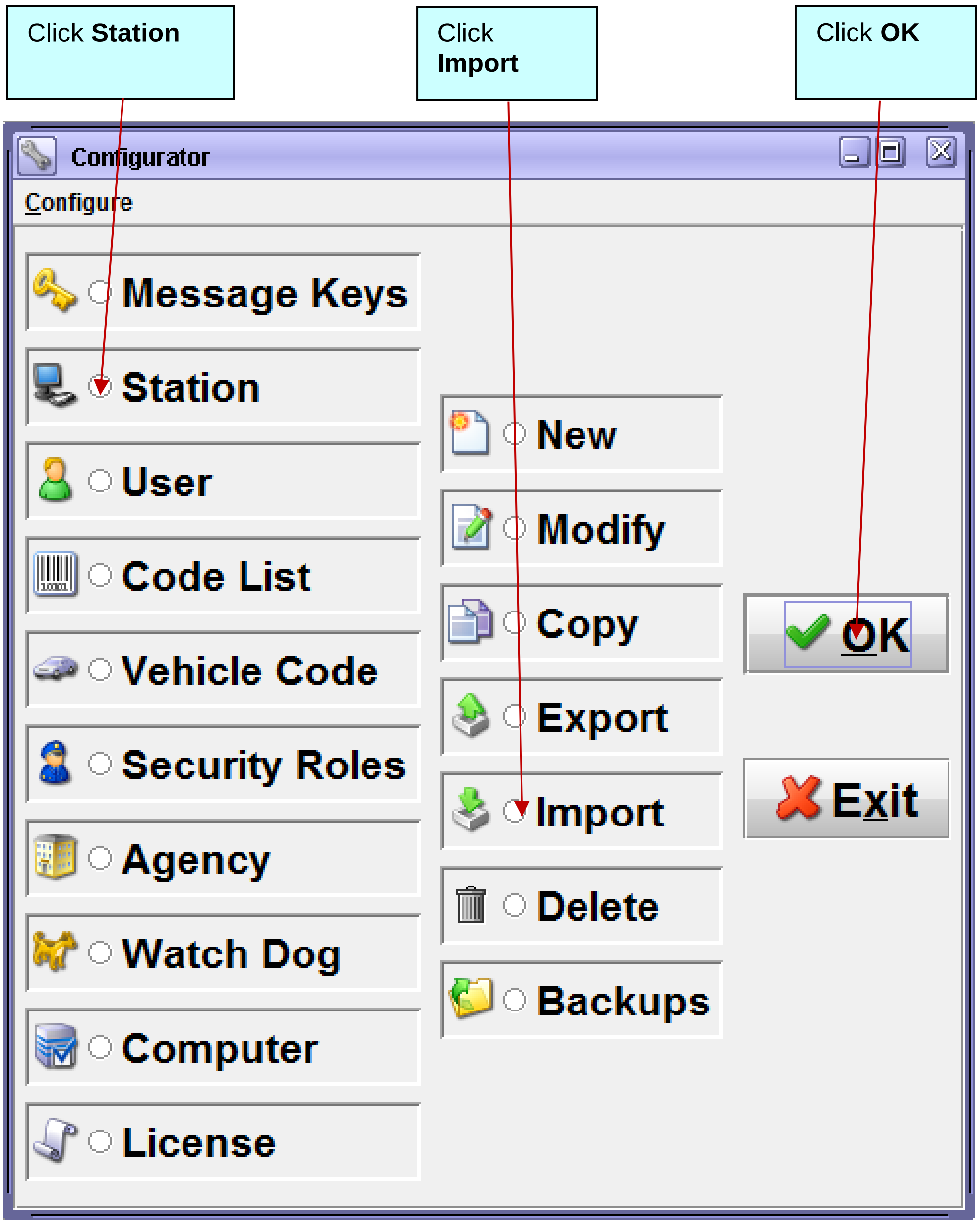
Export Station Records To Directory

- Select the directory on your local P.C. to export the station records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

4.5 – Import Station

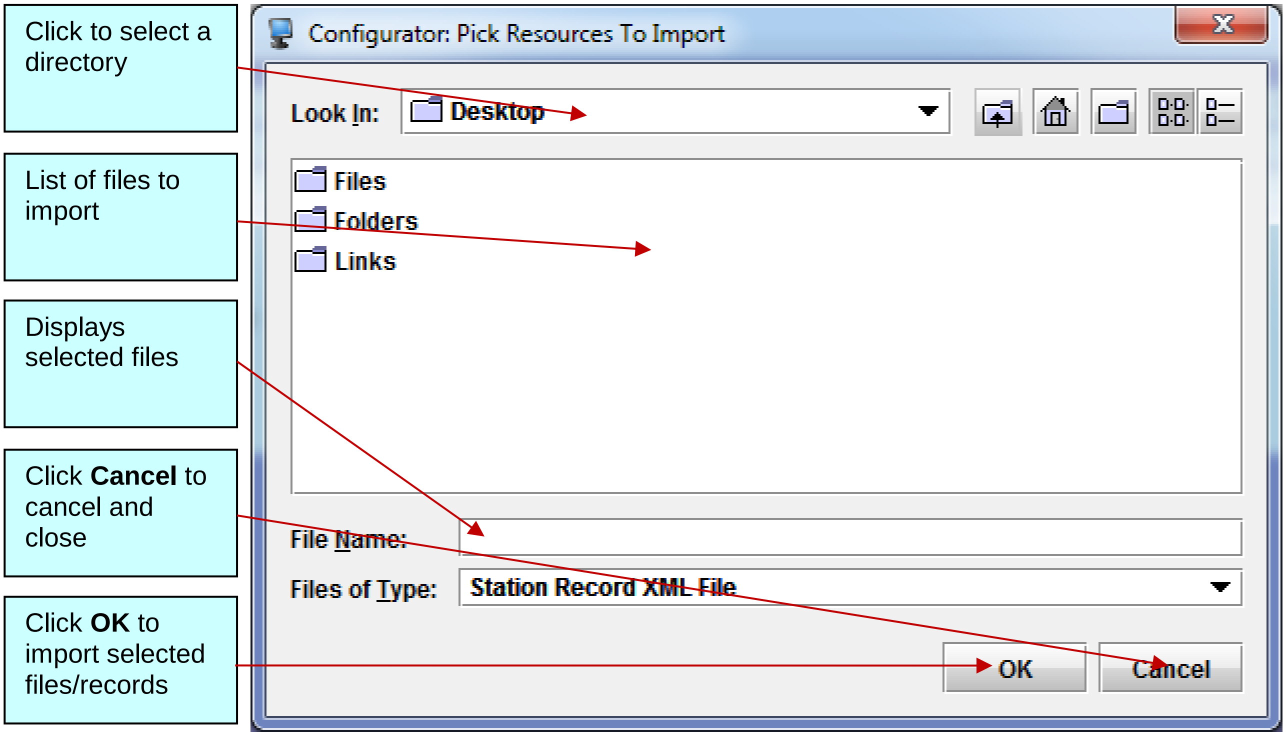
To import a Station:

- Open the Configurator Module



Configurator

- Select **Station** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



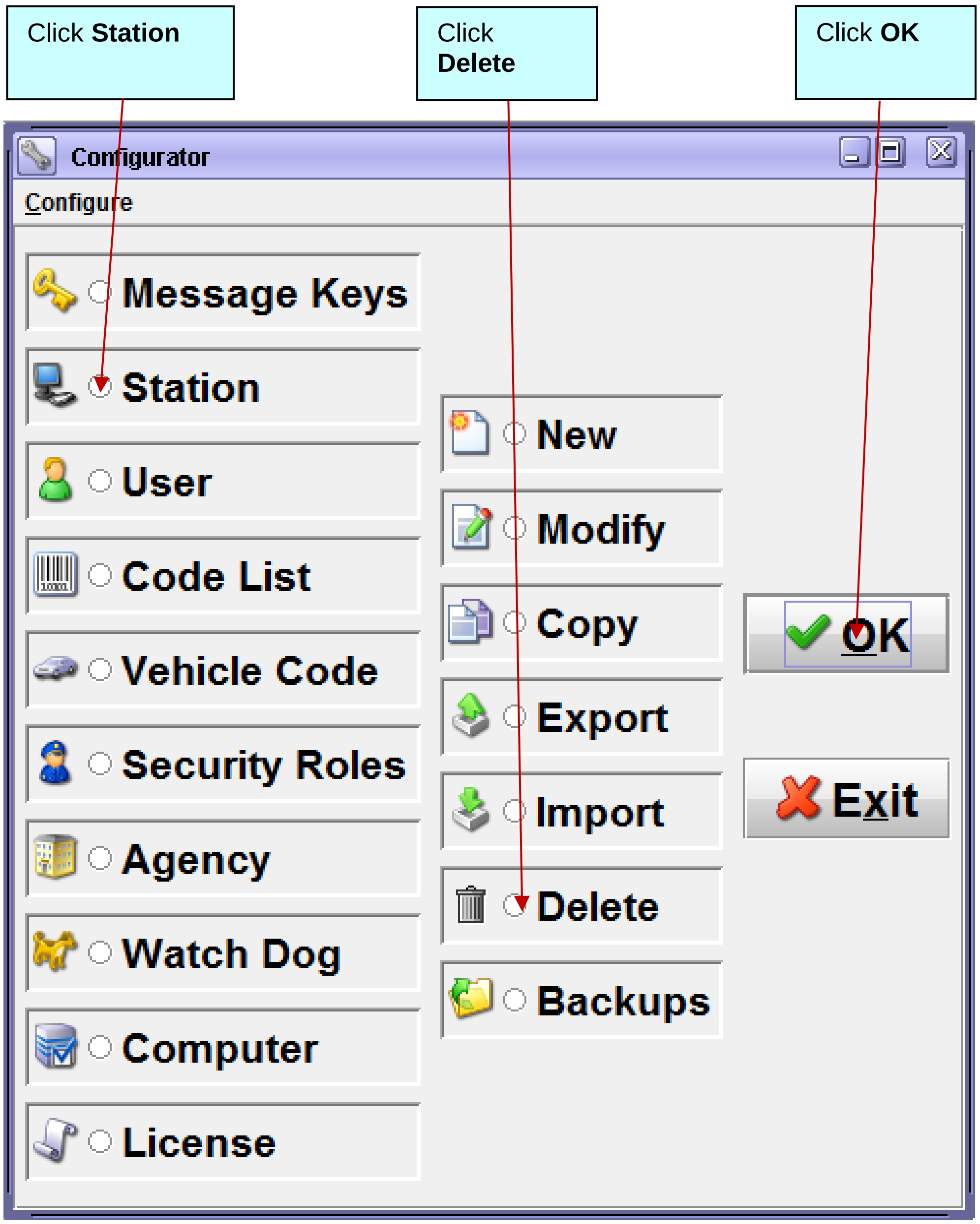
Pick Resources to Import

- Select the Station file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

4.6 – Delete Station

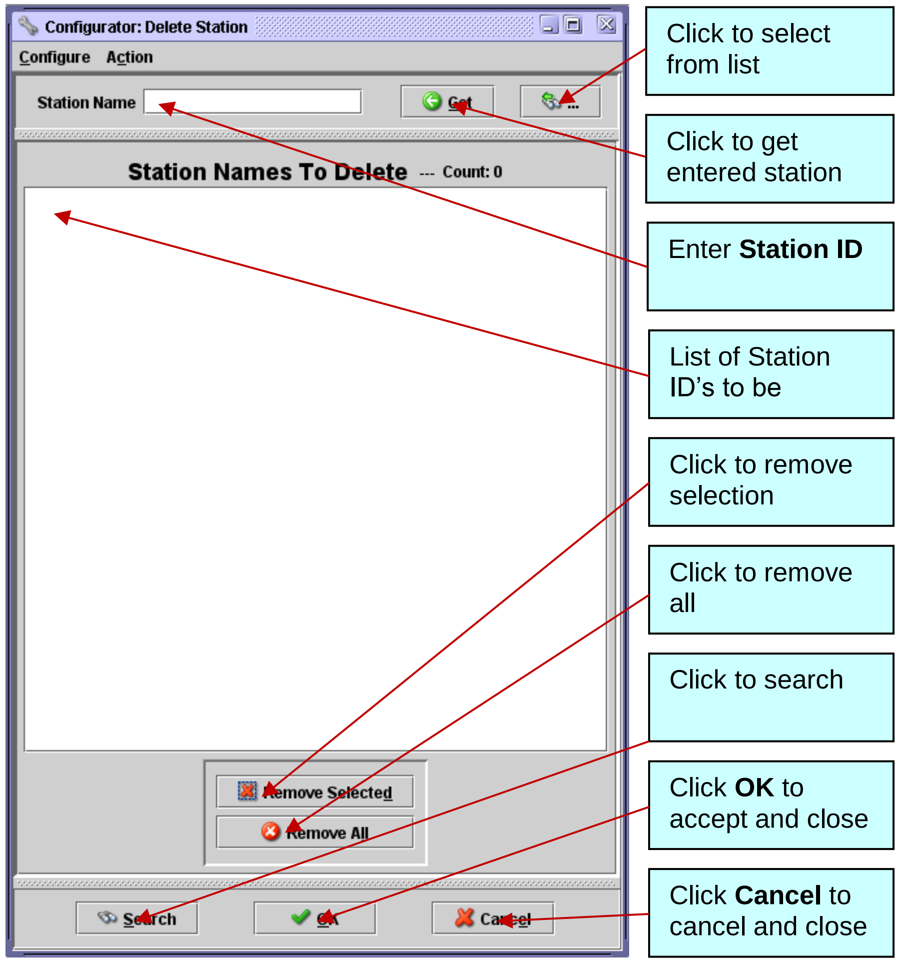
To delete a Station:

- Open the Configurator Module



Configurator

- Select **Station** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



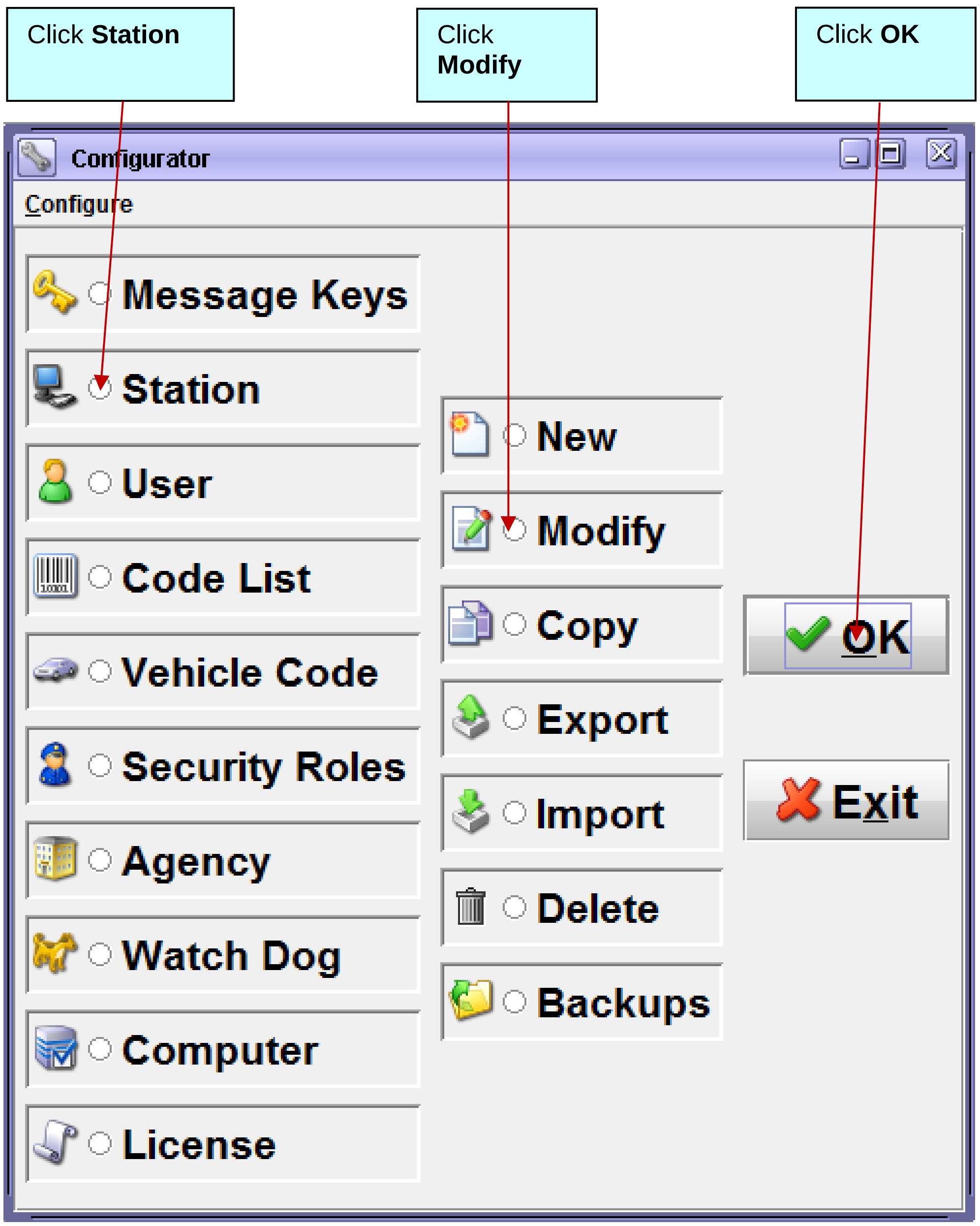
Delete Station

- Select the Station record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

4.7 – Global Modify Station

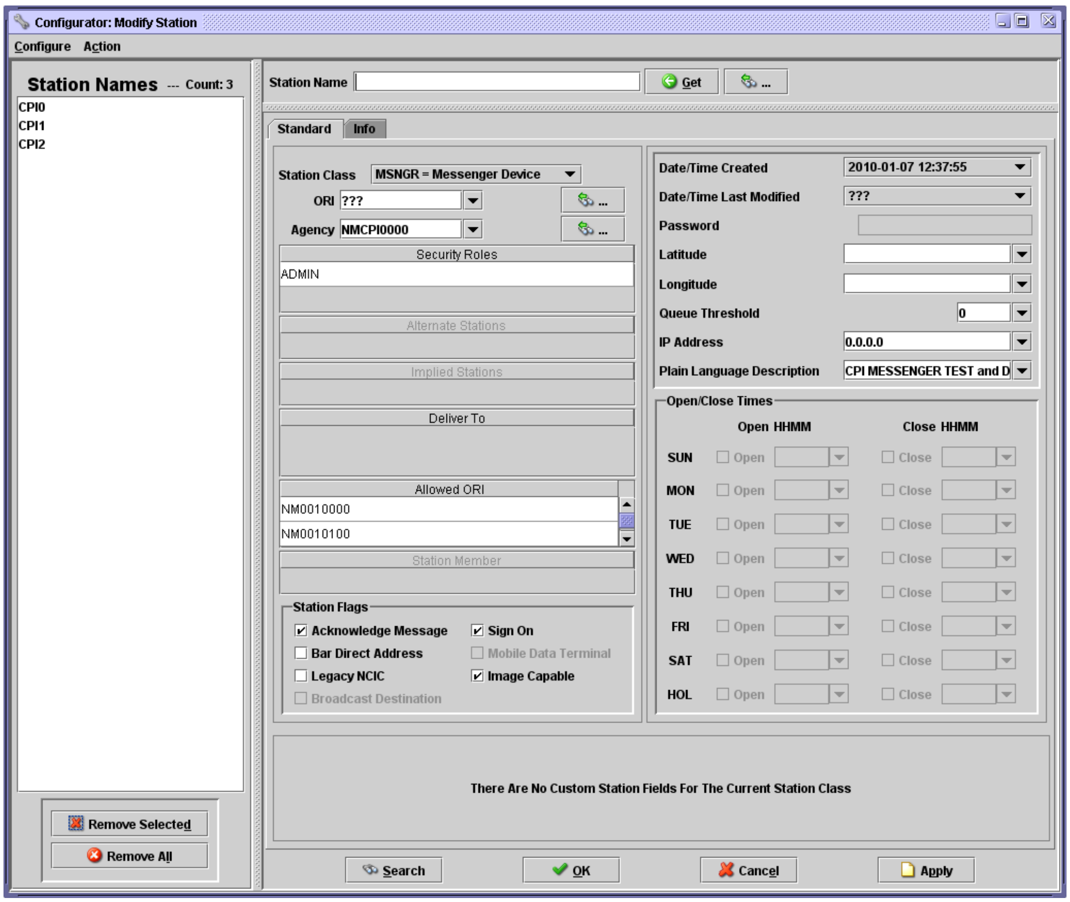
The OpenFox® Configurator is designed so that the station modify screen will automatically switch to a global station modify screen if the administrator selects two or more station records. To access the global station modify screen, the OpenFox® Station Configurator administrator must have their '**Enable Global Record Screen'** OpenFox® Configurator User Preference enabled.

- Open the Configurator Module



Configurator

- Select **Station** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.
- From within the station modify screen, select two or more station records. For example, click the Binocular button located on the top of screen, just to the right of the **Get** button. This will display the **Get Station** window. By holding down the Shift key and/or Ctrl key and clicking on more than one Station IDs with the mouse, the user can select more than one station record. After selecting two or more station records, click **OK** to retrieve the station records and load the station records into the station modify screen.



Global Modify Station

When in the global station modify screen, any changes you make to any field on the screen will be applied to all station records you have selected. The list of these station records is displayed in the **Station Names** list on the left-hand-side of the screen. The global station modify screen works just like the single-record station modify screen with the following primary differences:

- A **Station Names** list appears on the left-hand-side of the screen. This list contains the names of all Station IDs that will be modified when you click the **OK** or **Apply** button.
- Lists contain all values that exist in any of the listed records.
- Check boxes can be selected with a white background, selected with a grey bacckground, or unselected.

Text Fields - In the global configuration screen, text boxes can contain a text value, which indicates that all IDs in the list have this same value entered for this field. Text boxes can contain no text, which indicates that all IDs in the list have no value entered for this field. Text boxes can also contain the value of three consecutive question marks ("???"), which indicates that at least two IDs in the list have values entered for this field, but these values are different from each other.

Text fields in the global configurator screen will now display as a drop-down list instead of a plain text field. Clicking the drop-down list will display all values for this field across all IDs in the list. For exampe, if you select two records, and the first ID has an agency of AGENCY_1, but the second ID has an agency of AGENCY_2, the agency combo box on the global configurator screen will display '???'. The drop down agency combo box list would then contain both AGENCY_1 and AGENCY_2 as valid selectable values.

Entering text directly into the field is still an option, as the drop-down list does not make the field non-editable.

In the global configuration screen, whether a value is selected from the drop-down list, or a value is entered directly into a text box, that new value will be applied to this field for all records in the **IDs List** if you click the **OK** or **Apply** button. If there are multiple values in the field data list, and no changes are made to this field (if the text shown is still "???"), no changes will be made to this field for any IDs.

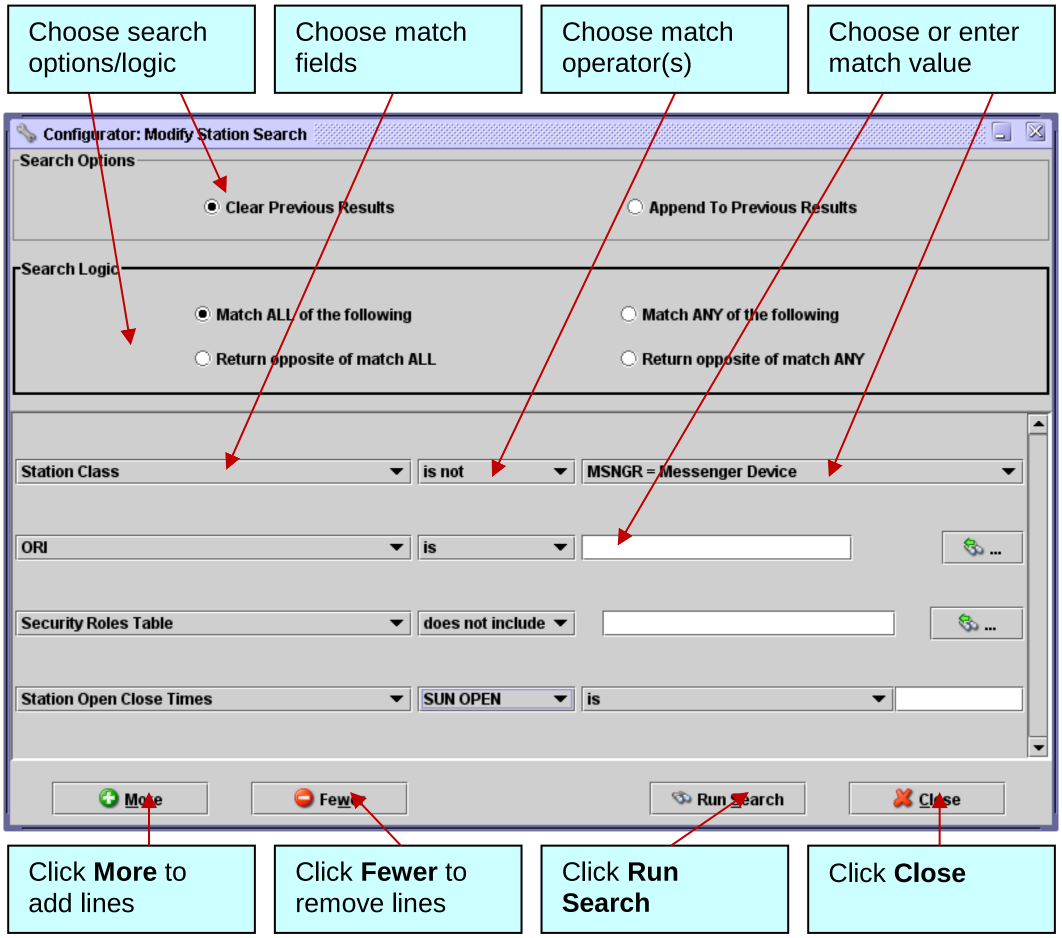
Check Boxes – In the global configuration screen, check boxes can display as selected (checked) with a white background, which indicates all IDs in the list have this value selected. Check boxes can be unselected (unchecked), which indicates all IDs in the list have this value unselected. Check boxes can also be selected with a grey background, indicating that some IDs in the list have this value selected, while other IDs in the list have this value unselected.

In the global configuration screen, whether a check box is selected or unselected, that new value will be applied to this field for all records in the **IDs List** if you click the **OK** or **Apply** button. If some records have this field selected, while others have this field unselected (if the check box is selected but has a grey background) and no changes are made to this field, no changes will be made to this field for any IDs.

Lists – In the global configuration screen, lists will show a combined list of all values applied to any ID. For example, if the first ID in the list has Security Role ROLE_1, while the second ID in the list has Security Roles ROLE_1 and ROLE_2, both ROLE_1 and ROLE_2 will be shown in the list. Removing only ROLE_1 from the list will leave the first ID with no Security Role, while the second ID will retain only ROLE_2. Removing only ROLE_2 from the list would leave both IDs with ROLE_1, and neither ID would have ROLE_2. These changes will not be applied until you click the **OK** or **Apply** button.

4.8 – Search Station

All station screens have a **Search** button located on the bottom-left. The full-featured station search window is provided as an aid to help locate station records. An example of this window is shown below. Any records found from the search will be used to populate the station screen.



Station Search

Search Options - If a previous search was performed, choose whether to clear the previous search results prior to performing the new search.

Search Logic - The logic to be used to perform the search.

> **Match ALL of the following** - Records will only be returned in the search results if they match ALL of the search field/operator/value combinations.
> **Match ANY of the following** - Records will be returned in the search results if they match AT LEAST ONE of the search field/operator/value combinations.
> **Return opposite of match ALL** - Returns all records not matched in the corresponding "ALL" search.
> **Return opposite of match ANY** - Returns all records not matched in the corresponding "ANY" search.

Match Field - Choose the field from the station to search against. Examples of valid values are **Station Name**, **Station Number**, **Station Class**, and **ORI**.

Match Operator - Choose the type of comparison operation to be performed against the match field. Only certain operators are valid for each **Match Field**. Examples of valid Match Operators are **is**, **is not**, **contains**, **does not contain**, **less than**, and **greater than**.

Match Value - Enter or select the value to be searched upon.

More - Click **More** to add another row of comparison field/operator/value selections.

Fewer - Click **Fewer** to remove the bottom row of comparison field/operator/value selections.

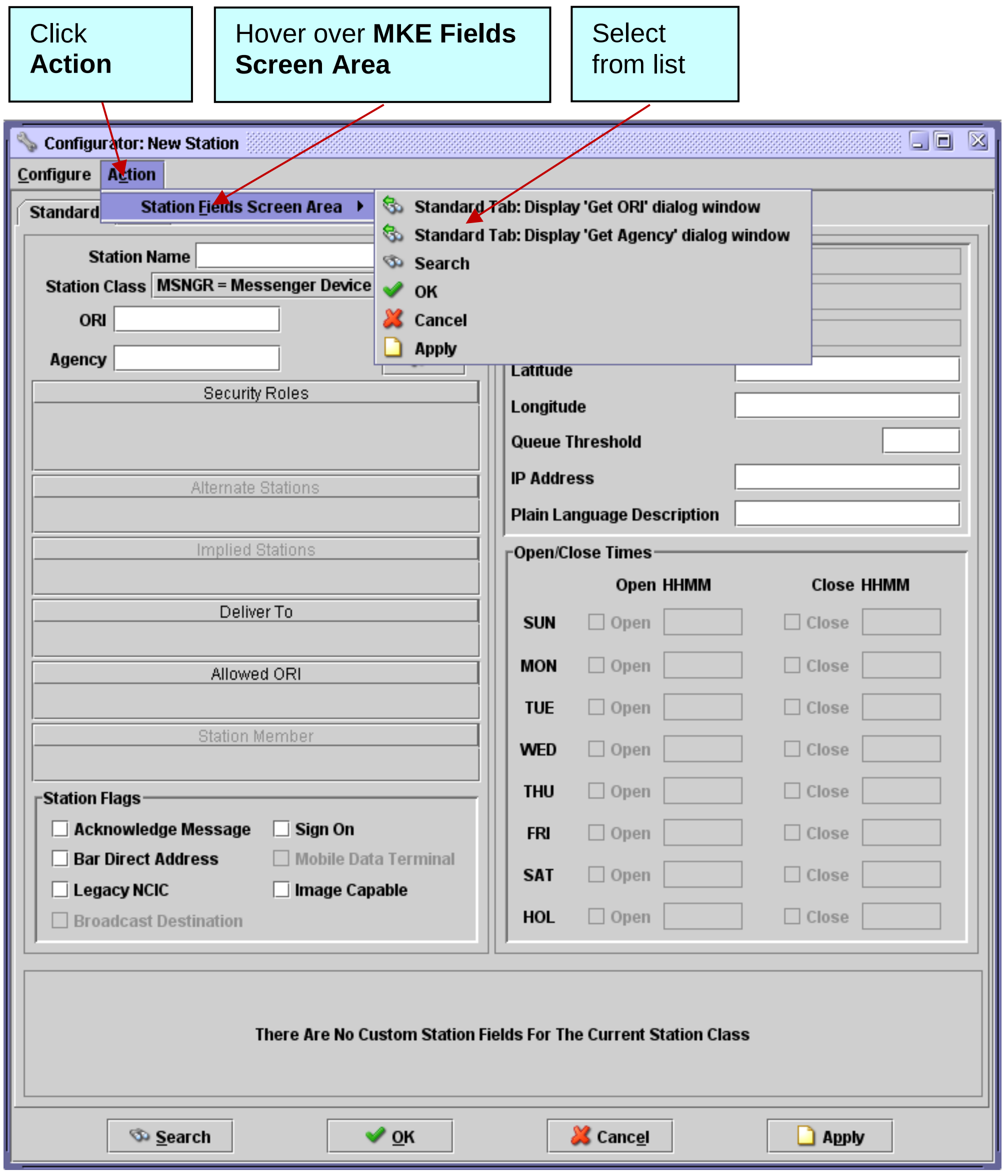
Run Search - Click **Run Search** to obtain a list of Station IDs based on the current comparison field/operator/value selections listed in the search window.

Close - Click **Close** to cancel the current search and close the search window.

4.9 – Station Menu Access

To use the Station Action menu:

- Open the Configurator Module.
- Open any Station screen containing an **Action** menu item.



Station Menu Access

- Click the **Action** menu.
- Hover over **Station Fields Screen Area**.
- Select from list provided.

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Chapter 5 – User Configuration

A person that connects to the OpenFox® Message Switch through a station is referred to as a "user". Each user has a single record entered into the database that defines how they connect to the OpenFox® Message Switch, what they are allowed to do, when they are allowed to log on, how they will interact with the OpenFox® Message Switch, and other information that administrators use to help them maintain their users.

The OpenFox® Configurator User screens are used to supply the information necessary to define User records. The OpenFox® Configurator User screens allow the administrator to create new User records, modify existing User records, copy existing User records, export User records, import User records, or delete User records, all with immediate effect and without any other software changes or system reboots.

NOTE: While changes to the user record are immediate, any changes to the user will not affect their current session if the user is logged in when the changes are applied to their user record. The user will have to close any open session and open a new session with this user for these changes to take effect. An administrator can force a user's session to reset by setting the user down and resetting the user. For more information on OpenFox® commands, see the *OpenFox® Systems Guide*.

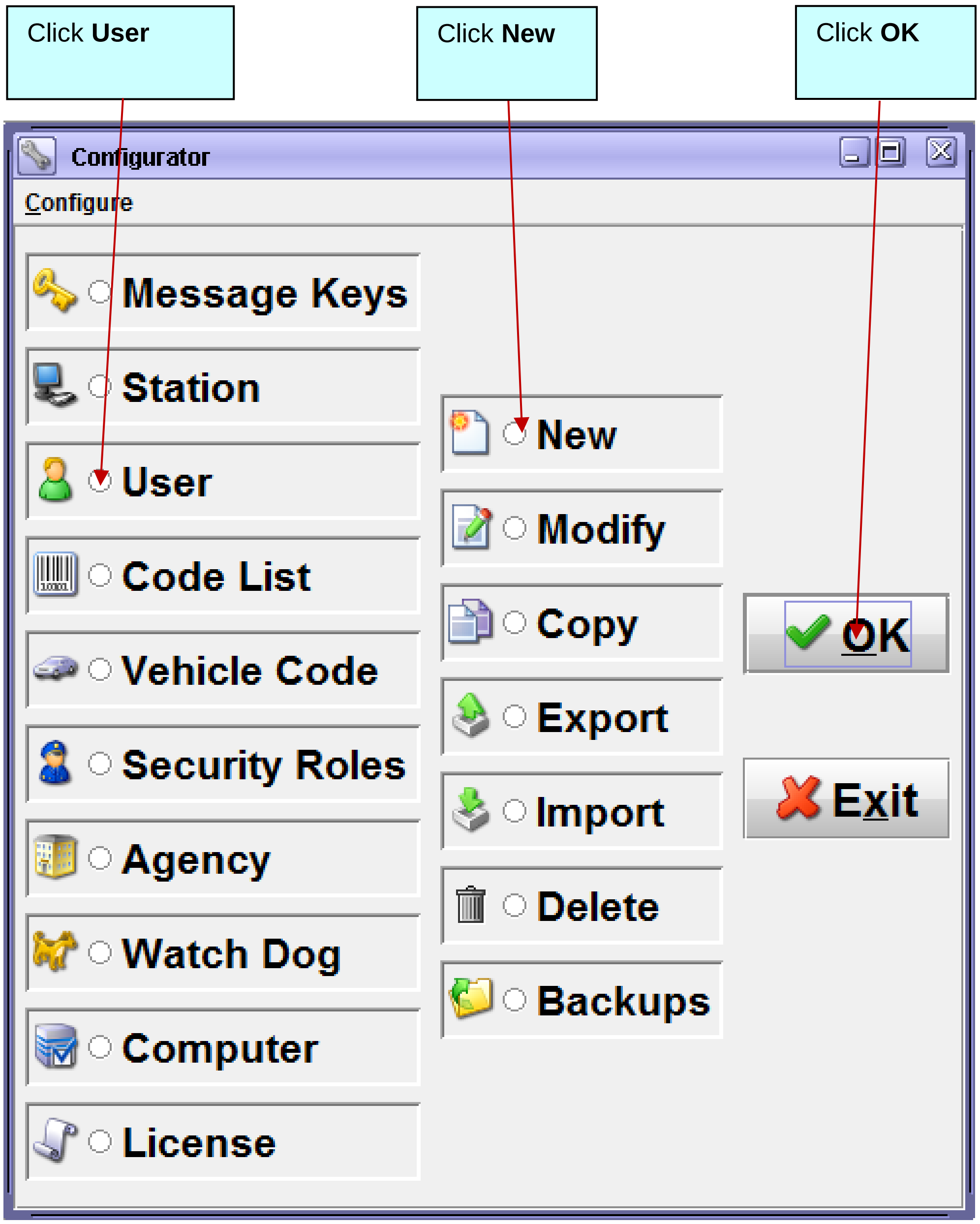
NOTE: Deleting a User record will not erase the user information from the system. The User information will still be available in the database. The user will, however, be unable to log in to a session from this User ID after the User record is deleted.

The OpenFox® Configurator User screens, their text-fields, lists, options and buttons are as follows:

5.1 – Add New User

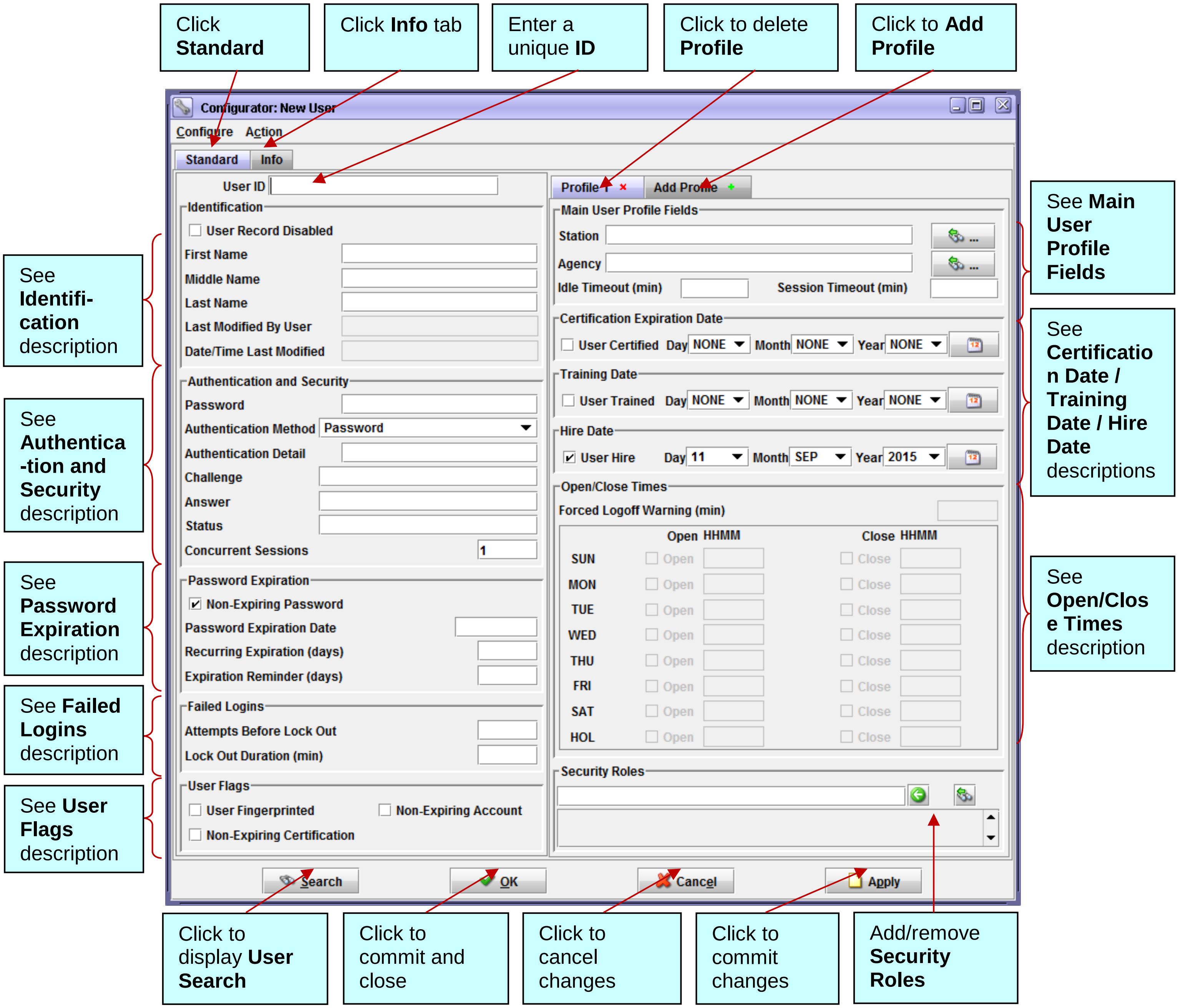
To configure a new User:

- Open the Configurator Module



Configurator

- Select **User** from the left column.
- Select **New** from the middle column.
- Click **OK**.


Click Standard
Click Info tab
Enter a unique ID
Click to delete Profile
Click to Add Profile
Configurator: New User
Configure Action
Standard Info
User ID
Identification
User Record Disabled
First Name
Middle Name
Last Name
Last Modified By User
Date/Time Last Modified
Authentication and Security
Password
Authentication Method Password
Authentication Detail
Challenge
Answer
Status
Concurrent Sessions 1
Password Expiration
Non-Expiring Password
Password Expiration Date
Recurring Expiration (days)
Expiration Reminder (days)
Failed Logins
Attempts Before Lock Out
Lock Out Duration (min)
User Flags
User Fingerprinted
Non-Expiring Account
Non-Expiring Certification
Profile 1
Add Profile
Main User Profile Fields
Station
Agency
Idle Timeout (min)
Session Timeout (min)
Certification Expiration Date
User Certified Day NONE Month NONE Year NONE
Training Date
User Trained Day NONE Month NONE Year NONE
Hire Date
User Hire Day 11 Month SEP Year 2015
Open/Close Times
Forced Logoff Warning (min)
Open HHMM
Close HHMM
SUN MON TUE WED THU FRI SAT HOL
Open
Close
Security Roles
Search OK Cancel Apply
See Identifi-cation description
See Authentica-tion and Security description
See Password Expiration description
See Failed Logins description
See User Flags description
See Main User Profile Fields
See Certification Date / Training Date / Hire Date descriptions
See Open/Close Times description
Click to display User Search
Click to commit and close
Click to cancel changes
Click to commit changes
Add/remove Security Roles

New User

5.1.1 – Minimum Requirements for Users

The minimum required fields needed to create a new user record are:

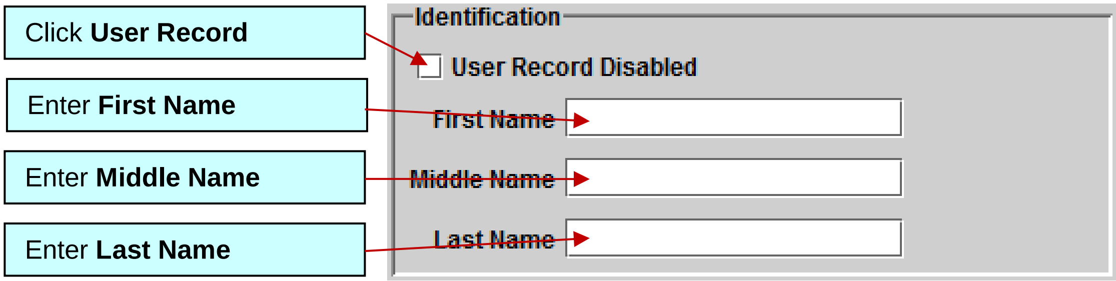
- **User ID**
- **First Name**
- **Last Name**
- **Password**
- **Authentication Method**

After the OpenFox® User Configurator administrator fills in the required and non-required fields as desired, the administrator can click on either the **OK** or **Apply** button to commit the new user record to the database. Optionally the OpenFox® User Configurator administrator can click on the **Search** button to retrieve an existing user record to aid in filling in the Configurator New User screen's fields.

The procedure for creating a new user is covered in detail below:

- Enter a unique **User ID**.
- Enter both a **First Name** and **Last Name**.
- Enter a **Password**.
- Choose an **Authentication Method**.
- Enter data in all other optional fields as desired.
- Click **OK** to accept changes and clear screen, **Cancel** to cancel the changes and return to the main OpenFox® Configurator screen or **Apply** to accept changes and stay in this screen.

5.1.2 – Identification Description



Identification Section

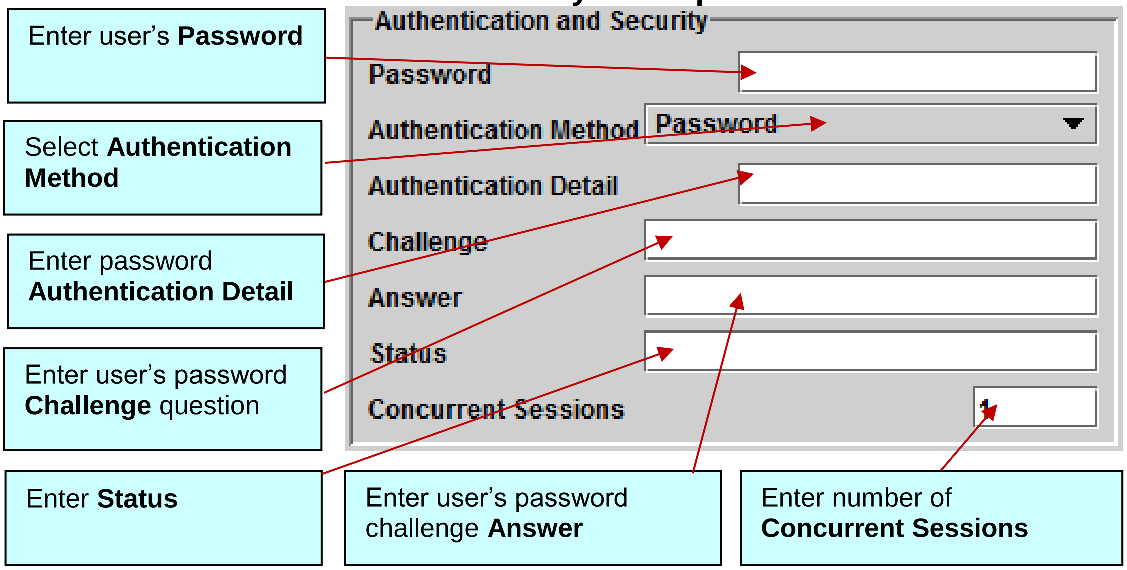
User Record Disabled - Select this field if you wish to disable this user record but leave it intact (without deleting it).

First Name - Enter the user's first name.

Middle Name - Enter the user's middle name.

Last Name - Enter the user's last name.

5.1.3 – Authentication and Security Description



Authentication and Security Section

Password - The password a user will use to log in to the OpenFox®. There is one password per User ID. The **password** field is masked in the User Configuration screen. Setting the password to the exact same text as the User ID will force the user to reset their password at their next logon.

Authentication Method - Choose the type of authentication this User ID must use to access the system. Choices are:

> **Password** - User must enter a text password to access the OpenFox®.
> **Token** - User will utilize an authentication token to access the OpenFox®.
> **LDAP** - User must authenticate against an LDAP server to access the OpenFox®.
> **Radius** - User must authenticate against a Radius server to access the OpenFox®.

Authentication Detail - Optional plain text explanation of this User's Authentication Process, related to the authentication method.

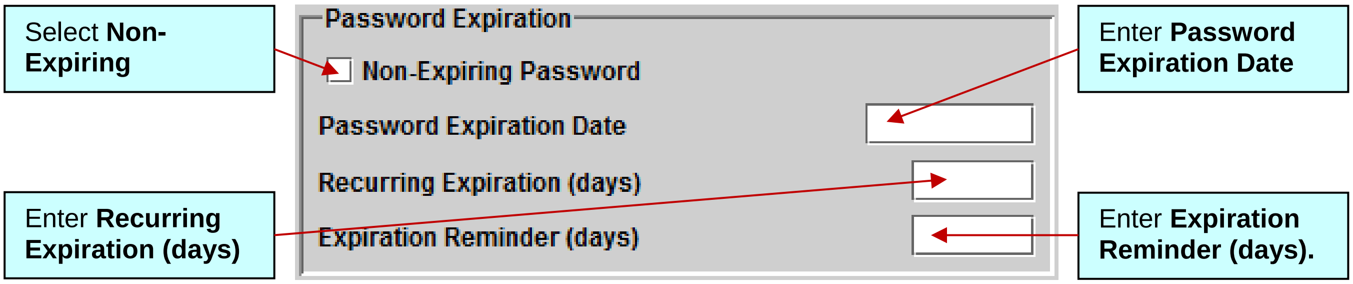
Challenge - Optional text that is used to verify a user's identity.

Answer - Optional answer to the Challenge question. This should be included if the **Challenge** field contains data.

Status - Optional plain text explanation of this User's status.

Concurrent Sessions - The number of concurrent OpenFox® sessions a user can establish at one time. If this number is zero (0), there is no limit.

5.1.4 – Password Expiration



Password Expiration Section

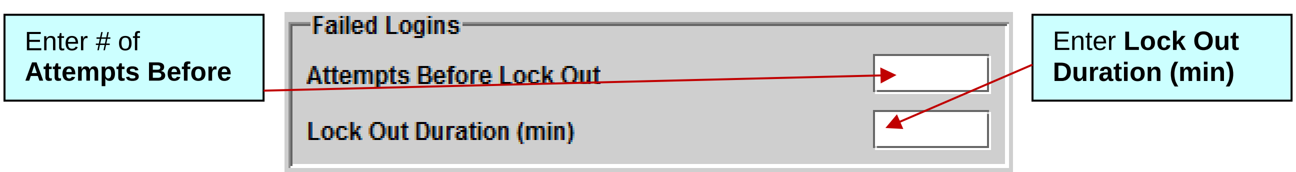
Non-Expiring Password - Select this box to set this user's password to never expire.

Password Expiration Date - The date this user's password will expire. The date is entered in YYYYMMDD format. Leave blank for no date.

Recurring Expiration (days) - The number of days that this user's password will remain active if the password remains unchanged. At the end of this number of days, this user's password will automatically be set to expire if it has not been reset by the user.

Expiration Reminder (days) - The number of days prior to automatic expiration that starts a reminder message process for this user. This process sends a reminder message to the user upon login to the OpenFox® that their password will expire soon.

5.1.5 – Failed Logins

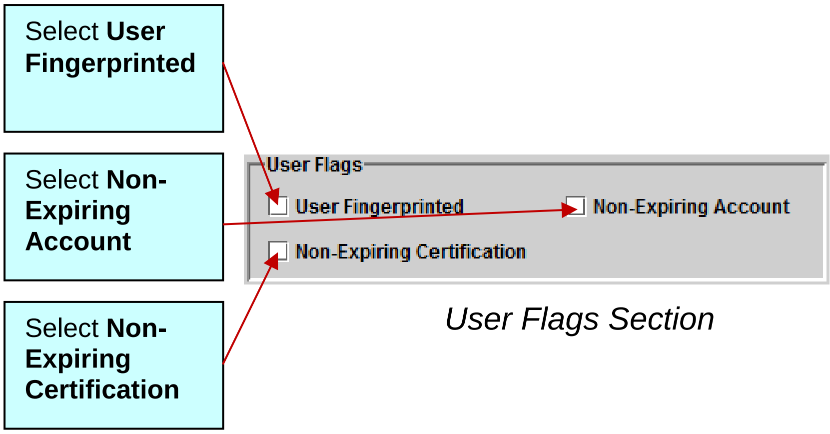


Failed Logins Section

Attempts Before Lock Out - Enter the number of consecutive unsuccessful login attempts a user will be allowed to attempt prior to the system locking this User ID out of the OpenFox®. Once locked, the user will have to wait the number of minutes specified in the **Lock Out Duration (min)** field, or have their password reset.

Lock Out Duration (min) - The number of minutes the user must wait to re-try a login after their User has been locked out. Locking a user occurs after the number of consecutive unsuccessful logon attempts specified in the **Attempts Before Lock Out** field.

5.1.6 – User Flags



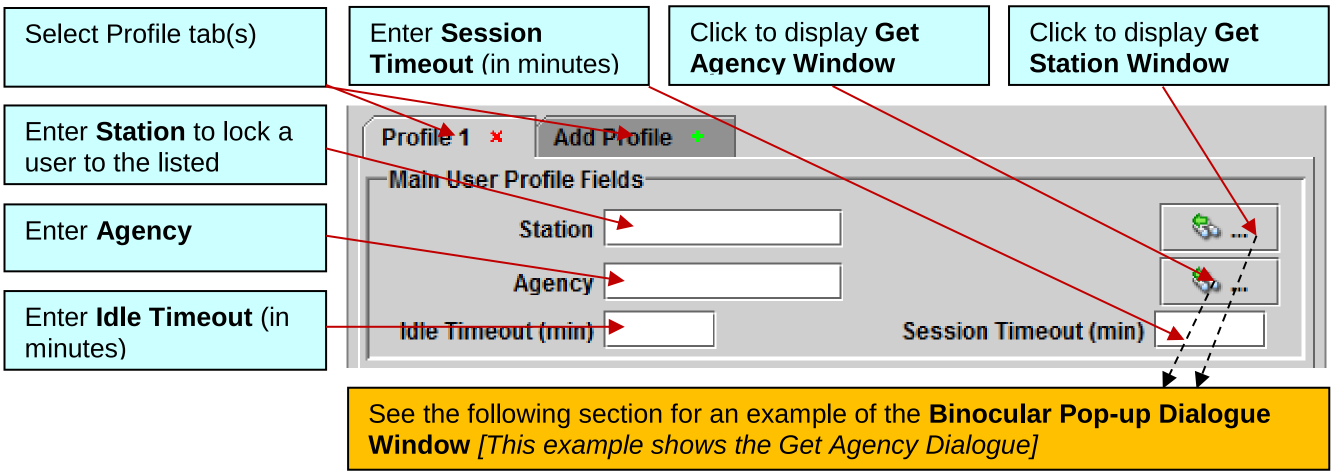
User Flags Section

User Fingerprinted - Optional field to indicated to administrators that this user has been fingerprinted.

Non-Expiring Account - Optional field to indicated to the system to disregard account inactivity. If selected, this user's account will not be disabled even if inactive for the set inactivity time period.

Non-Expiring Certification - Optional field to indicated to the system to disregard training and certification dates. If selected, this user's account will never expire even if their recertification date has passed.

5.1.7 – Main User Profile Fields



Main User Profile Fields

Station - Enter a Station ID in this field to indicate which station, or list of stations, that this user profile is authorized to use to log in to the OpenFox®. Leave this field blank to indicate that this user is authorized to log in from any station.

Agency - Enter the Agency ID where this user profile belongs. Leave this field blank to indicate that this user is not assigned to any specific agency.

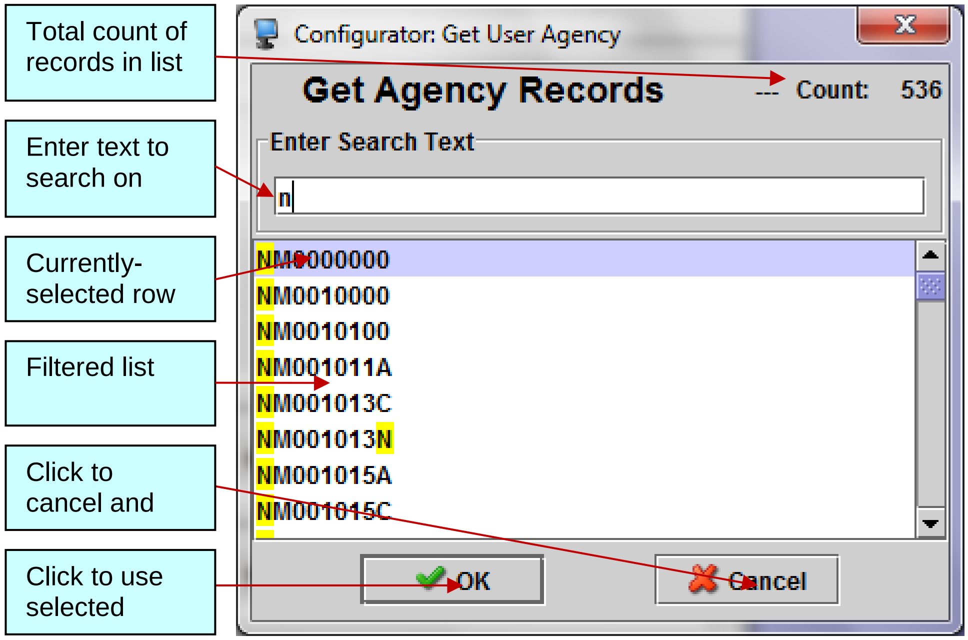
Idle Timeout (min) - Enter the amount of time a user's session is allowed to remain idle before the user is automatically logged out of the OpenFox®.

Session Timeout (min) - Enter the amount of time a user's session is allowed to remain active before the user is automatically logged out of the OpenFox®. Session timeouts occur even if the user's session is not idle.

Profile # - Click the tab associated with the Profile # you wish to set up. Clicking the red "X" at the right of the Profile # tab will delete the profile.

Add Profile - Click the Add Profile tab to add a new profile. Only one profile is allowed per agency for each user.

5.1.7.1 – Binocular Pop-up Window



Binocular Pop-up Window

Enter Search Text - Enter the text to use to filter the list. The list below the search text will dynamically and automatically change to only display records that match the text entered.

The currently-selected row(s) in the list have a non-white background color.

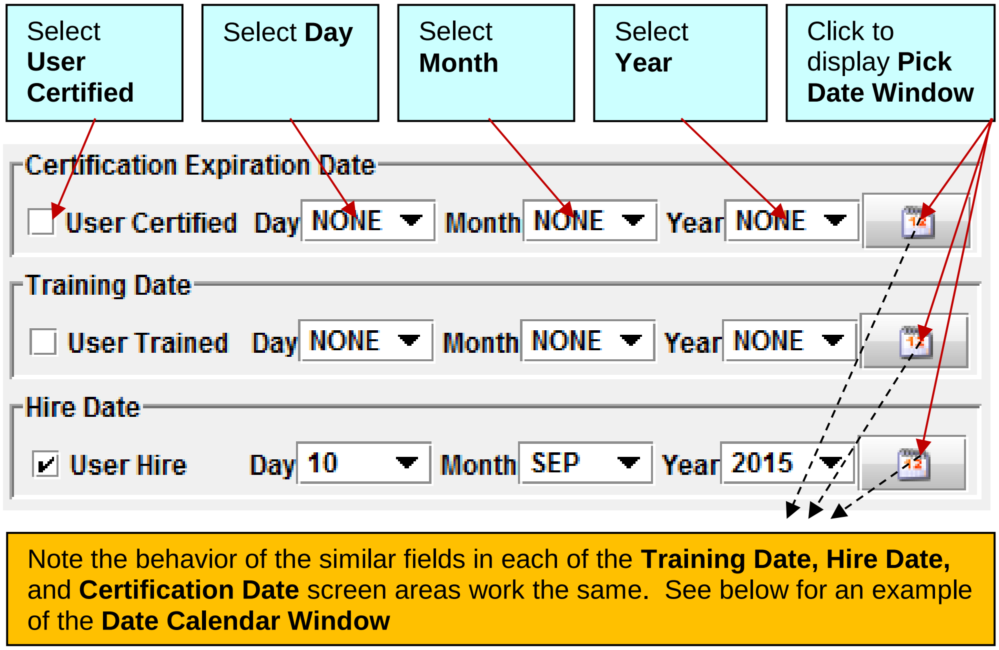
The filtered list will highlight the text used to filter the search.

The total count of items in the filtered list will be shown at the top-right of the "Get Records" pop-up dialogue window.

Once the desired list is selected, click **OK** to populate the previous form with the selected data.

Click **Cancel** to cancel the search and go back to the previous form without populating any data from the list.

5.1.8 – Certification Expiration, Training, and Hire Date



User Profile Date Fields

User Certified - Select to indicate that this user has been certified. Selecting this field activates the **Day**, **Month**, and **Year** drop-down lists.

User Trained - Select to indicate that this user has been trained. Once selected, choose the date from the fields following.

Hire Date - Select to indicate that this user has been hired. Once selected, choose the date from the fields following.

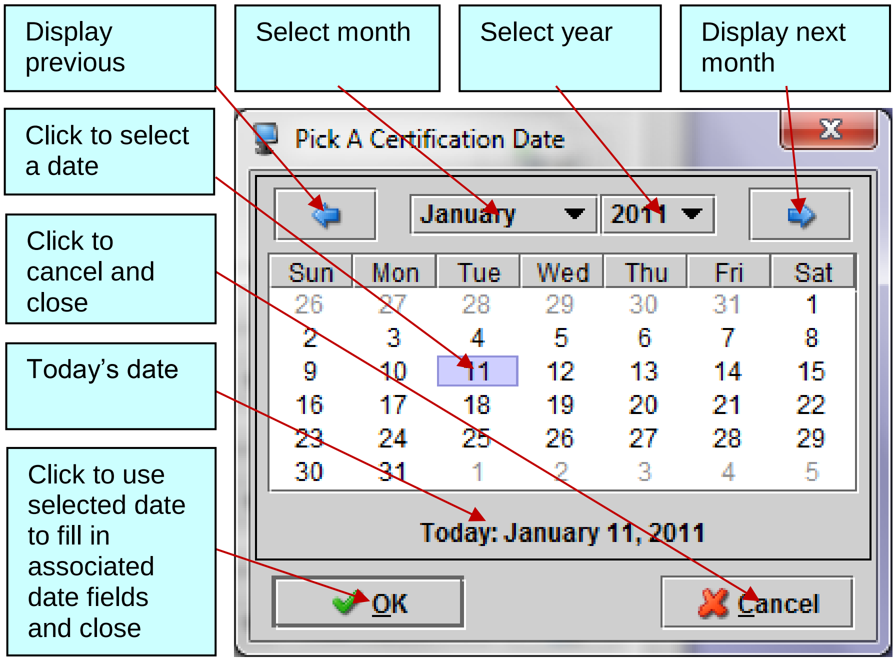
Day - Select the day of the month. Valid choices are 01 through 31, with the max number dependent upon the month.

Month - Select the month. The value will be shown as the first three alphabetic characters of the month name.

Year - Select the four-character year. Valid choices are between 1970 and 2037.

Pick Date Button – Click to pop up a **Pick A Date** calendar-style window. This window allows you to choose the Day, Month, and Year from an interactive calendar window.

5.1.8.1 – Pick A Date Pop-up Calendar Window



Date Pop-up Window

Previous Month Button - Click the **Previous Month Button** to display the previous month from the one that is currently displayed.

Month Drop-down - Click the **Select Month Drop-down** to display a list of month names to choose from. This will choose the month from the currently-displayed year.

Year Drop-down - Click the **Select Year Drop-down** to display a list of years to choose from. This will display the currently-selected month from the newly-selected year.

Next Month Button - Click the **Next Month Button** to display the next month from the one that is currently displayed.

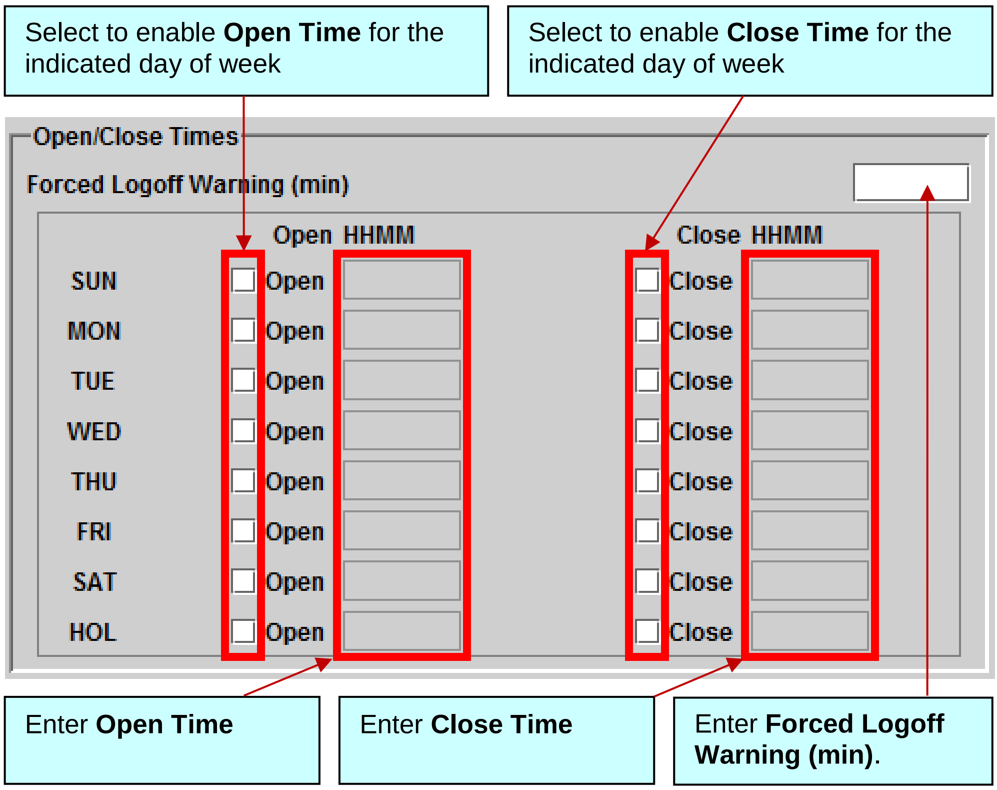
Click a date in the currently-displayed month/year to select it. The selected date will be displayed with a non-white background.

Today's date will always display at the bottom of the window.

Click **OK** to close the **Pick A Date** window and populate the user date fields.

Click **Cancel** to cancel the date selection and close this window.

5.1.9 – Open/Close Times



Open/Close Times

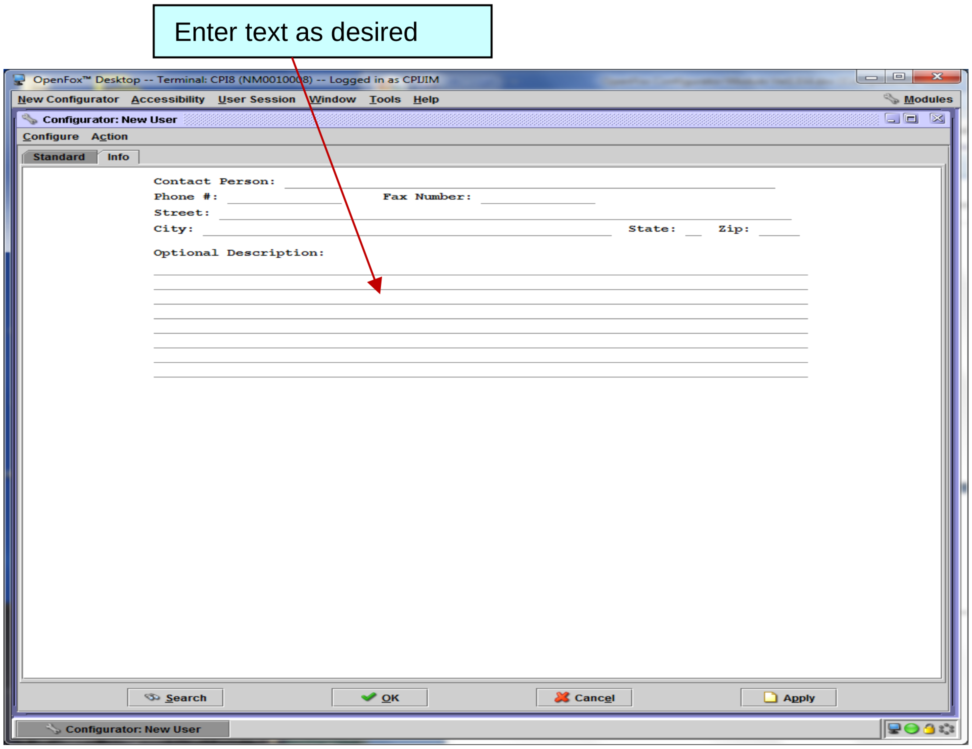
Enter **Forced Logoff Warning (min)**. If a user will be automatically logged off of the OpenFox® due to a Close Time, the user will receive a warning message. This field indicates the number of minutes before a user is automatically logged off that the OpenFox® will send the warning message. If blank or zero (0), the user will just be logged off with no warning.

Open Time is entered in HHMM format.

Close Time is entered in HHMM format.

5.1.10 – Info Tab

Click on the '**Info**' tab to enter the optional information for a user record.



Info Tab

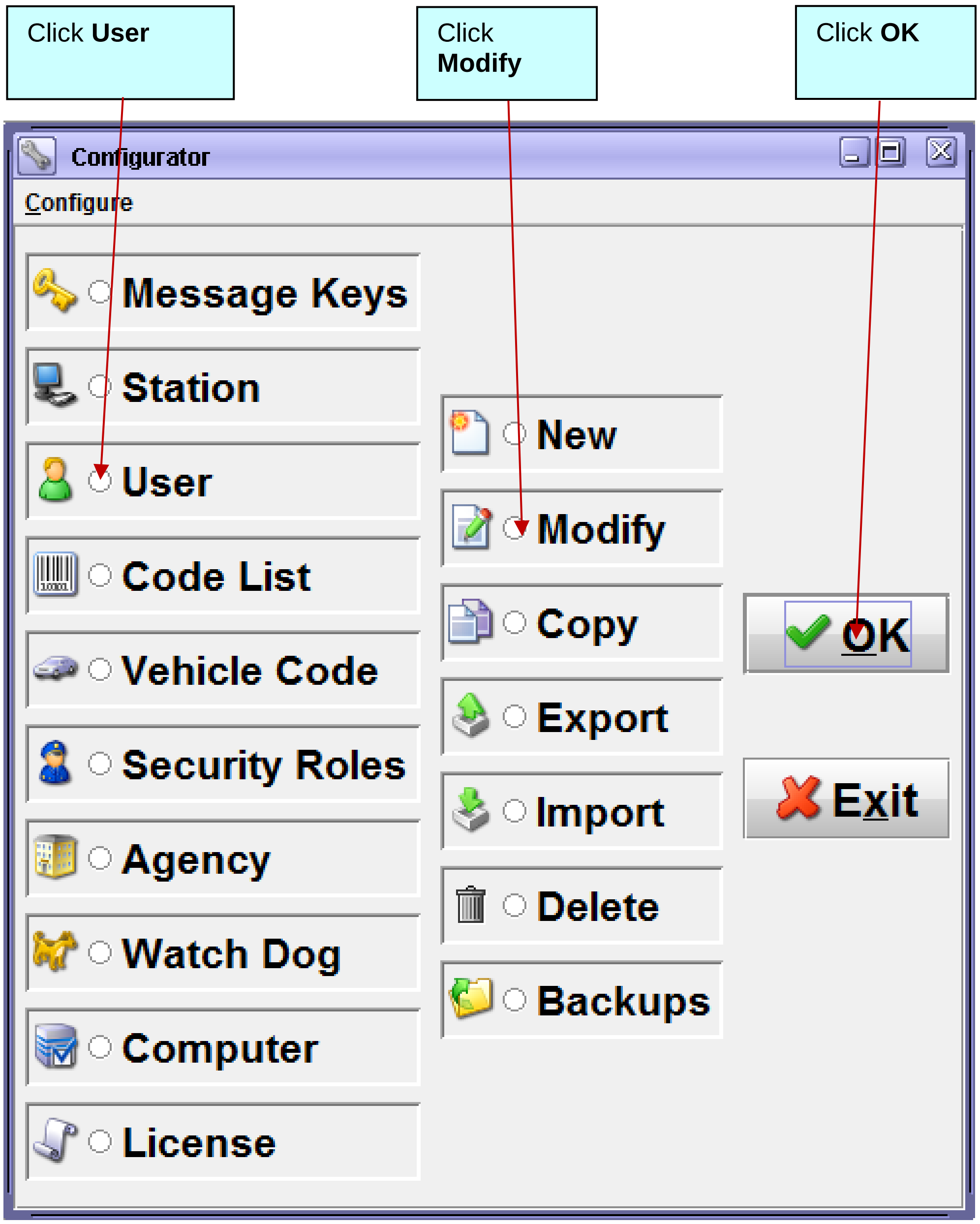
The contents of this screen are customized per each client's OpenFox® system. All data in this tab is optional.

NOTE: The image above only shows an example of how the user info screen can be configured.

5.2 – Modify Existing Users

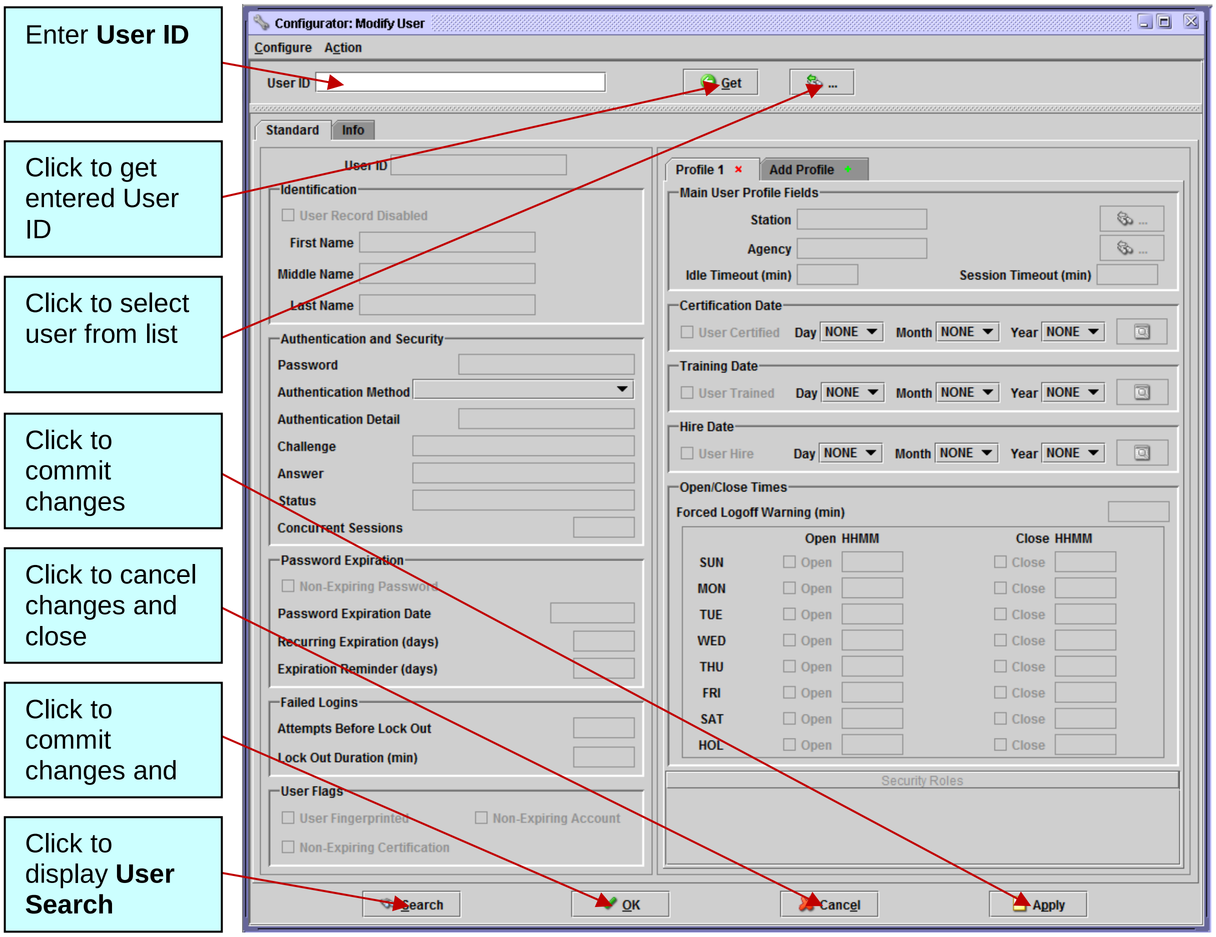
To modify an existing User:

- Open the Configurator Module



Configurator

- Select **User** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



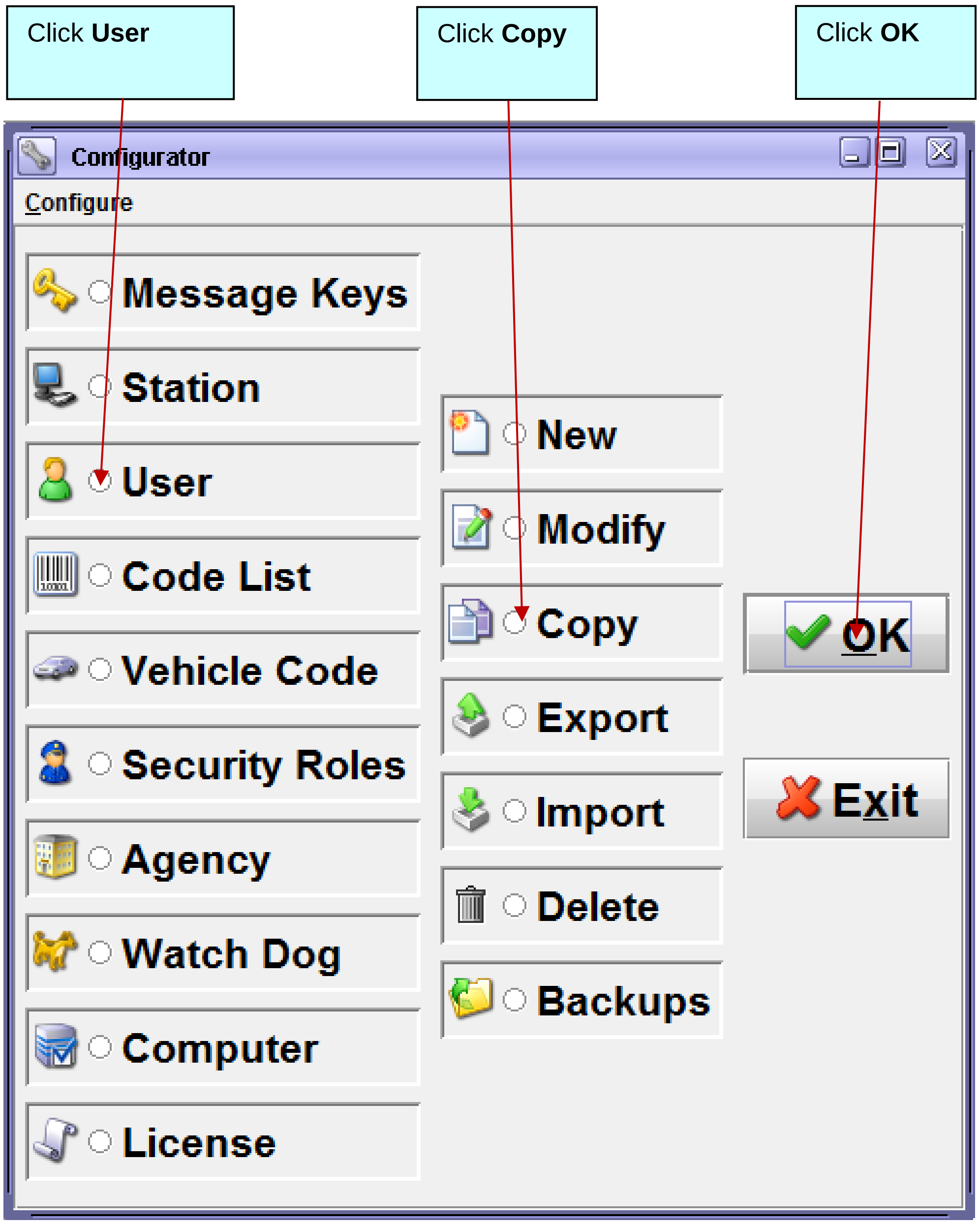
Modify User

- Enter the User ID then click **Get** to retrieve the user record. You may click the **Binocular** button to display the **Get User Dialog Window**. This window will list all user records contained in the system for you to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Modify the fields in the user record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

5.3 – Copy Existing User

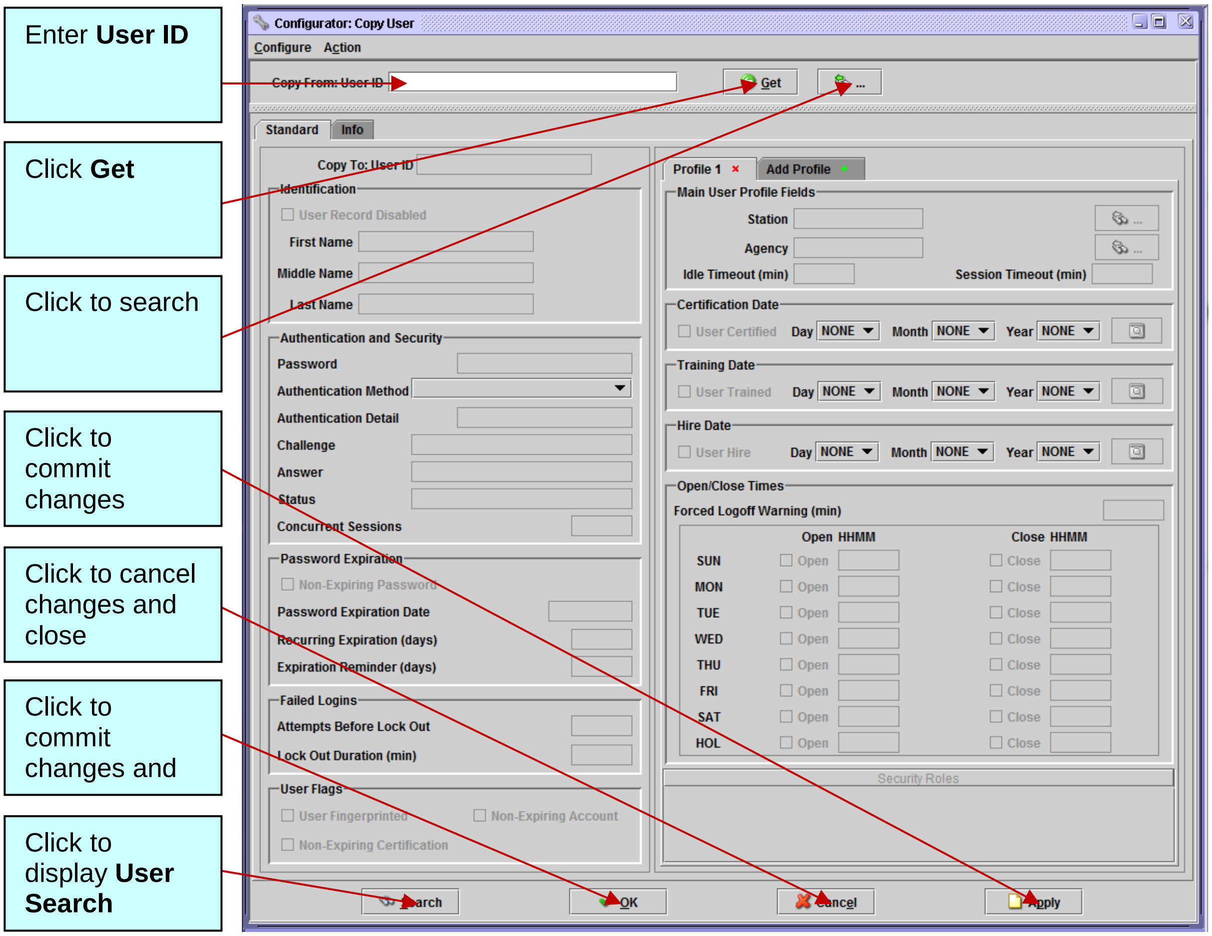
To copy an existing User:

- Open the Configurator Module



Configurator

- Select **User** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



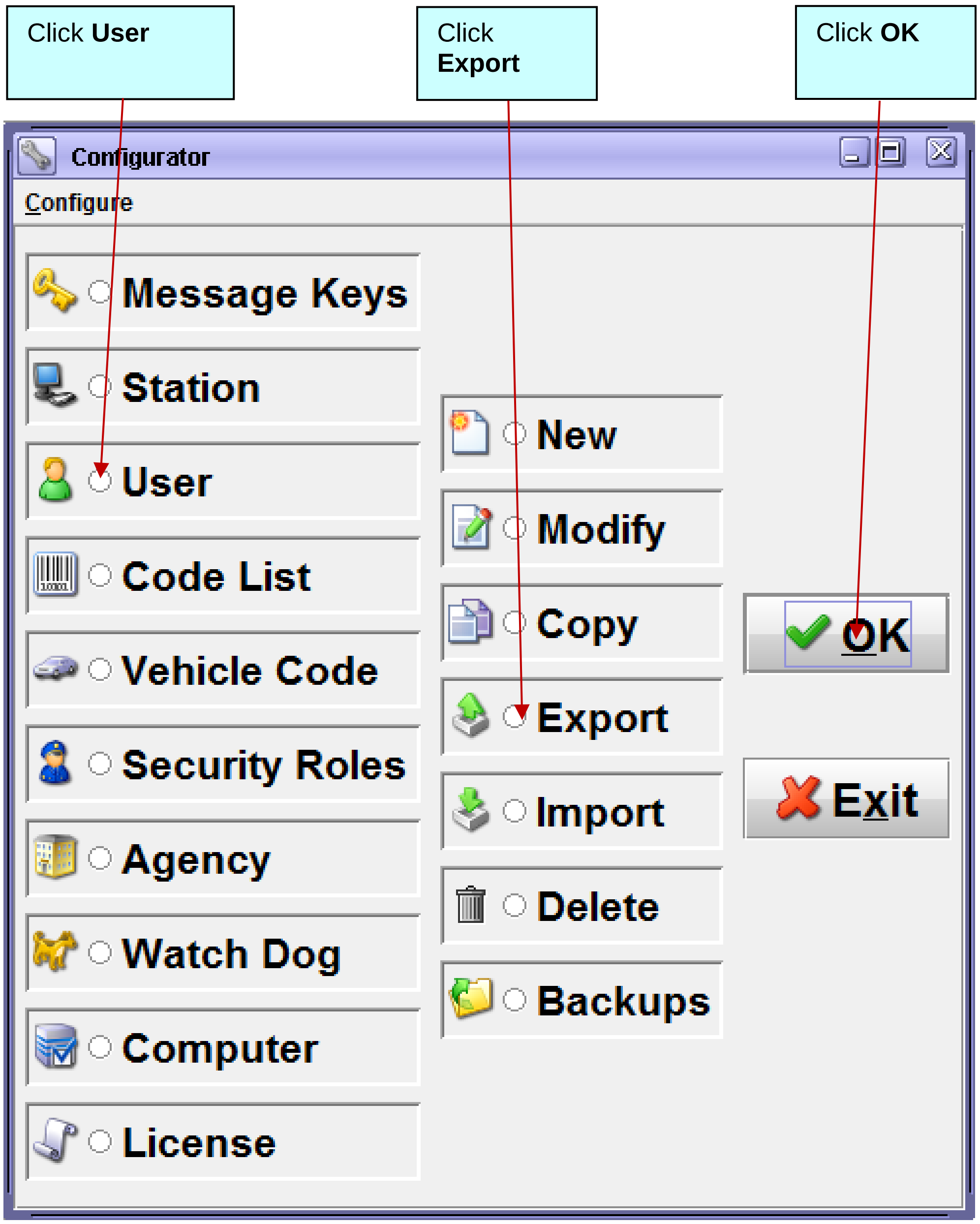
Copy User

- Enter the User ID then click **Get** to retrieve the user record. You may click the **Binocular** button to display the **Get User Dialog Window**. This window will list all user records contained in the system for you to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Enter a unique (i.e. “copy-to”) **User ID**.
- Modify the fields in the user record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

5.4 – Export User

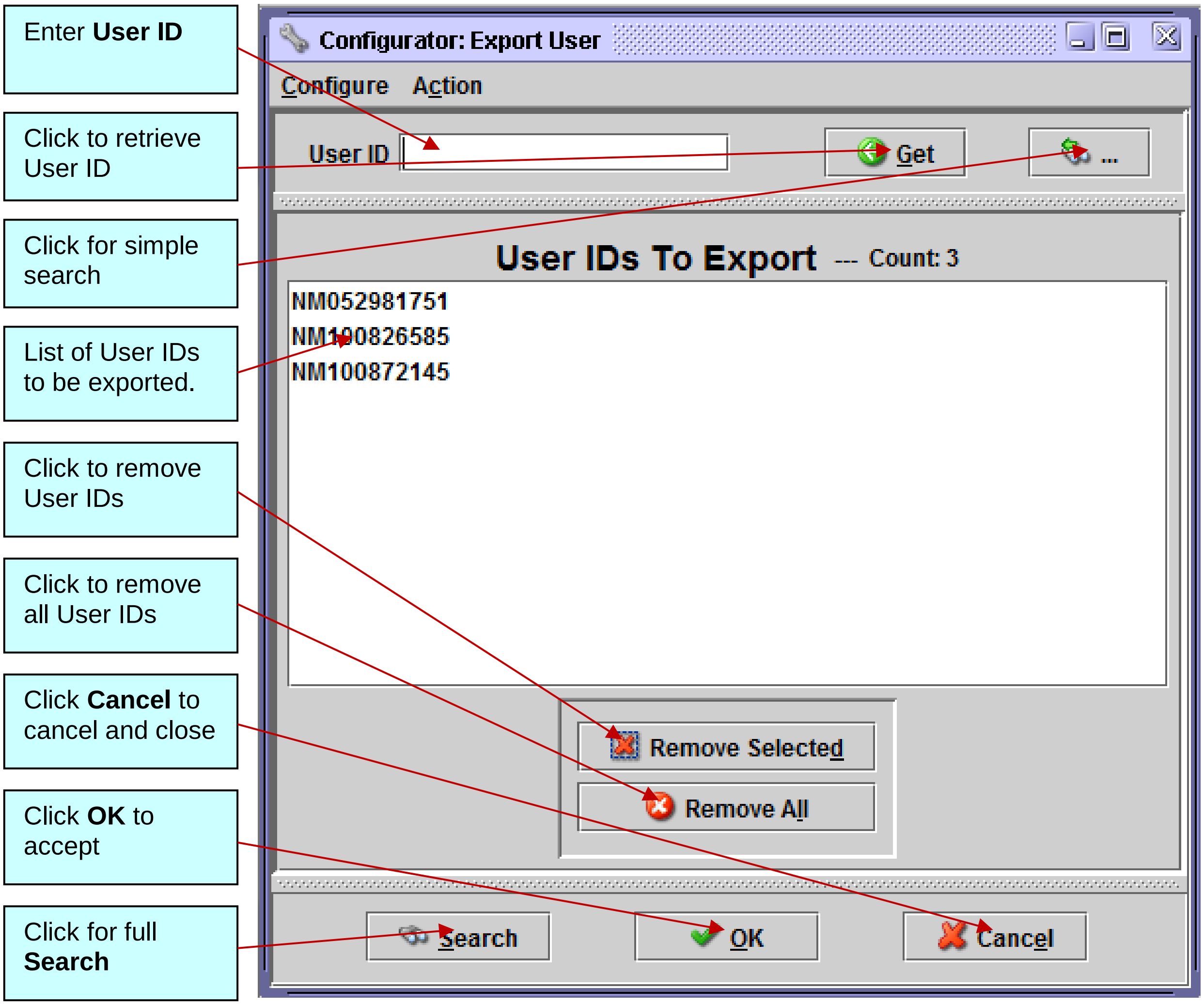
To export a User:

- Open the Configurator Module



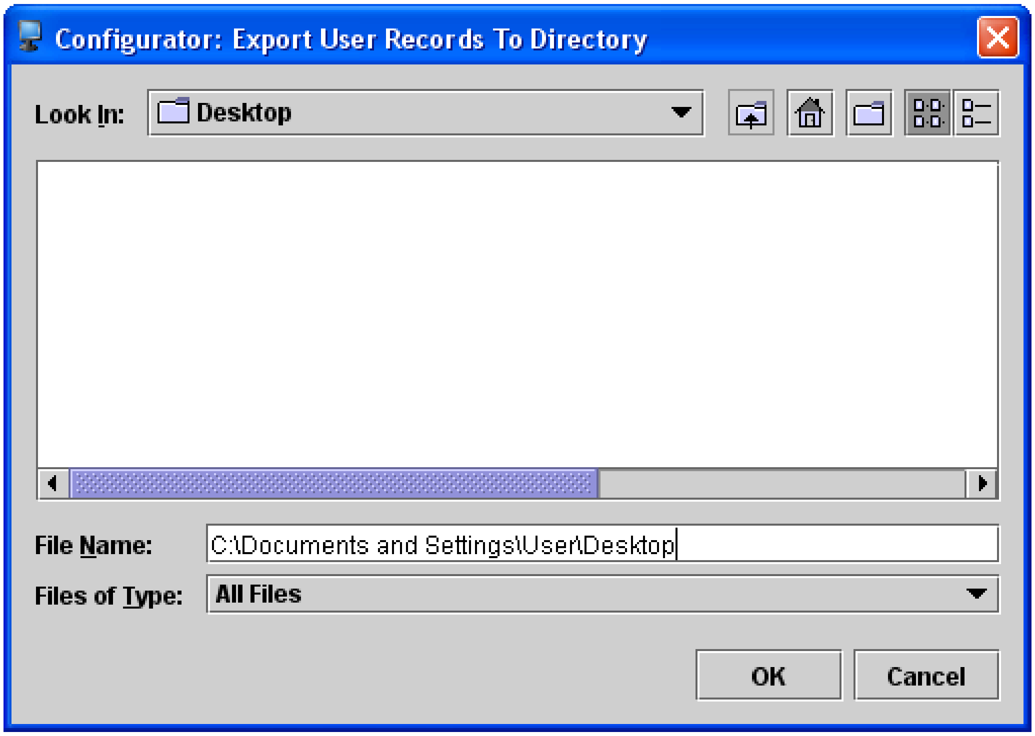
Configurator

- Select **User** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export User

- Select the user records to export.
- Click **OK**.



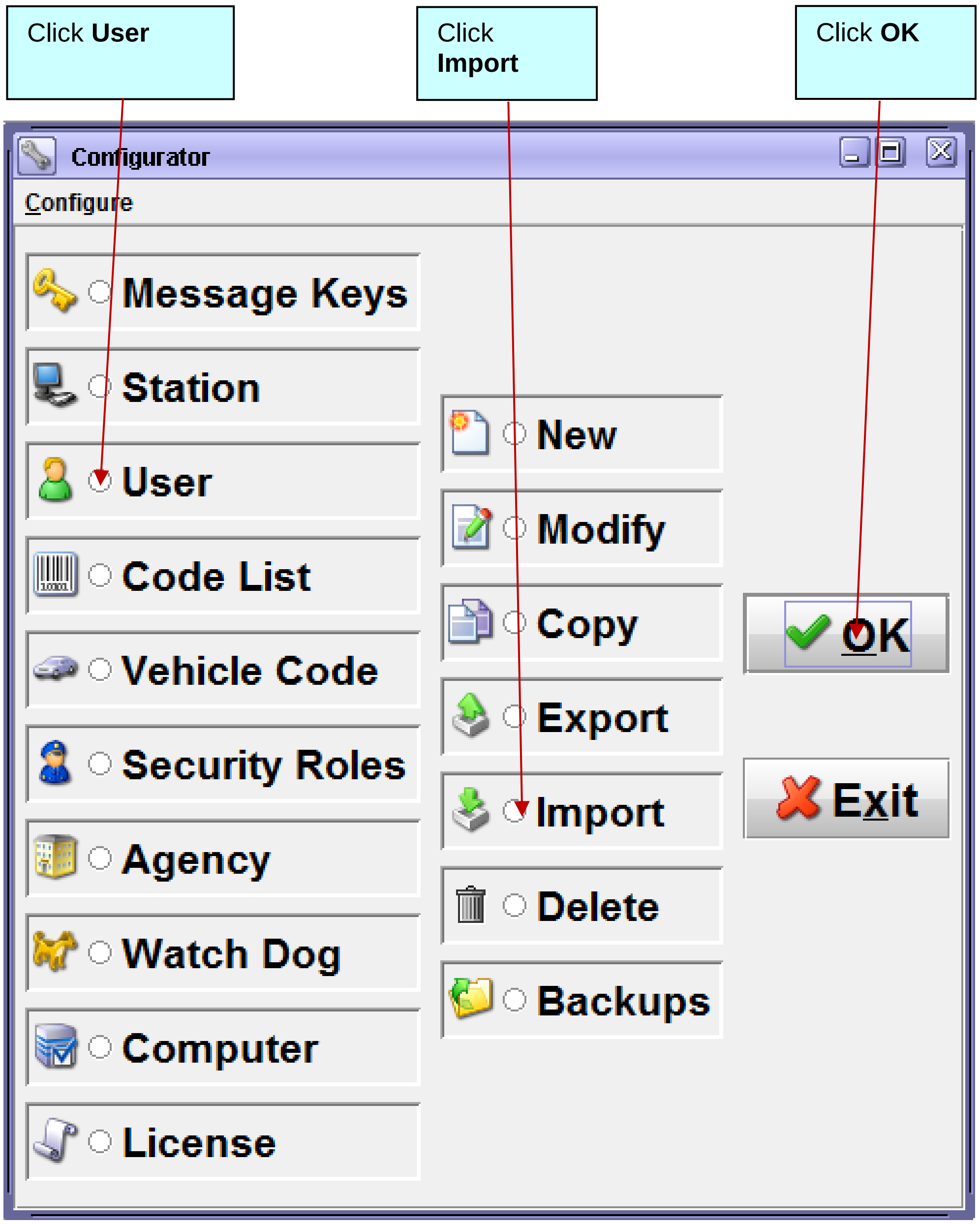
Export User Records To Directory

- Select the directory on your local P.C. to export the user records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

5.5 – Import User

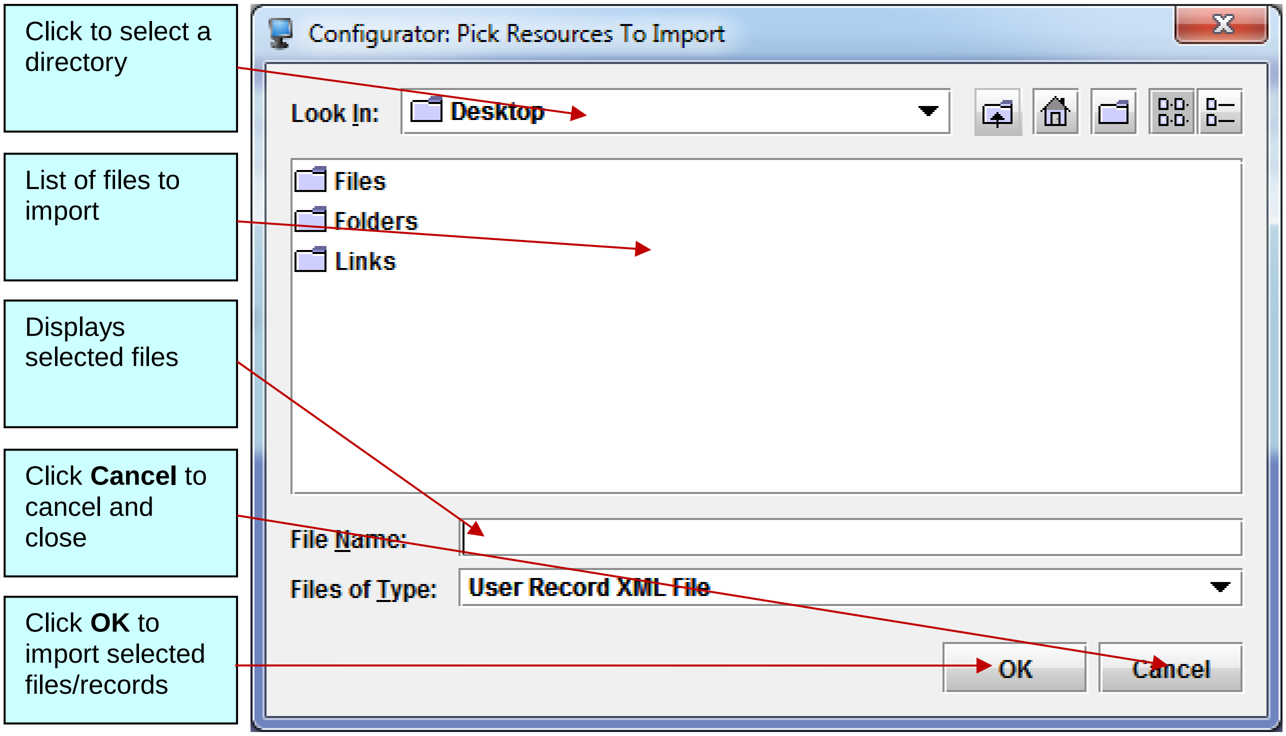
To import a User:

- Open the Configurator Module



Configurator

- Select **User** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



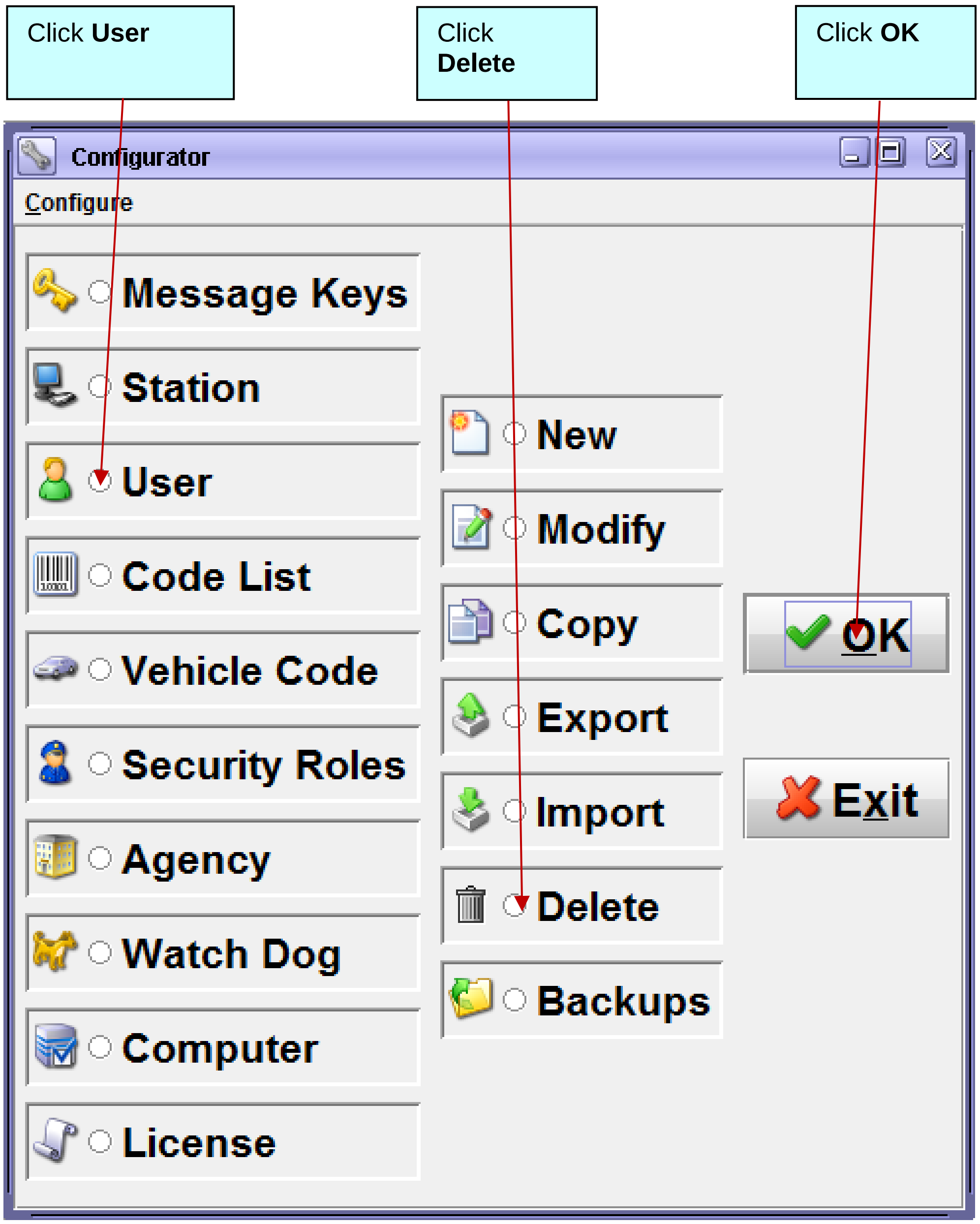
Pick Resources to Import

- Select the User file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

5.6 – Delete User

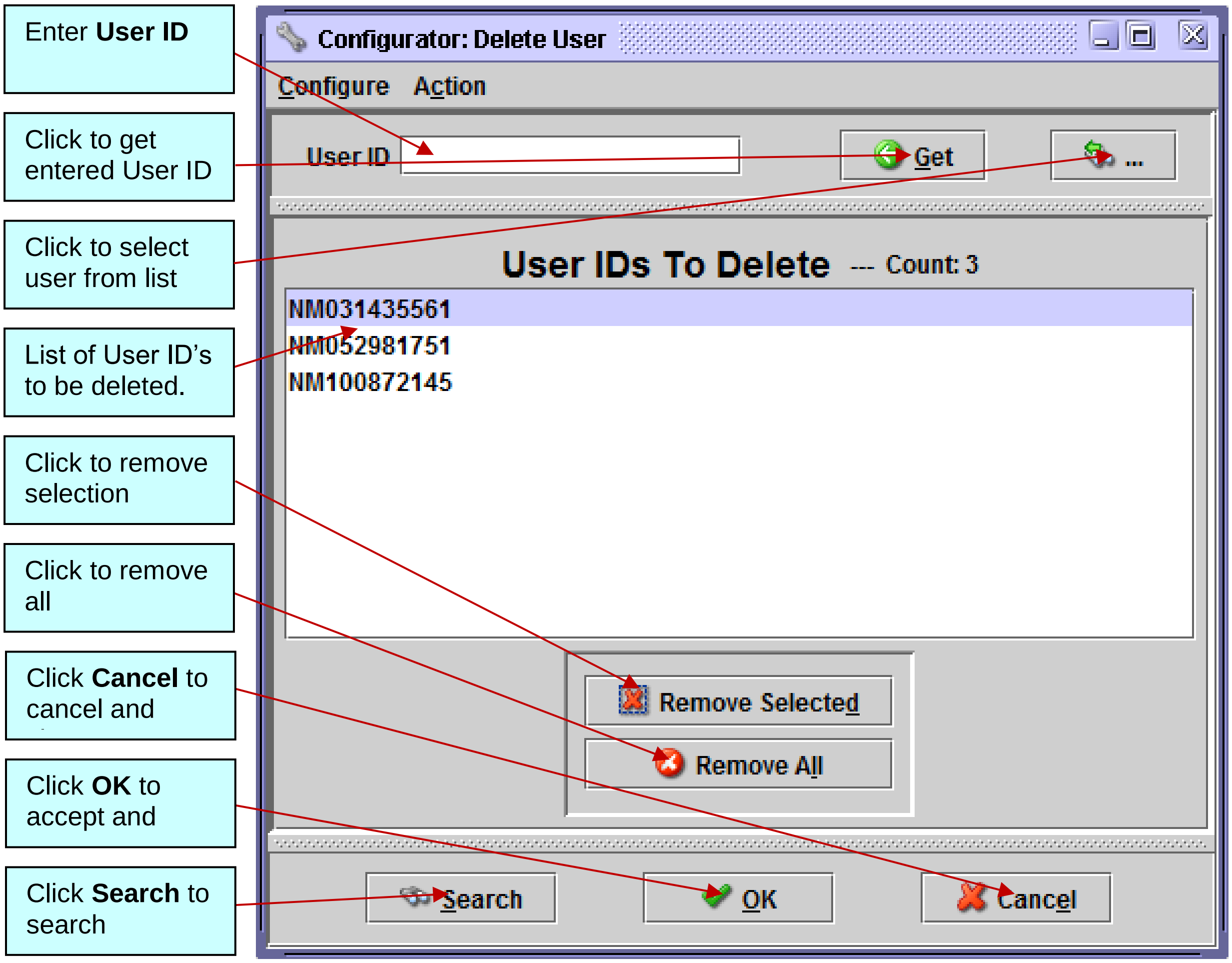
To delete a User:

- Open the Configurator Module



Configurator

- Select **User** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



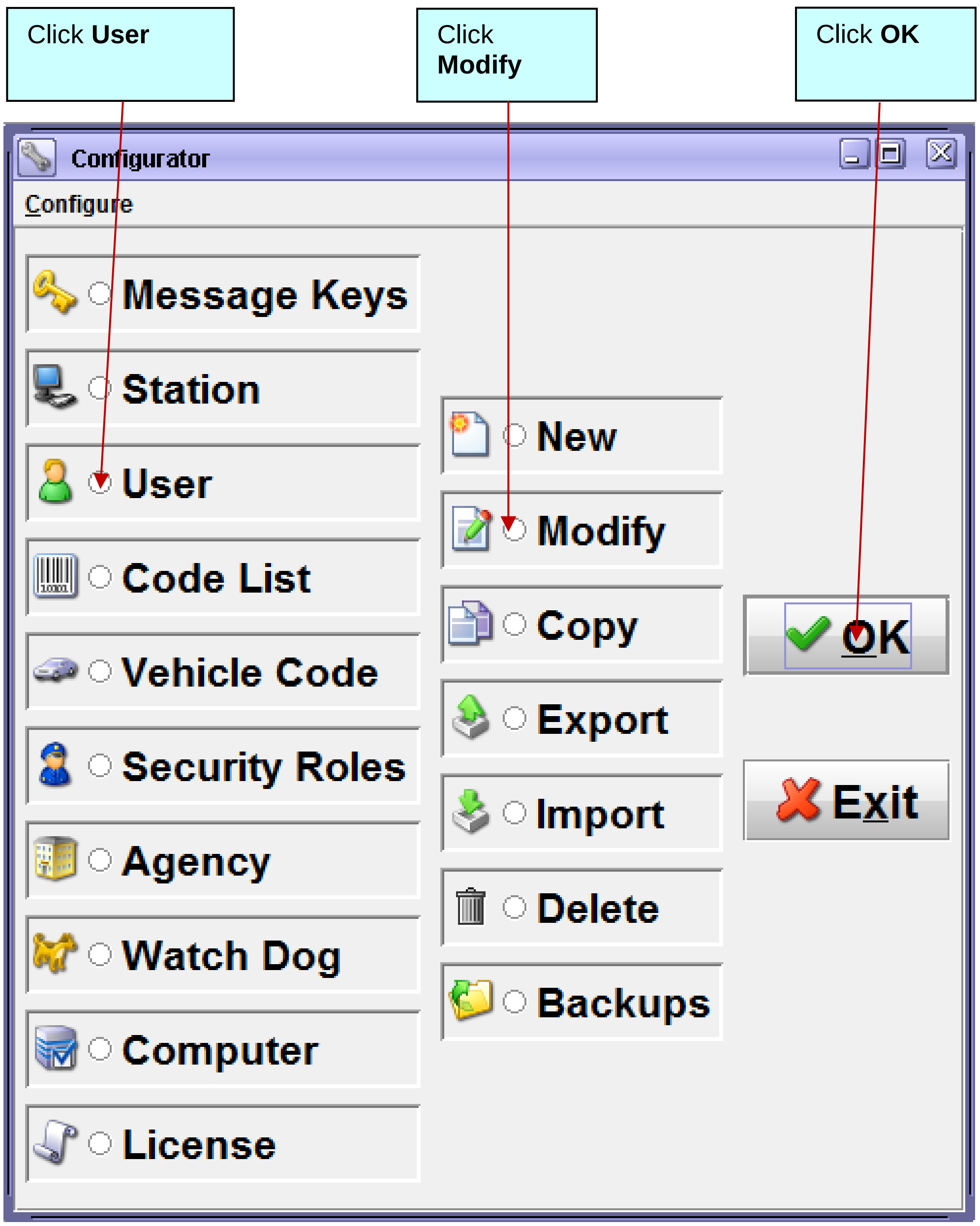
Delete User

- Select the User record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

5.7 – Global Modify User

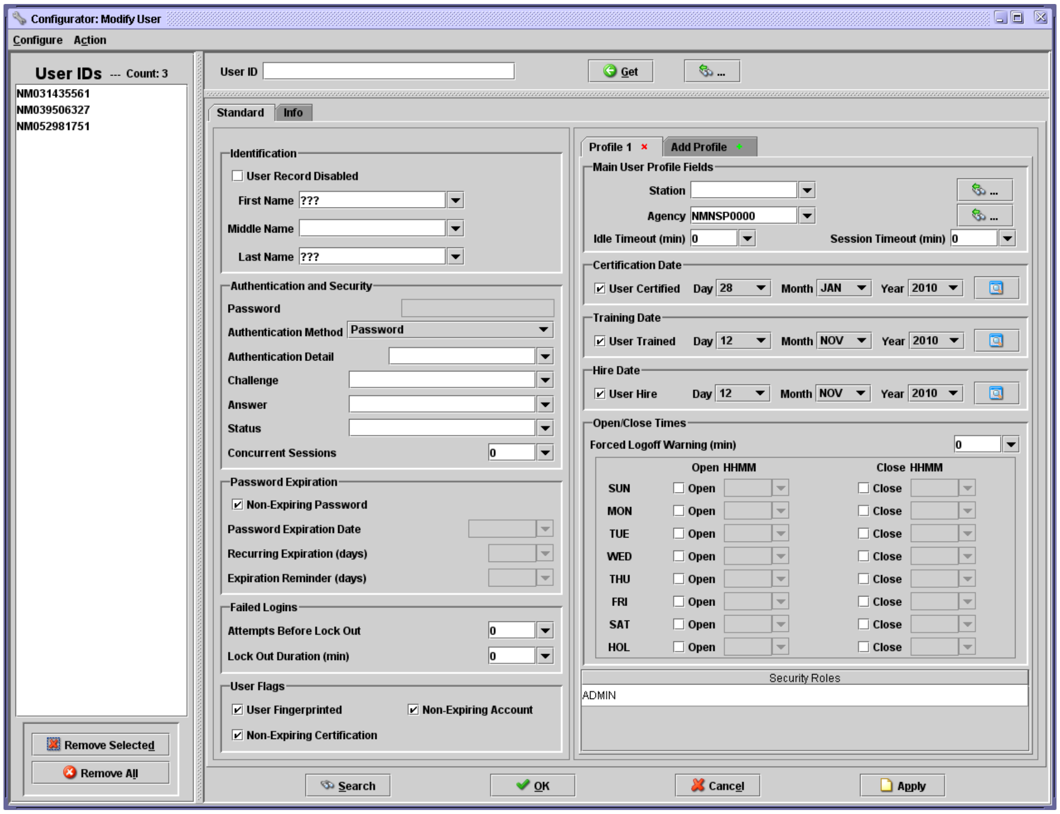
The OpenFox® Configurator is designed so that the user modify screen will automatically switch to a global user modify screen if the OpenFox® User Configurator administrator selects two or more records. To access the global user modify screen, the OpenFox® User Configurator administrator must have their '**Enable Global Record Screen'** OpenFox® Configurator User Preference enabled.

- Open the Configurator Module



Configurator

- Select **User** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.
- From within the user modify screen, select two or more user records. An easy way to do this is to click the **Search** button located at the bottom of the screen. In the search window, select the filters to use to obtain the desired list of users. After two or more user records are listed, click **OK** to retrieve the user records and load the user records into the user modify screen.



Global Modify User

When in the global user modify screen, any changes you make to any field on the screen will be applied to all user records you have loaded into the global user modify screen. The list of these user records is displayed in the **User IDs** list on the left-hand-side of the screen. The global user modify screen works just like the single-record user modify screen with the following primary differences:

- A **User IDs** list appears on the left-hand-side of the screen. This list contains the names of all User IDs that will be modified when you click the **OK** or **Apply** button.
- Lists contain all values that exist in any of the listed records.
- Check boxes can be selected with a white background, selected with a grey bacckground, or unselected.

Text Fields - In the global user configuration screen, text boxes can contain a text value, which indicates that all users in the list have this same value entered for this field. Text boxes can contain no text, which indicates that all users in the list have no value entered for this field. Text boxes can also contain the value of three consecutive question marks (“???”), which indicates that at least two stations in the list have values entered for this field, but these values are different from each other.

Text fields in the global user configurator screen will now display as a drop-down list instead of a plain text field. Clicking the drop-down list will display all values for this field across all users in the list. For exampe, if you select two user records, and the first user has an agency of AGENCY_1, but the second user has an agency of AGENCY_2, the agency combo box on the global configurator screen will display ‘???’. The drop down agency combo box list would then contain both AGENCY_1 and AGENCY_2 as valid selectable values.

Entering text directly into the field is still an option, as the drop-down list does not make the field non-editable.

In the global configuration screen, whether a value is selected from the drop-down list, or a value is entered directly into a text box, that new value will be applied to this field for all user records in the **User IDs List** if you click the **OK** or **Apply** button. If there are multiple values in the field data list, and no changes are made to this field (if the text shown is still “???”), no changes will be made to this field for any user records.

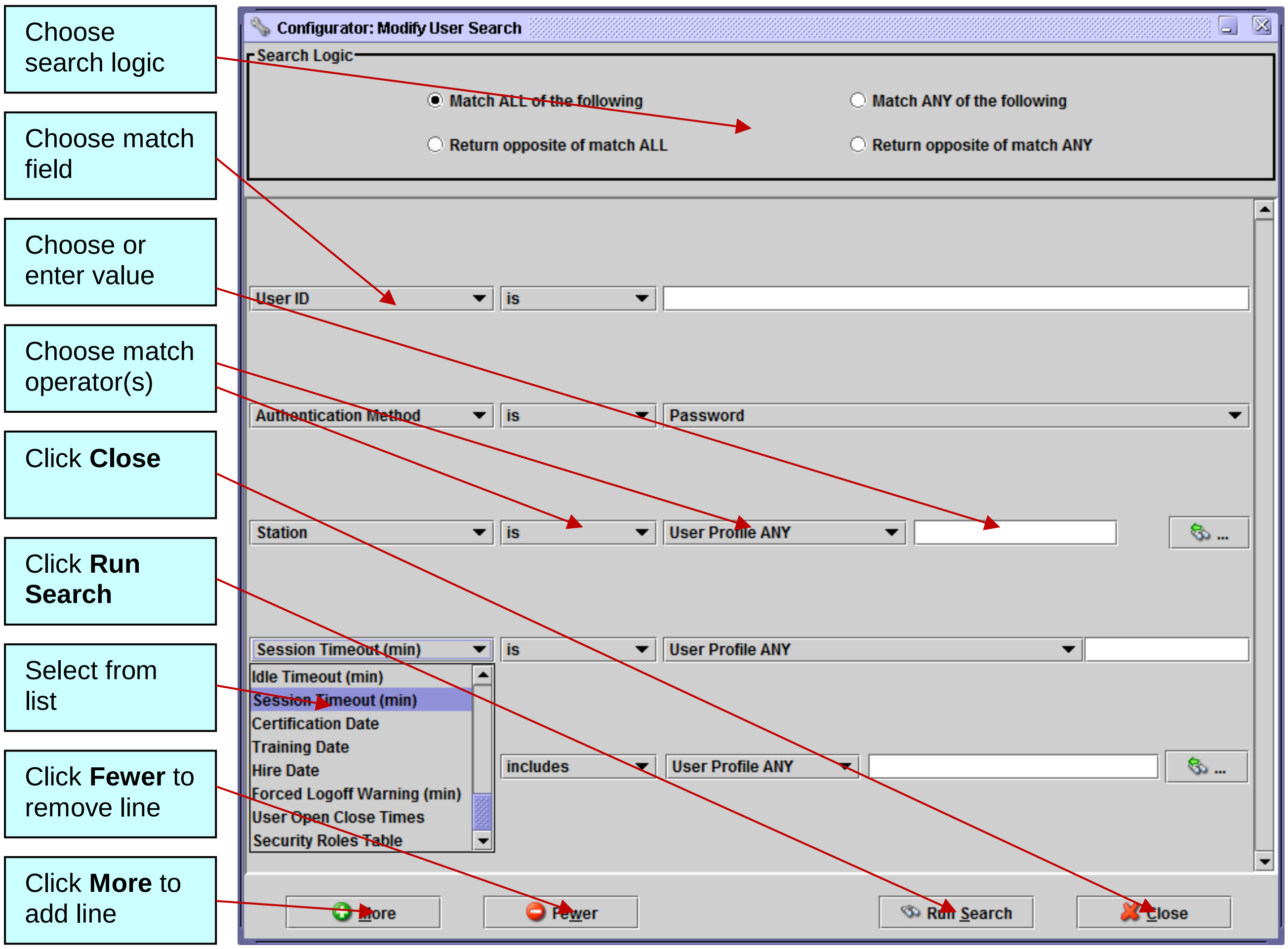
Check Boxes – In the global user configuration screen, check boxes can display as selected (checked) with a white background, which indicates all users in the list have this value selected. Check boxes can be unselected (unchecked), which indicates all users in the list have this value unselected. Check boxes can also be selected with a grey background, indicating that some users in the list have this value selected, while other users in the list have this value unselected.

In the global configuration screen, whether a check box is selected or unselected, that new value will be applied to this field for all user records in the **User IDs List** if you click the **OK** or **Apply** button. If some records have this field selected, while others have this field unselected (if the check box is selected but has a grey background) and no changes are made to this field, no changes will be made to this field for any user records.

Lists – In the global user configuration screen, lists will show a combined list of all values applied to any user. For example, if the first user in the list has Security Role ROLE_1, while the second user in the list has Security Roles ROLE_1 and ROLE_2, both ROLE_1 and ROLE_2 will be shown in the list. Removing only ROLE_1 from the list will leave the first user with no Security Role, while the second user will retain only ROLE_2. Removing only ROLE_2 from the list would leave both users with ROLE_1, and neither user would have ROLE_2. These changes will not be applied until you click the **OK** or **Apply** button.

5.8 – Search User

All user screens have a **Search** button located on the bottom-left. The full-featured user search window is provided as an aid to help locate user records. An example of this window is shown below. Any records found from the search will be used to populate the user screen.



User Search

Search Logic - The logic to be used to perform the search.

> **Match ALL of the following** - Records will only be returned in the search results if they match ALL of the search field/operator/value combinations.
>
> **Match ANY of the following** - Records will be returned in the search results if they match AT LEAST ONE of the search field/operator/value combinations.
>
> **Return opposite of match ALL** - Returns all records not matched in the corresponding “ALL” search.
>
> **Return opposite of match ANY** - Returns all records not matched in the corresponding “ANY” search.

Match Field - Choose the field from the station to search against. Examples of valid values are **Station Name**, **Station Number**, **Station Class**, and **ORI**.

Match Operator - Choose the type of comparison operation to be performed against the match field. Only certain operators are valid for each **Match Field**. Examples of valid Match Operators are **is**, **is not**, **contains**, **does not contain**, **less than**, and **greater than**.

Match Value - Enter or select the value to be searched upon.

More - Click **More** to add another row of comparison field/operator/value selections.

Fewer - Click **Fewer** to remove the bottom row of comparison field/operator/value selections.

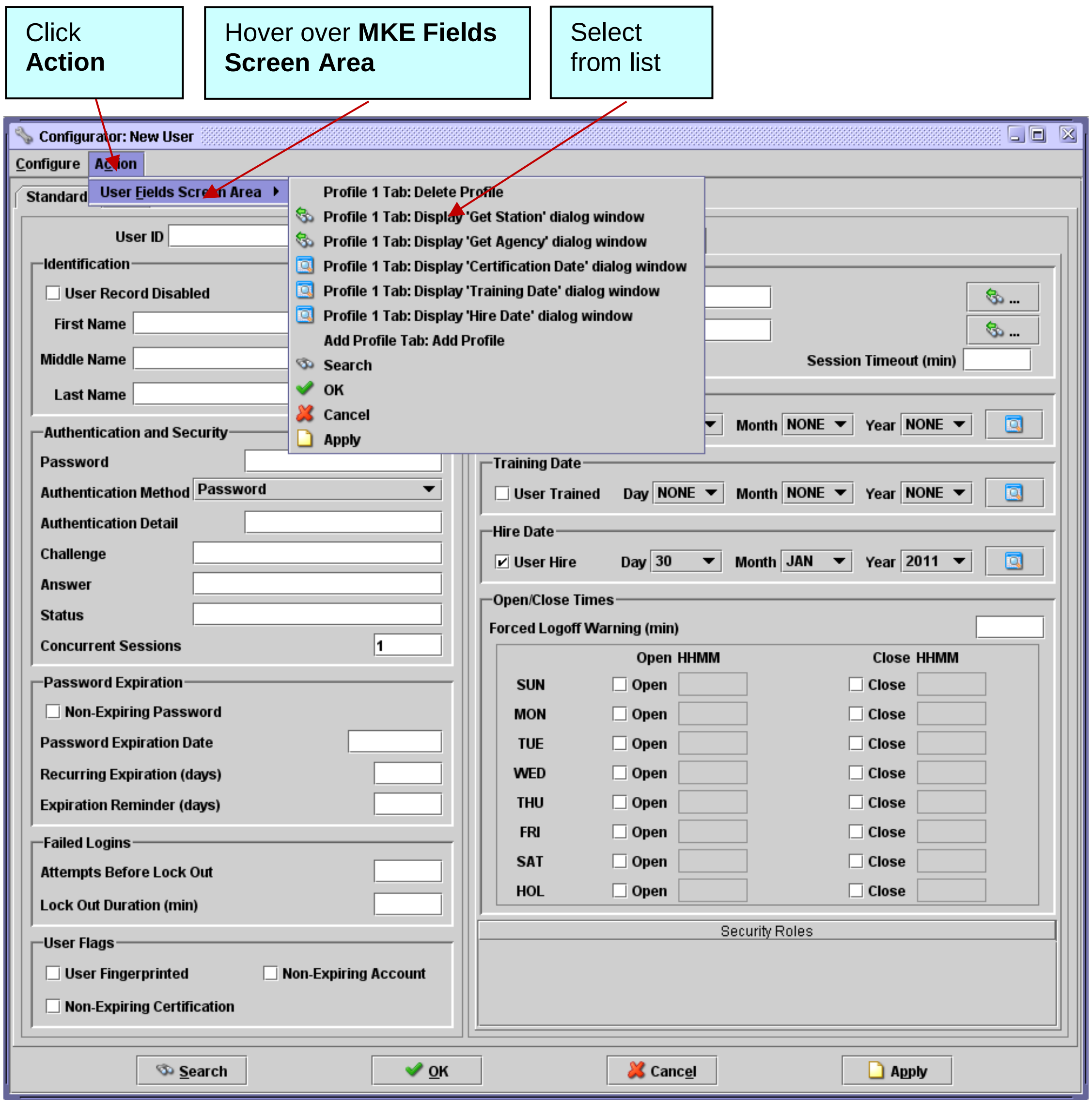
Run Search - Click **Run Search** to obtain a list of Station IDs based on the current comparison field/operator/value selections listed in the search window.

Close - Click **Close** to cancel the current search and close the search window.

5.9 – User Menu Access

To use the User Action menu:

- Open the Configurator Module.
- Open any User screen containing an **Action** menu item.



User Menu Access

- Click the **Action** menu.
- Hover over **User Fields Screen Area**.
- Select from list provided.

Chapter 6 – Code List Configuration

Many fields have pre-defined values that a user must choose from. If any other value is provided for these fields in a transaction, an error will be generated. Having an open text field for these fields allows a greater chance of user error. The OpenFox® Configurator provides code lists as a way to alleviate this.

The OpenFox® Configurator Code List screens are used to supply the information necessary to define Code List records. The OpenFox® Configurator Code List screens allow the administrator to create new Code List records, modify existing Code List records, copy existing Code List records, export Code List records, import Code List records, delete Code List records, or interact with Code List backups, all with immediate effect and without any other software changes or system reboots. The administrator can also define whether this code list will only be available to OpenFox® Desktop, or will be available to OpenFox® Desktop and the OpenFox® Message Switch.

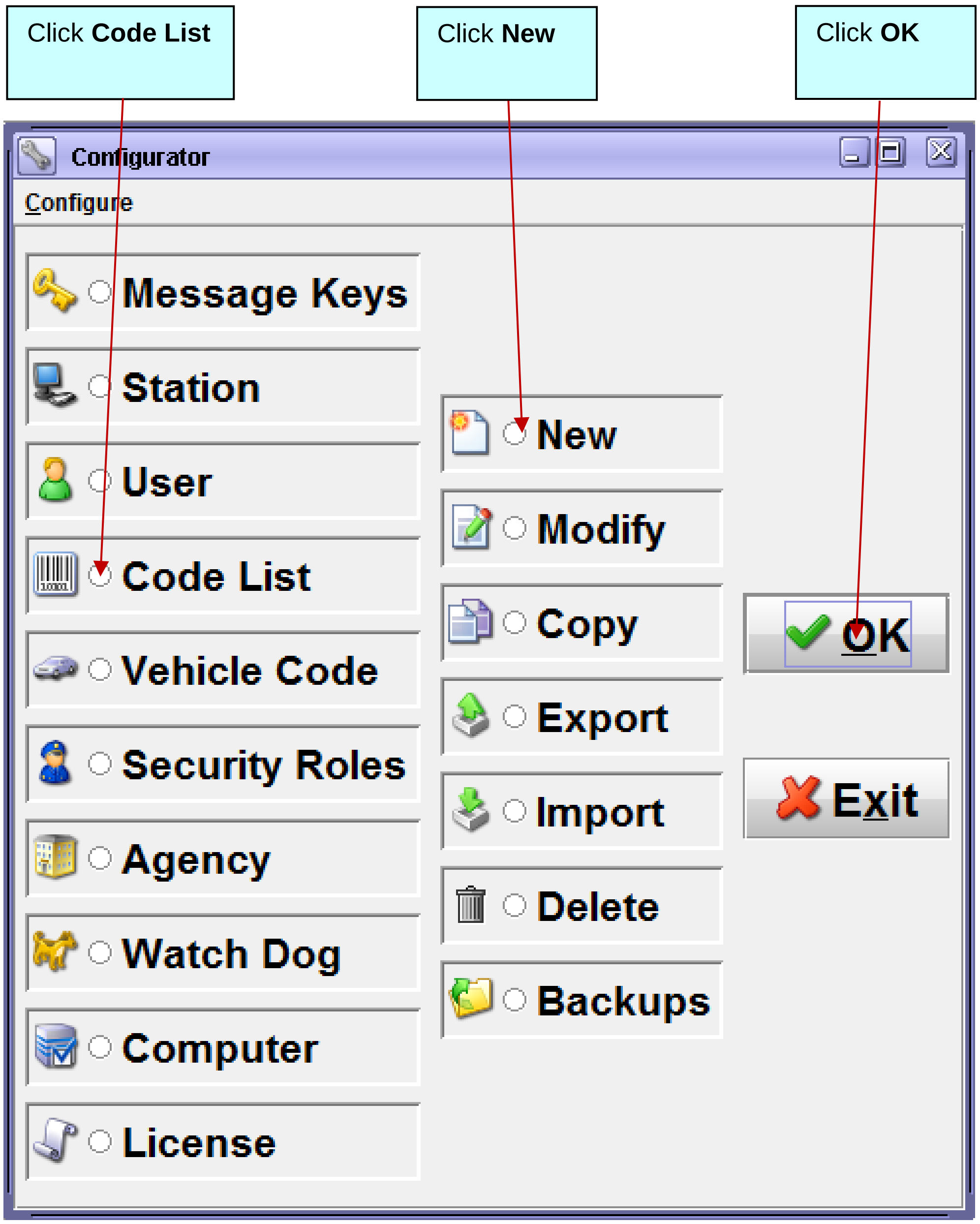
NOTE: Deleting a Code List record will erase the code list information from the system completely. The Code List information will no longer be available in the database.

The OpenFox® Configurator Code List screens, their text-fields, lists, options and buttons are as follows:

6.1 – Add New Code List

To configure a new Code List:

- Open the Configurator Module



Configurator

- Select **Code List** from the left column.
- Select **New** from the middle column.
- Click **OK**.

New Code List

6.1.1 – New Code List Window

The procedure for creating a new code list is covered in detail below:

- Enter a unique **Code List** ID.
- Enter a value in the **Code Min Length** field.
- Enter a value in the **Code Max Length** field.
- Enter any other desired or necessary information.
- Click **OK** to accept changes and clear screen, **Cancel** to cancel the changes and return to the main OpenFox® Configurator screen or **Apply** to accept changes and stay in this screen.

6.1.1.1 – New Code List Fields

Code List - Enter a unique value for each code list. Alphanumeric characters, as well as the hyphen character, are allowed.

Version - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the code list record to the OpenFox®.

Last Modified By User - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the code list record to the OpenFox®.

Date/Time Last Modified - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the code list record to the OpenFox®.

Code Min Length - This is the Minimum length the code value can be.

Code Max Length - This is the Maximum length the code value can be.

Code Max Length (free text) - This field is only used for fields that have a combined pre-set value AND free-text value that must be entered together (e.g. the NCIC Offense Codes that end in “99”). This field indicates the position at which the code list value should start highlighting text so the user can more easily fill out the valid combined code/free-text combination.

Description - Enter a description for the Code List in the Description field. This is a free-text description only used for viewing. It has no bearing on transactional behavior, but helps in understanding configurations when troubleshooting.

Store in DB - Indicates that this code list will be usable by the OpenFox® Message Switch as well as OpenFox® Desktop. If this check box is not check, only modules within Desktop will be able to access this code list and its values for field validation.

Sort Code List - Indicates that the code list should be automatically sorted alphabetically by value. If this is not checked, the values will appear exactly as they are entered in the code list screen.

6.1.1.2 – Code List Find Fields

Find - Enter a value in this field to search against the existing values in the code list.

Next - Click this button to cycle down through the matching values discovered during the previous Find operation.

Previous - Click this button to cycle up through the matching values discovered during the previous Find operation.

Count: - This is a read-only field that reports the number of matches obtained during the previous Find operation.

6.1.1.3 – Code List Group Fields

Add - Add new group into groups table. Users will need to click Apply or OK to save changes into the database.

Accept - Accept changes to groups table. Users will still need to click Apply or OK to save changes into the database.

Delete - Remove selected group from groups table. Users will still need to click Apply or OK to save changes into the database.

Up - Move currently-selected item up one row in the groups table.

Down - Move currently-selected item down one row in the groups table.

Cut - Remove selected group from groups table and add it to the clipboard. Users will still need to click Apply or OK to save changes into the database.

Copy - Leave selected group unchanged, but add its contents to the clipboard.

Paste - Paste group from clipboard into current code list configuration. Users will need to click Apply or OK to save changes into the database.

Sort - Indicates whether the fields within this group should be sorted automatically. If this is not checked, the values will appear exactly as they are entered in the code list screen.

6.1.1.4 – Code List Fields

Add - Add new field into fields table. Users will need to click Apply or OK to save changes into the database.

Accept - Accept changes to fields table. Users will still need to click Apply or OK to save changes into the database.

Delete - Remove selected field from fields table. Users will still need to click Apply or OK to save changes into the database.

Up - Move currently-selected item up one row in the fields table.

Down - Move currently-selected item down one row in the fields table.

Cut - Remove selected field from fields table and add it to the clipboard. Users will still need to click Apply or OK to save changes into the database.

Copy - Leave selected field unchanged, but add its contents to the clipboard.

Paste - Paste field from clipboard into current code list configuration. Users will need to click Apply or OK to save changes into the database.

Code - Enter the value that will be sent as field data for this field .

Description - Enter the value that the users will see as a “friendly name” for this field (e.g. a description of “United States” for the code “US”).

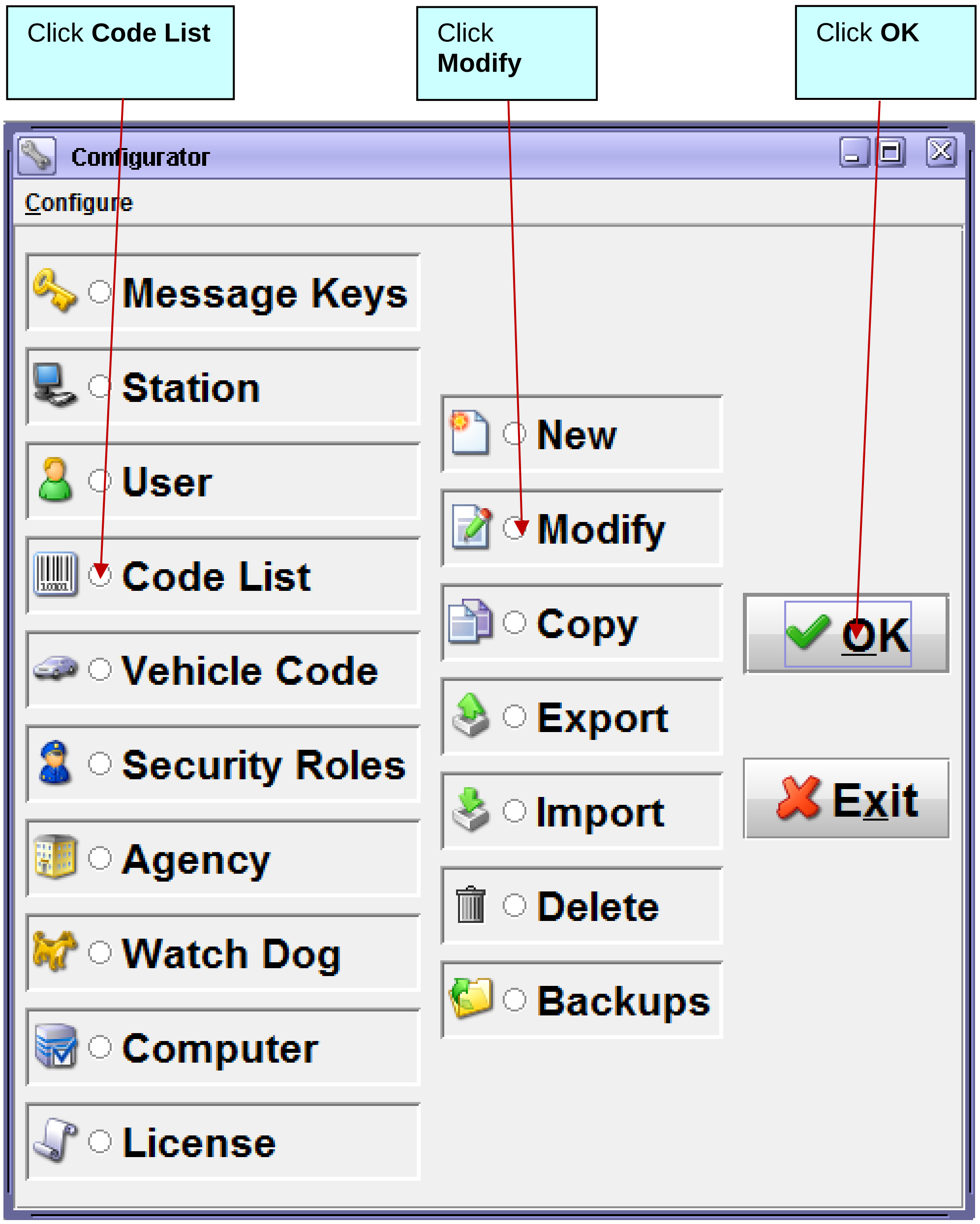
Start Free Text - Indicates the position at which the free-text portion of a combined code/free-text field should begin.

Flags - Enter any alphabetic character that will be used as a filter to hide values (to not show them as valid values) when necessary in any module that uses this code list.

6.2 – Modify Existing Code List

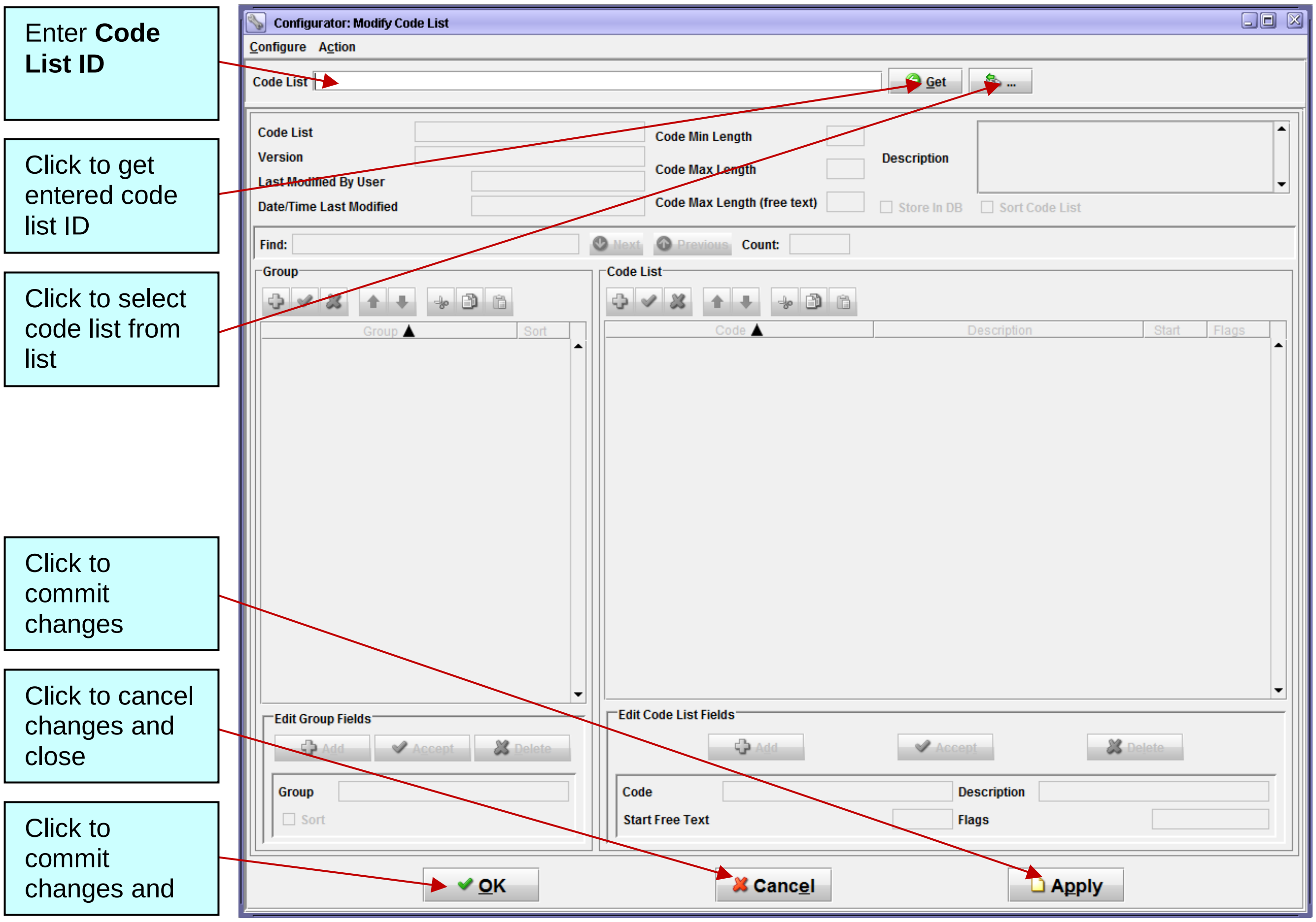
To modify an existing Code List:

- Open the Configurator Module



Configurator

- Select **Code List** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



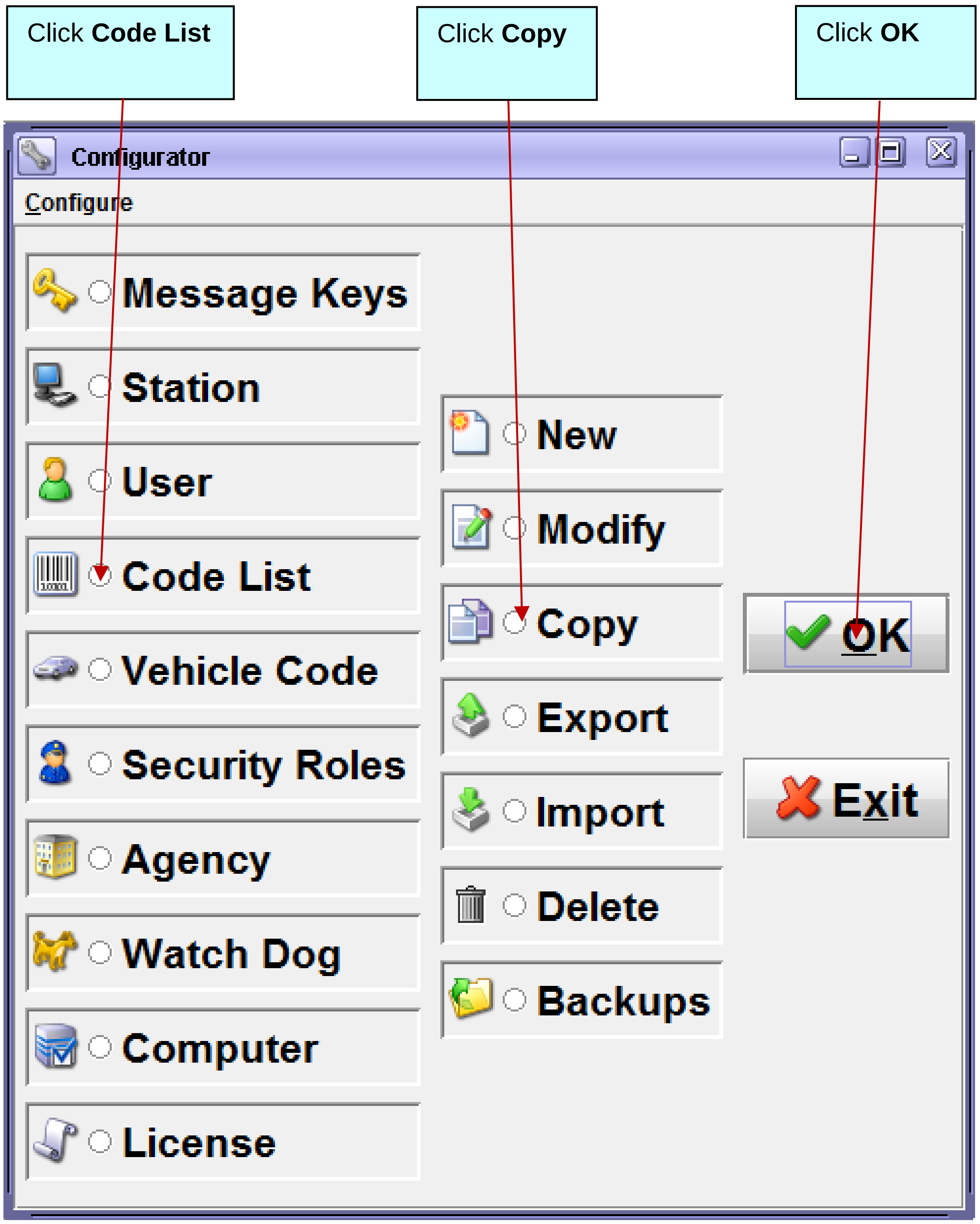
Modify Code List

- Enter the Code List ID then click **Get** to retrieve the code list record. You may click the **Binocular** button to display the **Get Code List Dialog Window**. This window will list all code list records contained in the system for you to choose from.
- Modify the fields in the code list record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

6.3 – Copy Existing Code List

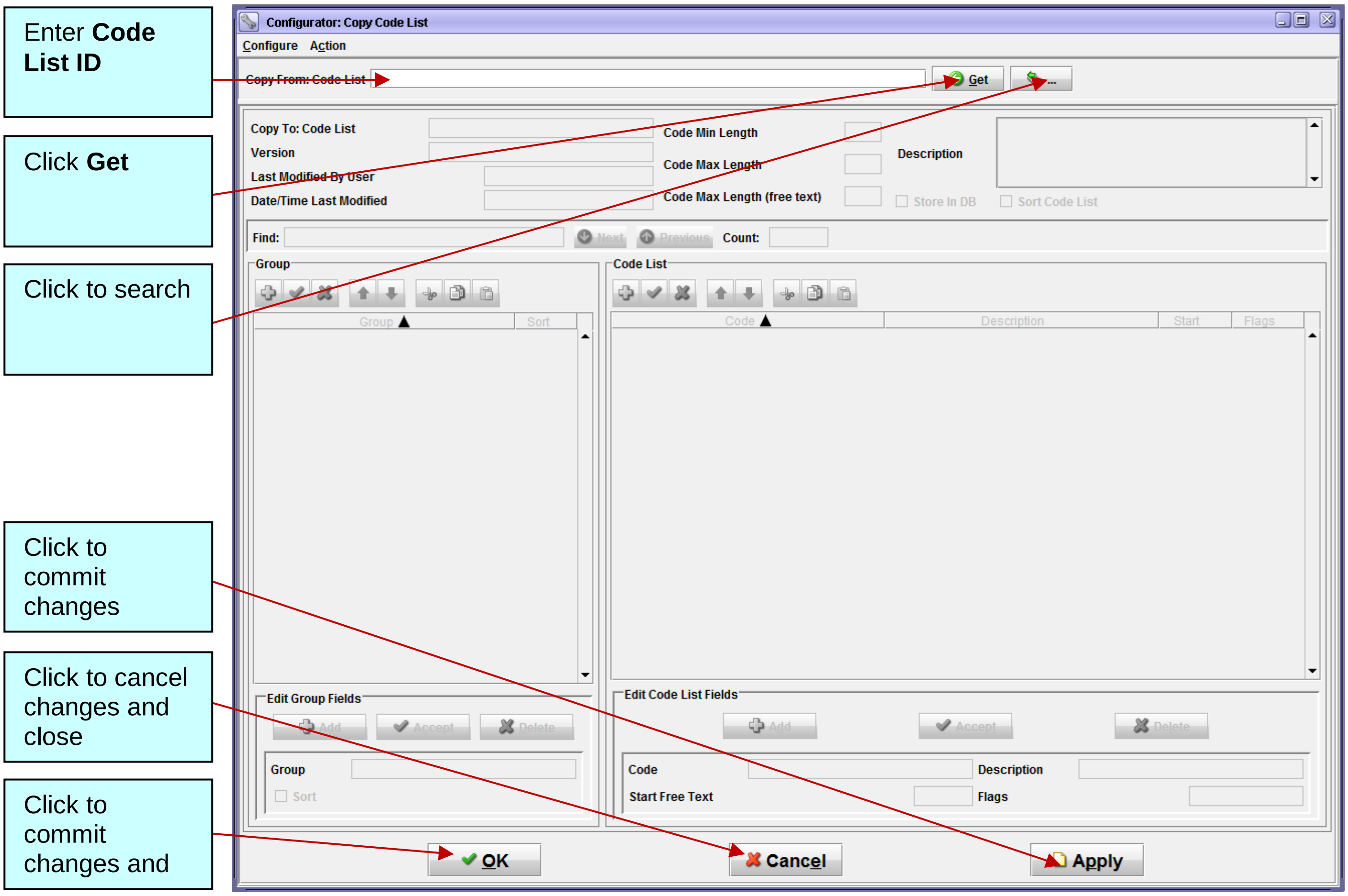
To copy an existing Code List:

- Open the Configurator Module



Configurator

- Select **Code List** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



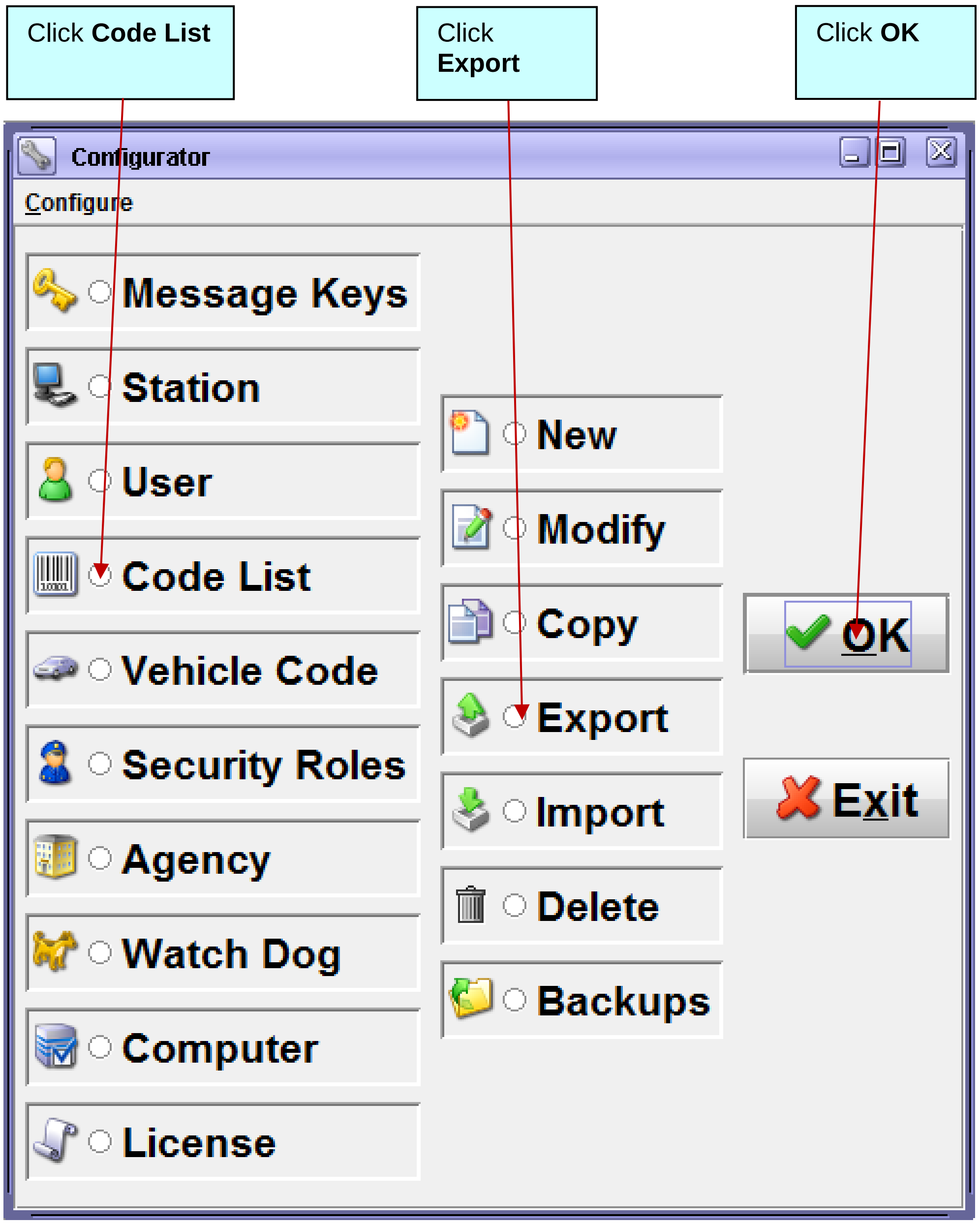
Copy Code List

- Enter the Code List ID then click **Get** to retrieve the code list record. You may click the **Binocular** button to display the **Get Code List Dialog Window**. This window will list all code list records contained in the system for you to choose from.
- Enter a unique (i.e. “copy-to”) **Code List ID**.
- Modify the fields in the Code List record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

6.4 – Export Code List

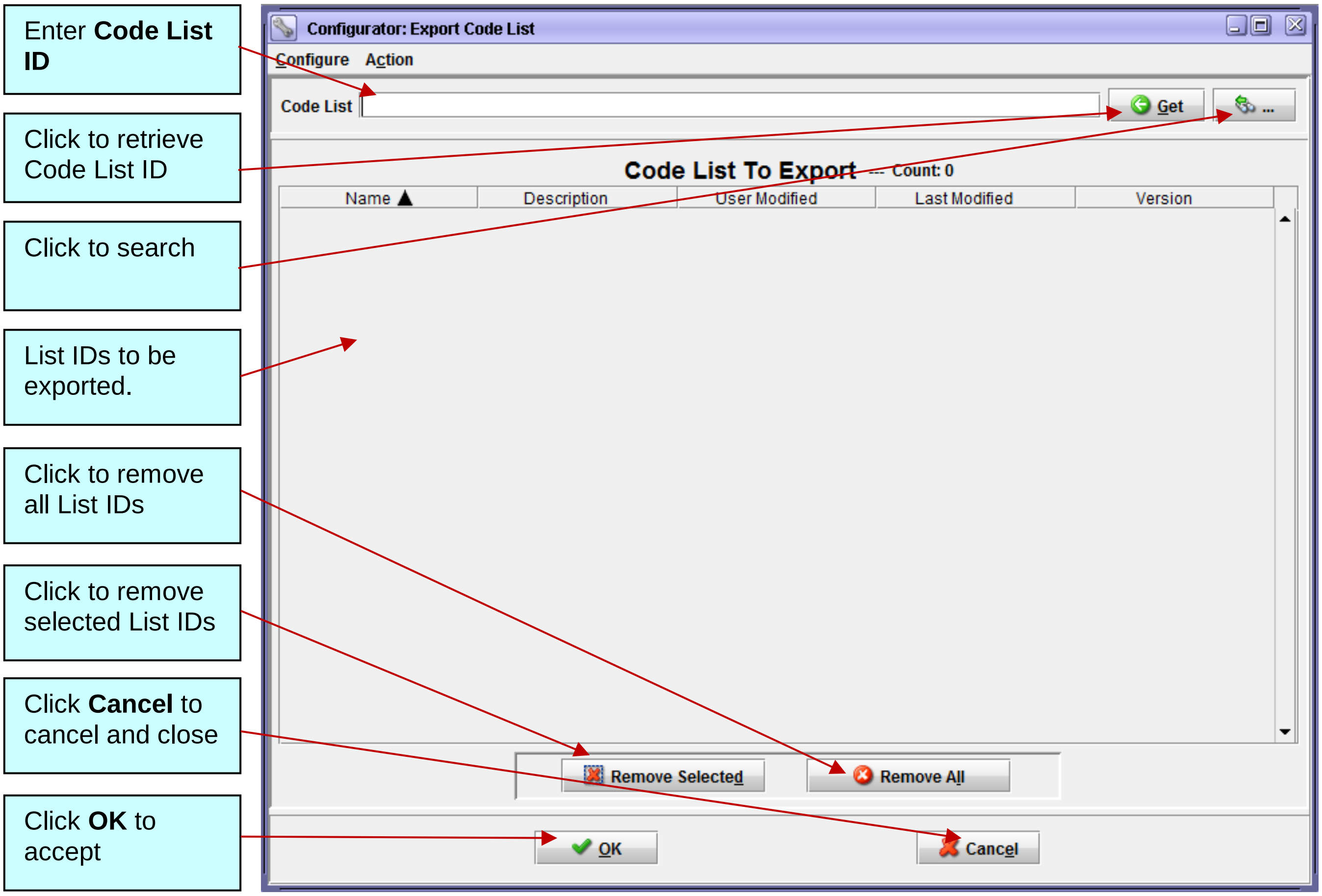
To export a Code List:

- Open the Configurator Module



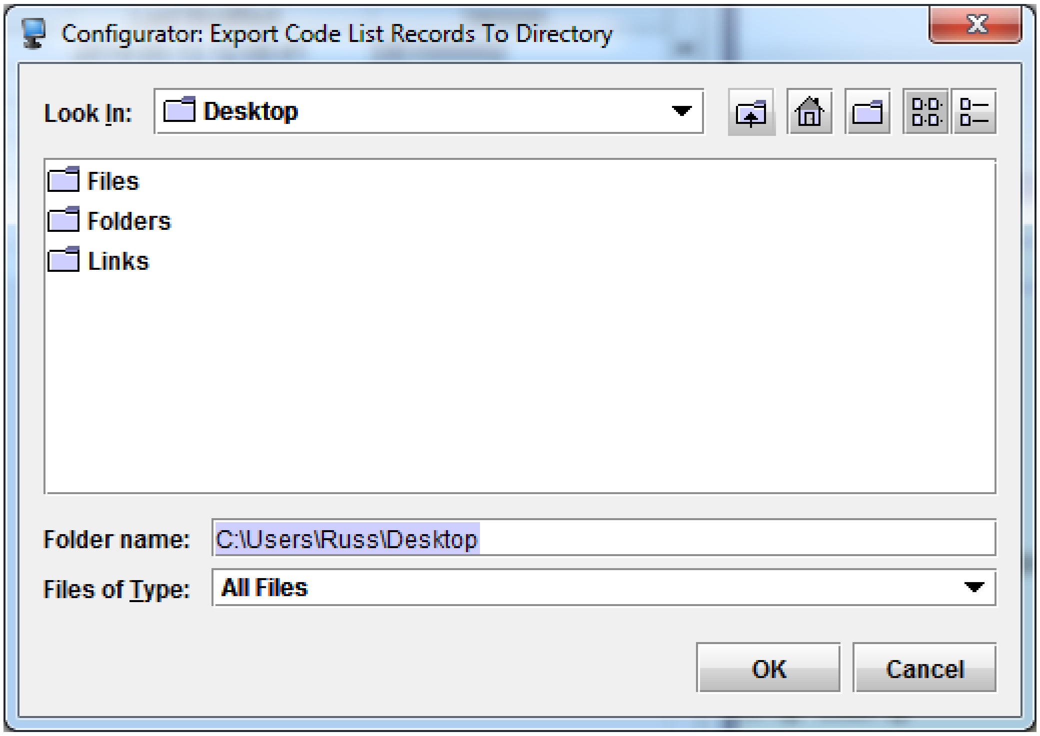
Configurator

- Select **Code List** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Code List

- Select the code list records to export.
- Click **OK**.



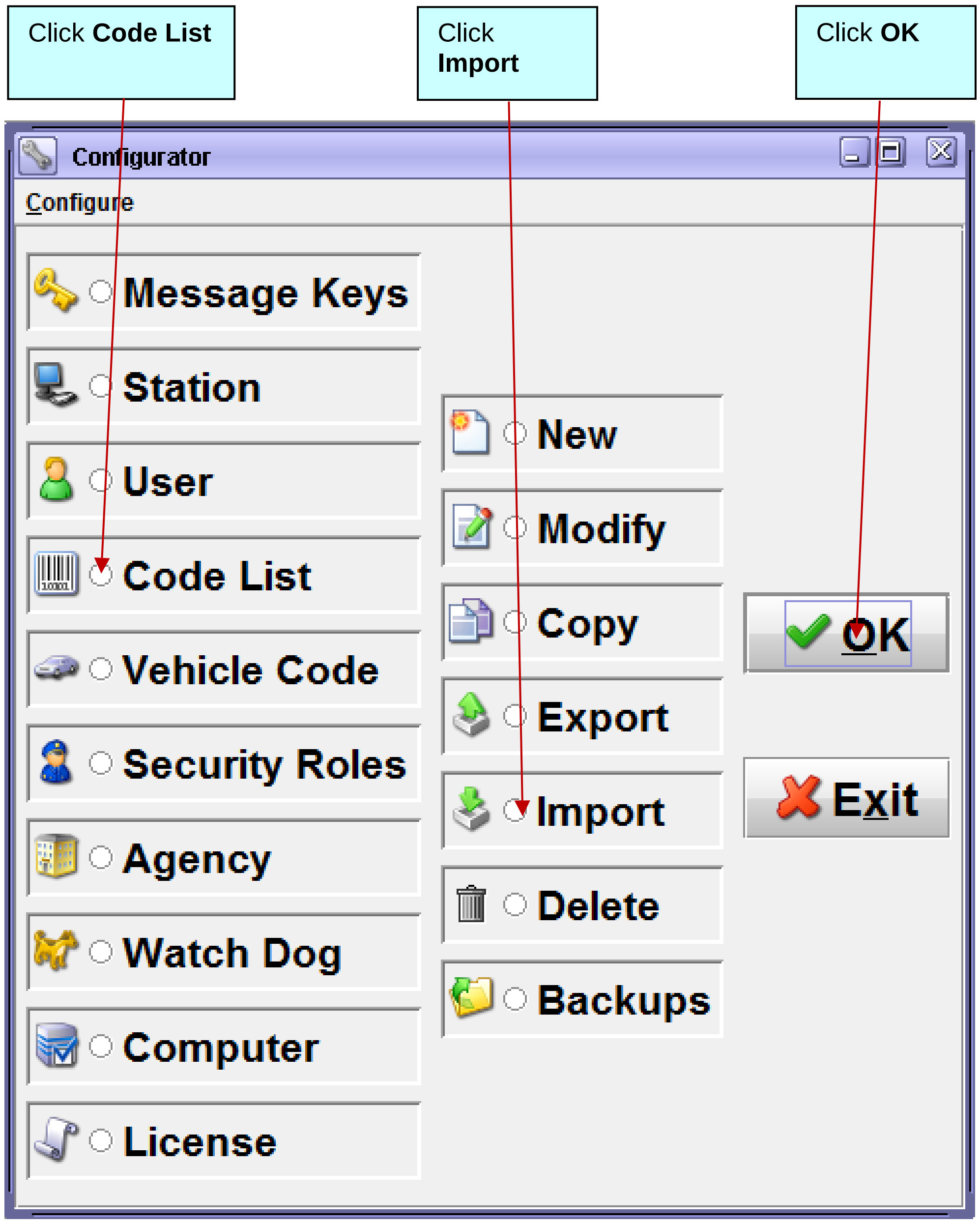
Export Code List Records To Directory

- Select the directory on your local P.C. to export the code list records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

6.5 – Import Code List

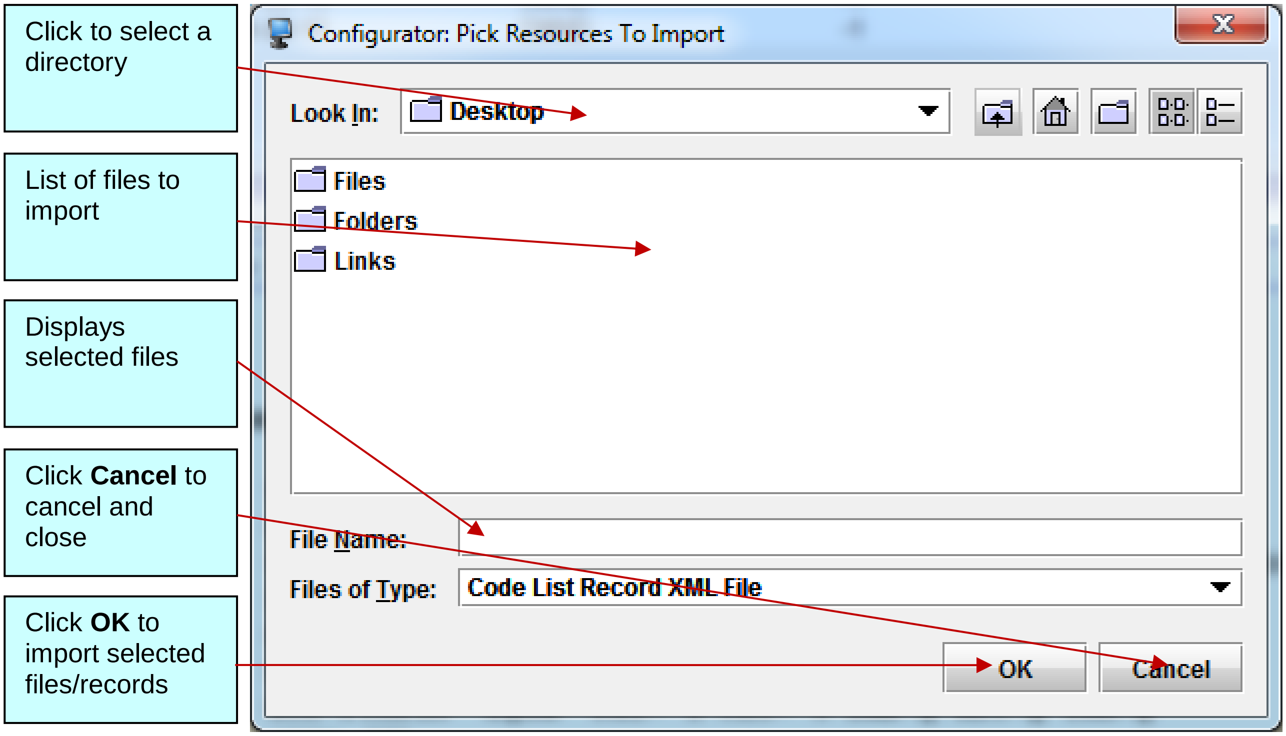
To import a Code List:

- Open the Configurator Module



Configurator

- Select **Code List** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



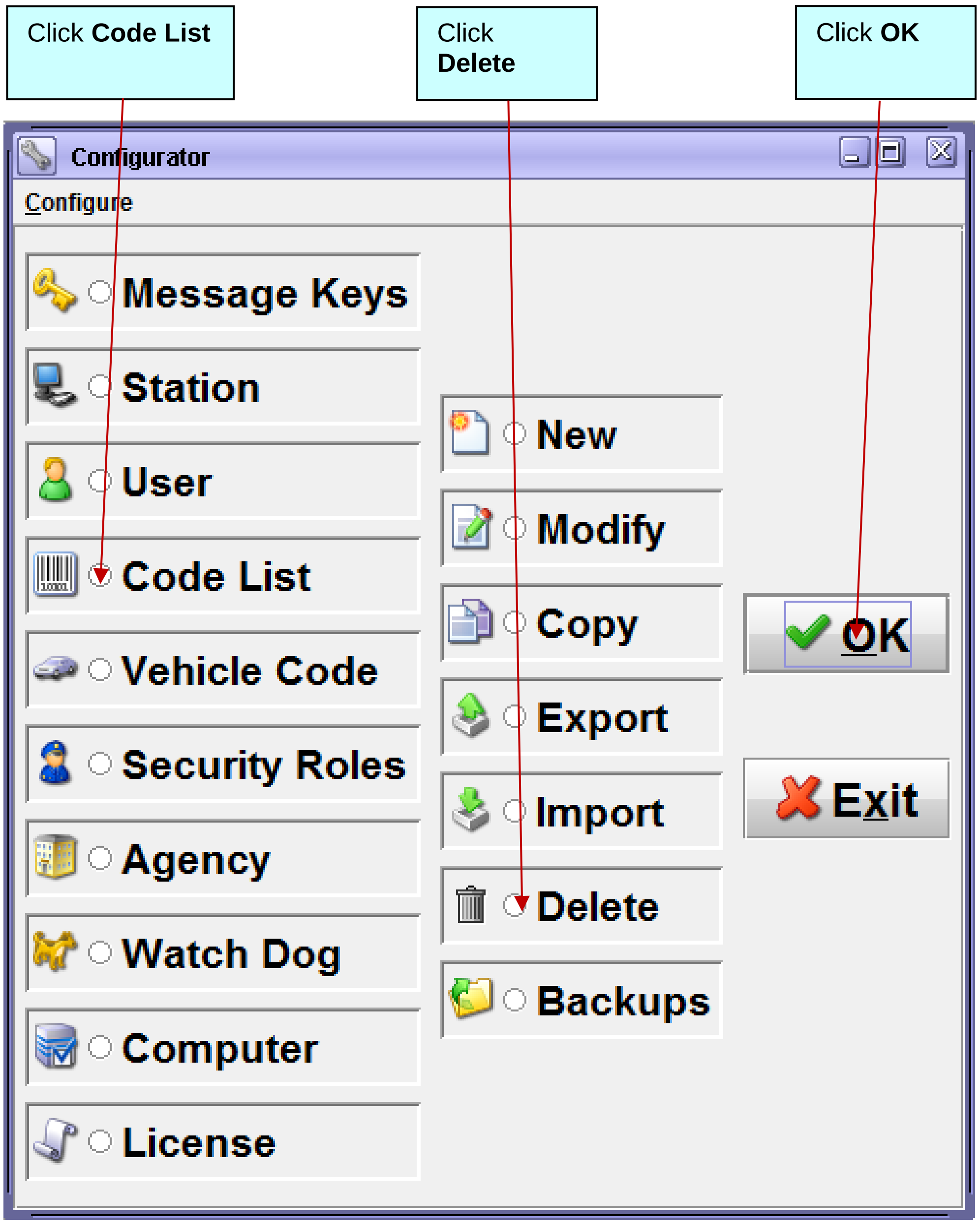
Pick Resources to Import

- Select the Code List file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

6.6 – Delete Code List

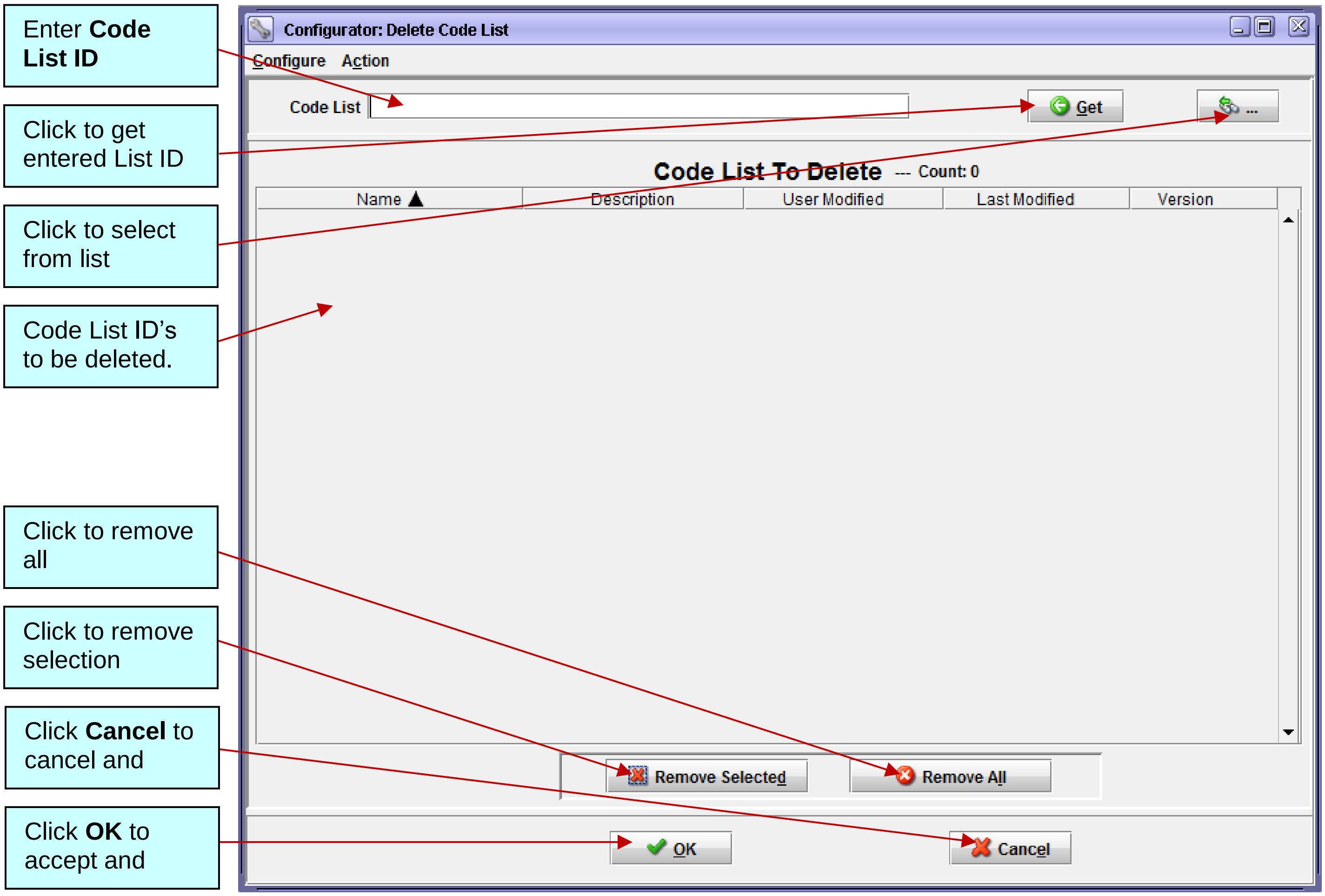
To delete a Code List:

- Open the Configurator Module



Configurator

- Select **Code List** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



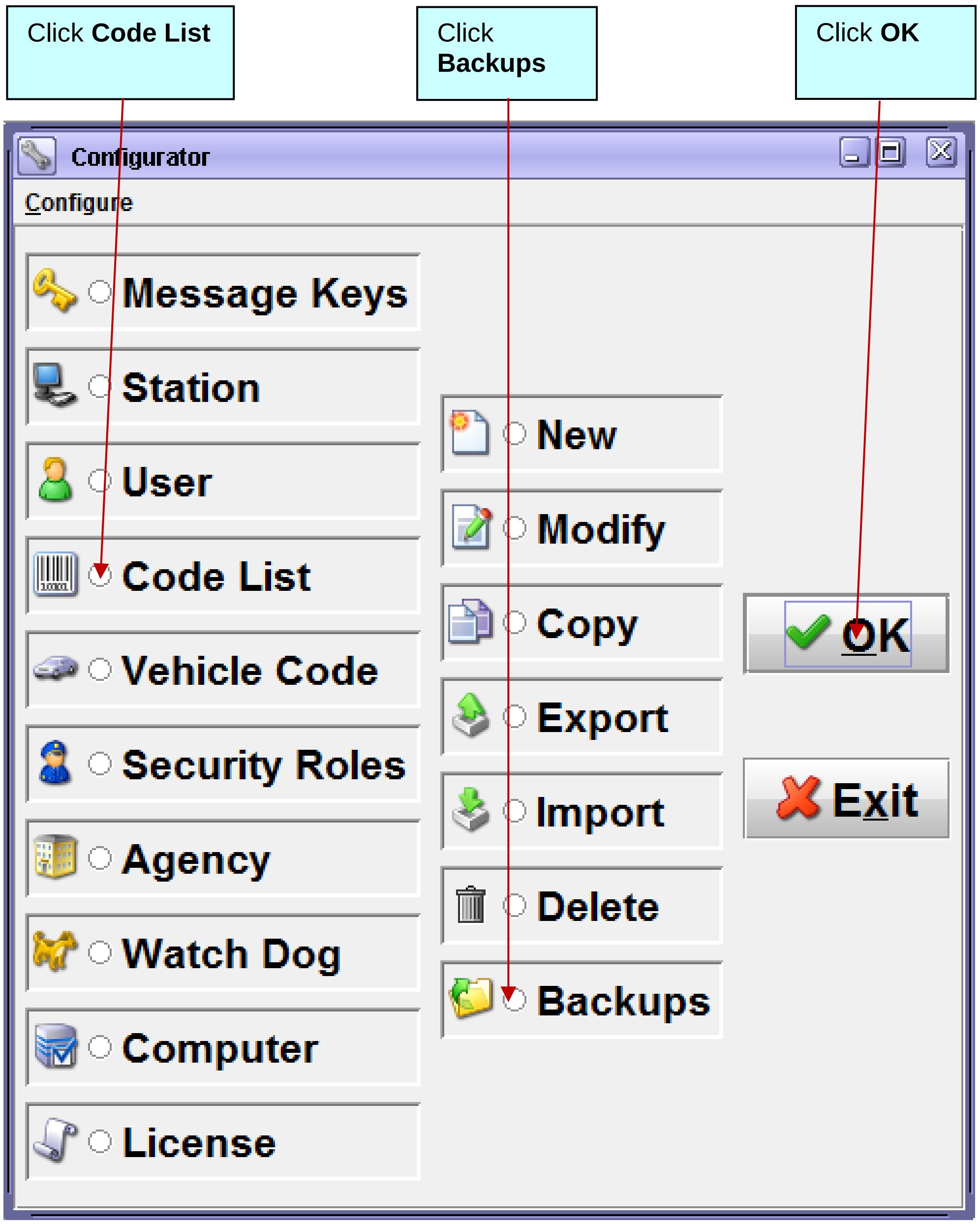
Delete Code List

- Select the Code List record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

6.7 – Code List Backups

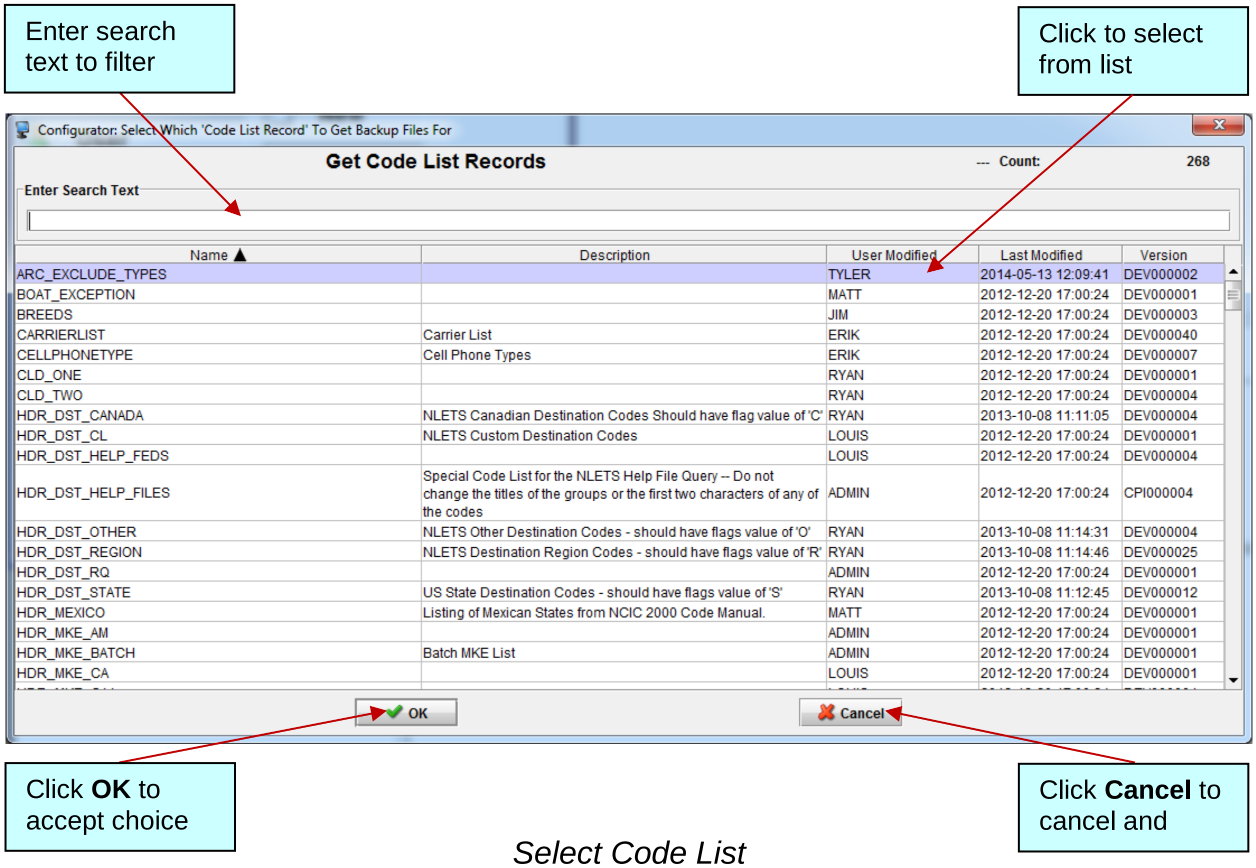
To access Code List Backups:

- Open the Configurator Module



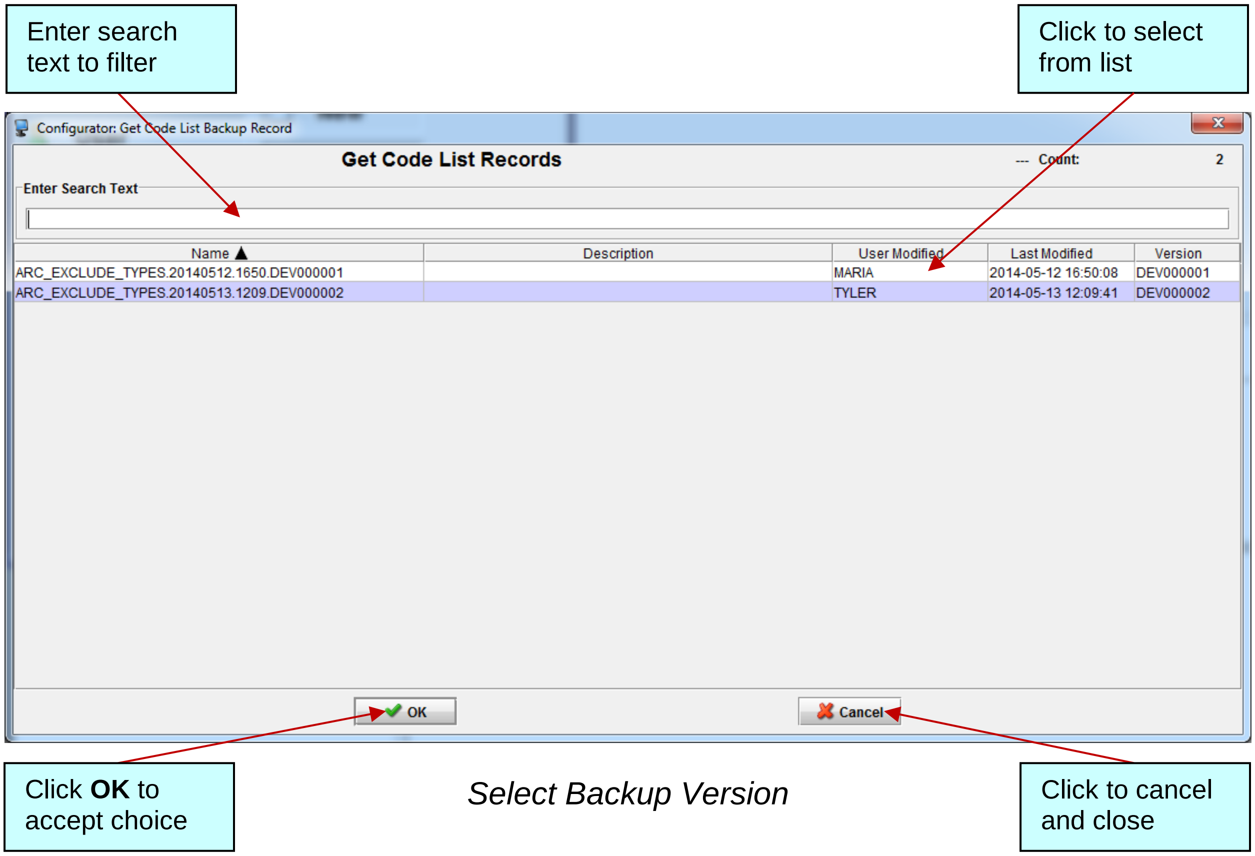
Configurator

- Select **Code List** from the left column.
- Select **Backups** from the middle column.
- Click **OK**.



Select Code List

- Select a Code List to access the backups for. You can only select a single code list backup at a time.
- Click **OK** to access the backups for the selected code list, or **Cancel** to cancel out of the window and go back to the main Configurator screen.



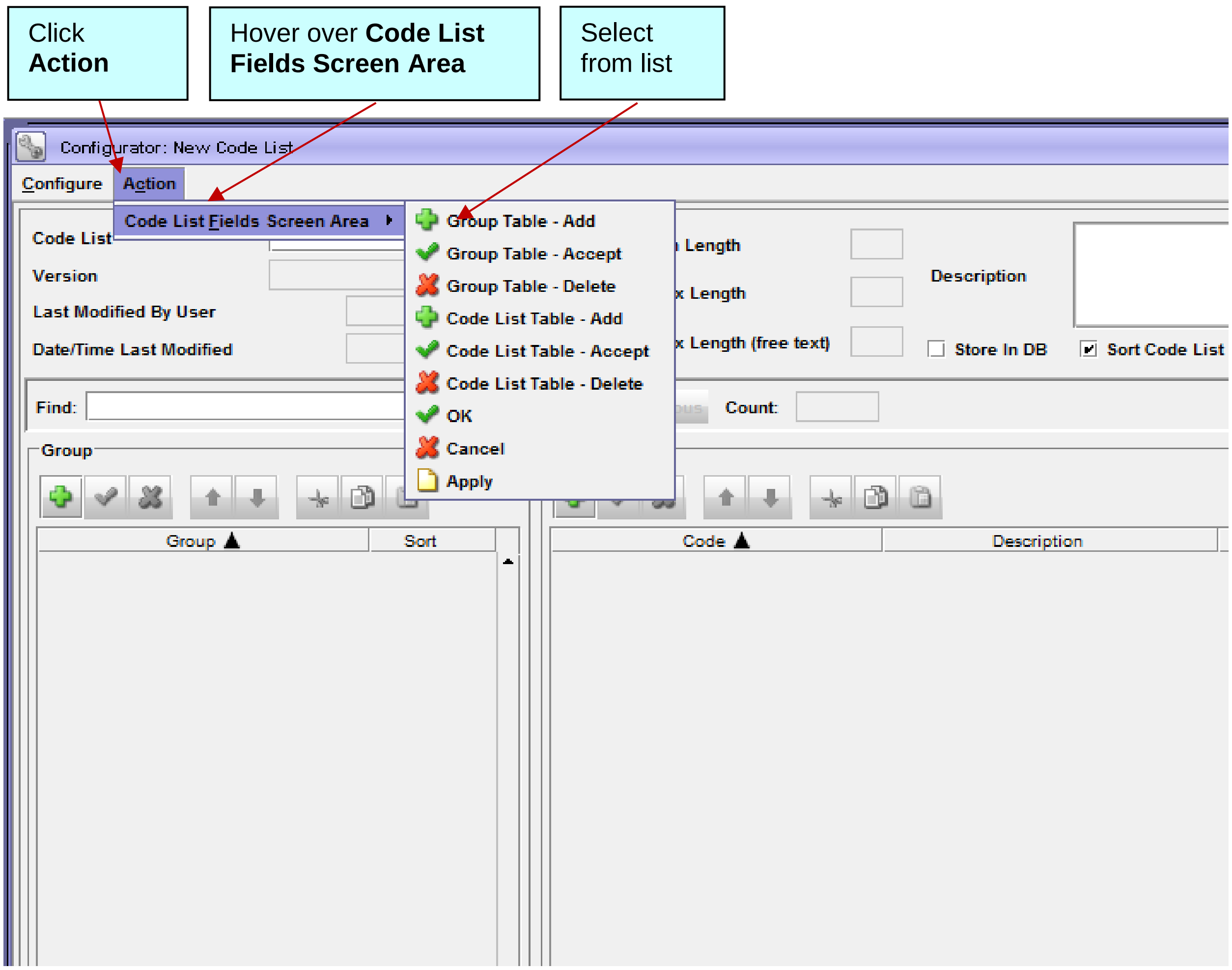
Select Backup Version

- Select a Code List backup. You can only select a single code list backup at a time.
- Click **OK** to access the selected backup, or **Cancel** to cancel out of the window and go back to the main Configurator screen.

6.8 – Code List Menu Access

To use the Code List Action menu:

- Open the Configurator Module.
- Open any Code List screen containing an **Action** menu item.



Code List Menu Access

- Click the **Action** menu.
- Hover over **Code List Fields Screen Area**.
- Select from list provided.

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Chapter 7 – Vehicle Code Configuration

Vehicle codes are a set of fields that would normally be code list fields but have a very specific interaction between them. The complication inherent with this interaction meant the need for a separate section within the OpenFox® Configurator specifically for vehicle codes. This section deals with the interaction between the Vehicle Makes, Vehicle Models, and Vehicle Styles, which are all tied very tightly together to create not just a single list for each field, but an interdependency that allows only select values from one field to allow only select other values from another field.

The OpenFox® Configurator Vehicle Code screens are used to supply the information necessary to define Vehicle Code records. The OpenFox® Configurator Vehicle Code screens allow the administrator to create new Vehicle Code records, modify existing Vehicle Code records, copy existing Vehicle Code records, export Vehicle Code records, import Vehicle Code records, delete Vehicle Code records, or interact with Vehicle Code backups, all with immediate effect and without any other software changes or system reboots.

NOTE: Deleting a Vehicle Code record will erase the vehicle code information from the system completely. The Vehicle Code information will no longer be available in the database.

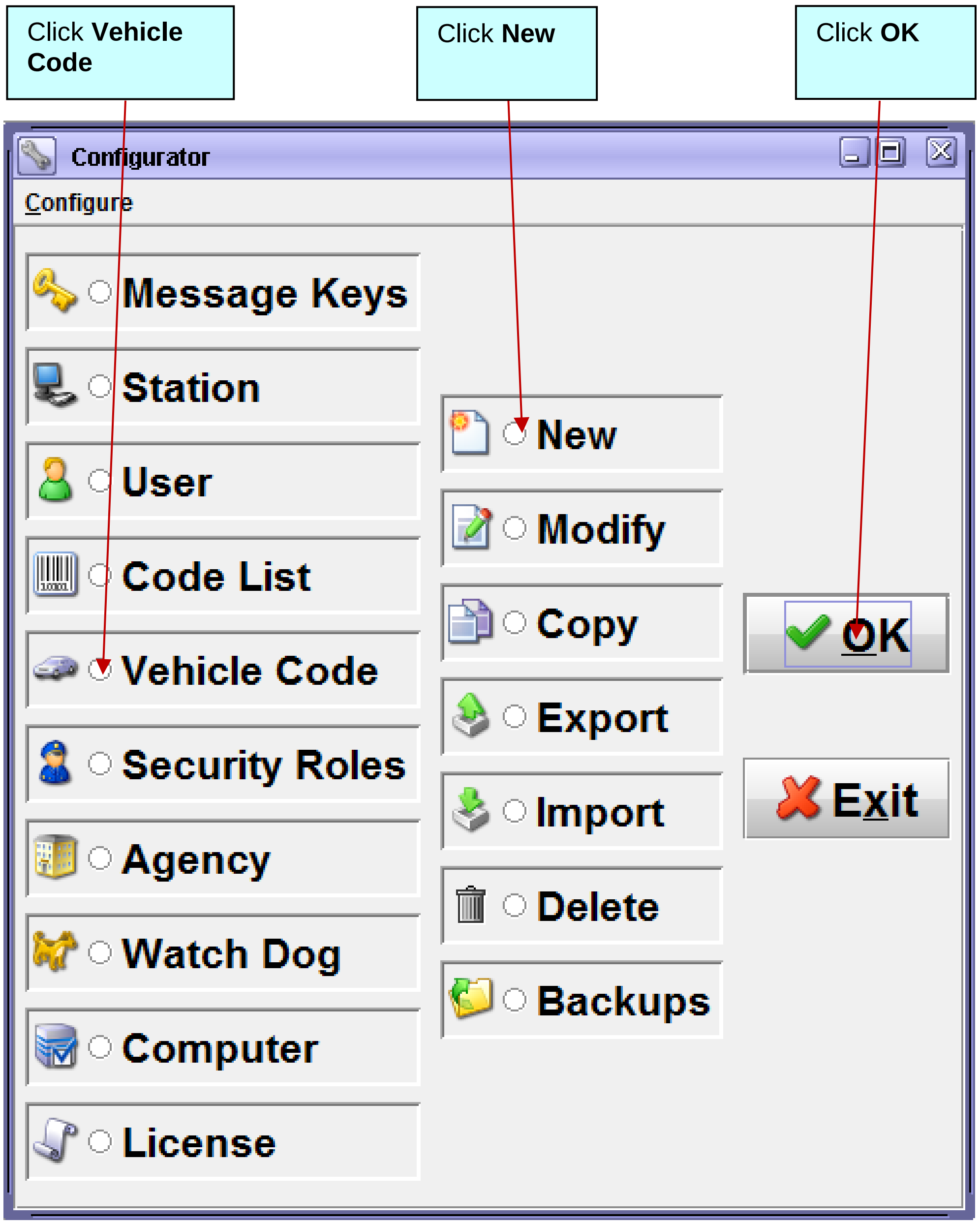
NOTE: There will only be one functioning vehicle code list operating at any given time. Generally, this is the vehicle code list called VEHICLE_CODES. All other vehicle code lists are backup or test versions.

The OpenFox® Configurator Vehicle Code screens, their text-fields, lists, options and buttons are as follows:

7.1 – Add New Vehicle Code

To configure a new Vehicle Code:

- Open the Configurator Module



Configurator

- Select **Vehicle Code** from the left column.
- Select **New** from the middle column.
- Click **OK**.

New Vehicle Code

7.1.1 – New Vehicle Code Window

The procedure for creating a new vehicle code is covered in detail below:

- Enter a unique **Vehicle Code** ID.
- Enter a **Description**.
- Select Store in DB if this code list must be accessible to all stations sending traffic through the switch (or leave it blank if this code list is only to be used within OpenFox® Desktop).
- Enter any other desired or necessary information.
- Click **OK** to accept changes and clear screen, **Cancel** to cancel the changes and return to the main OpenFox® Configurator screen or **Apply** to accept changes and stay in this screen.

7.1.1.1 – New Vehicle Code Fields

Vehicle Code - Enter a unique value for each vehicle code list. Alphanumeric characters, as well as the hyphen character, are allowed.

Version - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the vehicle code record to the OpenFox®.

Last Modified By User - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the vehicle code record to the OpenFox®.

Date/Time Last Modified - This is a read-only field, it is not interactive in any way. The system automatically updates this field upon submission of any modification of the vehicle code record to the OpenFox®.

Description - Enter a description for the Vehicle Code in the Description field. This is a free-text description only used for viewing. It has no bearing on transactional behavior, but helps in understanding configurations when troubleshooting.

Store in DB - Indicates that this code list will be usable by the OpenFox® Message Switch as well as OpenFox® Desktop. If this check box is not check, only modules within Desktop will be able to access this code list and its values for field validation.

7.1.1.2 – Vehicle Code Find Fields

Find - Enter a value in this field to search against the existing values in the vehicle code.

Next - Click this button to cycle down through the matching values discovered during the previous Find operation.

Previous - Click this button to cycle up through the matching values discovered during the previous Find operation.

Count: - This is a read-only field that reports the number of matches obtained during the previous Find operation.

7.1.1.3 – Vehicle Code Make Fields

Category - Select which category of Make to edit.

Add - Add new group into make table. Users will need to click Apply or OK to save changes into the database.

Accept - Accept changes to make table. Users will still need to click Apply or OK to save changes into the database.

Delete - Remove selected vehicle make from make table. Users will still need to click Apply or OK to save changes into the database.

Code - Enter the value that will be sent as field data for this field.

Description - Enter the value that the users will see as a “friendly name” for this field (e.g. a description of “Chevrolet” for the vehicle make code “CHEV”).

Start - The start position where the vehicle make code can be edited by the user.

Vehicle Types - Select the available vehicle types allowed for this vehicle make.

7.1.1.4 – Automobile Model Fields

Add - Add new field into fields table. Users will need to click Apply or OK to save changes into the database.

Accept - Accept changes to fields table. Users will still need to click Apply or OK to save changes into the database.

Delete - Remove selected field from fields table. Users will still need to click Apply or OK to save changes into the database.

Code - Enter the value that will be sent as field data for this field

Description - Enter the value that the users will see as a "friendly name" for this field (e.g. a description of "Mustang" for the vehicle model code "MUS").

7.1.1.5 – Model & Style Tab Fields

Vehicle Type - Select which vehicle type to modify.

Add - Add new field into fields table. Users will need to click Apply or OK to save changes into the database.

Accept - Accept changes to table. Users will still need to click Apply or OK to save changes into the database.

Delete - Remove selected field from table. Users will still need to click Apply or OK to save changes into the database.

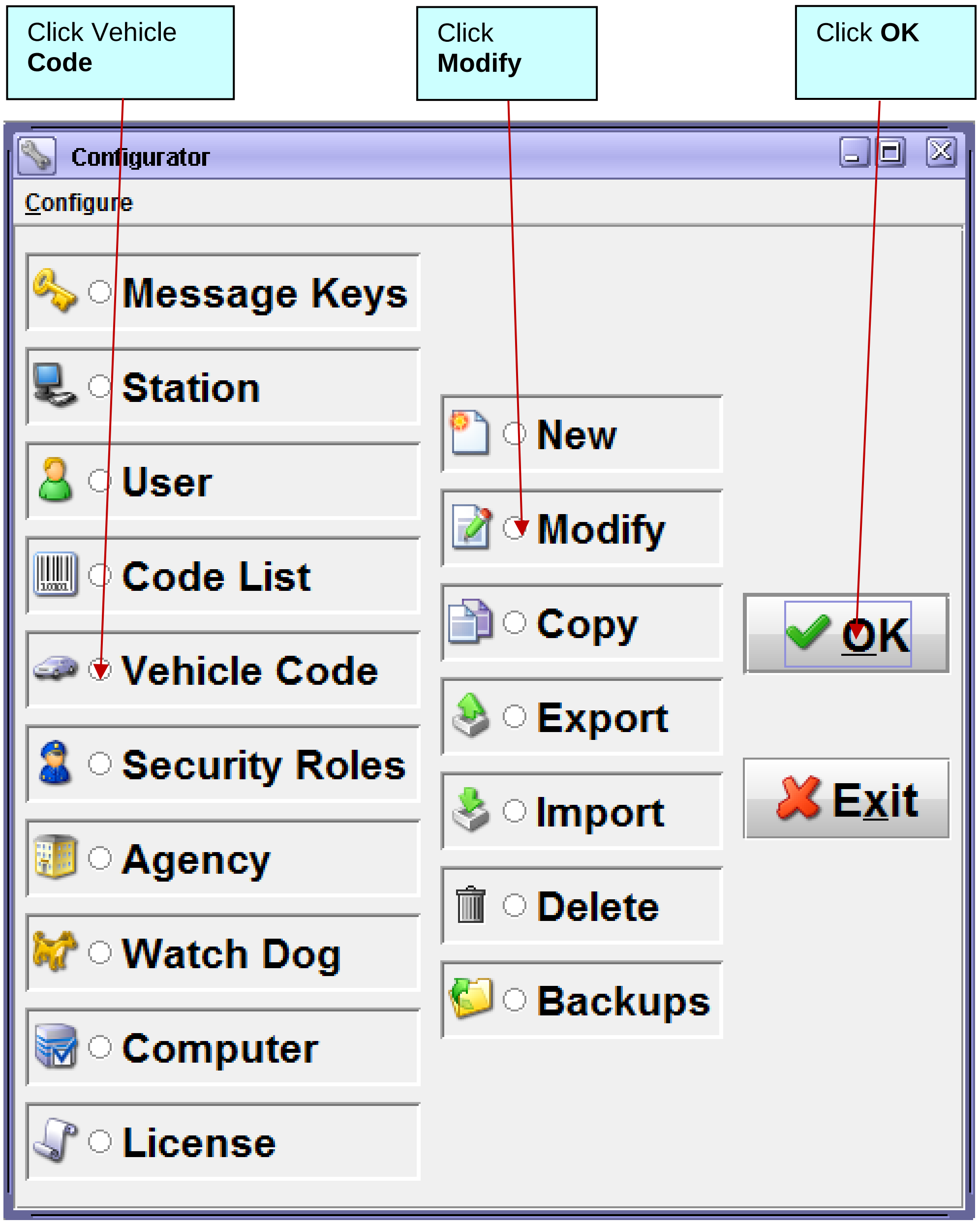
Code - Enter the value that will be sent as field data for this field

Description - Enter the value that the users will see as a "friendly name" for this field (e.g. a description of "Mustang" for the vehicle model code "MUS").

7.2 – Modify Existing Vehicle Code

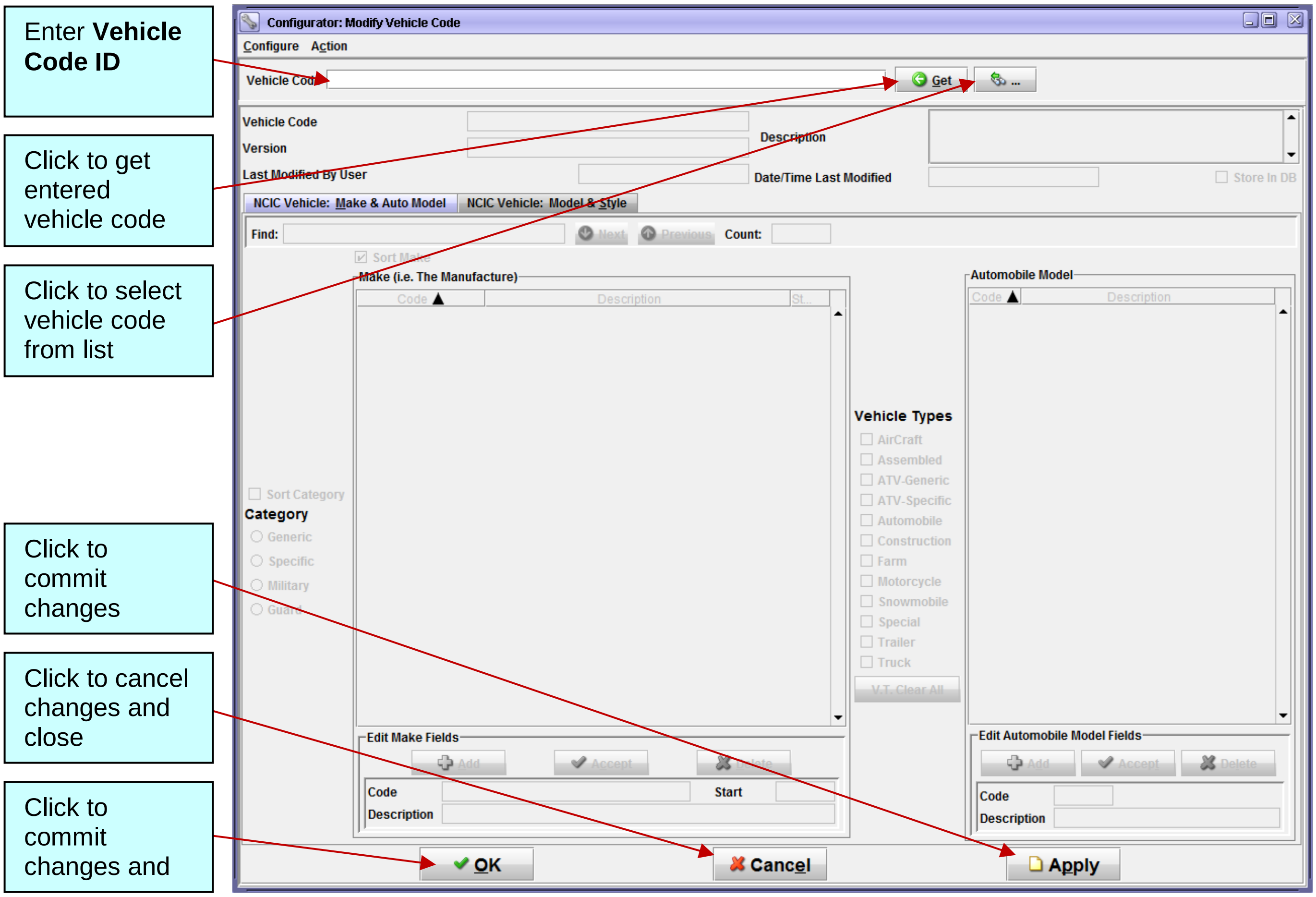
To modify an existing Vehicle Code:

- Open the Configurator Module



Configurator

- Select **Vehicle Code** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



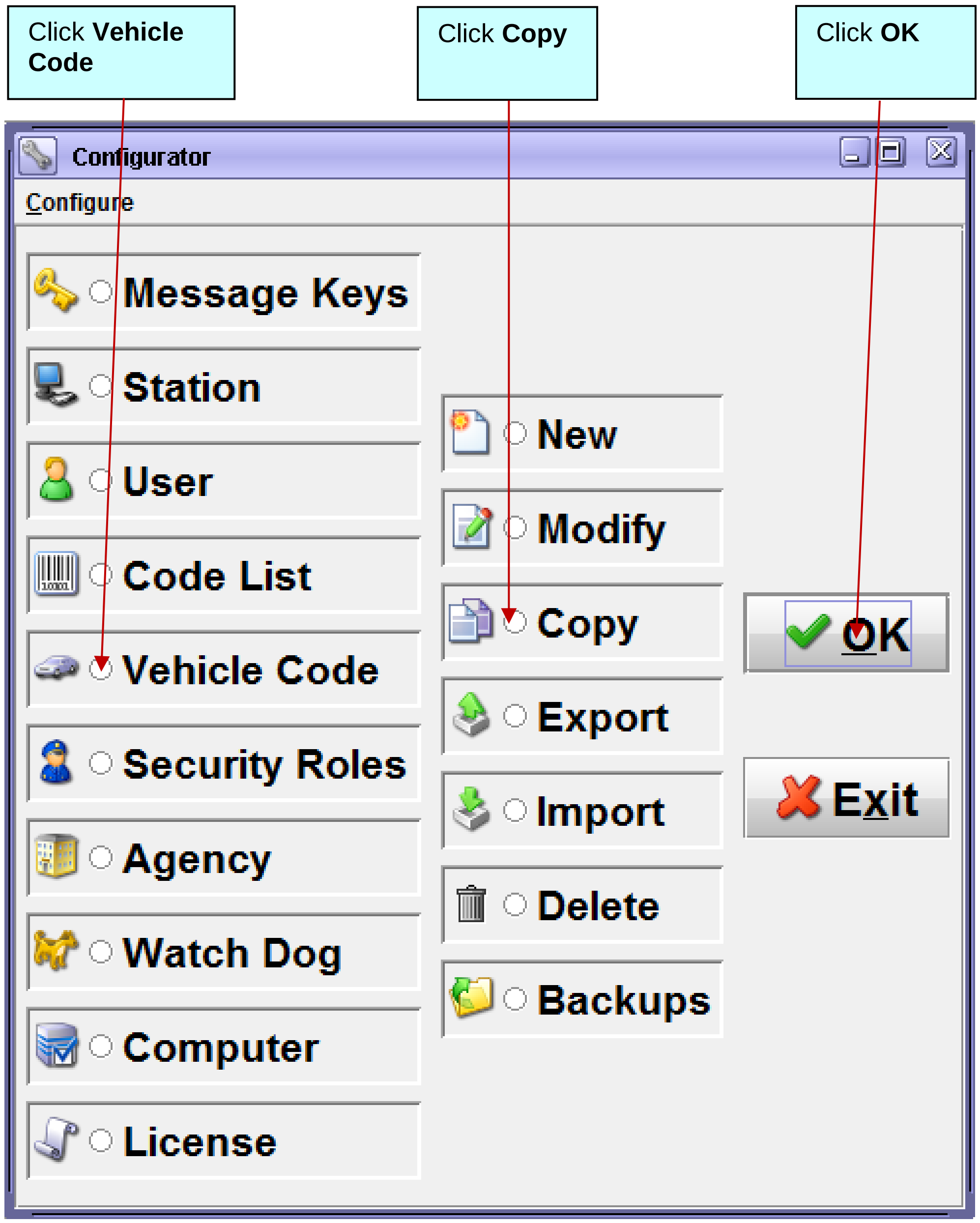
Modify Vehicle Code

- Enter the Vehicle Code ID then click **Get** to retrieve the code list record. You may click the **Binocular** button to display the **Get Vehicle Code Dialog Window**. This window will list all vehicle code records contained in the system for you to choose from.
- Modify the fields in the vehicle code record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

7.3 – Copy Existing Vehicle Code

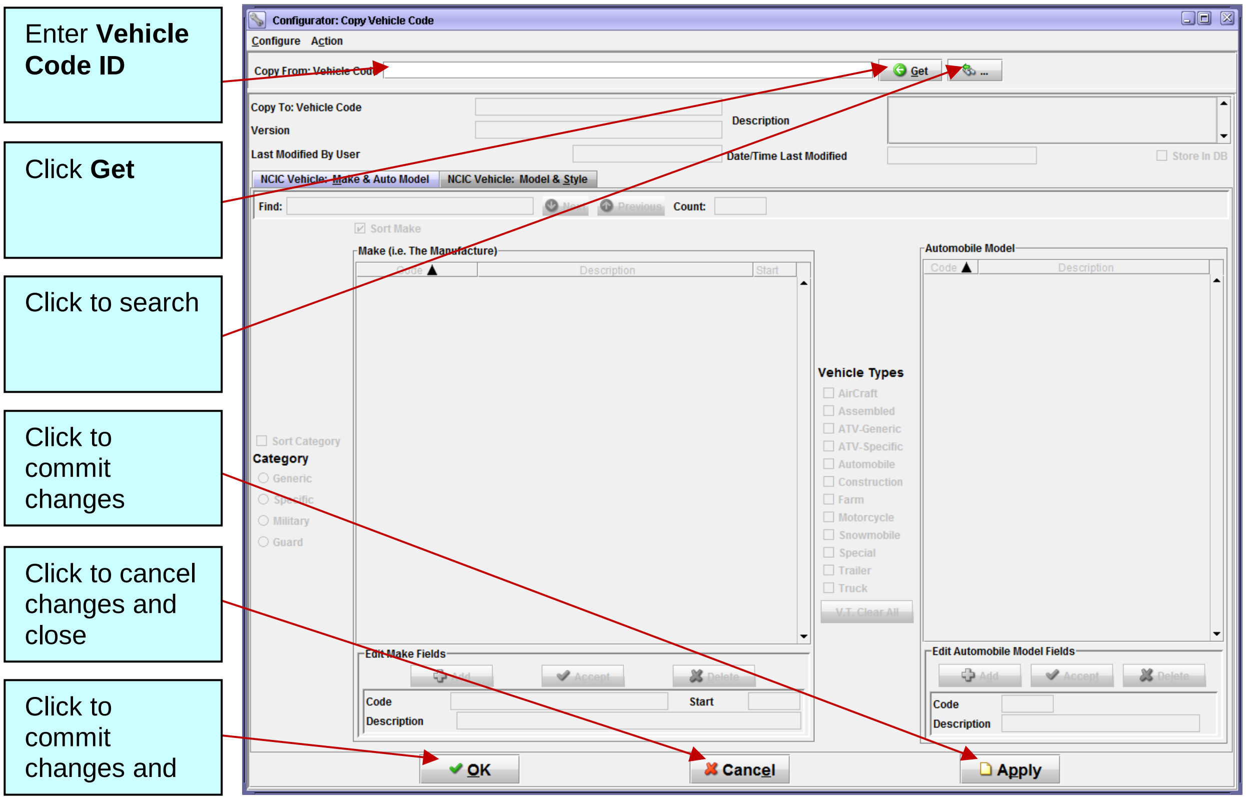
To copy an existing Vehicle Code:

- Open the Configurator Module



Configurator

- Select **Vehicle Code** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



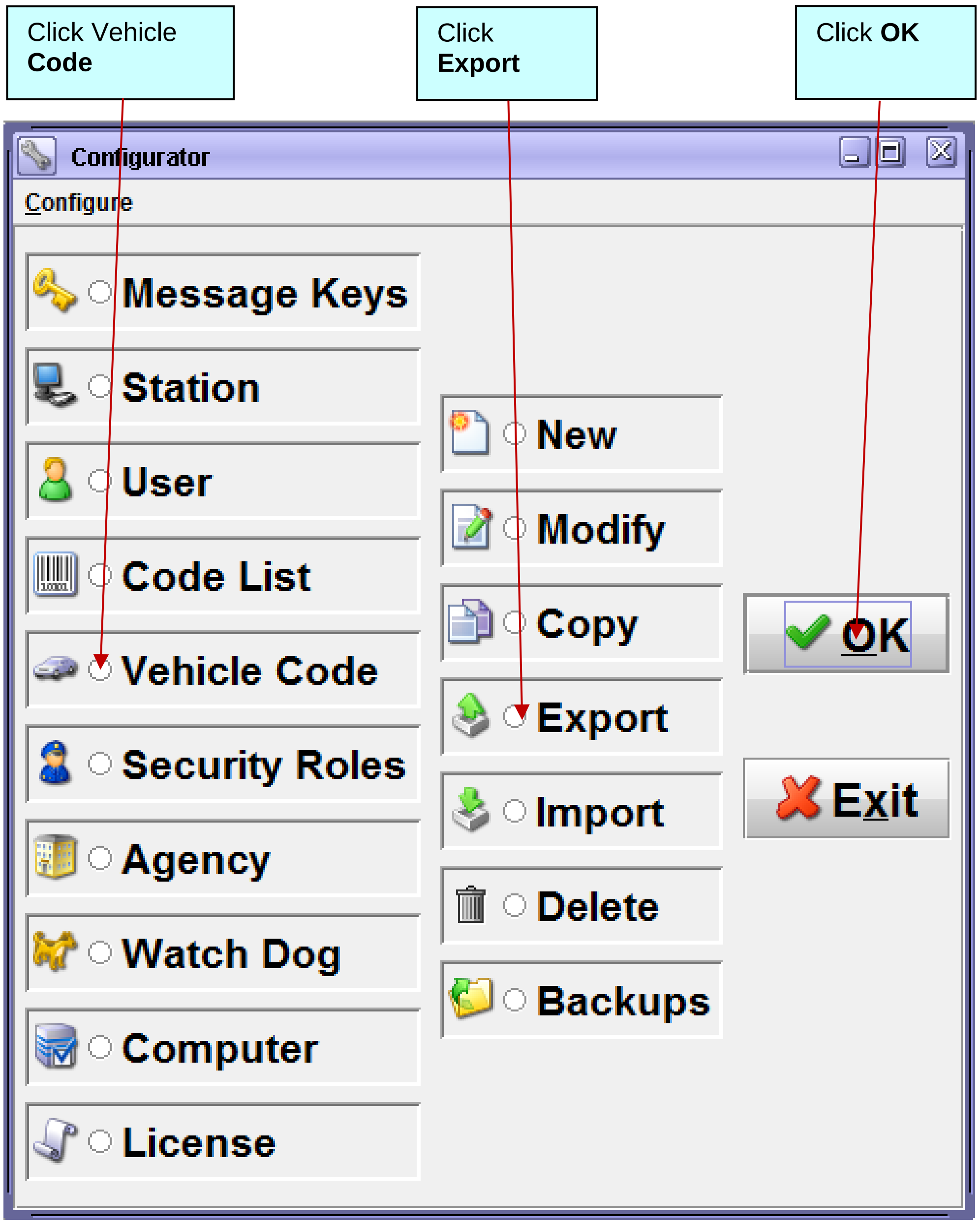
Copy Vehicle Code

- Enter the Vehicle Code ID then click **Get** to retrieve the code list record. You may click the **Binocular** button to display the **Get Vehicle Code Dialog Window**. This window will list all code list records contained in the system for you to choose from.
- Enter a unique (i.e. “copy-to”) **Vehicle Code ID**.
- Modify the fields in the Vehicle Code record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

7.4 – Export Vehicle Code

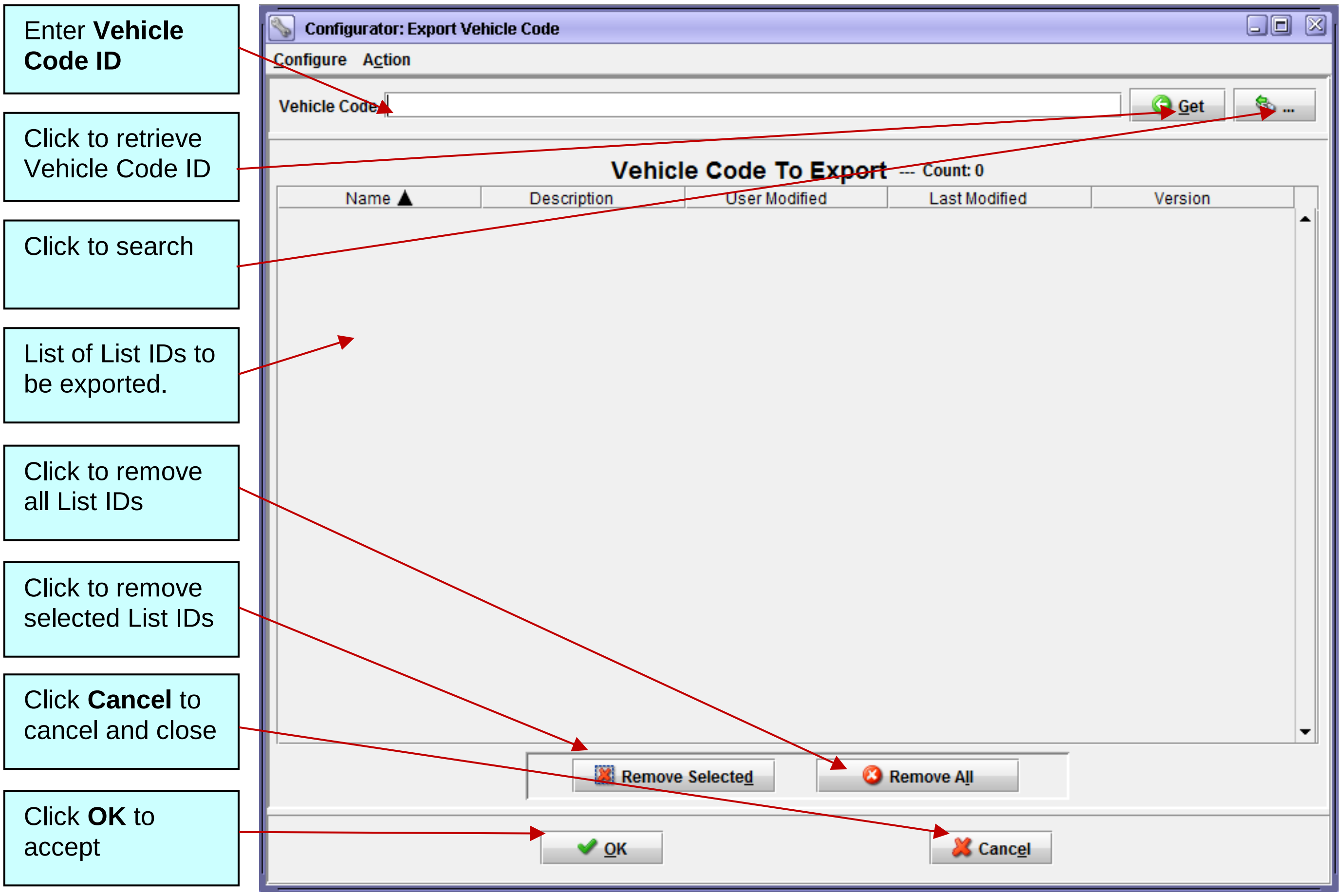
To export a Vehicle Code:

- Open the Configurator Module



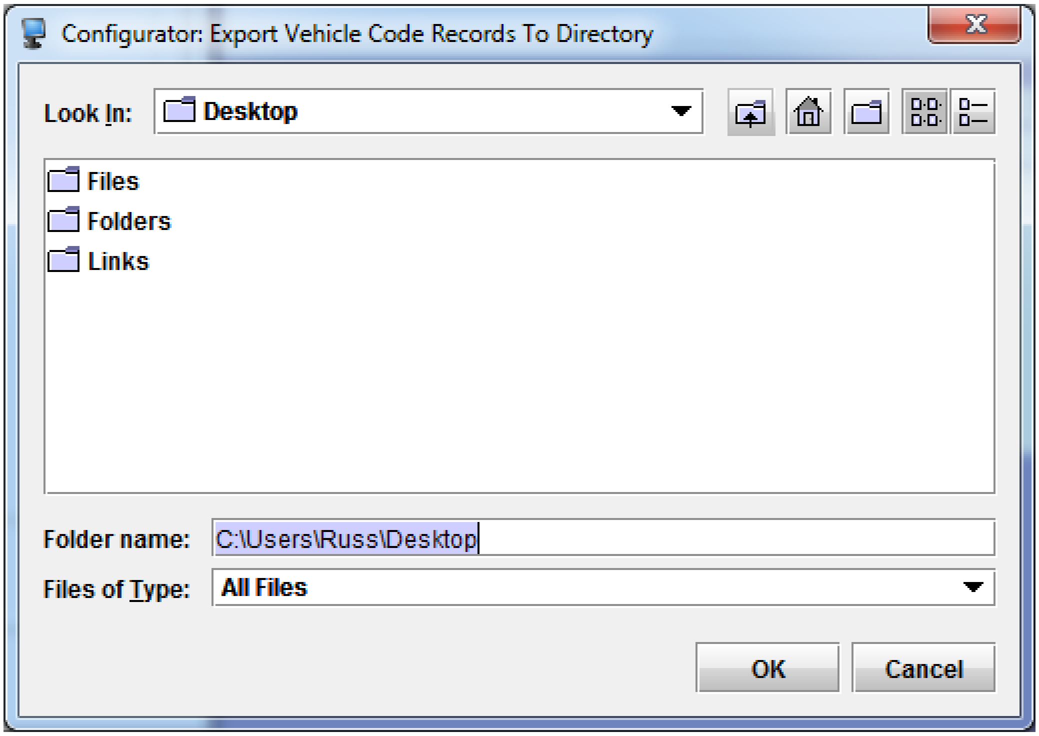
Configurator

- Select **Vehicle Code** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Vehicle Code

- Select the vehicle code records to export.
- Click **OK**.



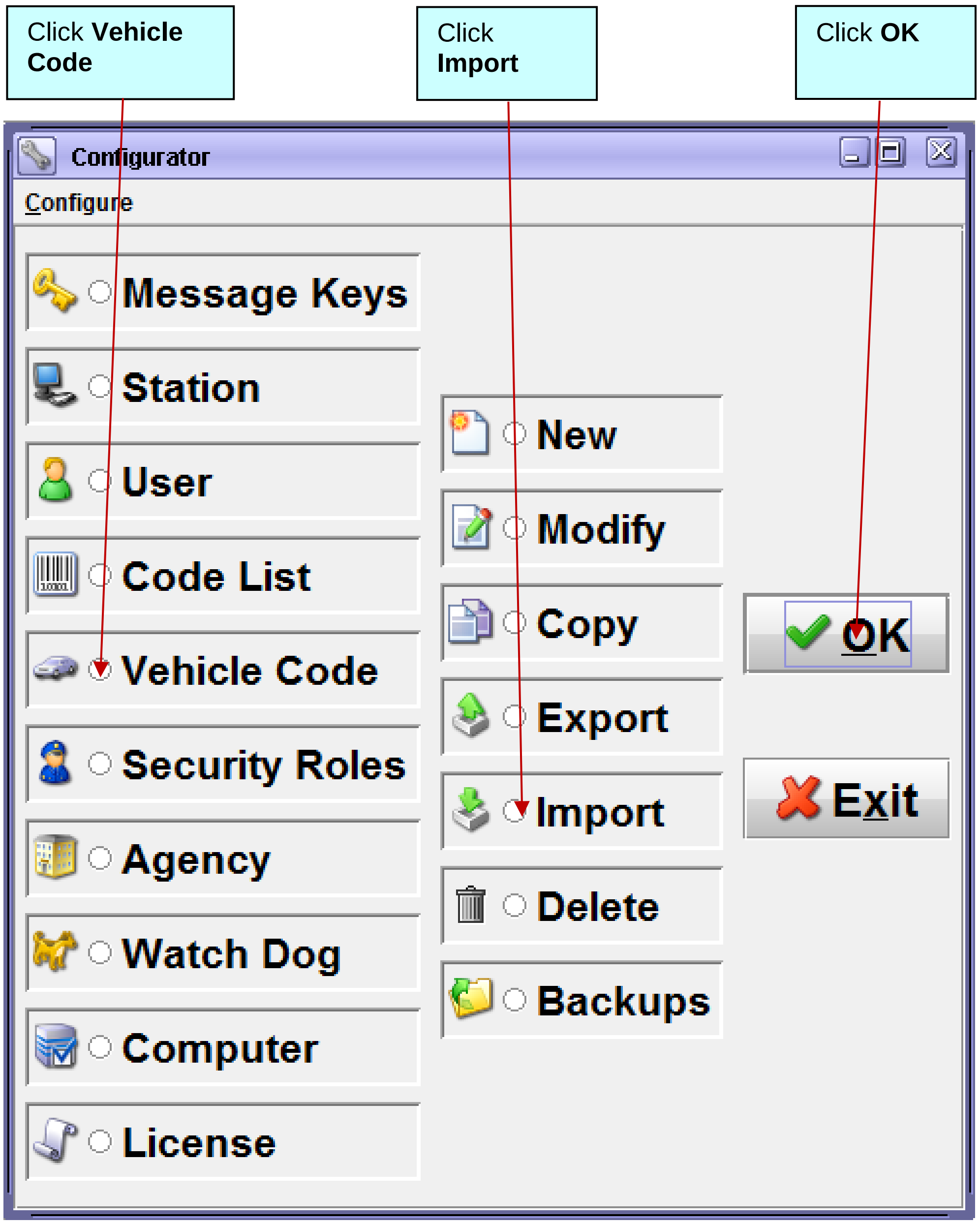
Export Vehicle Code Records To Directory

- Select the directory on your local P.C. to export the vehicle code records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

7.5 – Import Vehicle Code

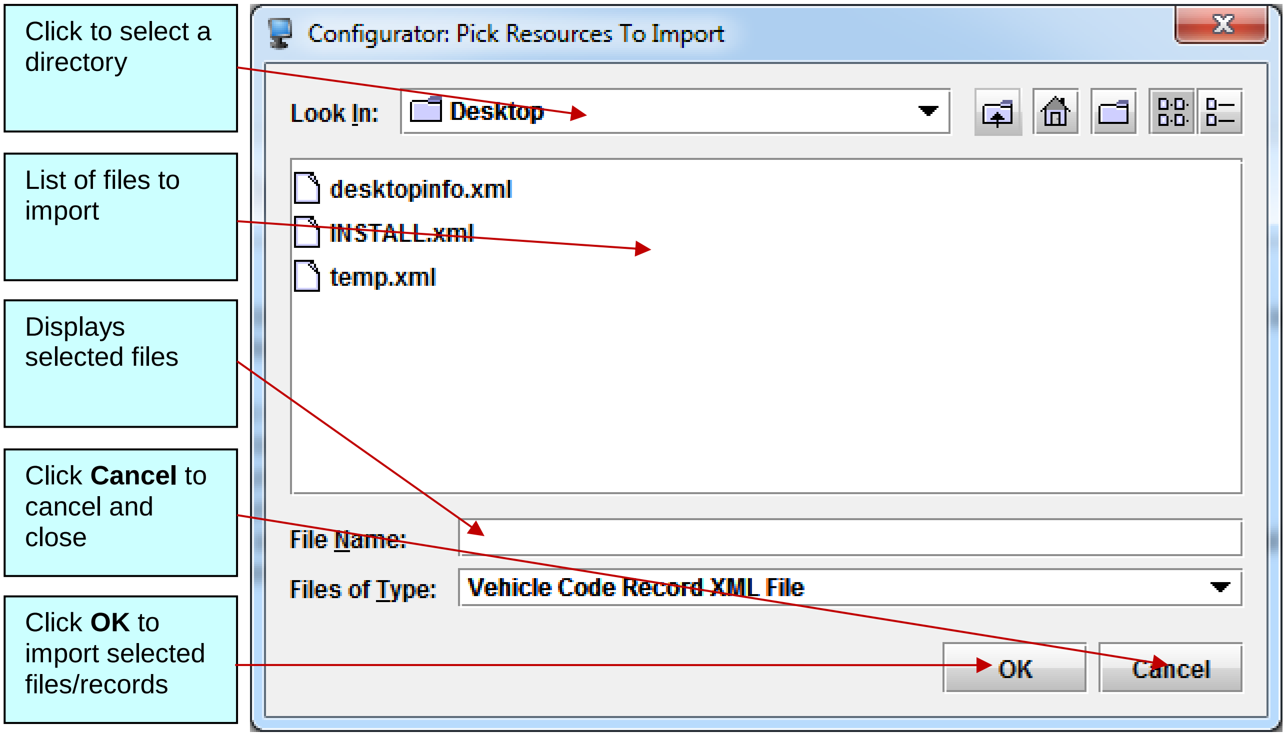
To import a Vehicle Code:

- Open the Configurator Module



Configurator

- Select **Vehicle Code** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



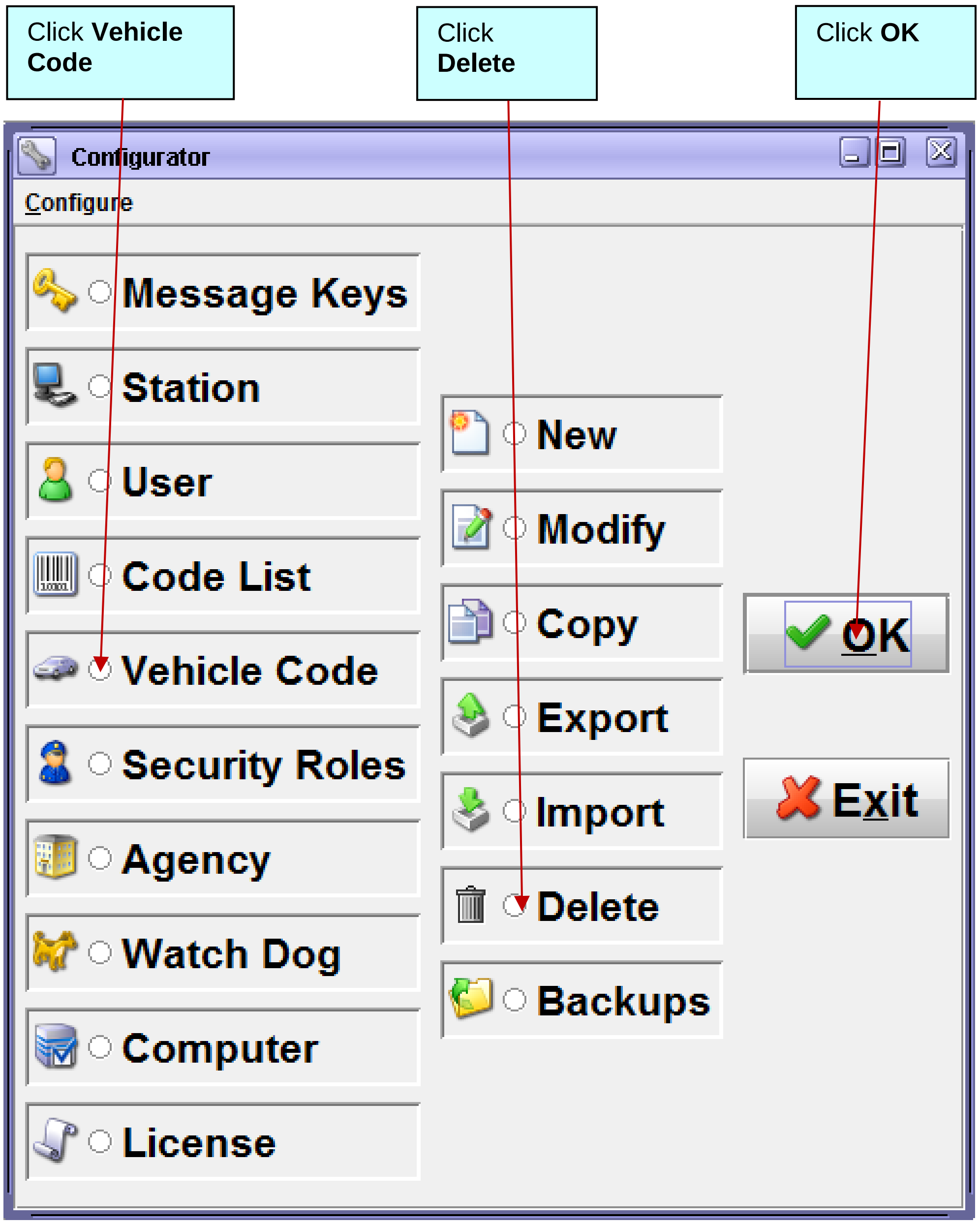
Pick Resources to Import

- Select the Vehicle Code List file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

7.6 – Delete Vehicle Code

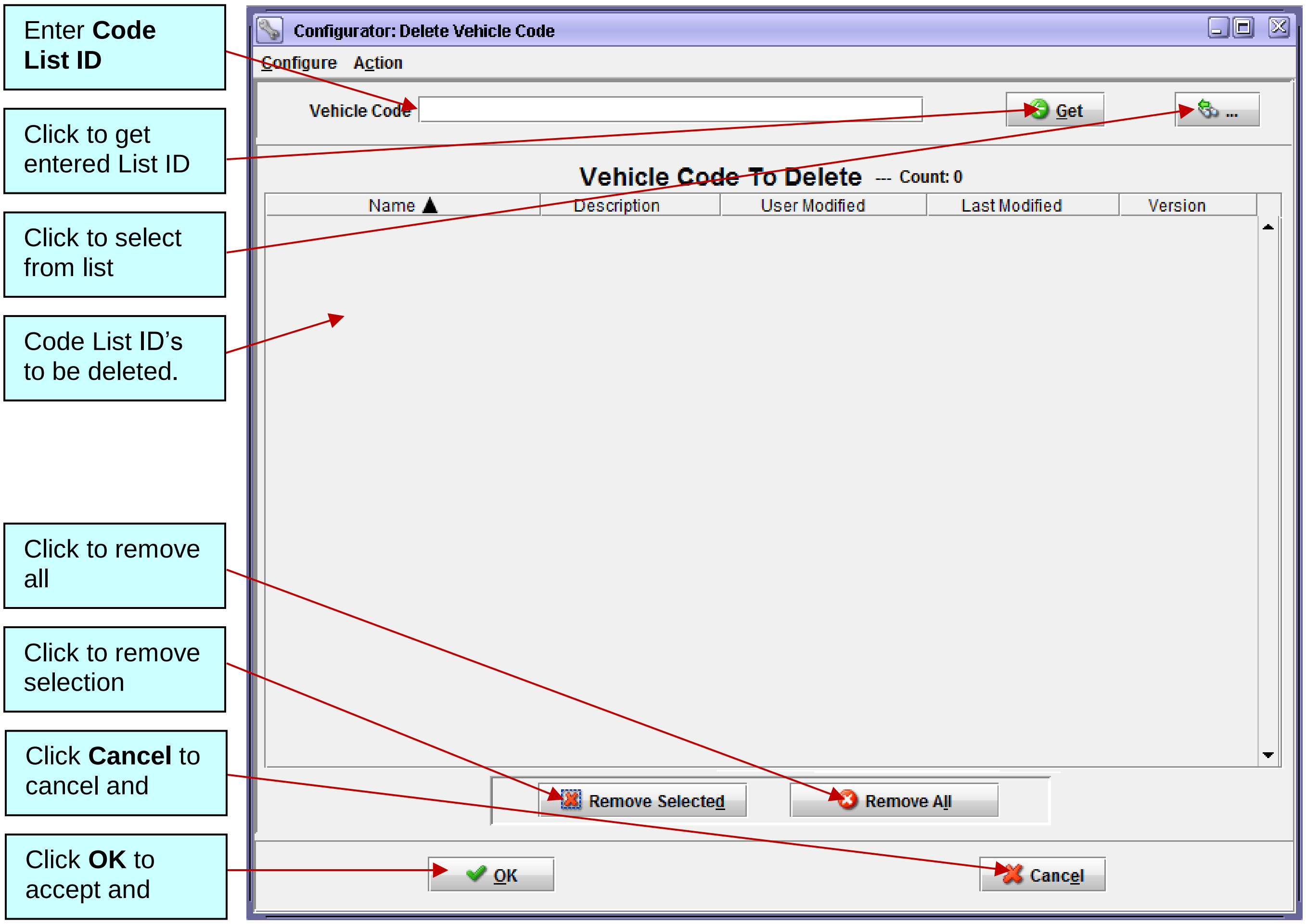
To delete a Vehicle Code:

- Open the Configurator Module



Configurator

- Select **Vehicle Code** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



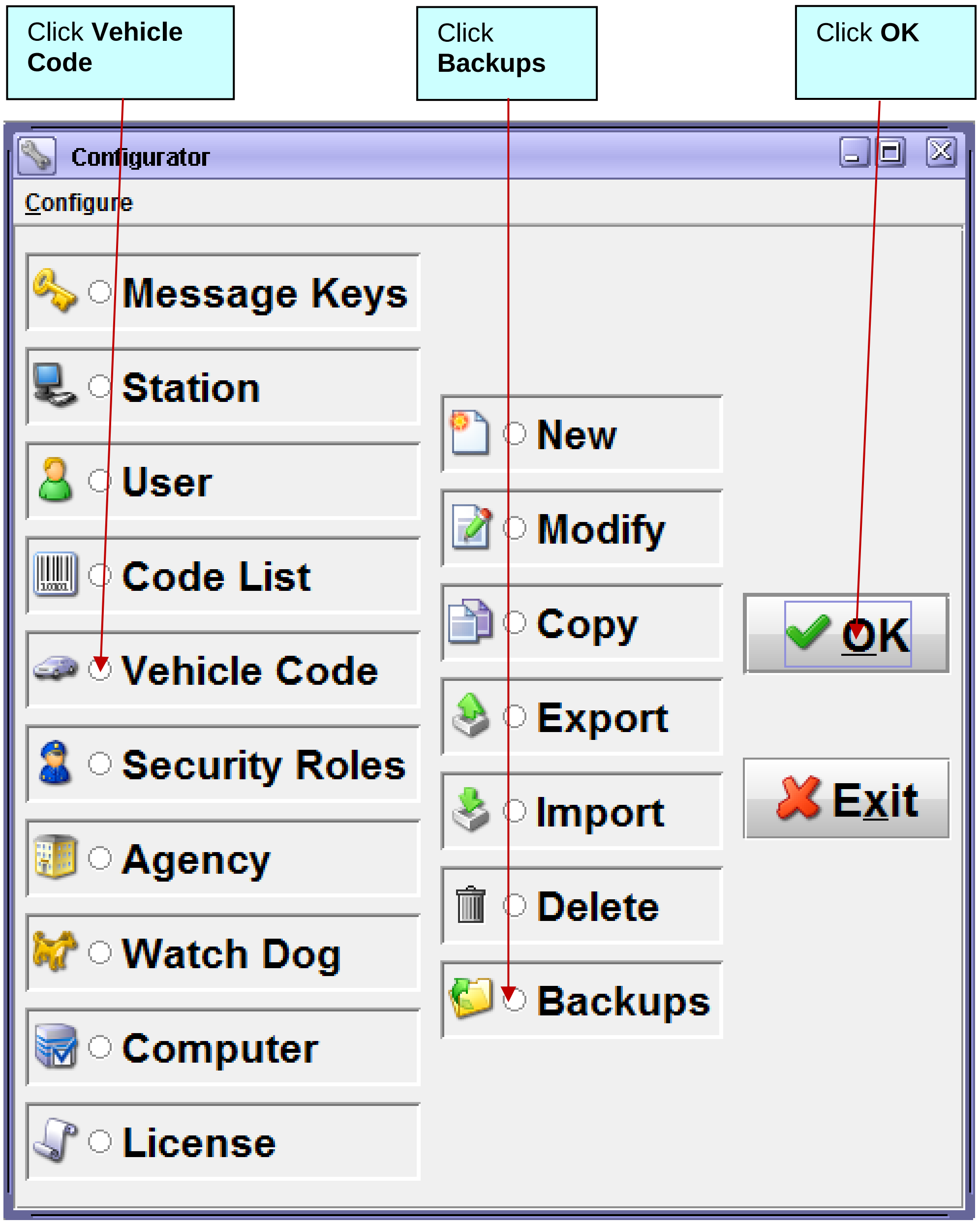
Delete Vehicle Code

- Select the Code List record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

7.7 – Vehicle Code Backups

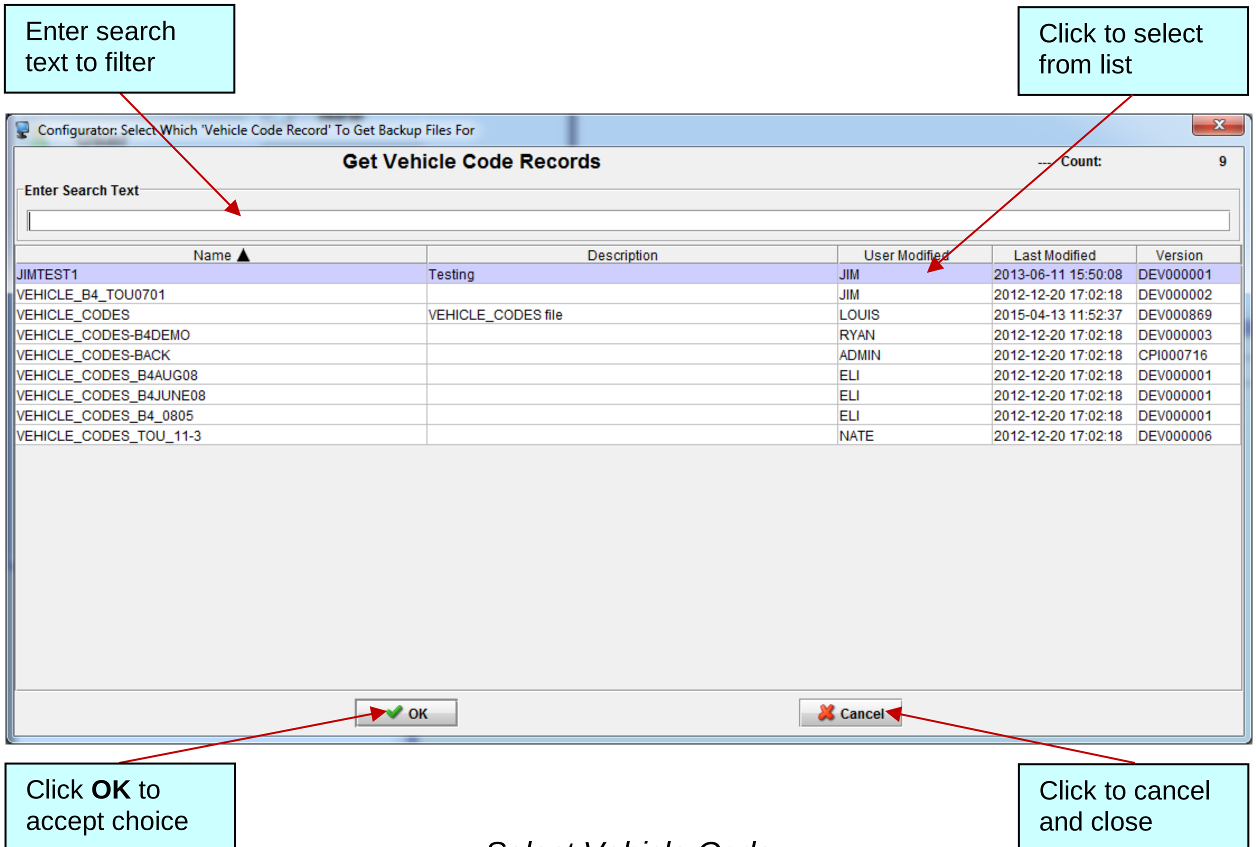
To access Vehicle Code Backups:

- Open the Configurator Module



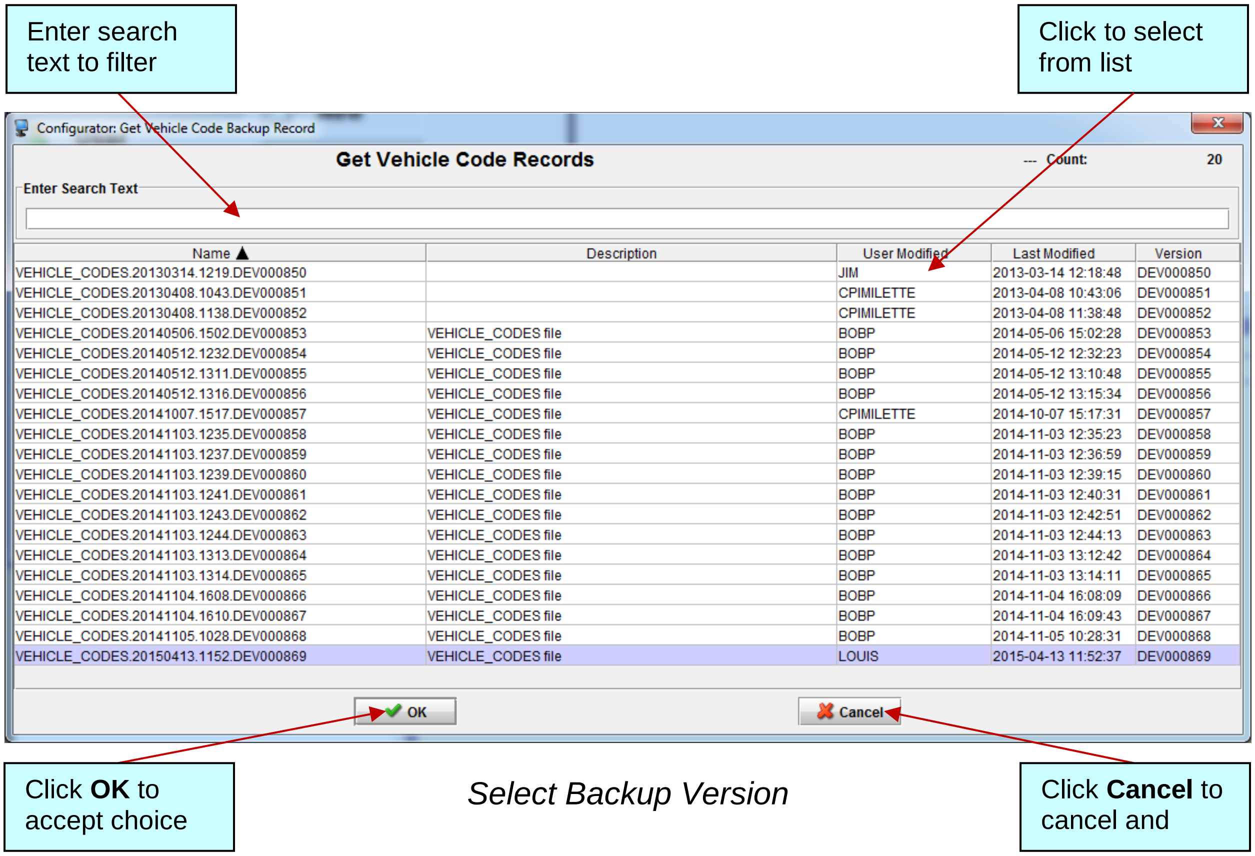
Configurator

- Select **Code List** from the left column.
- Select **Backups** from the middle column.
- Click **OK**.



Select Vehicle Code

- Select a Vehicle Code to access the backups for. You can only select a single vehicle code backup at a time.
- Click **OK** to access the backups for the selected vehicle code, or **Cancel** to cancel out of the window and go back to the main Configurator screen.



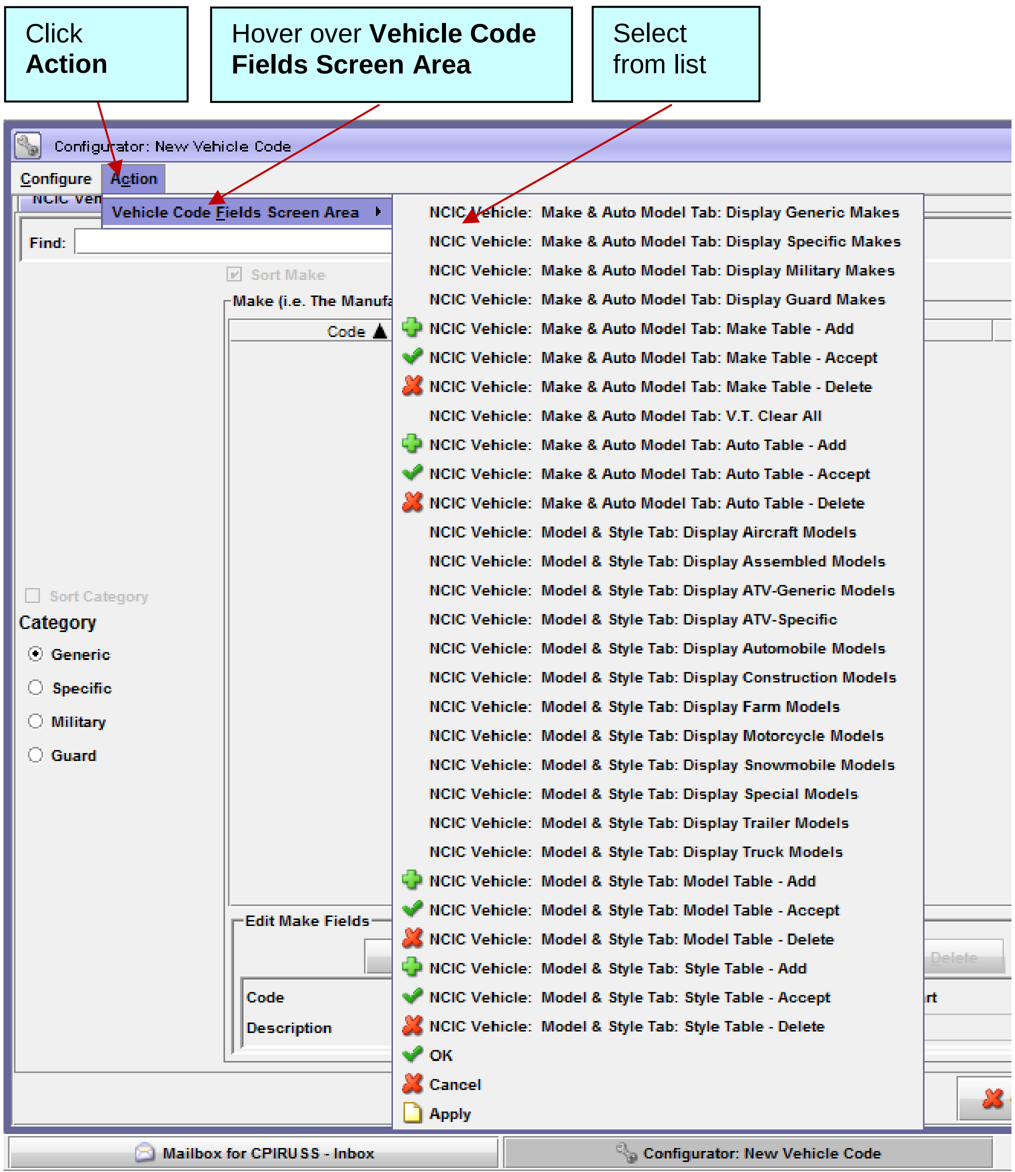
Select Backup Version

- Select a Vehicle Code backup. You can only select a single vehicle code backup at a time.
- Click **OK** to access the selected backup, or **Cancel** to cancel out of the window and go back to the main Configurator screen.

7.8 – Vehicle Code Menu Access

To use the Vehicle Code Action menu:

- Open the Configurator Module.
- Open any Vehicle Code screen containing an **Action** menu item.



Vehicle Code Menu Access

- Click the **Action** menu.
- Hover over **Vehicle Code Fields Screen Area**.
- Select from list provided.

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Chapter 8 – Security Role Configuration

A set of rules that govern what a station or user can do within the OpenFox® Message Switch is referred to as a “Security Role”. Each Security Role has a single record entered into the database that defines what transactions, commands, other authorities, and other security roles users and stations are authorized to use.

The OpenFox® Configurator Security Role screens are used to supply the information necessary to define Security Role records. The OpenFox® Configurator Security Role screens allow the administrator to create new Security Role records, modify existing Security Role records, copy existing Security Role records, export Security Role records, import Security Role records, or delete Security Role records, all with immediate effect and without any other software changes or system reboots.

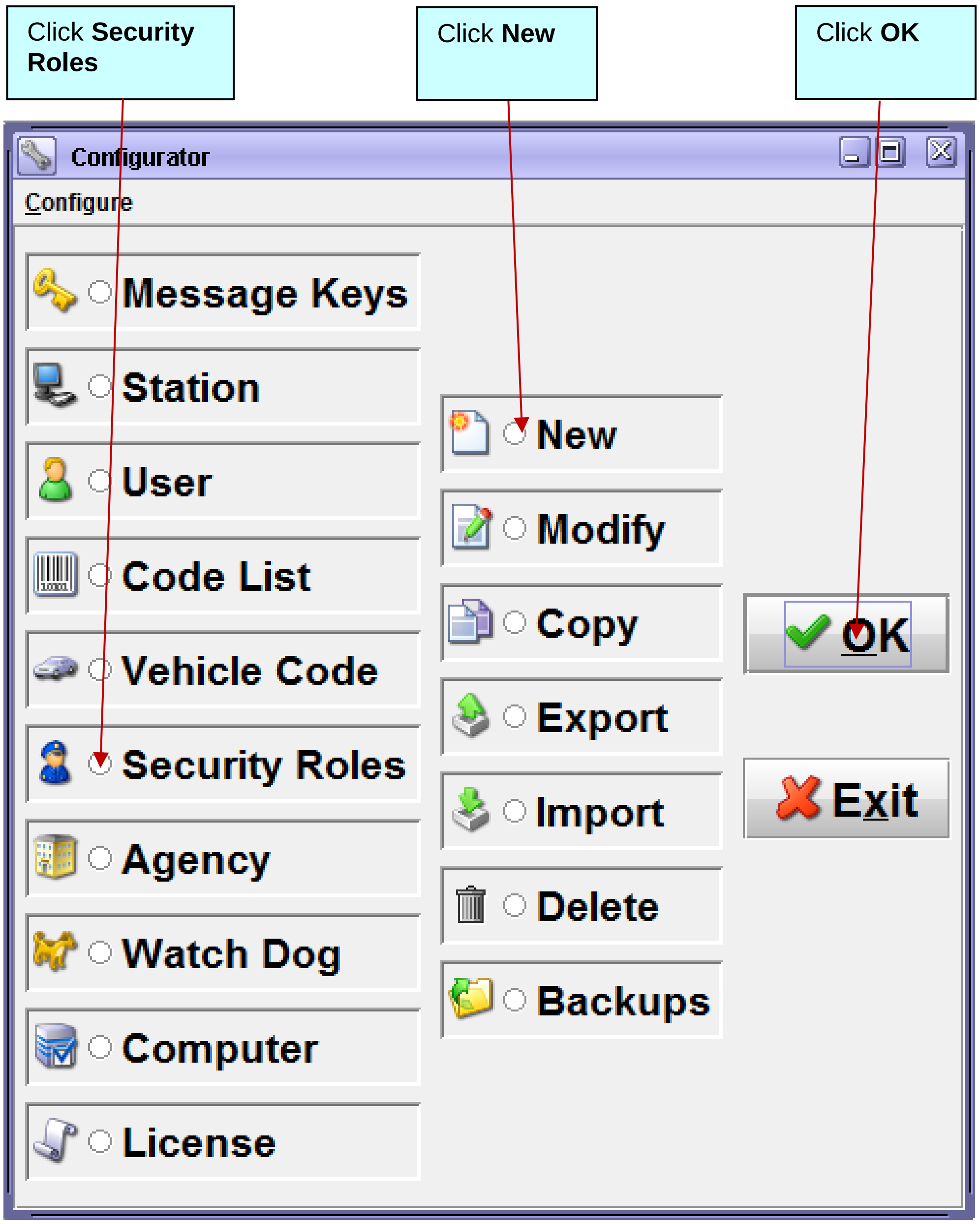
NOTE: While changes to the security role record are immediate, any changes to the security role will not affect a user’s current session if the user is logged in when the changes are applied to a security role which has been assigned to them. The user will have to close any open session and open a new session for these changes to take effect. An administrator can force a user’s session to reset by setting the user down and resetting the user. For more information on OpenFox® commands, see the *OpenFox® Systems Guide*.

The OpenFox® Configurator Security Role screens, their text-fields, lists, options and buttons are as follows:

8.1 – Add New Security Role

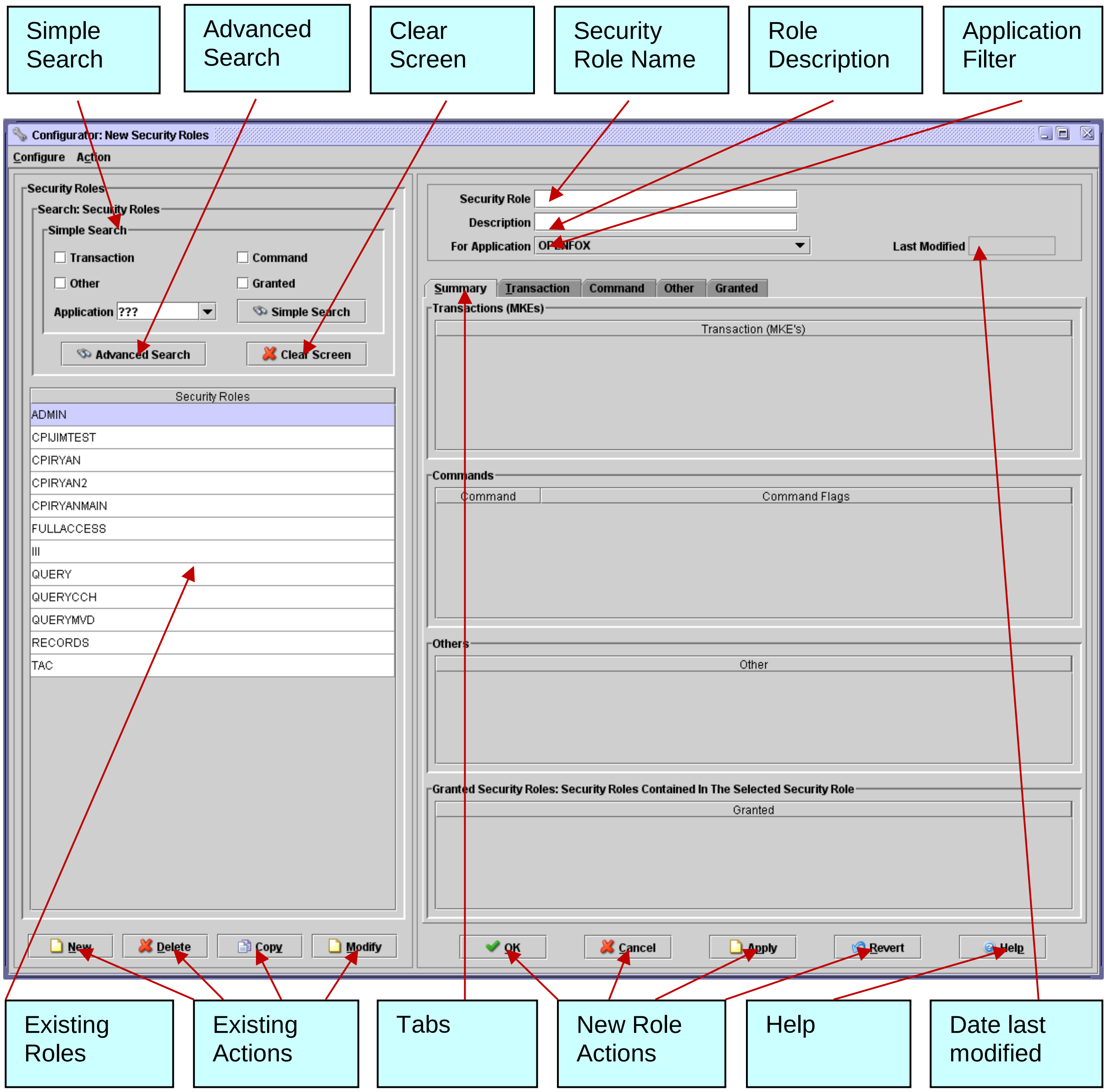
To configure a new Security Role:

- Open the Configurator Module



Configurator

- Select **Security Roles** from the left column.
- Select **New** from the middle column.
- Click **OK**.



New Security Role

- Enter a unique Security Role name in the text box following the **Security Role** label.
- Enter the full descriptive text that will describe this Security Role as fully as possible in the text box following the **Description** label.
- Select the **Application** the Security Role is for.
- Add desired Transactions, Commands, Other Authorities, and Security Roles.
- Click **OK** to accept the changes and close the window**,** **Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

8.1.1 – Security Role Fields

Simple Search - Quickly search through the list of existing Security Roles using fields present on the form.

Advanced Search - Provides a more-detailed search through the list of existing Security Roles using a dedicated search screen.

Clear Screen - Clears the screen of any entered information.

Security Roles - A complete list of all existing Security Roles by default, or a matching list of the returned values from a search.

Security Role - Enter a unique name for this Security Role.

Description - Enter the full text of the description for this Security Role.

For Application - Select the application this Security Role will apply to from the drop-down list provided.

Last Modified - Date the Security Role was last modified. This will be automatically updated by the system.

Summary Tab - Quick overview of items contained within the Security Role.

Transaction Tab - Available and selected MKEs contained within the Security Role. This tab is where you select the MKEs to be assigned to this Security Role.

Command Tab - Available and selected commands contained within the Security Role. This tab is where you select the OpenFox® Commands to be assigned to this Security Role.

Other Tab - Available and selected special authorities contained within the Security Role. This tab is where you select Other Authorities to be assigned to this Security Role.

Granted Tab - Available and selected Security Roles contained within the Security Role. This tab is where you select other Security Roles to be nested into this Security Role.

New - Changes the mode of the current Security Role window to the New Security Role window.

Delete - Changes the mode of the current Security Role window to the Delete Security Role window.

Copy - Changes the mode of the current Security Role window to the Copy Security Role window.

Modify - Changes the mode of the current Security Role window to the Modify Security Role window.

OK - Click this button to accept the changes to this Security Role record and close the New Security Role Configurator window.

Cancel - Click this button to cancel the changes to this Security Role record and close the New Security Role Configurator window.

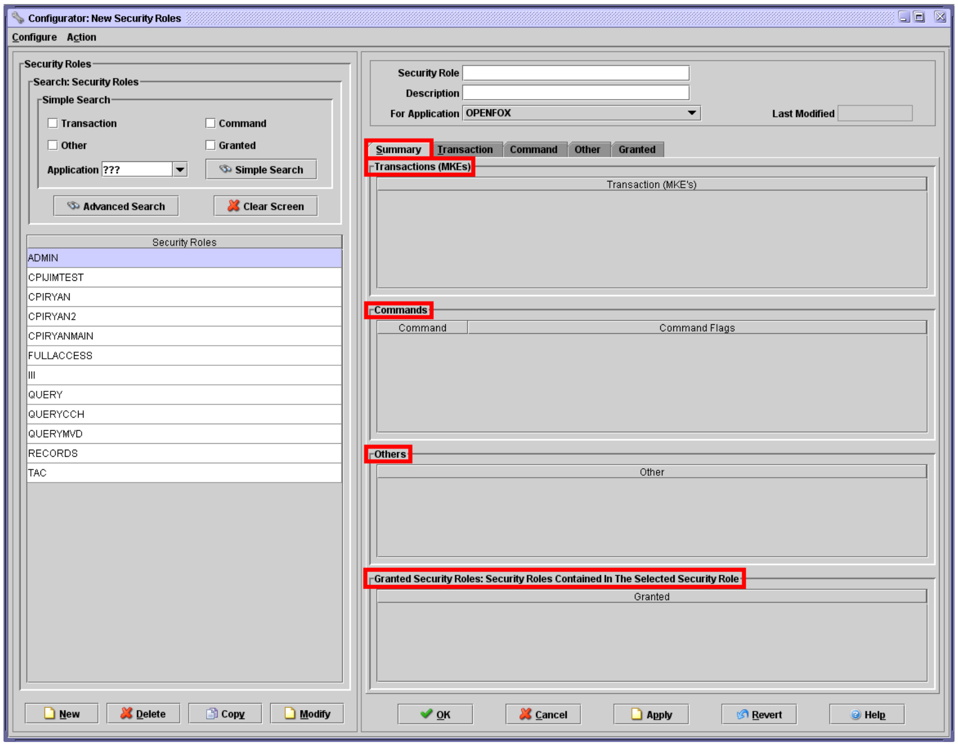
Apply - Click this button to accept the changes to this Security Role record and keep the New Security Role Configurator window open.

Revert - Click this button to cancel the changes to this Security Role record and keep the New Security Role Configurator window open.

Help - Click this button to open an online interactive help screen.

In the New Security Roles screen, you will see five tabs: **Summary**, **Transactions**, **Command**, **Other**, and **Granted.**

8.1.2 – Summary Tab

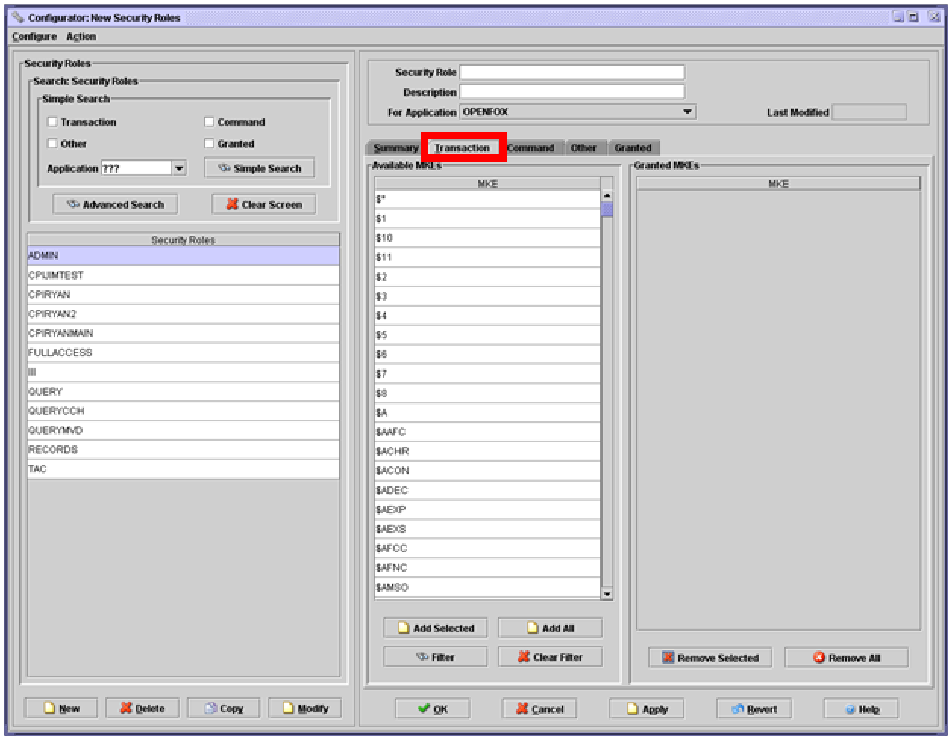


Summary Tab

The **Summary** tab provides a quick overview of the other tabs. It contains a snapshot of **Transactions (MKEs)**, **Commands**, **Others**, and **Granted Security Roles: Security Roles Contained In The Selected Security Role**.

NOTE: This is a passive tab for review only. No modification can be made to the contents of the Security Role from this tab.

8.1.3 – Transaction Tab



Transaction Tab

The **Transaction** tab provides a list of Message Keys (MKEs) that this Security Role grants the permission to use. MKEs that are available to add to the Security role are in the **Available MKEs** list on the left. MKEs that are already added to the Security Role are in the **Granted MKEs** list on the right.

To add a new MKE to the Security Role:

- Select each MKE from the **Available MKEs** to add to the Security Role.
- Click **Add Selected**.
- Review and verify the list of **Granted MKEs**.

To add all MKEs to the Security Role:

- Click **Add All**.
- Review and verify the list of **Granted MKEs**.

To filter the list of MKEs to choose from:

- Click **Filter**.
- Select filtering criteria.
- Click **OK**.

To remove the filter from the list of MKEs to choose from:

- Click **Clear Filter**.

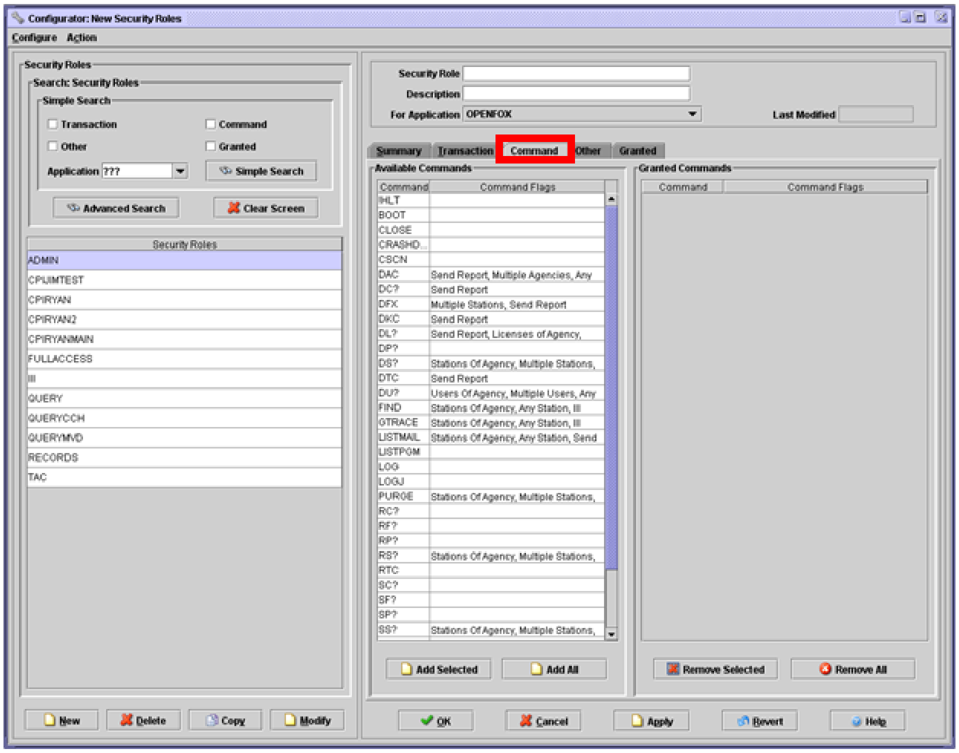
To remove a MKE from the Security Role:

- Select each MKE from the **Granted MKEs** to remove from the Security Role.
- Click **Remove Selected**.
- Review and verify the list of **Granted MKEs**.

To remove all MKEs from the Security Role:

- Click **Remove All**.
- Review and verify the list of **Granted MKEs**.

8.1.4 – Command Tab



Command Tab

The **Command** tab provides a list of the OpenFox® commands that this Security Role grants the permission to use to generate reports or perform other actions within the OpenFox® Message switch. This includes station reports, user reports, message key reports, purge command, etc.

To add a new Command to the Security Role:

- Select each Command from the **Available Commands** to add to the Security Role.
- Click **Add Selected**.
- Right-click the command and select any required flags.
- Review and verify the list of **Granted Commands**.

To add all Commands to the Security Role:

- Click **Add All**.
- Select each command that requires flag changes, right click and choose the appropriate flags.
- Review and verify the list of **Granted Commands**.

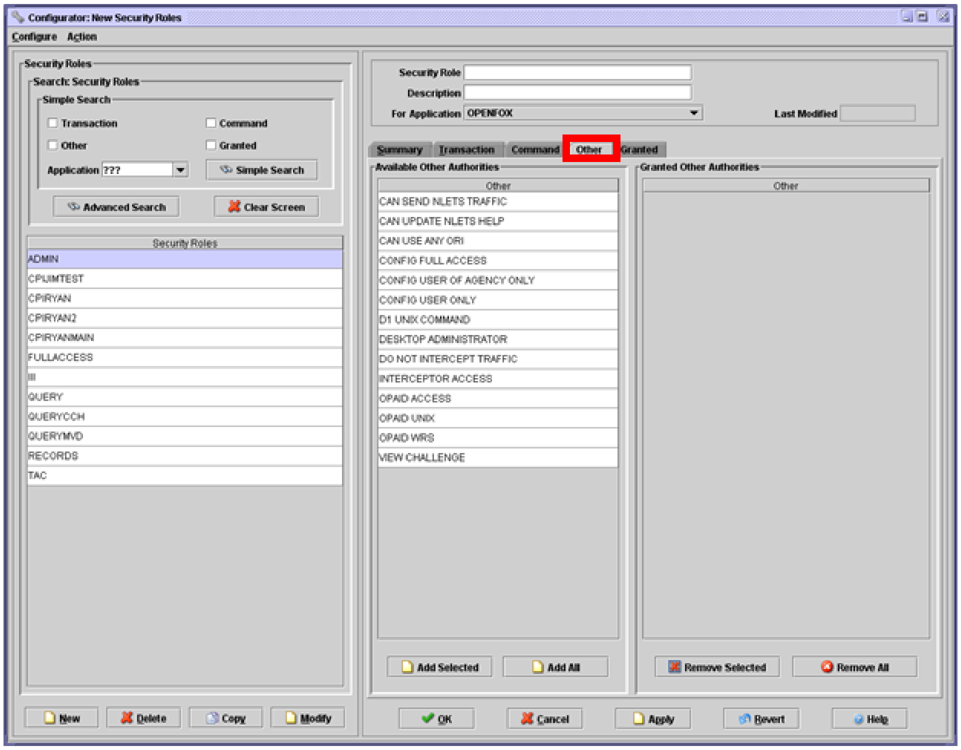
To remove a Command from the Security Role:

- Select each Command from the **Granted Commands** to remove from the Security Role.
- Click **Remove Selected**.
- Review and verify the list of **Granted Commands**.

To remove all Commands from the Security Role:

- Click **Remove All**.
- Review and verify the list of **Granted Commands**.

8.1.5 – Other Tab



Other Tab

The **Other** tab provides a list of the “other” functionalities and authorities that can be assigned to a user or station. This includes the ability to use any ORI within the system, which configurator access (if any) is granted, whether or not to allow access to Interceptor, etc. These authorities are configurable and are installation-specific.

To add a new Other Authority to the Security Role:

- Select each item from the **Available Other Authorities** to add to the Security Role.
- Click **Add Selected**.
- Review and verify the list of **Granted Other Authorities**.

To add all Other Authorities to the Security Role:

- Click **Add All**.
- Review and verify the list of **Granted Other Authorities**.

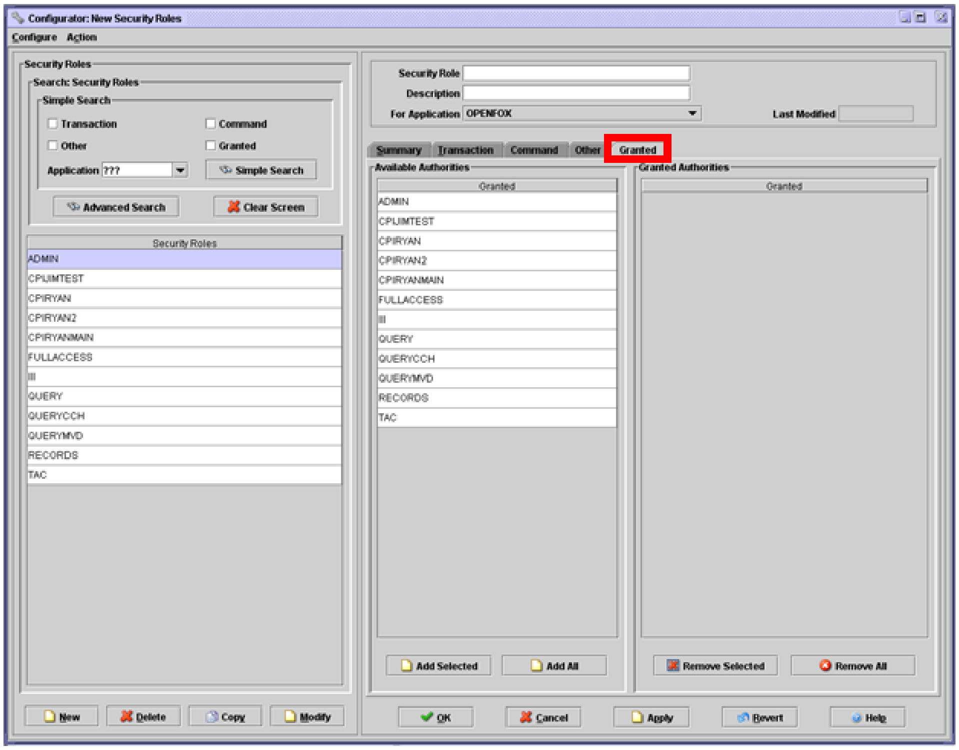
To remove Other Authorities from the Security Role:

- Select each Other Authority from the **Granted Other Authorities** to remove from the Security Role.
- Click **Remove Selected**.
- Review and verify the list of **Granted Other Authorities**.

To remove all Other Authorities from the Security Role:

- Click **Remove All**.
- Review and verify the list of **Granted Other Authorities**.

8.1.6 – Granted Tab



Granted Tab

The **Granted** tab provides a list of the other Security Roles that this Security Role grants the permission to use. This feature allows for “nested” Security Roles, making for a more streamlined approach to permission granting.

To add a new Granted Authority to the Security Role:

- Select each item from the **Available Authorities** to add to the Security Role.
- Click **Add Selected**.
- Review and verify the list of **Granted Authorities**.

To add all Available Authorities to the Security Role:

- Click **Add All**.
- Review and verify the list of **Granted Authorities**.

To remove Granted Authorities from the Security Role:

- Select each Granted Authority from the **Granted Authorities** to remove from the Security Role.
- Click **Remove Selected**.
- Review and verify the list of **Granted Authorities**.

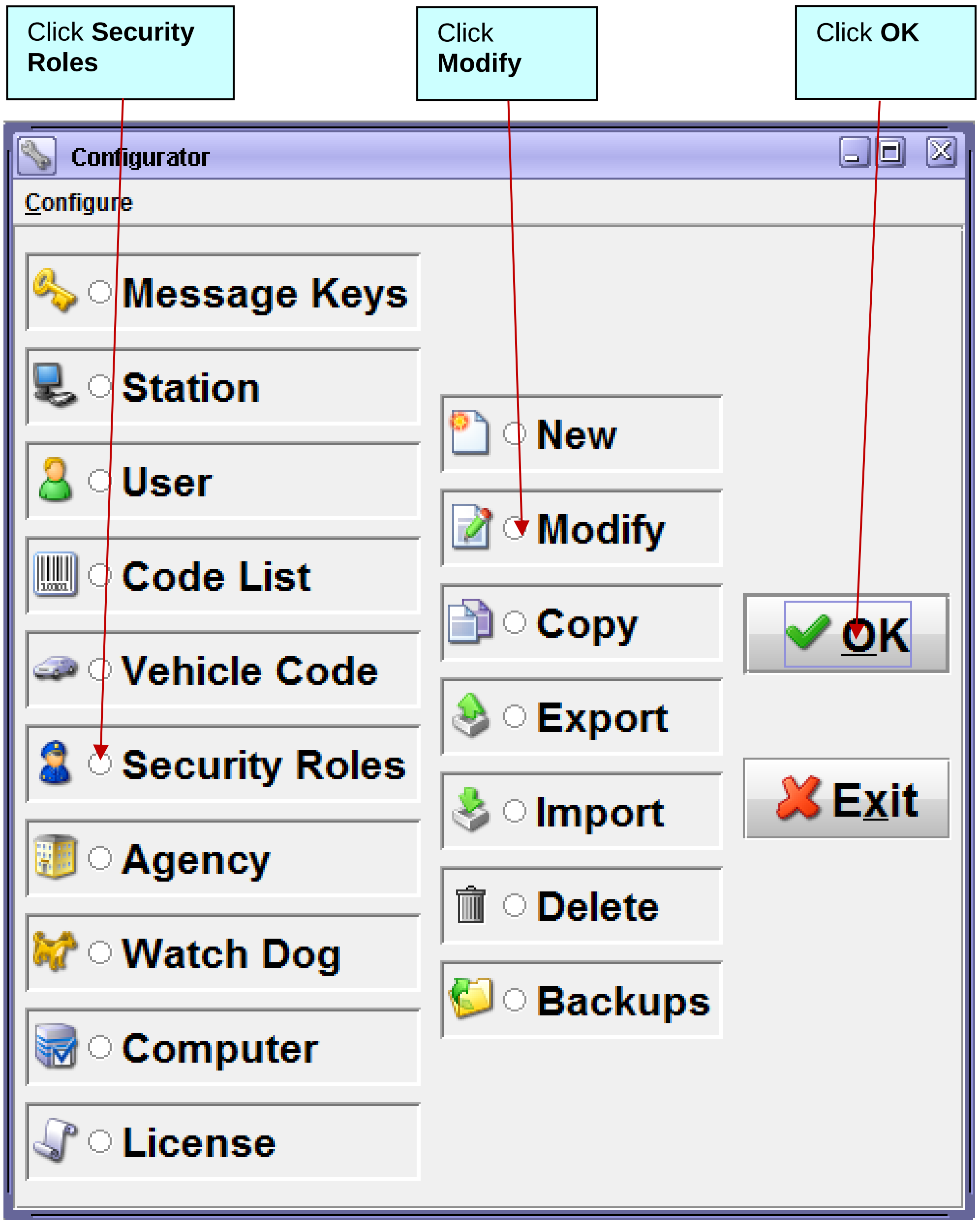
To remove all Granted Authorities from the Security Role:

- Click **Remove All**.
- Review and verify the list of **Granted Authorities**.

8.2 – Modify Existing Security Role

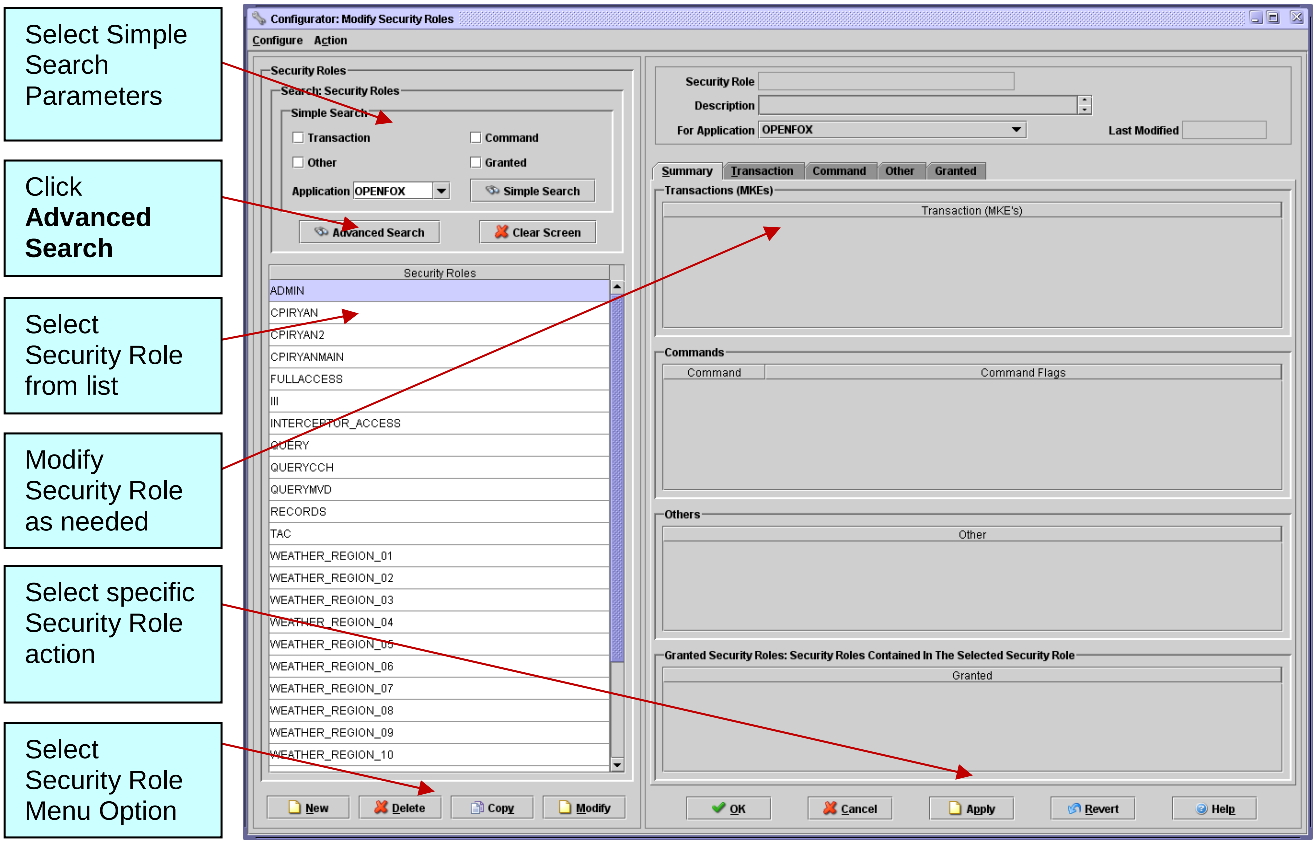
To modify an existing Security Role:

- Open the Configurator Module



Configurator

- Select **Security Roles** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



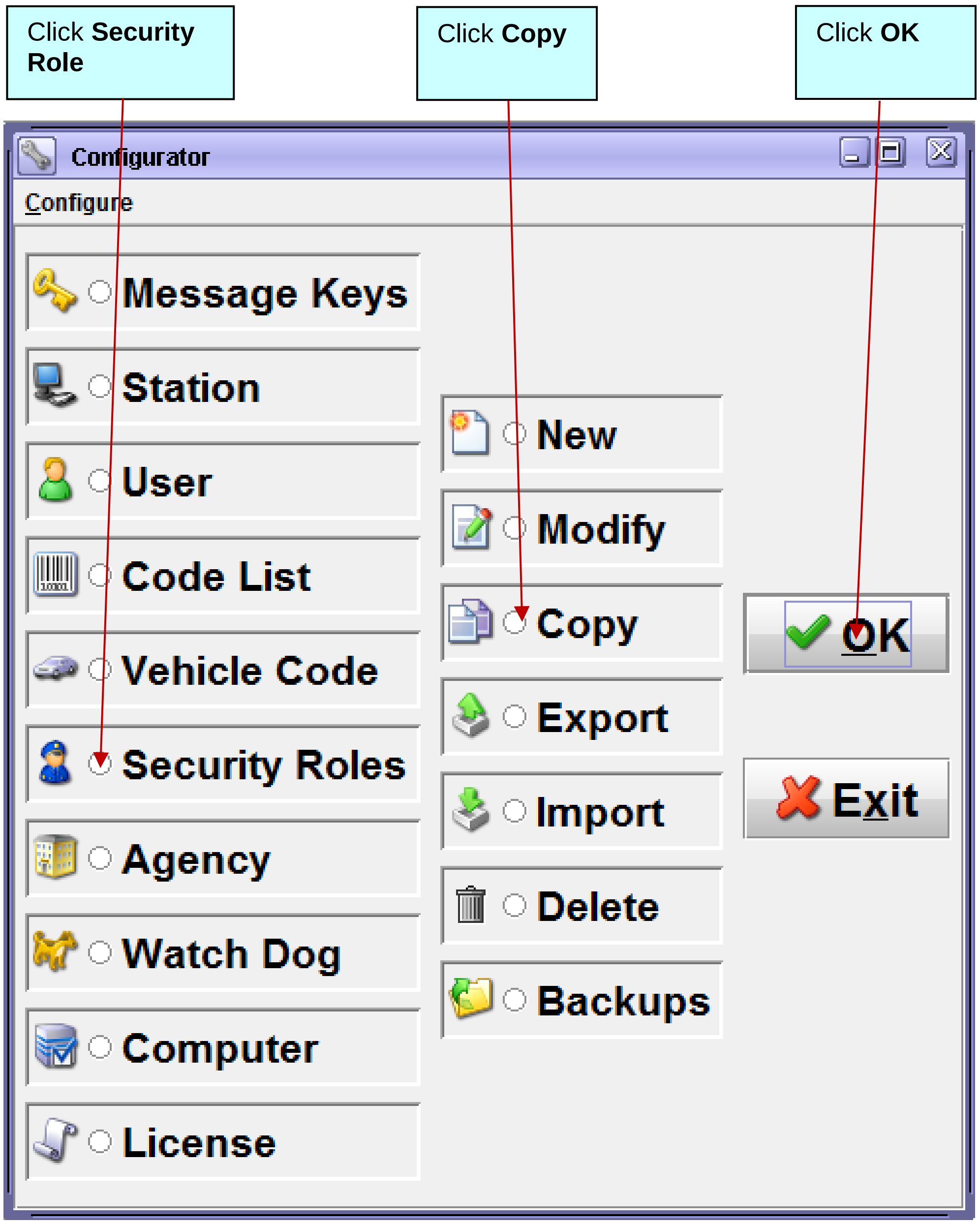
Modify Security Role

- Enter the Role ID then click **Get** to retrieve the Security Role record. You may click the **Binocular** button to display the **Get Security Role Dialog Window**. This window will list all security role records contained in the system to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Modify the fields in the security role record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

8.3 – Copy Existing Security Role

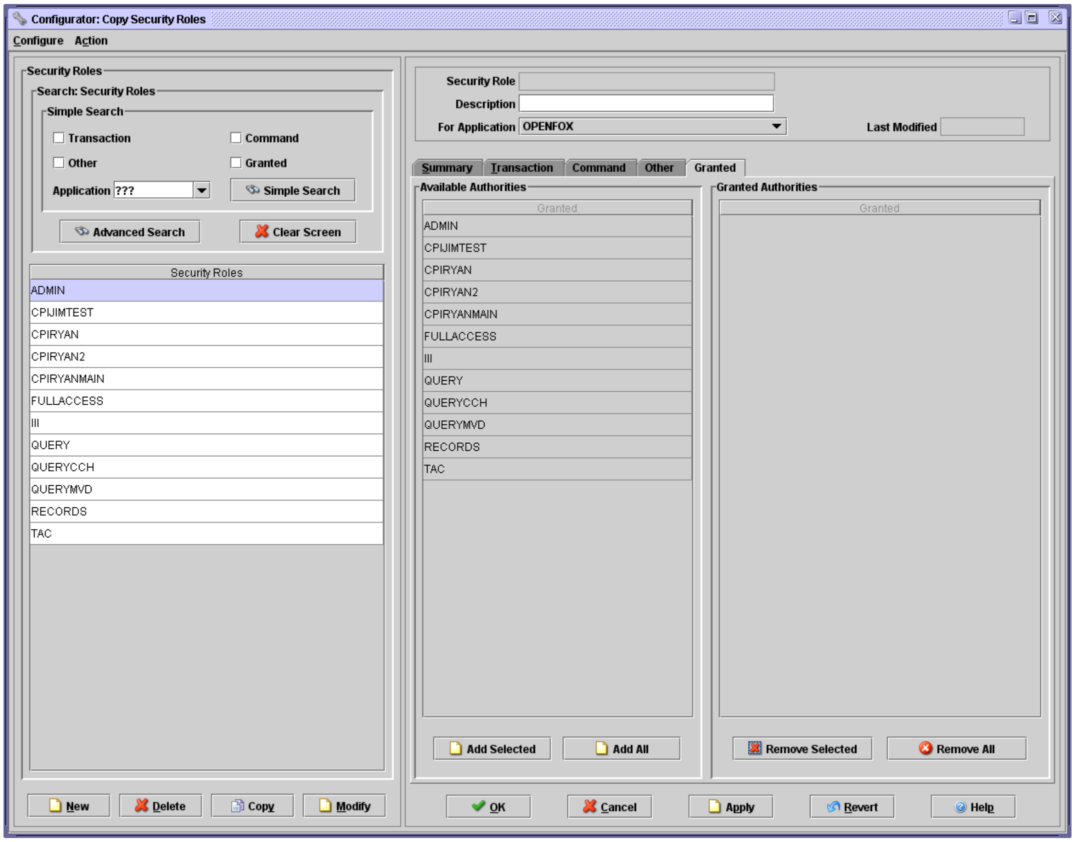
To copy an existing Security Role:

- Open the Configurator Module



Configurator

- Select **Security Role** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



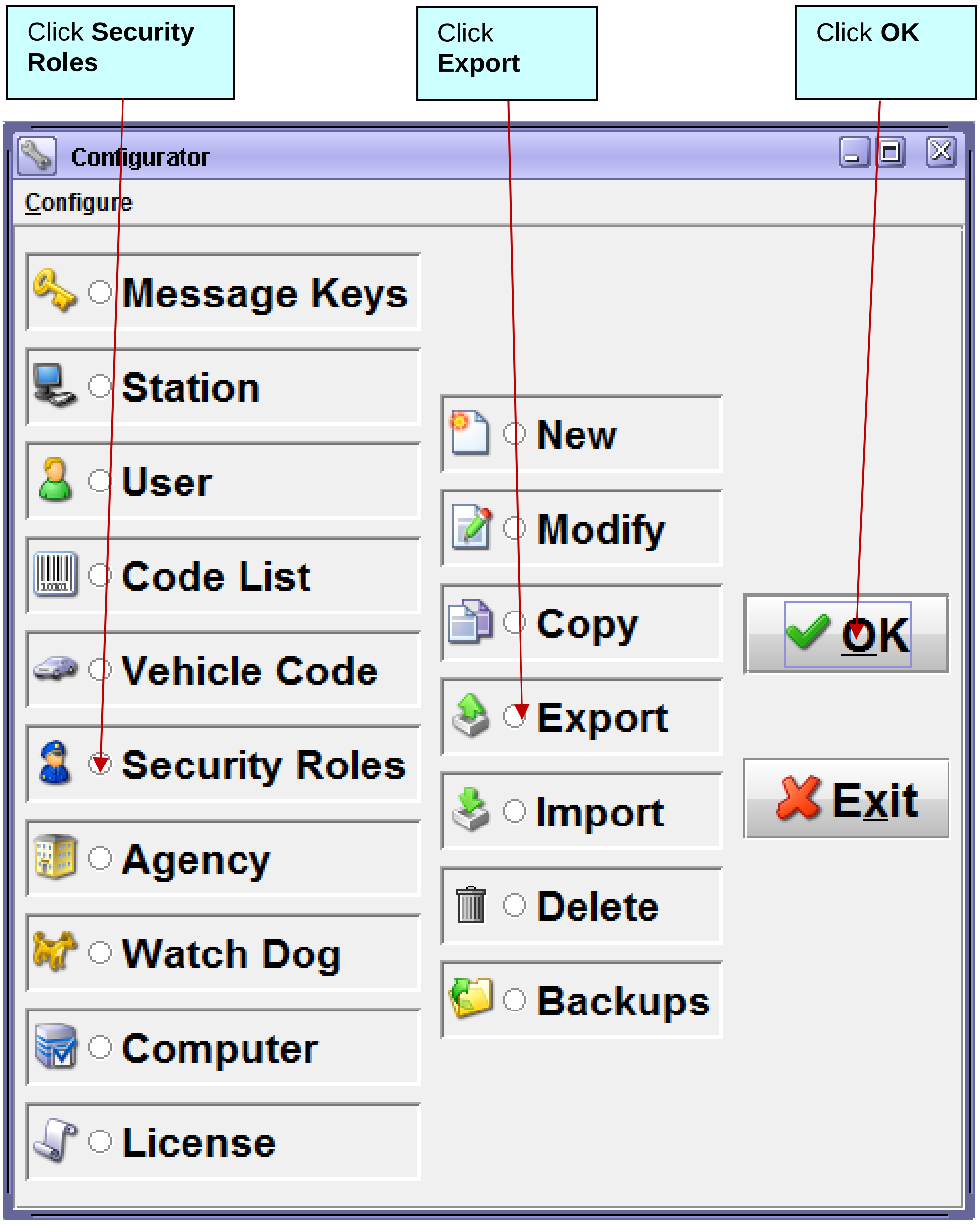
Copy Security Role

- Select the Security Role to copy from using the list of existing Security Roles on the left.
- Enter a unique (i.e. “copy-to”) **Security Role ID**.
- The Summary tab will populate with the **Transactions**, **Commands**, **Other Authorities**, and **Granted Roles** for the selected Security Role. Modify any of the fields necessary.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, **Apply** to accept the changes and keep the window open, or **Revert** to cancel the changes and keep the window open.

8.4 – Export Security Role

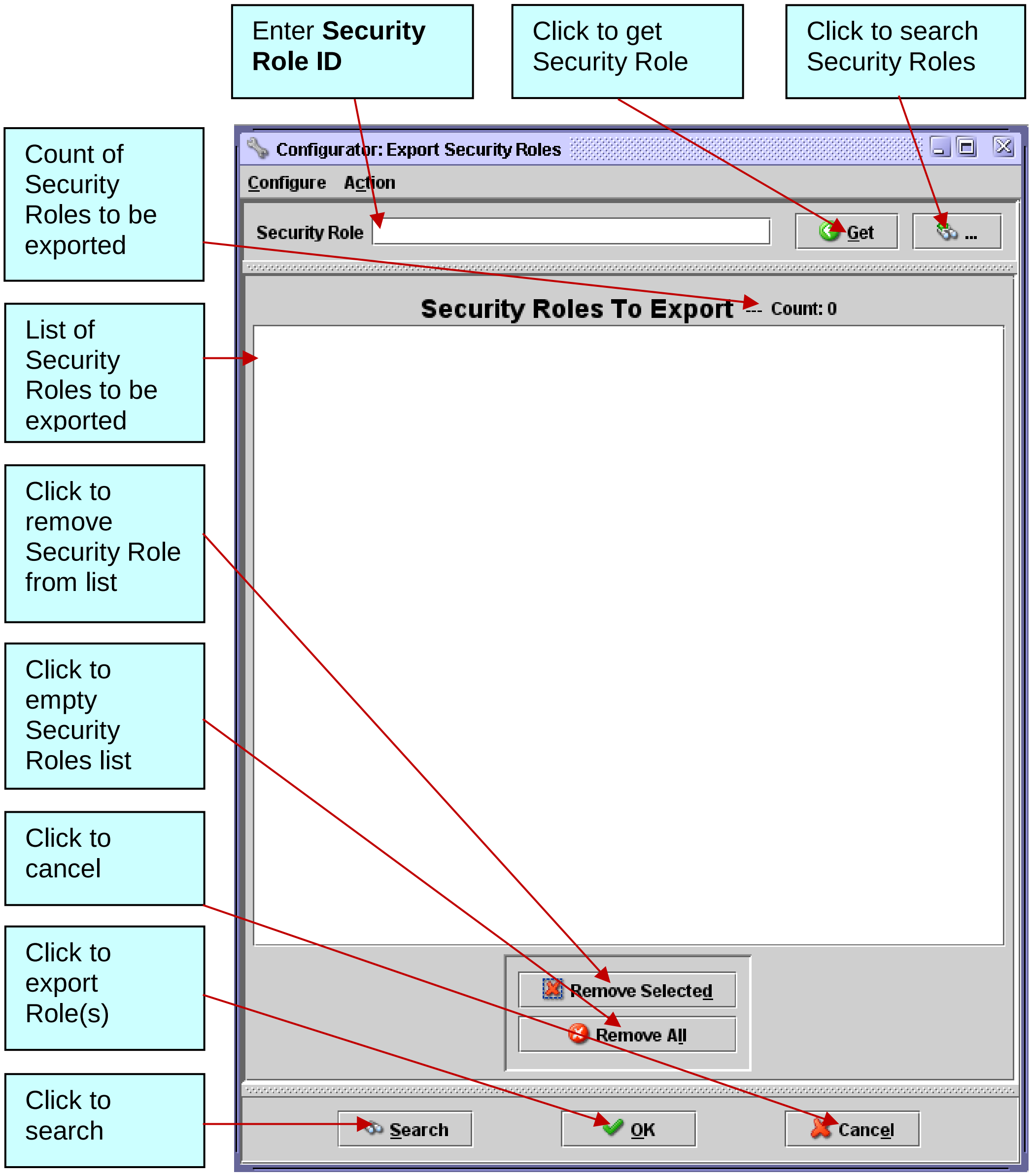
To export a Security Role:

- Open the Configurator Module



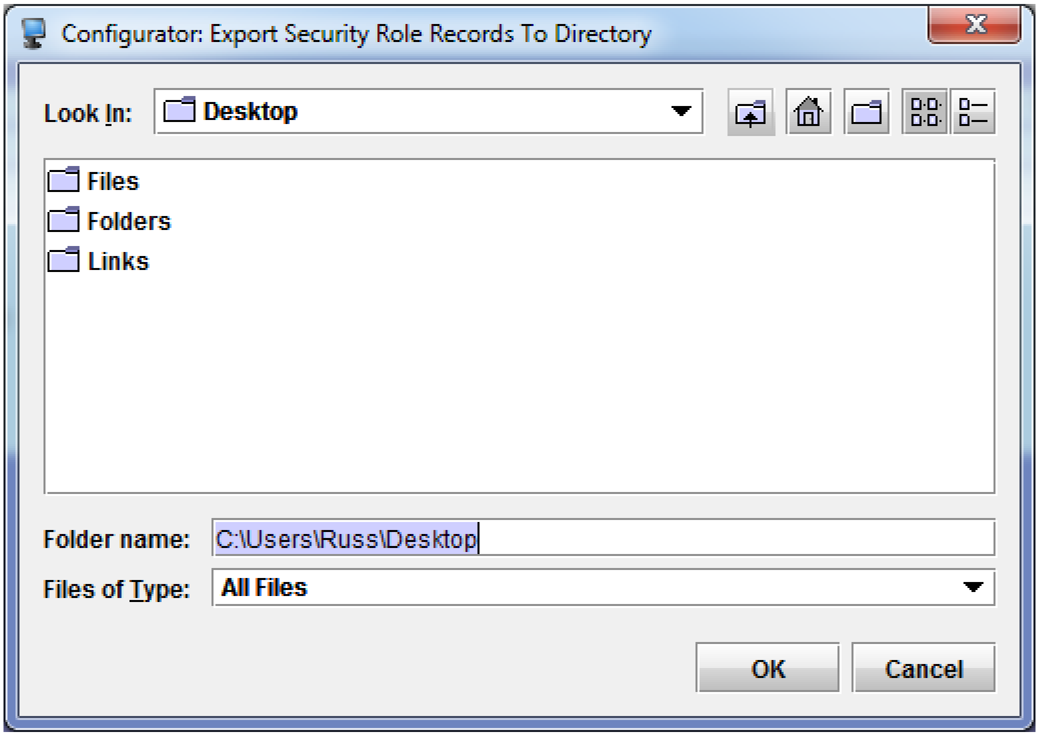
Configurator

- Select **Security Roles** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Security Roles

- Select the security role records to export.
- Click **OK**.



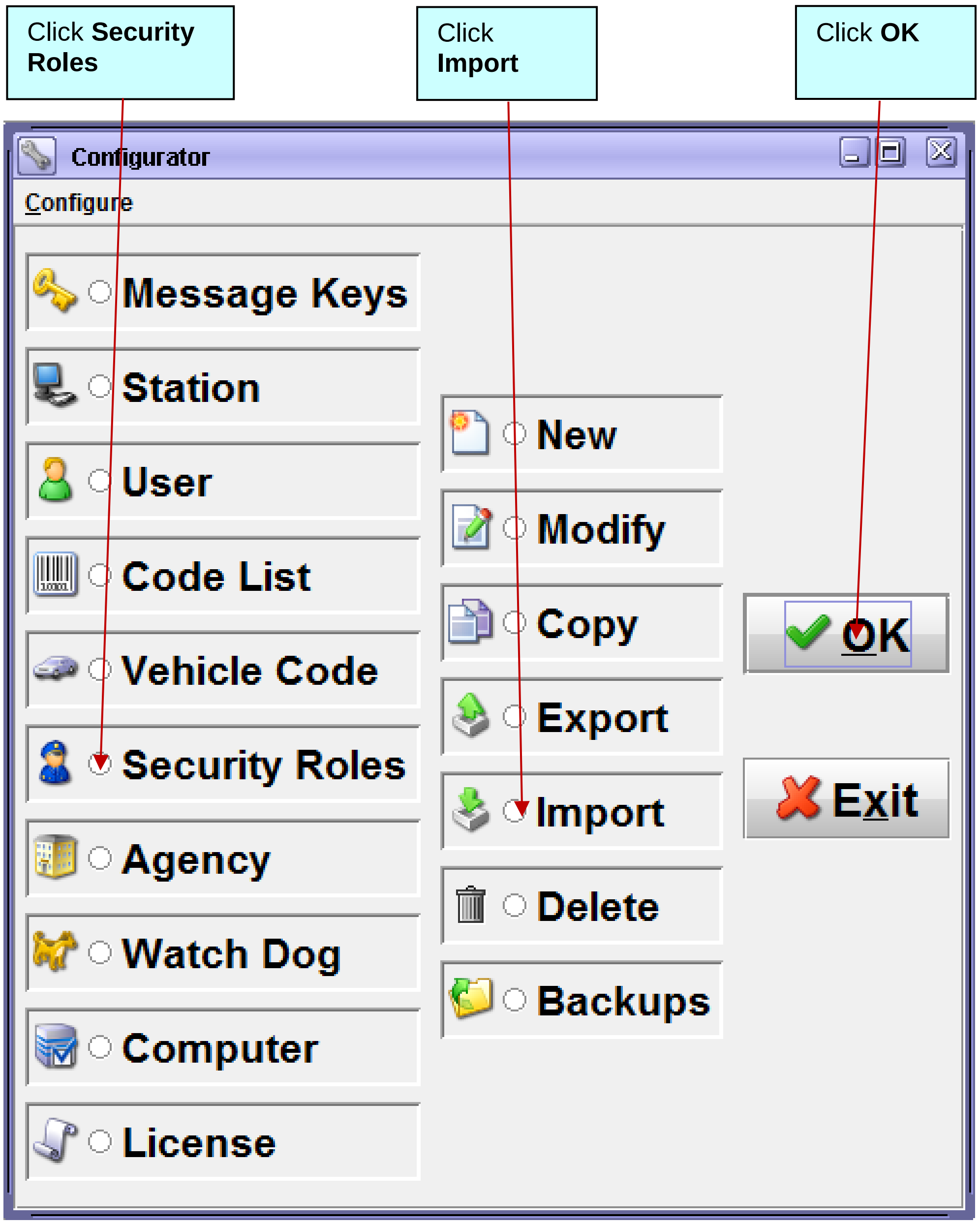
Export Security Role Records To Directory

- Select the directory on your local P.C. to export the security role records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

8.5 – Import Security Role

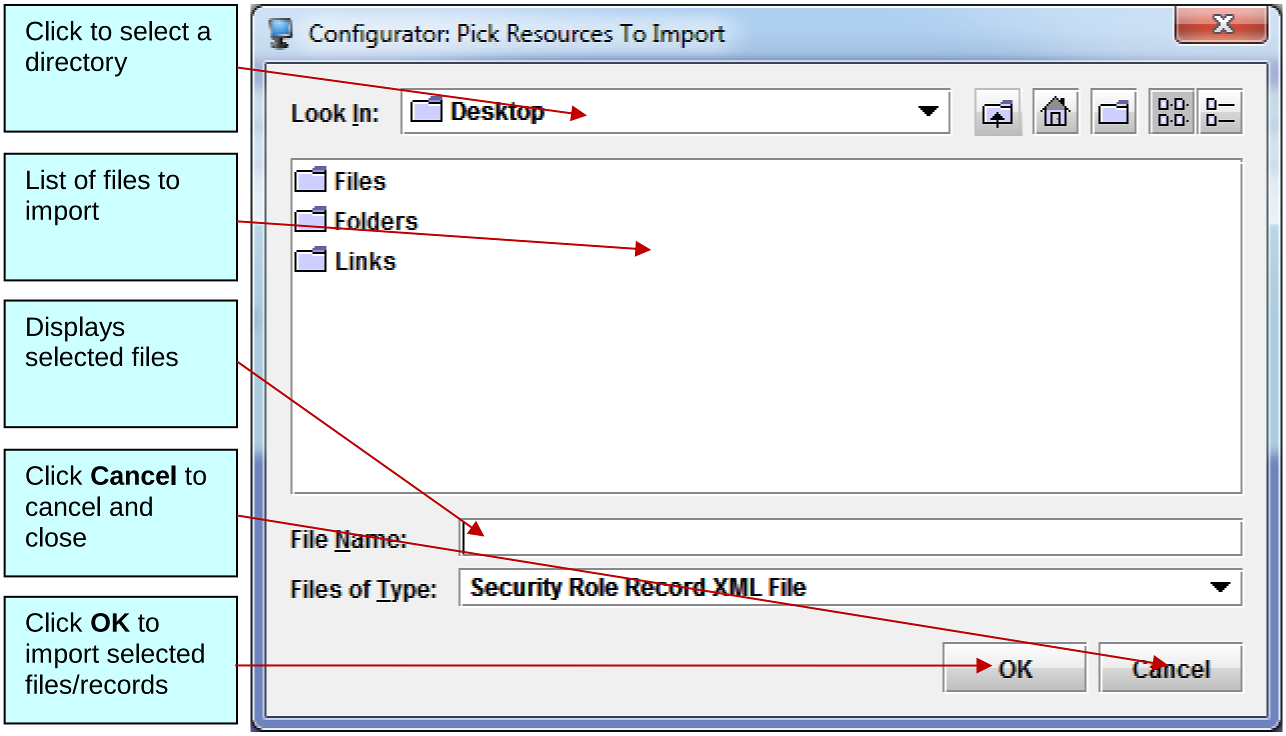
To import a Security Role:

- Open the Configurator Module



Configurator

- Select **Security Roles** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



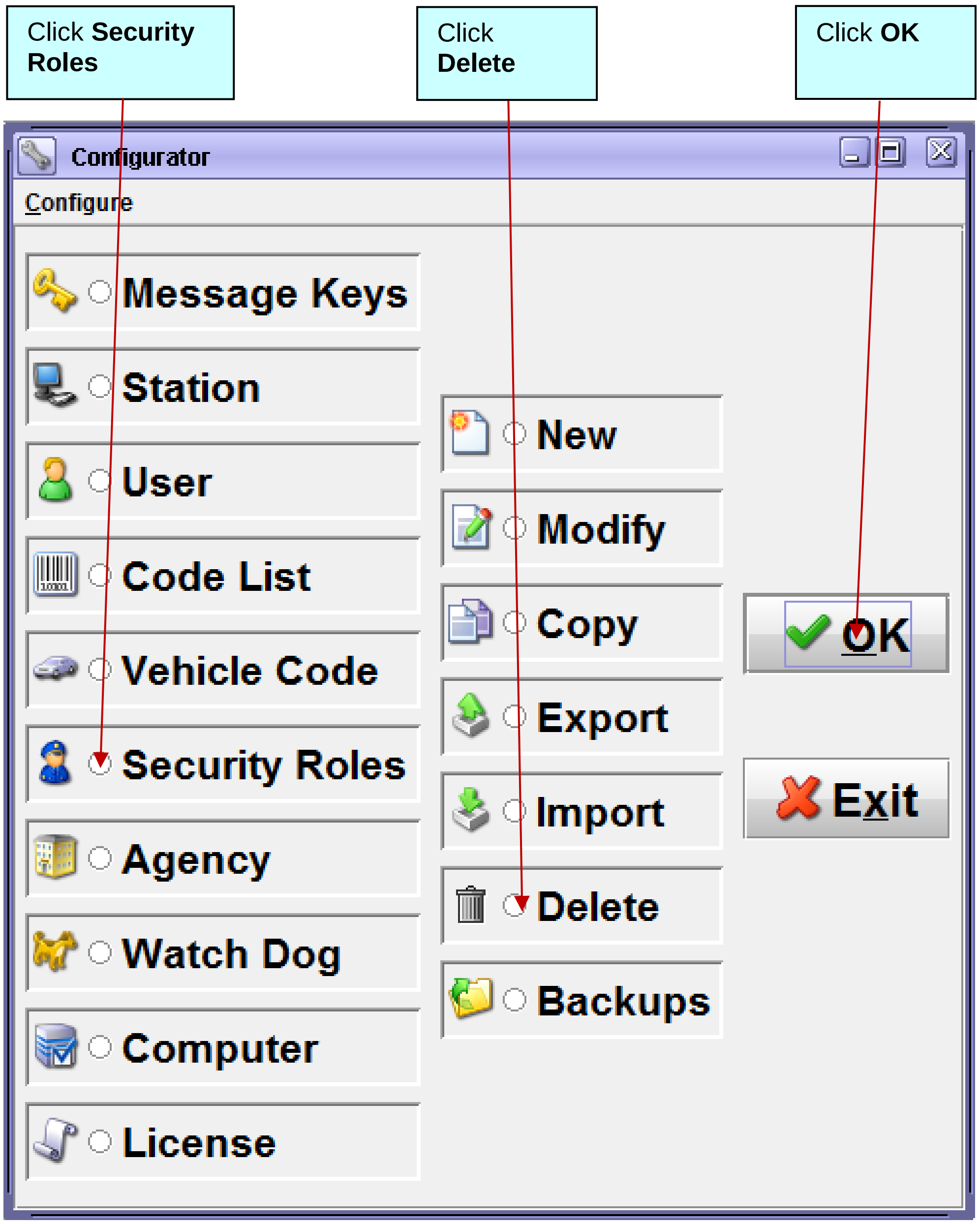
Pick Resources to Import

- Select the Security Role file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

8.6 – Delete Security Role

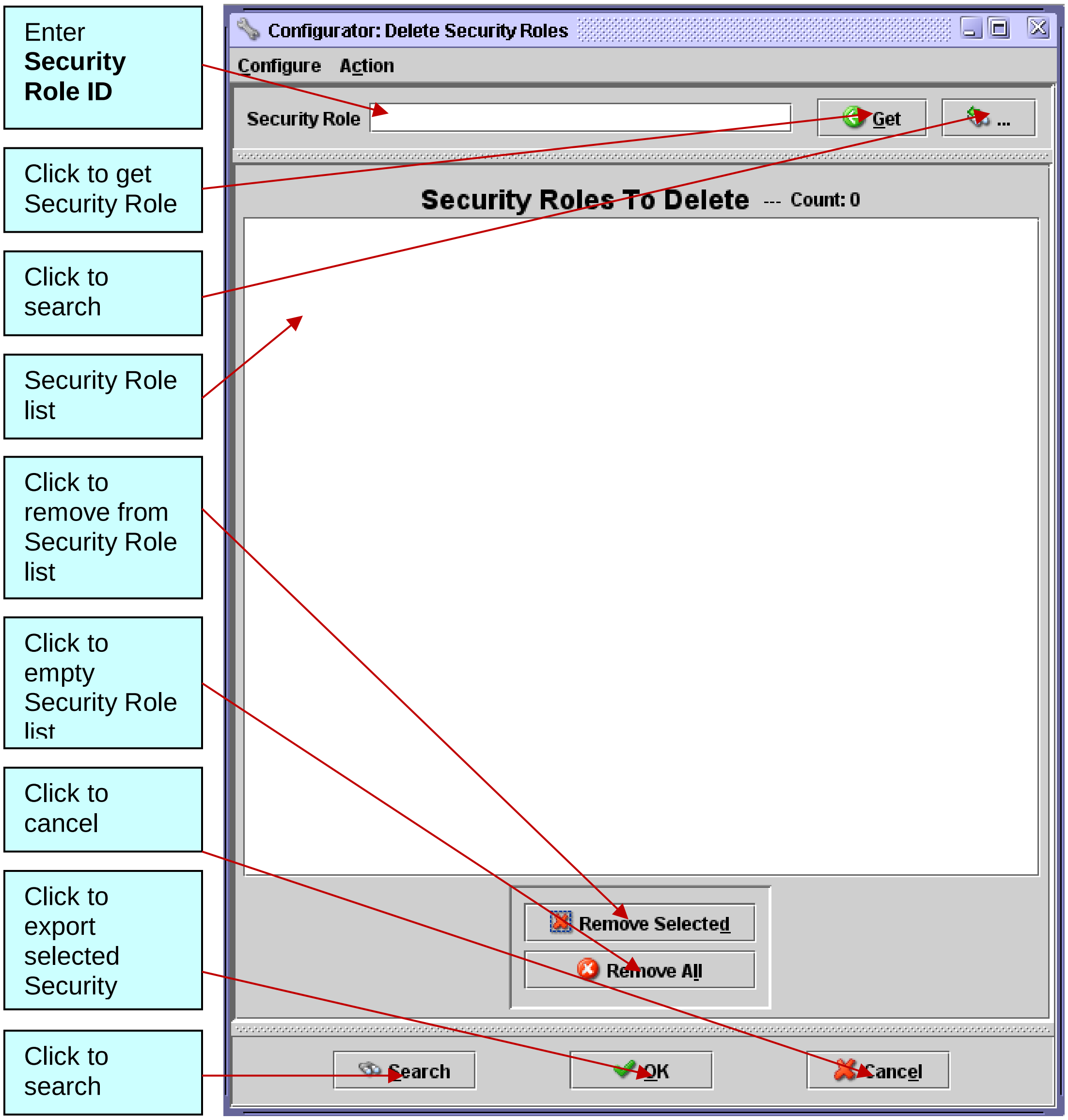
To delete a Security Role:

- Open the Configurator Module



Configurator

- Select **Security Roles** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



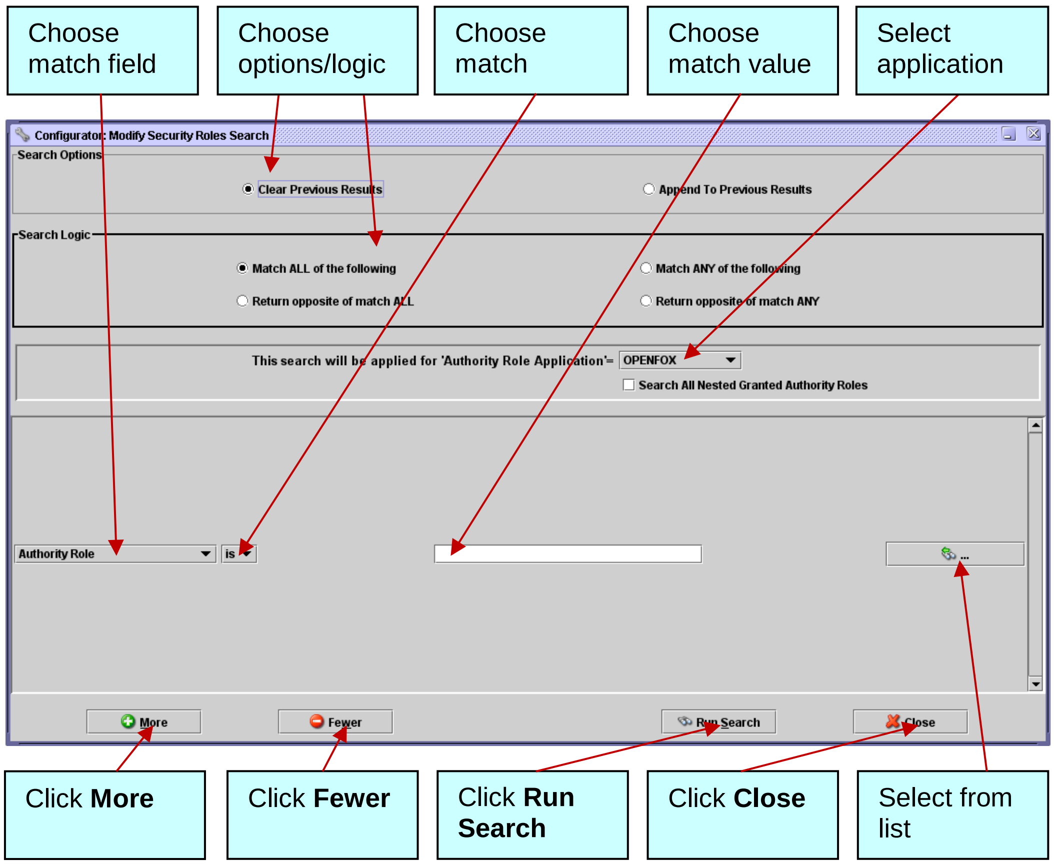
Delete Security Role

- Select the Security Role record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

8.7 – Search Security Role

To use the Security Role search feature:

- Open the Configurator Module
- Open any Security Role screen that has a **Search** button.
- Click the **Search** button.



Search Security Roles

Search Options - If a previous search was performed, choose whether to clear the previous search results prior to performing the new search.

Search Logic - The logic to be used to perform the search.

> **Match ALL of the following** - Records will only be returned in the search results if they match ALL of the search field/operator/value combinations.
>
> **Match ANY of the following** - Records will be returned in the search results if they match AT LEAST ONE of the search field/operator/value combinations.
>
> **Return opposite of match ALL** - Returns all records not matched in the corresponding "ALL" search.
>
> **Return opposite of match ANY** - Returns all records not matched in the corresponding "ANY" search.

Match Field - Choose the field from the station to search against. Examples of valid values are **Station Name**, **Station Number**, **Station Class**, and **ORI**.

Match Operator - Choose the type of comparison operation to be performed against the match field. Only certain operators are valid for each **Match Field**. Examples of valid Match Operators are **is**, **is not**, **contains**, **does not contain**, **less than**, and **greater than**.

Match Value - Enter or select the value to be searched upon.

More - Click **More** to add another row of comparison field/operator/value selections.

Fewer - Click **Fewer** to remove the bottom row of comparison field/operator/value selections.

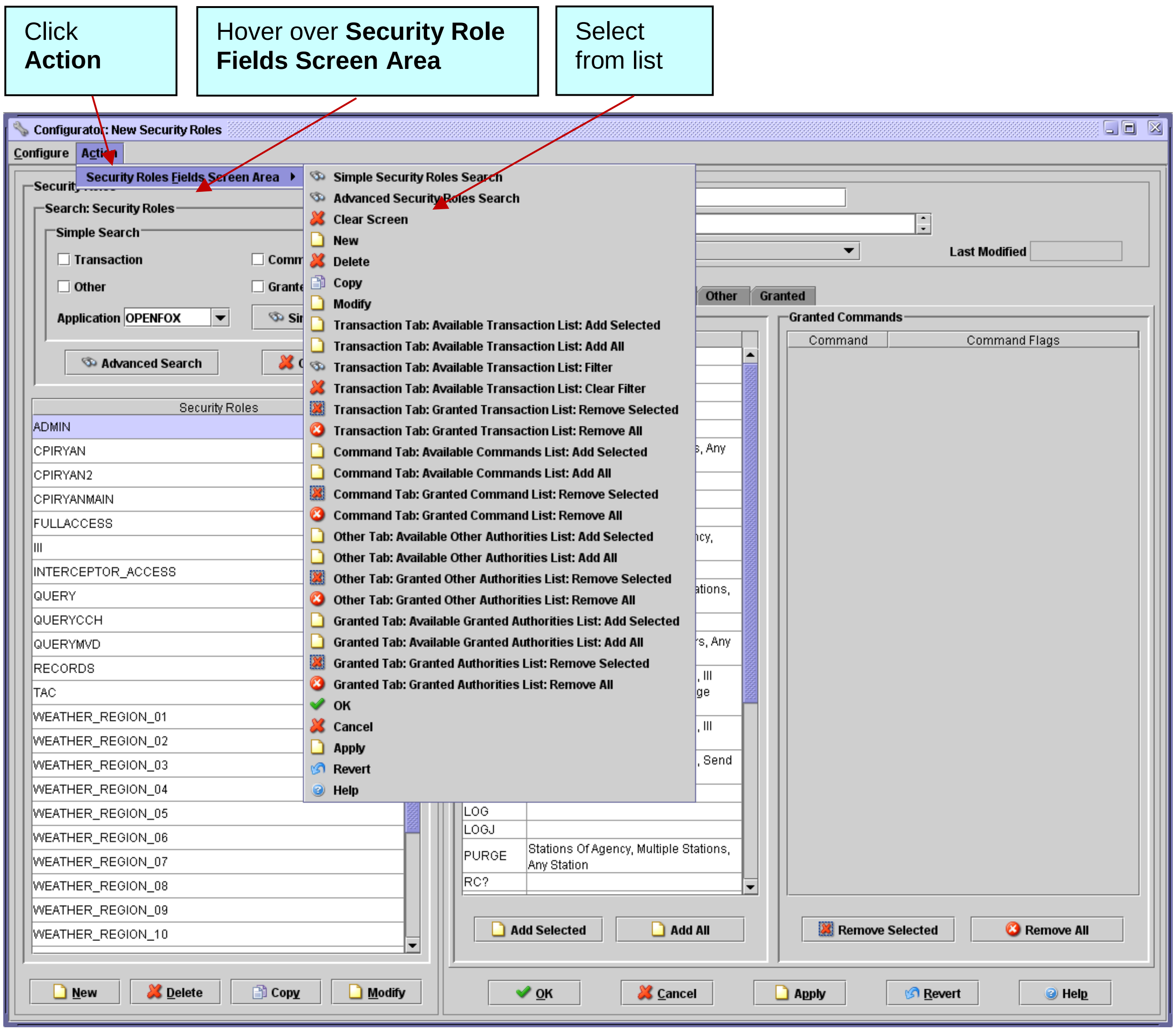
Run Search - Click **Run Search** to obtain a list of Station IDs based on the current comparison field/operator/value selections listed in the search window.

Close - Click **Close** to cancel the current search and close the search window.

8.8 – Security Role Menu Access

To use the Security Role Action menu:

- Open the Configurator Module.
- Open any Security Role screen containing an **Action** menu item.



Security Role Menu Access

- Click the **Action** menu.
- Hover over **Security Role Fields Screen Area**.
- Select from list provided.

Chapter 9 – Agency Configuration

An entity to which stations, users, and licenses belong within the OpenFox® Message Switch is referred to as an “Agency”. Each Agency has a single record entered into the database that defines an overall entity to which devices, users, and licenses can be assigned. An Agency helps limit where a user can log in, as well as what they are allowed to see of certain functions and abilities within the OpenFox®.

The OpenFox® Configurator Agency screens are used to supply the information necessary to define Agency records. The OpenFox® Configurator Agency screens allow the administrator to create new Agency records, modify existing Agency records, copy existing Agency records, export Agency records, import Agency records, or delete Agency records, all with immediate effect and without any other software changes or system reboots.

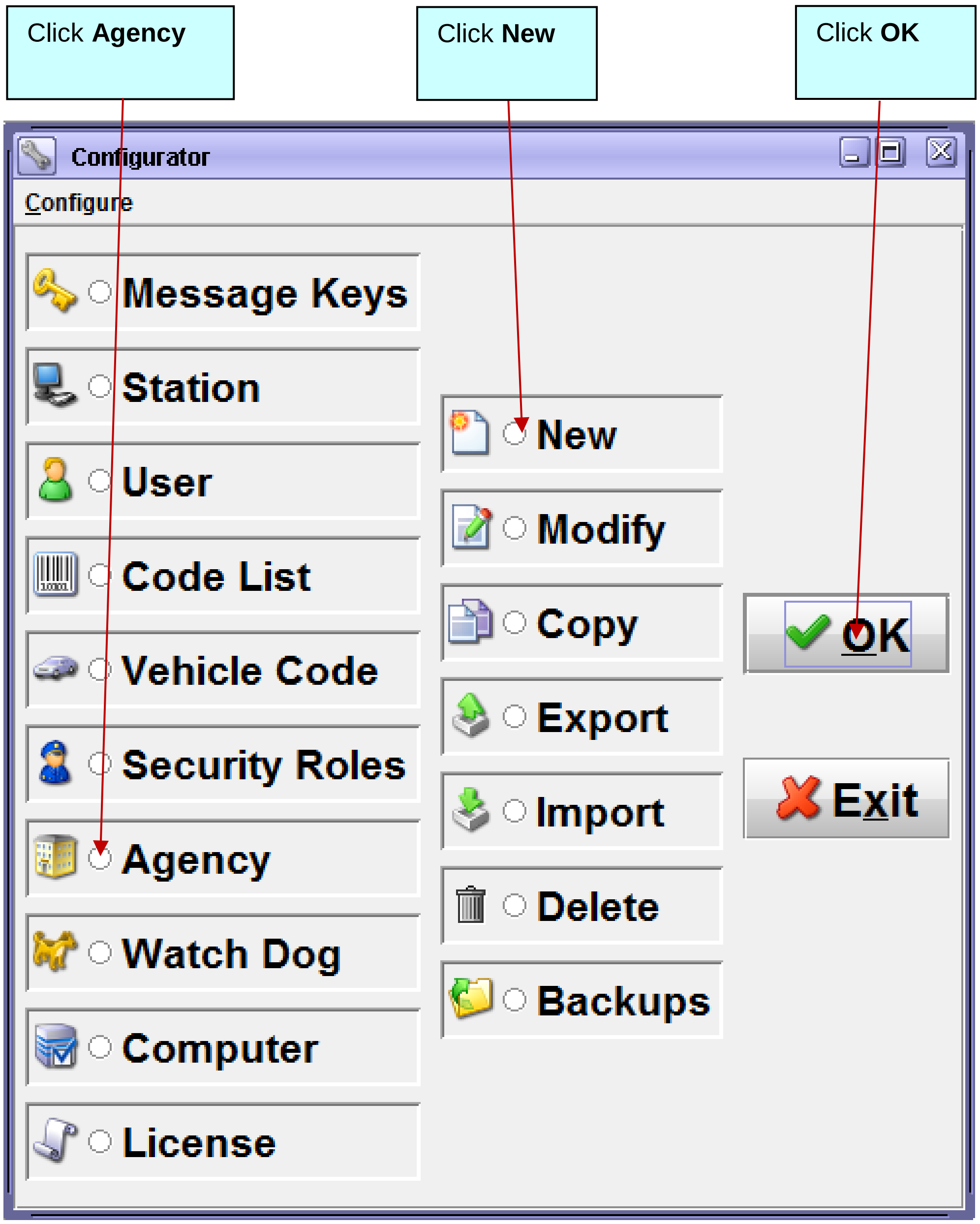
NOTE: Deleting an Agency record will not erase the agency information from the system. The Agency information will still be available in the database.

The OpenFox® Configurator Agency screens, their text-fields, lists, options and buttons are as follows:

9.1 – Add New Agency

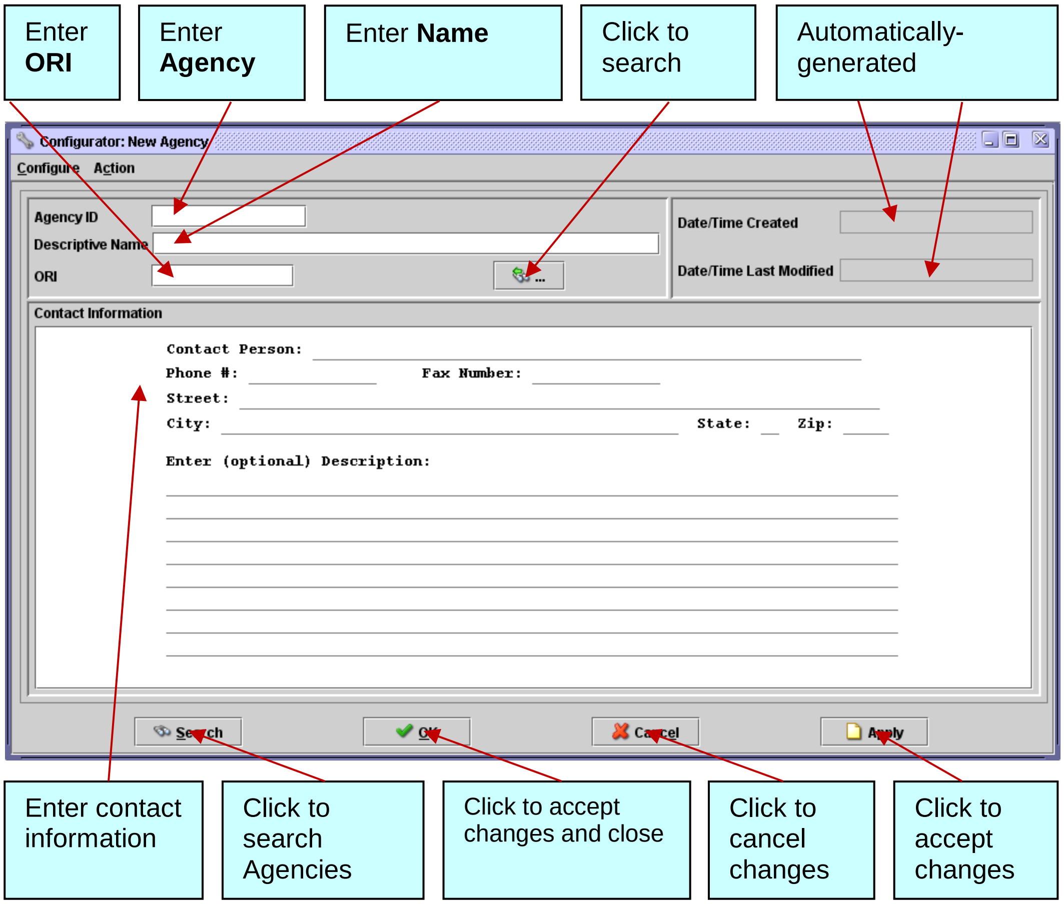
To configure a new Agency:

- Open the Configurator Module



Configurator

- Select **Agency** from the left column.
- Select **New** from the middle column.
- Click **OK**.



New Agency

- Enter a unique Agency ID in the text box following the **Agency ID** label.
- Enter the full descriptive text that will describe this Agency as fully as possible in the text box following the **Descriptive Name** label.
- Enter the main ORI of the agency (this ORI must already be entered as a station with the OpenFox® system).
- Enter any other required fields.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

9.1.1 – Agency Fields

Agency ID - Enter a unique ID assigned to this agency.

Descriptive Name - Enter the full text of the name that this agency is known by.

ORI - Enter the main ORI of this agency. This ORI must already exist in the system.

ORI Search (binoculars button) - Click this button to choose from a list of the existing ORIs.

Date/Time Created - This information is automatically generated by the system.

Date/Time Last Modified - This information is automatically generated by the system.

Contact Information: - This entire area is fully-customizable. Enter the appropriate information in the fields provided.

Search - Click this button to search a list of the existing agencies.

OK - Click this button to accept the changes to this agency record and close the New Agency Configurator window.

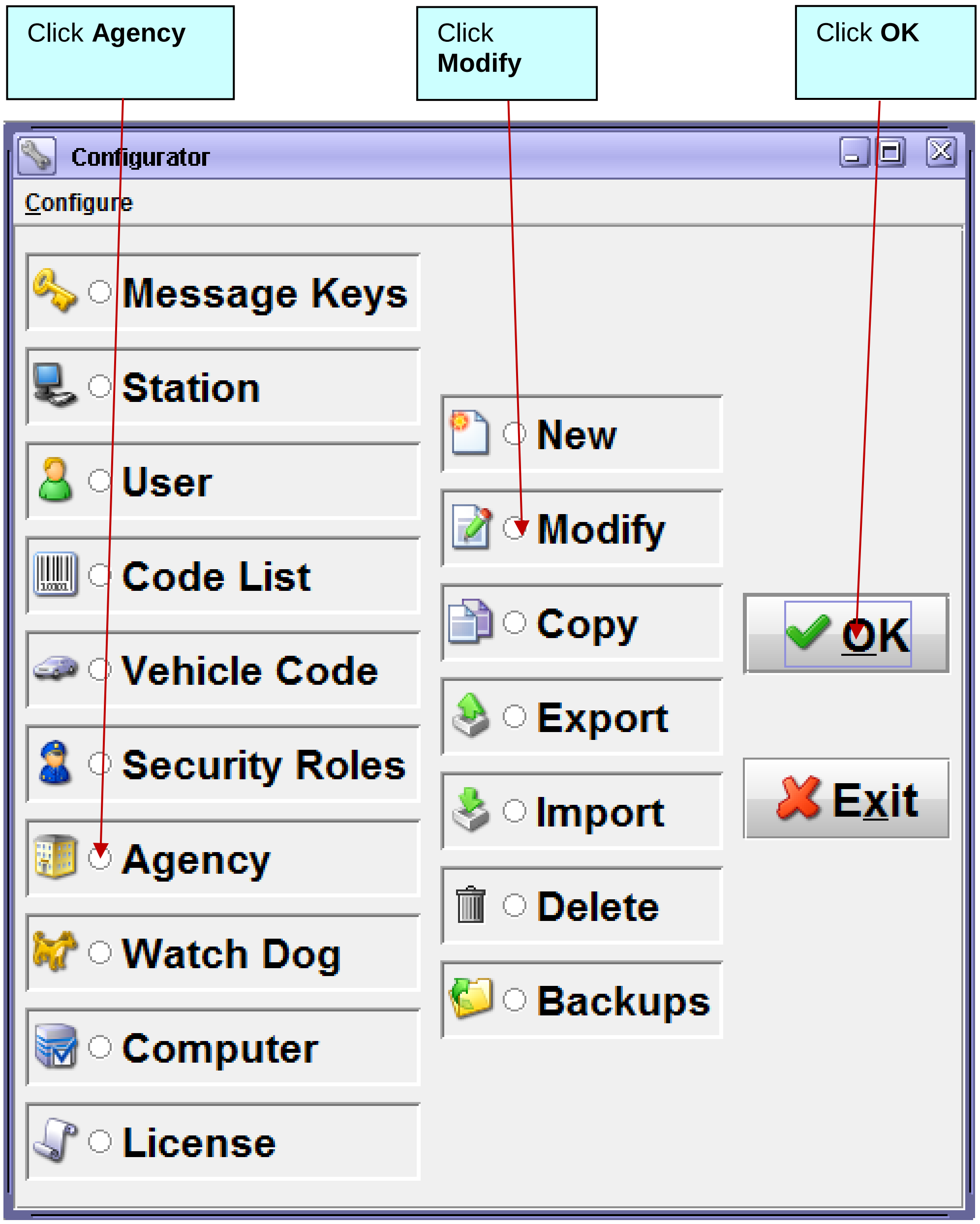
Cancel - Click this button to cancel the changes to this agency record and close the New Agency Configurator window.

Apply - Click this button to accept the changes to this agency record and keep the New Agency Configurator window open.

9.2 – Modify Existing Agency

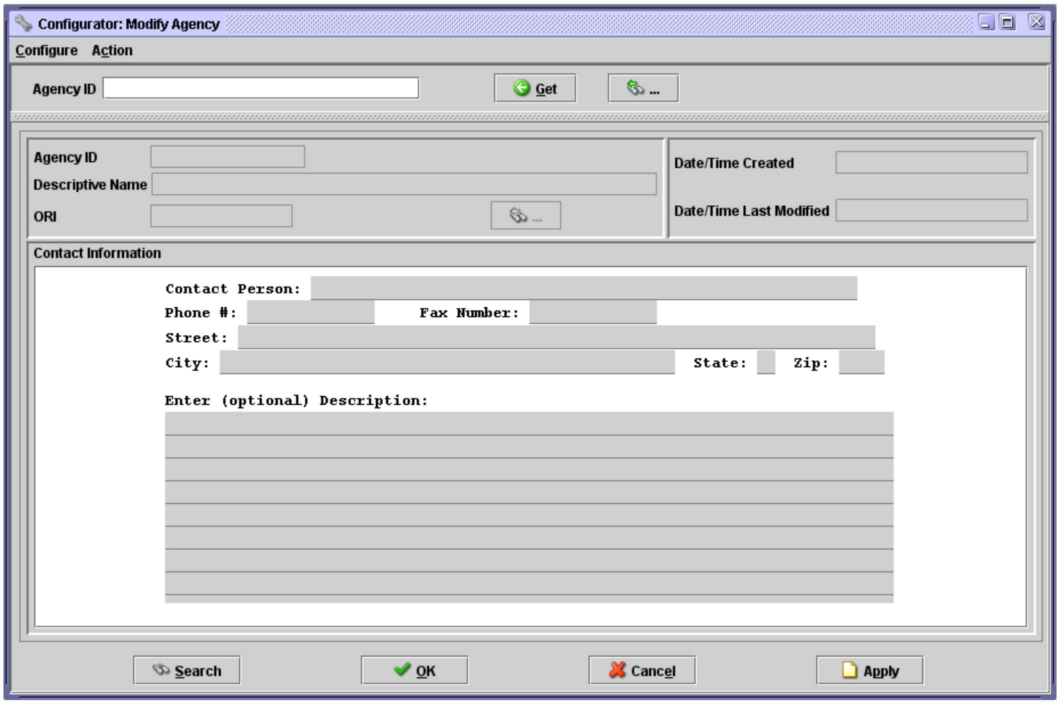
To modify an existing Agency:

- Open the Configurator Module



Configurator

- Select **Agency** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



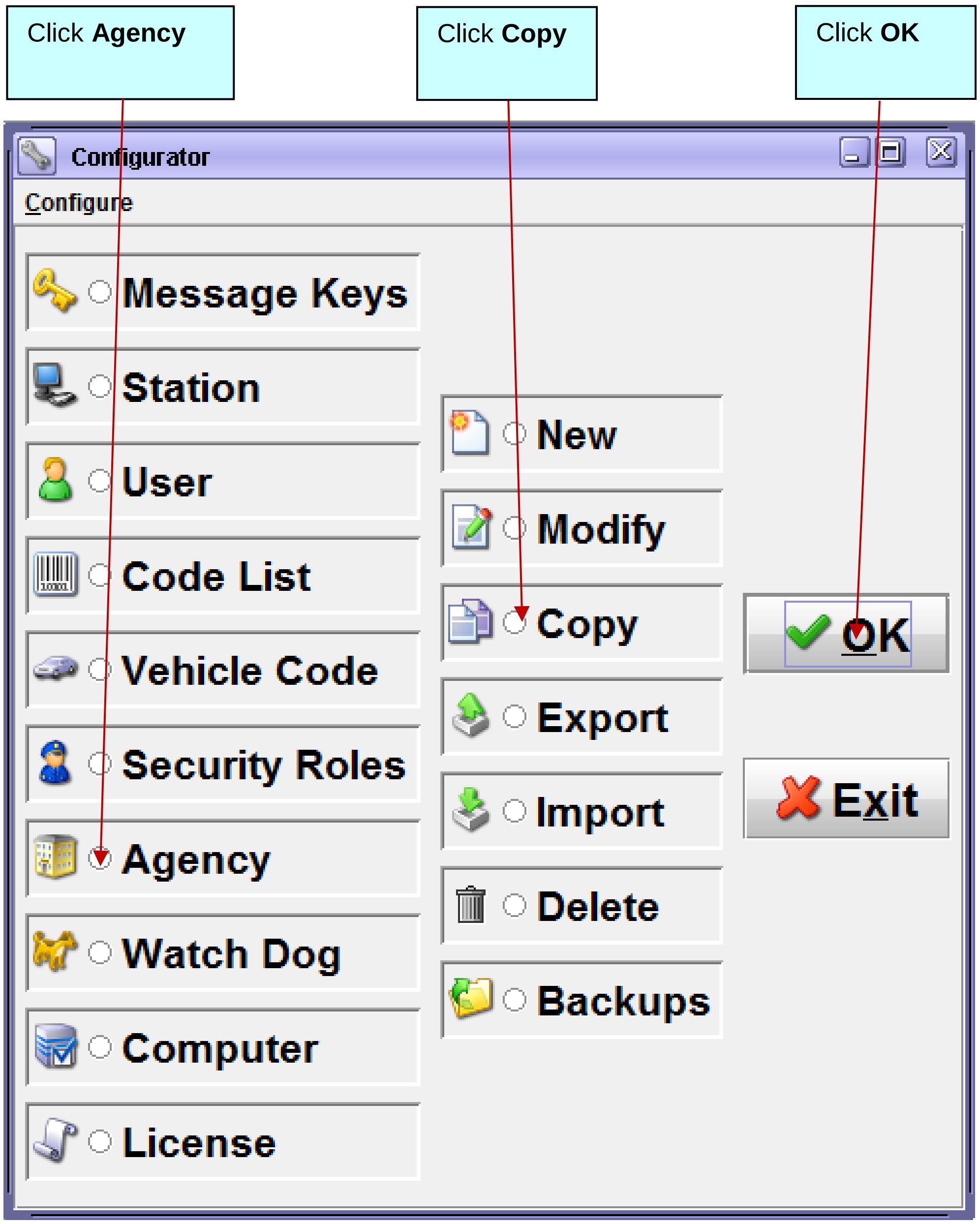
Modify Agency

- Enter the Agency ID then click **Get** to retrieve the Agency record. You may click the **Binocular** button to display the **Get Agency Dialog Window**. This window will list all agency records contained in the system to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Modify the fields in the agency record as desired.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

9.3 – Copy Existing Agency

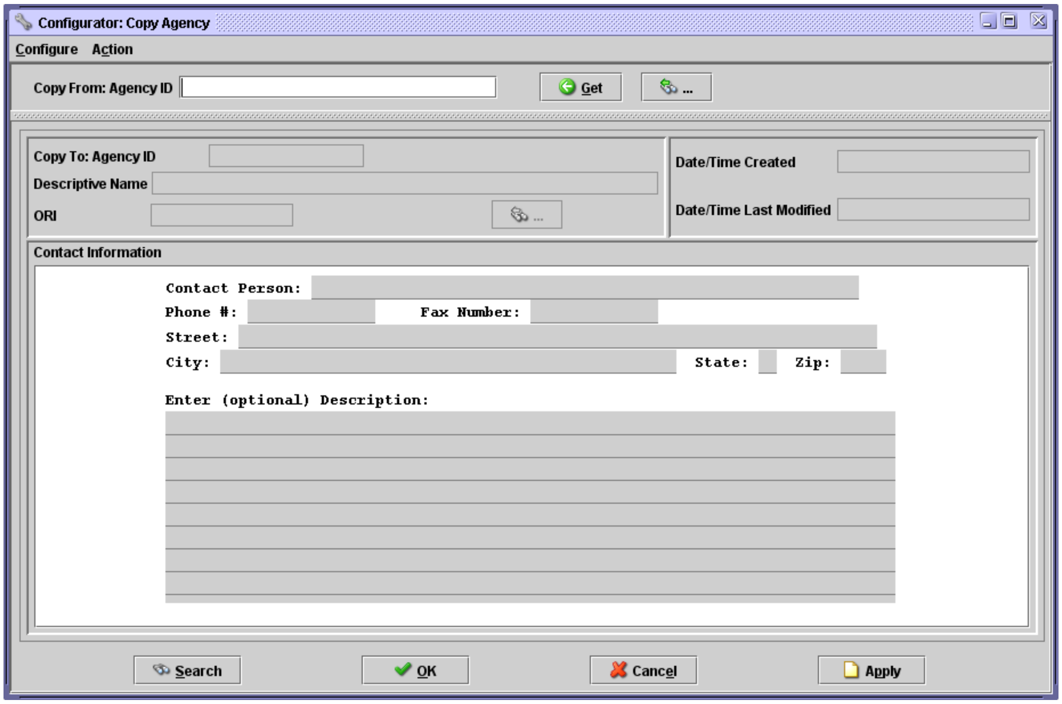
To copy an existing Agency:

- Open the Configurator Module



Configurator

- Select **Agency** from the left column.
- Select **Copy** from the middle column.
- Click **OK**.



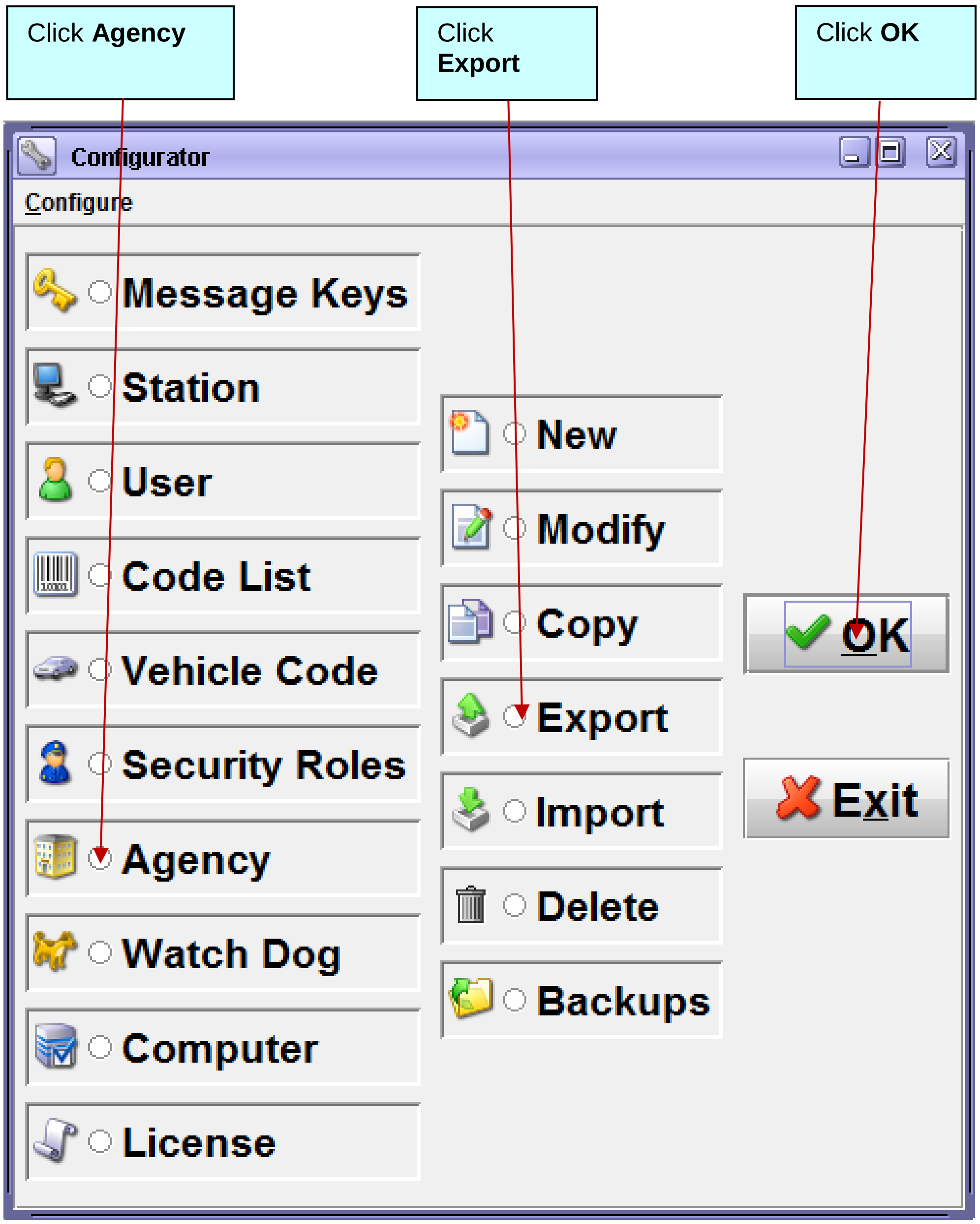
Copy Agency

- Enter the Agency ID then click **Get** to retrieve the Agency record. You may click the **Binocular** button to display the **Get Agency Dialog Window**. This window will list all agency records contained in the system to choose from. To use the full search feature, click the **Search** button to the left of the **OK** button.
- Enter a unique (i.e. "copy-to") **Agency ID**.
- Enter all fields as if you were adding a new record.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, **Apply** to accept the changes and keep the window open, or **Revert** to cancel the changes and keep the window open.

9.4 – Export Agency

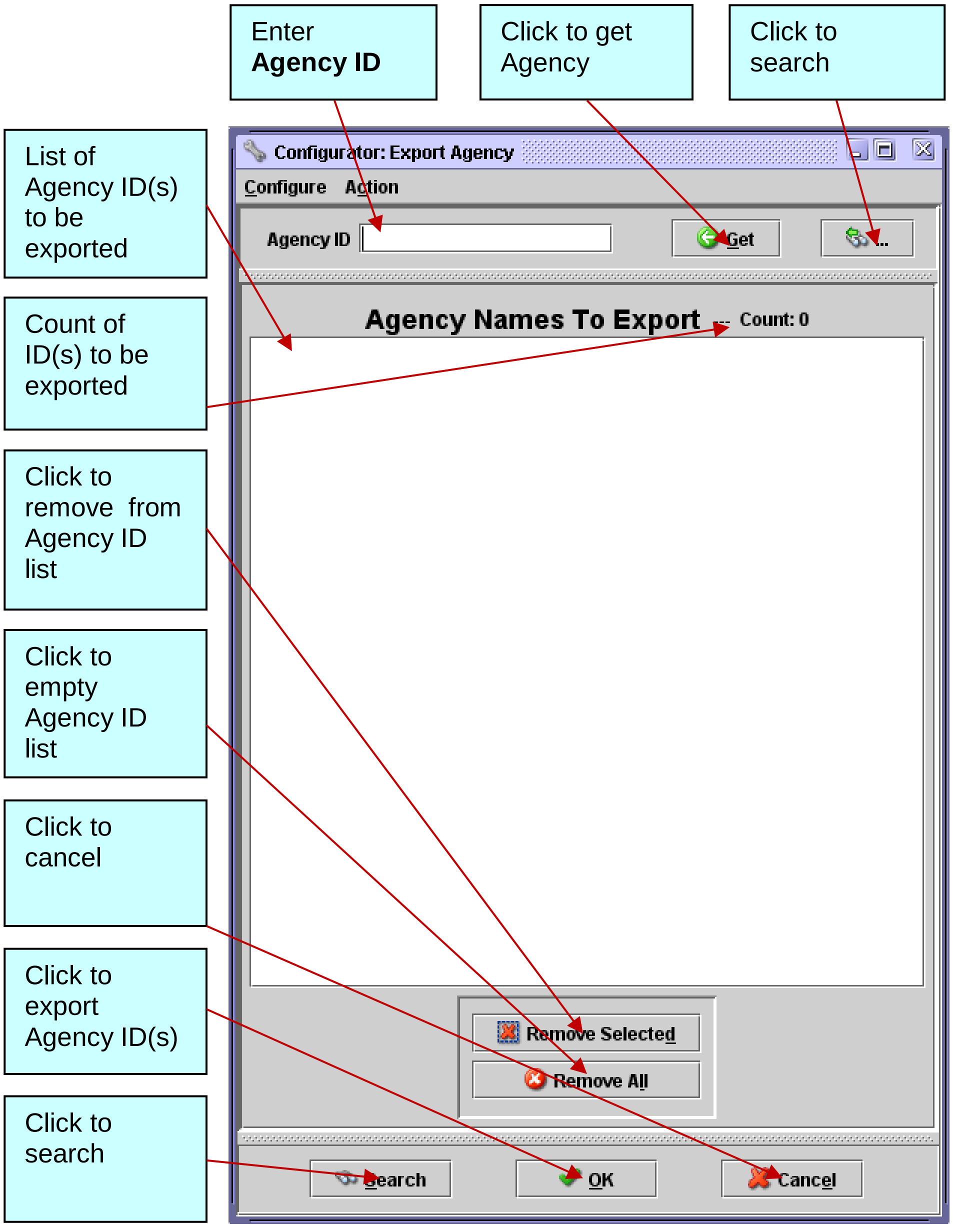
To export an Agency:

- Open the Configurator Module



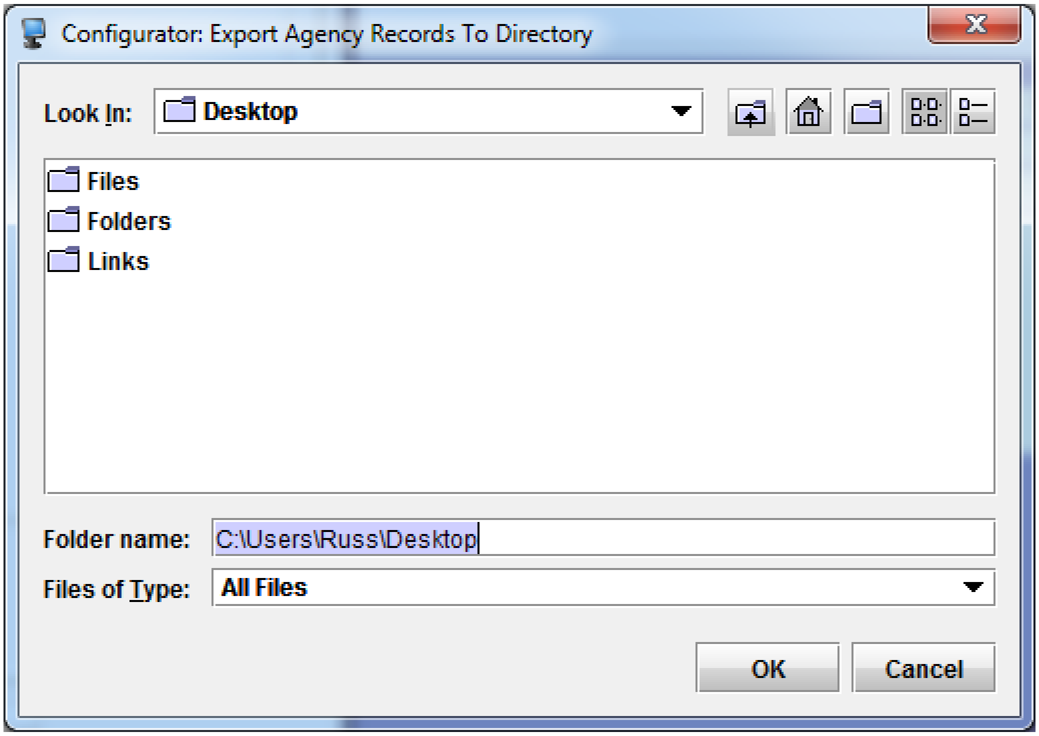
Configurator

- Select **Agency** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Agency

- Select the agency records to export.
- Click **OK**.



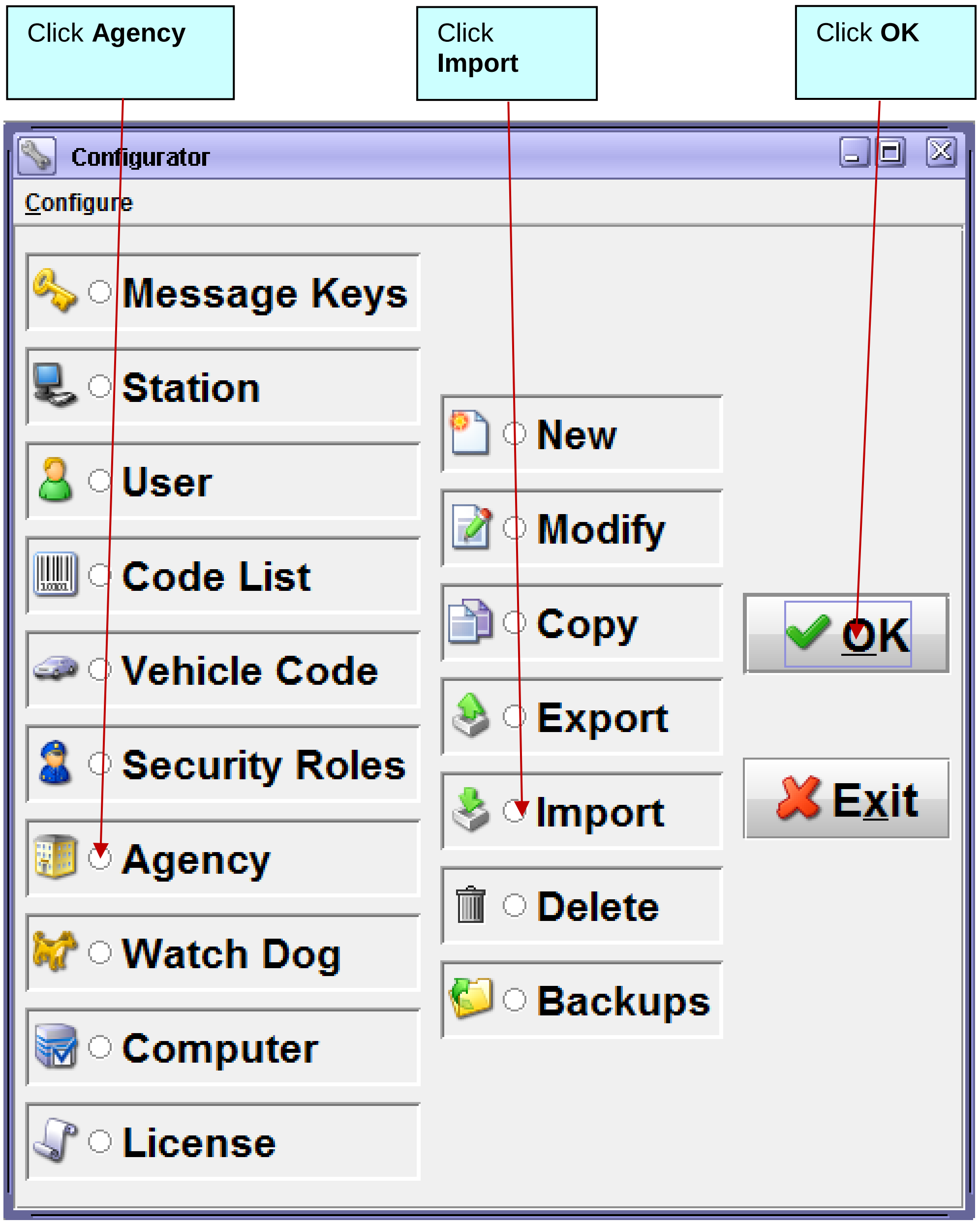
Export Agency Records To Directory

- Select the directory on your local P.C. to export the security role records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

9.5 – Import Agency

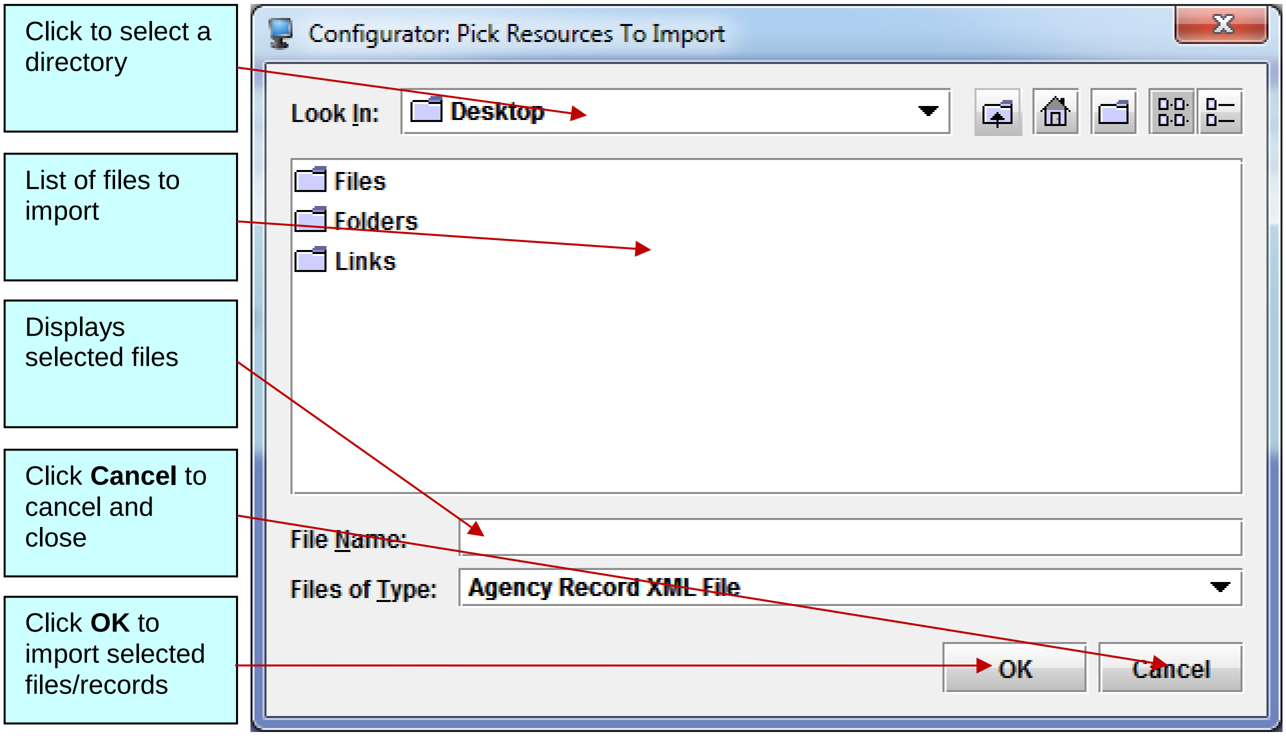
To import an Agency:

- Open the Configurator Module



Configurator

- Select **Agency** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



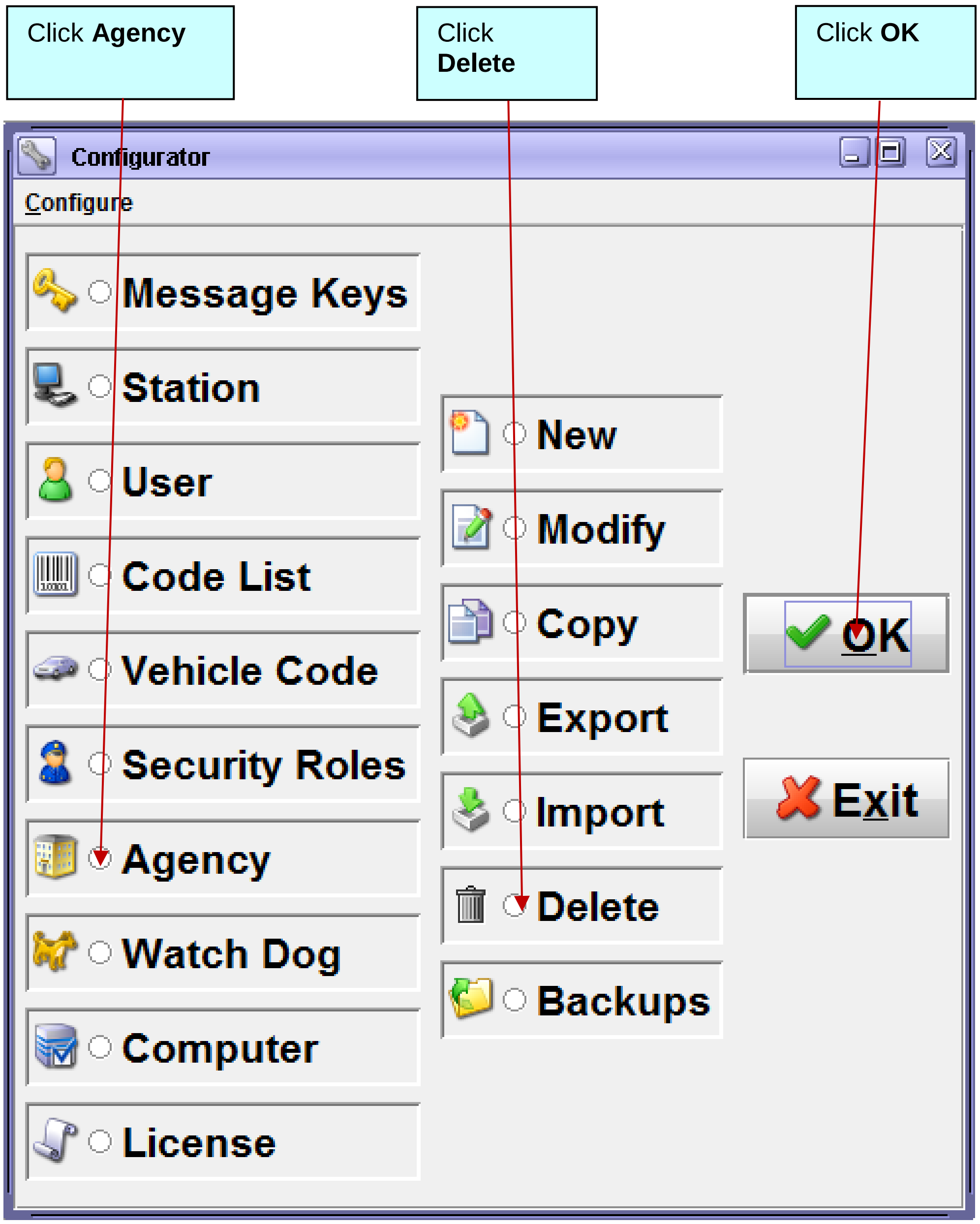
Pick Resources to Import

- Select the Agency file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

9.6 – Delete Agency

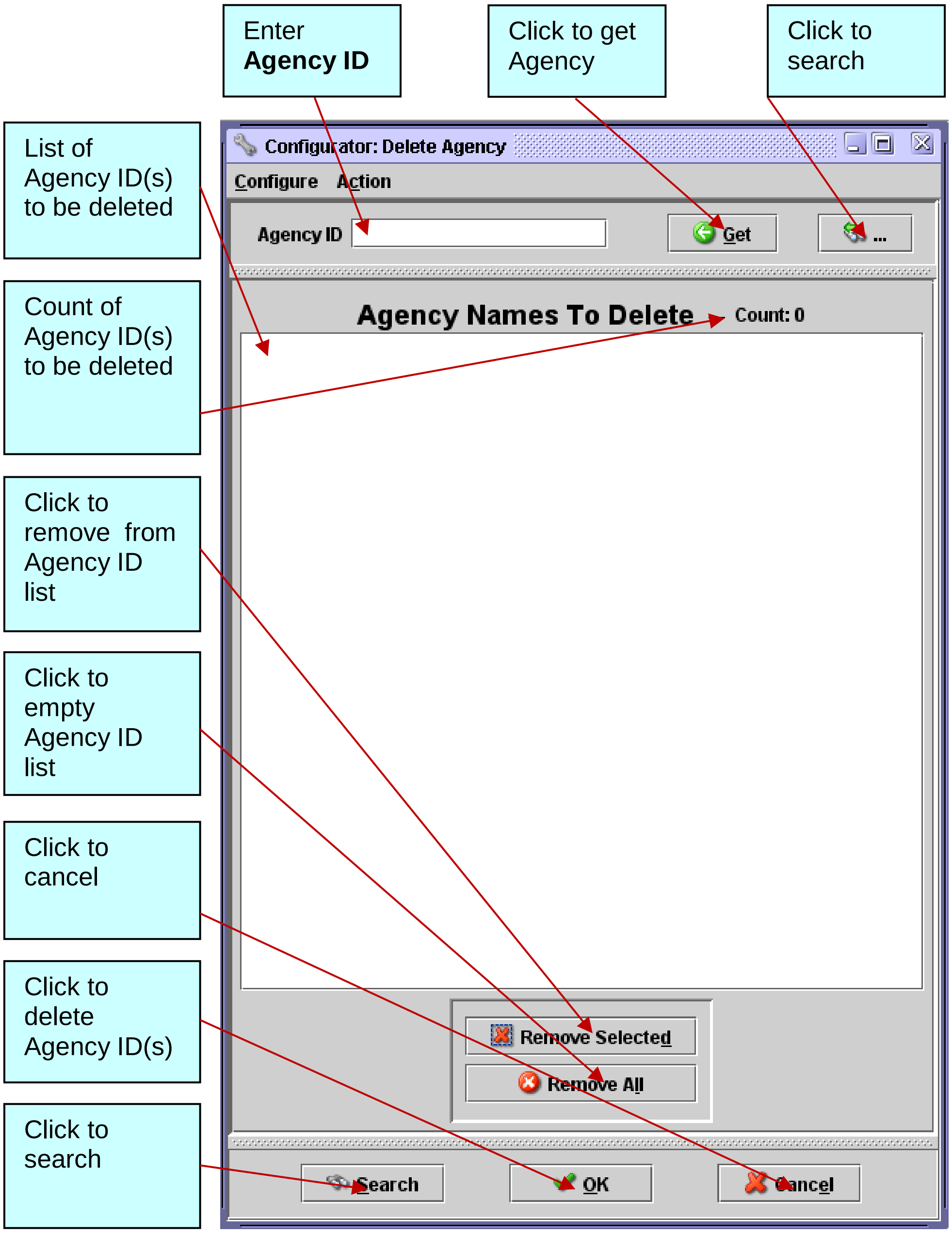
To delete an Agency:

- Open the Configurator Module



Configurator

- Select **Agency** from the left column.
- Select **Delete** from the middle column.
- Click **OK**.



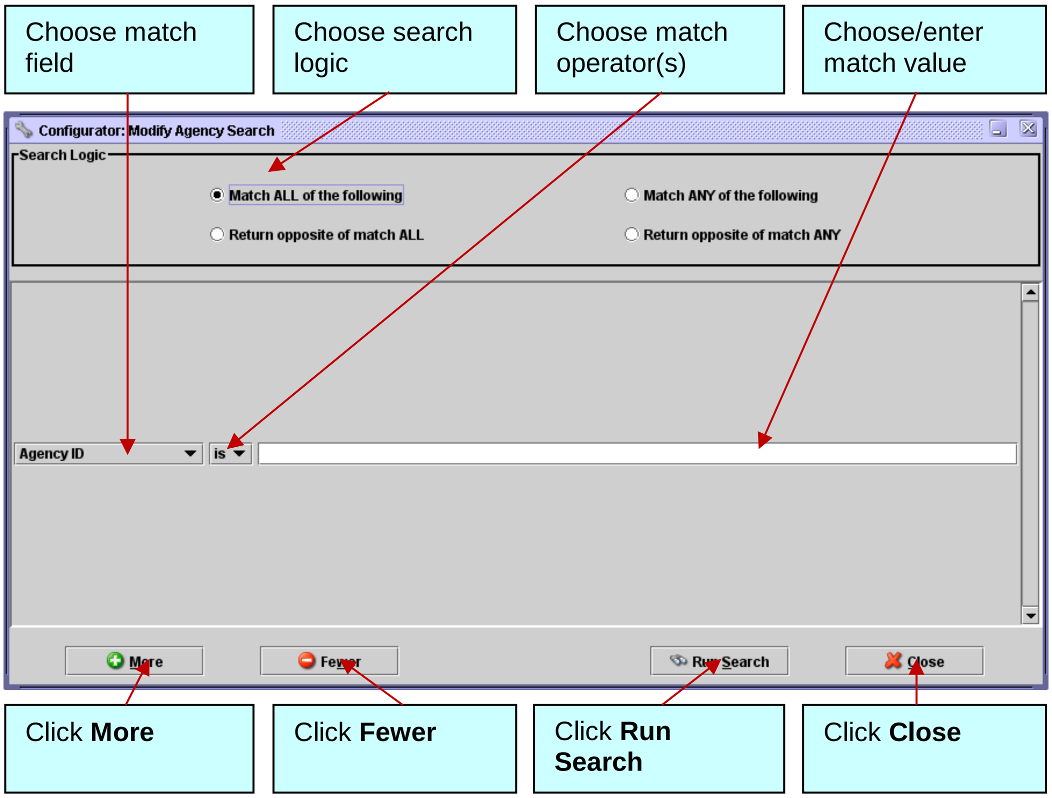
Delete Agency

- Select the Agency record(s) to delete. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to delete selected records, or **Cancel** to cancel the delete and go back to the main Configurator screen.

9.7 – Search Agency

To use the Agency search feature:

- Open the Configurator Module
- Open any Agency screen that has a **Search** button.
- Click the **Search** button.



Search Agency

Search Logic - The logic to be used to perform the search.

> **Match ALL of the following** - Records will only be returned in the search results if they match ALL of the search field/operator/value combinations.
>
> **Match ANY of the following** - Records will be returned in the search results if they match AT LEAST ONE of the search field/operator/value combinations.
>
> **Return opposite of match ALL** - Returns all records not matched in the corresponding "ALL" search.
>
> **Return opposite of match ANY** - Returns all records not matched in the corresponding "ANY" search.

Match Field - Choose the field from the station to search against. Examples of valid values are **Station Name**, **Station Number**, **Station Class**, and **ORI**.

Match Operator - Choose the type of comparison operation to be performed against the match field. Only certain operators are valid for each **Match Field**. Examples of valid Match Operators are **is**, **is not**, **contains**, **does not contain**, **less than**, and **greater than**.

Match Value - Enter or select the value to be searched upon.

More - Click **More** to add another row of comparison field/operator/value selections.

Fewer - Click **Fewer** to remove the bottom row of comparison field/operator/value selections.

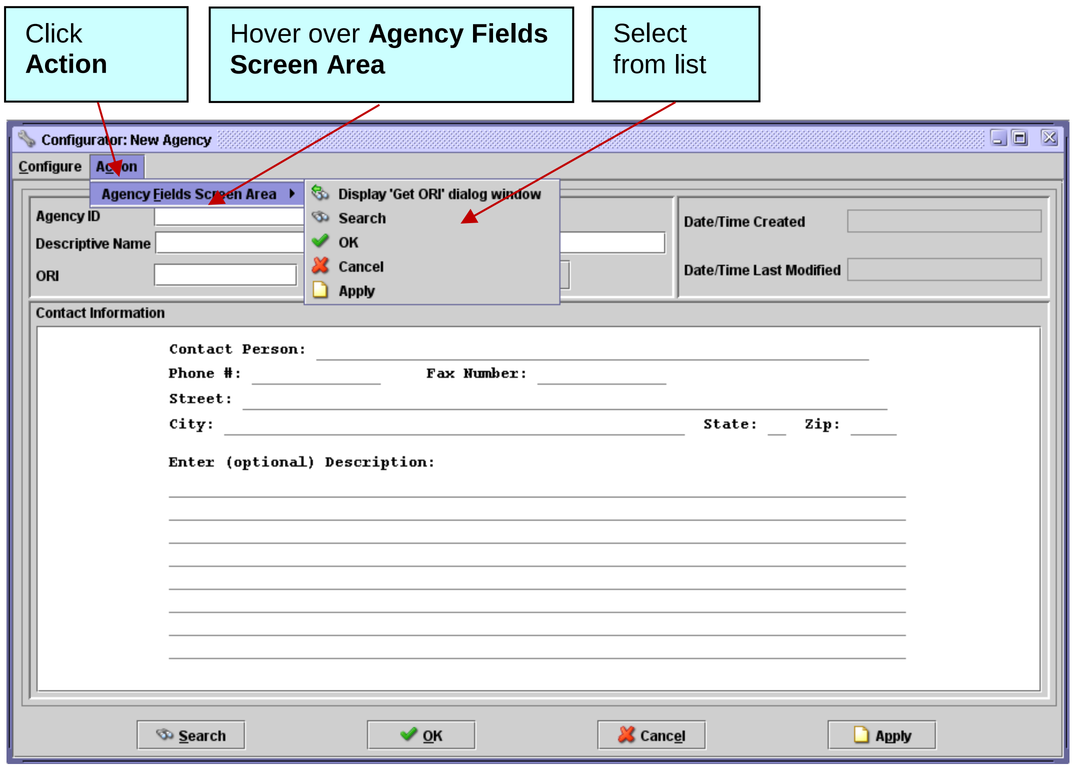
Run Search - Click **Run Search** to obtain a list of Station IDs based on the current comparison field/operator/value selections listed in the search window.

Close - Click **Close** to cancel the current search and close the search window.

9.8 – Agency Menu Access

To use the Agency Action menu:

- Open the Configurator Module.
- Open any Agency screen containing an **Action** menu item.



Agency Menu Access

- Click the **Action** menu.
- Hover over **Agency Fields Screen Area**.
- Select from list provided.

Chapter 10 – Watch Dog Configuration

The OpenFox® Message Switch has the capability to scan the contents of message traffic looking for key data values, and when found generate a message to any interested parties. This function is achieved by creating “Watch Dog” tables and populating them with entries. Each Watch Dog Table is specific to an entered MFC. Then the entries in that table contain the data that, when present in a properly-configured Message, will generate a Watch Dog Hit. Each entry in this table also allows the administrator to specify which stations should receive a copy of the hit message. There are various options for each entry as well, such as the ability to make the hit a “silent hit” (the originator of the message that generated the query that resulted in the hit is not notified that their message resulted in a Watch Dog hit), create custom text for the Watch Dog hit, and automatic removal of the entry from the Watch Dog table after a set number of days.

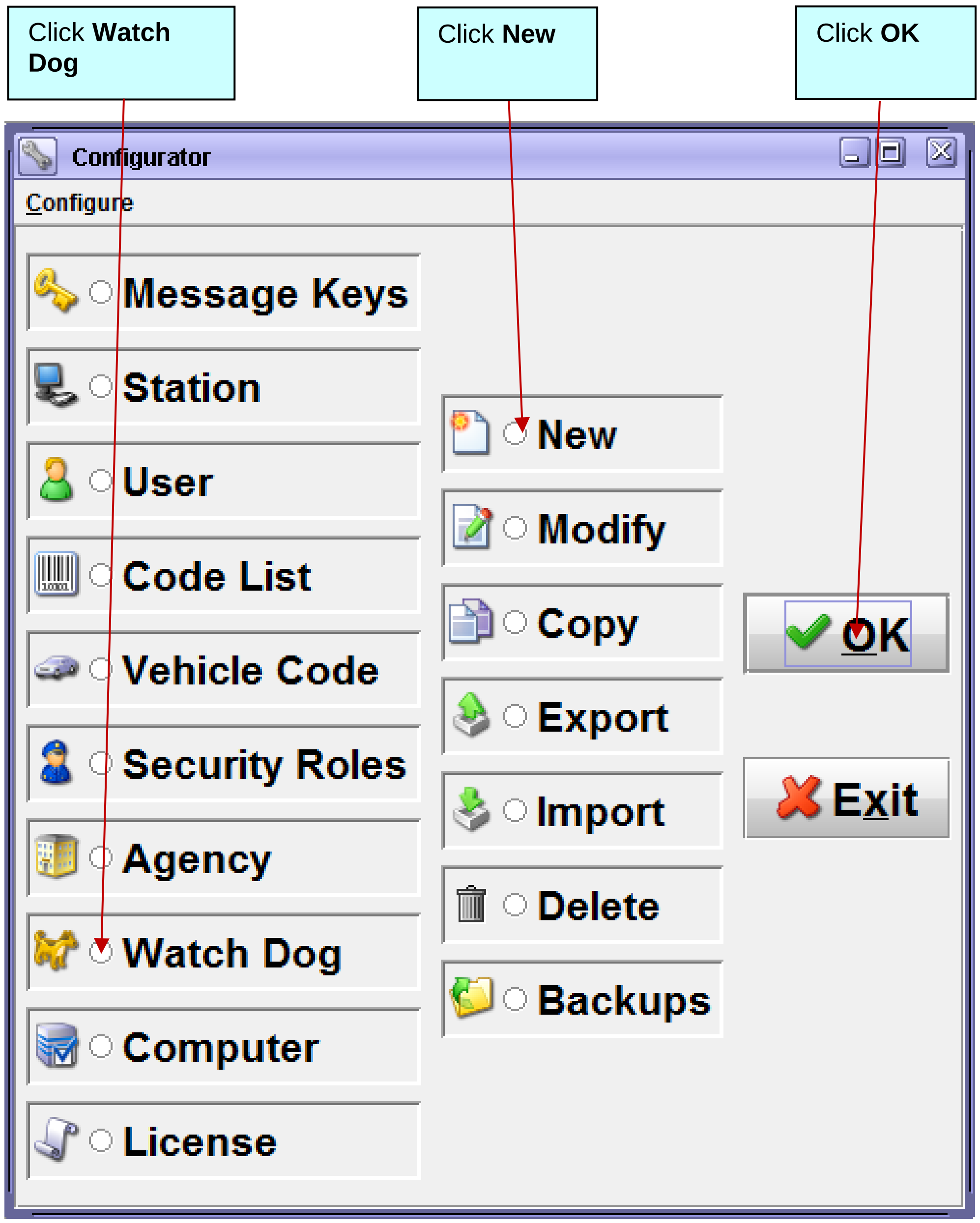
The OpenFox® Configurator Watch Dog screens are used to supply the information necessary to define Watch Dog records. The OpenFox® Configurator Watch Dog screens allow the administrator to create new Watch Dog records, modify existing Watch Dog records, export Watch Dog records, or import Watch Dog records, all with immediate effect and without any other software changes or system reboots.

The OpenFox® Configurator Watch Dog screens, their text-fields, lists, options and buttons are as follows:

10.1 – Add New Watch Dog Table

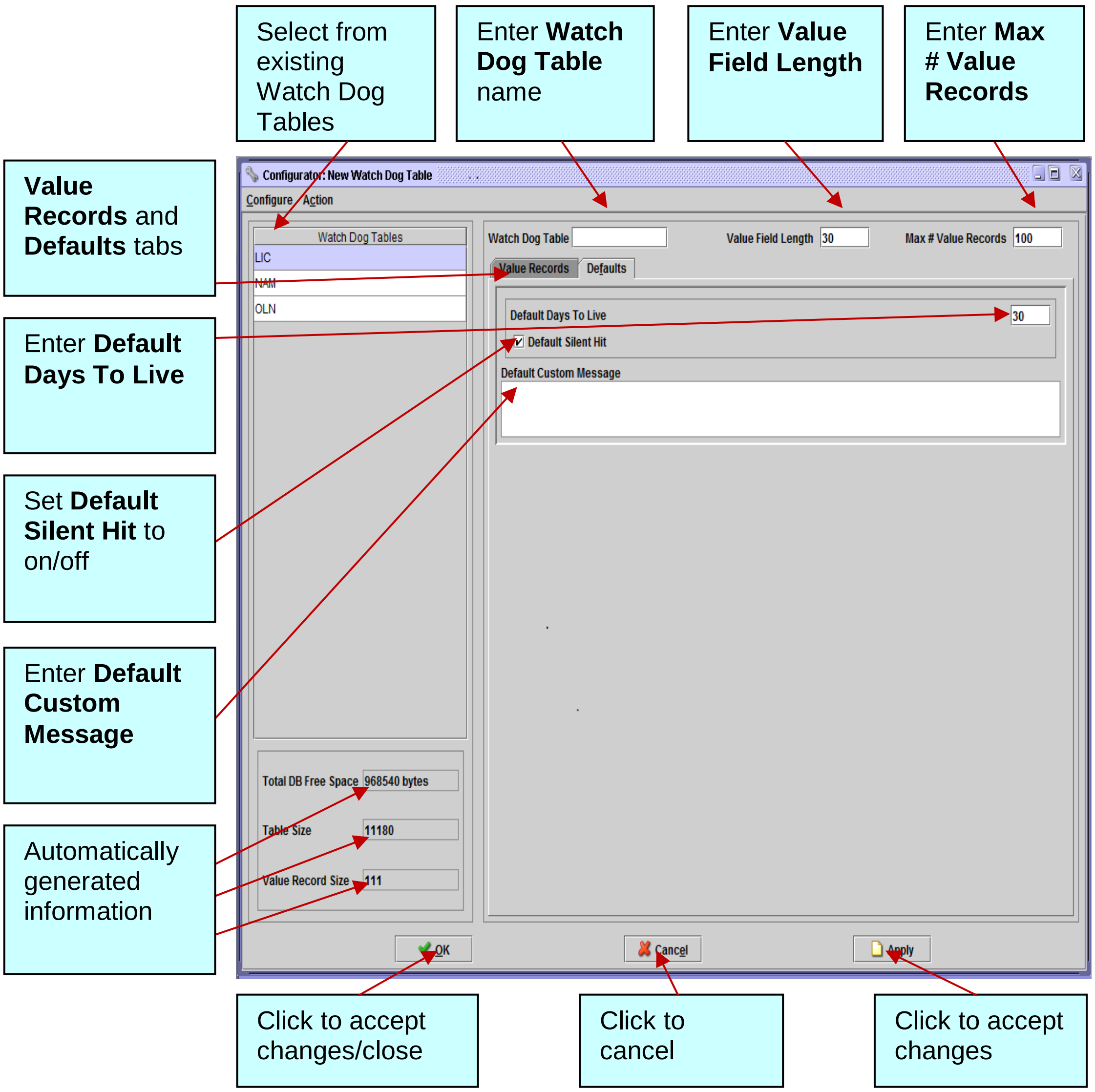
To configure a new Watch Dog Table:

- Open the Configurator Module



Configurator

- Select **Watch Dog** from the left column.
- Select **New** from the middle column.
- Click **OK**.



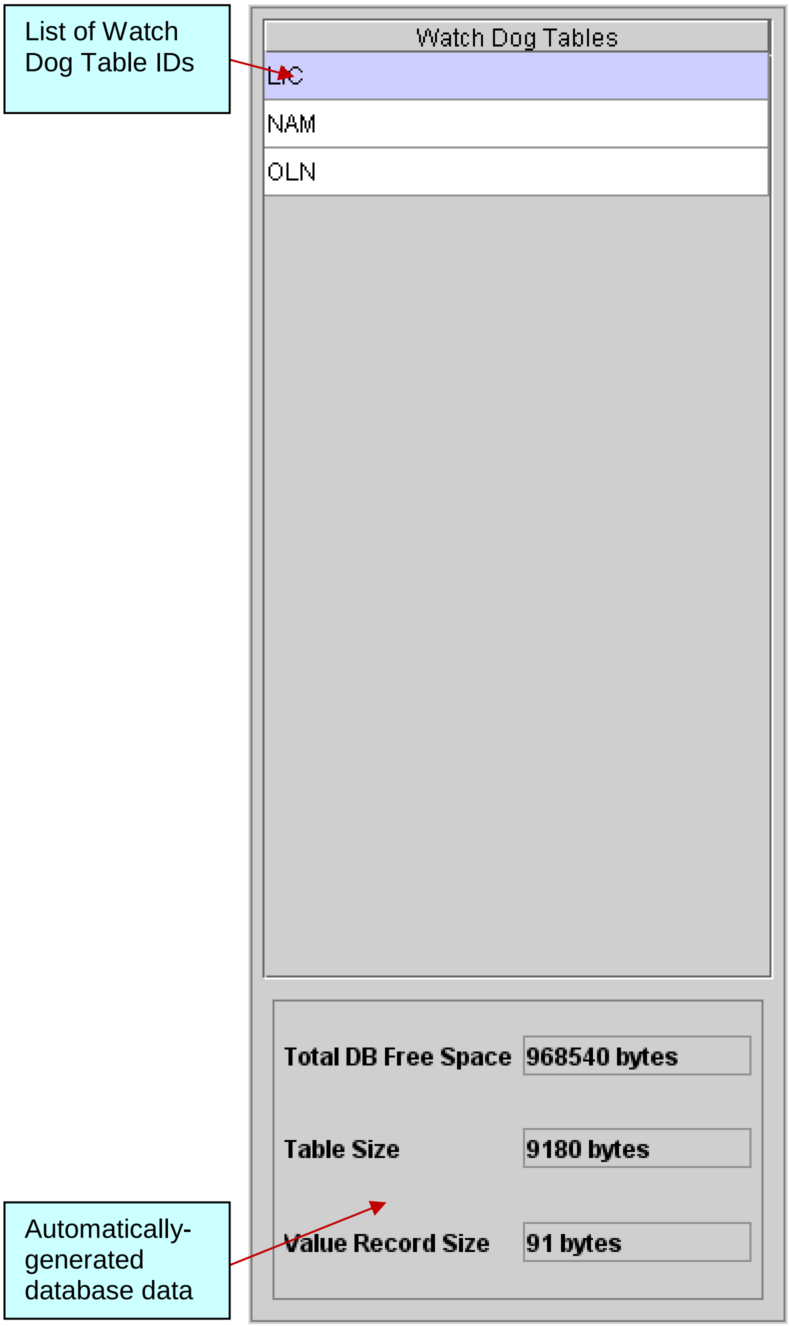
New Watch Dog Table

- If you wish to use an existing Watch Dog Table and its values as the basis for your new Watch Dog Table, double-click an existing Watch Dog table name from the Watch Dog Tables list on the left, otherwise skip this step.
- Enter a new unique Watch Dog Table name.
- Enter the **Value Field Length**. This value is the maximum length for the field that will be added to the watch dog table.
- Enter the **Max # Value Records**. This is the maximum number of watch dog entries for this table.
- Enter the **Default Days To Live**. This is the default value that will auto-populate the Value Records tab.
- Select or de-select the bit for **Default Silent Hit**. This is the default value that will auto-populate the Value Records tab.
- Enter the **Default Custom Message** for this Watch Dog Table. This is the default value that will auto-populate the Value Records tab.

NOTE: You can double click on any of the existing watch dog tables displayed in the list on the left side of the screen. If you double click on an existing watch dog table in the list, the screen will retrieve the data for that watch dog table, and populate the screen with all the data from the selected watch dog table. This data can then be used to help create a new watch dog table.

When initially entering the new watch dog table screen, the '**Defaults**' tab is selected by default. The fields inside this tab are used by the watch dog table new screen as the default values used to populate the editable fields in the '**Value Record Fields**' screen area (located in the '**Value Records**' tab). *NOTE: these default values are not used by the watch dog table screens until after you commit your changes to the DB using either the '**Apply**' or '**OK**' button.*

10.1.1 – Watch Dog Table Fields



Watch Dog Tables

Watch Dog Tables - Lists all existing watch dog tables in the database. You can double click on an existing watch dog table to populate the screen with its data.

Total DB Free Space - Automatically-generated information. This indicates how much free space is available in the watch dog table database memory area.

Table Size - Automatically-generated information. This indicates how much size the selected watch dog table occupies in the database.

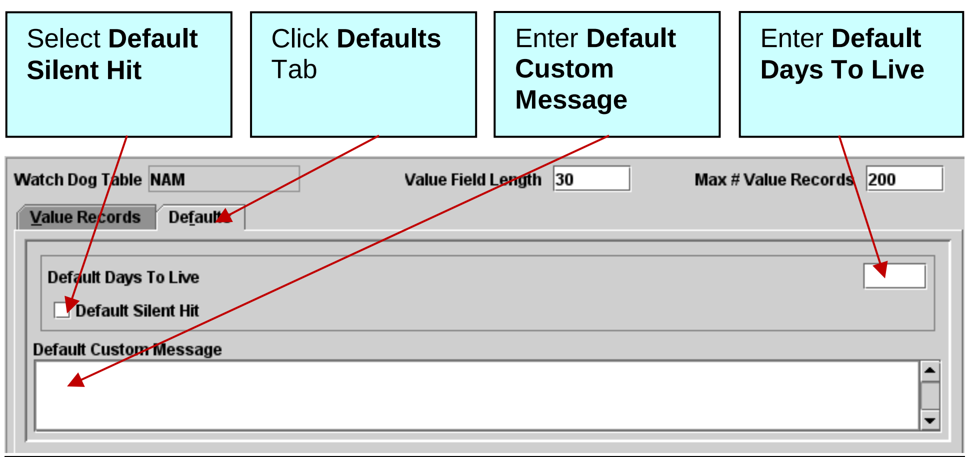
Value Record Size - Automatically-generated information. This indicates how much size each value record in the selected watch dog table occupies in the database.

Watch Dog Table - Enter a unique Watch Dog table name.

Value Field Length - Enter value that is equal to or greater than the longest value field (which is contained in each value record) throughout all value records in the Watch Dog table.

Max # Value Records - Enter the maximum number of value records allowed inside this Watch Dog table.

10.1.2 – Defaults Fields



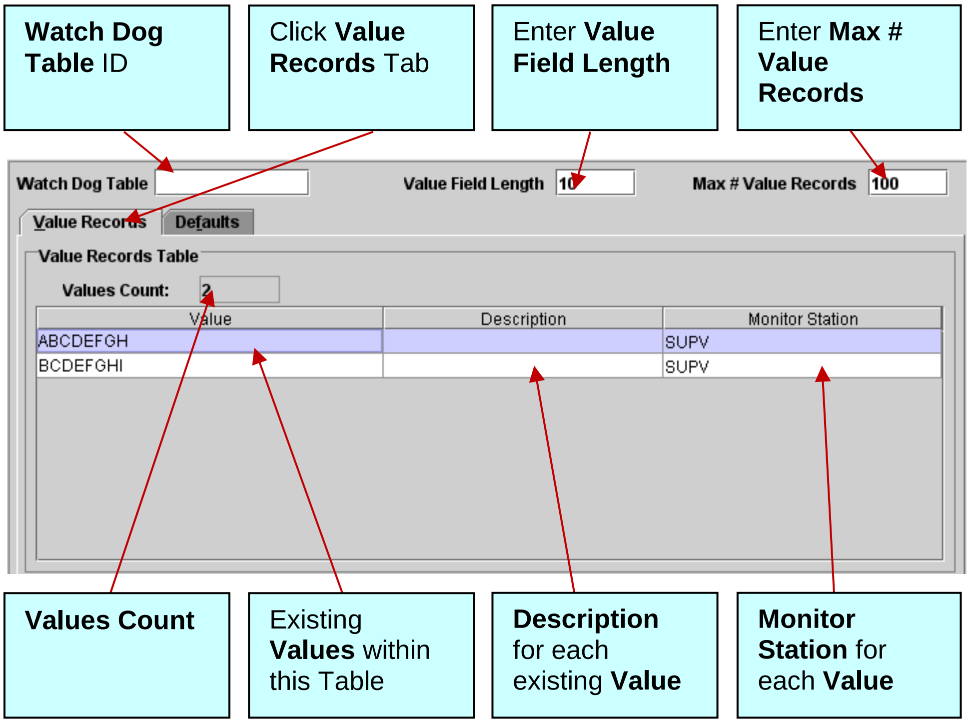
Defaults

Default Days To Live - Enter a value which the Configurator GUI will use as the default value used to populate the **Days To Live** field in the value records tab.

Default Silent Hit – Enter a value which the Configurator GUI will use as the default value used to populate the **Silent Hit** checkbox in the value records tab.

Default Custom Message – Enter a value which the Configurator GUI will use as the default value used to populate the **Custom Message** field in the value records tab.

10.1.3 – Watch Dog Table Fields



Value Records Tab

Watch Dog Table - Automatically-generated information. This indicates the number of value records in the Watch Dog table.

Value Field Length - Automatically-generated information. This indicates the number of value records in the Watch Dog table.

Max # Value Records - Automatically-generated information. This indicates the number of value records in the Watch Dog table.

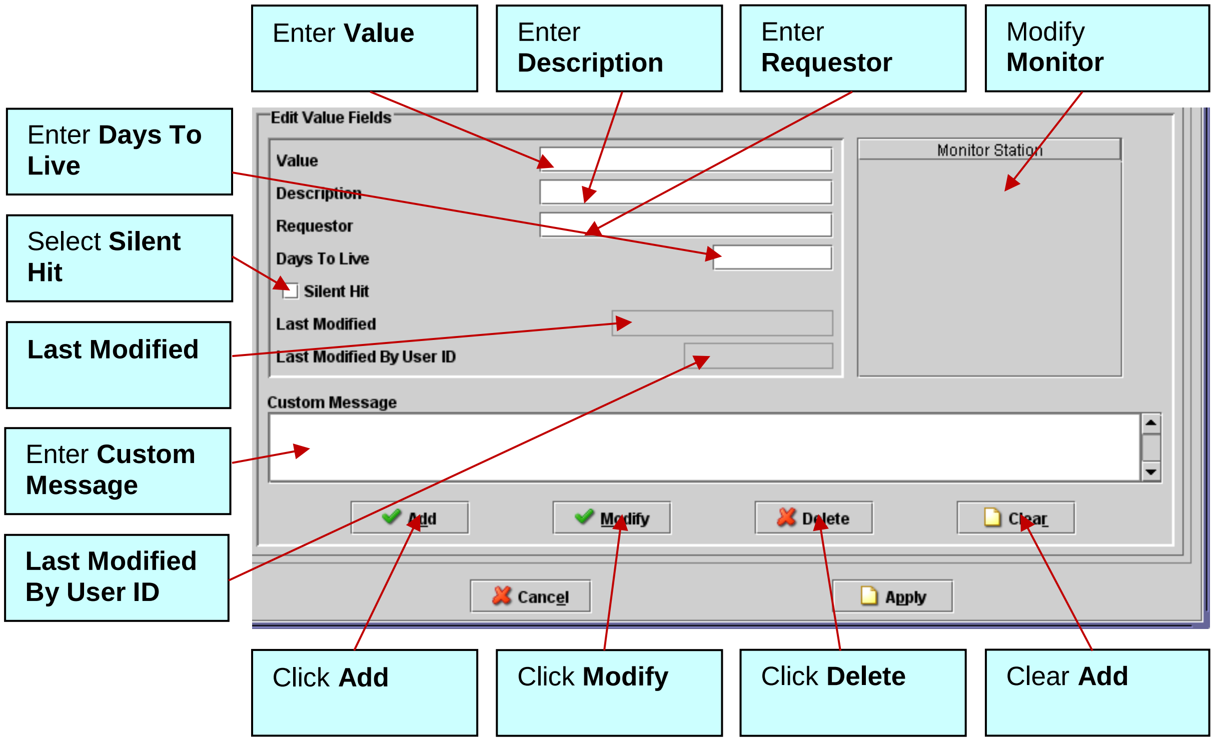
Values Count - Automatically-generated information. This indicates the number of value records in the Watch Dog table.

Value - Each separate specific value created within the selected Watch Dog Table.

Description - The Watch Dog Table Value's plain-language description.

Monitor Station - The station that is set to receive the Watch Dog message when the Value for this Watch Dog Table is queried.

10.1.4 – Edit Value Fields



Edit Value Fields

Value – Enter/edit a unique value ID or name for each value record. This is also the text which is used to compare against the field data when looking inside each appropriate message sent to the OpenFox® Message Switch to determine if a Watch Dog hit notification message should be generated.

Description – Enter/edit the plain-text description of the value record.

Requestor – Enter/edit the person/entity whom requested this value record.

Days To Live – Enter/edit the number of days in for which this value record will live. **If blank, the value record will not expire**. After the **Days To Live** number of days expires, the value record will be deleted automatically by the system.

Silent Hit – Enter/edit this bit which, if set, only the monitor station(s) listed in this value record will receive a Watch Dog hit notification message when a message matching this value is sent to the OpenFox® Message Switch. If not set, then both the station generating the message and the listed monitor station(s) will receive the Watch Dog hit notification message.

Last Modified - Automatically-generated information. This indicates the date this Value was last modified.

Last Modified By User ID - Automatically-generated information. This indicates the User ID of the individual who last modified this Value.

Monitor Station - Enter/edit the list of station(s) that will receive Watch Dog hit notification messages when a message matching this value is sent to the OpenFox® Message Switch. To add a new station to this list, right-click the box, left-click Add Monitor Station, select from the list supplied, then click OK. To delete a station from this list, left-click the station from the list of existing stations, right-click in the box, then left-click Delete Monitor Station.

Custom Message - Enter/edit. The contents of this field are used by the OpenFox® Message Switch to customize any generated Watch Dog hit notification messages for this value record.

Add - Click to add a new value record into the value record table. When this button is clicked the current contents of all the fields in the edit value fields screen area are used. *NOTE: this change is not written to the database until either the OK or Apply button is clicked.*

Modify - Click to modify an existing value record in the value record table. When this button is clicked the current contents of all the fields in the edit value fields screen area are used. This button can only be used for modification of an existing value record. *NOTE: this change is not written to the database until either the OK or Apply button is clicked.*

Delete - Click to delete an existing value record from the value record table. Left-click an existing value from the list of existing value records prior to clicking the Delete button. *NOTE: this change is not written to the DB until either the OK or Apply button is clicked.*

Clear - Click to clear the contents of all the fields in the edit value fields screen area. *NOTE: the contents of the values table will not be affected.*

OK - Click to commit all Watch Dog table changes to the DB and return to the main Configurator GUI screen.

Cancel - Click to clear all fields on screen and return to the main Configurator GUI screen.

Apply - Click to commit all changes to the watch dog table to the DB and stay in this screen. This will not clear the fields displayed on screen.

10.1.5 – Add New Watch Dog Value

To configure a new Watch Dog Value:

- Click the **Value Records** tab.
- If you wish to use an existing **Value** as the basis for a new **Value**, double-click an existing **Value** from the Value list on the right (under **Values Count**), otherwise skip this step.
- Enter a new unique **Value** name in the **Edit Value Fields** section.
- Optionally enter a new **Description**.
- Optionally enter a new **Requestor**.
- Enter the **Days To Live**.
- Select whether this Value will be a Silent Hit.
- Enter the **Custom Message**.
- Select the **Monitor Station**.
- Click **Add** to add the value to the list of existing values, or **Clear** to empty the values in the fields and start the Add Value process over.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

10.1.6 – Modify Existing Watch Dog Value

To modify an existing Watch Dog Value:

- Click the **Value Records** tab.
- Double-click an existing **Value** from the Value list on the right (under **Values Count**).
- Modify any of the fields necessary in the **Edit Value Fields** section that you are permitted to modify.
- Click **Modify** to add the value to the list of existing values with the modifications, or **Clear** to empty the values in the fields and start the Modify Value process over.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

10.1.7 – Delete Existing Watch Dog Value

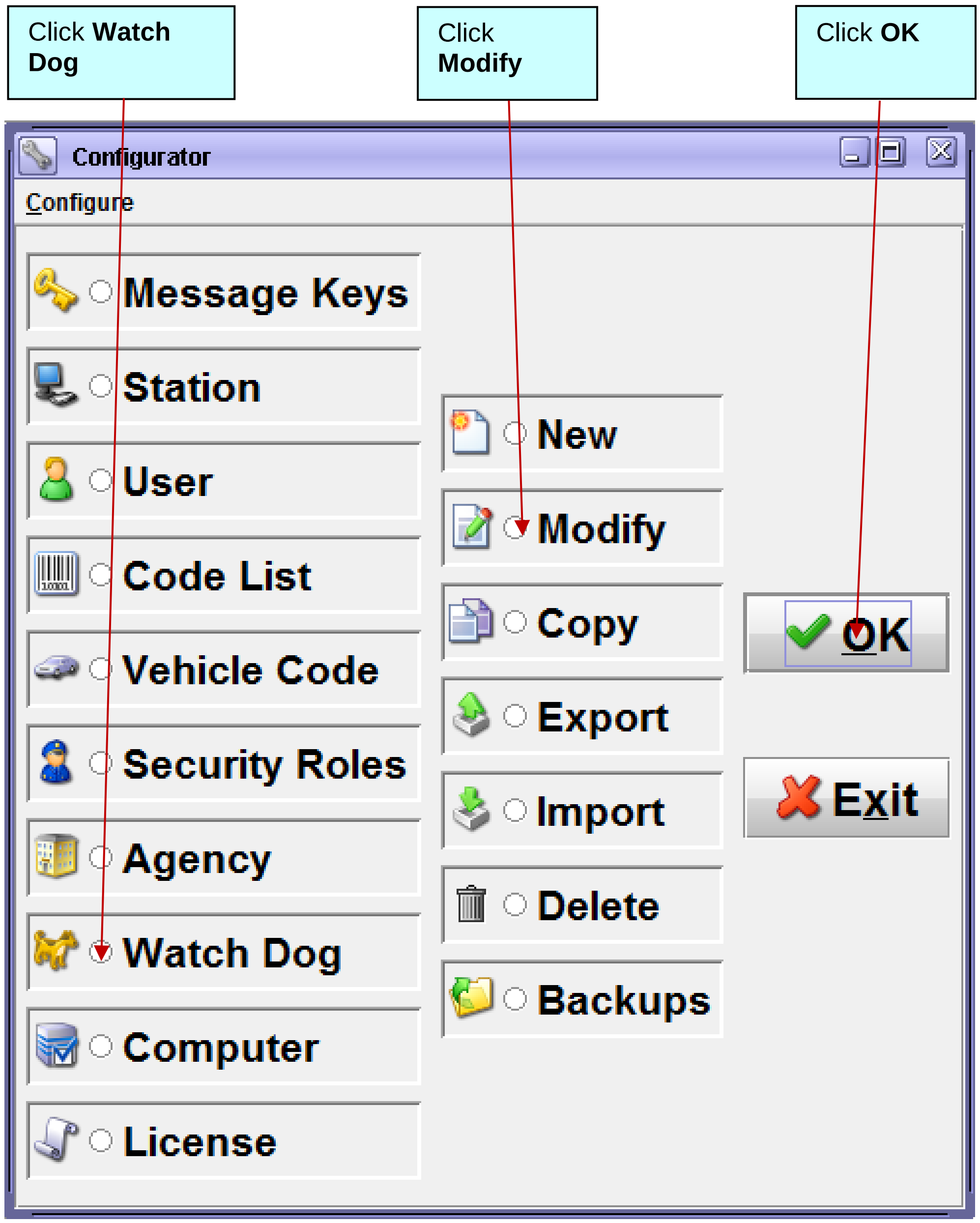
To delete an existing Watch Dog Value:

- Click the **Value Records** tab.
- Double-click an existing **Value** from the Value list on the right (under **Values Count**).
- Click **Delete** to remove the value from the list of existing values for this Watch Dog Table.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

10.2 – Modify Existing Watch Dog Table

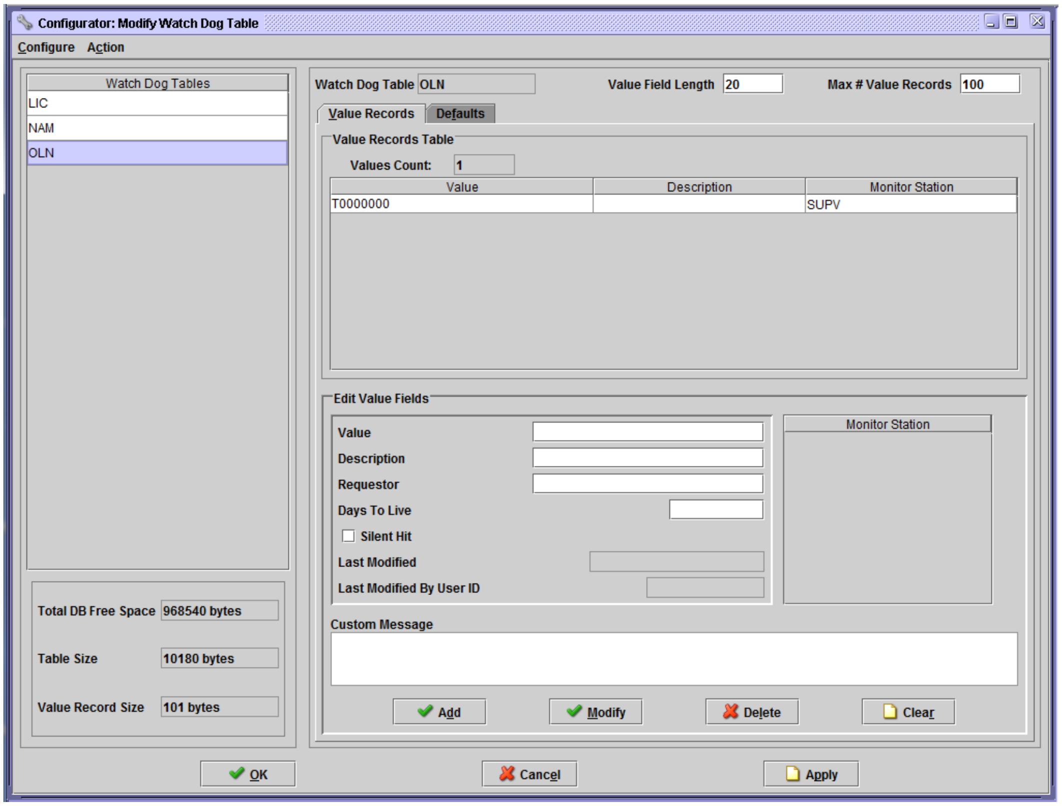
To modify an existing Watch Dog Table:

- Open the Configurator Module



Configurator

- Select **Watch Dog** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



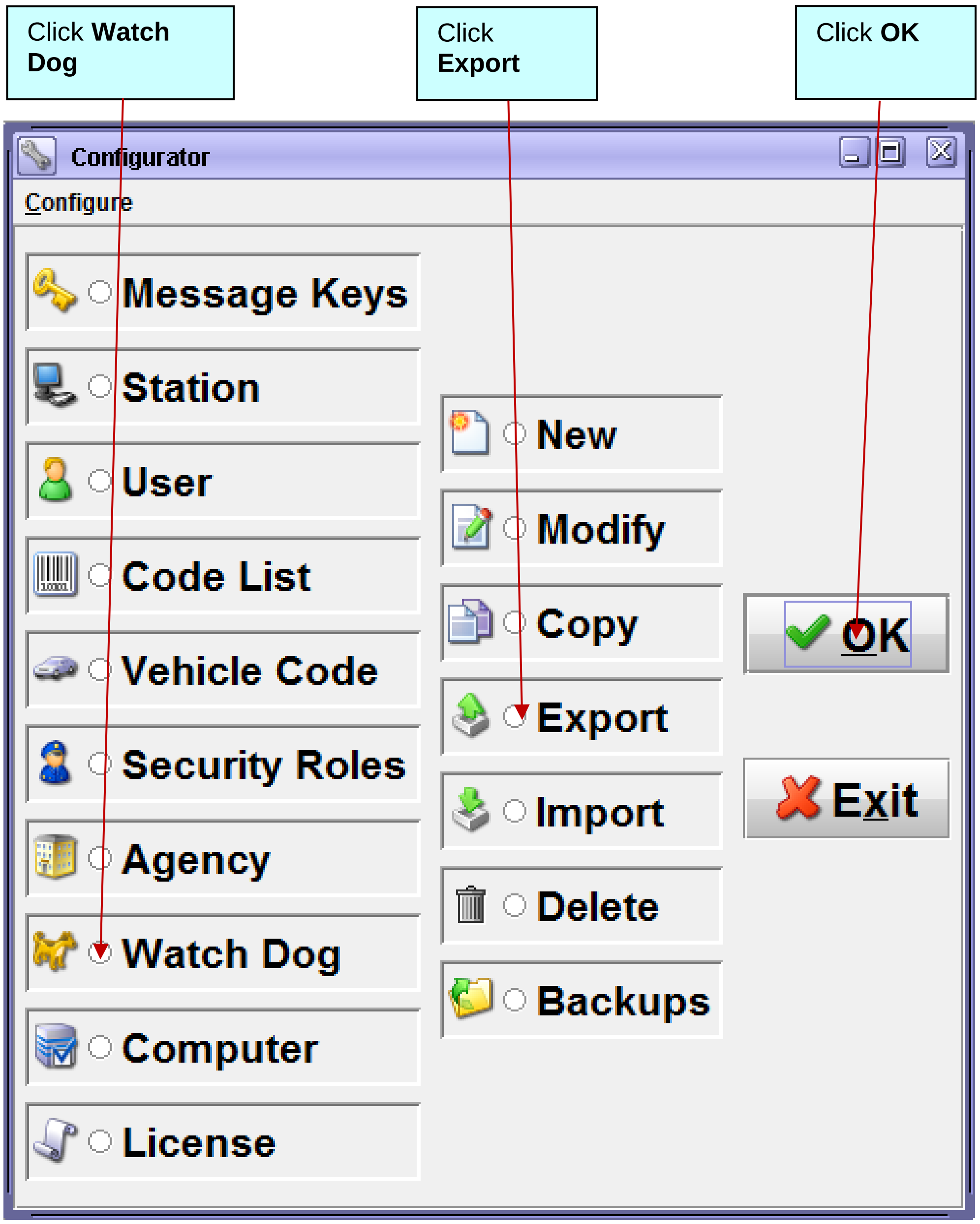
Modify Agency

- Double click a watch dog table name from the watch dog tables list on the left to retrieve the watch dog table record.
- Click the **Value Records** tab.
- Select the Value Fields that require modification from the **Value Records Table** list section on the top-right.
- Modify any of the fields as necessary in the Edit Value Fields section on the bottom-right.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

10.3 – Export Watch Dog Table

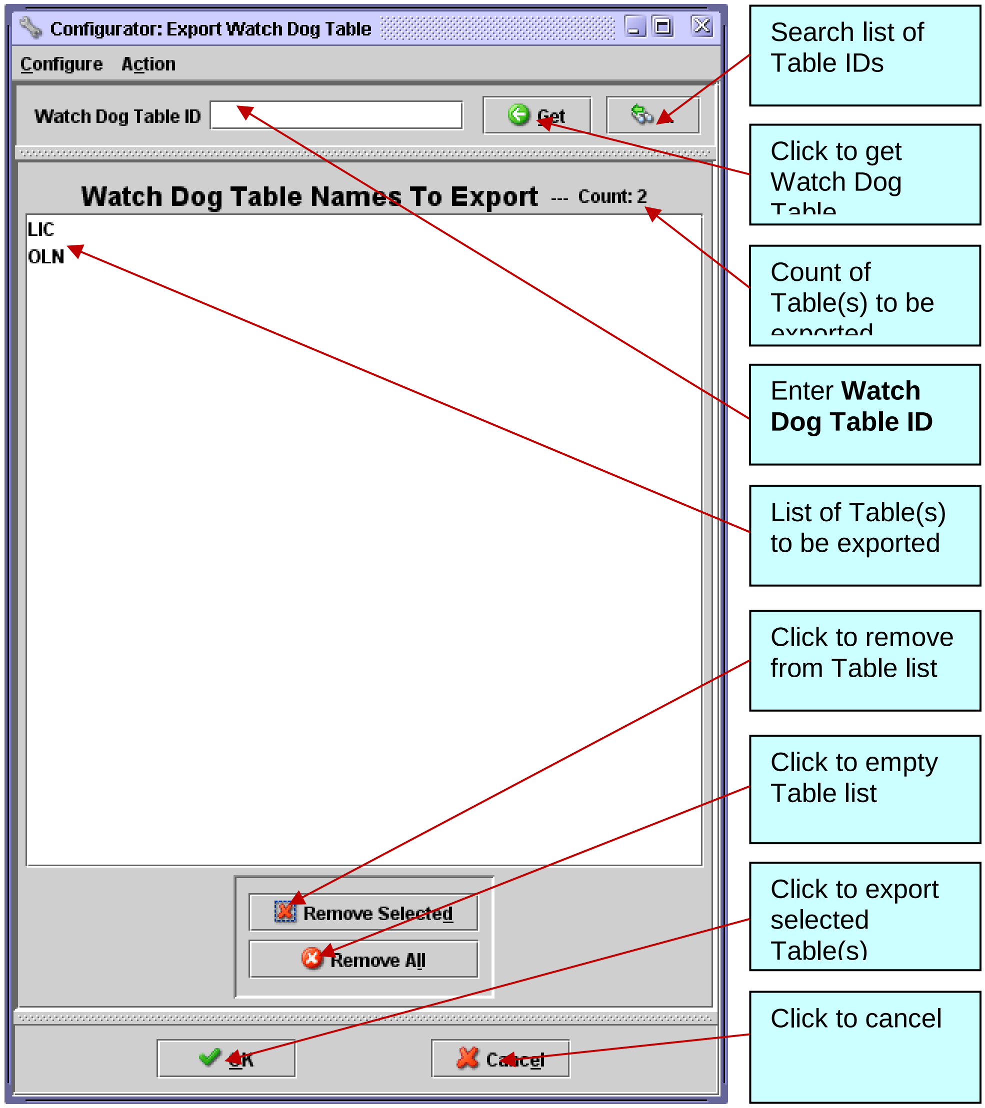
To export a Watch Dog Table:

- Open the Configurator Module



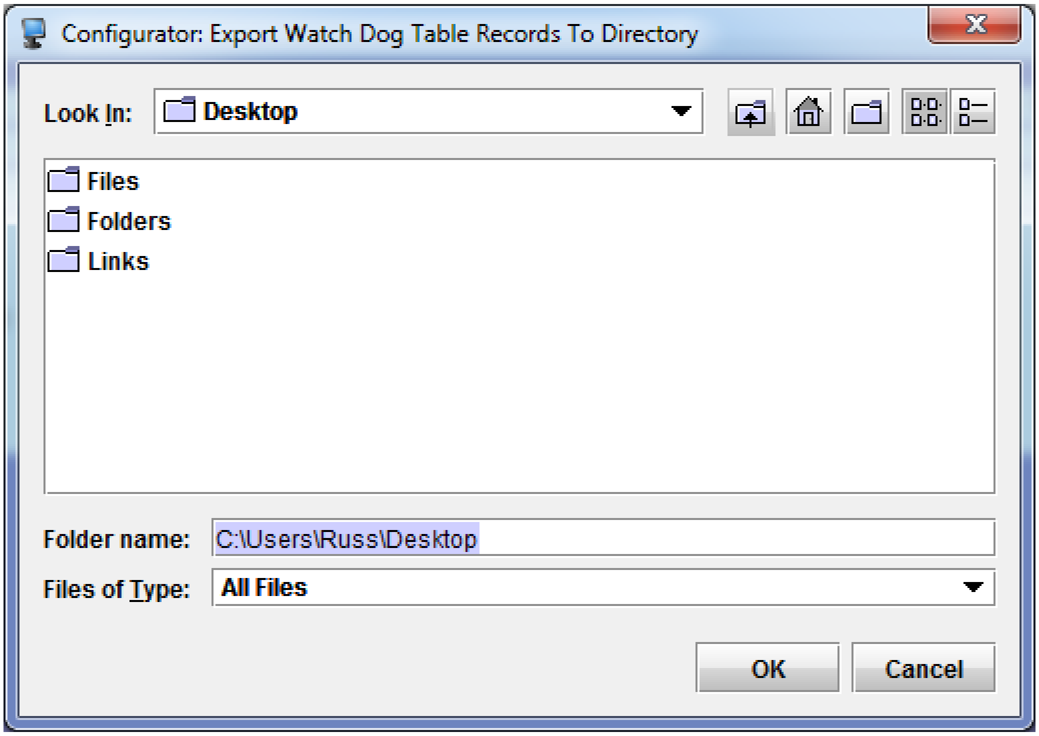
Configurator

- Select **Watch Dog** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



Export Watch Dog Table

- Select the watch dog table records to export.
- Click **OK**.



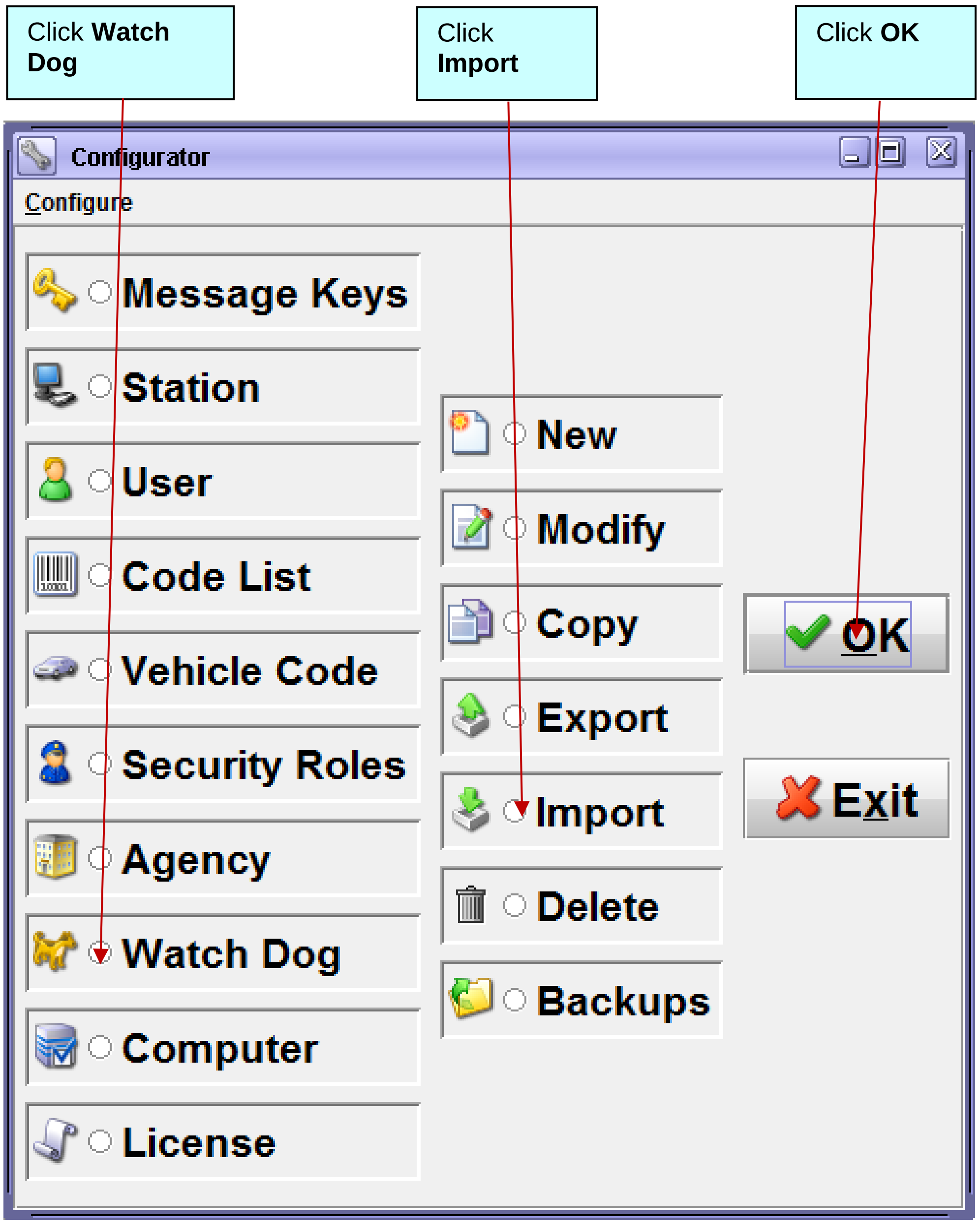
Export Watch Dog Table Records To Directory

- Select the directory on your local P.C. to export the watch dog table records to.
- Click **OK** to export the selected records to the local P.C. as XML files.

10.4 – Import Watch Dog Table

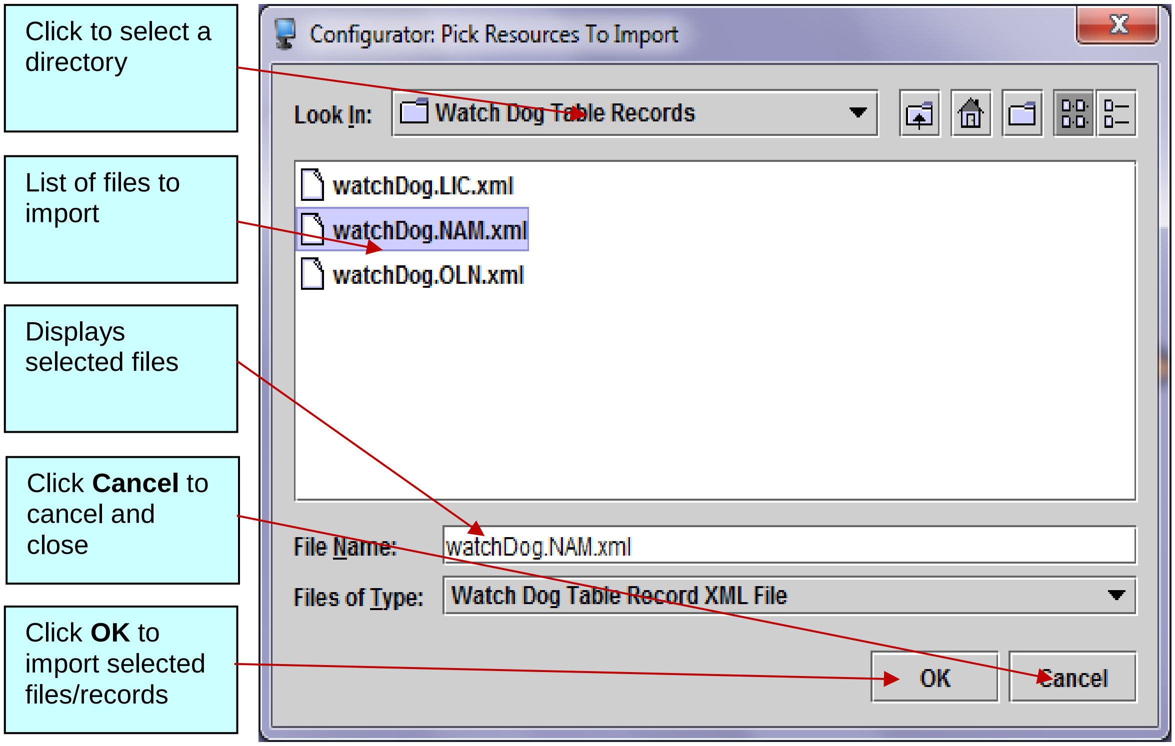
To import a Watch Dog Table:

- Open the Configurator Module



Configurator

- Select **Watch Dog** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



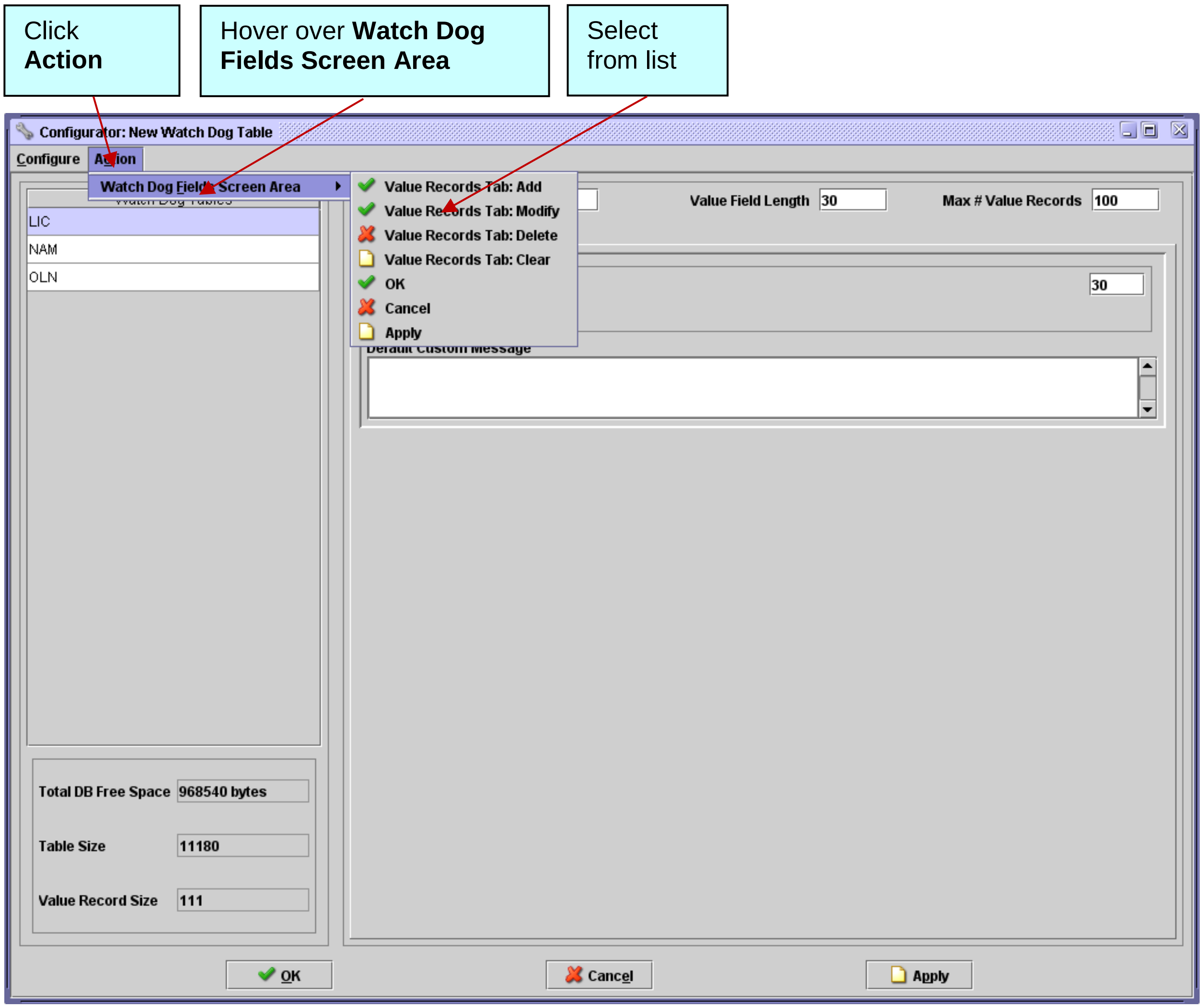
Pick Resources to Import

- Select the Watch Dog Table file(s) to import. You can use the Shift and/or Ctrl keys on your keyboard to select multiple files at once.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

10.5 – Watch Dog Menu Access

To use the Watch Dog Action menu:

- Open the Configurator Module.
- Open any Watch Dog screen containing an **Action** menu item.



Watch Dog Menu Access

- Click the **Action** menu.
- Hover over **Watch Dog Fields Screen Area**.
- Select from list provided.

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Chapter 11 – Computer Configuration

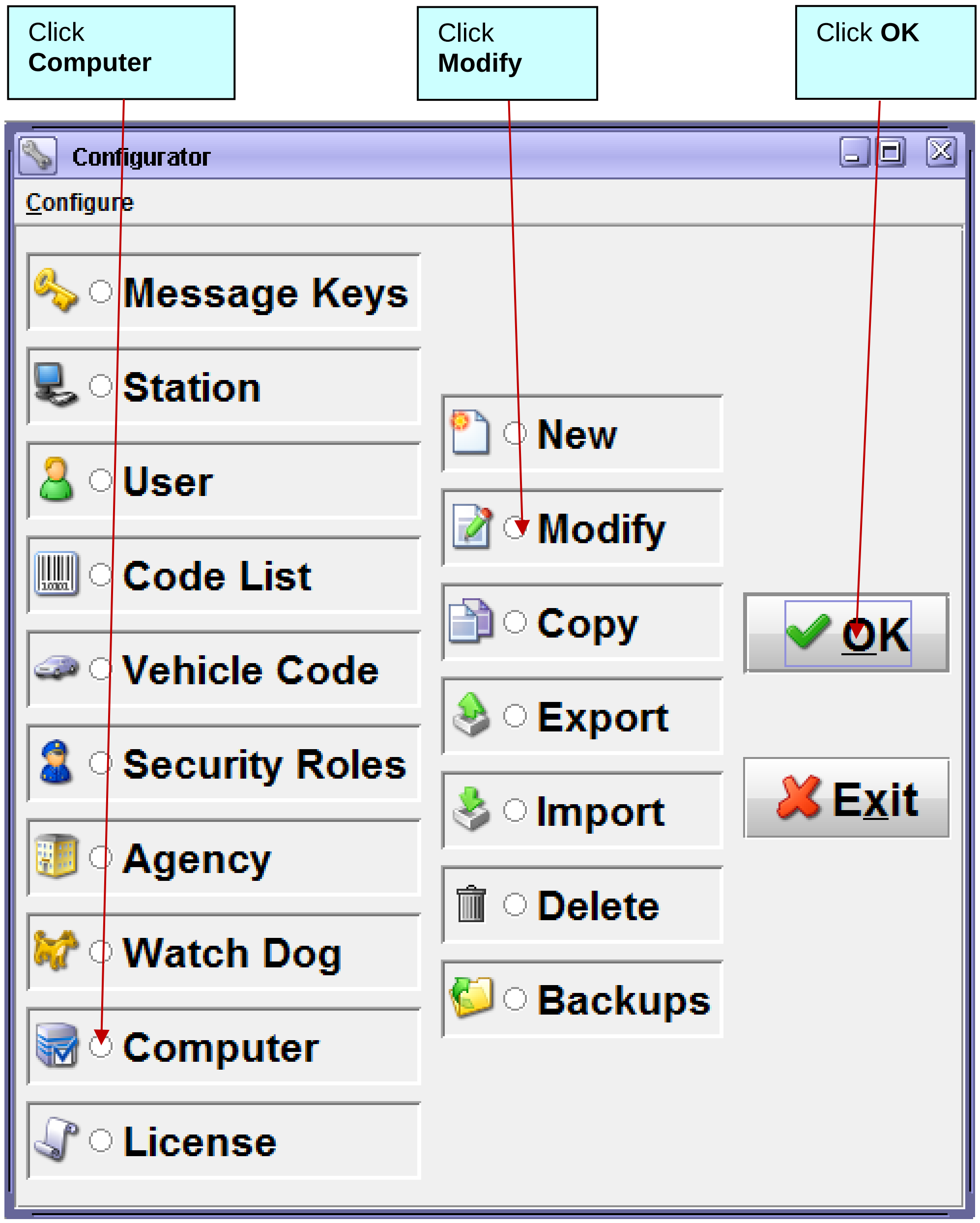
The OpenFox® Message Switch has several station configured that serve as system-wide monitors to specific types of messages, or are used for other special functions. These stations are entered and modified in the "Computer Configuration" screen. The types of messages that are monitored to these stations include, but are not limited to, network events, messages that have no other method of routing, user logon processing, auto-purge reporting, XSLT transformation reporting, and certain system operational messages. All of these stations are defined in the Computer Configuration screen. Some of these elements and events are common to all installations but the OpenFox® also allows for installation-specific fields so the individual elements that comprise the computer configuration screen may differ from installation to installation.

The OpenFox® Computer Configuration screen, its text-fields, and buttons are as follows:

11.1 – Modify Existing Computer Configuration

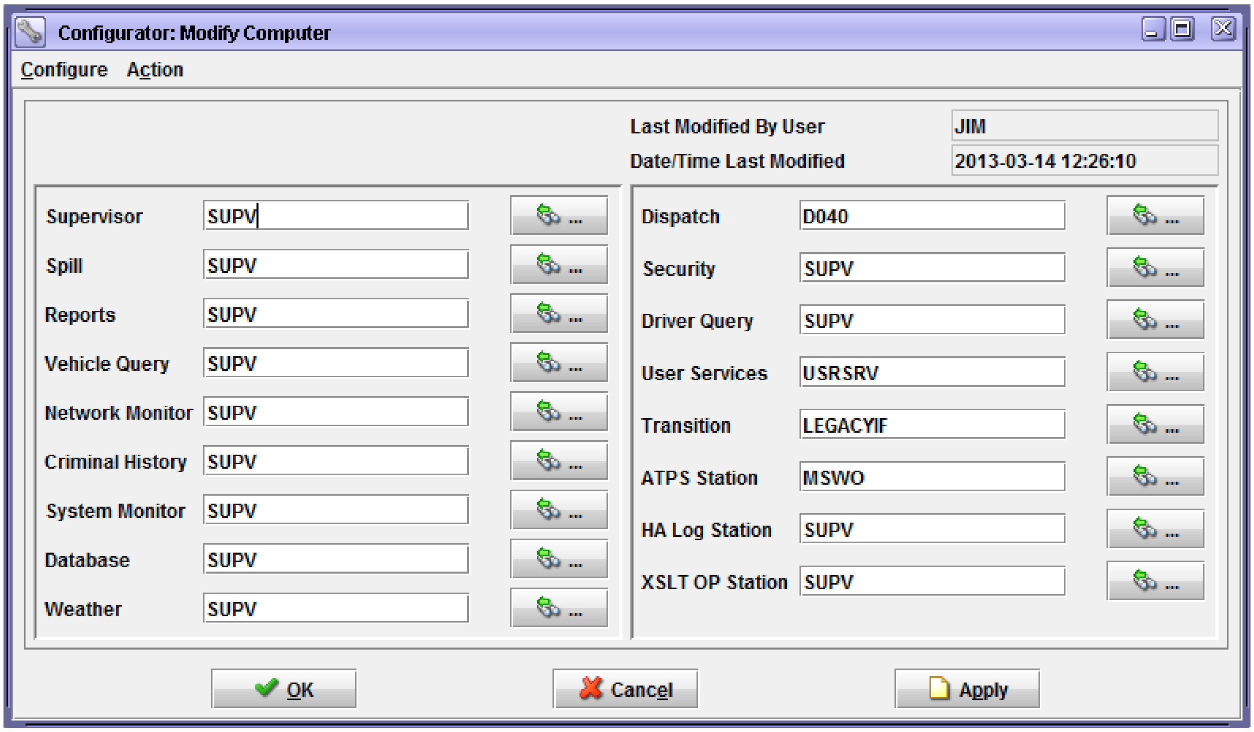
To modify an existing Computer Configuration:

- Open the Configurator Module



Configurator

- Select **Computer** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



Modify Computer Configuration

11.1.1 – Computer Configuration Fields

Supervisor - Enter the name of the station that is assigned the primary responsibility for controlling the system.

Spill - Enter the name of the station that will receive error messages generated to stations that are configured to intercept errors. Any message that is sent to a station that has the “bar direct address” flag turned on will be re-routed to the Spill station.

Reports - Enter the name of the station or distribution list, which will receive all automatically, generated computer resource reports and daily activity reports.

Vehicle Queries - Enter the name of the station which will receive and respond to vehicle queries.

Network Monitor - Enter the name of the station or distribution list which will receive all system generated communications-oriented alert messages.

Criminal History - Enter the name of the station which will receive and respond to criminal history queries.

System Monitor - Enter the name of the station or distribution list which will receive all system-generated operational messages (e.g., start-up message, disk errors, hourly reports, etc.).

Database - Enter the name assigned to the interface for the Relational Database Management System. Transactions pertaining to in-state warrants, sexual offenders, protection orders, etc. are normally directed to this interface.

Weather - Enter the name of the station which will input weather broadcasts for distribution.

Dispatch - Enter the name of the station which will receive messages from NLETS or NCIC which are addressed to the state code or which cannot be routed automatically.

Security - Enter the name of the station which will receive notices of any security violations. These will include invalid sign-on attempts, unauthorized use of criminal history MKEs, etc.

Driver Query - Enter the name of the station which will receive and respond to driver queries.

User Services - Enter the name of the station which will process user logons.

Transition - Used to enter station names which require unique processing within the customer-specific installation. Software modifications are required to effectively use each of these stations.

ATPS Station - Used to enter station names which require unique processing within the customer-specific installation. Software modifications are required to effectively use each of these stations.

HA Log Station - Enter the name of the station which will receive error reports if messages are auto-purged from a queue within the OpenFox®.

XSLT OP - Enter the name of the station which will receive XSLT transformation reports. This will include the XML input message as well as the transformation results. You must have the appropriate Computer Switch within the OpenFox® set for these reports to be generated.

OK - This button accepts the configuration changes and closes the window.

Cancel - This button cancels the configuration changes and closes the window.

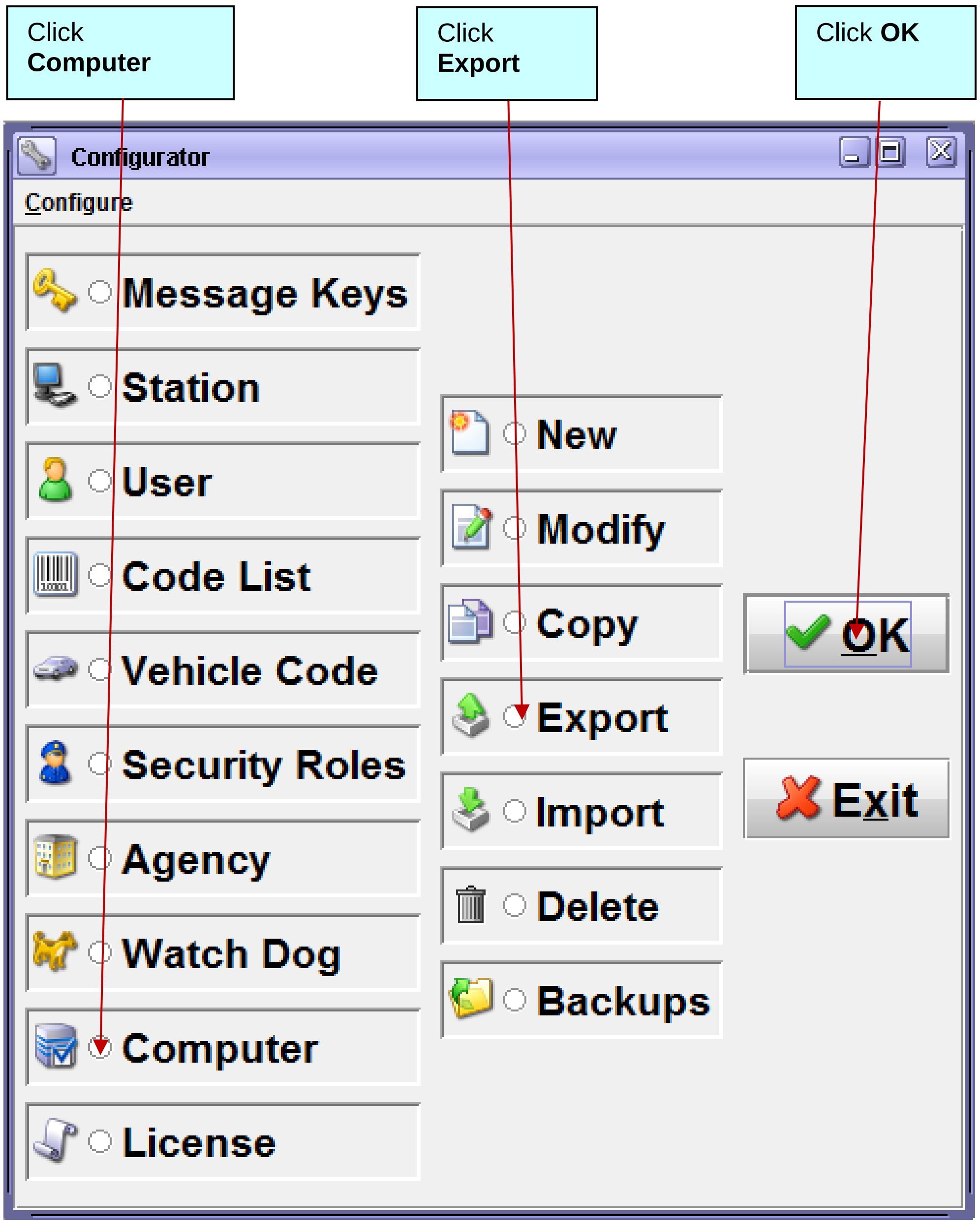
Apply - This button accepts the configuration changes and leaves the window open.

- Modify any of the fields necessary from the Computer settings. You can alternatively click the search button to bring up a dialogue box that allows you to search and select from existing stations.
- Click **OK** to accept the changes and close the window**, Cancel** to cancel the changes and close the window, or **Apply** to accept the changes and keep the window open.

11.2 – Export Computer Configuration

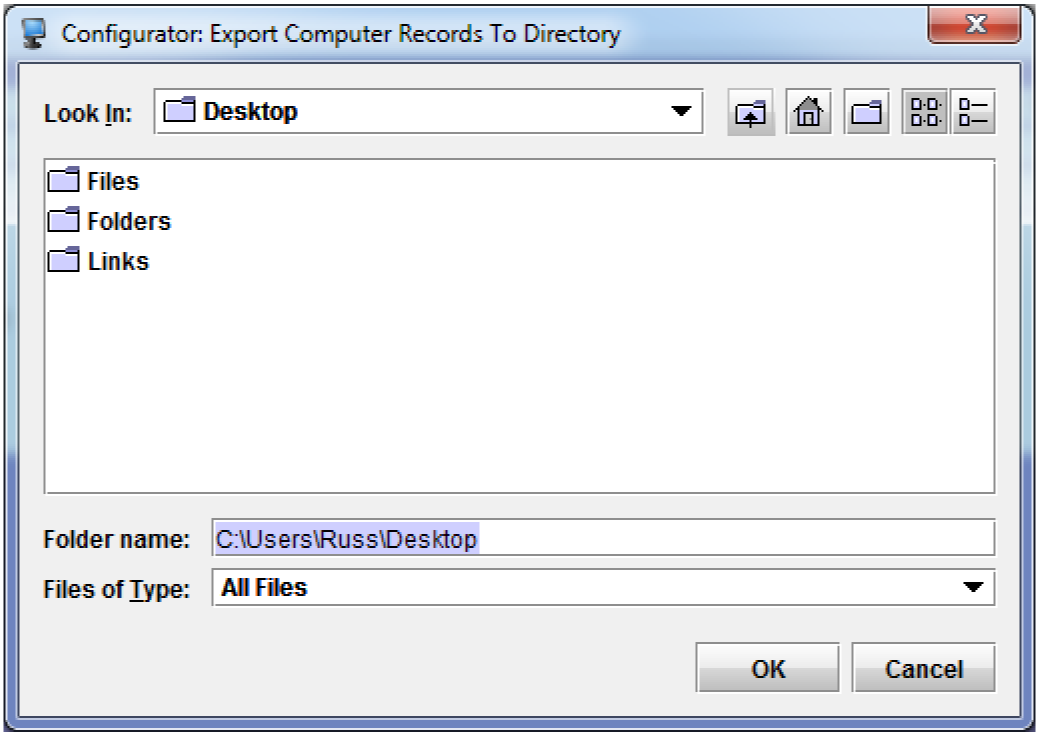
To export the Computer Configuration:

- Open the Configurator Module



Configurator

- Select **Computer** from the left column.
- Select **Export** from the middle column.
- Click **OK**.



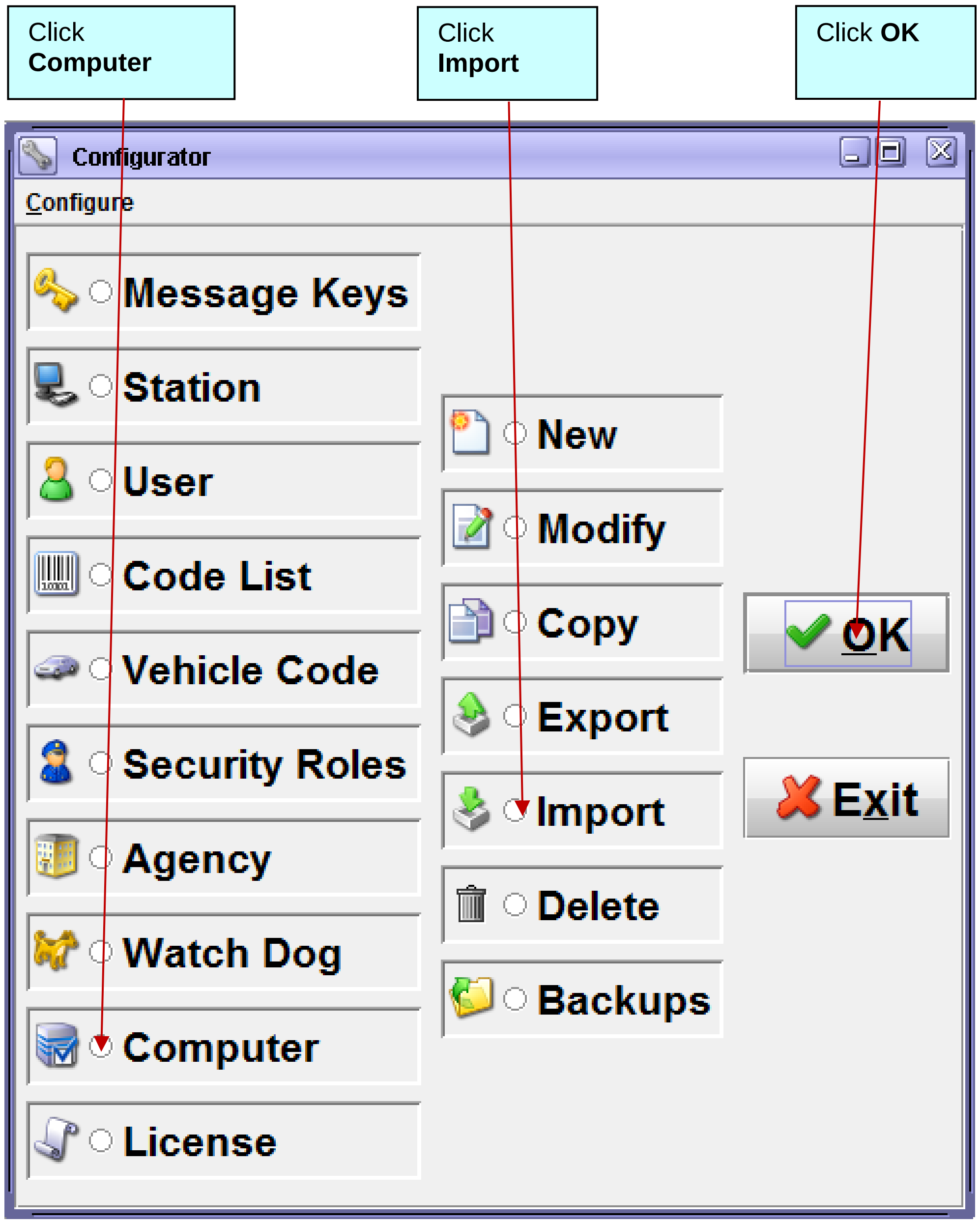
Export Computer Configuration To Directory

- Select the directory on your local P.C. to export the computer configuration to.
- Click **OK** to export the selected records to the local P.C. as XML files.

11.3 – Import Computer Configuration

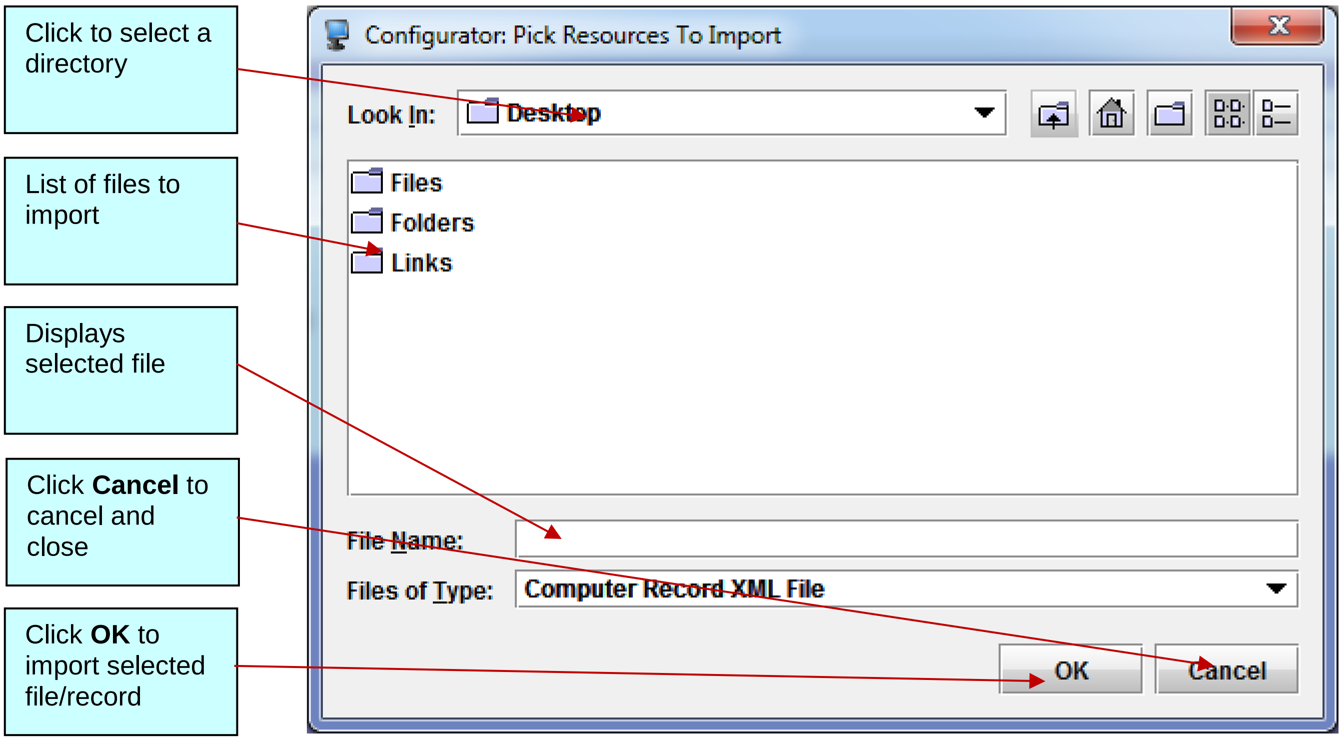
To import the Computer Configuration:

- Open the Configurator Module



Configurator

- Select **Computer** from the left column.
- Select **Import** from the middle column.
- Click **OK**.



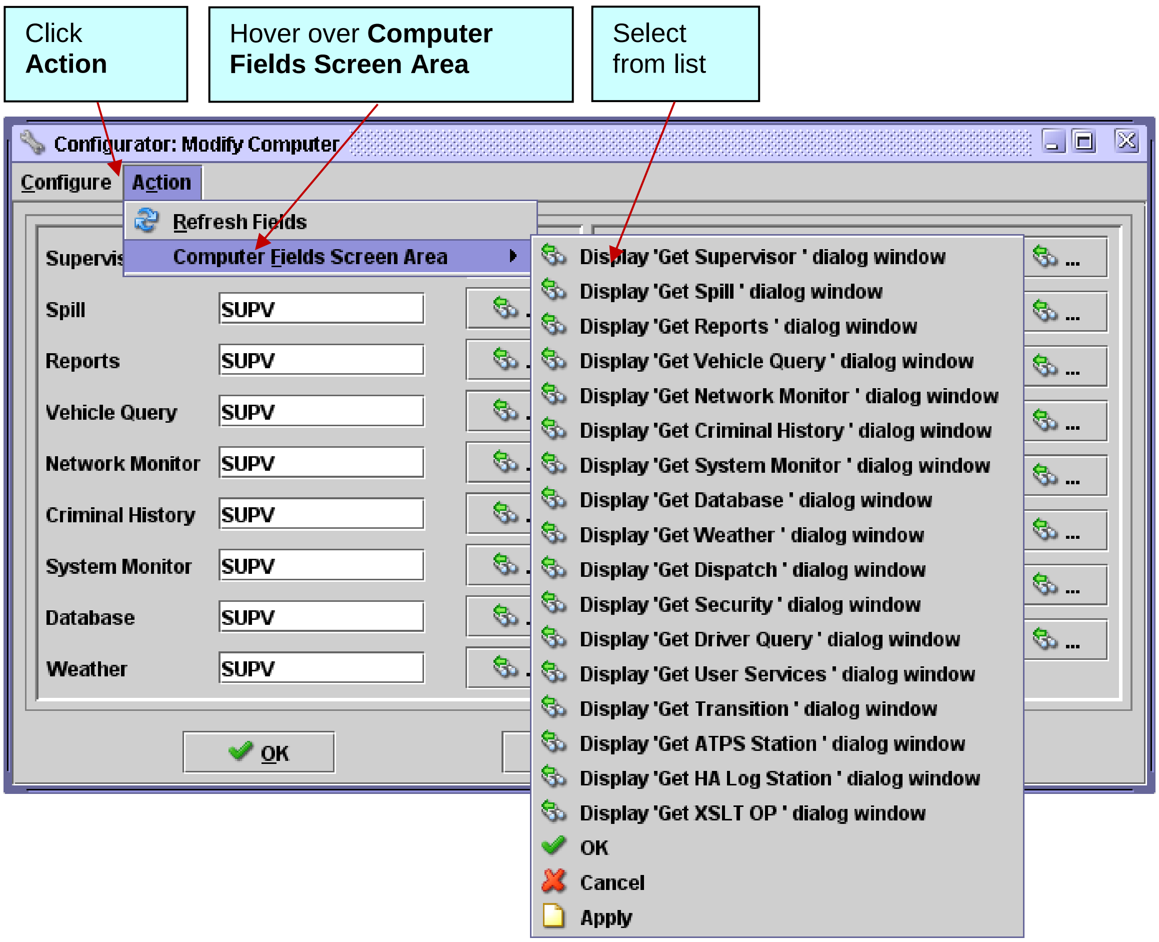
Pick Resources to Import

- Select the Computer Configuration file to import.
- Click **OK** to complete the import, or **Cancel** to cancel the import and go back to the main Configurator screen.

11.4 – Computer Menu Access

To use the Computer Action menu:

- Open the Configurator Module.
- Open the Computer Modify screen.



Watch Dog Menu Access

- Click the **Action** menu.
- Hover over **Computer Fields Screen Area**.
- Select from list provided.

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Chapter 12 – License Configuration

A product key record that defines specific functions for OpenFox® Desktop stations is referred to as a "License". Each License has a single record entered into the database that defines what product key the device must use to register, what agency and station the license is assigned to, whether or not the license is currently registered, when the license was created, when the license was last modified, when the license expires, which agency purchased the license, and what modules within the OpenFox® Desktop that this license will authorize for the station to use.

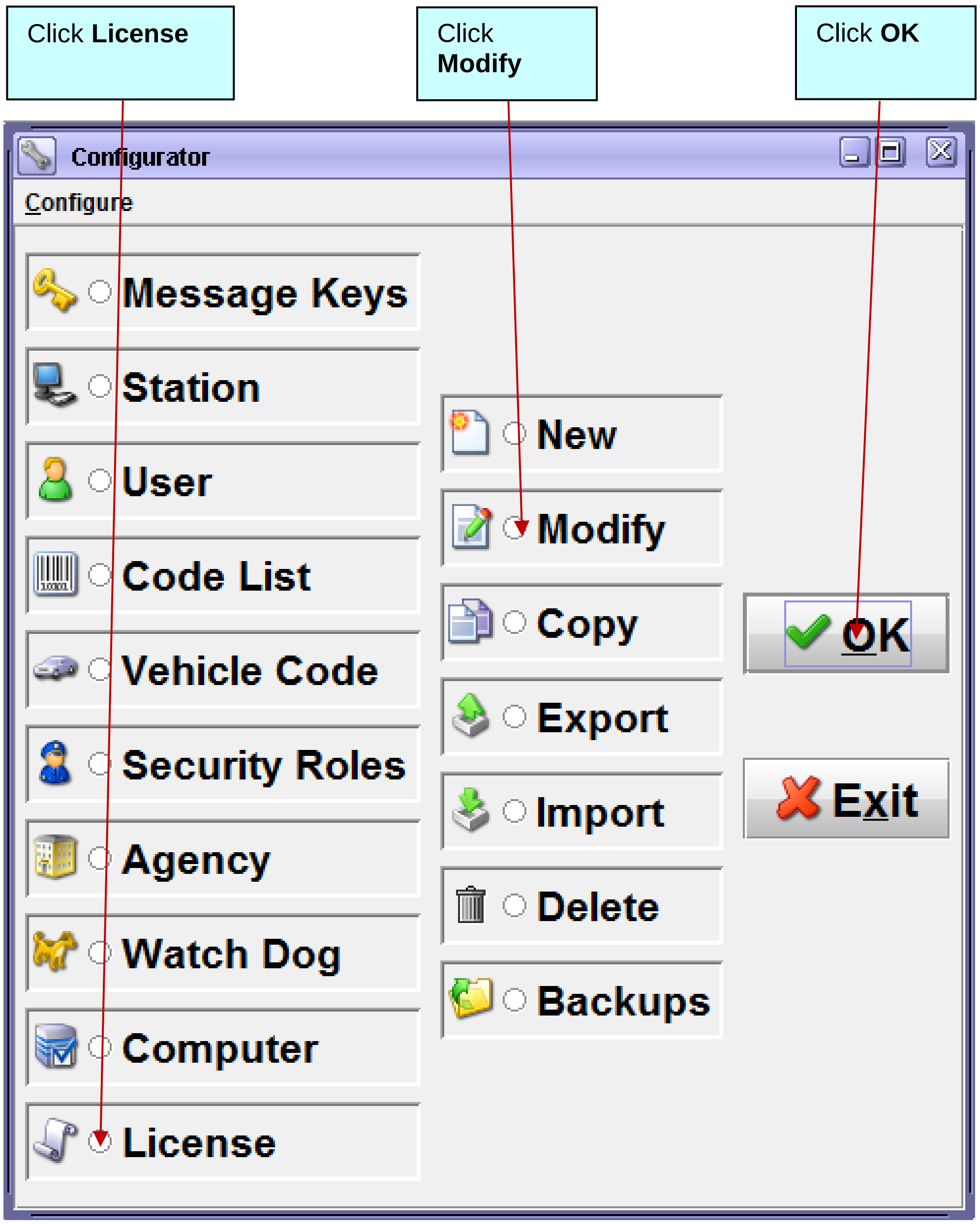
The OpenFox® Configurator License screen is used to supply the information necessary to update License records. The OpenFox® Configurator License screen allows the administrator only to modify existing License records, all with immediate effect and without any other software changes or system reboots.

The OpenFox® Configurator License screen, its text-fields, lists, options and buttons are as follows:

12.1 – Modify Existing License

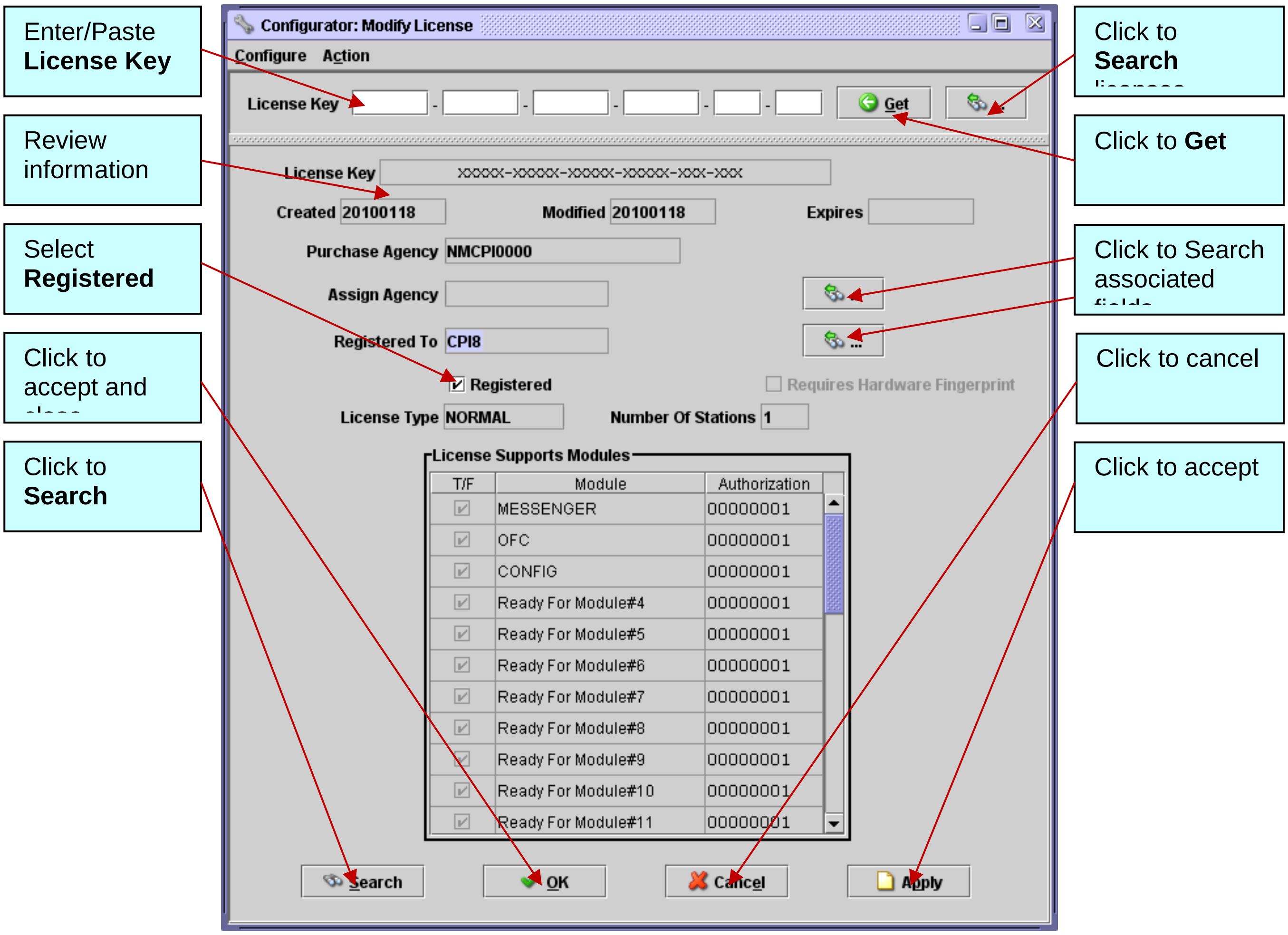
To modify an existing License:

- Open the Configurator Module



Configurator

- Select **License** from the left column.
- Select **Modify** from the middle column.
- Click **OK**.



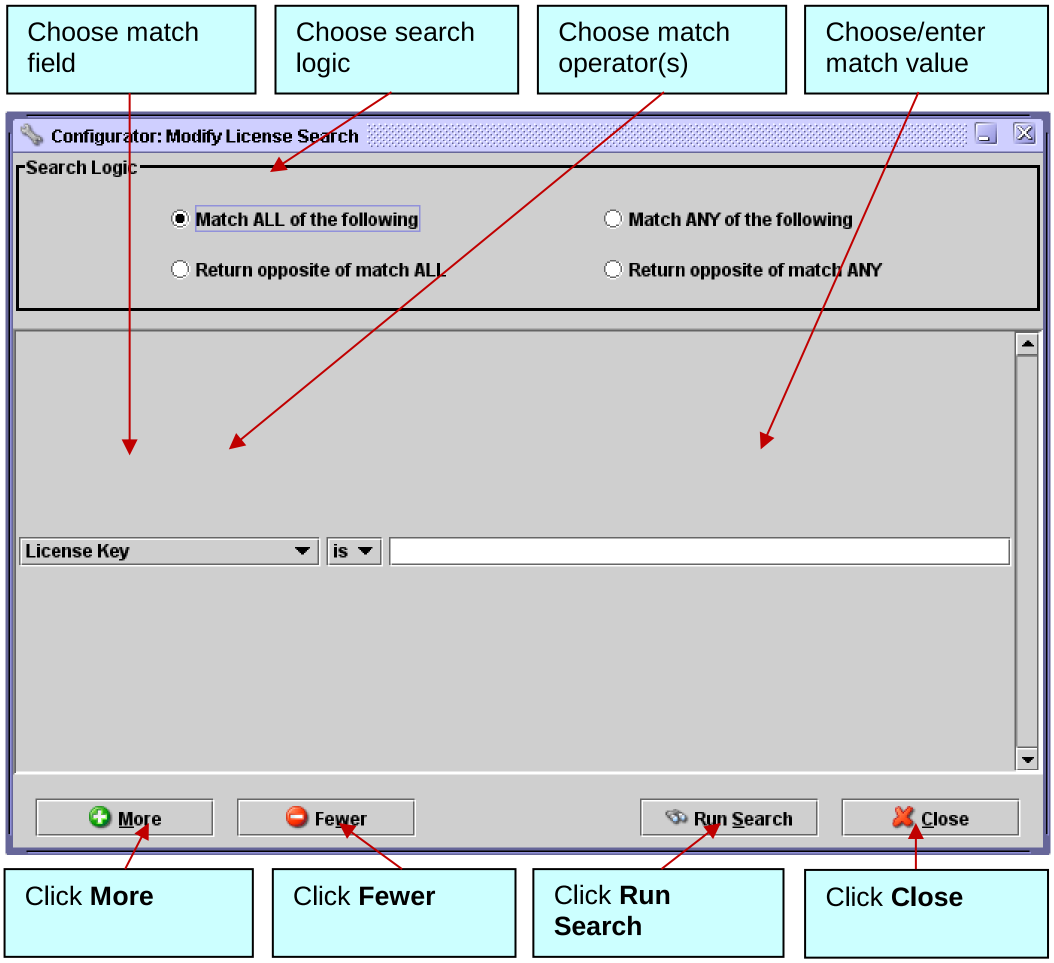
Modify License

- While the license is registered, the only modifiable field for the license is **Registered**. You can deselect this field to unregister this license if a user is receiving registration errors upon login. Upon unregistering, the binocular buttons for **Assign Agency** and **Registered To** will become active. Changes will not be permanent until you click **OK** or **Apply**.
- Click **OK** or **Apply** to commit your changes to the database. Click **Cancel** to clear the screen and return to the main Configurator GUI screen.

12.2 – Search License

To use the License search feature:

- Open the Configurator Module
- Open the License Modify screen.
- Click the **Search** button.



Search Security Roles

Search Logic - The logic to be used to perform the search.

Match ALL of the following - Records will only be returned in the search results if they match ALL of the search field/operator/value combinations.

Match ANY of the following - Records will be returned in the search results if they match AT LEAST ONE of the search field/operator/value combinations.

Return opposite of match ALL - Returns all records not matched in the corresponding “ALL” search.

Return opposite of match ANY - Returns all records not matched in the corresponding “ANY” search.

Match Field - Choose the field from the station to search against. Examples of valid values are **Station Name**, **Station Number**, **Station Class**, and **ORI**.

Match Operator - Choose the type of comparison operation to be performed against the match field. Only certain operators are valid for each **Match Field**. Examples of valid Match Operators are **is**, **is not**, **contains**, **does not contain**, **less than**, and **greater than**.

Match Value - Enter or select the value to be searched upon.

More - Click **More** to add another row of comparison field/operator/value selections.

Fewer - Click **Fewer** to remove the bottom row of comparison field/operator/value selections.

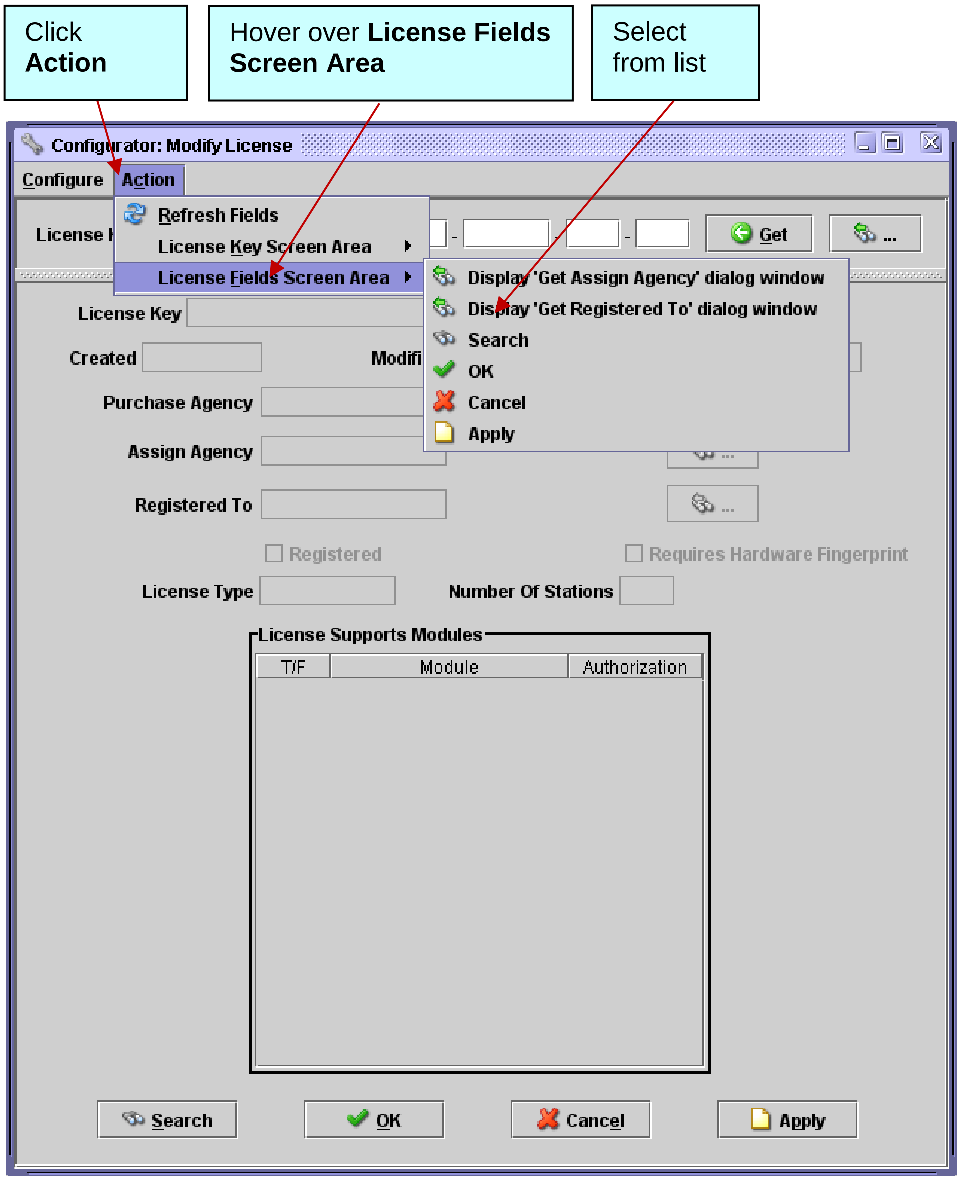
Run Search - Click **Run Search** to obtain a list of Station IDs based on the current comparison field/operator/value selections listed in the search window.

Close - Click **Close** to cancel the current search and close the search window.

12.3 – License Menu Access

To use the License Action menu:

- Open the Configurator Module.
- Open the License Modify screen.



Agency Menu Access

- Click the **Action** menu.
- Hover over **License Fields Screen Area**.
- Select from list provided.